

**Residential / Retail Master Plan & Construction** 

68-80 O'Connell Street, Kingswood

**Caddens Estate Development Pty Ltd** 





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#### **LIMITATIONS**

The bushfire protection measures recommended in this report do not completely remove the risk to life and property, and they do not guarantee that a development will not be impacted by a bushfire event. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions.

#### **ACKNOWLEDGEMENTS**

This document has been prepared by Eco Logical Australia Pty Ltd with support from various members of the project team.

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Template 2.8.1

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# **Abbreviations**

Abbreviation	Description
APZ	Asset Protection Zone
BAL	Bushfire Attack Level
BFPL	Bush Fire Prone Land
FDI	Fire Danger Index
FDI	Fire Danger Index
PBP	Planning for Bush fire Protection
RFS	NSW Rural Fire Service
VMP	Vegetation Management Plan

# 1. Property and Proposal

Table 1 identifies the subject property and outlines the type of development proposed.

Table 1: Subject site and development proposal summary

Street address:	68-80 O'Connell Street, Kingswood		
Postcode:	2747		
Lot/DP no:	Lot 1 / DP 1268507 and Lot 2 / DP 1268507		
Local Government Area:	Penrith		
Fire Danger Index (FDI)	100		
Current land zoning:	R4: High Density Residential and E1: Local Centre		
Type of development proposed:	Master Plan Development for the construction of multi-storey residential and retail buildings		

#### 1.1 Description of Proposal

The Master Plan proposal is for the construction of eighteen multi-story residential flat buildings incorporating ground floor retail shops (in the E1 zone), parking, bulk earth works, public road infrastructure, and associated utilities (Figure 1). The Master Plan also contemplates public open space, provided by recreation / parkland areas and a small isolated patch of bushland.

This development forms an integral part of the overall residential and business precinct centre development contemplated under the Penrith DCP 2014 Part E1 Caddens, as shown in Figure 2.

The proposed Master Plan development is located on land identified as Bush Fire Prone Land (BFPL) within the ePlanning Spatial Viewer<sup>1</sup> (Figure 3).

#### 1.2 Assessment Process

The development contemplated by the Master Plan is assessed in accordance with *Planning for Bush Fire Protection* (RFS 2019) and *Addendum to Planning for Bush Fire Protection* (RFS 2022), collectively referred to as 'PBP'.

This assessment is based on the following information sources:

- Background documentation provided by members of the project team;
- Information contained within the Site Plan from Turner (Drawing No DA-001-002 Project No 20096) dated 230822;
- Information contained within Vegetation Management Plans (ELA 2024, ELA 2020)
- Information contained within Landscape Plans (Site Image 2024, GeoScapes 2021);
- Information within the Penrith Development Control Plan pertaining to the Caddens Release Area Structure Plan (Penrith DCP Part E1 2014); and
- GIS analysis including online spatial resources (i.e. Arc GIS Earth, Google Earth, SIX Maps, Nearmap and the NSW Government Planning Portal).

<sup>&</sup>lt;sup>1</sup> https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address

Table 2 identifies the bushfire protection measures assessed and whether an acceptable or performance based solution is proposed.

Table 2: Summary of bushfire protection measures assessed

Bushfire Protection Measure	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones			3
Landscaping			3
Construction standard	V		3
Access			3
Water supply			3
Electrical services			3
Gas services	$\overline{\checkmark}$		3

### 1.3 Significant Environmental Features

An assessment of significant environmental features, threatened species, populations or ecological communities under the *Biodiversity Conservation Act 2016* that may potentially be affected by the proposed bushfire protection has not been undertaken in this report as it is covered by other parts of the Development Application (DA) process.

The impact footprint of the bushfire protection measures (e.g. Asset Protection Zone [APZ]) is identified within this report and therefore capable of being assessed by a suitably qualified person. Penrith City Council is the determining authority for this development; they will assess more thoroughly any potential environmental issues.

