

This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright

## 1585 & 1605 Mickleham Road, Yuroke

### Bushfire Planning Report

June 2023  
Report No. 18086.02 (1.1)

**ADVERTISED  
PLAN**



**Nature  
Advisory**

(Formerly Brett Lane & Associates Pty Ltd)

5/61-63 Camberwell Road  
Hawthorn East, VIC 3123  
PO Box 337, Camberwell VIC 3124

(03) 9815 2111

[www.natureadvisory.com.au](http://www.natureadvisory.com.au)

## Contents

# ADVERTISED PLAN

1. Executive summary.....	1
2. Sources of information and policy context.....	3
2.1. Existing information.....	3
2.2. Definitions.....	3
2.2.1. Site and study area .....	3
2.2.2. Classified vegetation .....	3
2.3. Field methodology .....	3
2.4. Precautionary approach.....	3
3. Bushfire hazard assessment .....	4
3.1. Bushfire hazard site assessment.....	4
3.1.1. Site description.....	4
3.1.2. Classified vegetation, slopes and BAL assessment .....	4
3.2. Vegetation classification zones .....	4
3.3. BAL assessment.....	8
3.4. Bushfire hazard landscape assessment.....	11
3.4.1. Hazards in the landscape .....	11
3.4.2. Likely bushfire scenarios .....	11
3.5. Egress to built-up areas .....	12
4. Bushfire management measures.....	14
4.1. School layout and design.....	14
4.2. Buildings and defensible space.....	14
4.2.1. BAL construction ratings.....	14
4.3. Water supply and access.....	14
5. References.....	16

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

## Tables

Table 1: BAL assessment.....	8
Table 2: Hazards determining final separation distances.....	9

## Figures

Figure 1: Bushfire hazard site assessment .....	10
Figure 2: Bushfire hazard landscape assessment.....	13

Figure 3: Defendable space.....	15
Figure 4: Identification of street hydrants for firefighting purposes .....	19

## Appendices

Appendix 1: School development plan.....	17
Appendix 2: Vegetation management requirements .....	18
Appendix 3: Fire Authority water supply requirements .....	19
Appendix 4: Vehicle access design and construction .....	20

# ADVERTISED PLAN

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**



# 1. Executive summary

Site Details	
Municipality:	Hume
Subject Site:	1585 & 1605 Mickleham Road, Yuroke
Site Area:	5.20 hectares
Zoning:	Green Wedge Zone (GWZ)
Overlays:	Not applicable.
Existing Buildings and Works:	Vegetated blocks, with sheds and dwellings present
Summary of Proposal	
Development Plan:	Construction of a school
Construction Standard:	BAL-12.5
Defendable Space:	19 metres from Zone 1 22 metres from Zone 5 33 metres from Zone 9 48 metres from Zone 6
Water Supply requirements:	Reticulated water supply

St Joseph's Christian College engaged Nature Advisory Pty Ltd to prepare this Bushfire Planning Report for the construction of a school proposed for 5.20-hectares of land at 1585 & 1605 Mickleham Road, Yuroke, zoned Green Wedge Zone (GWZ) in the Hume Planning Scheme. The land is within a designated Bushfire Prone Area (BPA).

This report demonstrates how the application meets the requirements of Clause 13.02 *Bushfire* of the State Planning Provisions, and includes the following components:

- A *bushfire hazard site assessment*, that describes bushfire hazards within 150 metres of the proposed subdivision in accordance with the planning permit application requirements of Clause 44.06-3. The description of the hazards has been prepared in accordance with the *Australian Standards AS 3959:2018, Construction of buildings in bushfire prone areas* (Standards Australia 2018); and
- A *bushfire hazard landscape assessment*, including a plan that describes the bushfire hazards in the general locality more than 150 metres from the site.

During the site assessment, classified vegetation in the form of grassland, woodland and forest was recorded. Grassland covered the majority of the site and occurred in the north, south, east and west of the study area. Woodland was present along the eastern border of the site. Forest was present on the southwestern border and immediately north of the site. Slope was recorded under each of these areas of classified vegetation.

The construction of a primary school and secondary school (as shown in Appendix 1) is proposed for 1585 to 1605 Mickleham Road, Yuroke.



Based on the classified vegetation recorded in the study area, and provided defensible space requirements set out in this report can be implemented, buildings associated with the school would be required to be constructed to a rating of BAL-12.5.

