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BUSHFIRE HAZARD ASSESSMENT

PROPOSED ST MARYS RAINBOW PRESCHOOL

FARRER ROAD, BOOROOMA

LGA: Wagga Wagga

Lot 153 DP 751407

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Proposal	Proposed St Marys Rainbow Preschool			
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DISCLAIMER

The recommendations provided in the summary of this report are a result of the analysis of the proposal in relation to the requirements of Planning for Bushfire Protection 2019. Utmost care has been taken in the preparation of this report however there is no guarantee of human error. The intention of this report is to address the submission requirements for Development Applications on bushfire prone land. There is no implied assurance or guarantee the summary conditions will be accepted in the final consent and there is no way Harris Environmental Consulting is liable for any financial losses incurred should the recommendations in this report not be accepted in the final conditions of consent. This bushfire assessment provides a risk assessment of the bushfire hazard as outlined in the PBP 2019 and AS3959 2018. It does not provide protection against any damages or losses resulting from a bushfire event.

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EXECUTIVE SUMMARY

This report provides a Bushfire Assessment for the proposal to construct a childcare centre, St Marys Rainbow Preschool, at Farrer Road, Boorooma. The proposed development involves leasing a portion of the subject lot, managed by Charles Sturt University, and constructing the preschool, outdoor play area and carparking area. The assessment confirms the subject lot is mapped Bushfire Prone.

The proposed development is classified as a Special Fire Protection Purpose (SFPP) development under Planning for Bushfire Protection 2019 (PBP) and is therefore integrated development under 100B of the Rural Fires Act 1997 and will require a Bushfire Safety Authority (BFSa) for consent.

The development is required to conform with the National Construction Code (NCC) Specification 43 Bushfire protection for certain Class 9 buildings

The assessment classifies the bushfire prone land within 140 m of the subject site as:

Aspect	Vegetation Classification & Slope	Distance from façade to hazard
North	Upslope Grassland	36 m
East	0-5° Downslope Grassland	40 m
South	0-5° Downslope Managed	> 140 m
West	Upslope Managed	> 140 m

The relevant technical bushfire protection provisions under the NCC for design and construction of building standards are:

- AS3959 - 2018 Construction for Buildings in Bushfire Prone Areas or,
- NASH Standard Steel Framed Construction in Bushfire Areas (2014) if a steel frame is proposed.

Specification 43 of the NCC requires Class 9 Child Care Centre's to be constructed to **BAL 19**. Therefore, the proposed St Marys Rainbow Preschool can be constructed to **BAL 19** (Section 3 and Section 6) as specified by AS3959 – 2018 Construction for Buildings in Bushfire Prone Areas and/or NASH Standard Steel Framed Construction in Bushfire Areas (2014) and PBP 2019.

The APZ should be established from the commencement of building works and maintained in perpetuity for the following distances:

- 36 m towards the northern elevation.
- 40 m towards the eastern and southern elevations.
- To the lot boundary on the western elevation.

The APZ management outside the preschool boundary is to be identified in the lease agreement as an obligation to maintain the BVMP as a surviving encumbrance on the land.

The area extends within the Charles Sturt University land from the leased land boundary for:

- North – 13.6 m.
- East – 12.2 m.

A Bushfire Vegetation Management Plan in accordance with 3.2.6 Plans of Management of PBP 2019 was provided by Harris Environmental Consulting in March 2024. This plan of management addressed ongoing management within and outside of the proposed lot to ensure compliance with APZ requirements. It is also recommended that following conditions be met:

- Notification of any transition arrangements for management or ownership alterations which occur as a result of land dedication or acquisition.
- Demonstration that the relevant authority has the necessary experience, resources and funds to undertake the directions; and

- Acknowledgement of responsibility from the adjoining landholder that the APZ will be managed in perpetuity.

A Bush Fire Emergency Management and Evacuation Plan should be prepared for St Marys Rainbow Preschool. The Plan should be consistent with the NSW RFS publication: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan* and Australian Standard AS3745 2010 *Planning for Emergencies in Facilities*. The Bush Fire Emergency Management and Evacuation Plan must consider a mechanism for the early relocation of occupants on days when adverse fire weather is notified, or adverse fire activity occurs in the local government area in which the development operates.

St Marys Rainbow Preschool's school closure policy addresses bushfire events and has proposed to close the school in the event of a Catastrophic risk rating.

The subject lot is located on Farrer Road. This is a two-wheel drive, all-weather road. Road surfaces and bridges are sufficient to carry fully loaded firefighting vehicles.

As St Marys Rainbow Preschool is located approximately 58 m from Farrer Road with the furthest extent of the building located 96 m away from the road, the proposed internal access is required to comply with the PBP- Property Access Table 7.4a. This includes:

- A minimum carriageway width of four metres;
- A minimum vertical clearance of 4 m to any overhanging obstructions, including tree branches;
- provide enough turning room for a fire tanker that requires an inner minimum turning radius of 6 m and outer minimum radius of 12 m;
- Curves a minimum inner radius of six metres;
- The minimum distance between inner and outer curves is six metres;
- The cross fall is not more than 10 degrees;
- Maximum grades for sealed roads do not exceed 15 degrees (28 per cent) and not more than 10 degrees (18 percent) for unsealed roads;
- The internal road surfaces and bridges have a capacity to carry fully loaded firefighting vehicles (23 tonnes) and provide signage that clearly indicates the bridge capacity; and
- There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.

The development will require a reticulated or static water supply. A reticulated water supply:

- Fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419.1:2005;
- Hydrants are not located within any road carriageway;
- Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.
- Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.

Or a static water supply:

- A 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.
- Above ground tanks are required to be manufactured of concrete or metal and raised tanks have their stands protected. All above ground water pipes external to the building are required to be metal including and up to any taps. Pumps are to be shielded. Underground tanks should have an access hole of 200 mm and a hardened ground surface within 4 m of the access hole. A suitable connection for firefighting purposes is required such as a 65mm storz outlet and a gate or ball valve.

Any bottled gas will be installed and maintained in accordance with AS1596 and the requirements of the relevant authority. If gas cylinders need to be kept close to the buildings, the release valves must be directed away from the building and away from any combustible material. Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used;

Electrical transmission lines, if above ground, will be managed in accordance with specifications issued by the respective energy supplier.

1. PROPOSAL

The lessees of Farrer Road, Boorooma, propose to construct a St Marys Rainbow Preschool on the leased portion of Lot 153 DP 751407. The proposed development includes the construction of the preschool, landscaping of the outdoor play area and providing access and a carpark on the leased lot.

Harris Environmental Consulting was commissioned to provide this bushfire assessment.

Figure 1 shows the subject lot location.

Figure 2 provides a broad scale aerial view of the subject site.

Figure 3 shows the close up of the subject lot.

Figure 4 shows the proposed plans.

