



Part 7 Codes

Division 3 Constraint Codes

Chapter 2 Bushfire Management Areas

1.0 Purpose

This code seeks to regulate development occurring in Potential Bushfire Hazard Areas through land use and development practices that ensure appropriate fire mitigation measures are adopted to protect life and property from bushfires.

This code also seeks to ensure that water supply facilities, with fire fighting vehicle fittings and appropriate access arrangements, are provided in new developments.

The ecological role of fire is recognised in this code, and protecting and maintaining the biodiversity and health of ecological systems of the Gold Coast City is a priority.

Land identified on **Overlay Map OM10 – Potential Bushfire Hazard Areas**, and confirmed through site-based assessment as being in a Medium or High Potential Bushfire Hazard Area, should be considered as designated bushfire prone areas for the purposes of the **Building Code of Australia** and **AS3959-1999 Construction of Buildings in Bushfire-Prone Areas**, and all Building Work must be carried out in a manner consistent with this standard.

2.0 Application

2.1 This code applies to any development indicated as self, code or impact assessable in the Table of Development of the Domain or Local Area Plan (LAP) within which the development is proposed.

2.2 In particular, this code applies to land identified on **Overlay Map OM10 – Potential Bushfire Hazard Areas** as being of at least Medium Potential Bushfire Hazard. As the map has been prepared at a citywide scale, it should be used as a trigger for the consideration of bushfire hazard issues. In each case, detailed site specific assessment will be required as part of the development process to determine the level of potential bushfire hazard on the site and, therefore, actual development requirements.

2.3 Performance Criteria PC1-PC15 apply to all code and impact assessable development subject to this code. For development identified as self assessable, only the acceptable solutions to Performance Criteria PC1-PC3 apply.

3.0 Development Requirements

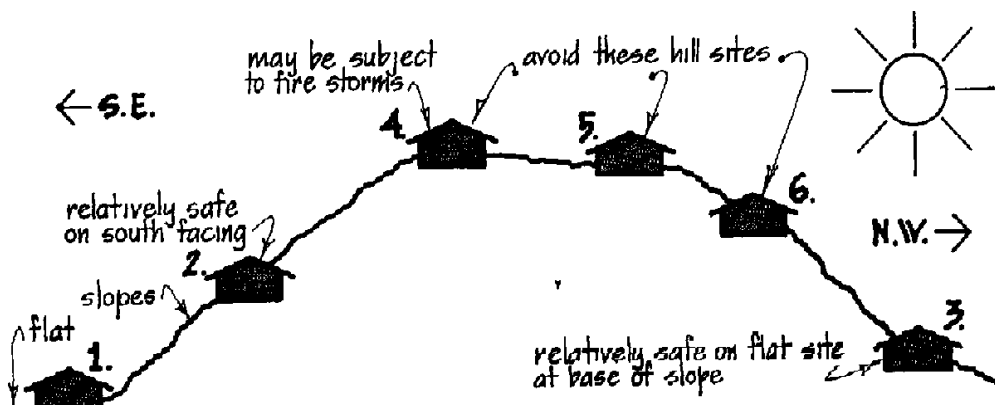
Performance Criteria	Acceptable Solutions
Development that is Self Assessable, Code Assessable or Impact Assessable	
Bushfire Hazard	
<p>PC1</p> <p>The fire mitigation methods used at the site must be adequate for the Potential Bushfire Hazard rating of the individual site, having regard to:</p> <ol style="list-style-type: none"> vegetation type; slope; aspect; on-site and off-site fire hazard implications of the development; bushfire history; conservation values of the site; ongoing maintenance. 	<p>AS1.1.1</p> <p>A Fire Management Plan has been prepared in accordance with Planning Scheme Policy 9 – Guidelines for Preparing Fire Management Plans, and the development complies with the Fire Management Plan.</p> <p>OR</p> <p>AS1.1.2</p> <p>The development is for a detached dwelling, located within a lot that has been created by a residential subdivision approval under one of the superseded Planning Schemes (ie. the lot is intended to be serviced by sewerage reticulation) and the development complies with the conditions of the subdivision approval.</p> <p>OR</p> <p>AS1.1.3.</p> <p>A written assessment by a competent person confirms that the subject site is of Low Potential Bushfire Hazard or has a lower rating; accordingly specific fire mitigation measures are not mandated for the development.</p>



