Corporate member of the Fire Protection Association of Australia

Tuesday, 30 August 2022

- ***Purpose;*** To provide a bushfire compliance constraints analysis for the proposed Special Fire Protection Development at.
- ***Address;*** 421 Elizabeth Mitchell Drive Thurgoona.
- ***Lot and DP number;*** lot 71, Dp 1048990.
- ***Referenced documents***; Supplied Site Masterplan, attached.
- ***Proposed works;*** Additions to an existing school.

General.

Bushfire Planning Services has been requested to undertake a preliminary assessment of the proposed additions to Trinity Anglican College in Thurgoona.

The purpose of the assessment is to establish the compliance/non-compliance with the Deemed to Satisfy requirements of the New South Wales Rural Fire Service document Planning for Bushfire Protection 2019 for the establishment of a Special Fire Purpose development.

The Rural Fire Service will consider this type of development a Special Fire Protection Purpose development (SFPP) and is therefore considered as Integrated Development for the purposes of compliance with section 4.46 of the Environmental Planning and Assessment Act (EPA act) (in combination with the Rural Fires Act requirement for a section 100B Bushfire Safety Authority).

To achieve a section 100B Bushfire Safety Authority from the Rural Fire Service the proposal needs to comply with the requirements of clause 45 of the Rural Fires Regulations 2022.

This assessment addresses section (2)(h) of clause 45 “An assessment of the extent to which the proposed development conforms with or deviates from *Planning for Bushfire Protection*”.

Section 6 of Planning for Bushfire Protection addresses the requirements for approval of a SFPP development and includes a set of tables which give the Performance Criteria to meet the relevant intent of various bushfire protection measures and the Acceptable Solutions for meeting each measure.

The tables of Planning for Bushfire Protection are on the following pages with commentary added regarding each requirements compliance.

One of the main requirements of the RFS is the proposals' ability to limit the radiant heat from a fire impacting the proposal to less than or equal to 10kwm2. Table A1.12.1 of Planning for Bushfire Protection outlines the setbacks from various vegetation forms to achieve this target radiant heat level. This is a "deemed to satisfy" approach.

Special Fire Protection developments differ from other types of residential development that allow building construction to compensate for higher heat levels and instead Special Fire Protection levels rely on minimal building construction requirements and large setbacks to achieve the target heat level.

The following table is a copy of table A1.12.1 of Planning for Bushfire Protection

Table A1.12.1

Minimum distances for APZs – SFPP developments (≤10kW/m², 1200K)

KEITH VEGETATION FORMATION	EFFECTIVE SLOPE				
	Up slopes and flat	>0°-5°	>5°-10°	>10°-15°	>15°-20°
	Distance (m) from the asset to the predominant vegetation formation				
Rainforest	38	47	57	69	81
Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	67	79	93	100	100
Grassy and Semi-Arid Woodland (including Mallee)	42	50	60	72	85
Forested Wetland (excluding Coastal Swamp Forest)	34	42	51	62	73
Tall Heath	50	56	61	67	72
Short Heath	33	37	41	45	49
Arid-Shrublands (acacia and chenopod)	24	27	30	34	37
Freshwater Wetlands	19	22	25	28	30
Grassland	36	40	45	50	55

Assumptions.

Assumptions made as part of this assessment include;

- That there is nothing that will prevent the entire development lot from being able to be managed as a "non-hazard".
- That, if needed, the layout of the development can be altered to incorporate the requirements of Planning for Bushfire Protection.
- The remaining hazard is the vegetation within the neighbouring lots to the north, west and south-west.
- That no arrangements have been made for the "of-site" management of the neighbouring properties vegetation.

Compliance with table A1.12.1 of Planning for Bushfire Protection.

To determine compliance with table A1.12.1 several site specific variables need to be determined. These are;

- The slope beneath the persisting hazards (effective slope).
- The vegetation type that makes up the hazard/s

The required setback distances are then derived using table A1.12.1.

Slope.

The following mapped image shows the slope runs used for this assessment and the details of each slope run are shown in the table.

