Date: 25 March 2020
Contact: Bushfire Planning & Assessment
Phone: 07 5582 8803
Our Ref: MCU/2018/58

Sandson Pty Ltd
C/- Urban Planning Services
PO Box 2091
SURFERS PARADISE QLD 4217

Dear Sir/Madam

TRAINING AND **EMERGENCY** MANAGEMENT



QUEENSLAND FIRE AND EMERGENCY SERVICES COVER SHEET FOR BUSHFIRE MANAGEMENT PLAN

Application type:	**Bushfire Management Plan (BMP)**
Application number:	**MCU/2018/58**
Property description:	**202 Baileys Mountain Road, Upper Coomera**
Property location:	**Lot 58 SP191940**

This cover sheet contains the endorsed BMP that has been assessed as part of a development application approval, the assessment was concluded by Queensland Fire and Emergency Services (QFES) bushfire planning and assessment officers seconded to Council of the City of Gold Coast (Council). It is intended that this QFES cover sheet and attached documents is to be regarded as forming an integral part of the approved development application.

A BMP is associated with a property to ensure protection from a potential bushfire risk is reduced as far as practicable through mitigation and maintenance measures.

The submitted BMP being, Bushfire Management Report FM 3812-3 for Sandson PTY LTD at 202 Baileys Mountain Road Upper Coomera, MCU/2018/58, dated 23/03/2020 and prepared by Eldon Bottcher Architect PTY LTD is accepted and that the development is to maintain the reduced bushfire risk in perpetuity for the life of the development along with additional conditions outlined within Council's decision notice.

All new purchasers/occupants (including community title management statements) must be provided a copy of the QFES cover sheet along with the stamped approved BMP. All conditions and recommendations must be complied with throughout the life of the development and any changes to the development will need to be reassessed for compliance against the approved BMP.

Should any changes to the development or site parameters occur, the land owner is responsible for advising a suitably qualified and experienced bushfire management consultant to confirm that the approved BMP is not affected by the changes and any specific fire mitigation measures are imposed to increase the protection to life, property and the environment. These changes could also require amending a condition within Council's decision notice, for further information please contact Council's Planning Enquiries Centre (PEC) on **P**: 07 5582 8708.

Where the BMP has triggered the requirements of *Australian Standards AS3959 – Construction of buildings in bushfire prone areas,* QFES does not accept any responsibility or liability for, or give approval as to the accuracy of the Bushfire Attack Levels (BAL) that is contained within the bushfire management plan, QFES only assesses the development's compliance with the applicable performance outcomes from the Council's planning scheme.

Contacting us

Should you wish to clarify any issues contained in this letter, please do not hesitate to contact Council's Bushfire Planning & Assessment Team on **P**: 07 5582 8803.

Yours faithfully

Brett Cutter

Digitally signed by Brett Cutter
Date: 2020.03.25 11:28:39 +10'00'

Brett Cutter
BUSHFIRE PLANNING AND ASSESSMENT OFFICER
QUEENSLAND FIRE AND EMERGENCY SERVICES

Seconded to Planning Assessment
ECONOMY, PLANNING & ENVIRONMENT DIRECTORATE
CITY OF GOLD COAST

WHAT IF I AM A LANDLORD?

From 1 January 2017

- You are required by law to install and maintain smoke alarms in your rental property.
- The minimum legal requirement for all existing dwellings is a 9-volt battery operated smoke alarm that complies with Australian Standards.
- A good quality non-removable 10-year battery powered smoke alarm, or a hardwired alarm, is more reliable and effective.
- You must test and clean each smoke alarm within 30 days before the start of a tenancy agreement.
- In addition you must replace, in accordance with the manufacturer's instructions, each battery in the smoke alarm that is flat or that you or your agent is aware is almost flat within 30 days before the start of a tenancy.
- Smoke alarms must be replaced 10 years after the manufacturer's date.
- Where notified by a tenant that a smoke alarm is not operating, you are required to replace that smoke alarm with a photoelectric type that complies with AS3786-2014.

From 1 January 2022

- As above except:
- All smoke alarms must be photoelectric, hardwired or 10-year tamper proof battery powered and all interconnected.
- Smoke alarms must be installed on each storey:
  - » in each bedroom; and
  - » in hallways which connect bedrooms and the rest of the dwelling; or
  - » if there is no hallway, between the bedrooms and other parts of the storey; and
  - » if there are no bedrooms on a storey at least one smoke alarm must be installed in the most likely path of travel to exit the dwelling.