Figure 1 Site Location

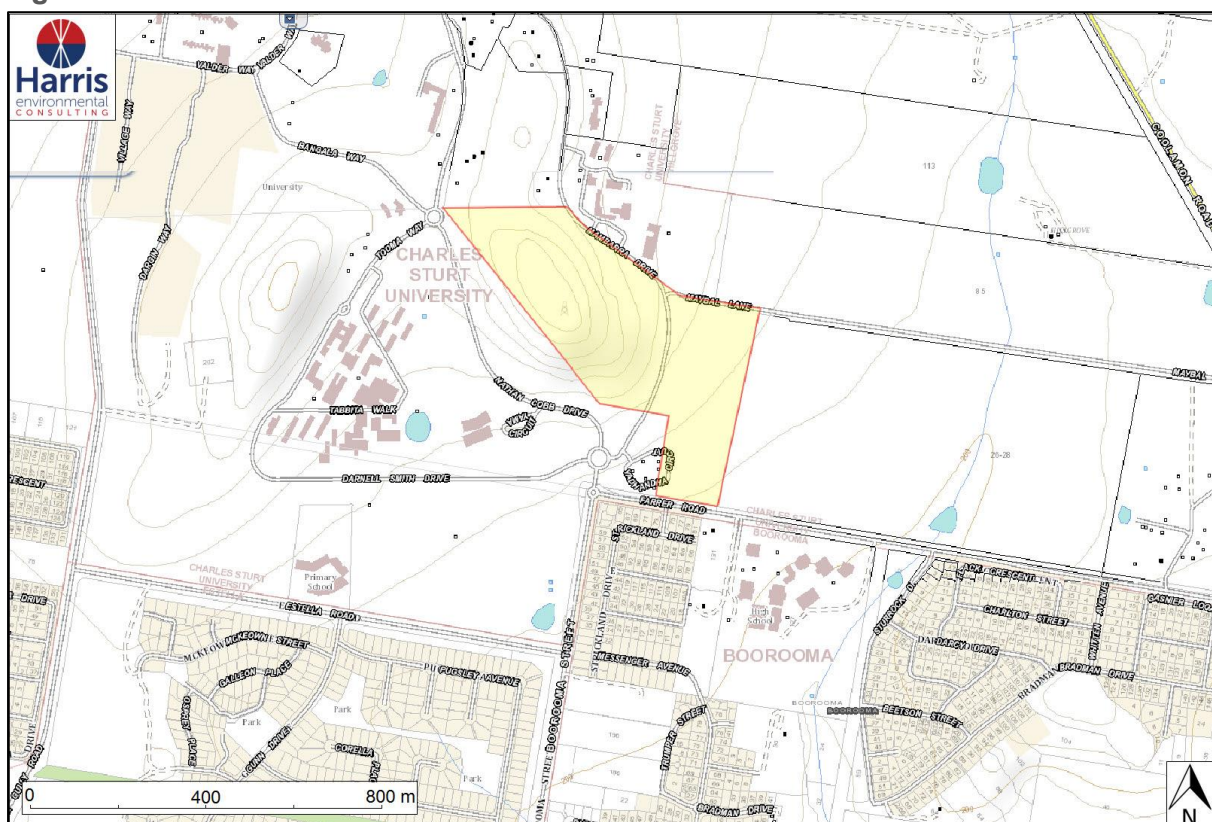


Figure 2 Broad scale aerial view of the subject lot



Figure 3 Close up view of the Subject Lot



2. ASSESSMENT REQUIREMENTS

2.1 Regulation

The proposed childcare is considered a Special Fire Protection Purpose (SFPP) development under Section 100B of the *Rural Fires Act (1997)*. This assessment is provided in accordance with Section 6 of *Planning for Bushfire Protection 2019 (PBP)* and the PBP Addendum Nov 2022.

Specification 43 of the NCC 2022 identifies additional bushfire provisions for the construction, separation and access requirements for certain Class 9 buildings, including childcare centers, located on bushfire prone land. Additional Performance Criteria and Acceptable Solutions for SFPP Class 9 buildings were identified in Appendix B the PBP Addendum Nov 2022. An analysis of the proposal against these requirements is provided in Section 6.

3. PLANNING LAYERS

The following planning layers are described in Table 1 and shown in the Figures below:

Table 1 Planning Layers

MAP	FIGURE	DESCRIPTION
Bushfire Prone Land Map	5	The subject site is mapped as “Vegetation Category 1”, “Vegetation Category 3” and “Vegetation Buffer”.
LEP Zone Map	6	The subject lot is zoned as “SP2 – Education Establishment”.
Vegetation Mapping	7	The vegetation surrounding the subject lot has been identified as “Western Slopes Dry Sclerophyll Forests” and “Western Slopes Grassy Woodlands” (DPE, 2022).
Biodiversity Values Map	8	There is land identified on 4/4/24 as having high biodiversity value under the Biodiversity Offsets Scheme under the <i>Biodiversity Conservation Act 2016</i> . This land does NOT include the leased lot area or the indicative proposed APZ.