Performance Criteria	Acceptable Solutions
Siting	
<p>PC2</p> <p>Buildings must be sited to minimise the Potential Bushfire Hazard and maximise the protection of life and property from bushfire.</p> <p>Note: <i>This does not apply to sites where a written assessment by a competent person confirms that the subject site is of Low Potential Bushfire Hazard or has a lower rating.</i></p>	<p>AS2.1</p> <p>Houses are located away from the most likely direction of a fire front, or on a flat site at the base of the slope (refer Figure 2-1).</p> <p>AS2.2</p> <p>The Fire Management Plan clearly identifies the preferred location of building sites, and the building is located within these areas.</p>

Figure 2-1: Preferred House Site Location in High and Medium Potential Bushfire Hazard Areas.

Source: adapted from QDHLGP (1993) Bushfire Hazard Planning in Queensland.



House sites are numbered in order of the degree of fire safety.

Building Design and Construction	
<p>PC3</p> <p>A building proposed in a designated Bushfire Prone Area (ie. in an area confirmed through site-based assessment to be subject to High or Medium Potential Bushfire Hazard) must be designed and constructed to maximise the protection of life and property from bushfire.</p>	<p>AS3</p> <p>The building is constructed in accordance with the requirements of the Building Code of Australia and, where relevant, AS3959-1999 – Construction of Buildings in Bushfire-Prone Areas.</p>

Development that is Code Assessable or Impact Assessable

Private Water Supply – In Areas with No Water Reticulation	
<p>PC4</p> <p>The development proposed in a High and/or Medium Potential Bushfire Hazard Area must provide an adequate water supply for fire fighting purposes.</p>	<p>AS4.1.1</p> <p>The property contains one dwelling, and the water supply has a volume of water not less than 5,000 litres, and is either:</p> <ul style="list-style-type: none"> a) a separate tank; and/or b) a reserve section in the bottom part of the main water supply tank; and/or c) a swimming pool installed immediately upon construction of the dwelling <p>OR</p> <p>AS4.1.2</p> <p>The property contains more than one dwelling and the water supply is provided to protect each individual dwelling, and has a volume of water not less than 10,000 litres, and is:</p> <ul style="list-style-type: none"> a) a separate tank; and/or b) a reserve section in the bottom part of the main water supply tank; and/or c) a swimming pool installed immediately upon construction of the home.



Performance Criteria	Acceptable Solutions
<p>PC5 In areas of High and/or Medium Potential Bushfire Hazard, all on-site water supply tanks, including domestic water supply tanks, must be fitted with the standard rural fire brigade fittings for emergency fire fighting purposes.</p>	<p>AS5 The water supply is fitted with a 50mm male camlock (standard rural fire brigade fitting).</p>
<p>PC6 Water supply provided for fire fighting purposes must be safely located and freely accessible for fire fighting purposes at all times.</p>	<p>AS6.1 The water supply outlet is located remote from any potential fire hazards, such as venting gas bottles, a burning house and burning sheds.</p> <p>AS6.2 The outlet pipe is 50mm in diameter and fitted with a 50mm male camlock (standard rural fire brigade fitting).</p> <p>AS6.3 A hardstand area is provided not more than six metres from the water supply outlet or, where applicable, a swimming pool.</p>
<p>Private Water Supply – In Areas with Water Reticulation</p>	
<p>PC7 The water supply must be reliable, and have sufficient flow and pressure requirements for fire fighting purposes at all times.</p>	<p>AS7 The development is proposed in a High and/or Medium Potential Bushfire Hazard Area, and reticulated water is supplied in accordance with Planning Scheme Policy 11 – Land Development Guidelines.</p>
<p>Public Water Supply – In Areas with No Water Reticulation</p>	
<p>PC8 The development proposed in a High and/or Medium Potential Bushfire Hazard Area must provide an adequate water supply which is readily accessible to fire brigades for fire fighting purposes.</p>	<p>AS8.1 Where public water supplies, fire hydrants, public water storage or permanent waterways do not exist, water tanks are provided on public land within the development. The water tanks:</p> <ul style="list-style-type: none"> a) hold a volume of at least 22,500 litres; b) are of concrete construction; and c) fitted with a 50mm male camlock (standard rural fire brigade fitting). <p>AS8.2 A hardstand area is provided not more than six metres from the water supply outlet.</p>
<p>Clearing and Landscaping</p>	
<p>PC9 The development proposed in a High and/or Medium Potential Bushfire Hazard Area must undertake appropriate vegetation clearing and landscaping to mitigate fire hazard.</p>	<p>AS9 The Fire Management Plan addresses appropriate vegetation clearing and landscaping.</p> <p>Note: Part 7, Chapter 36 – Vegetation Management specifies the maximum area of clearing permitted by the Planning Scheme for bushfire hazard mitigation. The Fire Management Plan may recommend lesser clearing on the basis of the specific nature of the development and of the site and the use of alternative fire hazard mitigation measures such as landscaping with fire retardant species.</p>