Following development of 1585 and 1605 Mickleham Road, all hazards within the site will be removed. The nearest and greatest bushfire threats will comprise forest and woodland to the north and grassland to the south, east and west. School buildings can be adequately separated by defensible space from the forest, woodland and grassland threats identified.

This report was prepared by a team from Nature Advisory, comprising Arend Kwak (Botanist), Emma Wagner (GIS Analyst), Chris Dunk (Senior Ecologist & Project Manager) and Dr Kate Callister (Senior Ecologist & Project Manager).

## ADVERTISED PLAN

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

## 2. Sources of information and policy context

### 2.1. Existing information

The reports, planning scheme and development plans relating to the study area listed below were reviewed.

- *VicPlan* (DELWP 2022a); and
- Victoria Planning Provisions (DELWP 2022b).

### 2.2. Definitions

#### 2.2.1. Site and study area

The term 'site' is used herein to refer to the land proposed for development at 1585 & 1605 Mickleham Road, Yuroke. The term 'study area' refers to area up to 150 metres from the site (see Figure 1).

#### 2.2.2. Classified vegetation

For the purposes of a Bushfire Attack Level (BAL) assessment areas of vegetation considered to pose a bushfire threat are classified according to the vegetation classes defined in Table 2.3 of AS 3959:2018. These hazards are grouped as either:

- Forest;
- Woodland;
- Shrubland;
- Scrub;
- Mallee/Mulga;
- Rainforest; or
- Grassland.

**ADVERTISED  
PLAN**

Non-vegetated areas and those considered 'low-threat', as defined in Section 2.2.3.2 of AS 3959:2018, are excluded from consideration as potential bushfire hazards and therefore do not influence BAL determination.

### 2.3. Field methodology

The field assessment was conducted on the 19<sup>th</sup> April 2023. During this assessment, the site was inspected on foot and the surrounding study area observed from the site and surrounding roads.

Sites in the study area found to contain classified vegetation were mapped. Mapping was undertaken through a combination of aerial photograph interpretation and ground-truthing using a hand-held ArcGIS Collector® (Esri).

### 2.4. Precautionary approach

Wherever appropriate, a precautionary approach has been adopted in the discussion of implications. That is, where insufficient evidence is available on the predicted behaviour of fire in a wildfire event, it is assumed both that the most severe fire behaviour could take place and that unmanaged immature vegetation could reach mature heights. The implications under legislation and policy are considered accordingly.

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

### 3. Bushfire hazard assessment

#### 3.1. Bushfire hazard site assessment

##### 3.1.1. Site description

The site is approximately 5.20 hectares of private land located at 1585 & 1605 Mickleham Road, Yuroke, 3 kilometres northwest of Craigieburn town centre and 27 kilometres north of the Melbourne CBD (Figure 1). It is bordered by paddocks and semi-rural dwellings to north, south and west and Mickleham Road to the east. The study area has historically supported stock grazing and semi-rural dwellings. Two dams are also present near the eastern border of the study area. The shape of the land is roughly trapezoidal, and it slopes downwards in an easterly direction. It is approximately 180 metres from north to south and 305 metres from east to west.

The site is currently zoned Green Wedge Zone in the Hume planning scheme and lies in the non-Alpine parts of Victoria, which have a Fire Danger Index (FDI) of 100.

Photographs of the site and study area are provided in Section 3.2.

##### 3.1.2. Classified vegetation, slopes and BAL assessment


During the field assessment, three classified vegetation classes were identified as per the classification methods in the Australian Standard AS 3959:2018. Classified vegetation is represented in Figure 1 and comprised:

- Grassland – occupies the majority of the site and occurs in the north, south, east and west of the study area.
- Woodland – present on the eastern border of the site.
- Forest – occurs immediately north of the site.

Slopes under classified vegetation and defendable space distances required from the proposed building envelopes based on the required BAL construction ratings are provided in Table 1.

#### 3.2. Vegetation classification zones

The following distinct bushfire hazards were recorded within the study area. Where vegetation has been excluded from further consideration as a bushfire threat, the applicable clause from AS3595 is indicated.

Zone	1	Photo	1
Vegetation Classification or Exclusion Clause			
Class G - Grassland			
Description/Justification for classification			
Grassland of exotic pastures, occupying the southern and western portions of the study area. Slashing of grasses noted along the fence line. This zone was level with the study area to the south and sloped upwards from the site's western border. 0° /Upslope.			



