

# **BUSHFIRE ASSESSMENT REPORT**

**CG218** 

**460 KOLODONG ROAD TAREE** 

**Project Address:** 460 KOLODONG ROAD TAREE

Prepared For: Ben Lynch

**Report Type:** Bushfire Assessment Report

Report By:Brad CaldonReport Date:08/07/2025Report ID:BAL-5af51380

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## **EXECUTIVE SUMMARY**

This bushfire assessment report provides a detailed analysis of a residential dwelling at 460 KOLODONG ROAD TAREE. The assessment was conducted in accordance with the "Planning for Bushfire Protection 2019" guidelines by the NSW Rural Fire Service (NSW RFS) and AS 3959-2018 Construction of Buildings in Bushfire-Prone Areas.

Based on a comprehensive evaluation of site-specific conditions including vegetation classification, topographical assessment, and Asset Protection Zone analysis, the determined Bushfire Attack Level (BAL) rating is BAL-19.

This report outlines the necessary construction standards, risk mitigation measures, and ongoing maintenance plans to ensure the safety and protection of the property and its occupants during bushfire events.

## 1.0 INTRODUCTION

This report provides a detailed bushfire assessment for a residential dwelling at 460 KOLODONG ROAD TAREE. The primary objective is to determine the Bushfire Attack Level (BAL) rating in accordance with the "Planning for Bushfire Protection 2019" guidelines established by the NSW Rural Fire Service (NSW RFS) and Australian Standard AS 3959-2018 "Construction of Buildings in Bushfire-Prone Areas".

This comprehensive assessment ensures compliance with all relevant standards and provides justified, accurate analysis to support development applications and building approvals. The assessment considers site-specific conditions, vegetation characteristics, topographical features, and existing fire protection measures.

## 2.0 SITE DETAILS

2.1 Project Information

Project ID: CG218

Report ID: BAL-5af51380
Assessment Date: 08/07/2025

2.2 Property Information

Address: 460 KOLODONG ROAD TAREE

Lot/Section/DP: 16/1/DP23983

Local Government Area: MID-COAST/MID-COAST COUNCIL

2.3 Site Characteristics Fire Danger Index (FDI): 100 Effective Slope: 3 degrees

**Vegetation Classification:** Forest

**Distance to Unmanaged Vegetation:** 33 meters **Effective Distance (including APZ/slope):** 33.0 meters

2.4 Asset Protection Zone Details

**APZ Status:** Not Present

APZ Width: N/A
APZ Condition: N/A

APZ Maintenance Regime: N/A Calculated APZ Benefit: None

## 3.0 VEGETATION ASSESSMENT

The vegetation surrounding the property has been classified as Forest in accordance with AS 3959-2018 classification standards.

Dense tree canopy over 30m height with high fuel loads. Represents the highest bushfire risk category.

The vegetation classification has been determined through detailed site inspection and analysis of fuel loads, species composition, and structural characteristics. This classification directly influences the bushfire risk assessment and subsequent BAL rating determination.

Vegetation Management Considerations: Maintain immediate areas under your control: keep grass <100mm, remove dead vegetation, trim shrubs away from buildings.

## 4.0 SLOPE ASSESSMENT

The site features an effective slope of 3 degrees in the direction of the predominant vegetation hazard. Slope is a critical factor in determining the appropriate BAL rating, as it significantly influences the rate of fire spread and intensity during bushfire events.

According to "Planning for Bushfire Protection 2019" (Appendix 1.4), slope affects fire behavior through:

- Increased rate of spread on upslopes
- Enhanced convective heat transfer
- Pre-heating of vegetation ahead of the fire front
- · Modified flame angle and radiant heat exposure

The slope measurement has been incorporated into the effective distance calculations to ensure accurate BAL rating determination.

## 5.0 ASSET PROTECTION ZONE (APZ)

No formal Asset Protection Zone has been established. Primary bushfire protection relies on building construction standards and distance to vegetation (33m).

#### 5.1 APZ Configuration Summary

• Total distance to unmanaged vegetation: 33 meters

• APZ establishment status: Not Present

Managed area width: N/A
 Current APZ condition: N/A
 Maintenance practices: N/A

• Effective total separation: 33.0 meters

• Calculated APZ benefit: None

The Asset Protection Zone serves as a crucial buffer area designed to minimise fuel loads and reduce potential exposure to radiant heat, ember attack, flame contact, and smoke during bushfire events. Proper establishment and maintenance of APZ areas significantly enhances the overall bushfire protection strategy for the property.