ID	Start	End	Length	Diff	Degrees
1	203.46	205.18	99.58	1.72	0.99
2	204.10	208.75	100.24	4.65	2.66
3	205.69	208.83	100.48	3.14	1.79
4	204.03	208.10	100.12	4.08	2.33
5	200.55	205.23	100.36	4.67	2.67
6	204.85	204.49	32.01	-0.36	-0.65
7	195.02	192.11	100.65	-2.91	-1.66
8	195.69	193.89	100.22	-1.80	-1.03
9	205.18	208.76	98.37	3.58	2.09
10	204.74	208.77	99.76	4.04	2.32
11	203.59	208.36	100.42	4.78	2.72
12	203.46	207.95	100.43	4.49	2.56
13	204.00	204.94	34.31	0.94	1.57

Vegetation.

As previously mentioned, it is an assumption of this assessment that all the vegetation within the subject lot can be managed as a non-hazard which leaves only the vegetation to the north, west and south-west as a potential hazard to the proposal.

To the south of the subject lot there is a narrow finger of remnant vegetation between the subject lot and the nearby housing to the south. This area is severely disturbed, contains walking paths and is considered to be a park and a non-hazard. It should be noted that the majority of this area is not mapped as a hazard.

To the south-west there is a larger area of park however this area is mapped as a hazard in the councils bushfire prone land map and as such will be included in this assessment.

Directly adjacent to the Western boundary of the subject lot is a strip of vegetation approximately 60m in width running in a north-south direction along the western boundary. Further to the west is an area of undeveloped land, lot 403, DP 1146605, containing disturbed vegetation. A subdivision has recently been constructed along the southern boundary of this block of land with the new subdivision showing a road stopping at the southern boundary. It is assumed that the road is to be continued into lot 403 as part of a future development. This will remove at least part of the hazard in a westerly direction.

To the north of the subject lot within lot 8, DP 1176355, is another area of vegetation that is mapped as a hazard.

The vegetation within the surrounding area has been identified using the AlburyLGA_E_3926 vegetation data set as Grassy Box Gum Woodland.

Setback required to achieve less than or equal to 10kwm2.

Given the various slopes and vegetation types as previously outlined, the following overlayed aerial image shows the setbacks required to achieve the 10kw requirement of table A1.12.1.

The blue shaded area is the NON-compliant area.

Map 1. The above overlaid image shows the proposed new work in yellow and the blue area is a 45m buffer around the hazard/managed land interface.

As can be seen in the above overlaid aerial image, using the deemed to satisfy setbacks of Planning for Bushfire Protection, the Senior School building is impacted by the 45m buffer requirement and is unlikely to be approved by the RFS. The remainder of the buildings can reasonably achieve the appropriate setbacks from unmanaged vegetation.

The basis of this assessment was to use the deemed to satisfy requirements of Planning for Bushfire Protection however, as it is evident that the Senior School will be non-compliant, a performance based assessment has also been undertaken to reduce the buffer using site-specific factors.

The following outlines the variables and the distance required to achieve the required 10 kW per metre squared of radiant heat.

Equations Used

Transmissivity: Fuss and Hammins, 2002

Flame Length: RFS PBP, 2001/Vesta/Catchpole

Rate of Fire Spread: Noble et al., 1980

Radiant Heat: Drysdale, 1985; Sullivan et al., 2003; Tan et al., 2005

Peak Elevation of Receiver: Tan et al., 2005

Peak Flame Angle: Tan et al., 2005

Vegetation Information

Vegetation Type:	Grassy and Semi-Arid Woodland (including Mallee)		
Vegetation Group:	Forest and Woodland		
Vegetation Slope:	2 Degrees	Vegetation Slope Type:	Upslope
Surface Fuel Load(t/ha):	10.5	Overall Fuel Load(t/ha):	20.2

Site Information

Site Slope:	1.5 Degrees	Site Slope Type:	Upslope
Elevation of Receiver(m):	Default	APZ/Separation(m):	34

Fire Inputs

Veg./Flame Width(m):	100	Flame Temp(K):	1200

Calculation Parameters

Flame Emissivity:	95	Relative Humidity(%):	25
Heat of Combustion(kJ/kg):	18600	Ambient Temp(K):	308
Moisture Factor:	5	FDI:	80

Outputs

Level of Construction:	BAL 12.5	Peak Elevation of Receiver(m):	4.9
Radiant Heat(kW/m2):	9.93	Flame Angle (degrees):	80
Flame Length(m):	8.13	Maximum View Factor:	0.11
Rate Of Spread (km/h):	0.88	Inner Protection Area(m):	34
Transmissivity:	0.807	Outer Protection Area(m):	0
Fire Intensity(kW/m):	9164		

Using a performance based approach and the variables as previously outlined in this assessment a reduced Asset Protection Zone of 34m instead of the deemed to satisfy 45m is considered achievable.

