

Bushfire Assessment Report



Apical

Bushfire and Planning



09:13

22/11/2025

Sat

607-615 Glenrock Rd, Cavan NSW 2582

Client: Blake & Buckmaster

(Care of: Tim Lee Architects)

Address: 595 Glenrock Rd, Cavan 2582

Lot/DP: 1/-/DP1232600

Proposed Development: New Dwelling (Class 1a) Rural Property

Bushfire Assessment Report

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Report:	Bushfire Assessment Report for 595 Glenrock Road
Prepared for:	Landholders: Blake and Buckmaster Landholders (C/o Tim Lee Architects)
Prepared by:	Maya Saunders & Daniel Anderson
Project no:	TA20251119
Date:	29/11/2025



Prepared by: _____

Daniel Anderson (M.Env.Sc, GCert.PBP.)

BPAD LEVEL 2 BUSHFIRE PRACTITIONER

BPAD- 48898



This report has been prepared for the owner of the land, in accordance with Planning for Bushfire Protection - A Guide for Councils, Planners, Fire Authorities and Developers, 2019, NSW Rural Fire Service (RFS) and Planning NSW.

Prepared under SECT 4.14 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Conforming to Australian Standard AS3959-2018 Building in Bushfire Prone Areas

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1. EXECUTIVE SUMMARY

The level of bush fire risk imposed upon a building is affected by the area you live, the vegetation, the distance from the vegetation to your home, and the ground slope which all contribute to bushfire behaviour within the landscape.

Section 4.14 of the NSW EP&A Act states that development upon bushfire prone lands must comply with NSW RFS Guidelines 'Planning for Bushfire Protection 2019' herein (PBP-2019) and building performance under AS3959-2018 'Construction of buildings upon bushfire prone land'.

This bushfire assessment report provided by Apical Bushfire & Planning will assess and determine the Bushfire Attack Level (BAL Rating) presented by the placement of the dwelling based upon the implementation of a Method 1 Bushfire Attack Level (BAL) Determination (Deemed to satisfy tables) permissible under AS3959-2018 (Construction of buildings in bushfire prone areas), and in accordance with Planning for Bushfire Protection 2019 (NSW RFS).

Once the BAL rating is determined for a building location, this assessment will then review the development proposal entirely to ensure that the proposal can demonstrate that the requirements and associated bushfire protection measures (BPM's) for a rural infill development prescribed within PBP-2019 can be satisfied by the planning proposal.

The consideration of PBP-2019 coupled with the application of building performance criteria prescribed within AS3959-2018 (Australian Standards – Building Code of Australia) will work in an integrated fashion by managing both landscape risk and building performance measures to protect buildings and building occupants from inherent risk of bush fire attack.

This development proposal is for a single occupancy dwelling with relevant site access and landscaping on a site which has been identified as being bushfire prone land (category 1 & 3).

Appendix A2.2 of PBP-2019 documents the assessment and submission requirements for 'infill' development including Bushfire Protection Measures (Section 3 of PBP-19 & Residential Development Section 7 PBP-19) which will be considered and presented within this assessment.

This Bushfire Assessment Report will address the following matters:

1. Confirmation the site is located upon bushfire prone land.
2. The location, extent, and vegetation formation of any bushland on or within 140 meters of the site.
3. The slope & aspect of the site and any of Bushfire Prone Land within 100m of the site.
4. Any features on or adjoining the site which may mitigate the impact of bushfire on the proposed development.
5. A statement assessing the likely environmental impact of any proposed Bushfire Protection Measures (BPM's).
6. A site plan showing access, water supplies, APZ's, BAL requirements, & building footprint in relation bushfire hazards; and
7. Calculated BAL construction levels for the dwelling.

This development proposal regards construction of class 1a building (residential dwelling) a single occupancy dwelling with two (2) designed and attached buildings, internal site access roadway and landscaping on a site which has been identified as being bushfire prone land (category 1 and 3) affected by native grassland pastures and woodland trees.

The class 1a) home dwelling is constructed upon piers, with raised (elevated flooring)

The property is zoned RU1 Primary Production under the Yass Valley Local Environment Plan (LEP) 2013.

A concept Site Plan, showing the proposed layout of the buildings onsite as part of the proposal is provided as (Map Image A.1.).

The assessment of the site is based on the results of a field survey and BAL site assessment conducted by Mr Daniel Anderson Bushfire Planning Accredited Assessor: BPAD48898, During November 2025.



The following key bushfire influential characteristics were found during the assessment of the site.

- The subject site is affected by a grassland hazard, mapped as category 3 (NSW RFS), in all directions. To the West is also forest mapped as category 1 (NSW RFS) however this is too far from the proposed building envelope to be considered a hazard.
- The grassland hazard sits within the lot boundary
- Bushfire Attack Levels (BAL) were determined for the proposal using the application of BAL assessment methodology 'Appendix 1 PBP-2019 and Table A1.12.5 of PBP2019. BAL determination is BAL 29,
 - i) North: BAL 29kW/m² (Provide a suitable APZ area out from the house location)
 - ii) South: BAL 29kW /m² (Provide a suitable APZ area out from the house location)
 - iii) East: BAL 29kW /m² (Provide a suitable APZ area out from the house location)
 - iv) West BAL 29kW /m² (Provide a suitable APZ area out from the house location)

1.1 Bushfire Protection Measures – Summary Recommendations

The following key recommendations to mitigate bushfire risk have been provided to ensure compliance with the current legislation Australian Standard under the National Construction Code (NCC) and PBP 2019.

1. Asset Protection Zone (APZ):

Vegetation management, to improve separation distance, provide for reasonable defensible space and enhance Asset Protection Zones is recommended for all directions.

The application of vegetation management In the form of an APZ around the building area (as presented in the site plans) to comply with IPA (Inner Protection Area) standards:

- i) North: 45m extending outwards from the dwelling managed as inner protection area (APZ)
- ii) South: 10m extending outwards from the dwelling managed as inner protection area (APZ)
- iii) East: 15m extending outwards from the dwelling managed as inner protection area (APZ)
- iv) West: 15m extending outwards from the dwelling managed as inner protection area (APZ)

2. Siting and Design

The siting of the proposed new dwelling is in line with Yass Valley DCP 2024 setback requirements and within the required boundary setbacks also allowing for the APZ areas.

The proposed development is for a new single storey dwelling with main living area building and adjoining bedrooms area building with relevant site access and landscaping features (see site plans – Map Image A.1.).

The site will be accessed via the existing driveway to the front (south) of the subject site.

The home site will be located adjacent to the current rural shed, levelled building pad and water tanks area upon the property.

The APZ will provide an area where the dwelling can be safely defended in the case of a fire.

Water supplies for firefighting will be provided by the existing above ground poly water tanks and new water tanks associated with the house development.

Siting for the habitable dwelling has been determined to achieve:

- The ability to provide sound vehicle access to the lot.
- The ability to provide distance from land gradients, which stabilize fire rate of spread and allow for safer vehicle movements and parking.
- The ability to provide for minimal vegetation management.



3. Construction Standard

To improve the integrity of the dwelling against bush fire attack, Building Construction Level for this proposal must be designed to achieve a BAL of 29kW/m² for all (4) building elevations.

The building is designed with an elevated subfloor and is to be constructed upon piers with elevated flooring.

The building must be constructed in accordance with sections 3 & 7 of AS3959-2018 to reflect the requirements of the BCA and NCC construction codes.

Ember attack and volatile winds under bushfire conditions are also factors for the building to withstand and should be appropriately acknowledge as part of the building design.

The proposal must ensure that the building is constructed to contain attributes compliant with AS3959-2018 specifications.

Performance criteria relating the Bushfire Protection Measures (BPM's) of the proposal must also comply with chapter 7 of PBP-2019 & section 3 & 7 of AS3959-2018.

Leaf proof gutter system will be provided and installed to improve defence from ember attack.

4. Access Requirements

Access requirements to the building for firefighting are prescribed within Appendix 3 PBP-2019. This report has reviewed the proposal against such criteria with the key performance statements for each bushfire protection measure presented within.

Current road widths presented by Glenrock Road and the surrounding road networks are sufficient to safely provide for cars and versatile truck vehicles measuring 5-6 meters wide (Fire-fighting tankers) in the event of firefighting at the location.

5. Water & Utility Services

Reticulated water is not available on the site.

Currently there are 4 X approximately 12,000L poly water tanks installed at the location which are connected to the roof catchment of the existing shed.

The retention of this water capacity will be a useful addition to the project water supply for firefighting purpose.

Currently the tanks are above ground and made of polyurethane plastics which will require heat shielding to be considered effective water supplies under bushfire conditions, to ensure the tanks do not melt from radiant heat exposures.

In addition a water tank of at least 20,000L will be provided exclusively for firefighting purposes under the home development and will be constructed to the standards outlined in table 7.4a PBP 2029, with a 65mm storz outlet valve for access by firefighting vehicles in attendance to the site.

If Bottle gas services are available, they must be installed and maintained in accordance with AS 1596. Gas cylinder relief valves shall be directed away from the building and away from any hazardous materials such as firewood, etc. Gas bottles will be sited away from exposure to radiant heat sources (northern and western elevation).

Electricity is supplied to the site underground alternatively solar panel electricity maybe established.

6. Landscaping

Any future landscaping prescribed within the plan shall be designed and maintained in accordance with the principals identified in sections 7.4 Landscaping, 7.6 fencing and gates and be compliant with Appendix 4 Asset Protection Zones of PBP 2019.

Asset Protection Zone (APZ areas) must be implemented at the prescribed management distance out from the dwelling for each provided elevation to ensure separation of the building from flammable bushfire fuel areas.



The application of bushfire hazard reduction principals in accordance with the landscape design will focus upon:

- Maintaining a clear area of low-cut lawn or pavement adjacent to the house.
- Keeping areas under fences, fence posts and gates and trees raked and cleared of fuel.
- Utilising non-combustible fencing and retaining walls.
- Breaking up the canopy of trees and shrubs with defined garden beds.
- Organic mulch should not be used in bushfire prone areas and non-flammable material should be used as ground cover, e.g., Scoria, pebbles, recycled crushed bricks.
- Planting trees and shrubs such that:
 - the branches will not overhang the roof.
 - the tree canopy is not continuous.

7. Emergency Management

The applicants are advised to obtain the NSW Rural Fire Service – “Guidelines for the Preparation of Bush Fire Evacuation Plans” & ‘Bush Fire Survival Plan’. In the event of emergency, the any future owners should ensure they are familiar with the RFS Bush Fire Alert Levels and use their Bush Fire Survival Plan.

8. Findings

The recommendations presented here in the summary, will ensure the development has fully considered the bush fire protection measures and requirements provided in *Planning for Bushfire Protection* (2019) & addendum (2022) *NSW Rural Fire Service* and comply with adequate provision for firefighting strategies to meet the overall presented requirements of Clause 44 of the Rural Fires Regulation NSW 2013.

2. INTRODUCTION

Apical Bushfire & Planning P/L was commissioned by the landholders to undertake the required Bushfire Hazard Assessment for this development proposal after it was established that the property was located on bushfire prone land (Category 1 and 3) as such the proposal is subject to the considerations outlined in *Planning for Bushfire Protection*, NSW Rural Fire Service 2019 (stated as – *PBP 2019-NSW, RFS*).

The development aims to comply with ‘Deemed to satisfy’ solutions determined for the required bush fire attack level determined for the siting of the building and the presented bushfire protection measures.

The assessment will present key management actions and applied interventions to reduce overall bushfire risk to the property.

Building performance will also be delivered by the builders through application of a BAL 29 construction standard pursuant with the NCC & AS3959-2018 requirements.

The site is located within a remote area and accessed via a gravel surface road which is considered to traverse narrow and steep passageway to access and egress from the site.

Leaving the site early in any event of a bushfire within the locality is advised.

Alternatively sheltering in place with applied site preparation and complaint bushfire resistance to BAL 29 conditions is preferred to using the road network in any emergency event of local fire.

The key recommendations are provided to sufficiently alleviate and mitigate bushfire risk for the development and support the safety of the future occupants of the site.

Methodology applied by our site assessment for determination of bushfire attack (BAL) is based on the application of the site assessment methodology and bushfire attack level tables included within Appendix 1, *NSW Planning for Bushfire Protection Guidelines, 2019 (PBP) NSW, RFS*.



Terrain (slope) and landform assessment of the site was determined by investigation of the land using slope digital elevation model (DEM) provided by 'Nearmap' via a review of aerial imagery and elevations measured onsite using a clinograph and verified via a site inspection (November 2025) of the subject property.

Vegetation extent within the subject area and surrounds has been derived from available aerial photo interpretation (API), cross referencing with NSW Vegetation data layers (P5MA, Keith Classifications, AUSLIG) on a GIS platform and a site inspection (November 2025) conducted prior to finalising this report.

The extent and dimensions of the proposed new dwelling are based on the Yass Valley DCP 2024 and supplied concept site layout plan prepared by Tim Lee Architects.

Site mapping imagery was obtained via access to geo-rectified aerial image photos provided via Nearmap and dated September 2025.

