



Bushfire Attack Level (BAL) Assessment
Hills of Carmel (Stages 6C, 6 & 7 MD and 12)

For sales purposes only

DH Box Hill Pty Ltd

DOCUMENT TRACKING

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Template 2.8.1

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1. Background

This letter details a desktop-based Bushfire Attack Level (BAL) assessment completed for Stages 6C, 6 & 7 MD and 12 Hills of Carmel to advise potential purchasers of lots of the bushfire hazard impact.

This report is for sales purposes only and not suitable for submission to support a Development Application (DA) or Complying Development Certificate (CDC). Other bushfire protection measures may need to be addressed for any individual development proposal.

Development Consent for each subdivision stage were granted by The Hills Shire Council and incorporating the NSW Rural Fire Service (RFS) General Terms of Approval (GTA). This assessment is based on the following GTAs issued for each stage:

- Stage 6C: DA881/2019/ZB dated 22 August 2019; incorporating the RFS GTAs (DA2018/8435, dated 31 March 2023)
- Stage 6 & 7 MD: DA1037/2019/ZB dated 22 November 2019; incorporating the RFS GTAs (DA19/214 dated 18 February 2019)
- Stage 12: DA1839/2018/ZB dated 28 June 2019); incorporating the RFS GTAs (D18/5576 dated 3 May 2019).

2. Bushfire Attack Level Assessment

This BAL assessment follows the methodology described in Appendix 1 of *Planning for Bush Fire Protection 2019* (PBP; RFS 2019). The BAL assessment has been undertaken to identify the bushfire hazard and how it potentially impacts individual lots within each stage by determining the BAL.

The BAL is determined based on-site specific inputs including the predominant vegetation, effective slope and managed separation distance between future dwellings and the bushfire hazard. Our assessment identifies the separation distance for each BAL rating from BAL-FZ being the highest to BAL-12.5 being the lowest. Where no BAL applies, this is noted as 'no bushfire construction response required'.

Figure 1 to Figure 3 identifies the relevant vegetation, slope and the associated BAL separation distances for each stage, based on the surrounding existing bushfire prone vegetation.

2.1 Stage 6C (Figure 1)

The riparian corridor to the south-east is being revegetated to a River-Flat Eucalypt Forest (RFEF) vegetation community as outlined in the Vegetation Management Plan (VMP; ELA 2016), which falls within the Coastal Floodplain Wetland vegetation class (Keith 2004) and classified 'forested wetland' under PBP. The effective slope under the vegetation falls within the PBP slope category of '>0-5 degrees downslope'.

The maximum BAL applicable to individual lots within Stage 6C is outlined in Table 1 and mapped in Figure 1. Most of the lots are already developed and this only applies to Lots 6201, 6212 and 6214.

2.2 Stage 6 & 7 MD (Figure 2)

The riparian corridor to the east/south-east is being revegetated to a River-Flat Eucalypt Forest (RFEF) vegetation community as outlined in the VMP (ELA 2016), which falls within the Coastal Floodplain Wetland vegetation class (Keith 2004) and classified 'forested wetland' under PBP. The effective slope under the vegetation falls within the PBP slope category of '>0-5 degrees downslope'.

The drainage corridor to the south-east will consist of bioretention basins/raingardens but not managed to PBP Inner Protection Area (IPA) specifications and therefore considered a bushfire hazard. The drainage corridor was assessed as a 'low hazard' and is assigned the equivalent hazard type of 'rainforest' under the broader subdivision approvals for Box Hill (DA126/2019/ZB and DA1007/2020/ZB). However, this is not the predominant bushfire hazard.

The stormwater management lot/SP2 Drainage zoned land to the north-east is legally required to be maintained to PBP IPA specifications as conditioned under the broader subdivision approvals for Box Hill (DA1260/2018/ZB and DA1037/2019/ZB) and therefore does not constitute a bushfire hazard.

The maximum BAL applicable to individual lots within Stage 6 & 7 MD is outlined in Table 1 and mapped in Figure 2.