It should be noted that the variables as outlined in this assessment are subjective and open to interpretation. All performance based assessments are required to be referred to the RFS for parallel assessment.

The following overlaid aerial image shows the Asset Protection Zone requirements based on the performance based assessment as outlined above. The Asset Protection Zone is 34m wide and is highlighted in yellow.

Using the performance based assessment the Asset Protection Zone impact on the Senior School building has been reduced considerably however strictly speaking it is still non-compliant as part of it is still within 34m of the hazard to the west.

The measurements used in this assessment are based on available data and, while close, they may not be completely accurate. As there is only about 800mm of the building encroaching into the 34m buffer, more accurate measurements may find the building is compliant.

Compliance with chapter 4 of PBP

Clause 45 requirement "an assessment of the extent to which the proposed development conforms with or deviates from *Planning for Bush Fire Protection*"

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
ASSET PROTECTION ZONES › *radiant heat levels of greater than 10kW/ m² (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.*	*No.*
› *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.*	*Yes. There are no areas within the lot where the slope is over 18 degrees.*
› *APZs are managed and maintained to prevent the spread of fire to the building.* › *the APZ is provided in perpetuity.*	› *the APZ is managed in accordance with the requirements of Appendix 4 of this document, and is wholly within the boundaries of the development site;* › *APZ are wholly within the boundaries of the development site; and*	*It is assumed that all the vegetation within the developmen t lot can be managed by the school.* *Achievable with modifications to the size or placement*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
	• *other structures located within the APZ need to be located further than 6m from the refuge building.*	*of the Senior School building.* *N/A*
VARIATIONS		
Camping and primitive camping: *no performance criteria applicable.*	• *N/A*	
Bed and breakfast and farm stay: *the building will not be exposed to radiant heat levels exceeding 29kW/m² (1090K).*	• *an APZ is provided in accordance with Tables A1.12.2 or A1.12.3 in Appendix 1 of this document around the entire building or structure.*	*N/A*
Ecotourism : *radiant heat levels of greater than 10kW/m² (1200K) are not experienced by emergency service personnel and occupants during firefighting and emergency management around a building on site that can be used as a refuge.*	• *an APZ is provided in accordance with Table A1.12.1 in Appendix 1 of this document around the entire refuge building or structure.*	*N/A*
Manufactured home estates: *APZs achieve radiant heat levels that are commensurate with the construction standard for the proposed dwellings.*	• *an APZ in accordance with Table A1.12.1 in Appendix 1 of this document is provided to all new dwellings; or* • *an APZ in accordance with Table A1.12.2 or A1.12.3 in Appendix 1 of this document is provided where it is demonstrated that all new dwellings will*	*N/A*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
	be constructed in accordance with BAL-29.	
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*	*Achievable* *Achievable*
CONSTRUCTION STANDARDS	➢ *the proposed building can withstand bush fire attack in the form of wind, embers, radiant heat, and flame contact.*	➢ *a construction level of BAL-12.5 under AS 3959 or NASH Standard and section 7.5 of PBP is applied.*	*Achievable*
	VARIATIONS		
	Camping and primitive camping: *no performance criteria applicable.*	➢ *N/A*	*N/A*
	Bed and breakfast and farm stay: *the proposed building can withstand bush fire attack in the form of wind, embers, radiant heat, and flame contact.*	➢ *construction is applied in accordance with Appendix 1 of PBP.*	*N/A*
	Ecotourism : *the proposed refuge building can withstand bush fire attack in the form of wind, embers, radiant heat, and flame contact*	➢ *a construction level of BAL-12.5 or greater is applied to the refuge building in accordance with AS 3959 or NASH Standard and 7.5 of PBP*	*N/A*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
	Manufactured home estates: *the proposed manufactured home can withstand bush fire attack in the form of wind, embers, radiant heat, and flame contact.*	› *Where an APZ is provided in accordance with Table A1.12.1 in Appendix 1 of this document the construction standards for BAL-12.5 shall apply; or* › *Where an APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1 of this document the construction standards for BAL-29 shall apply.*	*N/A*
	Ecotourism		
	occupants of the ecotourism facility are provided with appropriate shelter in the event of a bush fire.	› *a refuge building is provided;* › *the refuge building must have sufficient space for all occupants and comply with the occupancy levels permissible for that structure; and* › *the refuge building must be constructed to BAL-12.5 or greater in accordance with AS 3959 or NASH Standard and 7.5 of PBP.*	*N/A*
ACCESS	› *firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation*	› *SFPP access roads are two-wheel drive, all-weather roads;* › *access is provided to all structures;* › *traffic management devices are constructed to not prohibit access by emergency services vehicles;* › *access roads must provide suitable turning areas in accordance with Appendix 3; and*	*Achievable* *Achievable* *Achievable* *Achievable*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
		➢ *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.*	*N/A.*
	VARIATIONS		
	Primitive camping: *Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.*	➢ *access is provided in accordance with the property access requirements of Table 5.3b.*	*N/A*
	Bed and breakfast and farm stay: *Firefighting vehicles are provided with safe, all-weather access to structures.*	➢ *access is provided in accordance with the property access requirements of Table 5.3b.*	*N/A*
	Ecotourism: *fire fighting vehicles are provided with safe, all-weather access to the proposed refuge building.*	➢ *vehicular access is provided to the refuge building from a public road in accordance with property access requirements of Table 5.3b;* ➢ *accommodation is within 100m of the refuge building; and* ➢ *pedestrian paths from accommodation to the refuge building/s are provided and clearly signposted.*	*N/A*
	➢ *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*	*Assumed.*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
	clearly indicate load rating.	
	➢ *there is appropriate access to water supply.*	➢ *hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression;* — *Achievable.* ➢ *hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005; and* — *Achievable.* ➢ *there is suitable access for a Category 1 fire appliances to within 4m of the static water supply where no reticulated supply is available.* — *N/A.*
PERIMETER ROADS	➢ *perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating as well as providing a safe operational environment for emergency service personnel during firefighting and emergency management*	➢ *there are two-way sealed roads;* — *Achievable.* ➢ *minimum 8m carriageway width kerb to kerb;* — *Achievable.* ➢ *parking is provided outside of the carriageway width;* — *Achievable.* ➢ *hydrants are to be located clear of parking areas;* — *Achievable.* ➢ *there are through roads, and these are linked to the internal road system at an interval of no greater than 500m;* — *No.* ➢ *curves of roads have a minimum inner radius of 6m;* — *Achievable.*