Photographic images of the subject property and surrounding vegetation and landscapes are also included within this report (as Figures) i.e. (Site Photos) presenting site condition at the time of inspection.



3. PROPERTY DETAILS

Applicants Name: Blake & Buckmaster C/o Tim Lee Architects

Council: Yass Valley

Council Reference:

Lot: 1 DP: DP1232600

Address/Location: 595 Glenrock Rd, Cavan 2582

Zoning: RU1 – Primary Production

Bushfire Prone Land: Category 1 and 3 (Grassland and Woodland)

Aspect: North West

Map image 1. Aerial image subject site



Source: Nearmap (dated September 2025)

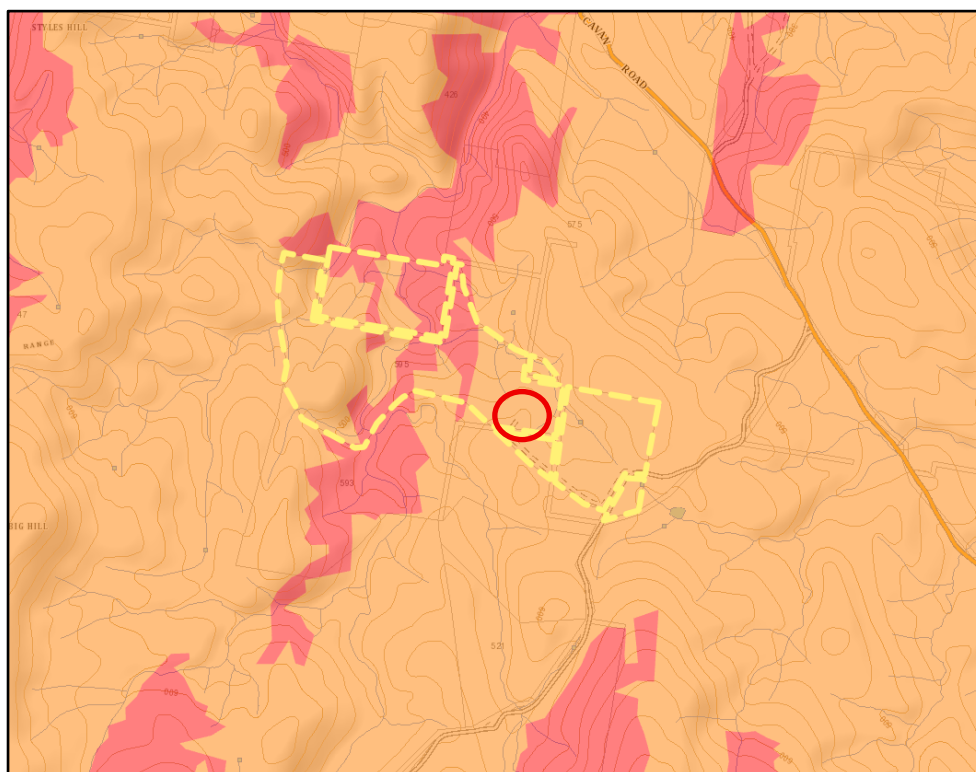


3.1 Constraints:

Table 1. Relevant site constraints

Reference	Planning Layer	Site Relevance
NSW Government	NSW Biodiversity Values Map	Not relevant
Local Government	Terrestrial Biodiversity Map	See map image 6.3.
Local Land services	Natural Resources Sensitivity Map	See map image 6.4.
Local Government	Environmentally Sensitive Land	Not relevant
Local Government	Scenic Land Protection	Not relevant
NSW Government	NSW Bushfire Prone Land Map	Category 1 & 3 Hazards
Local Government	Riparian Land/Watercourses	Not relevant
Local Government	Flood Prone Land Map	Not relevant
NSW Government	Rivers & Foreshores / Marine Protection Areas	Not relevant
NSW Government	Wetland Areas (SEPP 14)	Not relevant
NSW Government	Aboriginal Heritage Information System	Not relevant
NSW Government	Core Koala Habitat Area (SEPP Koala Habitat Protection)	Not relevant

Map image 2. NSW RFS Bushfire Prone Land Map



NSW Planning Portal Bushfire Prone Mapping Tool showing the subject development site to be designated bushfire prone land (Category 1 & 3)



4. PROPOSAL

The proposed development is for a new single occupancy dwelling (2 X attached buildings) on piers with elevated subfloor, internal road site access and landscaping features (see site plans – map image A.1).

The site will be accessed via the property driveway that travels through a grassland hazard to the front (south) of the subject site. The driveway is currently formed of gravel surfacing and presents as a good condition surface.

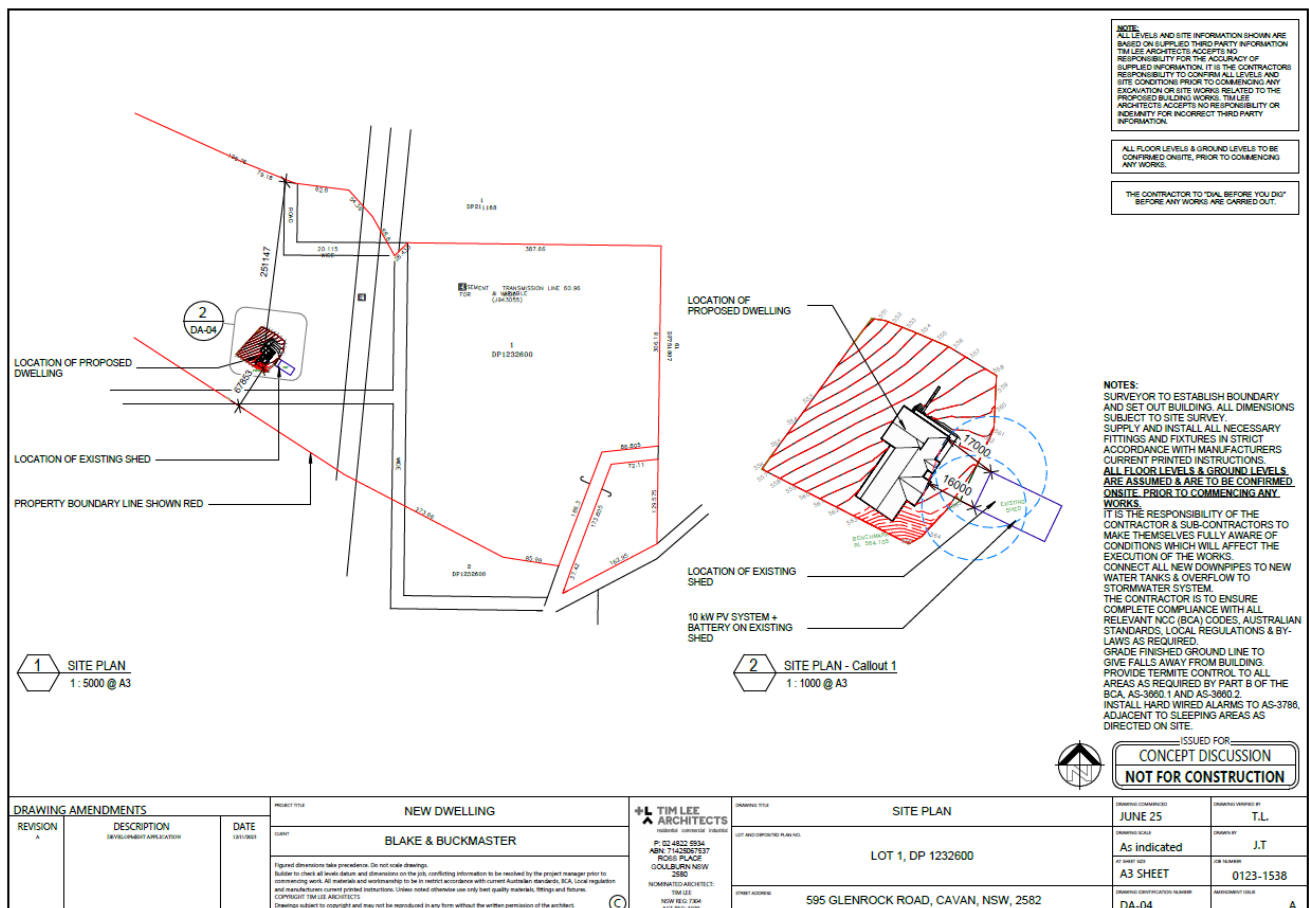
The bushfire protection measures devised and presented within this report have been determined via review and integration with the documented objectives of *PBP 2019-NSW*, RFS.

"The aim of PBP-2019 is to provide for protection of human life and minimise impacts on property from the threat of bushfire".

More specifically, the objectives of this assessment are to present interventions and solutions which:

- afford buildings and their occupants protection from exposure to a bush fire;
- provide for a defendable space to be located around buildings;
- provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition;
- ensure that safe operational access and egress for emergency service personnel and residents is available;
- provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zone (APZ); and
- ensure that utility services (Water provision) are adequate to meet the needs of firefighters (and others assisting in bushfire fighting").

Map image 3. Site Location Plan (provided by Tim Lee Architects)



5. Bushfire Attack

The vegetation within the study area is mapped as 'Bushfire Prone Vegetation – category 1 & 3' on Council Bushfire Prone Land Maps (see map image 2).

Grassland Vegetation & Woodland Vegetation.

A desktop review and data assessment were prepared to identify current vegetation cover and vegetation complexes within the surrounding landscapes of the subject site.

Actual vegetation occurring within the associated landscape and in conjunction with the proposal site were assessed at the site in the field during site assessment visits.

Vegetation structure, maintenance and actual hazard fuel ratings were evaluated in the field using field assessment guidelines derived to measure the fuel characteristics including load, structure and height of vegetation and vegetation biomass.

Our assessment of the fuel loads retained within the managed landscape zone were supported by a site visit, site photos and correlation of the ground cover and surface fuel loads with fact sheets and research papers such as Comprehensive Vegetation Fuel Loads – 2019 (NSW RFS) fuel modelling project (University of Wollongong).

Data reviews were undertaken through consultation with NSW Government State Government Databases such as consultation with available data layers including 'State Vegetation Mapping', 'Keith, 2006 Vegetation Mapping' and NSW Office of Environment & Heritage 'Plant Community Type (PCT)' data and metadata to determine vegetation type and class occurring in the broader surrounds to the site.

- The subject site is affected by a grassland hazard, mapped as category 3 (NSW RFS), in all directions. To the West is also forest mapped as category 1 (NSW RFS) however this is too far from the proposed building envelope to be considered a hazard.
- The hazard is formed of a patch of 'Southern Tableland Grassy Box Woodland' is mapped to the west of the proposed building envelope (SEED Database), areas surrounding the site have been removed due to the development (see map image 1).
- Vegetation posing the bushfire threat was classified 'Grassland' (east, south, west) and 'Woodland' (north) (Site inspection November 2025).

Grassland

Surface fuel loads = 6.0 tonnes p/ha

Overall fuel load = 6.0 tonnes p/ha

Woodland

Southern Tableland GW	10.5 p/ha	19.01 p/ha
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VEGETATION	VEGETATION CLASSIFICATION	SURFACE AND ELEVATED	OVERALL FUEL LOAD (INCLUDING BARK AND CANOPY)
Grassland	Keith: Maritime Grasslands, Temperate Montane Grasslands, Western Slopes Grassland, Riverine Plain Grasslands and Semi-arid Floodplain Grasslands. PBP Note: Dominated by perennial grasses and the presence of broad- leaved herbs on flat topography. Lack of woody plants. Plants include grasses, daisies, legumes, geraniums, saltbushes and copperburrs.	6.0	6.0

VEGETATION	VEGETATION CLASSIFICATION	SURFACE AND ELEVATED	OVERALL FUEL LOAD (INCLUDING BARK AND CANOPY)
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VEGETATION	VEGETATION CLASSIFICATION	SURFACE AND ELEVATED	OVERALL FUEL LOAD (INCLUDING BARK AND CANOPY)
Woodlands	Coastal Valley GW	10	18.07
	Tablelands Clay GW	10.5	18.61
	New England GW	10.5	20.2
	Southern Tableland GW	10.5	19.01
	Sub-alpine woodlands	18	27.3
	Western Slopes GW	10.5	18.3
	Floodplain transition woodlands	10.5	18.9