Zone	2	Photo	2
Vegetation Classification or Exclusion Clause			
Class A - Forest			
Description/Justification for classification			
<p>Small row of Monterey Pine situated in the southwest of the site. This zone was present on a gentle slope, that descended in an easterly direction. &gt;0° to 5° downslope.</p>			

Zone	3	Photo	3
Vegetation Classification or Exclusion Clause			
Class G - Grassland			
Description/Justification for classification			
<p>Grassland of exotic pastures, within the majority of the site. Narrow rows of treed vegetation were present along the site borders, but comparatively limited in extent. Some mowing was noted, though consistent management of this grassland over time is unclear. Sloping downwards in an easterly direction. &gt;0° to 5° downslope.</p>			

## ADVERTISED PLAN

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

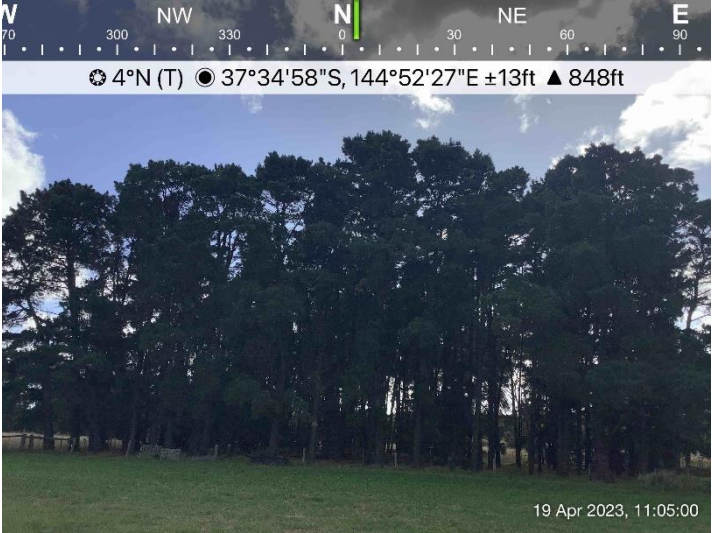
Zone	4	Photo	4
Vegetation Classification or Exclusion Clause			
Class B - Woodland			
Description/Justification for classification			
<p>Planted treed vegetation situated in the northeast of the site. Trees were evenly spaced, and understory elements were largely absent, except for a small tract of shrubbery fringing an artificial farm dam. This zone was present on a gentle slope, that descended in an easterly direction. &gt;0° to 5° downslope.</p>			

Zone	5	Photo	5
Vegetation Classification or Exclusion Clause			
Class G - Grassland			
Description/Justification for classification			
<p>Grassland primarily comprising exotic pastures, with smaller patches of native grass interspersed. This zone was situated on the road reserve associated with Mickleham Road, immediately east of the site. This zone was present on a gentle slope, that descended in an easterly direction. &gt;0° to 5° downslope.</p>			

## ADVERTISED PLAN

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



Zone	6	Photo	6
Vegetation Classification or Exclusion Clause			
Class A - Forest			
Description/Justification for classification			
Planted Monterey Pine, situated directly north and northwest of the site. This zone was level with the study area. 0° /Upslope.			
			

Zone	7	Photo	7
Vegetation Classification or Exclusion Clause			
Class G - Grassland			
Description/Justification for classification			
Grassland of exotic pastures, occupying the northernmost portion of the study area. This zone was level with the study area. 0° /Upslope.			
			

## ADVERTISED PLAN

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**



Zone	8	Photo	8
Vegetation Classification or Exclusion Clause			
Class G - Grassland			
Description/Justification for classification			
<p>Grassland of exotic pastures, occupying the easternmost portion of the study area. This zone occurred on level ground. 0° /Upslope.</p>			

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Zone	9	Photo	9
Vegetation Classification or Exclusion Clause			
Class B - Woodland			
Description/Justification for classification			
<p>An open eucalypt woodland with minimal understory elements, occurring to the north of the study area. This zone occurred on level ground. 0° /Upslope.</p>			

### 3.3. BAL assessment

Table 1 summarises the classification of bushfire hazards and the resultant minimum BAL rating arising from each threat.