Insurance – property owners

- Industry figures show that people underinsure.
- Adequate insurance cover can provide peace of mind if your home and belongings are damaged or lost to fire.
- Most insurance companies offer specific landlord policies.
- As a property owner your home insurance policy could be affected by whether you have a smoke alarm installed.
- Check with your specific insurance provider.

WHAT IF I AM A TENANT?

- You are required by law to test and clean each smoke alarm in the dwelling at least once every 12 months. QFES recommends smoke alarms are tested once a month.
- You are required by law to replace, in accordance with the information statement (RTA Form 17a) provided to you, each battery that is flat or is almost flat during your tenancy.
- If you become aware that a smoke alarm in the rental property is not working, other than because the removable battery is flat or 'chirping', you must advise the landlord or agent as soon as practicable.
- Your landlord is only required by law to test and clean smoke alarms at the start of each new tenancy agreement. If the property is managed by an agent, they may arrange for this to be done.
- Please note that for public housing tenants the Queensland Government has already installed hardwired smoke alarms in all public housing dwellings.

Insurance – tenants

- Research indicates that nearly half of all renters do not have insurance of any kind.
- To protect your personal possessions you should have your own contents insurance.

How will compliance be achieved?

On the sale of a property, the vendor must lodge a form with the Queensland Land Registry (www.dnrm.qld.gov.au) stating that smoke alarms are installed in the property and the purchaser has been informed smoke alarms are installed. Fire Officers will also investigate complaints received. Fines apply for failing to install or interfering with the operation of smoke alarms.

safehome

Safehome is a FREE service provided by Queensland Fire and Emergency Services to householders in an urban fire service area. Local firefighters will come to your home to assist you to recognise fire and safety hazards in and around the home. Once the hazards are identified you can then take steps to eliminate them. A visit should take no longer than 45 minutes.

You will receive advice on correct positioning and installation of smoke alarms, a safety pack and checklist.

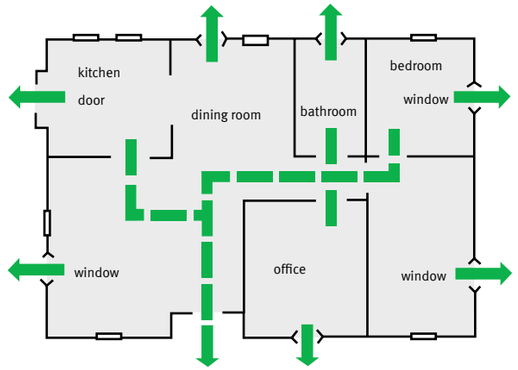
Call 13 QGOV (13 74 68) for a Safehome visit.

Do I need a fire escape plan?

Queensland Fire and Emergency Services recommends that you have a fire escape plan.

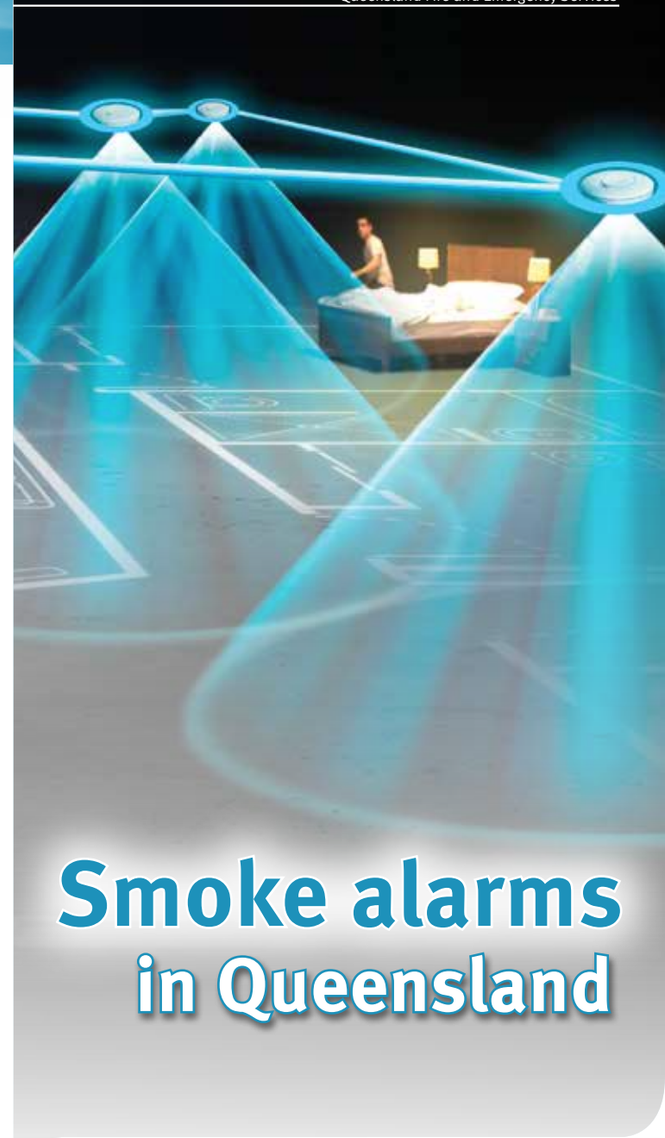
A smoke alarm will alert you to a fire, but what you do next is a matter of life and death. To survive it is essential you know how to escape.