Figure 1. New South Wales RFS – Comprehensive Vegetation Fuel Loads

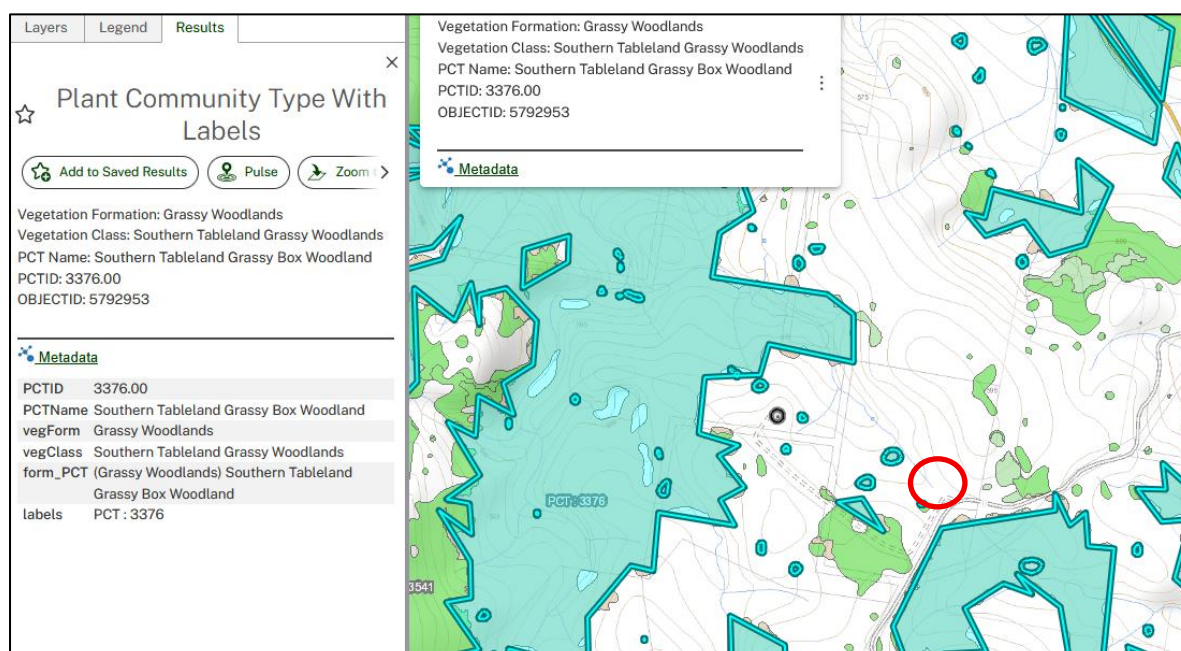
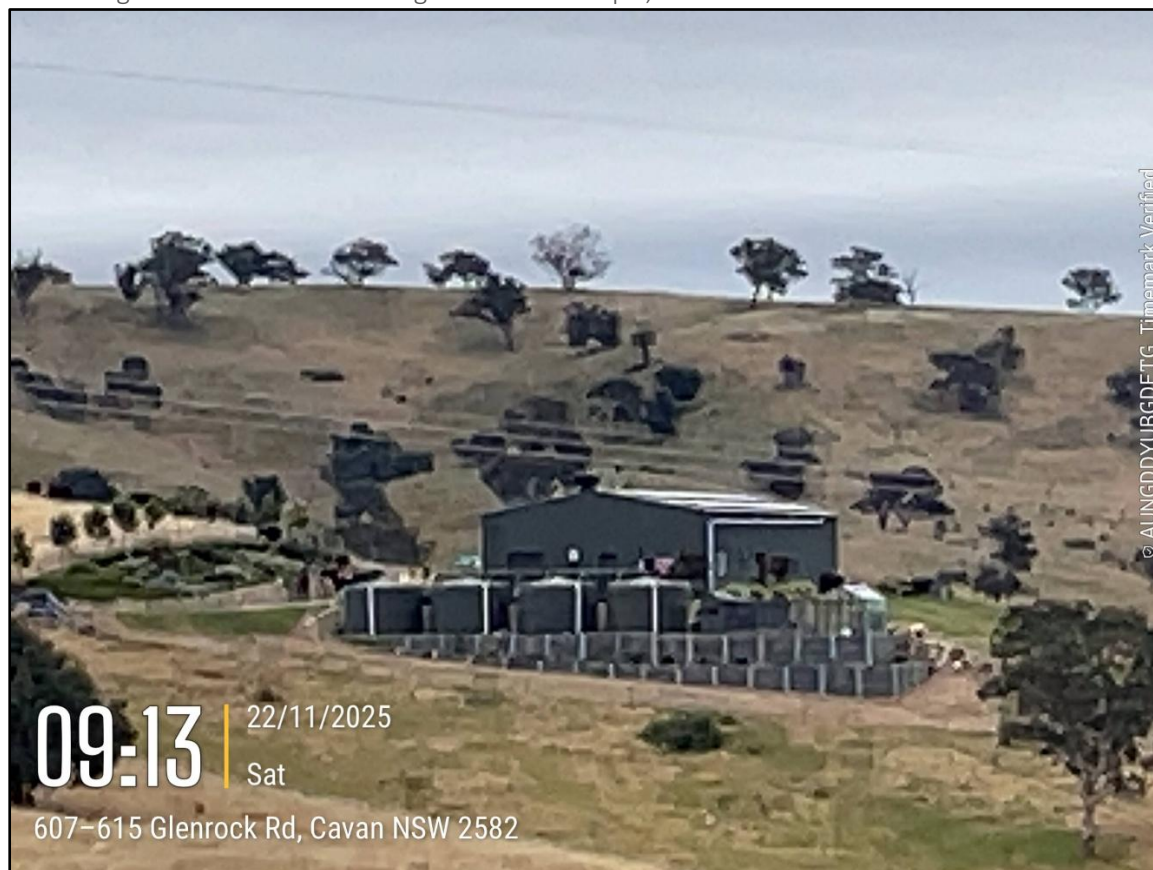


Figure 2: Vegetation Formation: Grassy Woodlands
Vegetation Class: Southern Tableland Grassy Woodlands
PCT Name: Southern Tableland Grassy Box Woodland
PCTID: 3376.00
OBJECTID: 5792953



Site Images – Surrounding Vegetation Hazards

Site image 1. North: 10-15 Degrees Downslope, Woodland



Site image 2. East: 10-15 Degrees Downslope, Grassland



Site image 3. South: Upslope/flat, Grassland



Site image 4. West: Upslope/flat, Grassland



5.1 Bushfire Attack Level – Determination AS3959-2018

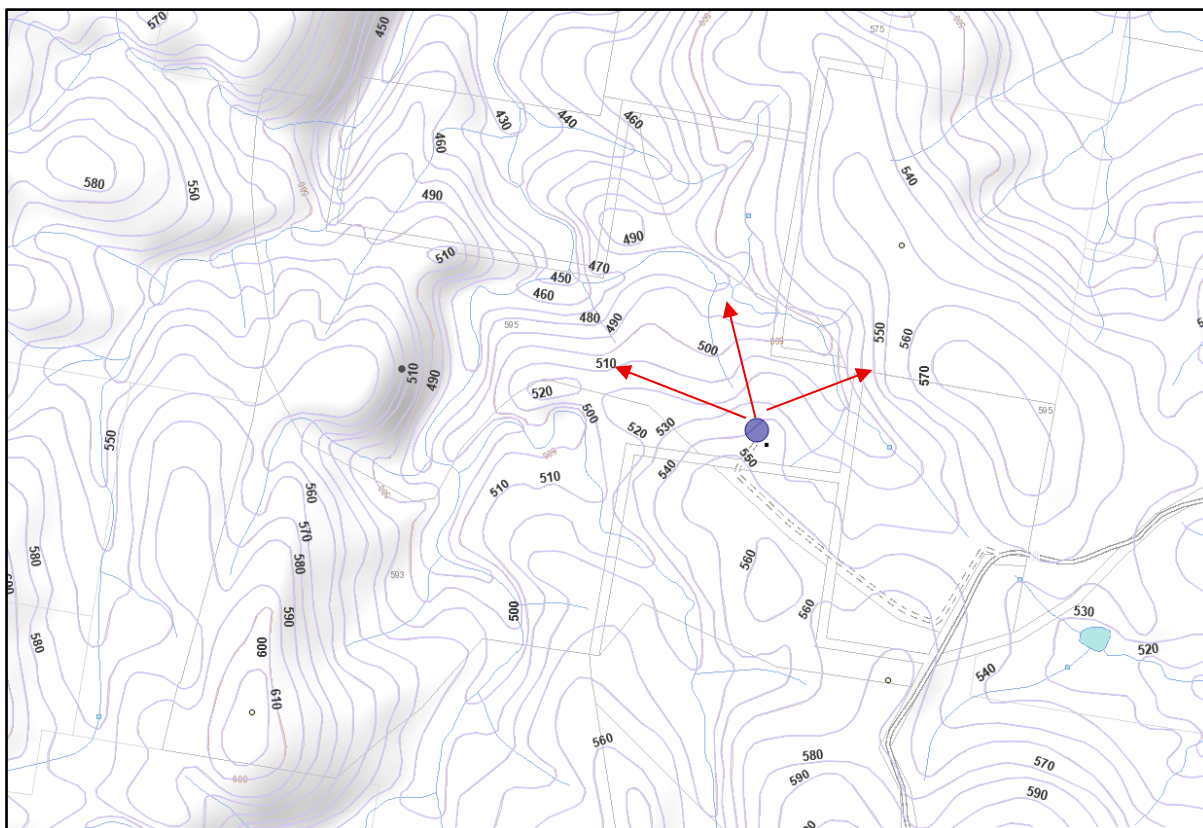
Bushfire Attack Level (BAL) Assessment is undertaken with the application of the site assessment methodology and bushfire attack level tables included within Appendix 1, NSW Planning for Bushfire Protection Guidelines, 2019 (PBP) NSW, RFS.

Key factors and values which combine to influence potential bushfire attack risks for a location are provided and measured in the below table.

Table 2. Bushfire Attack Level Determination Factors & Values (AS3959-2018)

SITE DETERMINATION FACTORS	
Factor	Value
A) Relevant FDI	100
B) Flame Temperature	1090k
C) Slope – North Slope – South Slope – East Slope – West	10-15 Degrees Downslope Upslope/flat 10-15 Degrees Downslope Upslope/flat
D) Vegetation Classification	Grassland (East, South, West) Woodland (North)
E) Building Location	See Appendix A

Map image 4. Site contours



Source: NSW Govt Spatial Map Viewer: <https://portal.spatial.nsw.gov.au/>



Bushfire Attack Level – Determination PBP 2019 (Appendix 1)

The following process as reflected in Appendix 1 PBP -2019 is applied to determine the Bushfire Attack Level (BAL Rating) for the positioning of the dwelling.

Step 1: Determine the vegetation formation in all directions around the building to a distance of 140 meters.

Step 2: Determine the effective slope of the landform from the building to a distance of 100 meters.

Step 3: Determine the distance between the vegetation and the building measured from the edge of the foliage cover (drip line) and the closest external wall of the building location.

Step 4: Match the relevant FDI measure, appropriate vegetation, distance, and effective slope to determine the BAL rating from the relevant tables (A12.5 to A12.6) PBP-2019.

Step 5: Refer to section 3 'Construction General' in AS3959-2018 and NASH Standard to identify the appropriate construction requirements for the calculated BAL of the site.

A Bushfire Attack Level (BAL) 29 exposure was determined for the building.

Table 3. Current Bush Fire Hazards Assessed - Refer Appendix 1 PBP,2019.

BAL – MEASURES						
Aspect	Distance to hazard	Vegetation up to 140m	Effective Slope to 100m	BAL AS3959-2018, Section 2, Table 2.4.2	Asset Protection Zones	Construction Requirements As3959-2018 - Sections
NORTH	45m	Woodland	10-15 degrees downslope	BAL 29	45m applied out from the building	Sections 3 & 7
EAST	15m	Grassland	10-15 degrees downslope	BAL 29	15m applied out from the building	Sections 3 & 7
SOUTH	10m	Grassland	Upslope/flat	BAL 29	10m applied out from the building	Sections 3 & 7
WEST	15m	Grassland	Upslope/flat	BAL 29	15m applied out from the building	Sections 3 & 7



Table 4. Bushfire Attack Level determined for each directional façade of the building.