**Table 1: BAL assessment**

Zone	Vegetation Classification	Effective slope	Separation (m)	BAL
1	Class G - Grassland	0° /Upslope	19	BAL-12.5
			13	BAL-19
			9	BAL-29

Zone	Vegetation Classification	Effective slope	Separation (m)	BAL
2	Class A – Forest	>0° to 5 °	57	BAL – 12.5
3	Class G - Grassland	>0° to 5 °	22	BAL – 12.5
4	Class B - Woodland	>0° to 5 °	33	BAL – 12.5
5	Class G - Grassland	>0° to 5 °	22 15 10	BAL – 12.5 BAL – 19 BAL – 29
6	Class A – Forest	0 ° /Upslope	48 35 25	BAL – 12.5 BAL – 19 BAL – 29
7	Class G - Grassland	0 ° /Upslope	19	BAL – 12.5
8	Class G - Grassland	0 ° /Upslope	19	BAL – 12.5
9	Class B - Woodland	0 ° /Upslope	33	BAL-12.5

Following development of 1585 and 1605 Mickleham Road, all hazards within the site will be removed. While grassland is expected to be present in the oval and active play area, this will be managed to a minimum fuel condition (mown to <10cm height). Trees and shrubs are also likely to be established around the perimeter of the site, but these will be narrow strips and will be selected and maintained to minimise bushfire risk.

Relevant threats remaining in the wider study area will comprise grassland to the south, east and west and forest and woodland to the north. School buildings can be adequately separated by defensible space from all remaining threats.

Based on the above, the hazards in the study area that present the nearest and greatest threat, requiring mitigation via appropriate separation from proposed school buildings is shown in Table 2.

**Table 2: Hazards determining final separation distances**

Zone	Vegetation Classification	Effective slope	Separation (m)	BAL
1	Class G - Grassland	0° /Upslope	19	BAL – 12.5
5	Class G - Grassland	>0° to 5°	22	BAL – 12.5
6	Class A – Forest	0 ° /Upslope	48	BAL – 12.5
9	Class B - Woodland	0 ° /Upslope	33	BAL-12.5

This copied document to be made available for the sole purpose of enabling its consideration and review as

part of a planning process under the Planning and Environment Act 1987.

The document must not be used for any purpose which may breach any copyright



Determined Bushfire Attack Level

BAL – 12.5

**ADVERTISED  
PLAN**



**Figure 1: Bushfire Hazard Site Assessment**

**Project:** 1585 Mickleham Road, Yuroke  
**Client:** St Abdisho's Community  
**Date:** 12/05/2023

- Site
- Study area (150m buffer of site)
- Contours
- Effective slope under hazard
- Classified vegetation**
  - Forest
  - Woodland
  - Grassland
  - Low threat





### 3.4. Bushfire hazard landscape assessment

#### 3.4.1. Hazards in the landscape

The surrounding landscape primarily supports paddocks and semi-rural dwellings, which are often fringed by narrow rows of planted trees. There is an increasing transition towards urban development associated with the Craigieburn township, occurring approximately 1.3 kilometres to the east of the site. The most significant threat in the study area's immediate surrounds comprises an approximately 31-hectare tree plantation, occurring 1.13 kilometres to the west. The Mount Ridley Nature Conservation Reserve also occurs 3.85 kilometres to the northeast. Although a more distant threat and separated from the study area by urban development, this reserve comprises a large tract of bushland and therefore also represents a notable hazard in the landscape.

The study area lies within a broader landscape type One as defined in the BMO technical guide (DELWP 2017) and includes the following:

- Vegetation in the immediate surrounds and beyond 150 metres of the site is primarily grassland and unlikely to result in neighbourhood-scale destruction.
- Access to an area of bushfire shelter (within the Craigieburn township) is readily available.

The Regional Bushfire Planning Assessment for the Hume local government area (DPCD 2012) identifies the following threats in the landscape:

- A potential bushfire hazard, associated with the Deep Creek river corridor interfacing with lots, occurs approximately 3.94 kilometres to the northwest of the site. This hazard is separated from the site by roads and extensive tracts of paddock vegetation.
- Extensive bushland associated with the Woodlands Historic Park occurs 5.78 kilometres to the south-southwest of the site. This hazard is separated from the site by roads and extensive tracts of paddock vegetation.

The closest history of a bushfire to the study area since 1970 was from 2014 and was related to a grassfire on the periphery of Craigieburn, 1.48 kilometres to the northeast. Seven planned burns were undertaken 3.85 kilometres to the northeast, at Mount Ridley Nature Conservation Reserve, between 2006-2019. Numerous planned burns have also been undertaken 5.78 kilometres to the south-southwest at the Woodlands Historic Park, between 1997-2016.

Refer to Figure 2 for a map presenting the landscape assessment.

#### 3.4.2. Likely bushfire scenarios

In Victoria, the most dominant weather conditions are winds from the northwest or southwest, although wind may travel in all directions.