Figure 5 Bushfire Prone Map

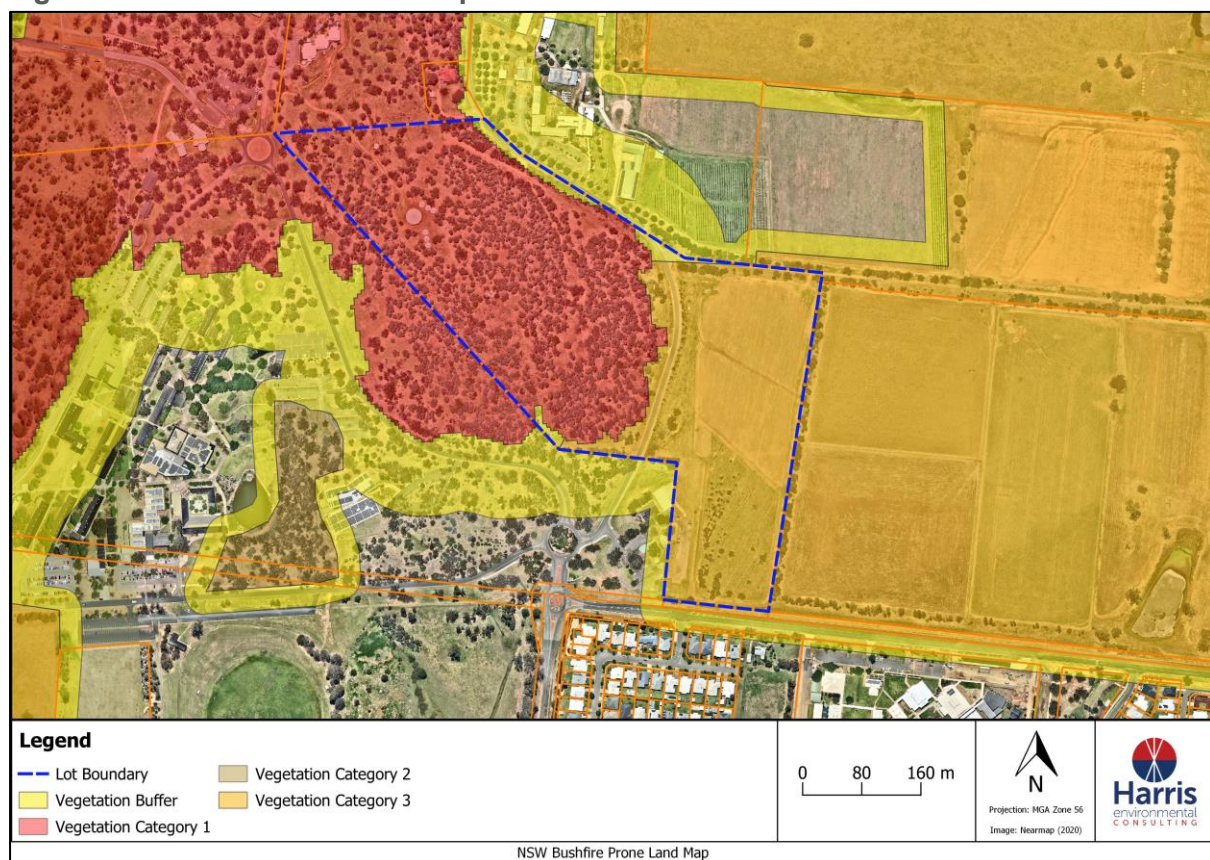


Figure 6 LEP Zone Map

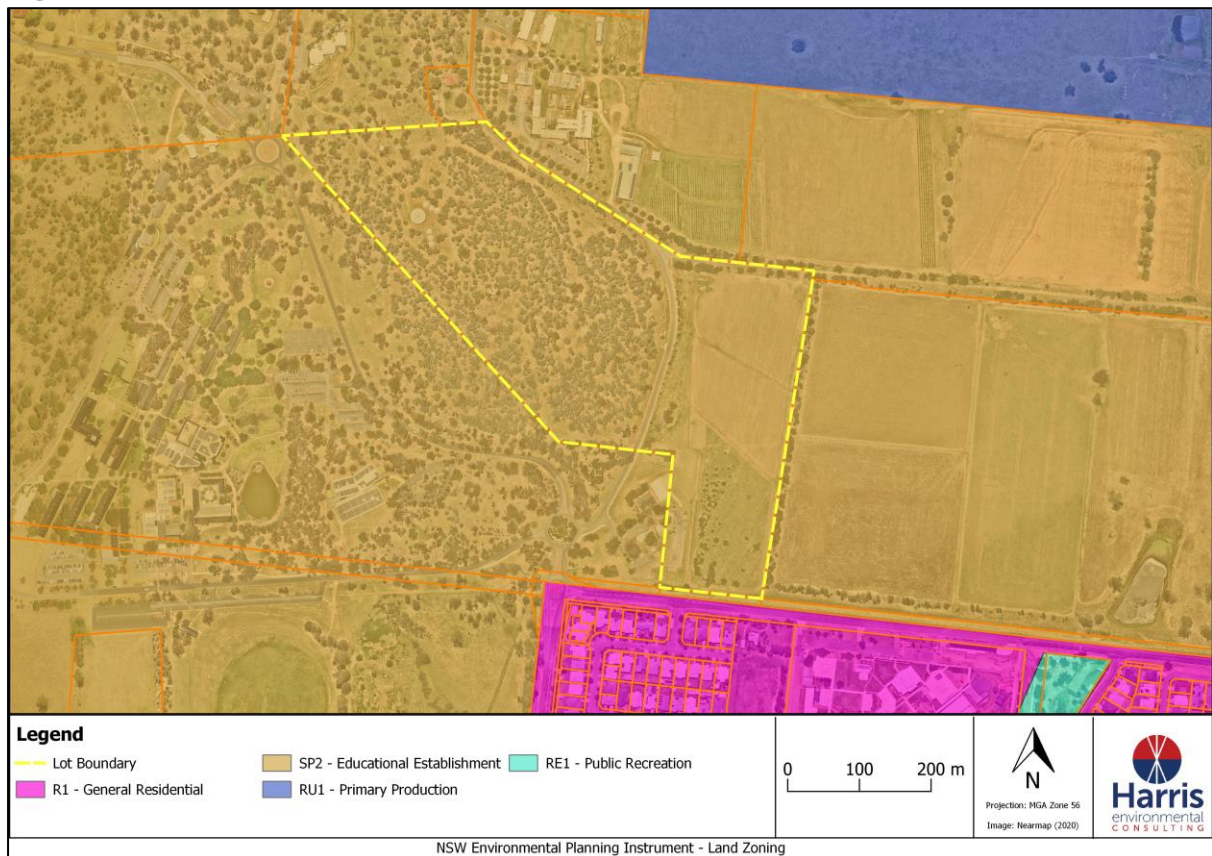


Figure 7 Vegetation Mapping

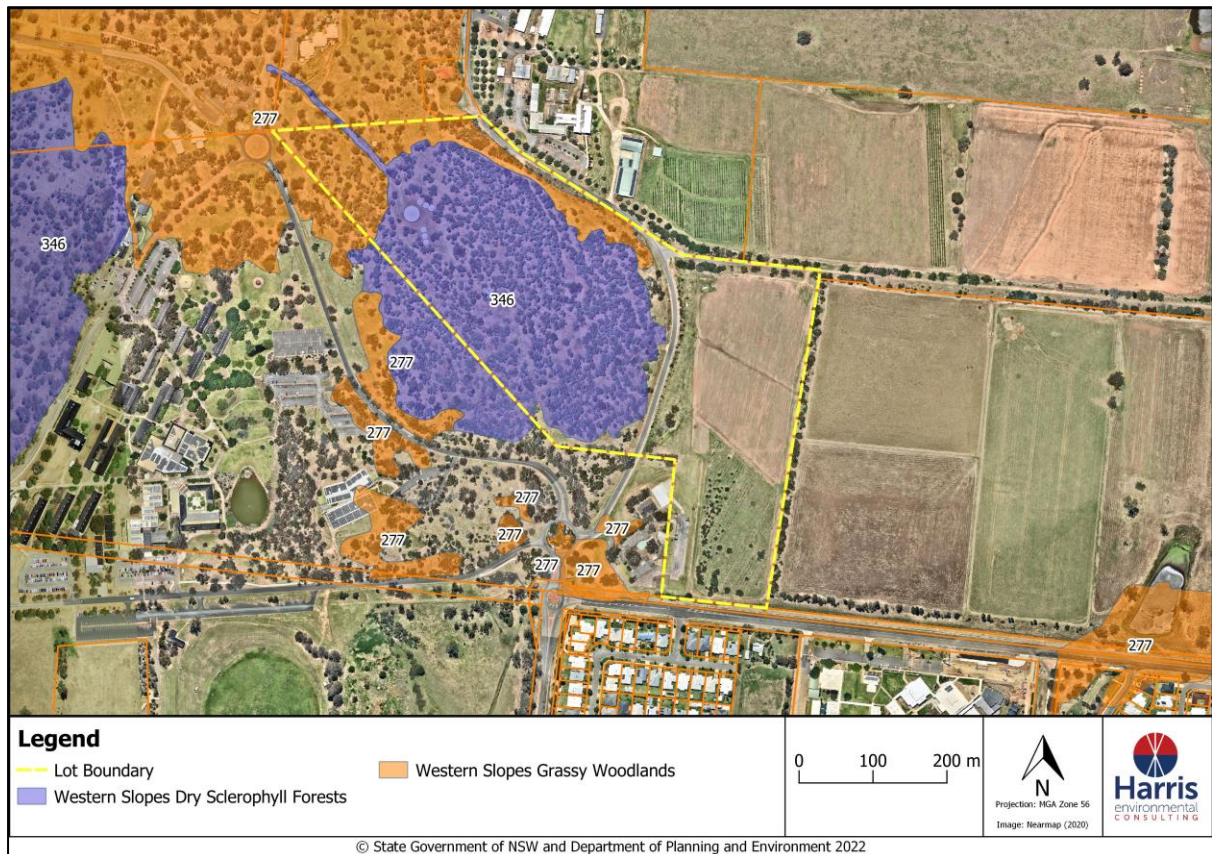
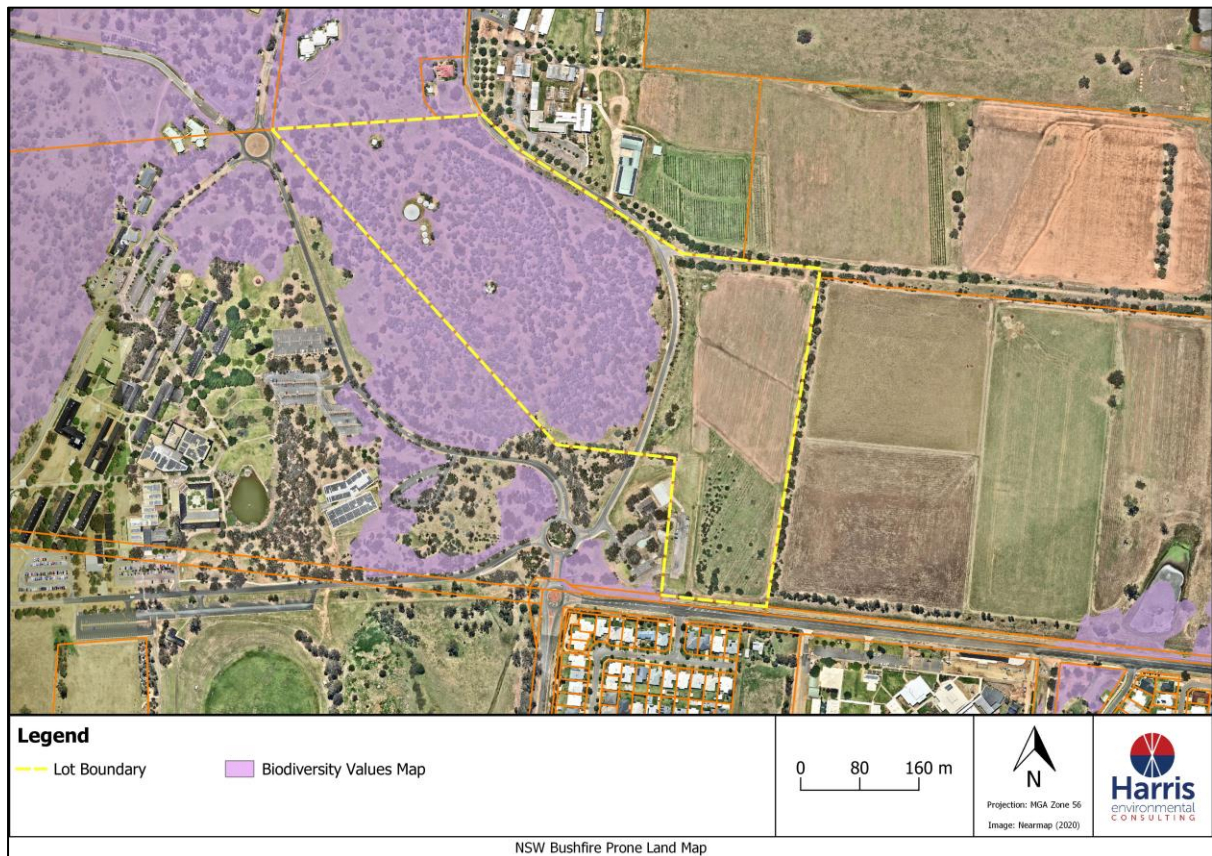


Figure 8 Biodiversity Values Map



4. SITE DESCRIPTION

4.1 Slope and Aspect of the Site within 100m

The slope that would most significantly influence fire behaviour was determined over a distance of 100 m out from the proposed development. This assessment was made using 2 m contour intervals.

