

Bush Fire Assessment Report

Bushland Health - Manning Rise
Proposed Seniors Living Community

Lot 343 DP 1118417
494 Wingham Road, Taree

August 2024
Final

Prepared for
Bushland Health

Project No: 19249

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1. INTRODUCTION

Accuplan has been commissioned by Bushland Health to prepare a Bush Fire Assessment Report in relation to a proposed Seniors Living Community ('Manning Rise') on land at Lot 343 DP 1118417, 494 Wingham Road, Taree.

The land within the site and surrounds is mapped as bushfire prone land for the purposes of Section 10.3 of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

The purpose of this report is to carry out a bushfire assessment having regard to the provisions of the NSW Rural Fire Service guideline entitled *Planning for Bush Fire Protection 2019* (PBP).

Due to the proposal involving the construction of a seniors living community, the proposal is to be assessed under the provisions for a Special Fire Protection Purpose (SFPP) development (PBP).

2. PROPOSED DEVELOPMENT

The proposed development is for the establishment of a seniors living community on land described as Lot 343 DP 1118417, 494 Wingham Road, Taree.

The community involves the construction of a range of facilities including:

- A village comprised of 209 independent living units (ILUs), arranged in 8 precincts;
- Community facilities;
- RV and caravan parking;
- Communal landscaped areas and bushland reserve which includes a bushfire asset protection zone (APZ) in the northern part of the site.

An extract of the site plan for the proposal is at Figure 2.1.



Figure 2.1: Extract of Master Plan
(Source: dwp, 2024). North to top of page

3. SITE DESCRIPTION

The subject site is identified as Lot 343 DP 1118417, 494 Wingham Road, Taree.

The site is in the Mid-Coast Local Government Area and the applicable Environmental Planning Instrument (EPI) is the *Greater Taree Local Environmental Plan 2010 (LEP)*.

The eastern boundary of the site has frontage to Marie Avenue. Land in the central southern part of the site has frontage (about 57 metres) to the northern side of Wingham Road.

The subject site has an area of approximately 25.6 hectares and is occupied by an unused residential dwelling and ancillary buildings in its north-eastern corner. Vegetation within the site largely consists of degraded agricultural land with some areas of remnant forest persisting within the north-eastern extent of the site and paddock trees occurring throughout.

Except for part of the central southern area of the site which has frontage to Wingham Road, land adjoining the site to the south is occupied by established residential dwellings, with industrial development occupying land to the south of Wingham Road. Land to the north-east of the site is characterised by residential subdivision, with most allotments containing residential buildings. Land to the south-east of the site is the Warrana Place retirement living development.

Land to the north-east of the site contains forest vegetation, with land immediately to the north of the western part of the site managed as grassland. Forest vegetation exists further to the north-west of the site, in the north-western part of land within Lot 32 DP 1043136, 522 Wingham Road. Forest vegetation to the north of the land at 522 Wingham Road is contiguous with the forest vegetation on the land to the north-east of the site.

In relation to the area of vegetation to the north-west of the site, in the north-western part of Lot 32 DP 1043136, this comprises an area of forest vegetation which is separated from the western boundary of the subject site by cleared land within the central part of that adjoining property. The north-eastern part of Lot 32, directly north of the north-western part of the subject site, is cleared grazing land maintained as short grasses.

The nearest areas of vegetation that is likely to present a potential bushfire hazard in relation to development of the site is the areas of forest vegetation identified in the above paragraphs. The mapped areas of potential bushfire hazard vegetation is shown in Figure 3.1.