1. Draw your escape plan on a sheet of paper or visit www.qfes.qld.gov.au.
2. Plan two ways out of every room.
3. Pick a meeting place outside the home, such as the letterbox.
4. Call the fire service on 000 (Triple Zero).
5. Practise your fire escape plan regularly, at night, with the lights off.
6. Practise your escape on hands and knees.
7. Consider how your security (e.g. locked doors and windows) may stop your escape.



© State of Queensland (Queensland Fire and Emergency Services) 2017
All Queensland Fire and Emergency Services material in this document – except any material protected by a trademark, and unless otherwise noted – is licensed under a Creative Commons Attribution 4.0 licence.

QFE00040 1/17A



Smoke alarms in Queensland

Queensland Government

New smoke alarm legislation

From 1 January 2027

Smoke alarms in all dwellings must:

- be photoelectric (AS 3786-2014); and
- not also contain an ionisation sensor; and
- be less than 10 years old; and
- operate when tested; and
- be interconnected with every other required smoke alarm in the dwelling so all activate together.

Smoke alarms must be installed on each storey:

- in each bedroom; and
- in hallways which connect bedrooms and the rest of the dwelling; or
- if there is no hallway, between the bedrooms and other parts of the storey; and
- if there are no bedrooms on a storey at least one smoke alarm must be installed in the most likely path of travel to exit the dwelling.

Smoke alarms must be either hardwired or powered by a non-removable 10-year battery.

Prescribed locations for installing smoke alarms

Where practicable smoke alarms must be placed on the ceiling. Smoke alarms must not be placed:

- within 300mm of a corner of a ceiling and a wall;
- within 300mm of a light fitting;
- within 400mm of an air-conditioning vent;
- within 400mm of the blades of a ceiling fan.

There are special requirements for stairways, sloping ceilings, and ceilings with exposed beams. Specific requirements are explained in the *Building Fire Safety Regulation 2008*.

If it is impractical for the prescribed location requirements to be met, the owner may put the alarm at another location that will provide a warning to occupants of the dwelling.

2017
2022
2027

The staged approach

Existing dwellings

From 1 January 2017

- All required smoke alarms that are replaced must be photoelectric and comply with AS3786-2014.
- Existing smoke alarms manufactured more than 10 years ago must be replaced. (Note: Smoke alarms should have the date of manufacture stamped on them).
- Smoke alarms that do not operate when tested must be replaced immediately.
- Existing hardwired smoke alarms that need replacement must be replaced with hardwired smoke alarms.

Dwellings sold, leased or an existing lease renewed

From 1 January 2017

- Requirements as for existing dwellings.
- Existing landlord's and tenant's obligations regarding the installation and testing of smoke alarms continue.

From 1 January 2022

- New legislative requirements must be met.

New dwellings and those being substantially renovated

From 1 January 2017

- The development approval process for new dwellings and substantial renovations will ensure that applications for building works made after this date will bring dwellings into compliance with legislation.
- For substantial renovations, a building certifier will determine the smoke alarm requirements as a part of the development approval process.

What else do I need to know?

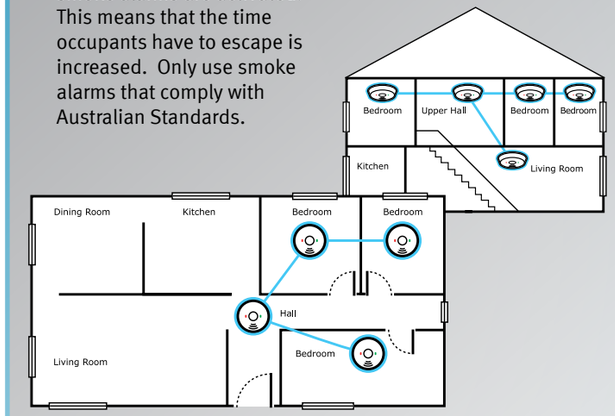
Instead of waking you, smoke and toxic gases from a fire can quickly numb your senses and put you into an even deeper sleep.