The Australian Standard AS3959 - 2018 and PBP 2019 identifies that the slope of the land under the classified vegetation is much more important than the slope between the site and the edge of the classified vegetation.

As shown in Figure 9, the subject lot is located on land that slopes steeply upwards towards the northwestern elevation and downwards towards the southeastern elevation. The development area slopes gently downwards towards the southeast.

Figure 9 Slope



4.2 Vegetation Formation within 140m of Proposed Development

Figure 10 shows the vegetation classifications of the managed and unmanaged land within 140 m of the proposed development.

The vegetation formations are described below and summarised in Table 2.

The vegetation towards the northern and eastern elevations has been mapped as “Grassland” in accordance with *Planning for Bush Fire Protection (PBP) 2019*.

The vegetation on the remaining elevations is considered managed.

Table 2 Predominate Vegetation Classification

	Vegetation Formation	Effective Slope	Distance from Lot Boundary to Façade.
North	Grassland	Upslope	36 m
East	Grassland	0-5° Downslope	40 m
South	Managed	0-5° Downslope	> 140 m
West	Managed	Upslope	> 140 m

Figure 10 Bushfire Prone Vegetation within 140 metres



5. BUSHFIRE THREAT ASSESSMENT

5.1. BAL Assessment for proposed development

Table A1.12.1 *Planning for Bush Fire Protection 2019* has been used to determine the BAL and the width of the required APZ for the proposed SFPP development using the vegetation and slope data identified.

Table 3 below shows the APZ and BAL Determination for the subject site.

A Bushfire Vegetation Management Plan (BVMP) in accordance with 3.2.6 Plans of Management of PBP 2019 was provided by Harris Environmental Consulting in May 2024. This plan of management addressed ongoing management within and outside of the proposed lot to ensure compliance with APZ requirements. An excerpt of the BVMP is provided in Table 4 detailing the prescribed APZ requirements, treatment details and predicted timing intervals of the management options.

The APZ should be established from the commencement of building works and maintained in perpetuity for the following distances as shown in Figure 11:

- 36 m towards the northern elevation.
- 40 m towards the eastern and southern elevations.
- To the lot boundary on the western elevation.

The APZ management outside the preschool boundary is to be identified in the lease agreement as an obligation to maintain the BVMP as a surviving encumbrance on the land. The area is shown in Figure 12 and extends within the Charles Sturt University land from the leased land boundary for:

- North – 13.6 m.
- East – 12.2 m.

This external APZ must be managed into perpetuity and if ACPT (operator of St Marys Rainbow Preschool) do not meet their obligations to maintain the land in accordance with the VMP, this would constitute a breach of the terms of the Lease and the land would default back to CSU, who would then carry the obligation.

It is also recommended that following conditions be met:

- Notification of any transition arrangements for management or ownership alterations which occur as a result of land dedication or acquisition.
- Demonstration that the relevant authority has the necessary experience, resources and funds to undertake the directions; and
- Acknowledgement within the lease agreement that the APZ will be managed in perpetuity.

Table 3 APZ and BAL Determination

	NORTH	EAST	SOUTH	WEST
Vegetation	Grassland	Grassland	Managed	Managed
Gradient	Upslope	0-5° Downslope	0-5° Downslope	Upslope
Distance from hazard to façade.	36 m	40 m	> 140 m	> 140 m
10kW/m² required APZ	36 m	40 m	-	-
APZ required	SFPP APZ	SFPP APZ	SFPP APZ	SFPP APZ
Construction BAL required	BAL 19	BAL 19	BAL 19	BAL 19

Figure 11 Asset Protection Zone

Figure 12 APZ outside of Lease Area to be managed as per Lease Agreement



Table 4 Excerpt from BVMP - Requirements for Bushfire Vegetation Management Area

Requirements for Bushfire Vegetation Management Area		
Site Manager:		
Bushfire Vegetation Management Requirements	Frequency	Responsibility
Tree canopy cover should be less than 15 % at maturity	Quarterly	Site Manager
Trees at maturity should not touch or overhang the building	Quarterly	Site Manager
Lower Limbs should be removed up to a height of 2 m above ground	Establishment of APZ and Quarterly	Site Manager
Tree canopies should be separated by 2 to 5 m	Establishment of APZ and when planting.	Site Manager
Preference should be given to smooth-barked and evergreen trees	Establishment of APZ and when planting	Site Manager
Create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings should be provided	Quarterly	Site Manager
Shrubs should not be located under trees	Quarterly	Site Manager
Shrubs should not form more than 10% ground cover	Quarterly	Site Manager
Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation	Quarterly	Site Manager
Grass should be kept mown to no more than 100 mm in height	Fortnightly	Site Manager
Leaves and vegetation debris should be removed	Fortnightly	Site Manager
SFAZ area (outside of the fence line of the site) should be kept slashed to prevent the establishment of hazardous vegetation.	6 monthly	Site Manager
Renew Bushfire Vegetation Management Plan	Every 5 years or following: <ul style="list-style-type: none"> • A major bushfire event; • Changes to organisational responsibility • Changes to legislation 	Site Manager

5.2. Relevant Construction Standard

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.

The following was determined for this site:

Relevant fire danger index.....FDI 100
Flame temperature1200 K

The proposed St Marys Rainbow Preschool can be constructed to **BAL 19** (Section 3 and Section 6) as specified by AS3959 - 2018 Construction for Buildings in Bushfire Prone Areas and/or NASH Standard Steel Framed Construction in Bushfire Areas (2014). New construction must also comply with the construction requirements in Section 6 of *Planning for Bush Fire Protection 2019* and the *Planning for Bush Fire Addendum 2022*.

5.3. Emergency Management

A Bush Fire Emergency Management and Evacuation Plan should be prepared for St Marys Rainbow Preschool. The Plan should be consistent with the NSW RFS publication: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan* and Australian Standard AS3745 2010 *Planning for Emergencies in Facilities*. The Bush Fire Emergency Management and Evacuation Plan must consider a mechanism for the early relocation of occupants on days when adverse fire weather is notified or adverse fire activity occurs in the local government area in which the development operates.

St Marys Rainbow Preschool should ensure all staff, students and day visitors are familiar with the RFS Bush Fire Alert Levels and the Plans' procedures.

The Plan should be reviewed and updated annually following an audit of bush fire protection measures, including maintaining asset protection zones, water supplies and access roads within the site. An up to date copy of the Plan should be provided to the Local Emergency Management Committee.

St Marys Rainbow Preschool's school closure policy addresses bushfire events and has proposed to close the school in the event of a Catastrophic risk rating.

5.4. Adequate Water and Utility Services

Reticulated water is supplied to the subject lot. Hydrants are located on Farrer Road however they are greater than 70 m of the furthest extent of the proposed development.

The development will require a reticulated or static water supply. A reticulated water supply:

- Fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419.1:2005;
- Hydrants are not located within any road carriageway;

- Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.
- Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.

Or a static water supply:

- A 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.
- Above ground tanks are required to be manufactured of concrete or metal and raised tanks have their stands protected. All above ground water pipes external to the building are required to be metal including and up to any taps. Pumps are to be shielded. Underground tanks should have an access hole of 200 mm and a hardened ground surface within 4 m of the access hole. A suitable connection for firefighting purposes is required such as a 65mm storz outlet and a gate or ball valve.

In accordance with AS 2419.1:2005, Section 3.2.2.2 states that the external fire hydrants should be located within 20 m of a hardstand such that when a pumping appliance is connected to it, all portions of the building shall be within reach of a 10 m hose stream, issuing from a nozzle at the end of a 60 m length of hose laid on the ground.

Any bottled gas will be installed and maintained in accordance with AS1596 and the requirements of the relevant authority. If gas cylinders need to be kept close to the buildings, the release valves must be directed away from the building and away from any combustible material. Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used;

Electrical transmission lines, if above ground, will be managed in accordance with specifications issued by the respective energy supplier.