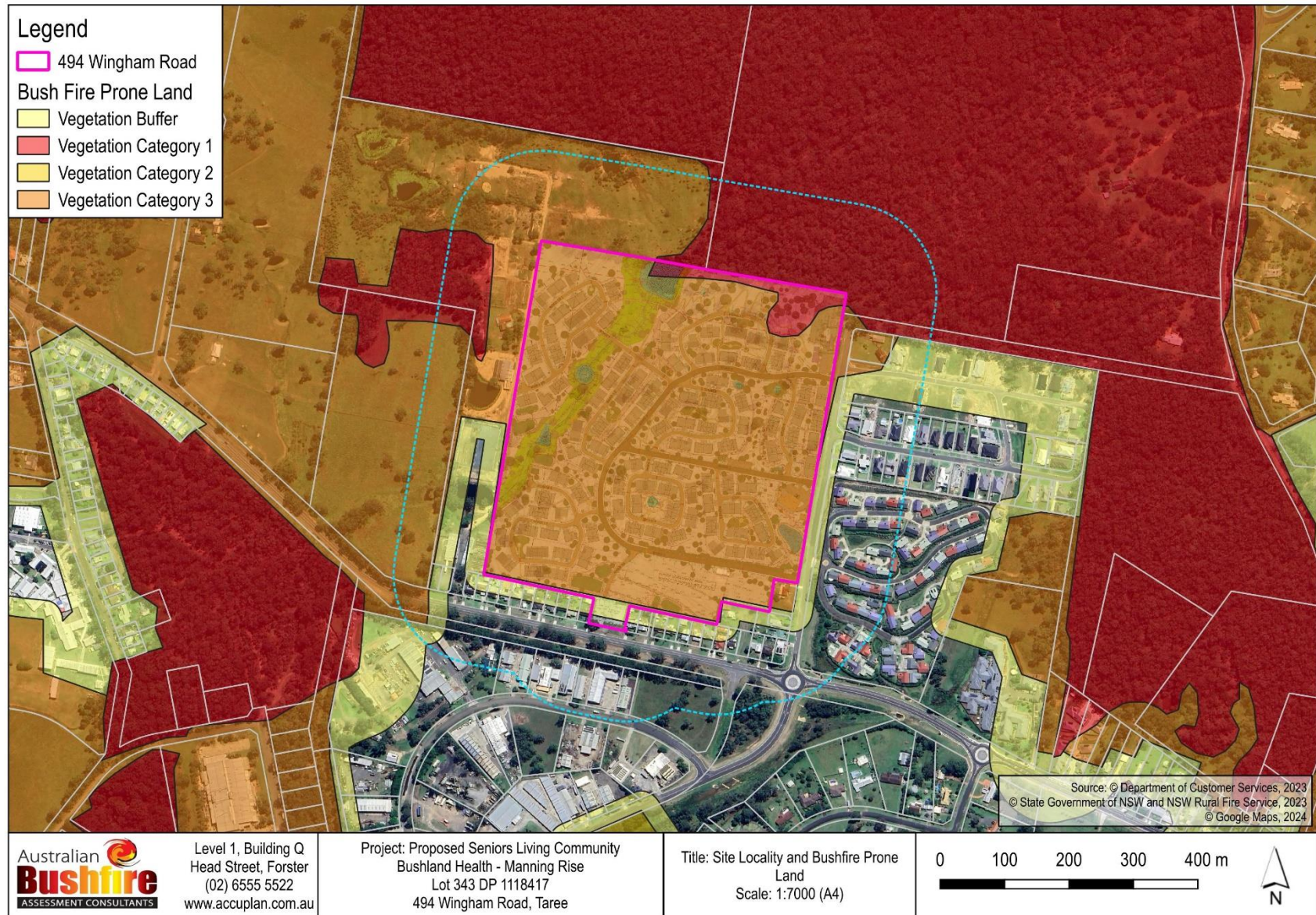


Figure 3.1: Site Locality and Bushfire Prone Land Map



Photo 3.1: Looking east from within the site, showing forest vegetation to the north-east of the site.



Photo 3.2: Looking north from within the site, showing forest vegetation to the north-east of the site

3.1 Services and Infrastructure

Table 3.1 summarises the services and infrastructure available to the site.