Photoelectric smoke alarms

Research by the Australasian Fire and Emergency Service Authorities Council indicates that photoelectric smoke alarms provide the best detection across a wider range of fires and are more likely to alert occupants in time to escape safely.

Interconnected

When one smoke alarm is activated, all interconnected smoke alarms are activated. This means that the time occupants have to escape is increased. Only use smoke alarms that comply with Australian Standards.



Unwanted activations

Photoelectric smoke alarms are less likely to false alarm. There are five main reasons that smoke alarms would activate for no apparent reason.

1. They are near or past their ten year life.
2. The backup battery requires replacement.
3. The wrong type of smoke alarm has been selected for the location.
4. They have a build-up of dust, insects or other particulates.
5. They are in the wrong location (e.g. too close to cooking fumes from the kitchen or steam from the shower).

Smoke Alarm Certification

Look for these symbols to ensure compliance with Australian Standards.

Smoke alarms for the Deaf and hard of hearing community

QFES provides a subsidy scheme to assist people who are deaf or hard of hearing to purchase special smoke alarms. This initiative is managed by Deaf Services Queensland.

Email: smokealarms@deafsq.org.au

Phone: (07) 3892 8500

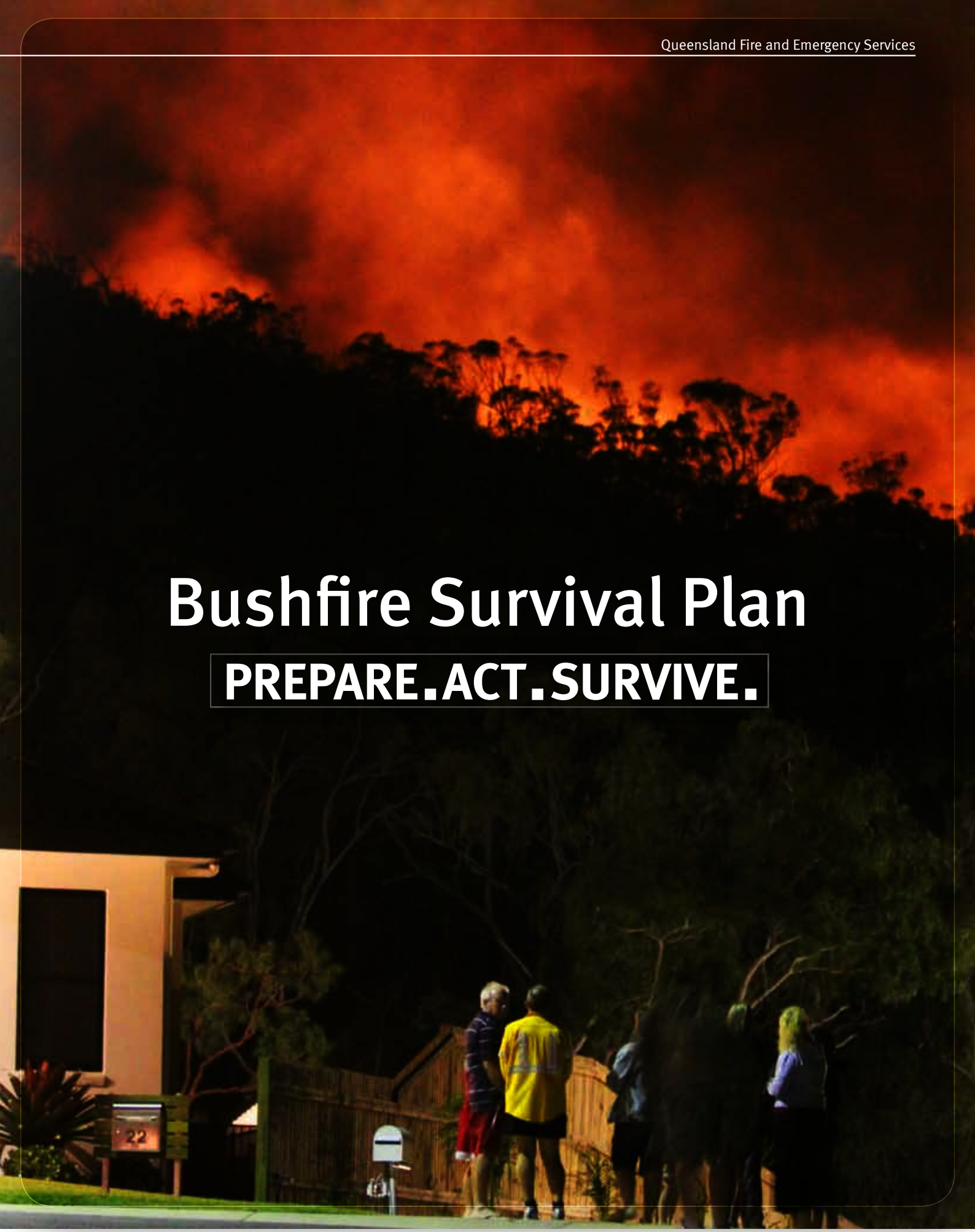
TTY: (07) 3892 8501

What about maintenance?

