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- > Building Solutions Advice for Bushfire Prone Areas

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8 November 2024

McDonald Jones Homes PO Box 340 East Maitland NSW 2323

Attention: Tahra Brady Our Ref: 24268

Dear Tahra,

BUSHFIRE ASSESSMENT LOT 6 DP 1262773, 11 ELLUISA CLOSE, FORSTER

I refer to your request for a Bushfire Assessment for a proposed development on the above land (the subject land).

The proposed development that is the subject of the assessment is the construction of a dwelling on the land.

The following is a summary of the assessment.

BAL Assessment Procedure	Appendix 1 (PBP 2019)	
Council Area	Mid-Coast	
FFDI	80 (North Coast)	
Applicable PBP 2019 Table	A1.12.6	
Proposed Development	Dwelling	
Vegetation formation	Forest	
Effective slope	upslope	
Land to be maintained as APZ	Land within the site	
Highest BAL when assessed under Table A1.12.6 of PBP 2019	BAL-29 (see Note)	

Note: A Bushfire Safety Authority was issued by the RFS for the subdivision which created the site subdivision containing the subject site. This bushfire assessment adopts the BAL determined by Mid-Coast Council for the most recent development consent granted for residential allotments in Elluisa Close within 30 metres of the site (BAL-29 for the dwelling at 15 Elluisa Close). The adopted BAL is higher than the BAL determined for each of the allotments directly adjoining the site, that is, BAL-12.5 for 9 Elluisa Close (east) and BAL-19 for 13 Elluisa Close (west).

1 Background

The subdivision which created the site was subject to the issue of a Bushfire Safety Authority (BFSA) issued by the RFS on the basis that any future dwellings on land within the subdivision would be subject to ≤BAL-29. In other words, the subdivision could only be eligible for the issue of a BFSA if it could be demonstrated that the highest Bushfire Attack Level (BAL) for any residential dwellings on any future allotments would be BAL-29.

It is understood that the RFS' consideration of the BFSA was based on the provisions of then *Planning for Bush Fire Protection 2006* (since repealed) and a Bushfire Protection Assessment by Travers Bushfire & Ecology (March 2015, Ref: A14048). The findings of that assessment were that the vegetation formation within the land now on the northern side of Elluisa Close was consistent with littoral rainforest vegetation. It is noted that the vegetation on that land is not mapped as littoral rainforest but, nevertheless, it appears that the BFSA was issued on that basis.

The nearest potential bushfire hazard vegetation relative to the proposed dwelling is land on the northern (opposite) side of Elluisa Close.

The area of vegetation to the northern side of the road reserve in Elluisa Close exhibits characteristics consistent with that of coastal swamp forest. Also, the area of the vegetated land is >1 hectare.

The RFS guideline, *Planning for Bush Fire Protection 2019* (PBP 2019), came into force in about March 2020 and includes coastal swamp forest as a vegetation formation included in a classification as *forest*.

This assessment is based on two (2) propositions:

- (a) As a BFSA was issued for the subdivision, then the expectation is that any dwelling on the site will be subject to no higher than BAL-29; and
- (b) In line with the expectation in (a) is the assumption that any BAL for any proposed dwelling would not be higher than the most recent (highest) BAL determined by Mid-Coast Council for other residential buildings on allotments along the southern side of Elluisa Close within, say, 25 metres of the site.

In relation to (b) above, the BALs determined for dwellings on other residential allotments within 25 metres to the east or west of the site are identified in the following table. The most recent approval (development consent granted on 12 February 2024) was that for the dwelling at 15 Elluisa Close, to the west of the site.

Direction	Lot	Address	Approval by (and when)	Front setback (min)	Required BAL
East	5	9 Elluisa Close	Complying Development Certificate (April 2021)	~6 metres	BAL-12.5
West	7	13 Elluisa Close	Development Consent (December 2020)	~4.5 metres	BAL-19
West	8	15 Elluisa Close	Development Consent (February 2024)	~4.2 metres	BAL-29*

(*) Note: the BAL required by the most recent development consent.

This Bushfire Assessment adopts the BAL applied to the most recent approval (development consent), that is, BAL-29. In this regard, it is noted that the separation distance between the proposed dwelling (with a 4.51 metre setback) and any vegetation on the northern/opposite side of Elluisa Close will also be slightly greater than the separation distance between the same area of vegetation and the approved dwelling at 15 Elluisa Close.

The setback of the proposed dwelling will be approximately the same as that of the approved dwelling at 13 Elluisa Close, required to be constructed to BAL-19 via the development consent for that dwelling.