The nearest notable bushfire threat comprises a 31-hectare tree plantation, occurring 1.13 kilometres to the west of the site. If a fire was to occur at this plantation, it is possible that it could travel along narrow tracts of treed vegetation or progress to the site via surrounding grassland. Given that this threat is isolated from more significant, unmanaged bushland in the landscape, it is unlikely to result in severe bushfire behaviour. The presence of paddock vegetation is also likely to diminish the intensity of the fire as it moves through the landscape. Other possible bushfire scenarios involve fire at the Mount Ridley Nature Conservation Reserve and Woodlands Historic Park, occurring 3.85 kilometres to the northeast and 5.78 kilometres to the south-southwest of the site respectively. In both cases, the bushfire would be separated from the site by roads and extensive tracts of paddock vegetation, with urban development also separating the Mount Ridley Nature Conservation Reserve from the site. This is also likely to significantly reduce the intensity of the associated fires, which may spread through the landscape via unmanaged grassland or ember attacks.

An analysis of possible fire runs identified two likely fire runs, travelling 3.6 kilometres and 3.1 kilometres, from the northwest and southwest respectively. Though less probable, fire may also travel 1.5 kilometres and 0.9 kilometres, from the northeast and southeast respectively. In all cases, these fire runs would primarily traverse extensive tracts of grassland, sparse treed vegetation and roads.

### 3.5. Egress to built-up areas

The proposed primary and secondary schools will provide vehicular egress to Mickleham Road to the east, a single-carriageway sealed road. This roadway could provide the following egress routes from the site in the event of extreme bushfire behaviour to nearby built-up areas (Figure 2):

- Craigieburn – 2.2 kilometres to the southeast via Mickleham Road, Craigieburn Road and Aitken Boulevard; or 4.7 kilometres to the northeast via Mickleham Road, Mount Ridley Road and Highlander Drive.

Each of these egress routes would involve travelling on roads that traverse paddocks, sparse treed vegetation and urban development.

## ADVERTISED PLAN

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**



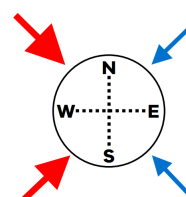


**Figure 2: Bushfire hazard landscape assessment**

**Project:** 1585 Mickleham Road, Yuroke **Client:** St Abdisho's Community **Date:** 20/04/2023

- ★ Site
- Access and egress
- Fire history
- ▭ Bushfire
- ▭ Controlled burn
- Potential fire run
- More likely
- Less likely

**ADVERTISED  
PLAN**



N

Metres  
0 600

**Nature  
Advisory**

PO Box 337, Camberwell, VIC 3124, Australia  
[www.natureadvisory.com.au](http://www.natureadvisory.com.au)  
 03 9815 2111 - [info@natureadvisory.com.au](mailto:info@natureadvisory.com.au)



## 4. Bushfire management measures

The buildings and defensible space bushfire protection objective is to ensure that:

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

The required BAL construction rating for the proposed school and defensible space requirements are outlined in Sections 3.2 and 3.3 and shown in Figure 3.

### 4.1. School layout and design

The following considerations and bushfire protection measures address subdivision layout and design:

- Once developed, no bushfire hazards will remain within the subdivision area. Provided a clearance buffer is established to reduce the extent of Zone 6, proposed buildings within the BPA are considered sufficiently separated from bushfire hazards that will remain within the subdivision area and beyond the site (see defensible space considerations below);
- The proposed primary and secondary schools provide a central access road between the main school buildings to support firefighting; and
- Roadside and open space landscaping will address the CFA publication *Landscaping for Bushfire* (cfa.vic.gov.au) and will be to the satisfaction of Council and the CFA.

### 4.2. Buildings and defensible space

The following considerations and bushfire protection measures address buildings and defensible space.

- Defensible space setbacks from nearby bushfire hazards within the proposed primary and secondary school area and beyond the site will be achieved through the provision of a clearance buffer and building setbacks as demonstrated in Figure 3.

#### 4.2.1. BAL construction ratings

Based on the classified vegetation recorded in the study area and provided defensible space requirements set out in this report can be implemented, buildings associated with the school would be required to be constructed to Bushfire Attack Level (BAL) rating 12.5.

### 4.3. Water supply and access

The following measures respond to the water supply and access bushfire protection:

- A reticulated water supply and hydrants will be provided throughout the subdivision for firefighting as described in Appendix 3; and
- Vehicle access will be designed and constructed to enhance safety in the event of a bushfire as described in Appendix 4.