- ❒ Test smoke alarms once a month using the test button.
- ❒ Check that the battery is working once a month. A 'chirping' sound from the smoke alarm may indicate a flat battery. Replace batteries as required.
- ❒ Clean the grill of your smoke alarm once a month using a vacuum cleaner or soft brush.
- ❒ Do not hinder the device (e.g. smoke alarms must never be painted).
- ❒ If activated from cooking/steam, use the 'hush' button (if fitted) or disperse the smoke/steam (e.g. wave a towel near the alarm).
- ❒ All types of smoke alarms have a limited life-span and must be replaced every 10 years. Look for the year of manufacture sticker or stamp.

For more information

Additional information on smoke alarms is available at www.qfes.qld.gov.au/smokealarms/.



Bushfire Survival Plan

PREPARE.ACT.SURVIVE.

RURAL FIRE SERVICE

Queensland Government



You must PREPARE. ACT. SURVIVE.

Your main priority is to ensure that you and your family are safe. During a bushfire, you and your family's survival and safety depend on your preparations, and the decisions you make.

The lives of you and your family are more important than any building.

Whether your plan is to leave early or stay, you must prepare your home and property to increase their levels of resilience and your chances of survival.

Bushfires in Queensland

The fire season in Queensland normally commences in the far north of the state in July and progresses through to southern areas as spring approaches. The fire season can extend through to February in southern and far south-western Queensland. These time frames can vary significantly from year to year, depending on the fuel loads, long-term climate, and short-term weather conditions in each area.

There are four key considerations for dealing with bushfire:

- The safety of you and your family.
- The resilience of your property.
- The protection of irreplaceable valuables and important documents.
- The maintenance of adequate levels of insurance.

This document will provide you with information about the things you need to consider to prepare yourself and your home for the bushfire season, and how to make your own personal Bushfire Survival Plan.

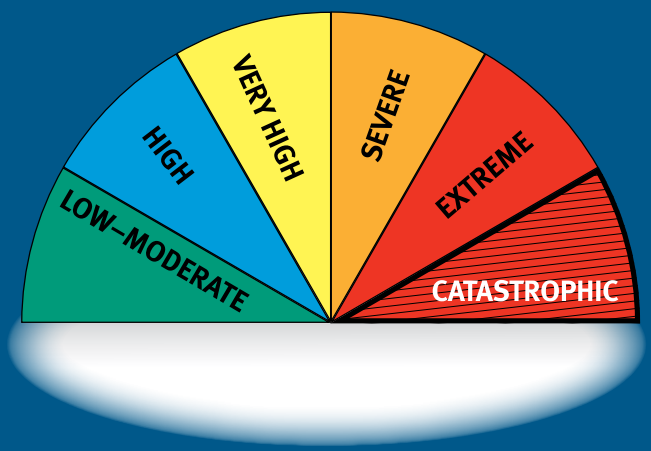
It is your responsibility to prepare yourself, your family and your home for the threat of bushfire.

Understand your risk

The first step in planning to survive a bushfire is to understand your own level of risk. By understanding your own level of risk, you will be able to make informed decisions that are right for you and your family. Included with this Bushfire Survival Plan is a self-assessment tool that will enable you to gauge the risk level associated with your property. If you are still unsure of your level of risk or require assistance, contact your local fire station for more information. To book a Bushfire Safety presentation, call 13 QGOV (13 74 68).

Fire danger ratings

The increased frequency of extreme bushfires in Australia in the last 10 years and the recent experience of the Black Saturday fires in Victoria have encouraged fire services throughout Australia to introduce new levels of Fire Danger Rating (FDR). A lift-out chart of the FDR system is contained within this document. Display it in a prominent place in your home, or keep it with your Bushfire Survival Plan.



Catastrophic fire danger rating

The highest level is catastrophic. On a day of catastrophic FDR, leaving early is the only option to ensure your survival. You must relocate early to a safer location hours before a fire approaches, or even the day before. Under no circumstances will it be safe to stay with your property.