## 6.0 DETERMINING THE BAL RATING

The BAL rating has been determined through comprehensive analysis of the following key factors in accordance with AS 3959-2018 methodology:

#### 6.1 Assessment Parameters

Vegetation Classification: Forest
 Topographical Assessment: 3 degrees

3. Distance to Hazard: 33 meters4. Effective Separation: 33.0 meters

5. **Fire Danger Index:** 100

6. Asset Protection Zone: No formal APZ established

**DETERMINED BAL RATING: BAL-19** 

#### 6.2 Associated Risk Characteristics

• Radiant Heat Flux: 19-29 kW/m²

• Risk Classification: Medium risk - ember attack and some radiant heat

Property Type: RESIDENTIAL AREA

This BAL rating determination is based on conservative assessment principles and current site conditions. The rating establishes the minimum construction standards required to provide appropriate protection against bushfire attack.

## 7.0 CONSTRUCTION STANDARDS

To achieve compliance with the determined BAL-19 rating, the following construction standards must be implemented in accordance with AS 3959-2018 "Construction of Buildings in Bushfire-Prone Areas":

#### 7.1 Primary Requirements

BAL-19 construction required

#### 7.2 Detailed Construction Specifications

- External walls: Non-combustible or bushfire-resistant timber
- Roofing: Non-combustible covering with ember guards
- · Windows: Toughened glass recommended
- · Doors: Solid core construction
- Vents: 2mm mesh screens required

These construction measures are specifically designed to provide enhanced protection against ember attack, radiant heat exposure, and potential direct flame contact during bushfire events. Compliance with these standards is mandatory for development approval and building certification.

## 8.0 ACCESS & EGRESS

**Emergency Access Requirements:** 

Ensure street access suitable for emergency vehicles. Maintain clear driveway access (minimum 3m wide where possible).

Access and egress routes must be designed and maintained to ensure safe evacuation of occupants and unrestricted entry for emergency services during bushfire events. Critical considerations include:

- Road width and load bearing capacity for firefighting vehicles
- Overhead clearance for emergency equipment
- Clear signage and address identification
- Turn-around areas and parking provisions
- Alternative egress routes where feasible
- · Ongoing maintenance and vegetation management

All access provisions must comply with "Planning for Bushfire Protection 2019" Chapter 3.4 requirements and local council specifications.

## 9.0 WATER SUPPLY AND UTILITIES

Water Supply Requirements:

Connect to reticulated water supply. Consider rainwater tank for general use (firefighting connection not required in urban areas).

Adequate water supply for firefighting operations must be established and maintained. This includes consideration of:

- Static Water Supply (SWS): Tanks, swimming pools, or dams accessible to firefighting crews
- Reticulated hydrant systems with adequate pressure and flow rates
- Strategic positioning for emergency vehicle access
- Clear identification and signage of water sources
- Maintenance protocols to ensure availability during emergencies

Water sources must be strategically located and clearly marked to ensure ready accessibility during emergency operations, in accordance with "Planning for Bushfire Protection 2019" Chapter 3.5.

#### 10. EMERGENCY MANAGEMENT ARRANGEMENTS

Property occupants must develop and maintain a comprehensive Bushfire Survival Plan that addresses actions to be taken during bushfire events. This plan should include:

- Monitoring weather conditions and fire danger ratings
- Evacuation trigger points and decision-making criteria
- Evacuation routes and alternative pathways
- Emergency meeting points and communication protocols
- · Emergency contact information and radio frequencies
- Essential items and documentation preparation
- · Pet and livestock management procedures

The Bushfire Survival Plan must be reviewed and practiced regularly with all household members to ensure familiarity and effectiveness. Regular updates should reflect changes in household composition, local conditions, and emergency procedures.

## 11.0 LANDSCAPING AND VEGETATION MANAGEMENT

Vegetation Management Strategy:

Maintain immediate areas under your control: keep grass <100mm, remove dead vegetation, trim shrubs away from buildings.

Landscaping and vegetation management must comply with NSW RFS guidelines while maintaining appropriate aesthetic and environmental values. Key principles include:

- Maintenance of low fuel loads within Asset Protection Zones
- Strategic placement of trees and shrubs to minimize fire spread pathways
- Regular removal of dead vegetation, leaf litter, and combustible materials
- · Appropriate species selection favoring low-flammability plants
- · Adequate spacing between vegetation elements
- Seasonal maintenance scheduling aligned with fire danger periods

Ongoing vegetation management is critical to maintaining the effectiveness of bushfire protection measures and ensuring continued compliance with assessment parameters.