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**



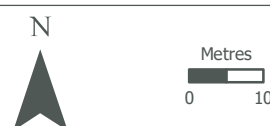
**Figure 3: Bushfire Protection Measures**

**Project:** 1585 Mickleham Road, Yuroke  
**Client:** St Abdisho's Community  
**Date:** 21/06/2023

- Site**
- Study area (150m buffer of site)
- Defendable space - BAL rating**
- BAL 12.5
  - BAL 19
  - BAL 29
- Classified vegetation**
- Forest
  - Woodland
  - Grassland
  - Low threat

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED PLAN**



PO Box 337, Camberwell, VIC 3124, Australia  
www.natureadvisory.com.au  
03 9815 2111 - info@natureadvisory.com.au



## 5. References

CFA 2006, *Requirements for water supplies and access for subdivisions in residential 1 and 2 and township zones*, State of Victoria, Country Fire Authority, Burwood East.

CFA 2011, *Landscaping for bushfire – garden design and plant selection*, State of Victoria, Country Fire Authority, Burwood East.

CFA 2019, *Identification of street hydrants for firefighting purposes*, State of Victoria, Country Fire Authority, Burwood East.

DEECA 2023a, *VicPlan*, Department of Energy, Environment and Climate Action, East Melbourne, <<https://mapshare.vic.gov.au/vicplan/>>.

DEECA 2023b, *Victoria Planning Provisions*, Department of Energy, Environment and Climate Action, Melbourne, <<https://planning-schemes.app.planning.vic.gov.au/Victoria%20Planning%20Provisions/ordinance/>>

DPCD 2012, *Regional Bushfire Planning Assessment – Melbourne Metropolitan Region*, Department of Planning and Community Development, Melbourne.

Standards Australia 2018, *Australian Standards AS 3959:2018, Construction of buildings in bushfire-prone areas*, Standards Australia, Sydney.