5.5. Safe Operational Access

The *Planning for Bushfire Protection 2019* requires the provision of safe operational access to structures and water supply for emergency services while residents are seeking to evacuate from an area.

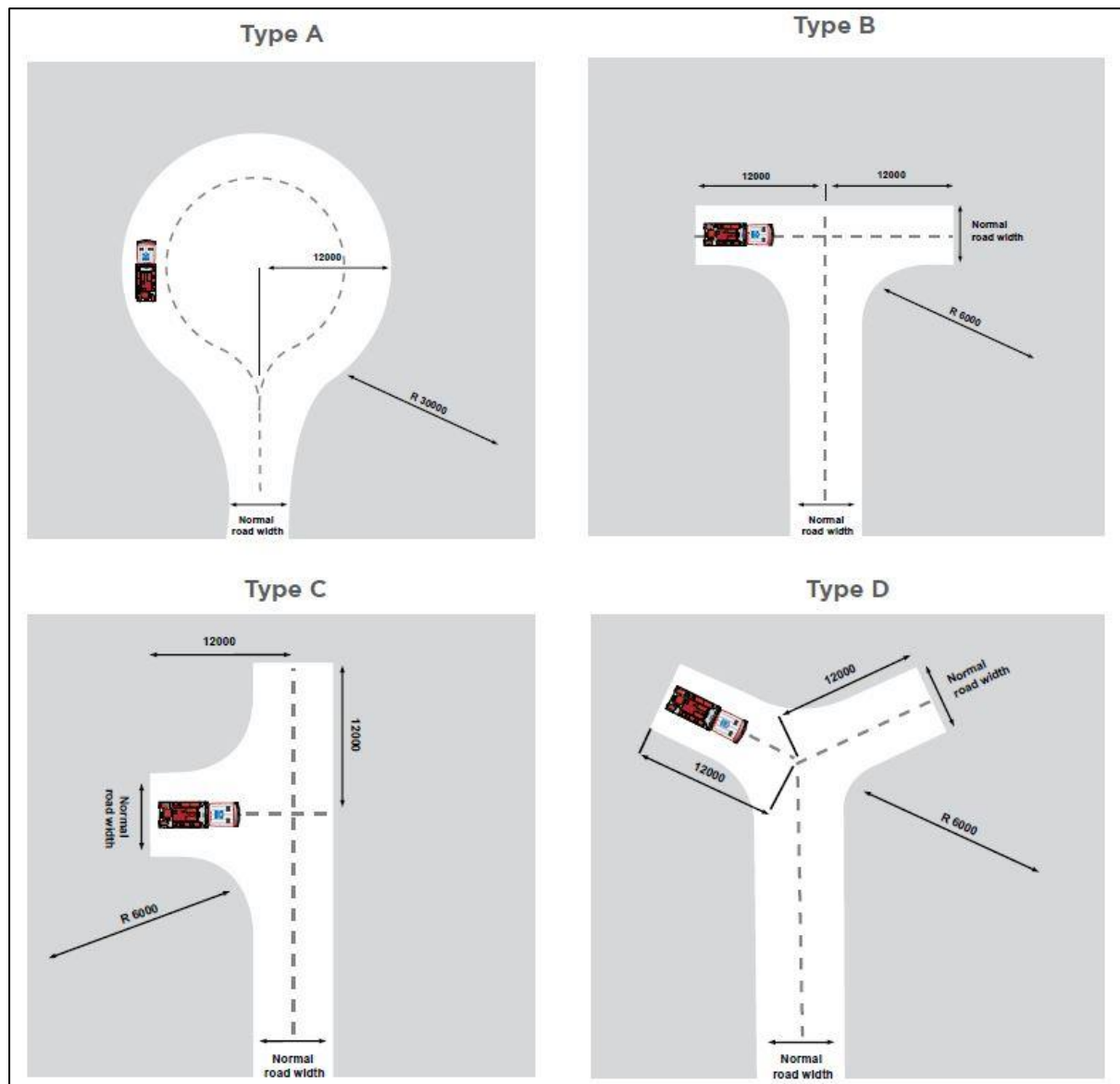
The subject lot is located on Farrer Road. This is a two-wheel drive, all-weather road. Road surfaces and bridges are sufficient to carry fully loaded firefighting vehicles.

As St Marys Rainbow Preschool is located approximately 58 m from Farrer Road with the furthest extent of the building located 96 m away from the road, the proposed internal access is required to comply with the PBP- Property Access Table 7.4a. This includes:

- A minimum carriageway width of four metres;
- A minimum vertical clearance of 4 m to any overhanging obstructions, including tree branches;
- provide enough turning room for a fire tanker that requires an inner minimum turning radius of 6 m and outer minimum radius of 12 m;
- Curves a minimum inner radius of six metres;
- The minimum distance between inner and outer curves is six metres;
- The cross fall is not more than 10 degrees;

- Maximum grades for sealed roads do not exceed 15 degrees (28 per cent) and not more than 10 degrees (18 percent) for unsealed roads;
- The internal road surfaces and bridges have a capacity to carry fully loaded firefighting vehicles (23 tonnes) and provide signage that clearly indicates the bridge capacity; and
- There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.

Figure 13 **Multipoint turning options**



6. HOW THIS PROPOSAL MEETS REGULATIVE REQUIREMENTS

The following tables show how the proposal meets the Performance Based Control of the PBP (2019) Chapter 6 and PBP Addendum Nov 2022.

Table 5 Planning for Bush Fire Requirements for SFPP developments

	Performance Criteria	Acceptable Solution	Demonstration of Compliance
ASSET PROTECTION ZONES	radiant heat levels of greater than 10kW/m ² (calculated at 1200K) will not be experienced on any part of the building.	the building is provided with an APZ in accordance with Table A1.12.1 in Appendix 1.	This assessment can demonstrate that the proposed development will not experience radiant heat levels of greater than <10 kW/m ²
	APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.	APZs are located on lands with a slope less than 18 degrees.	Complies - the APZ is not located on land than exceeds 18 degrees.
	APZs are managed and maintained to prevent the spread of fire to the building.	The APZ is managed in accordance with the requirements of Appendix 4 of PBP 2019,	To comply
	The APZ is provided in perpetuity.	APZ are wholly within the boundaries of the development site;	To comply - The APZ extends into the Charles Sturt University land and the lease agreement will ensure the APZ is managed into perpetuity.
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 is in accordance with Appendix 4; And fencing is constructed in accordance with section 7.6 of PBP 2019.	Is proposed to comply.
CONSTRUCTION STANDARDS	PBP Addendum 2022: The proposed building can withstand bush fire attack in the form of wind, embers, radiant heat and flame contact.	A construction level of BAL-19 or greater under AS 3959 and section 7.5 of PBP is applied.	The proposed preschool (< 10kW/m ²) is to be constructed to BAL 19.

ACCESS	<p>PBP Addendum 2022:</p> <p>Firefighting vehicles are provided with safe, all-weather access to structures and hazardous vegetation.</p>	<p>Vehicular access must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and</p> <p>Must have a minimum unobstructed width of 6m with no part of its furthest boundary more than 18m from the building and in no part of the 6m width be built upon or used for any purpose other than vehicular or pedestrian movement; and</p> <p>Must provide reasonable pedestrian access from the vehicular access to the building; and</p> <p>Must have a load bearing capacity and unobstructed height to permit the operation and passage of fire fighting vehicles; and</p> <p>Must be wholly within the allotment except that a public road complying with above may serve as the vehicular access or part thereof.</p>	<p>Due to the development size (residential lot) and type, the development cannot support a continuous vehicle access road around the entire building.</p> <p>Is required to comply.</p> <p>Is required to comply.</p> <p>Complies.</p>
	The capacity of access roads is adequate for firefighting vehicles.	The capacity of road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges and causeways are to clearly indicate load rating.	Is required to comply
	There is appropriate access to water supply.	There is suitable access for a Category 1 fire appliances to within 4m of the static water supply where no reticulated supply is available.	Is required to comply.