### 12.0 MAINTENANCE PLAN

APZ and Protection Measures Maintenance:

Focus on maintaining defendable space on your property - prioritize building construction compliance over large APZ establishment.

A comprehensive maintenance program must be established and implemented to ensure the ongoing effectiveness of all bushfire protection measures. The maintenance plan should address:

- Regular inspection schedules for all protection elements
- · Seasonal maintenance activities and timing
- Vegetation management protocols and frequency
- Water supply system testing and maintenance
- · Access road and egress route upkeep
- Building element inspection and repair
- Documentation and record-keeping requirements
- Responsible parties and contact information

Regular maintenance is essential to preserve the integrity of bushfire protection systems and maintain compliance with the assessed BAL rating throughout the building's operational life.

## 13.0 COMPLIANCE CHECKLIST

The following compliance checklist provides a comprehensive summary of assessment findings and implementation requirements:

Requirement | Compliance Status
------Vegetation Classification | ✓ Compliant
Slope Measurement | ✓ Compliant
Distance Assessment | ✓ Compliant
BAL Determination | ✓ BAL-19
Construction Standards | Specified
Asset Protection Zone | Recommended
Access and Egress | Recommended
Water Supply | Recommended
Emergency Management | Recommended

This checklist serves as a reference tool for building professionals, certifiers, and property owners to ensure all bushfire protection requirements are appropriately addressed throughout the development and construction process.

### 14.0 RECOMMENDATIONS AND ACTION PLAN

Property Classification: RESIDENTIAL AREA

#### **Specific Recommendations:**

Maintenance Plan | Required

- **Asset Protection Zone:** Limited separation distance typical for residential areas. Primary protection through appropriate building construction and maintenance of immediate surrounds.
- **APZ Management:** Focus on maintaining defendable space on your property prioritize building construction compliance over large APZ establishment.
- **Emergency Access:** Ensure street access suitable for emergency vehicles. Maintain clear driveway access (minimum 3m wide where possible).
- **Water Supply:** Connect to reticulated water supply. Consider rainwater tank for general use (firefighting connection not required in urban areas).
- **Vegetation Management:** Maintain immediate areas under your control: keep grass <100mm, remove dead vegetation, trim shrubs away from buildings.
- **Development Certification:** Eligible for Complying Development Certificate (BAL-Low to BAL-29).
- **Building Construction Focus:** Primary bushfire protection achieved through appropriate building materials, ember-resistant construction, and maintenance of defendable space on your property.
- **NSW Regulatory Compliance:** Focus on building construction compliance with AS 3959-2018 and ember protection measures.

Implementation of these recommendations is essential for achieving and maintaining appropriate bushfire protection standards. All measures should be implemented in accordance with current NSW regulations and Australian Standards.

## **CONCLUSION**

This comprehensive bushfire assessment for 460 KOLODONG ROAD TAREE has been conducted in strict accordance with "Planning for Bushfire Protection 2019" guidelines and AS 3959-2018 standards. The determined BAL-19 rating reflects a thorough analysis of site-specific conditions and provides the foundation for appropriate construction and protection measures.

The assessment findings and recommendations outlined in this report are designed to ensure the safety and protection of property occupants while maintaining compliance with all relevant NSW bushfire protection requirements. Adherence to the specified construction standards, maintenance protocols, and protection measures is crucial for achieving optimal bushfire resilience.

This report has been prepared with professional diligence and technical accuracy, ensuring all assessments align with current best practices for bushfire protection in New South Wales. Implementation of the recommended measures will significantly enhance the property's resilience against bushfire risks.

## **15.0 ASSESSOR STATEMENT**

**Professional Certification:** 

This bushfire assessment has been prepared in accordance with Australian Standard AS 3959-2018 "Construction of buildings in bushfire-prone areas" and NSW Rural Fire Service "Planning for Bush Fire Protection" guidelines (2019).

Assessor Details
Name: Brad Caldon
Qualifications: Builder

Contact: brad@caldon.com.au Assessment Date: 08/07/2025

Assessor Signature:	 <b>Date:</b> 08/07/20	)25

#### **Validity and Limitations:**

This assessment is valid for a period of 2 years from the date of issue, subject to no material changes in site conditions, vegetation characteristics, or regulatory requirements. Site conditions and vegetation may change over time, requiring reassessment to maintain accuracy and compliance.

Property owners and developers are responsible for ensuring ongoing compliance with all recommendations and maintaining the effectiveness of implemented protection measures throughout the building's operational life.

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