Extreme fire danger rating

The second highest level is extreme. Should a fire occur in your area on a day of extreme FDR, leaving early will always be the only option. Staying can only be considered for homes that:

- Have been designed and constructed specifically to address the threat of bushfire.
- Have been maintained to those levels and are currently well prepared.
- Can be actively defended by people with the skills, knowledge and confidence to implement a well-rehearsed Bushfire Survival Plan.

On days of catastrophic or extreme FDR:

- Fires are likely to be uncontrollable, unpredictable and very fast moving, with highly aggressive flames extending high above tree tops and buildings.
- Thousands of embers may be violently blown into and around homes causing other fires to start rapidly and spread quickly up to 20 kilometres ahead of the main fire.
- Fire can threaten suddenly, without warning, and the heat and wind will make it difficult to see, hear and breathe as the fire approaches.
- People in the path of such fires will almost certainly be injured or die, and a significant number of homes and businesses will be destroyed or damaged.
- Even well-prepared and constructed homes will not be safe.
- Expect power, water and phone networks to fail as severe winds well ahead of the fire will bring down trees and power lines, and blow roofs off buildings.

It is vital that you understand that, on these days, your survival will depend solely on how well you have prepared and how decisively you act.

Leaving late can be a deadly option. If you are in any doubt, make the decision to LEAVE EARLY.

What will you do?

At all times you need to **PREPARE.ACT.SURVIVE.**

When the fire danger rating is **'catastrophic',** leaving early is the safest option.

When the fire danger rating is lower than **'catastrophic'**, one of the most important decisions you need to make is whether you will leave early or stay with a well-prepared property. This decision is the basis of your Bushfire Survival Plan.

The following questions may help you make the right decision about whether you leave early or stay:

- Do you need to consider family members who are young, elderly or infirm?
- Are you physically and emotionally prepared to stay with your property?
- Do you have the knowledge, skills, and confidence to stay with your property?
- Is your home adequately constructed, maintained, and prepared to withstand the impact of a fire? In other words, is your home prepared to withstand the impact of a bushfire?
- Do you have well-maintained resources and equipment to fight fire, and do you know how to use them?
- Do you have appropriate protective clothing to fight a fire?
- What will you do if a rapid onset fire gives you no time to leave? Where will you shelter?



Leave early

If you plan to leave early, then you must leave your home well before a bushfire threatens and travelling by road becomes hazardous. Your leave-early preparations include:

Step 1: Preparation – your property should be well prepared for bushfire, even if you intend to leave early.

Step 2: What you will do? Make your Bushfire Survival Plan in accordance with your decision to leave early.

Step 3: Make a contingency plan – the FDR, the preparedness of your home, a change in household circumstances, a change in your physical preparedness or unexpected visitors are some things that may require you to reconsider your Bushfire Survival Plan.

Planning to stay

Planning is critical to successfully staying with your home, as it may involve the risk of psychological trauma, injury or death.

Step 1: Preparation – your property must be able to withstand the impact of bushfire and be prepared well enough to shelter you and your family.

Step 2: What you will do? Make your Bushfire Survival Plan in accordance with your decision to stay.

Step 3: Make a contingency plan – the FDR, the preparedness of your home, a change in household circumstances, a change in your physical preparedness or unexpected visitors are some things that may require you to reconsider your Bushfire Survival Plan.

In making your decision to stay, there are a few things you need to consider:

- Is your property able to withstand the impact of a bushfire?
- Are you physically and emotionally prepared to stay with your property?
- Do you have well-maintained resources and equipment, and do you know how to use them?
- Do you have appropriate protective clothing?
- Will your bushfire survival plan need to be different for weekdays, weekends or if someone is sick at home?
- Do you have a contingency plan?

Preparing your Bushfire Survival Plan

Preparation is the key to survival. Being involved in a fire will be one of the most traumatic experiences of your life.

- Prepare yourself – you need to be both mentally and physically prepared to carry out your Bushfire Survival Plan.
- Prepare your Bushfire Survival Plan.
- Prepare your Bushfire Emergency Kit.
- Prepare your Bushfire Evacuation Kit.
- Prepare your property.

When writing your plan, you need to consider:

- Have you made the right choice – to leave early or stay?
- Have you discussed your choice with your family, friends and neighbours?
- Who will take charge and lead other family members by carefully communicating the various tasks set out in the plan?
- If you have chosen to stay, what will you do to protect your property when the fire arrives?
- What will you put in your Bushfire Emergency Kit and where will you store it?
- Do your friends, family and neighbours know the details of your plan?