Table A1.12.5

Determination of BAL, FFDI 100 – residential developments

KEITH VEGETATION FORMATION		BUSH FIRE ATTACK LEVEL (BAL)				
		BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
		Distance (m) asset to predominant vegetation class				
ALL UPSLOPE AND FLAT LAND	Rainforest	< 8	8 -< 11	11 -< 16	16 -< 23	23 -< 100
	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 18	18 -< 24	24 -< 33	33 -< 45	45 -< 100
	Grassy and Semi-Arid Woodland (including Mallee)	< 9	9 -< 12	12 -< 18	18 -< 26	26 -< 100
	Forested Wetland (excluding Coastal Swamp Forest)	< 7	7 -< 10	10 -< 14	14 -< 21	21 -< 100
	Tall Heath	< 12	12 -< 16	16 -< 23	23 -< 32	32 -< 100
	Short Heath	< 7	7 -< 9	9 -< 14	14 -< 20	20 -< 100
	Arid-Shrublands (acacia and chenopod)	< 5	5 -< 6	6 -< 9	9 -< 14	14 -< 100
	Freshwater Wetlands	< 4	4 -< 5	5 -< 7	7 -< 11	11 -< 100
	Grassland	< 8	8 -< 10	10 -< 15	15 -< 22	22 -< 50
	Rainforest	< 11	11 -< 14	14 -< 21	21 -< 29	29 -< 100
> 0 > 5 DEGREES – DOWNSLOPE	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 22	22 -< 29	29 -< 40	40 -< 54	54 -< 100
	Grassy and Semi-Arid Woodland (including Mallee)	< 12	12 -< 16	16 -< 23	23 -< 32	32 -< 100
	Forested Wetland (excluding Coastal Swamp Forest)	< 9	9 -< 12	12 -< 18	18 -< 26	26 -< 100
	Tall Heath	< 13	13 -< 18	18 -< 26	26 -< 36	36 -< 100
	Short Heath	< 8	8 -< 10	10 -< 15	15 -< 22	22 -< 100
	Arid-Shrublands (acacia and chenopod)	< 5	5 -< 7	7 -< 11	11 -< 16	16 -< 100
	Freshwater Wetlands	< 4	4 -< 6	6 -< 8	8 -< 12	12 -< 100
	Grassland	< 9	9 -< 12	12 -< 17	17 -< 25	25 -< 50
	Rainforest	< 14	14 -< 18	18 -< 26	26 -< 37	37 -< 100
	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 28	28 -< 36	36 -< 49	49 -< 65	65 -< 100
> 5 > 10 DEGREES – DOWNSLOPE	Grassy and Semi-Arid Woodland (including Mallee)	< 15	15 -< 20	20 -< 28	28 -< 39	39 -< 100
	Forested Wetland (excluding Coastal Swamp Forest)	< 12	12 -< 16	16 -< 23	23 -< 33	33 -< 100
	Tall Heath	< 15	15 -< 20	20 -< 29	29 -< 40	40 -< 100
	Short Heath	< 9	9 -< 12	12 -< 18	18 -< 25	25 -< 100
	Arid-Shrublands (acacia and chenopod)	< 6	6 -< 8	8 -< 12	12 -< 18	18 -< 100
	Freshwater Wetlands	< 5	5 -< 6	6 -< 10	10 -< 14	14 -< 100
	Grassland	< 10	10 -< 13	13 -< 20	20 -< 28	28 -< 50
	Rainforest	< 17	17 -< 23	23 -< 34	34 -< 46	46 -< 100
	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 36	36 -< 45	45 -< 60	60 -< 77	77 -< 100
	Grassy and Semi-Arid Woodland (including Mallee)	< 19	19 -< 25	25 -< 36	36 -< 49	49 -< 100
> 10 > 15 DEGREES – DOWNSLOPE	Forested Wetland (excluding Coastal Swamp Forest)	< 15	15 -< 20	20 -< 29	29 -< 41	41 -< 100
	Tall Heath	< 17	17 -< 22	22 -< 32	32 -< 44	44 -< 100
	Short Heath	< 10	10 -< 13	13 -< 20	20 -< 29	29 -< 100
	Arid-Shrublands (acacia and chenopod)	< 7	7 -< 9	9 -< 14	14 -< 20	20 -< 100
	Freshwater Wetlands	< 5	5 -< 7	7 -< 11	11 -< 16	16 -< 100
	Grassland	< 11	11 -< 15	15 -< 23	23 -< 32	32 -< 50
	Rainforest	< 17	17 -< 23	23 -< 34	34 -< 46	46 -< 100



Table 5. Radiant heat exposure – Effects and Impacts – AS3959 Construction Levels

Table A1.7

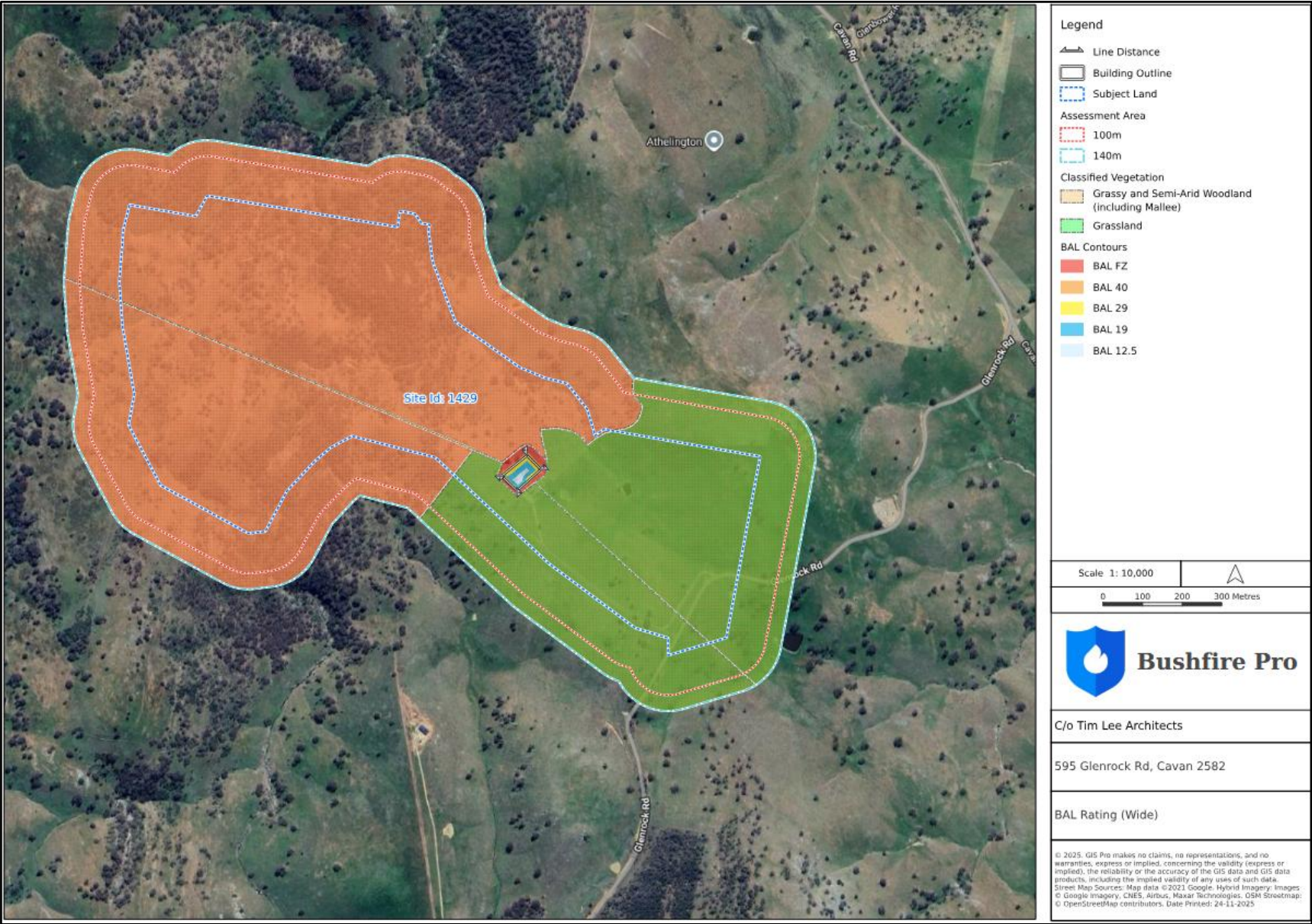
Radiant heat flux exposure and appropriate bush fire attack level (BAL)

Heat flux exposure	Description	AS 3959 construction level
N/A	Minimal attack from radiant heat and flame due to the distance of the site from the vegetation, although some attack by burning debris is possible. There is insufficient threat to warrant specific construction requirements.	Bush fire attack level: Low (BAL-LOW)
≤12.5	Attack by burning debris is significant with radiant heat (not greater than 12.5kW/m ²). Radiant heat is unlikely to threaten building elements (such as unscreened glass). Specific construction requirements for ember protection and accumulation of debris are warranted.	Bush fire attack level: 12.5 (BAL-12.5)
>12.5 ≤19	Attack by burning debris is significant with radiant heat flux (not greater than 19kW/m ²) threatening some building elements (such as screened glass). Specific construction requirements for embers and radiant heat are warranted.	Bush fire attack level: 19 (BAL-19)
>19 ≤29	Attack by burning debris is significant and radiant heat flux (not greater than 29kW/m ²) threatens building integrity. Specific construction requirements for ember and higher radiant heat are warranted. Some flame contact is possible.	Bush fire attack level: 29 (BAL-29)
>29 ≤40	Radiant heat flux and potential flame contact could threaten building integrity.	Bush fire attack level: 40 (BAL-40)
>40	Significant radiant heat and significant higher likelihood of flame contact from the fire front will threaten building integrity and result in significant risk to residents.	Bush fire attack level – Flame Zone (BAL-FZ)

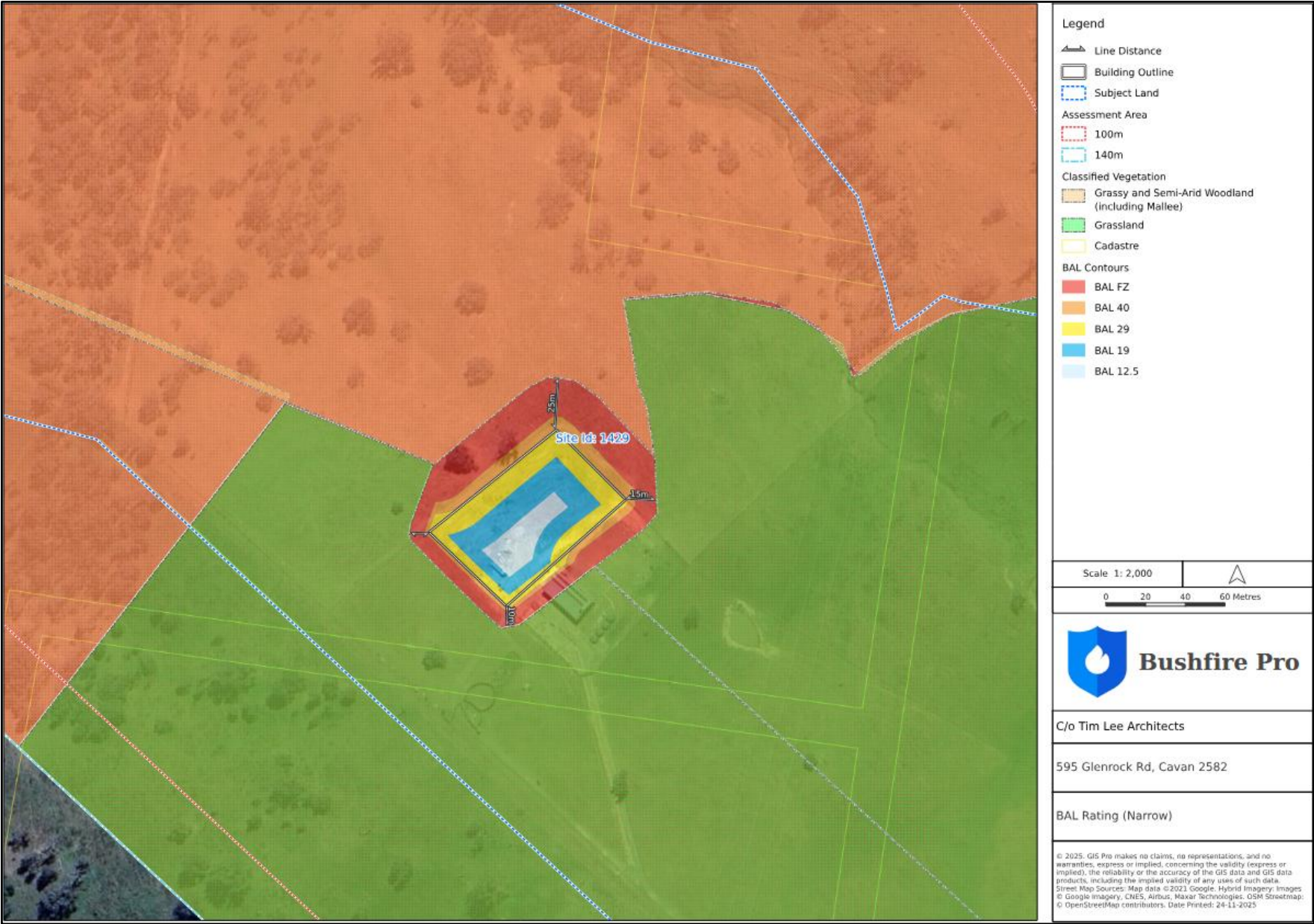
Note: Attack from burning debris increases with the bush fire attack level.