#### 1.4 Aboriginal Cultural Heritage

An assessment of any Aboriginal cultural heritage objects (within the meaning of the *National Parks and Wildlife Act 1974*) that may potentially be affected by the proposed bushfire protection measures has not been undertaken in this report as it is covered by other parts of the Development Application (DA) process.

The impact footprint of the bushfire protection measures (e.g. APZ) is identified within this report and therefore capable of being assessed by a suitably qualified person. Penrith City Council is the determining authority for this development; they will assess more thoroughly any potential Aboriginal cultural heritage issues.

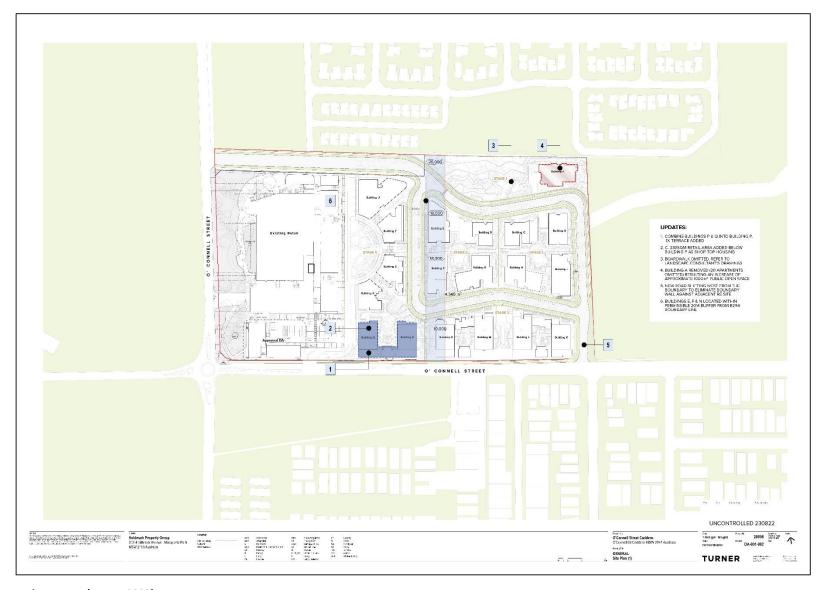


Figure 1: Master Plan Layout (Turner 2023)



Figure 2: Caddens Release Area Structure Plan (Penrith DCP Part E1 2014)

## 2. Bushfire Hazard Assessment

#### 2.1 Process

The site assessment methodology from Appendix 1 of PBP has been applied in this assessment.

#### 2.2 Vegetation Assessment

In accordance with PBP, the predominant vegetation formation has been assessed for a distance of at least 140 m from the subject land in all directions. The predominant vegetation has been assessed using the NSW State Vegetation Type Map (DPE 2022) and site assessment, along with consideration of the Landscape Plans (Site Image 2024, GeoScapes 2021) and Vegetation Management Plans (VMP) (ELA 2024, ELA 2020) for the subject site and adjoining site.

#### 2.3 Slope Assessment

In accordance with PBP, the slope that would most significantly influence fire behaviour was determined over a distance of 100 m from the proposed development under the classified vegetation.

## 2.4 Summary of Assessment

Recently approved development is currently occurring on the property directly north of the subject land. This adjoining development at 46-66 O'Connell Street Caddens (Lot 6 DP 593628, Lot 3 DP 1103503 & Lot 2 DP 1217434) had development consent granted by the Land and Environment Court of NSW DA21/0323 (LEC 2021/00222237) dated 28 June 2022 for a staged community title subdivision including the creation of 119 residential lots, 1 residue lot and 4 super lots, civil works, earthworks, creation of a new park and associated landscaping. Nearmap aerial imagery dated 25 January 2024 indicates that construction of this development has now commenced and has removed the vegetation that was previously mapped as bush fire prone (Figure 3 and Figure 4).