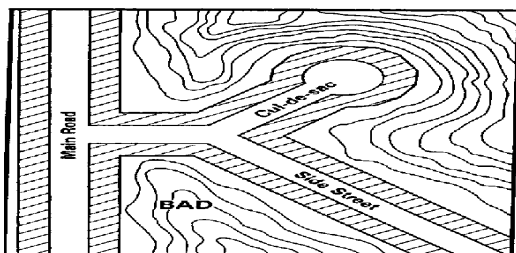


Performance Criteria	Acceptable Solutions
Fire/Maintenance Trails	
<p>PC10 Fire/maintenance trails must be provided to:</p> <ul style="list-style-type: none"> a) enable access for fire fighters, residents and equipment; b) mitigate against fire hazard; and c) allow fuel reduction activity. 	<p>AS10.1 The development is proposed in a Medium Potential Bushfire Hazard Area, and the subdivision design incorporates fire/maintenance trails located as close as possible to the boundaries of the lots and the adjoining bushland.</p> <p>AS10.2 The fire/maintenance trail has:</p> <ul style="list-style-type: none"> a) a minimum cleared width of six metres; b) a minimum formed width of four metres; and c) a maximum gradient of 16%, with adequate drainage to prevent soil erosion and minimise ongoing trail maintenance. <p>AS10.3.1 Vehicular links are provided along the fire/maintenance trail either to existing fire/maintenance trails or roads, and these links are designed having regard to the topography of the site, fire fighter safety and the need to regularly access water supplies.</p> <p>AND</p> <p>AS10.3.2 The fire/maintenance trail has vehicular access at each end, and links either to existing fire/maintenance trails or roads.</p> <p>OR</p> <p>AS10.3.3 Vehicular access at each end of fire/maintenance trails does not exist, and a turning circle is provided for turning of fire fighting vehicles.</p> <p>OR</p> <p>AS10.3.4 Vehicular access at each end of fire/maintenance trails does not exist, and a 'T' or 'Y' shaped turning bay is provided for turning of fire fighting vehicles.</p> <p>AS10.4 The fire/maintenance trail provides areas for vehicles to pass or turn at intervals of not more than 400 metres and with a maximum grade of 5% (1 in 20).</p> <p>AS10.5.1 Fire/maintenance trails are located on public land (including public open space areas) to facilitate access for fire brigades.</p> <p>OR</p> <p>AS10.5.2 Fire/maintenance trails are located on public land (including public open space areas) to facilitate access for fire brigades and other purposes, such as pedestrian and cycling access.</p> <p>OR</p> <p>AS10.5.3 Fire/maintenance trails are located on the site, and an access easement is granted in favour of Council and fire brigades.</p>