2.3 Stage 12 (Figure 3)

The drainage corridor to the south-east will consist of bioretention basins/raingardens but not managed to PBP IPA specifications and therefore considered a bushfire hazard. The drainage corridor was assessed as a 'low hazard' and is assigned the equivalent hazard type of 'rainforest' under the broader subdivision approvals for Box Hill (DA126/2019/ZB and DA1007/2020/ZB). The effective slope under the vegetation falls within the PBP slope category of '>0-5 degrees downslope'.

There is unmanaged grassland to the west of Mount Carmel Drive which is which is a 'grassland' hazard under PBP however, it is >50 m away and not considered 'classified' vegetation under A1.3 of PBP.

The stormwater management lot/SP2 Drainage zoned land to the south is legally required to be maintained to PBP IPA specifications as conditioned under the broader subdivision approvals for Box Hill (DA1260/2018/ZB and DA1037/2019/ZB) and therefore does not constitute a bushfire hazard.

The maximum BAL applicable to individual lots within Stage 12 is outlined in Table 1 and mapped in Figure 3.

3. Building Construction Standards

Construction standards for future dwellings within the precinct will be determined when individual development applications are lodged. It is important that the current version of AS 3959 (currently SA 2018) or NASH Standard (currently NASH 2021) is consulted at the time of development and the additional ember protection provisions identified in PBP incorporated (currently Section 7.5 of PBP).

Development that is located outside of the mapped BAL ratings (Figure 1-Figure 3). Where no BAL applies, this is noted as 'no bushfire construction response required'.

3.1.1 Fences and gates

To comply with Section 7.6 of PBP, all fencing and gates within mapped bushfire prone areas should be constructed of hardwood or non-combustible material. Where fencing is within 6 m of a building or in

areas of BAL-29 or greater, they should be made of non-combustible material only. Where buildings are not exposed to a BAL, these provisions do not apply.

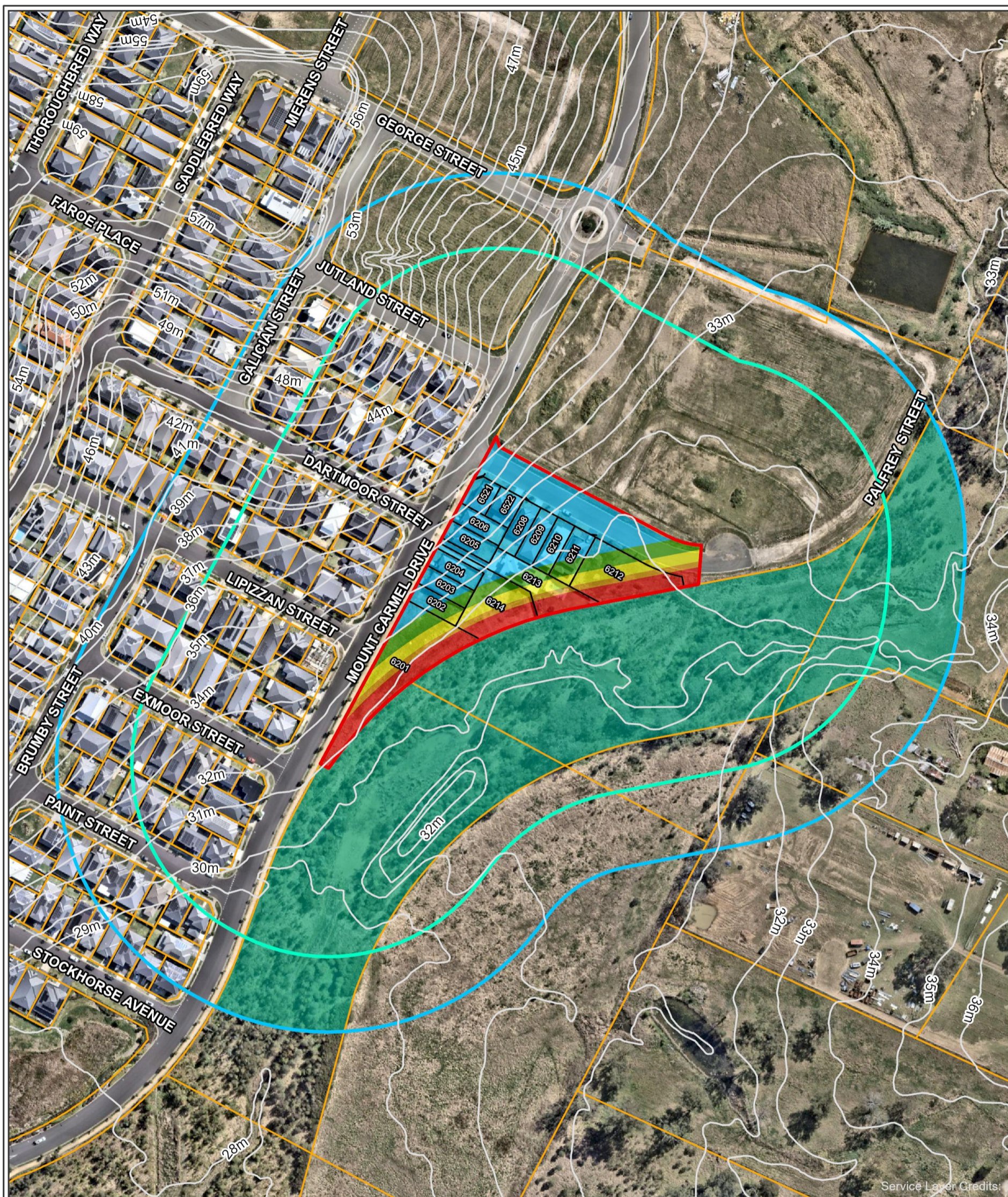
3.1.2 Class 10a buildings (sheds etc.)