- What will you do if your Bushfire Survival Plan fails?
- Do you have an alternative option or contingency plan if your plan fails?
- Do you have a Neighbourhood Safer Place (NSP) you can go to as a last resort? For more information on NSPs, see www.ruralfire.qld.gov.au.
- Is it safe to travel there?

If your decision is to leave early, you must include the following information or action items in your Bushfire Survival Plan:

- Monitor media outlets – radio, TV, mobile phone and internet for bushfire alerts.
- When will you leave?
- What will be your trigger for action?
- Will your plan be different for weekdays, weekends, or if someone is at home sick or injured?
- What will you take with you (Evacuation Kit)?
- Where will you and your family go when you leave early?
- What route will you take to get there?
- What will you do with your pets?
- What will you do if there are consecutive or multiple **'catastrophic'** or extreme fire danger days?
- Will you go to work on days when the FDR is in the upper levels?
- Will you send your children to school when the FDR is in the upper levels?
- Will all members of your household leave early?
- What will you do to prepare your property?
- What is your contingency plan in the event that it is unsafe to leave?

If your decision is to stay, you must include the following information or actions items in your Bushfire Survival Plan:

- Monitor media outlets – radio, TV, mobile phone and internet.
- Locate your Bushfire Emergency Kit.
- Put on protective clothing.
- Remain hydrated by drinking lots of water.
- Move any stock to fully grazed paddocks.
- Move cars to a safe location.
- Remove garden furniture, doormats, and other items.
- Close windows and doors and shut blinds.
- Take down curtains and move furniture away from windows.
- Seal gaps under doors and window screens with wet towels.
- Place pets inside, restrain them, and provide water.
- Block downpipes and fill gutters with water.
- Wet down the sides of buildings facing the approaching fire front.
- Wet down decks and verandas.
- Wet down fine fuels close to buildings.
- Turn on garden sprinklers before the bushfire arrives.
- Fill containers with water – bath, sinks, buckets, wheelie bins, etc.
- Have ladders ready to access inside roof spaces, and against the roof on the outside.
- Have a generator or petrol pump ready.
- Start patrolling outside to check for embers.

When the fire front arrives:

- Take all fire-fighting equipment, such as hoses and pumps, inside – these may melt during the fire.
- Go inside and shelter away from the fire front.
- Patrol the inside of your home, including the ceiling space, for embers or small fires that may start.
- Drinks lots of water.
- Check family and pets.

After the fire front has passed:

- Wear protective equipment.
- Go outside once it is safe.
- Check for small spot fires and burning embers:
  - inside roof space
  - under floor boards
  - under house space

- on veranda and decks
- on window ledges and door sills
- in roof lines and gutters
- garden beds and mulch
- wood heaps
- outdoor furniture
- sheds and carports.

- Continue to drink lots of water.
- Stay at your property until the surrounding area is clear of fire.
- Monitor media outlets – radio, TV, mobile phone and internet.

You need to be both mentally and physically prepared to carry out your Bushfire Survival Plan.

There may be other actions to include, depending on your individual property and the level of bushfire risk you are exposed to.

Include the whole family in creating your Bushfire Survival Plan. You and your family should be aware of the actions you will take at the various FDR levels. and it is important to ensure this is incorporated into your Bushfire Survival Plan. The FDR for your area can be found on roadside signs and by visiting www.ruralfire.qld.gov.au and following the FDR link.

It is important that your Bushfire Survival Plan does not rely solely on receiving an alert.

Once you have completed your Bushfire Survival Plan, practise it regularly to ensure everyone involved knows exactly what to do in the event of a fire.

Preparing your Bushfire Emergency Kit

It is essential that you have a Bushfire Emergency Kit if your choice is to stay with your property. This kit will ensure you and your family have the important equipment you need to stay. For a comprehensive list of equipment needed in a Bushfire Emergency Kit see page 14.

Preparing your Bushfire Evacuation Kit

It is equally important to have a Evacuation Kit if your choice is to leave early. This kit will ensure you and your family have important items and equipment required to relocate for the time needed. For a comprehensive list of items and equipment needed in a Bushfire Evacuation Kit see page 15.

Making a contingency plan

No matter whether your decision is to leave early, well before a bush fire threatens, or to stay, you should still have a contingency plan as part of your Bushfire Survival Plan. There are many scenarios to consider, such as: what you will do if a rapid onset fire starts in your local area, making roads impassable or travel particularly dangerous? You should have other options if road travel is not safe.

- Is your house well prepared?
- Can it provide you with protection from radiant heat?
- Have you identified a safer location, such as an NSP?