Table 3.1: Services Summary

Service	Availability
Access	According to Figure 2.1, access to the site will be via internal roads that will extend into the site from Marie Avenue. The proposed roads would provide all-weather access to proposed buildings within the site.
Water	Existing reticulated water supplies are in Wingham Road and Marie Avenue and are capable of being provided to the site as part of the proposal.
Electricity	Overhead and underground electricity is available in Wingham Road and Marie Avenue.

3.2 Environmental Features or Aboriginal Relics

A Biodiversity Development Assessment Report (BDAR) prepared by Accuplan accompanies the development application. The BDAR provides an analysis of the potential impacts associated with the proposed development, having regard to the current provisions of the *Biodiversity Conservation Act 2016* and *Environment Protection & Biodiversity Conservation Act 1999* (Cth). The BDAR outlines Biodiversity Offset Scheme credit obligations associated with the proposal.

No archaeological assessment was provided for the purposes of this assessment.

A search of the Aboriginal Heritage Information System (AHIMS, Ref: 917661, 7 August 2024) has disclosed that no known items of Aboriginal cultural heritage significance have been recorded on or in the vicinity of the site.

3.3 Vegetation Classification

The nearest area of potential bushfire hazard occurs as forest to the north-east of the site within Lot 3 DP 250638. A second area of potential bushfire hazard vegetation occurs to the north-west of the site and comprises forest vegetation in the north-western part of Lot 32 DP 1043136. The north-eastern part of Lot 32, directly north of the north-western part of the subject site, is cleared grazing land maintained as short grasses.

Forest vegetation around the site has been identified as *PCT 1215 – Spotted Gum – Grey Ironbark open forest of the Macleay Valley lowlands of the NSW North Coast Bioregion*. The vegetation community is classified as ‘forest’ for the purposes of PBP.

For the purposes of determining Asset Protection Zones (APZs) and Bushfire Attack Levels (BALs), the vegetation formation has been classified in accordance with Appendix 1 of PBP as “forest”.

The forest vegetation in the north-western part of Lot 32 DP 1043136 is separated from the western boundary of the subject site by cleared land within the central part of Lot 32.

The land within the central part of Lot 32, effectively for the length of that land with the western boundary of the subject site, is considered as managed land for the purposes of Section A1.10 (Low threat vegetation – exclusions) of PBP. The area in the central part of Lot 32 is clear of any significant vegetation and maintained with a low fuel load.

3.4 Slope Assessment

The assessment of slope has been undertaken in accordance with the methodology contained within Section A1.5 of PBP. The analysis of slope was undertaken via analysis of 1:25,000 topographic mapping and through field analysis using a hand-held inclinometer and range finder.

For the purposes of this assessment, the slope of land most likely to influence bushfire behaviour in relation to the proposal has been assessed as:

- Upslope in relation to grassland north of the western part of the northern site boundary,
- >0.5 degrees downslope to the north-east; and
- Upslope in relation to forest vegetation to the north-west.

4. BUSHFIRE ASSESSMENT

The proposed development is subject to the specific considerations in Chapter 6 of PBP relating to *Special Fire Protection Purpose Developments*. The relevant performance criteria in Chapter 6 of PBP are considered in Table 4.1 to Table 4.4.

The following addresses the matters listed at Section A2.1(g)(i)-(viii) of PBP (Submission Requirements for a BFSAs).

4.1 The extent to which the development is to provide for setbacks including Asset Protection Zones

The site is located within the MidCoast Local Government Area. According to Appendix 1 of *Planning for Bush Fire Protection 2019*, the site is in the North Coast fire weather area and is subject to a fire danger index (FDI) rating of 80.

The required minimum Asset Protection Zones (APZs) for a Special Fire Protection Purpose are as per Table A1.12.1 of PBP:

The required APZs are:

- 36 metres to grassland to the north (upslope) of the western part of the northern site boundary;
- 79 metres to the forest vegetation to the north-east;
- 67 metres to forest vegetation on land (upslope) to the north-west of the site, in the north-western part of Lot 32 DP 1043136.

The proposed development can incorporate the required APZs to the residential components of the development subject to final design.