To comply with Section 8.3.2 of PBP, Class 10a structures within 6 m of any proposed dwelling that is within a bushfire prone area must be constructed in accordance with the NCC. Where the structure is greater than 6 m, no bushfire requirements apply.

Where dwellings are not exposed to a BAL, this does not apply.

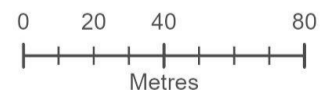
Table 1: Bushfire Attack Level (BAL) Table

Lot Number	BAL
Stage 6C (undeveloped lots only)	
6201	BAL-FZ (BAL-40 achievable if new dwelling is located ≥ 9 m from rear boundary, BAL-29 achievable is ≥ 12 m from rear boundary)
6212	BAL-FZ (BAL-40 achievable if new dwelling is located ≥ 9 m from rear boundary, BAL-29 achievable is ≥ 12 m from rear boundary)
6214	BAL-FZ (BAL-40 achievable if new dwelling is located ≥ 9 m from rear boundary, BAL-29 achievable is ≥ 12 m from rear boundary)
Stage 6 & 7 MD	
7701	BAL-19 (BAL-12.5 may be achieved if new dwelling is located outside of the BAL-19 contour)
7702-7709	BAL-12.5
7710	BAL-19 (BAL-12.5 may be achieved if new dwelling is located outside of the BAL-19 contour)
7711	BAL-19 (BAL-12.5 may be achieved if new dwelling is located outside of the BAL-19 contour)
7712-7717	BAL-12.5
7718-7732	No specific bushfire construction requirements
7733-7738	BAL-12.5
7739-7745	BAL-19 (BAL-12.5 may be achieved if new dwelling is located outside of the BAL-19 contour)
7746-7753	BAL-12.5
7754	BAL-12.5 (No specific bushfire construction requirements may be achieved if new dwelling located outside of BAL-12.5 contour)
7755-7756	No specific bushfire construction requirements
7757	BAL-12.5 (No specific bushfire construction requirements may be achieved if new dwelling located outside of BAL-12.5 contour)
7758-7759	BAL-12.5
7760-7854	No specific bushfire construction requirements
Stage 12	
4701-4783	No specific bushfire construction requirements
4784	BAL-12.5 (No specific bushfire construction requirements may be achieved if new dwelling located outside of BAL-12.5 contour)
4785-4792	BAL-12.5
4793	BAL-19 (BAL-12.5 may be achieved if new dwelling is located outside of the BAL-19 contour)
4794-4799	BAL-12.5
4800	BAL-12.5 (No specific bushfire construction requirements may be achieved if new dwelling located outside of BAL-12.5 contour)
4801-4850	No specific bushfire construction requirements