## ADVERTISED PLAN

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

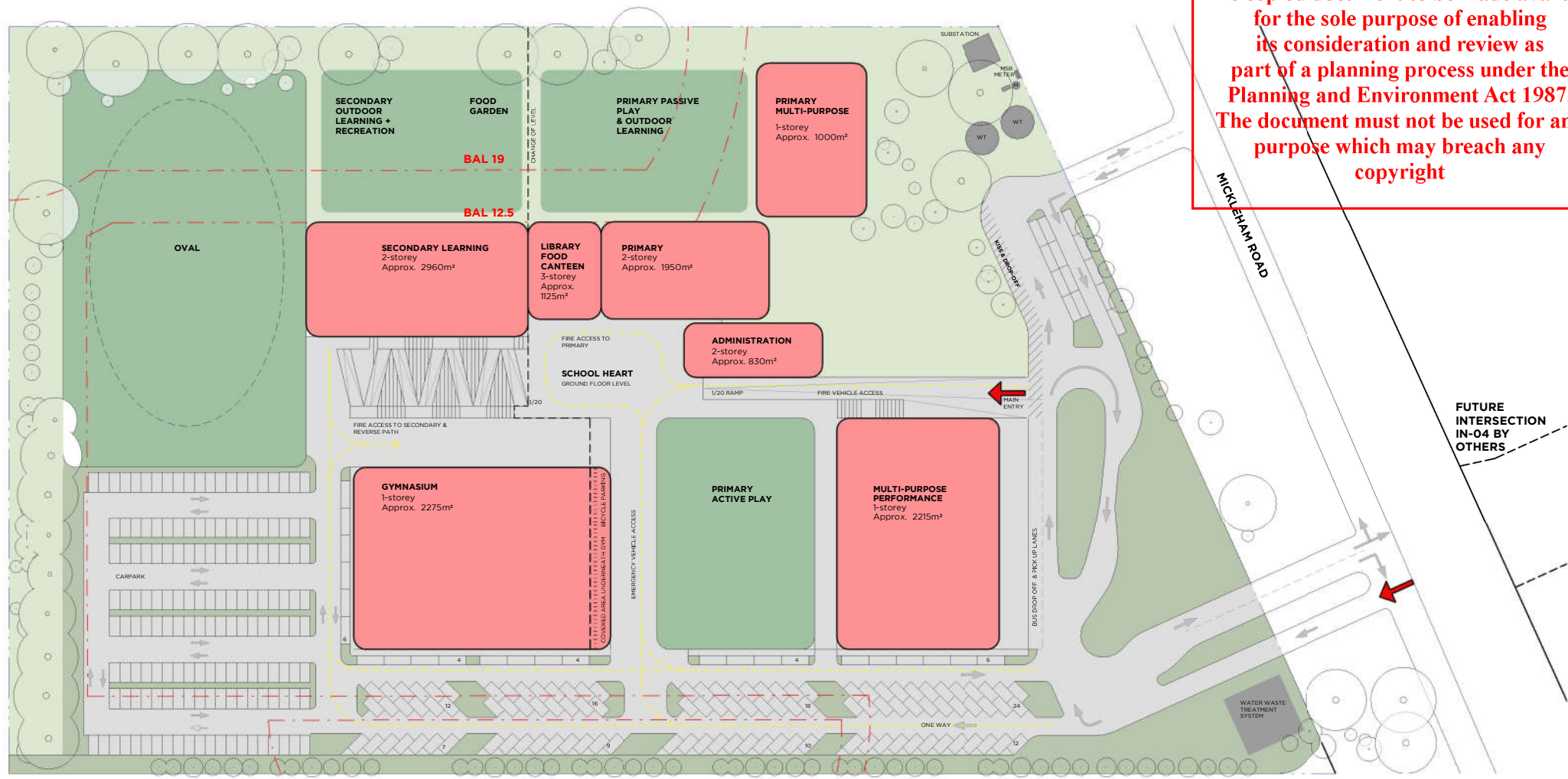


**Appendix 1: School development plan**

## ADVERTISED PLAN

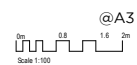
**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



- Key drawing Legend**
- BAL Rating Line. Refer to Bushfire Report
  - Existing Boundary Line
  - Trafficable Accessway
  - Proposed Building Envelopes
  - Proposed Open Space
  - Landscaped area
  - Designated Outdoor/ Playground area
  - On-site Parking / Accessway / Driveway
  - Services
  - Existing buildings
  - Gravel

Indicative location of trees.  
Refer to Landscape Architect Report



**PMDL** **mcglashan everist**

PMDL ARCHITECTURE + DESIGN HK (LIMITED)  
PMDL ARCHITECTURE + DESIGN PTY LTD ABN 56 062 961 317

# ADVERTISED PLAN

PROJECT **St Joseph's Christian College**  
DWG **Proposed Masterplan**

ISSUE	DATE	REVISION	0mm	50mm	100mm
DO NOT SCALE FROM DRAWING. USE FIGURED DIMENSION ONLY. CHECK ALL DIMENSIONS ON SITE BEFORE MANUFACTURE OR CONSTRUCTION.	09.06.2023	Author	3072		
CLIENT <b>St Joseph's Christian College</b>	DATE	DRAWN	DWG #	REVISION	
CLIENT REF & CONTACT <b>V/ 1585 Mickelham Road, Yuroke</b>	SCALE @ A3	CHKD	TP100		
	As	Checker			



## Appendix 2: Vegetation management requirements

(Taken from Table 6 of Clause 53.02)

The defendable space management requirements below must be implemented.

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

**ADVERTISED  
PLAN**

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

### Appendix 3: Fire Authority water supply requirements

#### Reticulated water supply

Where a reticulated water supply is being installed, operable hydrants must be provided in accordance with the *Requirements for water supplies and access for subdivisions in residential 1 and 2 and township zones* (CFA 2006). Access to the water supply will meet the requirements of the relevant fire authority. The following has been adopted from the CFA (2006, 2012) and is required for subdivisions where hydrants are being installed.

- The maximum distance between a hydrant and the rear of the building envelope must be 120 metres and hydrants must be no more than 200 metres apart;
- Hydrants placement must comply with AS2419-2005;
- Installation depths must comply with the Water Supply Code of Australia (WSA 03–2011);
- To ensure operation of the standpipe, fire plugs must be installed between 100 and 200 millimetres from the top cover plate to the top of the lugs; and
- To ensure that firefighters can rapidly locate water supplies in emergency, hydrants must be identified as specified in *Identification of Street Hydrants for Firefighting Purposes* (see below) available under publications on the CFA's website ([cfa.vic.gov.au](http://cfa.vic.gov.au)).