The required APZs and/or available effective separation distances are shown in Figure 4.1.

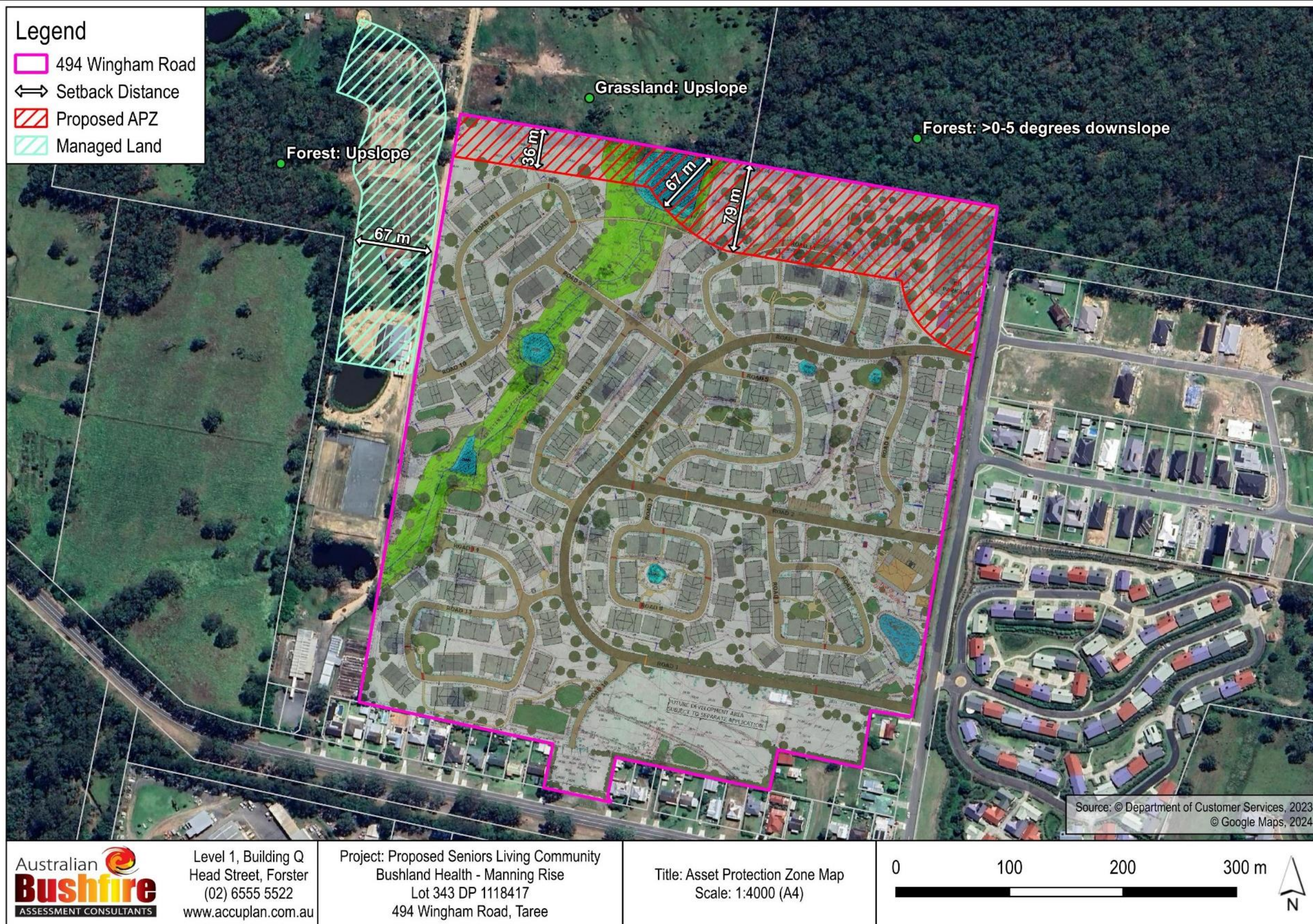


Figure 4.1: Asset Protection Zones

4.2 The siting and adequacy of water supplies for fire fighting

The site is in an area serviced by reticulated water. Reticulated water supply within the site is to be via a ring main system. Fire hydrant location, spacing, design and sizing is to be as per AS2419.1-2021.