Bushfire Attack Level (BAL) – For Sales Purposes Only

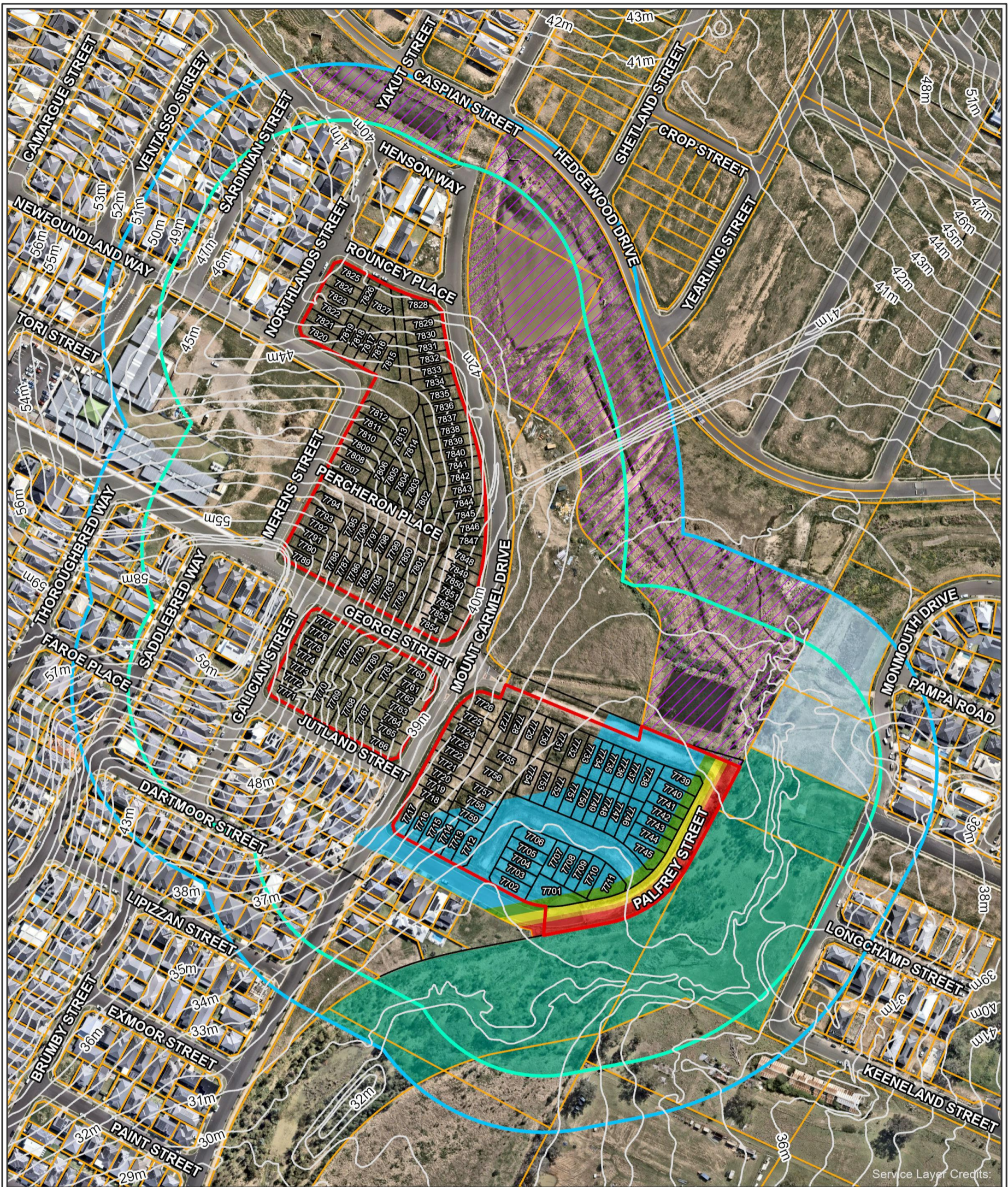
- | | |
|--------------------------------------|---|
| Stage 6C boundary | Forested wetland |
| Development layout | Bushfire Attack Level |
| Slope assessment buffer (100 m) | BAL-FZ ($> 40 \text{ kW/m}^2$) |
| Vegetation assessment buffer (140 m) | BAL-40 ($\leq 40 \text{ kW/m}^2$) |
| Cadastre | BAL-29 ($\leq 29 \text{ kW/m}^2$) |
| Contours (1 m) | BAL-19 ($\leq 19 \text{ kW/m}^2$) |
| | BAL-12.5 ($\leq 12.5 \text{ kW/m}^2$) |