Map image 5.1. Radiant Heat Exposure



Map image 5.2. Radiant Heat Exposure

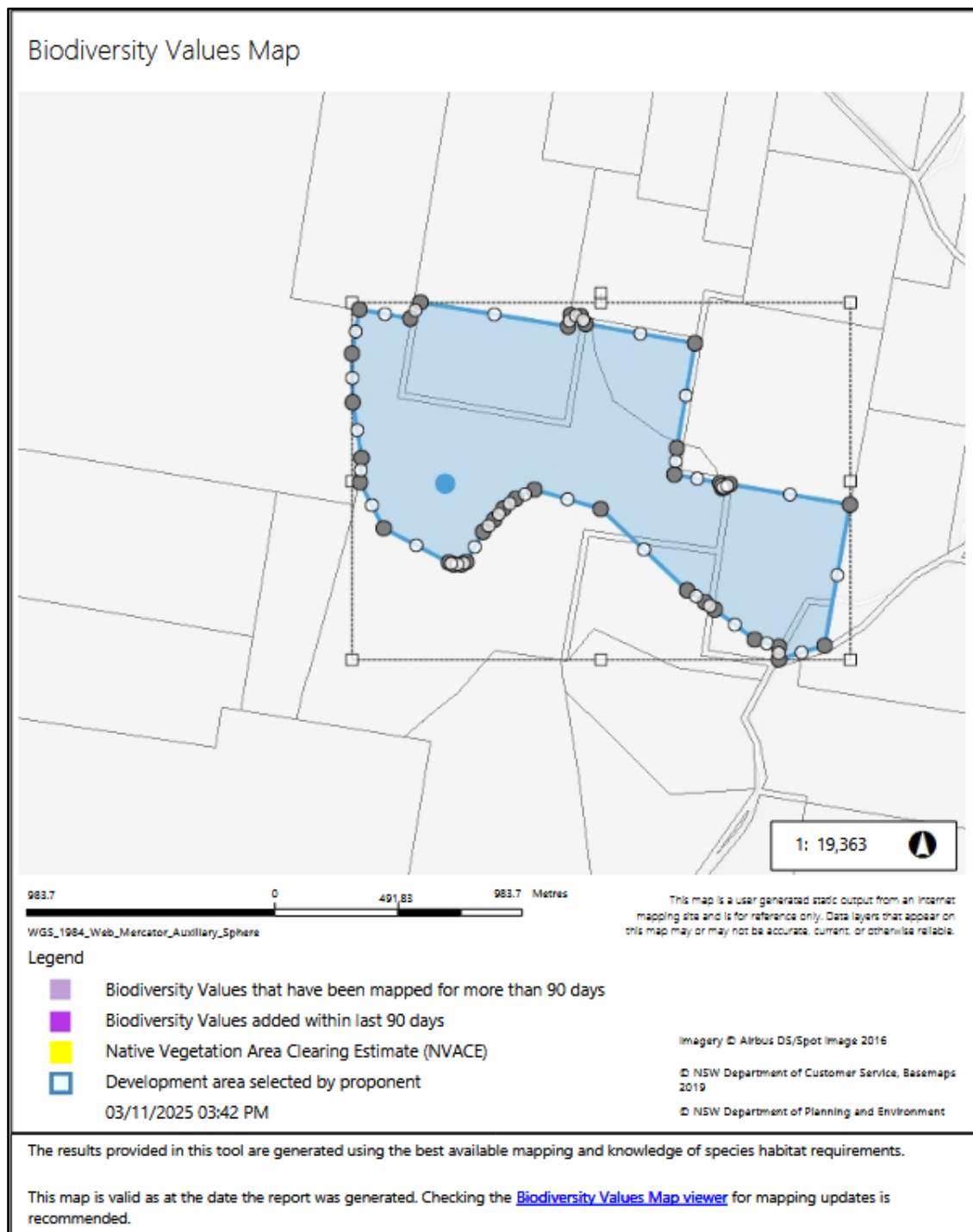


6. SIGNIFICANT ENVIRONMENTAL FEATURES

6.1 BIODIVERSITY VALUES

The Biodiversity Values Map identifies land with high biodiversity value, as defined by clause 7.3(3) of the Biodiversity Conservation Regulation 2017. The Biodiversity Offsets Scheme applies to any clearing of native vegetation on land mapped as sensitive. The subject site is **NOT** located upon the NSW Biodiversity Values Map as presented herein.

Map image 6.1. Biodiversity Values Map and threshold tool



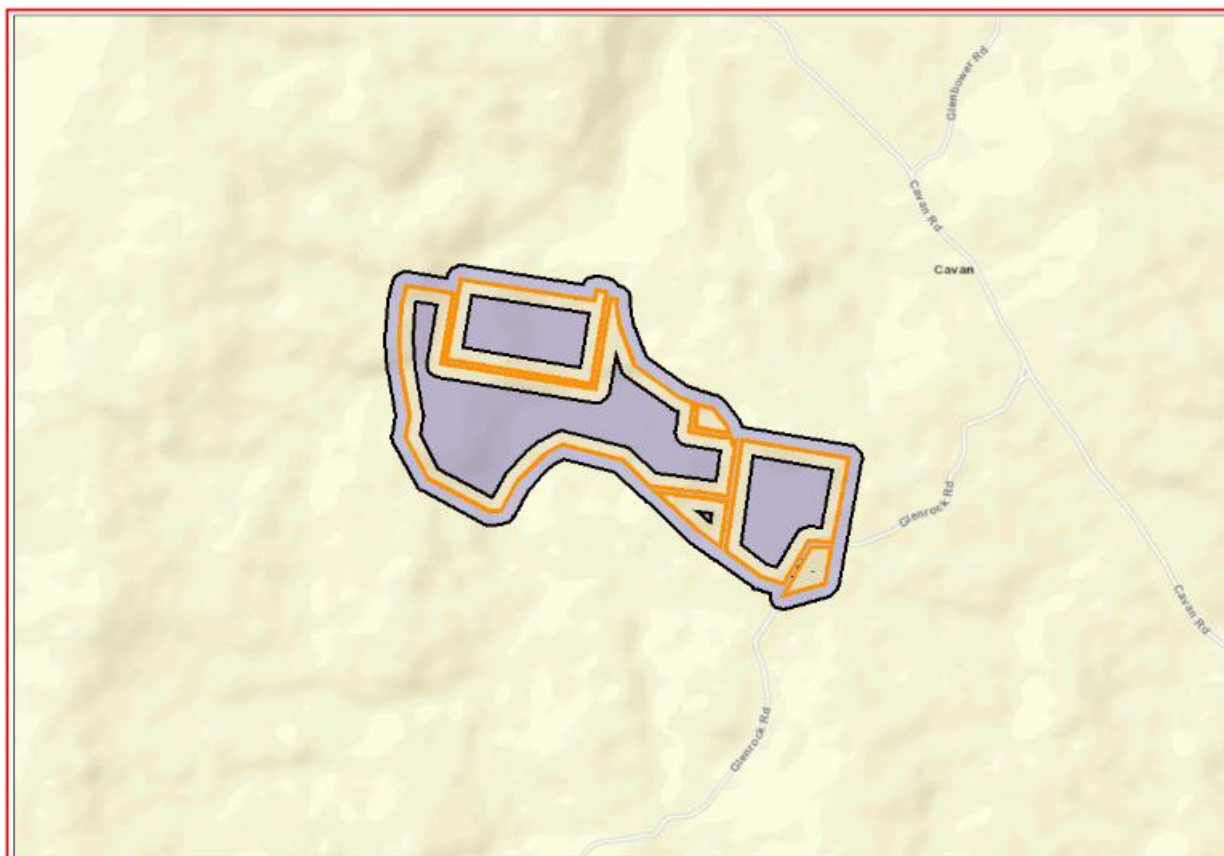
6.2 ABORIGINAL RELICS

An AHIMS aboriginal cultural heritage site assessment report has identified no Aboriginal sites or places recorded to site.

Map image 6.2. Aboriginal Heritage Information Management System

AHIMS Web Service search for the following area at Lot : 1, DP:DP1232600, Section : - with a Buffer of 50 meters, conducted by Tess Jordan on 26 September 2025.

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



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

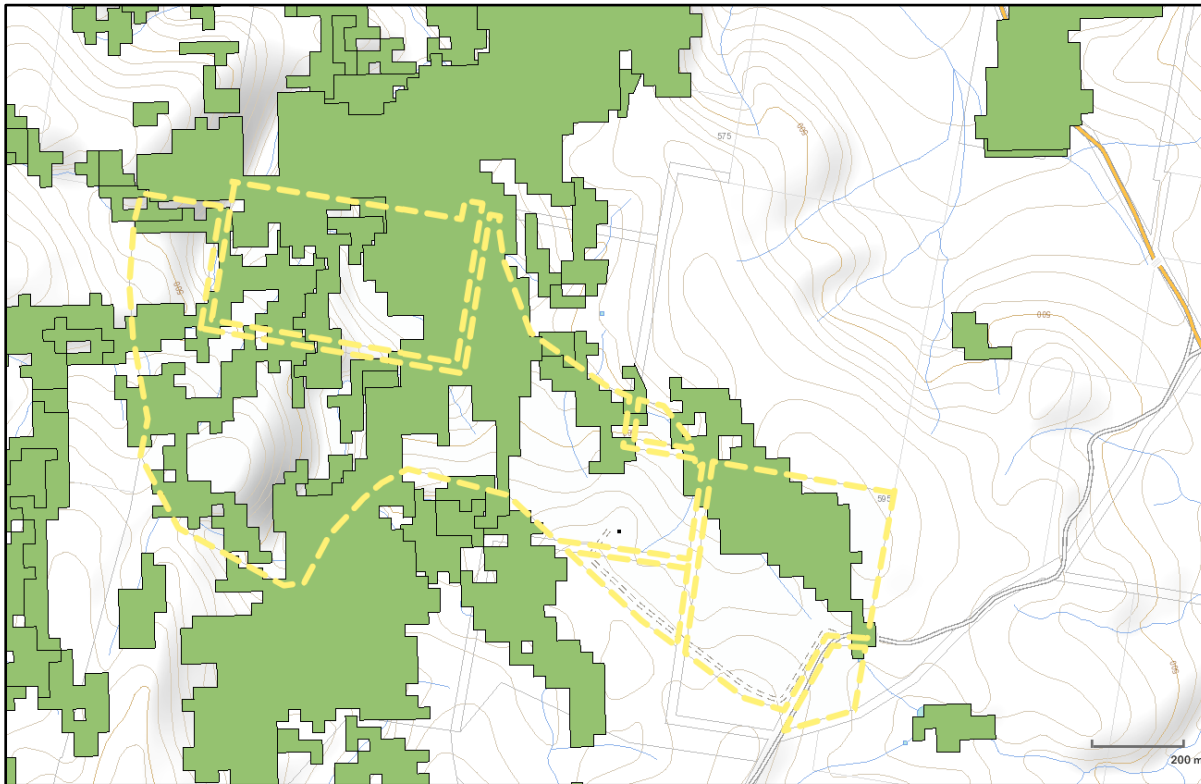
0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



6.3 TERRESTRIAL BIODIVERSITY

Terrestrial Biodiversity Land has been mapped on the lot under the Yass Valley LEP 2013.

Map image 6.3. Terrestrial Biodiversity Land Map



6.4 NATURAL RESOURCE SENSITIVITY

High soil erodibility has been mapped on the lot under the Yass Valley LEP 2013.

Map image 6.4. Natural Resources Land Map



7. BUSHFIRE PROTECTION MEASURES – (INFILL DEVELOPMENT)

Section 3 of PBP-2019 explains the importance and function of bushfire protection measures BPM's in reducing risk exposure to bushfire attack.

Key types of BPM's include; Asset Protection Zone (APZ), building construction siting and design, access, landscaping, water supply and utilities, and emergency management arrangements.

Additionally, section 7 of PBP-2019, NSW RFS identifies the performance criteria and acceptable solutions for bush fire protection measures regarding 'Infill' development types.

The intent of such measures is to minimize the risk of bushfire attack & provide protection for emergency services personnel, residents and others assisting in firefighting activities.

The inclusion of the supporting performance tables for each protection measure outline the deemed to satisfy solutions specified in PBP-2019, with assessment responses provided in this report to show how each of the acceptable solutions has been addressed & implemented via this proposal.



7.1 Asset Protection Zones

The aim of APZs is to ensure there is a progressive reduction in flammable material towards any building. The intent of the APZ measures is to provide sufficient space and maintain reduced fuel loads, to ensure radiant heat levels at buildings are below critical limits measured at 29kW/m² and to prevent direct flame contact with the building.

The appropriate APZ distance is based on vegetation type, ground slope and nature of the development. Suitable APZ areas can include roads and areas within a property which are managed consistently with APZ standards set out in Appendix 4 PBP-2019 and within the NSW RFS document 'Standards for Asset Protection Zones'.

This proposal allows the following implementation of asset protection zones:

- i) North: 45m
- ii) South: 10m
- iii) East: 15m
- iv) West: 15m

Vegetation within the APZ should be managed in accordance with APZ specifications for the purposes of limiting the travel of a fire, reducing the likelihood of direct flame contact, and removing additional hazards or ignition sources. The following outlines some general vegetation management principles for APZs:

1. Discontinuous shrub layer (clumps or islands of shrubs not rows);
2. Vertical separation between vegetation strata;
3. Tree canopies not overhanging structures;
4. Management and trimming of trees and other vegetation in the vicinity of power lines and tower lines in accordance with the specifications in "Vegetation Safety Clearances" issued by Energy Australia (NS179, April 2002);
5. Maintain low ground covers by mowing / whipper snipper / slashing; and
6. Non-combustible mulch e.g., stones and removing stores of combustible materials.
7. Vegetation to be planted should consist of fire retardant/less flammable species strategically located to reduce attack from embers (i.e., as ember traps when in small clumps and short wind breaks).