If the BAL applicable to the site as per the most recent development consent is not adopted, then that would technically result in the BAL for (in this case) Lot 6, 11 Elluisa Close, being BAL-40. This would be despite the dwellings on the adjoining allotments at 9 and 13 Elluisa Close having been approved for construction (since late 2020) to BAL-12.5 and BAL-19 respectively.

2 Introduction

The purpose of this assessment is to determine the category of bushfire attack and subsequent construction standard for the proposed erection of a dwelling on land at Lot 6 DP 1262773, 11 Elluisa Close, Forster.

Part of the land within the site is mapped as 'bush fire prone land' for the purposes of Section 10.3 of the *Environmental Planning and Assessment Act 1979*.

As part of the land within the site is mapped as bushfire prone land, the purpose of this Bushfire Assessment is to assist in the planning process, to identify the proximity of the proposed development to any potential bushfire threat and to determine what, if any, level of construction is required in accordance with the RFS guideline entitled *Planning for Bush Fire Protection 2019* (PBP).

This Bushfire Assessment adopts the BAL applied to the most recent approval (development consent), that is, BAL-29, as discussed in detail in the previous section of this document. Construction requirements for BAL-29 will apply subject to AS3959-2018: Construction of Buildings in Bushfire Prone Areas, or the NASH Standard - Steel Framed Construction in Bushfire Areas (2021), subject to any additional construction requirements detailed in Section 7.5.2 of PBP.

3 The Site

Address	11 Elluisa Close, Forster	
Real Property Description	Lot 6 DP 1262773	
Zoning	R2-Low Density Residential	
Local EPI	Great Lakes Local Environmental Plan 2014	

The site comprises land described as Lot 6 DP 1262773, 11 Elluisa Close, Forster, with an area of 449m².

The site is on the southern side of Elluisa Close, approximately 90 metres west of the intersection with Boundary Street.

The subject site is presently vacant. Access to the site is via Elluisa Close.

Land within the site is relatively flat, with a gentle slope from the northern (front) boundary towards the southern (rear) boundary. The site is vegetated with grasses.

Land to the east, west and south of the site is occupied by established residential dwellings.

Land to the north of the site, on the opposite (northern) side of Elluisa Close, contains coastal swamp forest vegetation.

The nearest area of potential bushfire hazard vegetation in relation to the development is on land to the north of the site, within the unmanaged forest vegetation.

Reticulated water supply is available to the site with the nearest hydrants located in Elluisa Close, approximately 22 metres to the west and 36 metres to the east of the site. The site is serviced by underground electricity.

The following photo shows the vegetation on land on the opposite side of Elluisa Close.



Photo 1: Looking north-west from the site along Elluisa Close, showing vegetation on land on the northern side of Elluisa Close

4 The Proposal

The development is for construction of a dwelling-house on the land. The siting of the proposed dwelling is shown in Figure 4.1.



Figure 4.1: Site Plan Extract – Source: No author. Not to Scale. Street to top of page. North approx to top of page.

5 Bushfire Assessment

The site assessment methodology as per Appendix 1 of *Planning for Bush Fire Protection* 2019 (PBP 2019) outlines the procedure to determine Bushfire Attack Levels (BALs).

The site assessment methodology is summarised in the following steps:

- 5.1 Determine vegetation formation around building to a distance of 140 metres;
- 5.2 Determine effective slope of the land from the building for a distance of 100 metres;
- 5.3 Identify relevant Forest Fire Danger Index (FFDI) for the Council area;
- 5.4 Determine separation distance from the edge of the unmanaged vegetation to the closest external wall (or closest structural support element in the case of patios/porticos, etc.);
- 5.5 Match the relevant FFDI, appropriate vegetation, distance and effective slope to determine the appropriate BAL.

The steps are discussed in 5.1-5.5 below.

5.1 Vegetation

The nearest potential bushfire hazard vegetation relative to the proposed dwelling is on land on the northern (opposite) side of Elluisa Close.

The area of vegetation to the northern side of the road reserve in Elluisa Close exhibits characteristics consistent with that of coastal swamp forest. Also, the area of the vegetated land is >1 hectare.

The Background (Section 1) to this assessment noted that PBP 2019 includes coastal swamp forest as a vegetation formation included in a classification as *forest*.

5.2 Effective Slope

The slope of the land under the nearest areas of potential bushfire hazard vegetation is upslope.

5.3 Relevant FFDI for Council area

The Council area in which the development is to be undertaken is the Mid-Coast Council area which is within the North Coast Fire Weather area. The applicable FFDI is 80.