WATER SUPPLY	<p>PBP Addendum 2022:</p> <p>An adequate water supply for firefighting purposes is installed and maintained.</p>	<p>Reticulated water is to be provided to the development, where available; and</p> <p>Water for firefighting purposes must be made available and consist of –</p> <p>A fire hydrant system installed in accordance</p> <ul style="list-style-type: none"> • with AS2419.1; or • Where no reticulated water is available, a static water supply consisting of tanks, swimming pools, dams or the like, or a combination of these, together with suitable pumps, hoses and fittings, determined in consultation with NSW RFS that – <ul style="list-style-type: none"> ○ is capable of providing the required flow rate for a period of not less than 4 hours or ○ has a volume of 10,000 litres for each occupied building. 	<p>Required to comply.</p> <p>Required to provide hydrants or static water supply.</p>
	<p>Water supplies are located at regular intervals.</p> <p>The water supply is accessible and reliable for firefighting purposes.</p>	<p>fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005;</p> <p>hydrants are not located within any road carriageway; and</p> <p>reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads.</p>	<p>Required to provide hydrants or static water supply.</p>
	<p>Flows and pressure are appropriate.</p>	<p>fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.</p>	<p>To comply.</p>
	<p>The integrity of the water supply is maintained.</p>	<p>All above-ground water service pipes external to the building are metal, including and up to any taps.</p>	<p>To comply.</p>

<p>Water supplies are adequate in areas where reticulated water is not available.</p>	<ul style="list-style-type: none"> - A connection for firefighting purposes is located within the IPA or non hazard side and away from the structure; a 65mm Storz outlet with a ball valve is fitted to the outlet; - Ball valve and pipes are adequate for water flow and are metal; - Supply pipes from tank to ball valve have the same bore size to ensure flow volume; - Underground tanks have an access hole of 200mm to allow tankers to refill direct from the tank; - A hardened ground surface for truck access is supplied within 4m of the access hole; - Above-ground tanks are manufactured from concrete or metal; - Raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F AS 3959); - Unobstructed access is provided at all times; - Tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters; and - underground tanks are clearly marked. - All exposed water pipes external to the building are metal, including any fittings; - Where pumps are provided, they are a minimum 5hp or 3kW petrol or diesel-powered pump, and are shielded against bush fire attack; - Any hose and reel for firefighting connected to the pump shall be 19mm internal diameter; and fire hose reels are constructed in accordance with AS/NZS 1221:1997 <i>Fire hose reels</i>, and installed in accordance with the relevant clauses of AS 2441:2005 <i>Installation of fire hose reels</i>. 	<p>If Reticulated water and hydrants cannot be supplied to the lot, required to comply.</p>
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ELECTRICITY SERVICES	Location of electricity services limits the possibility of ignition of surrounding bushland or the fabric of buildings.	<p>Where practicable, electrical transmission lines are underground;</p> <p>Where overhead, electrical transmission lines are proposed as follow:</p> <ul style="list-style-type: none"> - lines are installed with short pole spacing (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 accordance with the specifications in ISSC3 <i>Guideline for Managing Vegetation Near Power Lines</i>. 	To comply.
GAS SERVICES	Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	<p>-bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used;</p> <ul style="list-style-type: none"> - All fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side; - Connections to and from gas cylinders are metal; <p>if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion;</p> <ul style="list-style-type: none"> - Polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used; and <p>above-ground gas service pipes external to the building are metal, including and up to any outlets.</p>	To comply.
EMERGENCY MANAGEMENT	A Bush Fire Emergency Management and Evacuation Plan is prepared.	<p>Bush Fire Emergency Management and Evacuation Plan is prepared consistent with:</p> <ul style="list-style-type: none"> - NSW RFS document: <i>A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan</i>; - NSW RFS Schools Program Guide; - Australian Standard AS 4083:2010 Planning for emergencies in facilities; and - Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable). <p>The Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants.</p> <p>Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to the occupation of the development</p>	<p>An emergency /evacuation plan as described in the PBB 2019 will be required. This will need to meet the criteria of the RFS guidelines for the Preparation of <i>Emergency/Evacuation Plan</i> and there shall be a trigger system for cancellation of staff and children. An onsite manager who can act as a Fire Warden is considered good practice.</p> <p>It is noted that St Marys Rainbow Preschool's school closure policy addresses bushfire events and has proposed to close the school in the event of a Catastrophic risk rating.</p>

	<p>Appropriate and adequate management arrangements are established for consultation and implementation of the Bush Fire Emergency Management and Evacuation Plan.</p>	<p>An Emergency Planning Committee is established to consult with residents (and their families in the case of aged care accommodation and schools) and staff in developing and implementing an Emergency Procedures Manual; and</p> <p>Detailed plans of all emergency assembly areas including on site and off-site arrangements as stated in AS 3745:2010 are clearly displayed, and an annually emergency evacuation is conducted.</p>	<p>To comply.</p>
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Table 6 NCC Specification 43 Bushfire protection for certain Class 9 buildings Requirements

NCC Specification 43 Requirements	Demonstration of Compliance
S43C2 Separation from classified vegetation (1) The building must be separated from classified vegetation— a. by not less than the minimum distances specified in Table S43C2; or b. such that the radiant heat flux on exposed building elements will not exceed 10kW/m ² . (2) For the purposes of (1), the term 'classified vegetation' has the meaning that it has in AS 3959.	Complies with (1)b – determined in accordance with Table A1.12.1 of Appendix 1 of PBP 2019.
S43C3 Separation between buildings (1) The building must be located not less than 12 m from any other building. (2) The separation distance required by (1) need not be complied with if the building is constructed— a. with external walls that have an FRL of not less than 60/60/60 when tested from the outside, including any openings protected in accordance with AS 3959 for BAL—19 or greater; or b. for external walls and roof, using a material or system that satisfies the test criteria of AS 1530.8.1 for a radiant heat flux of 10 kW/m ² or greater.	RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C3 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.
S43C4 Separation from allotment boundaries and carparking areas (1) The building must be located not less than 10 m from any allotment boundary or open carparking area/spots. (2) The separation distance required by (1) need not be complied with if the building is constructed— a. with external walls that have an FRL of not less than 60/60/60 when tested from the outside, including any openings protected in accordance with AS 3959 for BAL—19 or greater; or for external walls and roof, using a material or system that satisfies the test criteria of AS 1530.8.1 for a radiant heat flux of 10 kW/m ² or greater.	RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C4 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.
S43C5 Separation from hazards The external walls and roof of the building must be protected from potential hazards on the site such as liquefied petroleum gas bottles, fuel storage, storage of combustible materials, waste bins, vehicles, machinery, and the like, by— a. a separation distance of not less than 10 m; or b. where within the 10 m separation distance described in (a), constructed with external walls that have an FRL of not less than 60/60/60 when tested from the outside, including any openings protected in accordance with AS 3959 for BAL—19 or greater; or c. for external walls and roof, using a material or system that satisfies the test criteria of AS 1530.8.1 for a radiant heat flux of 10 kW/m ² or greater.	RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C5 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.
S43C6 Non-combustible path around building A non-combustible pathway directly adjacent to the building and not less than 1.5 m wide must be provided around the perimeter of the building.	RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C6 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.
S43C7 Access pathways (1) Access pathways that lead to a road or open space must— a. be readily identifiable; and b. have an even surface; and c. have a minimum clear width of not less than 1 m. (2) If the access pathway is an accessway that is required to comply with Part D4, the requirements of Part D4 override (1) to the extent of any inconsistency.	RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C7 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.
S43C8 Exposed external areas An external area designed to hold people unable to be safely accommodated within the building, that may be exposed to radiant heat flux from a fire front during a bushfire event, must not be exposed to an incident radiant heat flux from the fire front exceeding 1 kW/m ² above background solar radiant heat flux.	RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C8 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.