Figure 2. Proposed APZ Implementation

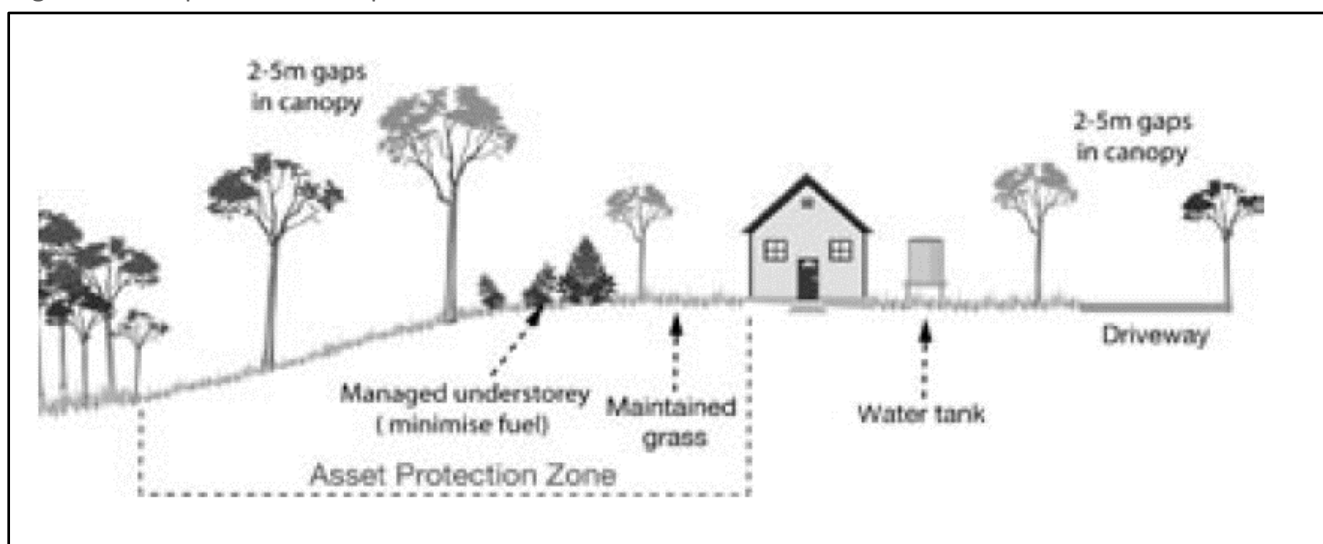


Figure: Diagrammatic representation of an Asset Protection Zone implementation.



Table 6. Asset Protection Zone – Performance criteria PBP2019

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	
The intent may be achieved where:			
ASSET PROTECTION ZONES	➤ APZs are provided commensurate with the construction of the building; and ➤ A defensible space is provided.	➤ an APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1.	
	➤ APZs are managed and maintained to prevent the spread of a fire to the building.	➤ APZs are managed in accordance with the requirements of Appendix 4 of PBP.	
	➤ the APZ is provided in perpetuity. ➤ APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.	➤ APZs are wholly within the boundaries of the development site. ➤ APZ are located on lands with a slope less than 18 degrees.	
	Home-based child care: the building must not be exposed to radiant heat levels exceeding 29kW/m ² (1090K).	➤ an APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1.	

The performance criteria and acceptable solutions for the Asset Protection Zone Areas prepared for this development are presented here.

The below table identifies the ability of the proposal to comply with the specified Asset Protection Zone separation distances (performance criteria).

Table 7. Performance Criteria APZ

Performance requirement PBP 2019	Acceptable Solution	Compliance
<i>APZs are managed and maintained to prevent the spread of a fire towards the building.</i>	APZs are managed in accordance with the requirements of Appendix 4.	Yes, sufficient APZ has been established, to support the building footprint and allow for suitable separation distances between the building and hazard.
<i>the APZs is provided in perpetuity.</i>	APZs are wholly within the boundaries of the development site	Yes, sufficient APZ has been established within the site boundaries of the lot
<i>APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimized.</i>	APZs are located on lands with a slope less than 18 degrees	Achieved with Inner Protection Areas within the subject lot.
<i>landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.</i>	landscaping is in accordance with Appendix 4; and	Yes, sufficient APZ has been established and surrounding garden areas as presented upon the site reflect the objectives of NSW RFS APZ inner protection zones. No timber fencing will be deployed towards the dwelling.
	fencing is constructed in accordance with section 7.6.	



7.2 Building Construction & Design

Design considerations for the building need to be addressed to ensure adequate protection from bushfire attack. Construction standards for buildings exposed to bushfire attack are provided for various levels of radiant heat exposure, flame contact, ember attack and increased winds within AS3959-2018 and the NASH standard.

The proposed building plans are in line with the Yass Valley DCP 2024 setback requirements.

Implementation of construction standards under Sections 3 & 7 (BAL 29) of the standard AS3959-2018 are required for the construction under this proposal. Refer Pages 65-75 of the standard

SECTION 7 CONSTRUCTION REQUIREMENTS FOR BAL—29

7.1 GENERAL

A building assessed in Section 2 as being BAL—29 shall conform with Section 3 and Clauses 7.2 to 7.8.

Any element of construction or system that satisfies the test criteria of AS 1530.8.1 may be used in lieu of the applicable requirements contained in Clauses 7.2 to 7.8 (see Clause 3.8).

NOTE: BAL—29 is primarily concerned with protection from ember attack and radiant heat greater than 19 kW/m² up to and including 29 kW/m².

7.3 Construction Standards

The construction standards and associated performance criteria for infill development require that new buildings can withstand bushfire attack in the form of wind, smoke, embers, radiant heat, and flame contact. PBP 2019 requires that the construction standards be determined in accordance with AS3959 – 2018 and the NASH (National Association of Steel-framed Housing) standards.

Building Construction Level for this proposal has been determined as BAL 29kW/m²

Refer Pages 65-75 of the standard AS3959-2018

The Australian Standard AS3959 – 2018 and NASH Standard Steel Framed Construction in Bushfire Areas (2014) are the enabling standards that address the performance requirements of both parts 2.3.4 and Part GF5.1 of the Building Code of Australia for the Construction of Class 1, 2 and Class 3 buildings within a designated Bushfire Prone Area.

Table 8. Performance criteria for PBP – Building Construction Standards

Performance requirement PBP 2019	Acceptable Solution	Compliance
<i>in relation to construction standards:</i>	Construction Standard meets required BAL.	Construction of the project must meet BAL 29W/m2 refer sections 3 and 7 of AS3959-2018 and section 7.5 of PBP-2018
<i>the proposed building can withstand bush fire attack in the form of embers, radiant heat, and flame contact.</i>	BAL is determined in accordance with Table 21; and	BAL 29 determination for all building elevations. Subfloor and Subfloor supports are inclusive elements given the design of the construction.



	construction provided in accordance with the NCC for buildings in bushfire prone areas	Yes, BAL has been determined in accordance with PBP 2019, method 1 assessment
<i>proposed fences and gates are designed to minimise the spread of bush fire.</i>	fencing and gates are constructed in accordance with Section 7.6	Yes, construction must meet the NCC for buildings in bushfire prone areas.
<i>proposed Class 10a buildings are designed to minimise the spread of bush fire.</i>	Class 10a buildings are constructed in accordance with Section 8.3.2.	Existing shed will be greater than 6m from the dwelling and therefore will not require upgrades for bushfire construction compliance.



7.4 Access Requirements

The performance criteria and acceptable solutions for public roads or internal roads for 'Infill' developments in accordance with Appendix 3, PBP 2019 are provided in the below assessment table.

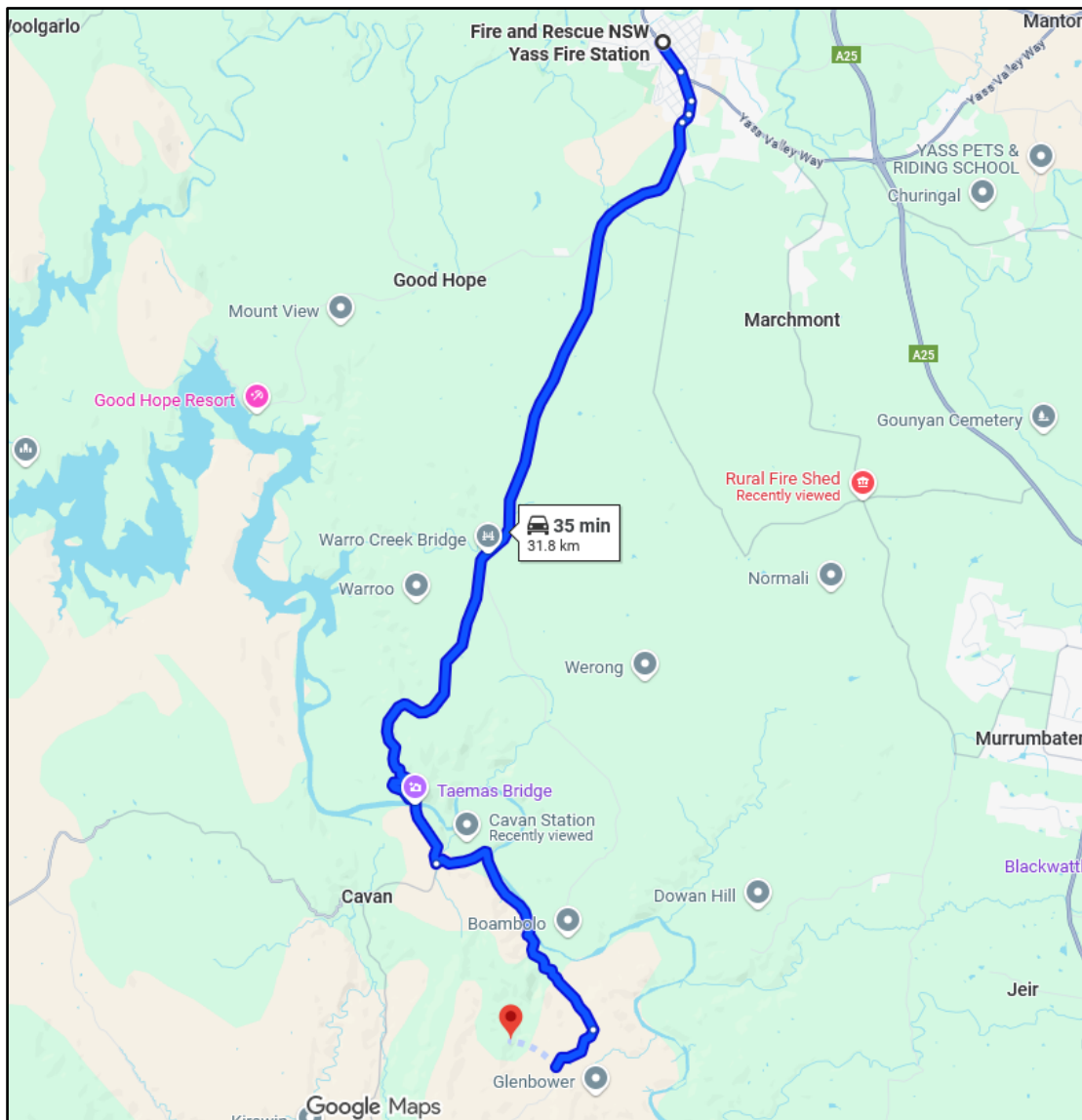
The intent of suitable access roads is to enable safe access and egress for residents to leave a dwelling under bushfire attack and for emergency service personnel to obtain clear and safe access to undertake firefighting operations.

The purpose of the road system for bushfire protection is:

- Provide firefighters with access to structures allowing for efficient use of firefighting resources.
- Provide evacuation routes.
- Provide access to areas of bushfire hazard for firefighting and hazard mitigation purposes.

See below the travel routes and distances for firefighting ordinates to get to the subject site from nearest RFS and NSW Fire & Rescue.

Map image 7. Google Road directions and travel distance to nearest NSW RFS Fire Brigade



Google Road directions and travel distance to nearest NSW RFS Fire Brigade (Fire and Rescue NSW Yass Fire Station) estimated at 31.8km and 35 minutes.



The internal access driveway to the site must provide a minimum 4m carriageway width from the front gate to the building location.

The end of the access driveway at connection to the house dwelling location must be provided with a suitable turning area in accordance with Appendix 3 of NSW RFS PBP-2019.

Access to water supply will be provided within 4m of the driveway or provided parking area.