To the east of the subject land is 'managed land', within the Werrington Campus of the University of Western Sydney. To the south of the subject land is existing developed lands. To the southwest there is recently approved development currently occurring in relation to a 39 residential lot Community Title Subdivision under DA22/1041, which has removed all bushfire hazard. To the west there is 'managed land' between the existing retail buildings and O'Connell Street, in the form of a narrow strip (< 20 m width) of scattered remnant trees and slashed grass. Thus, all lands to the east, south and west of the subject land are assessed as 'managed land' and excluded in accordance with A1.10 of PBP (Figure 4).

Onsite, there is a small area of remnant 'woodland' vegetation being retained and regenerated that extends onto the adjoining site to the north. The VMP boundaries for both sites have been used to confirm the future extent of this vegetation (Figure 5 and Figure 6). However, the total area of this vegetation is 0.93 ha across both sites and it will be completely surrounded by residential development and other 'managed land'. Given this remnant is less than 1 ha and greater than 100 m from other bushfire prone vegetation (closest is >240 m to the west as per Figure 4), it is excluded as 'low threat vegetation' in accordance with A1.10 of PBP.

Given the above assessment, there is no 'bush fire prone vegetation' within 140 m of the development. This means that the development is not bushfire prone and therefore the provision of bushfire protection is not triggered by PBP or warranted.