4.3 The capacity of nearby public roads to handle increased volumes of traffic when a bush fire emergency occurs

In the event of a bushfire emergency, access to the site may be obtained from Marie Avenue via Wingham Road. Each of these roads are bitumen sealed and have the capacity to handle some increased volumes of traffic during a bushfire emergency.

The proposal also includes emergency access/egress to/from Wingham Road at the southern boundary of the site.

4.4 Whether or not nearby public roads that link with the fire trail network have two-way access

Marie Avenue intersects with Wingham Road to the south-east of the site. Wingham Road is a main road linking Taree and Wingham and two-way access/egress is available to either the east or west via Wingham Road. All public roads in the vicinity of the site provide sufficient width to allow traffic to pass in opposite directions.

4.5 The adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response

Arrangements for access to and egress from the proposed development will be adequate for the purposes of an emergency response. Access/egress is available to the site from Marie Avenue via three (3) intersections with internal roads and emergency access/egress is also proposed to/from Wingham Road at the southern boundary of the site.

In circumstances where the development is proposed to be staged, recommendations are made for the provision of temporary turning heads to any internal roads during each stage of the development. Following construction/completion of the entire development, all roads would be through roads and turning heads would not be required.

4.6 The adequacy of bush fire maintenance plans and fire emergency procedures for the development site

An emergency management/evacuation plan should be prepared and implemented for the proposed development prior to occupation of any dwelling(s) within the proposed development. The plan is to be prepared consistent with the applicable RFS guide.

4.7 The construction standards to be used for building elements in the development

Recommendations have been made regarding the construction of dwellings to the requirements of BAL-12.5 under AS 3959 where located:

- within 50 metres of the nearest grassland hazard (area north of western part of northern site boundary); and/or
- within 100 metres of forest vegetation to the north-east and north-west of the site.

A Bushfire Attack Level Map is at Figure 4.2 showing the buildings subject to construction to the requirements for BAL-12.5 as per AS3959.

4.8 The adequacy of sprinkler systems and other fire protection measures to be incorporated into the development

The proposed development does not involve the provision of sprinkler systems.

Also, an emergency management/evacuation plan is to be formulated prior to occupation of any dwelling(s) within the proposed development.

4.9 Registered fire trails on the property

There are no registered fire trails on the property.