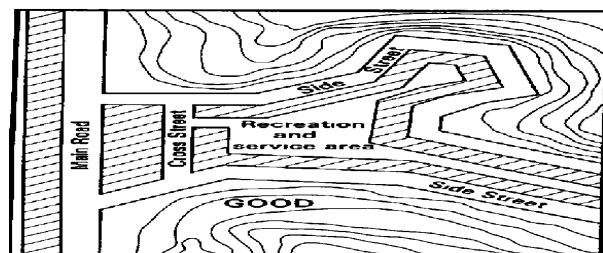


Performance Criteria	Acceptable Solutions
Advice to New Residents	
<p>PC11</p> <p>Reconfiguring a Lot occurs in a High and/or Medium Potential Bushfire Hazard Area and new residents must be informed about:</p> <ol style="list-style-type: none"> the potential bushfire hazard on their site; their responsibility for fire management; and the measures available for ongoing fire hazard mitigation. 	<p>AS11</p> <p>A copy of the Fire Management Plan is provided to each resident for the information of occupants.</p>
Vehicular Access	
<p>PC12</p> <p>The vehicular access (including internal roads) must be designed to mitigate against bushfire hazard by ensuring adequate access for:</p> <ol style="list-style-type: none"> fire fighting and other emergency vehicles; and the evacuation of residents and emergency personnel, in the event of an emergency. 	<p>AS12.1</p> <p>The development is proposed in a High Potential Bushfire Hazard Area, and the Reconfiguring a Lot design incorporates a perimeter road that:</p> <ol style="list-style-type: none"> is located between the boundary of the lots and the adjacent bushland; has a minimum cleared width of 20 metres; has a constructed road width of six metres; and is constructed to an all weather standard (refer Figure 2-2). <p>AS12.2</p> <p>The road design is capable of providing access for fire fighting and other emergency vehicles, in accordance with Planning Scheme Policy 11 – Land Development Guidelines.</p> <p>AS12.3</p> <p>Reconfiguring a Lot is proposed to occur in a High Potential Bushfire Hazard Area, and all roads are through roads and <i>culs-de-sac</i> are not utilised (refer Figure 2-2).</p>

Figure 2-2: Preferred Road Layout in High Potential Bushfire Hazard Areas



Unacceptable design with a High Risk – Hazardous ridge top development has no breaks and obstructs fire fighters.



Acceptable design – Ring road system provides a fire break and access for fire fighters.

	<p>AS12.4.1</p> <p>Reconfiguring a Lot is proposed to occur in a Medium Potential Bushfire Hazard area, and <i>culs-de-sac</i> are not more than 200 metres in length, and intersect or are met by a cross road or connecting road.</p> <p>OR</p> <p>AS12.4.2</p> <p>Reconfiguring a Lot is proposed to occur in a Medium Potential Bushfire Hazard area, and <i>culs-de-sac</i> are utilised, and an alternative access links the <i>cul-de-sac</i> to other through roads.</p>
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Performance Criteria	Acceptable Solutions
Lot Layout	
<p>PC13 In areas of High and/or Medium Potential Bushfire Hazard, access and internal roads must be constructed for the safe and effective operational use of the water supply and equipment on the fire fighting vehicles.</p>	<p>AS13 The development is proposed in a High and/or Medium Potential Bushfire Hazard Area, and roads are designed and constructed in accordance with Planning Scheme Policy 11 – Land Development Guidelines.</p>
<p>PC14 The lot layout of residential developments must be designed to mitigate any Potential Bushfire Hazard and provide safe sites for dwellings.</p>	<p>AS14 Residential lots are not located wholly within a High Potential Bushfire Hazard Area, and the building envelope is located in a lower Potential Bushfire Hazard Area of the site.</p>
Land Use	
<p>PC15 Any Material Change of Use, other than a detached dwelling, must not result in a high concentration of people living or congregating in a High Potential Bushfire Hazard Area.</p>	<p>AS15 The following uses are inappropriate in the High Potential Bushfire Hazard Area:</p> <ul style="list-style-type: none"> a) educational establishment; b) hospital; c) aged persons accommodation; d) caravan park; e) child care centre; f) community care centre; g) corrective institution; h) ecotourism facility; i) minor tourist facility; or j) tourist cabins.

4.0 Other Relevant Requirements

Planning Scheme Policy 9 – Guidelines for Preparing Fire Management Plans is directly relevant to the development of land within Potential Bushfire Hazard Areas.