The relevant table of PBP 2019 for determination of the BALs is Table A1.12.6.

5.4 Separation distance

With reference to Deposited Plan (DP) 1262773, it is noted that all residential allotments along the southern side of Elluisa Close, plus the full 14 metre width of the road reserve in Elluisa Close to the north of those allotments, is subject to an easement for asset protection zone.

Based on the siting of the proposed dwelling, the nearest potential bushfire hazard vegetation on land on the northern (opposite) side of Elluisa Close will be just less than 20 metres from the northernmost part of the proposed building (14 metre APZ easement in Elluisa Close, plus 4.51 metre setback shown in Figure 4.1 of this assessment).

It is to be recommended that land within the site be maintained as an Inner Protection Area (IPA) for the purposes of PBP 2019.

5.5 BAL Determination

While the vegetation to the north of the site is identified as forest vegetation for the purposes of PBP 2019, it is apparent that previous determinations for BALs for dwellings along the southern side of Elluisa Close have varied between BAL-12.5, BAL-19 and BAL-29, with dwellings on other land to the east and west of the subject site having similar setbacks to the proposed dwelling which is the subject of this assessment.

As discussed in detail in the Background (Section 1) of this document, this Bushfire Assessment adopts the BAL applied to the most recent approval (development consent), that is, BAL-29 (applied to the development consent for the dwelling on land at 15 Elluisa Close, granted by Mid-Coast Council in February 2024).

Note: If the BAL applicable to the site as per the most recent development consent is not adopted, then that would technically result in the BAL for (in this case) Lot 6, 11 Elluisa Close, being BAL-40. This would be despite the dwellings on the adjoining allotments at 9 and 13 Elluisa Close having been approved for construction (since late 2020) to BAL-12.5 and BAL-19 respectively.

Construction requirements apply for the purposes of AS 3959-2018 (Construction of buildings in bushfire-prone areas), or the NASH Standard - Steel Framed Construction in Bushfire Areas (2021), subject to any additional construction requirements detailed in Section 7.5.2 of PBP.

6. Recommendation

Subject to Section 5.5 above, in relation to the proposed dwelling on land at Lot 6 DP 1262773, 11 Elluisa Close, Forster, it is recommended that:

- A. Land within the site is to be maintained as an Asset Protection Zone (APZ) for the purposes of *Planning for Bush Fire Protection 2019*.
- B. The APZ is to be maintained in accordance with the requirements for an Inner Protection Area (IPA) as described in Appendix 4 of PBP and any grassy vegetation within the IPA is to be maintained to a height <100mm. A clear area of low-cut lawn or pavement is to be maintained adjacent to the dwelling.
- C. Subject to (A) and (B), construction of the proposed dwelling is to comply with the construction requirements for BAL-29 as per AS 3959-2018 (Construction of buildings in bushfire-prone areas), or the NASH Standard Steel Framed Construction in Bushfire Areas (2021), subject to any additional construction requirements detailed in Section 7.5.2 of PBP.
- D. Any fences and/or gates should be made of either hardwood or non-combustible material.
- E. All above-ground water service pipes external to the building are to be metal, including and up to any taps.
- F. Any bottled gas is to be installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and:
 - (i) all fixed gas cylinders are to be kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side;
 - (ii) if gas cylinders need to be kept close to the building, safety valves are to be directed away from the building and at least 2 metres away from any combustible material, so they do not act as a catalyst to combustion;

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- (iii) above-ground gas service pipes external to the building are to be metal, including and up to any outlets; and
- (iv) connections to and from gas cylinders are to be metal.

Notes to assessment:

- 1. The assessment relates to a proposed dwelling (the proposed development) on the subject land only. Only the siting plan at Figure 4.1 has been considered.
- This Assessment has been based on bushfire protection guidelines as outlined in the document entitled Planning for Bush Fire Protection 2019 (PBP).
- 3. Notwithstanding the precautions recommended, it should always be remembered that bushfires burn under a range of conditions and an element of risk, no matter how small, always remains.
- 4. Occupants are advised to consider preparation of a Bush Fire Survival Plan which is revised annually prior to the bushfire season. A Guide to Making a Bush Fire Survival Plan has been developed by the NSW RFS to assist residents in the preparation of their plan and can be found at the NSW RFS website www.rfs.nsw.gov.au.

Yours faithfully

SIMON CARROLL

Graduate Diploma in Design for Bushfire Prone Areas Graduate Diploma in Building Fire Safety & Risk Engineering Bushfire Planning and Design Accredited Practitioner Level 3 – NSW Accreditation Number BPAD9326