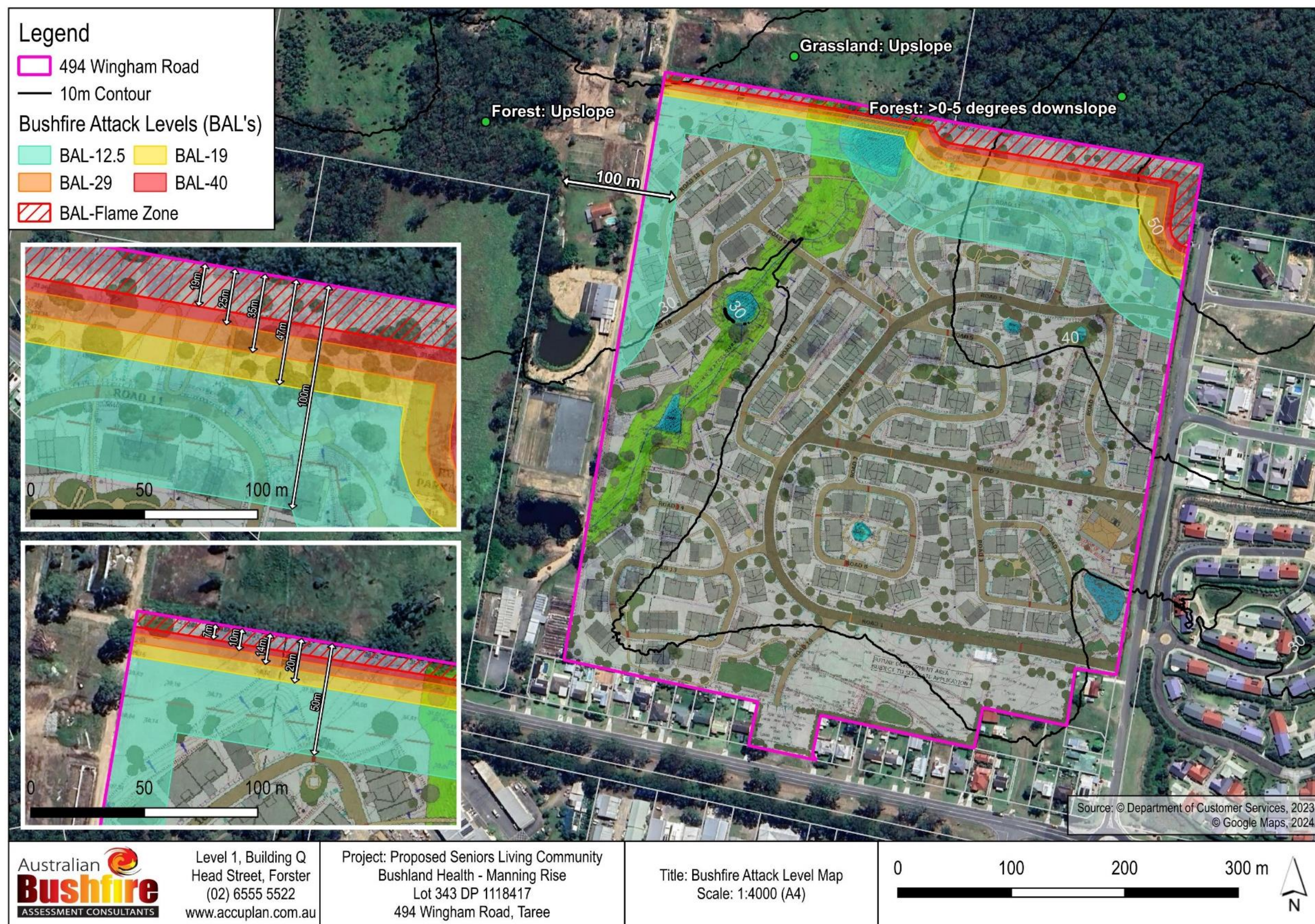


Figure 4.2: Bushfire Attack Level Map

Table 4.1: APZs and construction (Re: Table 6.8a PBP)

PERFORMANCE CRITERIA	RELATIONSHIP OF PROPOSAL TO PERFORMANCE CRITERIA
The intent may be achieved where:	
ASSET PROTECTION ZONES	The provision of Asset Protection Zones/existing effective separation distances to any areas of unmanaged vegetation meet and/or exceed the minimum APZ requirements set out in Table A1.12.1 of PBP. The APZs/effective separation distances are shown in Figure 4.1.
	APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised. APZ maintenance is practical and there are no apparent issues in relation to slope stability.
	APZs are managed and maintained to prevent the spread of fire towards the building. Land within the site is to be maintained as an APZ.
	The APZ is provided in perpetuity. Land within the site is to be maintained as an APZ.
LANDSCAPING	Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions. Landscaping of the unbuilt on land within the site is to be consistent with the areas required to be managed as an APZ/IPA around the residential buildings.
CONSTRUCTION STANDARDS	Recommendations have been made regarding the construction of dwellings to the requirements of BAL-12.5 under AS 3959 where located: • within 50 metres of the nearest grassland hazard (area north of western part of northern site boundary); and/or • within 100 metres of forest vegetation to the north-east and north-west of the site. The Bushfire Attack Level Map at Figure 4.2 shows the residential buildings subject to construction to the requirements for BAL-12.5 as per AS3959.