Datum/Projection:
GDA2020 MGA Zone 56
Project: 11923-ML Date: 20/10/2025



Figure 1: Stage 6C Bushfire Attack Level (BAL) – For Sales Purposes Only

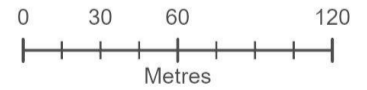


Bushfire Attack Level (BAL) – For Sales Purposes Only

- Stage 6 & 7 MD Boundary
- Development layout
- Slope assessment buffer (100 m)
- Vegetation assessment buffer (140 m)
- Cadastre
- Contours (1 m)

- Maintained to Inner Protection Area (IPA) specification as legal required under (DA1260/2018/ZB and DA1037/2019/ZB)
- Forested wetland
- Low hazard (rainforest)

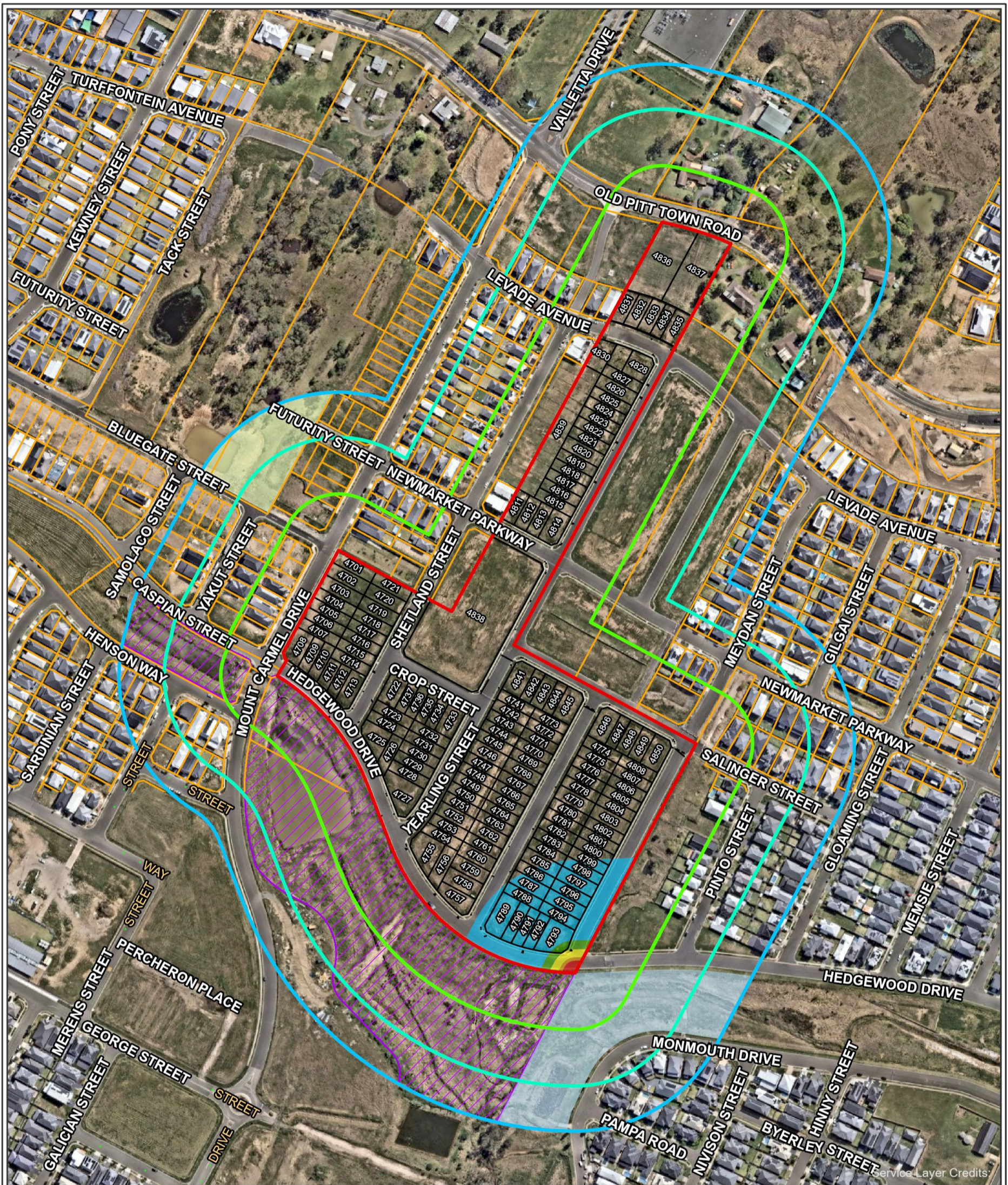
- Bushfire Attack Level**
- BAL-FZ (> 40 kW/m²)
 - BAL-40 (≤ 40 kW/m²)
 - BAL-29 (≤ 29 kW/m²)
 - BAL-19 (≤ 19 kW/m²)
 - BAL-12.5 (≤ 12.5 kW/m²)



Datum/Projection:
GDA2020 MGA Zone 56
Project: 11923-ML Date: 16/10/2025

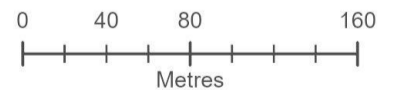


Figure 2: Stage 6 & 7 MD Bushfire Attack Level (BAL) – For Sales Purposes Only



Bushfire Attack Level (BAL) - For Sales Purposes Only

- | | | |
|--------------------------------------|---|--------------------------------------|