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	
The intent may be achieved where:			
	on the interface.	› *the maximum grade road is 15 degrees and average grade of not more than 10 degrees;* › *the road crossfall does not exceed 3 degrees; and* › *a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.*	*N/A* *Achievable.* *Achievable.*
NON-PERIMETER ROADS	› *non-perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating*	› *minimum 5.5m carriageway width kerb to kerb;* › *parking is provided outside of the carriageway width;* › *hydrants are located clear of parking areas;* › *there are through roads, and these are linked to the internal road system at an interval of no greater than 500m;* › *curves of roads have a minimum inner radius of 6m;* › *the maximum grade road is 15 degrees and average grade of not more than 10 degrees;* › *the road crossfall does not exceed 3 degrees; and* › *a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided*	*Achievable.* *Achievable.* *Achievable.* *Achievable.* *Achievable.* *N/A.*

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	
The intent may be achieved where:			
WATER SUPPLY ACCESS	➢ *an adequate water supply for firefighting purposes is installed and maintained.*	➢ *reticulated water is to be provided to the development, where available; or* ➢ *a 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.*	*Achievable.* *N/A*
	VARIATIONS		
	Caravan and camping grounds: *an adequate water supply for firefighting purposes is installed and maintained.* ***Primitive camping:*** *an adequate water supply for firefighting purposes is installed and maintained.*	➢ *either a reticulated water supply is provided or a 10,000 litres minimum water supply on site.*	*N/A*
	➢ *water supplies are located at regular intervals.* ➢ *the water supply is accessible and reliable for firefighting operations.*	➢ *fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005;* ➢ *hydrants are not located within any road carriageway; and* ➢ *reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads.*	*Achievable.* *Achievable.* *Achievable.*
	➢ *flows and pressure are appropriate.*	➢ *fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005*	*Achievable.*
	➢ *the integrity of the water supply is maintained.*	➢ *all above-ground water service pipes external to the building are metal, including and up to any taps.*	*Achievable.*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
	• *water supplies are adequate in areas where reticulated water is not available.*	• *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,*	*N/A for all following points of this section.*
WATER	• *water supplies are adequate in areas where reticulated water is not available.*	• *all exposed water pipes external to the building are metal, including any fittings;* • *where pumps are provided, they are a*	*N/A for all following points of this section.*

