



NSW RURAL FIRE SERVICE

Dept. Of Planning - Urban
Locked Bag 5022
Parramatta NSW 2124

Your reference: SSD-30759158
Our reference: DA20220629008877-Original-1

ATTENTION: Nahid Mahmud

Date: Tuesday 6 September 2022

Dear Sir/Madam,

Development Application

Other - Other Assessment - School

268-278 Catherine Fields Road Catherine Field NSW 2557 Australia, 26//DP1238179

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 23/06/2022.

Upon review of the information received, the NSW Rural Fire Service provide the following recommendations:

Asset Protection Zones

Intent of measures: to provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants.

1. From the start of building works and in perpetuity, the entire property must be managed as an inner protection area (IPA) in accordance with the requirements of Appendix 4 of *Planning for Bush Fire Protection* 2019. When establishing and maintaining an IPA, the following requirements apply:

- Tree canopy cover be less than 15% at maturity;
- Trees at maturity are not touching or overhang the building;
- Lower limbs are removed up to a height of 2m above the ground;
- Tree canopies are separated by 2 to 5m;
- Preference is given to smooth-barked and evergreen trees;
- Large discontinuities or gaps in vegetation are provided to slow down or break the progress of fire towards buildings;
- Shrubs are not located under trees;
- Shrubs do not form more than 10% of ground cover;
- Clumps of shrubs are separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
- Grass to be kept mown (as a guide grass should be kept to no more than 100mm in height);
- Leaves and vegetation debris are removed; and
- NSW Rural Fire Service's document *Standards for asset protection zones*.

Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555
F (02) 8741 5550
www.rfs.nsw.gov.au

2. Landscaping for the entire property must comply with Appendix 4 of *Planning for Bush Fire Protection 2019*. In this regard, the following principles are to be incorporated:

- A minimum 1 metre wide area (or to the property boundary where the setbacks are less than 1 metre), suitable for pedestrian traffic, must be provided around the immediate curtilage of the building;
- Planting is limited in the immediate vicinity of the building;
- Planting does not provide a continuous canopy to the building (i.e. trees or shrubs are isolated or located in small clusters);
- Landscape species are chosen to ensure tree canopy cover is less than 15% (IPA) at maturity and trees do not touch or overhang buildings;
- Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
- Use smooth bark species of trees species which generally do not spread fire up the bark into the crown;
- Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
- Avoid climbing species to walls and pergolas;
- Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
- Locate combustible structures such as garden sheds, pergolas and materials such as timber garden furniture away from the building; and
- Low flammability vegetation species are used.

Construction Standards

Intent of measures: to provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants.

3. The High School Buildings, including the Science, Library, Wellbeing, ELC, Food Tech, SSP HS, Arts, D&T, Canteen and High School Hall must comply with Sections 3 and 5 (BAL 12.5) of the Australian Standard AS3959-2018 *Construction of buildings in bush fire-prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas – 2014* as appropriate, and Section 7.5 of *Planning for Bush Fire Protection 2019*.

4. Any new Class 10b structures as defined per the *National Construction Code* must be non-combustible or hardwood.

Access - Internal Roads

Intent of measures: to provide safe operational access for emergency services personnel in suppressing a bush fire, while residents are accessing or egressing an area.

5. The proposed internal roads must comply with the following requirements of Table 6.8b of *Planning for Bush Fire Protection 2019*:

- access is provided to all structures;
- SFPP access roads are two-wheel drive, all-weather roads;
- roads have a minimum 5.5m carriageway width kerb to kerb;
- parking is provided outside of the carriageway width;
- hydrants are located clear of parking areas;
- dead end roads incorporate a suitable turning area in accordance with Appendix 3 of *Planning for Bush Fire Protection 2019*;
- 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 or other gradient specified by road design standards, whichever is the lesser gradient;
- the road crossfall does not exceed 3 degrees; and
- a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.
- traffic management devices are constructed to not prohibit access by emergency services vehicles;

- one way only public access roads are no less than 3.5 metres wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire suppression;
- the capacity of road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges/causeways are to clearly indicate load rating;
- hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression;
- hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005 - *Fire hydrant installations System design, installation and commissioning*; and
- there is suitable access for a Category 1 fire appliance to within 4m of the static water supply.

6. The proposed fire trail to the rear of the subject property is to comply with the relevant requirements for a Category 1 Fire Trail as described in NSW RFS publication *NSW RFS Fire Trail Standards* and *NSW Rural Fire Service Fire Trail Design Construction and Maintenance Manual*.

Water and Utility Services

Intent of measures: to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

7. The provision of water, electricity and gas shall comply with Table 6.8c of *Planning for Bush Fire Protection 2019*.

Emergency Management

Intent of measures: to provide suitable emergency and evacuation arrangements for occupants of SFPP developments.

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

Further Considerations for the Consent Authority

BAL 12.5 needs to be applied to the Staff & Admin building in its current location, where non-certified land on riparian/floodplain becomes a hazard if future land zoning supports revegetation within 100 metres of the building.

For any queries regarding this correspondence, please contact Simon Derevnin on 1300 NSW RFS.

Yours sincerely,

Kalpana Varghese

**Supervisor Development Assessment & Plan
Built & Natural Environment**