| Stage 12 boundary | Maintained to Inner Protection Area (IPA) specification as legal required under (DA1260/2018/ZB and DA1037/2019/ZB) | Bushfire Attack Level |
| Development layout | Low hazard (rainforest) | BAL-12.5 (≤ 12.5 kW/m ²) |
| Grassland assessment buffer (50 m) | Grassland | BAL-19 (≤ 19 kW/m ²) |
| Slope assessment buffer (100 m) | | BAL-29 (≤ 29 kW/m ²) |
| Vegetation assessment buffer (140 m) | | BAL-40 (≤ 40 kW/m ²) |
| Cadastre | | BAL-FZ (> 40 kW/m ²) |



Datum/Projection:
GDA2020 MGA Zone 56
Project: 11923-ML Date: 20/10/2025



Figure 3: Stage 12 Bushfire Attack Level (BAL) – For Sales Purposes Only

4. References

Eco Logical Australia (ELA). 2016. *Box Hill Vegetation Management Plan*. ELA, Sydney

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National Association of Steel Framed Housing (NASH). 2021. *Steel Framed Construction in Bushfire Areas (NS300)*. NASH, Melbourne.

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Standards Australia (SA). 2018. *Construction of buildings in bushfire-prone areas (including Amdt 1 and 2)*, AS 3959:2018. SAI Global, Sydney.