<p>S43C9 Internal tenability</p> <p>To maintain internal tenability throughout the duration of occupancy during a bushfire event, the building must comply with the following:</p> <ol style="list-style-type: none"> An air handling system must be provided that is capable of— <ol style="list-style-type: none"> being adjusted for full recycling of internal air for a period of not less than 4 hours to avoid the introduction of smoke into the building; and maintaining an internal air temperature of not more than 25°C. The building envelope must be designed such that if an air handling system required by (a) fails, then— <ol style="list-style-type: none"> internal air temperatures can be maintained below 39°C; and internal surface temperatures can be maintained below 60°C. If the building is divided into separate compartments then, for the purposes of (a), each compartment must have a separate air handling system. Each air handling system required by (a) must be designed to account for the activation of smoke detectors from low concentrations of smoke from external sources, so as to ensure that air-conditioning and other essential systems remain operational. 	<p>RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C9 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.</p>
<p>S43C10 Building envelope</p> <p>The building envelope must be constructed in accordance with AS 3959 – BAL 19 or greater, except that where the use of combustible materials is permitted by AS 3959, they are not to be used unless permitted by C2D10(4), (5) or (6).</p>	<p>Is required to comply.</p>
<p>S43C11 Supply of water for fire-fighting purposes</p> <p>Water for fire-fighting purposes must be available and consist of—</p> <ol style="list-style-type: none"> a fire hydrant system complying with E1D2, or a static water supply consisting of tanks, swimming pools, dams or the like, or a combination of these, together with suitable pumps, hoses and fittings, capable of providing the required flow rate for a period of not less than 4 hours, determined in consultation with the relevant fire brigade. 	<p>Is required to comply.</p>
<p>S43C12 Emergency power supply</p> <p>(1) Emergency power must be provided to support, for not less than 4 hours before and 2 hours after the passing of the fire front during a bushfire event, the ongoing operation of—</p> <ol style="list-style-type: none"> air handling systems to maintain internal tenability; and any pumps for fire-fighting; and any emergency lighting and exit signs; and any other emergency equipment listed in C3D14(6) and required to be provided. <p>(2) Manual control for emergency back-up power supply must be provided to facilitate manual intervention where the power supply fails or runs out.</p>	<p>RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C12 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.</p>
<p>S43C13 Signage</p> <p>Signage must be provided to warn building occupants against storing combustible materials under or adjacent to the building.</p>	<p>RFS confirms in Practice Note (6 May 2024) (Appendix iii) that S43C13 in Specification 43 is not addressed by PBP Addendum 2022 and is outside BPAD Consultant jurisdiction. Therefore demonstration of compliance is required at the CC stage by the Building Certifier.</p>
<p>S43C14 Vehicular access</p> <p>Vehicular access to the building must be provided in accordance C3D5(2), as if the building were a large isolated building for the purposes of C3D4.</p>	<p>Is required to comply.</p>

7. LANDSCAPING

An APZ is required to be established from commencement of building and maintained in perpetuity.

Appendix 4 (*PBP 2019*) provides guidelines for landscaping and Bushfire Provisions within the APZ. To incorporate bushfire protection measures into future development, the owner is advised to consider the following:

- Avoid planting trees species with rough fibrous bark or which retain/shed bark in long strips or retain dead material in their canopy.
- Avoid planting deciduous species that may increase fuel at surface/ground level by the fall of leaves.
- Avoid climbing species to walls and pergolas.
- Locate combustible materials such as woodchips/mulch, flammable fuel stores (LPG gas bottles) away from the building.
- Locate combustible structures such as garden sheds, pergolas, and materials such as timber furniture away from the building.
- Ensure any vegetation planted around the house is a suitable distance away so these plants do not come into physical contact with the house as they mature.
- The property should be developed to incorporate suitable impervious area surrounding the house, including courtyards, paths, and driveways.

The APZ is to be managed as an IPA. The IPA is the area closest to the building and creates a fuel-managed area which can minimise the impact of direct flame contact and radiant heat on the development and act as a defendable space. Vegetation within the IPA should be kept to a minimum level. Litter fuels within the IPA should be kept below 1cm in height and be discontinuous.

In practical terms the IPA is typically the curtilage around the building, consisting of a mown lawn and well-maintained gardens.

When establishing and maintaining an IPA the following requirements apply:

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.

8. SUMMARY

- The development will require to conform with the NCC Specification 43 Bushfire protection for certain Class 9 buildings
- The proposed St Marys Rainbow Preschool can be constructed to **BAL 19** (Section 3 and Section 6) as specified by AS3959 - 2018 Construction for Buildings in Bushfire Prone Areas, PBP 2019 and/or NASH Standard Steel Framed Construction in Bushfire Areas (2014).
- An APZ should be established from the commencement of building works and maintained in perpetuity for the following distances:
 - 36 m towards the northern elevation.
 - 40 m towards the eastern and southern elevations.
 - To the lot boundary on the western elevation.
- The APZ management outside the preschool boundary is to be identified in the lease agreement as an obligation to maintain the BVMP as a surviving encumbrance on the land. The area extends within the Charles Sturt University land from the leased land boundary for:
 - North – 13.6 m.
 - East – 12.2 m.
- A BMVP in accordance with 3.2.6 Plans of Management of PBP 2019 was provided by Harris Environmental Consulting in May 2024. This plan of management addressed ongoing management within and outside of the proposed lot to ensure compliance with APZ requirements. It is also recommended that following conditions be met:
 - Notification of any transition arrangements for management or ownership alterations which occur as a result of land dedication or acquisition.
 - Demonstration that the relevant authority has the necessary experience, resources and funds to undertake the directions; and
 - Acknowledgement of responsibility from the adjoining landholder that the APZ will be managed in perpetuity.
- A Bush Fire Emergency Management and Evacuation Plan should be prepared for St Marys Rainbow Preschool. The Plan should be consistent with the NSW RFS publication: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan* and Australian Standard AS3745 2010 *Planning for Emergencies in Facilities*. The Bush Fire Emergency Management and Evacuation Plan must consider a mechanism for the early relocation of occupants on days when adverse fire weather is notified or adverse fire activity occurs in the local government area in which the development operates.
- St Marys Rainbow Preschool's school closure policy addresses bushfire events and has proposed to close the school in the event of a Catastrophic risk rating.
- The subject lot is located on Farrer Road. This is a two-wheel drive, all-weather road. Road surfaces and bridges are sufficient to carry fully loaded firefighting vehicles.
- As St Marys Rainbow Preschool is located approximately 58 m from Farrer Road with the furthest extent of the building located 96 m away, the proposed internal access is required to comply with the PBP- Property Access Table 7.4a. This includes:
 - A minimum carriageway width of four metres;
 - A minimum vertical clearance of 4 m to any overhanging obstructions, including tree branches;
 - provide enough turning room for a fire tanker that requires an inner minimum turning radius of 6 m and outer minimum radius of 12 m;

- Curves a minimum inner radius of six metres;
 - The minimum distance between inner and outer curves is six metres;
 - The cross fall is not more than 10 degrees;
 - Maximum grades for sealed roads do not exceed 15 degrees (28 per cent) and not more than 10 degrees (18 percent) for unsealed roads;
 - The internal road surfaces and bridges have a capacity to carry fully loaded firefighting vehicles (23 tonnes) and provide signage that clearly indicates the bridge capacity; and
 - There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.
- The development will require a reticulated or static water supply. A reticulated water supply:
 - Fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419.1:2005;
 - Hydrants are not located within any road carriageway;
 - Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.
 - Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.
- Or a static water supply:
 - A 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.
 - Above ground tanks are required to be manufactured of concrete or metal and raised tanks have their stands protected. All above ground water pipes external to the building are required to be metal including and up to any taps. Pumps are to be shielded. Underground tanks should have an access hole of 200 mm and a hardened ground surface within 4 m of the access hole. A suitable connection for firefighting purposes is required such as a 65mm storz outlet and a gate or ball valve.
- Any bottled gas will be installed and maintained in accordance with AS1596 and the requirements of the relevant authority. If gas cylinders need to be kept close to the buildings, the release valves must be directed away from the building and away from any combustible material. Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used;
- Electrical transmission lines, if above ground, will be managed in accordance with specifications issued by the respective energy supplier.

9. REFERENCES

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Appendix i Definition of Asset Protection Zones

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) Noncombustible 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).

Appendix ii Definitions & Abbreviations

Asset Protection Zone (APZ): A fuel reduced area surrounding a buffer zone between a bushfire hazard and an asset. The APZ includes a defensible space within which firefighting operations can be carried out. The size of the required APZ varies with slope, vegetation and FFDI.

AS3959-2019: Australian Standard AS 3959:2018 Construction of buildings in bush fire-prone areas.

Bush fire prone area: an area of land that can support a bush fire or is likely to be subject to bushfire attack, as designated on a bush fire prone land map

Bush fire prone vegetation (BFPV): A map prepared by Council in accordance with RFS guidelines and defining area of vegetation by BFPV categories

Bushfire prone land map (BFPL): A map prepared in accordance with RFS guidelines and certified by the Commissioner of the NSW RFS under section 146 (2) of the Environmental Planning and Assessment Act (1979)

BFSA: Bush fire safety authority.

Effective Slope: The land beneath the vegetation which most significantly effects fire behaviour, having regard to the vegetation present.