Table 9. Performance criteria for PBP – Site Access Requirements

Performance requirement PBP 2019	Acceptable Solution	Compliance
<i>firefighting vehicles are provided with safe, all-weather access to structures.</i>	property access roads are two-wheel drive, all-weather roads;	Yes, roads meet standard currently
	traffic management devices are constructed to not prohibit access by emergency services vehicles;	Yes, traffic management devices will not prohibit access by ESV.
	maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient;	Yes, internal driveway will meet this standard. The public road access to the subject site is not compliant for road gradient and access standards.
	all roads are through roads;	N/A
	dead end roads are not recommended, but if unavoidable, are not more than 200 metres in length, incorporate a minimum 12 metres outer radius turning circle, and are clearly sign posted as a dead end;	The internal driveway will provide a turning head at the end of the driveway in accordance with Appendix 3 PBP-2019.
	where kerb and guttering is provided on perimeter roads, roll top kerbing should be used to the hazard side of the road	N/A – gravel roads only apply to the proposal.
	where access/egress can only be achieved through forest, woodland and heath vegetation, secondary access shall be provided to an alternate point on the existing public road system; and	N/A access egress is supplied to public road system. The road network to access / egress the site is considered hazardous and traverses through areas affected by bushfire risk and steep windy passage.
	one way only public access roads are no less than 3.5 metres wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire suppression.	The road network to access / egress the site is considered hazardous and traverses through areas affected by bushfire risk and steep windy passage. It is not advised to use the egress from the site under emergency bushfire conditions. Leaving early



		from the site is advised and not travelling under any event of local fires is advised.
<i>the capacity of access roads is adequate for firefighting vehicles.</i>	the capacity of perimeter and non-perimeter road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges/ causeways are to clearly indicate load rating.	N/A – access roads are not suitable for category 1 firefighting tankers.
<i>there is appropriate access to water supply.</i>	hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression;	N/A – no hydrants SWS water supplies.
	hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005 - Fire hydrant installations <i>System design, installation and commissioning</i> ; and	N/A no hydrants SWS water supplies.
	there is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	Onsite water will be provided within 4m of the parking bay area.
<i>firefighting vehicles can access the dwelling and exit the property safely.</i>	There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided between the most distant external part of the proposed dwelling and the nearest part of the public access road (where the road speed limit is not greater than 70kph) that supports the operational use of emergency firefighting vehicles.	

Site Image 5. Front Access of Site



Site Image 6. Glenrock Road Egress from Site



Site Image 7. Internal Driveway on Property



Site Image 8. Road Access from South of Site



7.5 Water & Utility Services

The performance criteria and acceptable solutions for water, electricity, and gas for residential development in accordance with Section 7 PBP 2019 are provided below. The intent of the measures is to provide adequate water services for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

Water supply:

Tank fittings, supply pipes and outlets will be provided to comply with section 7.4 of PBP-2019.

Table 10. Performance criteria for Service requirements – Water

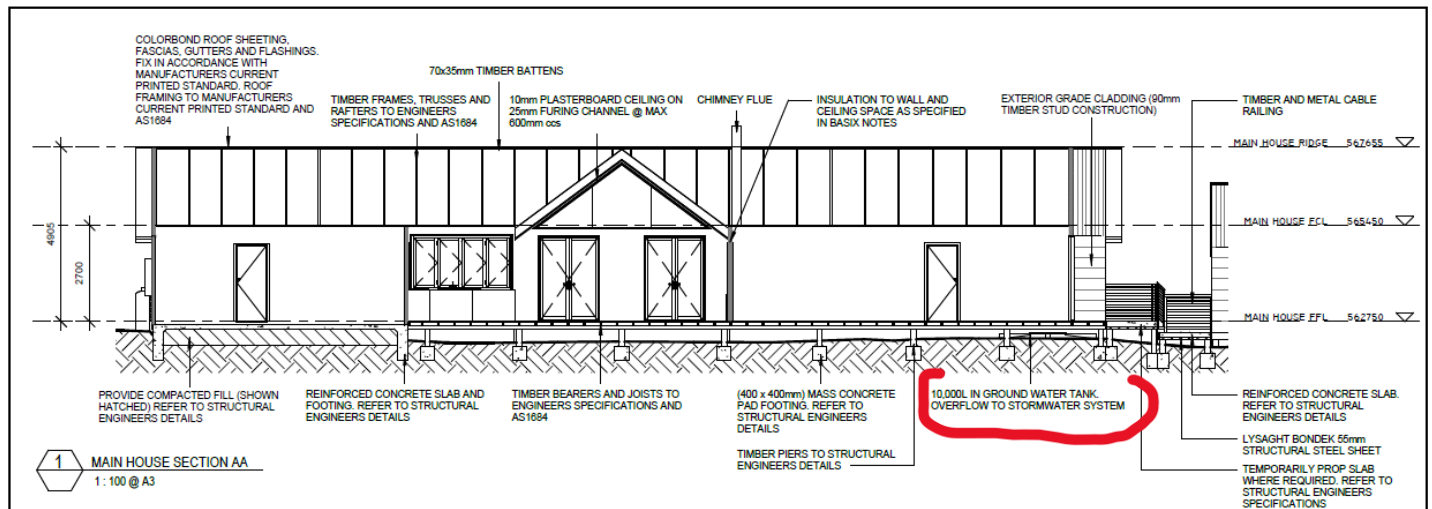
SECTION 5. SERVICES REQUIREMENTS - WATER		
Proposal can comply with PBP-19 Services – Water		
Performance requirement PBP 2019	Acceptable Solution	Compliance
<i>adequate water supplies is provided for firefighting purposes.</i>	Reticulated water is to be provided to the development where available.	N/A – Static water from water tanks.
	A static water source is provided for non-reticulated developments or where reticulated water supply cannot be guaranteed	Yes – current 4 X 12,000L poly tanks A new underground 20,000L tank is also required under the proposal.
	static water supplies shall comply with Table 5.3d.	Yes, a minimum of 20,00L will be supplied for firefighting purposes as underground tank by the proposal.
<i>water supplies are located at regular intervals: and the water supply is accessible and reliable for firefighting operations.</i>	fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419.1:2005;	N/A
	hydrants are not located within any road carriageway; and	N/A
	reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.	N/A
<i>flows and pressure are appropriate</i>	fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.	N/A



<i>the integrity of the water supply is maintained</i>	all above-ground water service pipes are metal, including and up to any taps; and	Yes – upgrades to ensure metal pipes, fittings and taps are provided to above ground SWS fittings.
	above-ground water storage tanks shall be of concrete or metal. New water tank under the proposal will be installed underground and be at least 20,000L in volume and presented for firefighting purposes. Static water supplies (SWS) will be provided to a water connection point not more than 4m from a parking area with a 65mm outlet storz valve.	The current Polyurethane tanks connected to the shed building must be screened along the exposed elevations (south and west) with a flame barrier non combustible screen.



Map image 8. Firefighting water supply



Upgrade 10,000L underground tank to 20,000L underground tank.

Install Non-combustible radiant heat and flame shield screen to protect existing water tanks.



Gas Supply

Gas cylinder relief valves shall be directed away from the building and away from any hazardous materials such as firewood, etc. Gas bottles will be sited away from exposure to radiant heat sources. There must not be any polymer sheathed flexible gas supply lines to gas meters adjacent to a dwelling.



Table 11. Performance criteria for Service requirements – Gas

SECTION 5. SERVICES REQUIREMENTS - Gas		
Proposal can comply with PBP-19 – Gas		
Performance requirement PBP 2019	Acceptable Solution	Compliance
<i>location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings</i>	reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 - The storage and handling of LP Gas, the requirements of relevant authorities, and metal piping is used;	Required
	all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;	Required
	connections to and from gas cylinders are metal;	Required
	polymer-sheathed flexible gas supply lines are not used; and	Required
	above-ground gas service pipes are metal, including and up to any outlets.	Required

Electricity:

Table 12. Performance criteria for Service requirements – Electricity

SECTION 5. SERVICES REQUIREMENTS - Electricity		
Proposal can comply with PBP-19 – Electricity		
Performance requirement PBP 2019	Acceptable Solution	Compliance
<i>location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.</i>	where practicable, electrical transmission lines are underground	Yes – power supplies can be provided underground
	where overhead, electrical transmission lines are proposed as follows: lines are installed with short pole spacing of 30m, unless crossing gullies, gorges or riparian areas; and no part of a tree is closer to a power line than the distance set out in ISSC3 Guideline for Managing Vegetation Near Power Lines.	Alternatively solar power may be provided to the dwelling



7.6 Landscaping

The performance criteria for landscaping to be designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause ignitions. Landscaping must conform to PBP 2019 Appendix 4 with regards to asset protection zones.

An APZ is an area surrounding a building or structure where the fuel of a potential bushfire has been reduced and is located between the building/structure and the hazard. An APZ is stated as providing:

- a buffer zone between a bush fire hazard and an asset.
- an area of reduced bush fire fuel that allows for suppression of fire.
- an area from which backburning or hazard reduction can be conducted; and
- an area which allows emergency services access and provides a relatively safe area for firefighters and homeowners to defend their property.”

Correctly designed landscaping in an APZ will reduce the risk of:

- direct flame contact on the building.
- damage to the building asset from intense radiant heat; and
- ember attack.

When establishing an inner asset protection zone PBP has the following requirements:

Trees

- tree canopy cover should be less than 15% at maturity;
- trees at maturity should not touch or overhang the building;
- lower limbs should be removed up to a height of 2m above the ground;
- tree canopies should be separated by 2 to 5m; and
- preference should be given to smooth barked and evergreen trees.

Shrubs

- create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings should be provided;
- shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover; and
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.

Grass

- grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and
- leaves and vegetation debris should be removed.

APZs should be perpetually maintained to ensure ongoing protection from the impact of bushfires.

Table 13. Performance criteria for PBP 2019 – Landscaping

Performance requirement PBP 2019	Acceptable Solution	Compliance
<i>Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause ignitions.</i>	landscaping is in accordance with PBP 2019 Appendix 4. The management of vegetation around the new dwelling is to be imposed to reflect the APZ distances – North 45m, South 10m, East 15m, West 15m	Yes



8. Compliance with Performance Criteria

All development on Bushfire Prone Land must satisfy the aims and objectives of PBP 2019.

The table below presents commentary on the key interventions and compliance measures presented in this report with reference to the specific objectives of PBP 2019 NSW-RFS.

It is pertinent that the key bushfire protection measures described herein, be implemented by the proponent and the referred standards and measures for the construction of the buildings be consulted and met to ensure that this development can provide adequate bushfire protection.

Table 14. Compliance with the specific objectives of PBP 2019.

PBP 2019 Specific Objective	Assessment / Comment
Afford occupants of any building adequate protection from exposure to a bushfire.	Yes - proposal complies with APZ setbacks to BAL 29 - Access/egress from site free from hazards - Dwellings must be constructed to a minimum BAL 29 construction standard
Provide for a defendable space to be located around buildings.	- Adequate APZ to boundary surrounding dwelling
Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition.	Yes - Appropriate vegetation separation to BAL 29 is provided.
Ensure that safe operational access and egress for emergency service personnel and residents is available.	Yes - Driveway connecting to Glenrock Road does not travel through heathland, woodland or forest. Driveway does travel through grassland. - Fire and Rescue NSW Yass Fire Station is approx. 31.8 km from site. - Early evacuation of the site is recommended. - Stay and defend at the location is advised before any attempt to exit the location under a bushfire condition
Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zone (APZ), through Landscaping and Maintenance provisions.	Yes - Minimal fuel exists within lot. APZ conditions prescribed to boundary to ensure minimal transfer of fire to dwelling.
Ensure that utility services are adequate to meet the needs of firefighters (and others assisting in bushfire fighting).	Yes - utility services are adequate



9. ADDITIONAL REQUIREMENTS

Ember Protection

PBP aims to maintain the safety level previously provided by construction standards at lower bush fire attack levels. In particular ember attack and building defences relating to:

- Sarking
- Sub-floor screening
- Floors
- Verandas, decks, steps, ramps, and landings
- Timber support posts and beams
- Fascia and bargeboards

Certain provisions prescribed within AS3959 are varied in NSW within the NCC.

Clause 3.10 of AS3959 is deleted and any sarking used for BAL 12.5 – BAL 40 shall:

- Be non-combustible.
- Comply with AS/4200.1, be installed on the outside of the frame and have a flammability index of not more than 5 as determined by AS1530.2
- Clauses 5.2 & 6.2 of AS3959 are replaced by clause 7.2 of AS3959, except that any wall enclosing the sub-floor space need only comply with the wall requirements for the respective BAL rating.
- Clauses 5.7 & 6.7 of AS3959 are replaced by clause 7.7 of AS3959, except that any wall enclosing the sub-floor space need only comply with the wall requirements for the respective BAL rating.

Flaming

Building materials that allow flaming can be problematic and are not supported by the NSW RFS. Where there is potential for materials of construction to ignite as a result of bushfire attack to the location, the proposed building solution as presented will fail the construction performance criteria for residential infill development.

Fence & Gates

Fences & gates in bush fire prone areas may play a significant role in the vulnerability of structures during bushfires. All fences in bushfire prone areas should be made of either hardwood or non-combustible material only.

In circumstances where the fence is within 6m of a building in areas of BAL-29 or greater they should only be made from non-combustible materials.

Screening of Polyurethane Water tanks

Provide / install flame and radiant protective screens to non-combustible material to shield the above ground water tanks along the southern and western elevation of the water tanks. Upgrade above ground outlet pipes and connections to metal fittings.

Underground Water Tanks

Upgrade the planning proposal for a 10,000L underground tank to a 20,000L underground tank as required as minimum water storage for firefighting on a rural property.



CONSULTANT DECLARATION

I/We declare that all the information in the application and checklist is, to the best of my/our knowledge, true and correct.