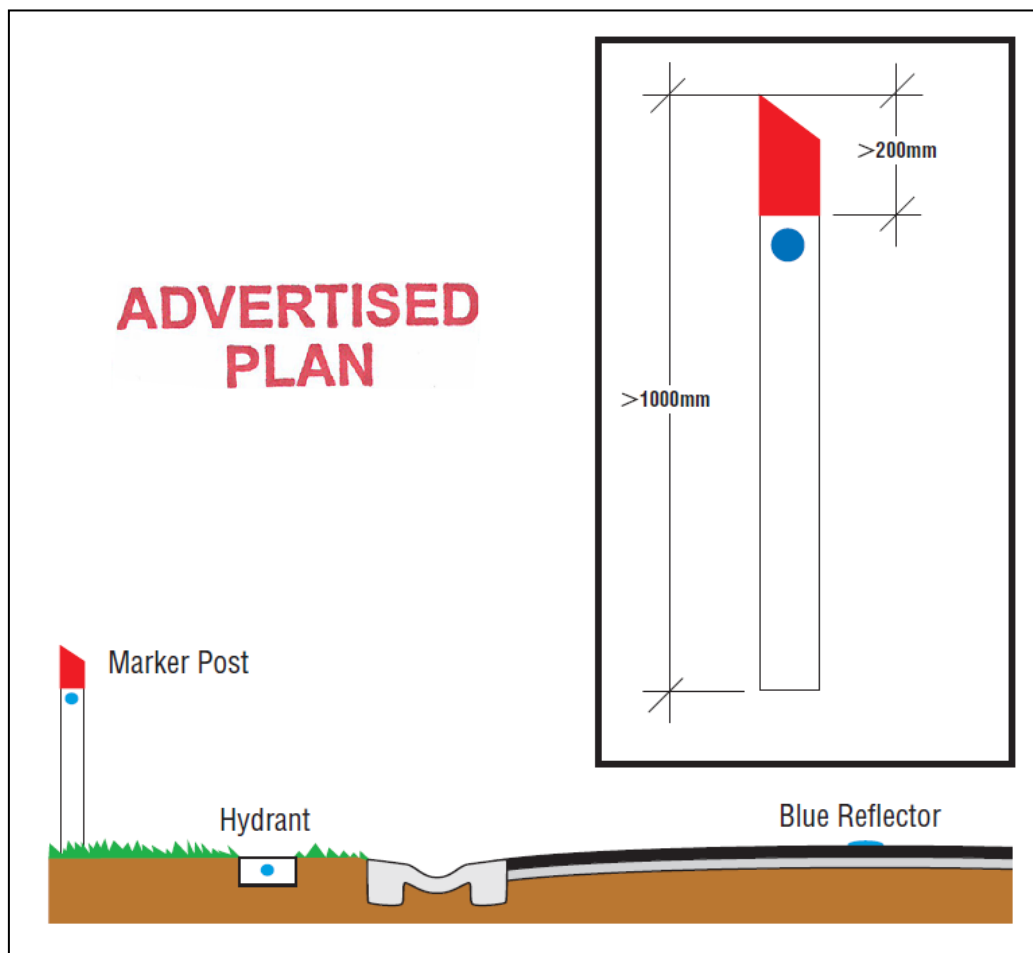


Figure 4: Identification of street hydrants for firefighting purposes

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



#### Appendix 4: Vehicle access design and construction

(Taken from Table 5 of Clause 53.02)

The proponent will provide safe access and egress arrangements which meet the requirement of the relevant fire authority.

Where the length of access is greater than 30 metres (but no greater than 100 metres), the following design and construction requirements apply:

- All-weather construction;
- A load limit of at least 15 tonnes;
- Provide a minimum trafficable width of 3.5 metres;
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically;
- Curves must have a minimum inner radius of 10 metres;
- The average grade must be no more than 1 in 7 (14.4%/8.1°) with a maximum grade of no more than 1 in 5 (20%/11.3°) for no more than 50 metres; and
- Dips must have no more than a 1 in 8 (12.5 per cent/7.1 degrees) entry and exit angle.
- Where the length of access is greater than 100 metres, the following additional design and construction requirements apply:
- A turning area for firefighting vehicles must be provided close to the building by one of the following:
  - A turning circle with a minimum radius of eight metres;
  - A driveway encircling the dwelling; and
  - The provision of other vehicle turning heads – such as a T or Y head – which meet the specification of Austroad Design for an 8.8 metre Service Vehicle.

Where the length of access is greater than 200 metres, the following additional design and construction requirements apply:

- Passing bays must be provided at least every 200 metres; and
- Passing bays must be a minimum of 20 metres long with a minimum trafficable width of 6 metres.

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**