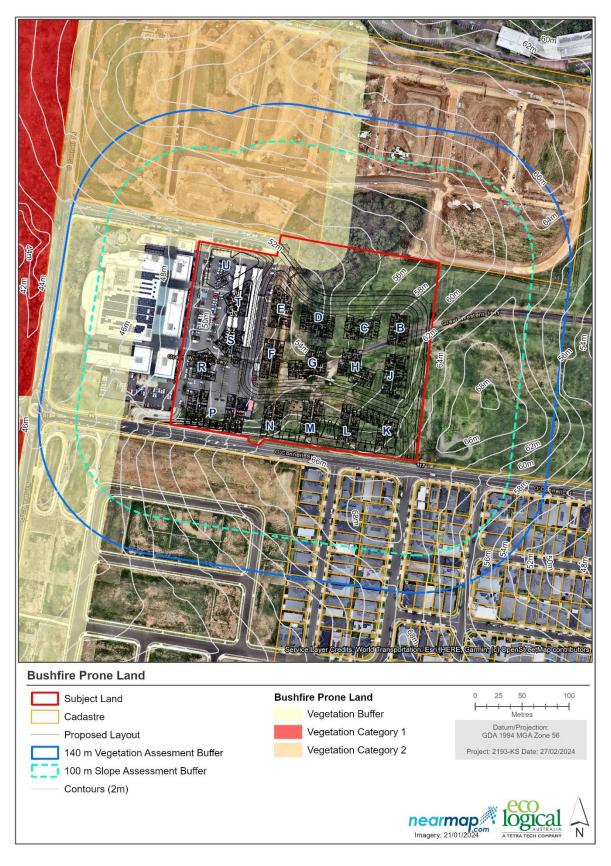


Figure 3: Existing Bushfire Prone Land Mapping

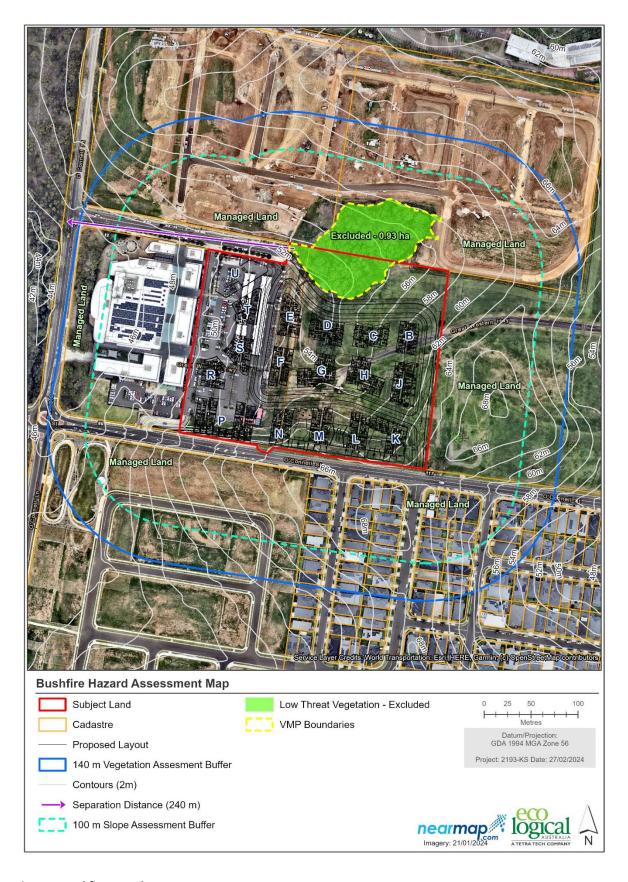


Figure 4: Bushfire Hazard Assessment



Figure 5: VMP Boundary – Subject Site (ELA 2024)



Figure 6: VMP Boundary – Adjoining Site (ELA 2020)

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## 3. Bushfire Protection Measures

No specific bushfire protection measures are required as there is no bushfire hazard within 140 m of the proposed development, as detailed in Section 2.4. Given the setback to hazard, the Bushfire Attack Level (BAL) is BAL-Low, which is described in Table A1.7 of PBP as follows:

Minimal attack from radiant heat and flame due to the distance of the building from the vegetation, although some attack by burning debris is possible. There is insufficient threat to warrant specific construction requirements.

## 4. Conclusion

The proposed development has been assessed against the specifications and requirements of *Planning for Bush Fire Protection*. The main finding of the assessment is that the recent removal of the bushfire hazard on adjoining lands, along with the small onsite remnant being assessed as 'low-threat vegetation' and therefore excluded, the development is not bushfire prone. The proposed development is located greater than 140 m from the closest bushfire hazard and is therefore assessed as BAL-Low. This assessment therefore extinguishes the requirements for the provision of any bushfire protection measures.

# 5. Recommendations

It is recommended that the development be issued a Bush Fire Safety Authority, and that no bushfire protection measures are conditioned.

Nathan Kearnes

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**Principal Bushfire Consultant** 

FPAA BPAD Certified Practitioner: PBAD23575-L3



### 6. References

Department of Planning and Environment. 2022. *NSW State Vegetation Type Map*. Website viewed 25/11/2022. <u>www.datasets.seed.nsw.gov.au/nsw-state-vegetation-type-map</u>.

Eco Logical Australia (ELA). 2020. 46-66 & 29 O'Connell Street, Caddens: Vegetation Management Plan. Prepared for HYG.

Eco Logical Australia (ELA). 2024. *68-80 O'Connell Street, Kingswood – Vegetation Management Plan*. Prepared for Caddens Estate Development Pty Ltd.

GeoScapes. 2021. *46-66 O'Connell Street Subdivision Caddens: Land*scape *Documentation*. Job Number: 191113. Dated 10/05/2021.

NSW Rural Fire Service (RFS). 2019. *Planning for Bush Fire Protection: A Guide for Councils, Planners, Fire Authorities, Developers and Homeowners – issued December 2019*. Australian Government Publishing Service, Canberra.

NSW Rural Fire Service (RFS). 2022. Planning for Bush Fire Protection: A Guide for Councils, Planners, Fire Authorities and Developers – Addendum November 2022. NSW RFS, Sydney.

Penrith City Council. 2014. Development Control Plan, Caddens Release Area Structure Plan (Penrith DCP Part E1 2014).

Site Image. 2024. Landscape Masterplan, Caddens Corner O'Connell Street Caddens. Job Number: SS22-4919. Dated 27/02/2024.

Turner. 2023. *General Site Plans. O'Connell Street Caddens*. Project No. 20096. Drawing No. DA-001-002. Dated 22/05/2023.