This Certificate has been prepared for the owner of the land by Apical Bushfire & Planning Pty Ltd, in accordance with; Planning for Bushfire Protection - A Guide for Councils, Planners, Fire Authorities and Developers, 2019 & 2018 NSW Rural Fire Service (RFS), Planning NSW and Australian Standard AS3959-2018 Building in Bushfire Prone Areas.

Certifier(s) Name – Daniel Anderson

Date: 29/11/2025

B-PAD 48898 – Level II

Signature(s)



Please indicate
by 'X'

x

PBP Practitioner

Landholder

Other - Associate

Fire Protection Association Australia Life Property Environment



CONDITIONS

This certificate should only be used for the purpose for which it was expressly prepared and shall not be reproduced by any third party in part or full without the permission of Apical Bushfire & Planning Pty Ltd.

The information and data collected to support the BAL determination was collected to the best of our knowledge, verified through supported on-ground site assessment methodologies and reflect the proposal (provided by the proponents) and site conditions (presented by the site) at the time of the assessment.

Liability limited by a scheme approved under Professional Standards Legislation.



10. BIBLIOGRAPHY

NSW Government 'NSW Spatial Data Catalogue' GIS Data Layer Vegetation Classes of NSW (version 3.03 - 200m Raster) - David A. Keith & Christopher C. Simpson. VIS_ID 3848 (2012).

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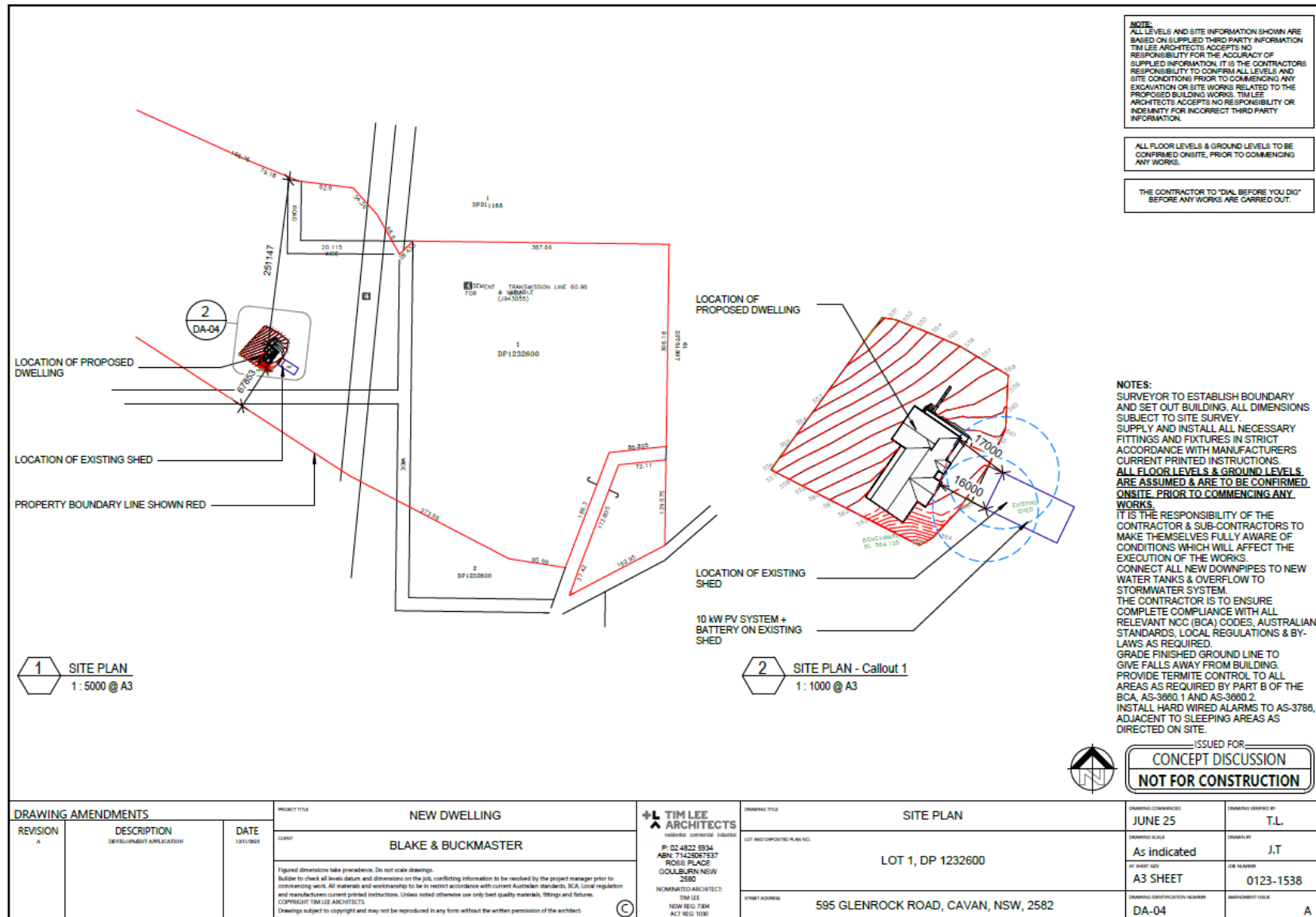
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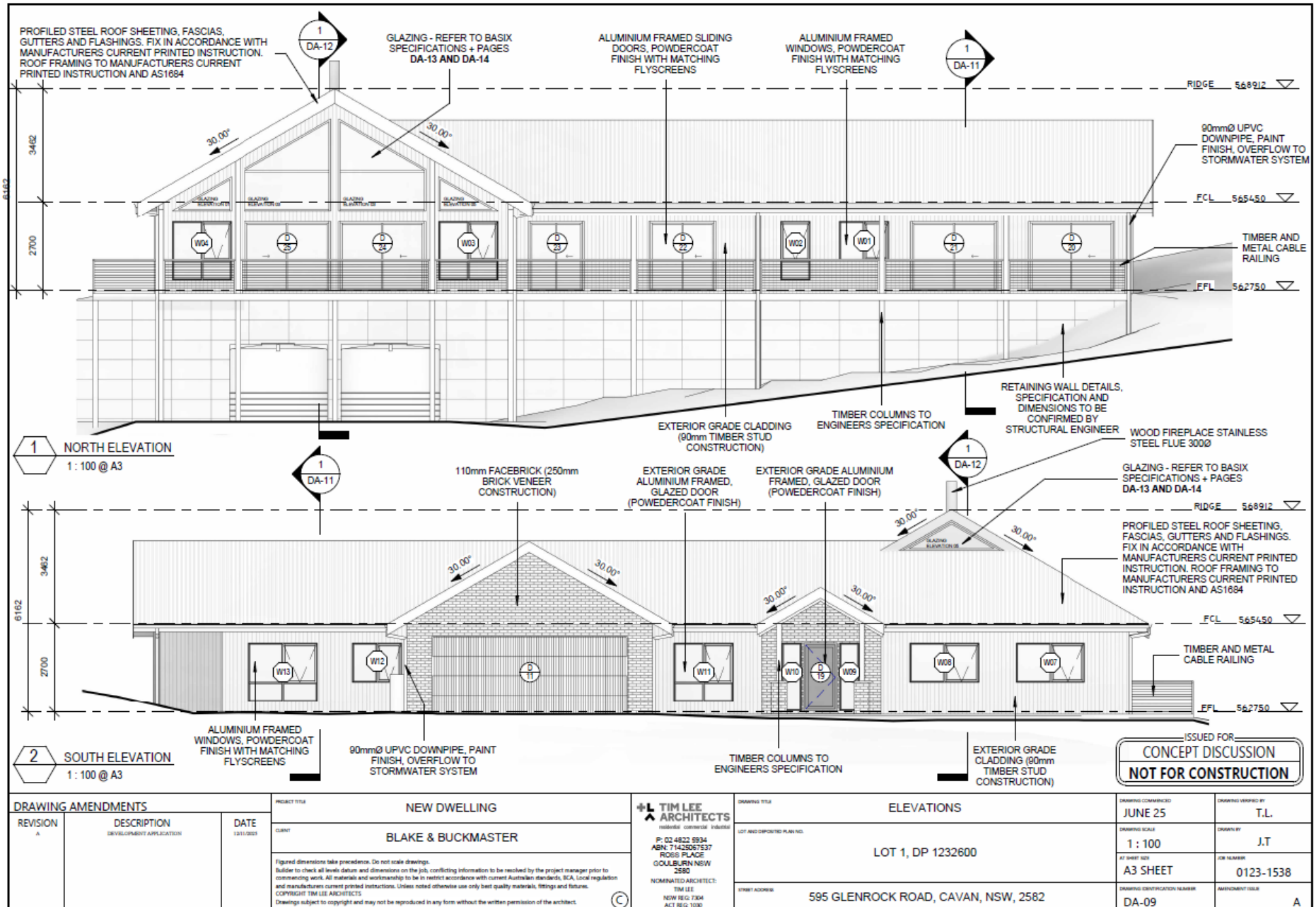
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APPENDIX 1 Siting and Layout Plan

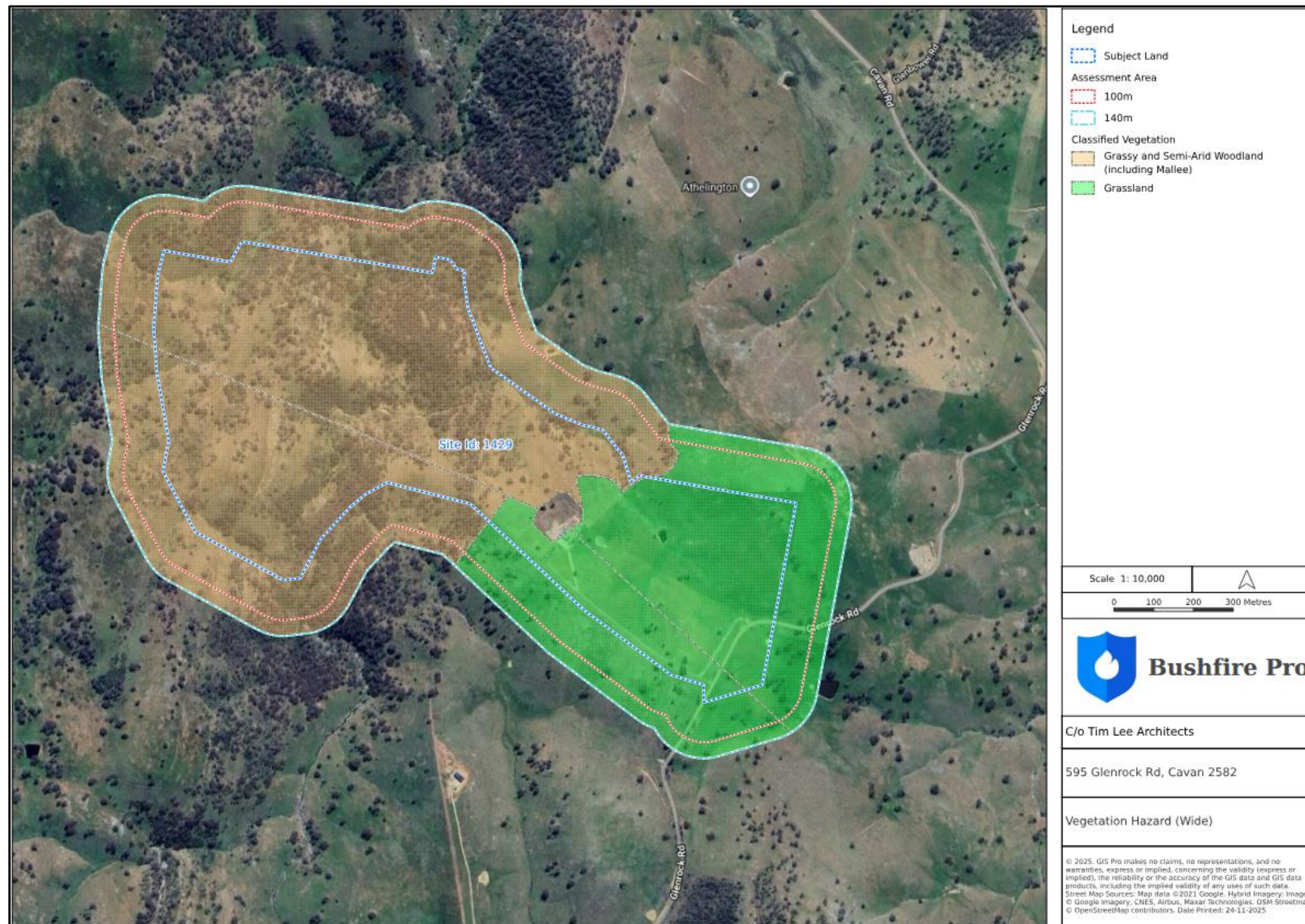
Map Image A.1. Site Plan (Provided by Tim lee Architects)





APPENDIX 2 Site Hazard Mapping

Map image A.2.1 Vegetation Hazards to Subject Site



Map image A.2.2 Vegetation Hazards to Subject Site