Table 4.2: Access (Re: Table 6.8b PBP)

PERFORMANCE CRITERIA	RELATIONSHIP OF PROPOSAL TO PERFORMANCE CRITERIA
The intent may be achieved where:	
ACCESS	Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.
	The capacity of access roads is adequate for firefighting vehicles.
	There is appropriate access to water supply. All access roads to and within the proposed development are, or will be constructed as, two-wheel drive, all-weather roads. The existing roadway in Marie Avenue will provide access to forest vegetation to the north-east of the site. Access within the proposed development is to be provided via sealed roads designed and constructed for capacity to carry fully laden fire fighting vehicles. Reticulated water is available to the site and hydrants are to be located to be accessible for firefighting purposes. Provision is to be made for: • Fire hydrant spacing, design and sizing to comply with the relevant clauses of AS 2419.1:2021; and • Hydrants to be located to be accessible from internal road carriageways and not to be obstructed by parked vehicles.
PERIMETER ROADS	Perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating as well as providing a safe operational environment for emergency service personnel during firefighting and emergency management on the interface. The northern part of the loop in Road 11 has been designed as a perimeter road as this is the part of the internal road network closest to the interface with the larger tract of forest vegetation to the north-east of the site. Parking is to be provided outside the carriageway width and hydrants are to be located clear of all parking areas.
NON-PERIMETER ROADS	Non-perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating. Any non-perimeter internal roads are to be constructed with minimum 5.5 metre carriageway widths. Parking is to be provided outside the carriageway width and hydrants are to be located clear of all parking areas.

Table 4.3: Services (Re: Table 6.8c PBP)

PERFORMANCE CRITERIA		RELATIONSHIP OF PROPOSAL TO PERFORMANCE CRITERIA
The intent may be achieved where:		
WATER SUPPLIES	<i>An adequate water supply for firefighting purposes is installed and maintained.</i>	Reticulated water is available to the site.
	<i>Water supplies are located at regular intervals; and The water supply is accessible and reliable for firefighting operations.</i>	As reticulated water is available to the site, provision is to be made in the design stage of the proposal for: • Fire hydrant spacing, design and sizing to comply with the relevant clauses of AS 2419.1:2021; • Hydrants to be located to be accessible from internal road carriageways and not to be obstructed by parked vehicles; • Reticulated water supply via a ring main system
	<i>Flows and pressure are appropriate.</i>	Fire hydrant flows and pressures are to be compliant with AS 2419.1:2021.
	<i>The integrity of the water supply is maintained.</i>	If proposed for additional water supply, any water supply tank(s) are to be of metal or concrete manufacture. Any fittings or exposed pipes are to be metal.
	<i>Water supplies are adequate in areas where reticulated water is not available.</i>	N/A
ELECTRICITY SERVICES	<i>Location of electricity services limits the possibility of ignition of surrounding bush land or fabric of buildings.</i>	Electricity supply to the proposed development is to be underground.
GAS	<i>Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.</i>	Any gas installation(s) is to be consistent with the relevant acceptable solutions of PBP.

Table 4.4: Emergency management planning (Re: Table 6.8d PBP)

PERFORMANCE CRITERIA	RELATIONSHIP OF PROPOSAL TO PERFORMANCE CRITERIA
The intent may be achieved where:	
EMERGENCY MANAGEMENT	A Bush Fire Emergency Management and Evacuation Plan is to be prepared consistent with: • The NSW RFS document: <i>Guide to Developing a Bush Fire Emergency Management and Evacuation Plan</i>; • Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable) The plan is to include planning for the early relocation of occupants.
	As part of the emergency management arrangements above, an Emergency Planning Committee is to be established to facilitate consultation with residents and their families. Detailed plans of all emergency assembly areas including on-site and off-site arrangements are to be clearly identified in the Emergency Management Plan and appropriate signage displayed.

5. CONCLUSION

The proposal involves the establishment of a seniors living development on land at Lot 343 DP 1118417, 494 Wingham Road, Taree.