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	
The intent may be achieved where:			
		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 Fire hose reels, and installed in accordance with the relevant clauses of AS 2441:2005 Installation of fire hose reels.*	
ELECTRICITY SERVICES	› *location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.*	› *where practicable, electrical transmission lines are underground;* › *where overhead, electrical transmission lines are proposed as follow:* ➢ *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 Guideline for Managing Vegetation Near Power Lines.*	*Achievable for all points of this section.*
GAS	› *location and design of gas services will not lead to ignition of surrounding bushland or*	› *reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant*	*Achievable for all points of this section if required.*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
	the fabric of buildings	*authorities, and metal piping is used;* › *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;* › *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;* › *polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used; and* › *above-ground gas service pipes external to the building are metal, including and up to any outlets.*	
EMERGENCY MANAGEMENT	› *Bush Fire Emergency Management and Evacuation Plan is prepared*	› *Bush Fire Emergency Management and Evacuation Plan is prepared consistent with:* ➢ *The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan* ➢ *NSW RFS Schools Program Guide;* ➢ *Australian Standard AS 3745:2010 Planning for emergencies in facilities; and*	*Achievable for all points of this section.*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
		➢ *Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable).* › *Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants.* *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 occupation of the development.*	
	VARIATIONS ***Caravan and camping grounds:*** *a Bush Fire Emergency Management and Evacuation Plan is prepared* ***Primitive camping:*** *a Bush Fire Emergency Management and Evacuation Plan is prepared.* ***Ecotourism:*** *A Bush Fire Emergency Management and Evacuation Plan is prepared.*	› *a Bush Fire Emergency Management and Evacuation Plan is prepared consistent with the NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan, and AS 3745:2010;* › *for proposals in isolated or remote areas which involve large travel distances through bush fire prone vegetation, the following issues should be determined and addressed:* ➢ *the amount of travel likely to be generated during an emergency evacuation;* ➢ *the capacity of the broader road*	*N/A* *N/A*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
		network to facilitate safe emergency evacuation; ➢ *limitations/constraints inherent in the road system; and* ➢ *management of potential traffic conflicts (such as emergency vehicles versus evacuating members of the public).* › *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.* *Note: A copy of the Bush Fire Emergency Management and Evacuation Plan shall be provided to the Local Emergency Management Committee for its information prior to occupation of the development.*	*N/A*
	› *appropriate and adequate management arrangements are established for consultation and implementation of the Bush Fire Emergency Management and*	› *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*	*N/A*

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	
The intent may be achieved where:		
	Evacuation Plan.	➢ *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*	*N/A*

Explanation of terms;

- **'Achievable'.** With appropriate design, this aspect can achieve the acceptable solution.
- **'Assumed'.** It is considered reasonable to assume this requirement has/can been met.
- **'N/A'.** This item is not considered as relevant to this proposal.
- **'Yes'.** This item can/does comply with the acceptable solution.
- **'No'.** This item does not comply with the acceptable solution.

Conclusion.

In its current configuration the Senior School building is unlikely to be approved using the deemed to satisfy requirements of Planning for Bushfire Protection. However, using a performance based approach and with either some movement of the building away from the hazard, alterations to building itself or verification that the building can achieve the required 34m separation, approval is considered likely. The remaining buildings are considered likely to be approved as they are at a considerable distance from any significant hazard.

The tables in pages 8-22 show that the majority of the proposal can, with appropriate design, comply with the requirements of Planning for Bushfire Protection and as such should gain approval from the RFS.

Once the Senior School buildings placement in relation to the required setback is addressed it is assumed that the RFS will have no objection to the proposal.

Should any further clarification be necessary please do not hesitate to contact me.

Yours Sincerely

Matthew Willis

*Grad Dip Planning for Bushfire Prone Areas (**FPAA BPAD Level 3 BPD-PA 09337)***

Bushfire Planning Services Pty Limited

TRINITY ANGLICAN COLLEGE

TRINITY ANGLICAN COLLEGE

SITE MASTER PLAN - STAGE 1

421 ELIZABETH MITCHELL DR, THURGOONA

0 20m 60m 100m

SCALE: 1:1000 @A1

ARCHITECT REGISTRATION NO: 11861

MP004 (P3)

vincent.chrisp