Fire Danger Index (FDI): The chance of a fire starting, its rate of spread, its intensity and the difficulty potential for its suppression, according to various combinations of air temperature, relative humidity, wind speed and both the long- and short term drought effects.

Fire hazard: the potential for land to carry a bush fire, utilizing materials or fuels that can be ignited

Grasslands: Grassed areas capable of sustaining a fire. Under Australia standard 3959 Construction of buildings in bushfire -prone areas, identified as low open shrubland, hummock grassland, closed tussock grassland, tussock grassland, open tussock, sparse open tussock, dense sown pasture, sown pasture, open herbfield and sparse open herb field. Grass, whether exotic or native, which is regularly maintained at or below 10 cm in height (includes maintained lawns, golf course, maintained public reserves, parklands, nature strips and commercial nurseries) are regarded as managed land

Inner Protection Area (IPA): the component of an APZ which closest to the asset (measured from unmanaged vegetation). It consists of an area maintained to minimal fuel loads so that a fire path is not created between the hazard and the building.

Managed land: Managed land is land that has vegetation removed or maintained to limit the spread and impact of bushfire. It may include existing developed land (i.e. residential, commercial or industrial) roads, golf course fairways, playgrounds or sports fields, vineyards, orchards, cultivated ornamental gardens, and commercial nurseries.

National Construction Code (NCC): Australia's primary set of technical design and construction provisions for buildings. As a performance-based code, it sets the minimum

required level for the safety, health, amenity, accessibility and sustainability of certain buildings.

PBP 2019: Planning for Bushfire Protection 2019

Appendix iii Appendix B of Addendum to Planning for Bush Fire Protection 2019: Practice Note (NSW RFS, 2024)



APPENDIX B OF ADDENDUM TO PLANNING FOR BUSH FIRE PROTECTION 2019

Practice Note**6 May 2024**

1. Introduction

This practice note provides guidance on the application of Appendix B of the November 2022 Addendum (**PBP Addendum**) to *Planning for Bush Fire Protection 2019* (**PBP 2019**).

Section 6.8 of PBP 2019 identifies bush fire protection measures (**BPM**) for special fire protection purpose (**SFPP**) development. Appendix B of the PBP Addendum sets out specific requirements for particular kinds of SFPP.

The PBP Addendum does not operate in isolation. Section 3 of the *Rural Fires Regulation 2022* (**RF Regulation**) defines “Planning for Bush Fire Protection” as the document prescribed by section 271 of the *Environmental Planning and Assessment Regulation 2021*. This prescribed document is PBP 2019 as amended by the PBP Addendum.

2. Development Assessment

2.1. RFS Role

Section 100B(3) of the *Rural Fires Act 1997* (**RF Act**) provides that a person must obtain a bush fire safety authority (**BFSA**) before developing bush fire prone land for a SFPP, subject to limited exceptions set out in the RF Act and RF Regulation.

Section 45(2)(h) of the RF Regulation requires an application for a BFSA to include (among other matters) an assessment of the extent to which the proposed development conforms with or deviates from “Planning for Bush Fire Protection” (i.e., PBP 2019 as amended by the PBP Addendum). The RFS will assess the proposed development against the requirements of “Planning for Bush Fire Protection” as part of its consideration of whether to issue a BFSA.

SFPP development that requires a BFSA is “integrated development” under section 4.46 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**). Before it can grant consent to a

Practice Note | Page 1 of 4

development application for such development, the consent authority must obtain the general terms of approval (GTA) for any BFSAs proposed to be granted by the RFS.

The procedure for a consent authority to seek GTA and for an approval body to notify its decision about those terms (including whether it will grant an approval) is governed by Part 3, Division 3 of the *Environmental Planning and Assessment Regulation 2021*.

Any consent granted by the consent authority to an SFPP development that requires a BFSAs must be consistent with the GTA proposed by the RFS and of which the consent authority is informed.

2.2. Certifier Role

Section 6.7(1) of the EP&A Act provides that a construction certificate is required for the erection of a building in accordance with a development consent. A certifier has the function of issuing construction certificates for building work: section 6.5(1)(a) of the EP&A Act. A certifier means a council or a registered certifier as per the definition in section 6.1 of the EP&A Act.

A certifier must not issue a construction certificate for building work unless the design and construction of the building is consistent with the development consent and the building will comply with the relevant requirements of the “Building Code of Australia” as in force on the relevant date: section 19(1) of the *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021*.

The Building Code of Australia comprises Volumes 1 and 2 of *National Construction Code 2022 (NCC 2022)* and any amendments approved from time to time by the Australian Building Codes Board in relation to NSW. NCC 2022 commenced on 1 May 2023.

In considering a construction certificate application for building work, it is a matter for the certifier to be satisfied whether the building will comply with the relevant development consent (including conditions therein reflecting any general terms GTA) and NCC 2022.

It is not the role of the RFS to advise on compliance with NCC 2022.

2.3. Appendix B and NCC 2022

NCC 2022 includes technical provisions relating to the design and construction of buildings that operate in conjunction with the BPM in “Planning for Bush Fire Protection”.

Relevantly, Part G5 of NCC 2022 sets out additional construction, separation and access requirements for certain Class 9 buildings that accommodate vulnerable occupants on bush fire prone land. Class 9 buildings include some SFPP developments under section 100B of the RF Act, such as a Class 9a health-care building, Class 9b early childhood centre, Class 9b primary or secondary school and Class 9c residential care building.

Clause G5D4 of NCC 2022 is a deemed-to-satisfy (DTS) provision applicable to scenarios where the bush fire attack level (BAL) does not exceed BAL 12.5. It provides that in a designated bush fire prone area, a Class 9 building that is a SFPP, or a Class 10a building or deck immediately adjacent or connected to such a building or part, must comply with:

- (a) for a Class 9 building that is special fire protection purpose, Specification 43 except as amended by Planning for Bush Fire Protection;
- (b) for a Class 10a building or deck immediately adjacent or connected to a Class 9 building that is a SFPP;

- (i) AS 3959 except as amended by Planning for Bush Fire Protection; and
- (ii) S43C13; or
- (c) the requirements of (a) or (b) above as modified by the development consent with a BFSA issued under section 100B of the RF Act for the purposes of integrated development.

Specification 43 sets out BPM for buildings described in clause G5D4. Aside from the scope provision (S43C1), twelve provisions of Specification 43 apply in NSW.

As outlined in Table 1 below, Appendix B of the PBP Addendum contains specific requirements for SFPP Class 9 buildings that reflect the measures the subject of S43C10, S43C11 and S43C14 of Specification 43. Appendix B of the PBP Addendum does not address the other measures in Specification 43.

Table 1: Relationship between NCC 2022 Specification 43 and Appendix B of PBP Addendum

Specification 43 measures addressed by Appendix B	Specification 43 measures not addressed by Appendix B
S43C10 Building envelope	S43C3 Separation between buildings
S43C11 Supply of water for fire-fighting purposes	S43C4 Separation from allotment boundaries and car parking areas
S43C14 Vehicular access	S43C5 Separation from hazards (such as liquefied petroleum gas bottles, fuel storage, storage of combustible materials, waste bins, vehicles, machinery, and the like)
	S43C6 Non-combustible path around building
	S43C7 Access pathways
	S43C8 Exposed external areas
	S43C9 Internal tenability
	S43C12 Emergency power supply
	S43C13 Signage

S43C2 (Separation from classified vegetation) does not apply in NSW. The minimum asset protection zones for SFPP development must be determined in accordance with Table A1.12.1 of Appendix 1 of PBP 2019.

Where the DTS provision in clause G5D4 of NCC 2022 applies to a Class 9 building that is a SFPP development, the building must comply with Specification 43 except as amended by “Planning for Bush Fire Protection” or as modified by the development consent with a BFSA.

Clause G5D4 enables Specification 43 requirements to be modified by a development consent with a BFSA. However, clause G5D4 does not contemplate that a BFSA can provide a general exemption from all Specification 43 requirements.

On a case-by-case basis and having regard to the circumstances of a particular development and site, the RFS may consider issuing a BFSA on terms that differ from the acceptable solutions in Appendix B of the PBP Addendum. However, any request by an applicant will need to demonstrate that relevant performance criteria in “Planning for Bush Fire Protection” are satisfied.

For further information regarding this Practice Note, please contact the Development Planning and Policy team emailing development.policy@rfs.nsw.gov.au