The proposal is development for a Special Fire Protection Purpose (SFPP) for the purposes of Section 100B of the *Rural Fires Act 1997*.

The following recommendations are made in relation to bushfire protection measures for the proposal and are based on the relevant provisions of the NSW Rural Fire Service guideline, *Planning for Bush Fire Protection 2019*. These recommendations are subject to change prior to finalisation of the assessment following receipt of final development application plans for the proposed development.

Asset Protection Zones

- A. Land within the site is to be maintained as an Asset Protection Zone (APZ), with the following areas maintained to the standard for an Inner Protection Area:
 - i. Land between the north-westernmost dwellings and the northern and western site boundaries;
 - ii. Land between the north-easternmost dwellings and the northern site boundary.
- B. Asset Protection Zones are to be maintained in accordance with the requirements of Appendix 4 of *Planning for Bush Fire Protection 2019* (PBP).

Construction & Design

- C. Subject to the provision of Asset Protection Zones as per A and B above, any residential buildings are to comply with the requirements for construction to BAL-12.5 as per AS3959-2018 (Construction of buildings in bushfire prone areas) where within:
 - i. 50 metres of the nearest grassland hazard (area north of western part of northern site boundary); and/or
 - ii. 100 metres of forest vegetation on land to the north-east and north-west of the site.

Access

- D. Internal road design and widths are to comply with Table 6.8b of *Planning for Bush Fire Protection 2019*.

- E. Internal road surfaces (and any bridges/culverts) are to have a capacity to carry fully loaded firefighting vehicles (up to 23 tonnes) and clearly indicate load rating.
- F. Car parking is to be restricted to individual sites and/or designated visitor parking areas to ensure that parking does not obstruct the paved width of the internal roads within the development.
- G. Any proposed traffic management devices are to be designed, located and constructed to facilitate access by emergency services vehicles.
- H. Where the development is to be staged, internal roads are to incorporate suitable turning areas in accordance with Appendix 3 of *Planning for Bush Fire Protection 2019*. Turning areas are to be provided throughout each stage of the development (for example, at the terminus of any dead end internal roads constructed in early stages).

Water Supply & Services

- I. Final design of the development is to detail the provision of reticulated water throughout the proposed development including location of fire hydrants in accordance with the minimum standards outlined by AS 2419.1-2021.
- J. Fire hydrant flows are to be confirmed as being compliant with AS 2419.1:2021.
- K. Any hydrants along the internal roads within the site are to be located outside of the road carriageway and/or parking bays (where applicable) to ensure accessibility to reticulated water for fire suppression.
- L. Any electricity supply lines are to be installed underground.

Landscape and Vegetation Management

- M. Fuel loads within the northern part of the site are to be monitored and managed to prevent regeneration of forest vegetation types.
- N. Landscaping of the site is to be consistent with principles in Appendix 4 of *Planning for Bush Fire Protection 2019*.

Evacuation Procedures

- O. A Bush Fire Emergency Management and Evacuation Plan is to be prepared and implemented for the development prior to occupation of any dwelling(s) within the development. The plan is

to be prepared in compliance with the NSW RFS document: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*.

NOTE & DISCLAIMER:

1. *This assessment relates only to the development described in Section 2 of this assessment.*
2. *This assessment has been based on bushfire protection guidelines as outlined in the document entitled Planning for Bush Fire Protection 2019 (PBP).*
3. *Notwithstanding the precautions recommended, it should always be remembered that bushfires burn under a range of conditions and an element of risk, no matter how small, always remains.*
4. *This assessment does not imply or infer any approval for the removal and/or thinning of vegetation for Asset Protection or other purposes. It is the responsibility of the client/landowner to obtain all necessary approvals in this regard.*

6. REFERENCES

NSW Rural Fire Service (2019)

Planning for Bush Fire Protection 2019

Standards Australia (2018)

AS 3959-2018 Construction of buildings in bushfire-prone areas