Sheltering in a well-prepared property is far safer than being out in the open or in a vehicle.

Preparing your property

An unprepared property is not only at risk itself, but may also present an increased danger for your neighbours and their homes.

Planning is absolutely critical to safely staying with your home. Staying home involves the risk of psychological trauma, injury and death.

There are a number of measures you can take to prepare your home and property for bushfire. These include annual preparations you must take before the bushfire season.

Your pre-season property preparations should include:

- Displaying a prominent house number.
- Ensuring there is adequate access to your property for fire trucks – 4 metres wide by 4 metres high with a turn-around area. Reduce vegetation loads along the access path.
- Mowing your grass regularly.
- Removing excess ground fuels and combustible material (long dry grass, dead leaves and branches).
- Clearing leaves, twigs, bark and other debris from the roof and gutters.
- Purchasing and testing the effectiveness of gutter plugs.
- Trimming low-lying branches 2 metres from the ground surrounding your home.
- Enclosing open areas under your decks and floors.
- Installing fine steel wire mesh screens on all windows, doors, vents and weep holes.
- Pointing LPG cylinder relief valves away from the house.
- Conducting maintenance checks on pumps, generators and water systems.
- Checking that you have sufficient personal protective clothing and equipment.
- Relocating flammable items away from your home, including woodpiles, paper, boxes, crates, hanging baskets and garden furniture.
- Sealing all gaps in external roof and wall cladding.
- Checking that the first-aid kit is fully stocked.

Bushfire Alerts

If you receive an emergency warning about a bushfire or other emergency, take notice – it could save your life.

There are three types of alert messages to help you make the right safety choices:

Bushfire Advice Message – a fire has started – general information to keep you up to date.

Bushfire Watch and Act Message – represents a heightened level of threat. Conditions are changing, a fire is approaching; lives may come under threat. Take appropriate action.

Bushfire Emergency Warning – is the highest level message advising of impending danger. It may be preceded with the Standard Emergency Warning Signal (SEWS).

An Emergency Warning means there is a threat to lives, and protective action is required immediately.

When a bushfire strikes

You have made your decision to **PREPARE.ACT.SURVIVE.** You have prepared your property before the fire season. You have made your Bushfire Survival Plan. You have practised your Bushfire Survival Plan.

A bushfire is threatening. What do you do?

- Know the FDR for any given day.
- Regularly check the FDR on the Rural Fire Services website at www.ruralfire.qld.gov.au.
- Monitor your media outlets for warnings on bushfire activity.
- Seek out information if you have to, and do not assume that you will receive a warning.
- Leave early or stay according to your Bushfire Survival Plan.
- Act decisively in accordance with your Bushfire Survival Plan.
- Do not adopt the 'wait-and-see' option.

Travelling in your vehicle near a bushfire

Sheltering inside a vehicle is a high-risk strategy that can result in death. While sheltering inside a vehicle offers you a slightly higher chance of survival than being caught in the open, having a leave-early or stay strategy is a much safer option.

You should never take a journey into areas where the fire danger is catastrophic or extreme. You should consider postponing or finding alternative routes if necessary. If you can smell or see smoke in the distance, it is best to U-turn and drive away from the danger.

If you are caught in smoke or flames while on the road:

- Turn on the vehicle's headlights and hazard warning lights.
- If you need to shelter in your vehicle, drive your car into a bare, clear area well away from surrounding trees, leaving lights on. Position the vehicle to prevent a side impact from an advancing fire front.
- Close all windows and vents.
- Leave the engine running and turn off the air conditioning system.
- Cover your entire body with woollen or cotton blankets to protect you from radiant heat.
- Take shelter below the window level.
- Drink water frequently, and stay in the vehicle until the fire front has passed.
- Once the fire front has passed, exit the vehicle to inspect the damage and ensure other passengers are safe.

Neighbourhood Safer Places

A Neighbourhood Safer Place (NSP) is a place of last resort for people during a bushfire. An NSP may form part of a back-up plan when:

- Your Bushfire Survival Plan has failed.
- Your plan was to stay, but the extent of the fire means that your home cannot withstand the impact of the fire and, therefore, your home is not a safe place to shelter.
- The fire has escalated to an extreme or catastrophic level and relocation is the safest option.

An NSP is an identified building or open space within the community that can provide a level of protection from the immediate life-threatening effects of a bushfire. NSPs still entail some risk, both in moving to them and while sheltering in them; they cannot be considered completely safe.

They are a place of *last resort* in bushfire emergencies only. The following limitations of NSPs need to be considered within your Bushfire Survival Plan:

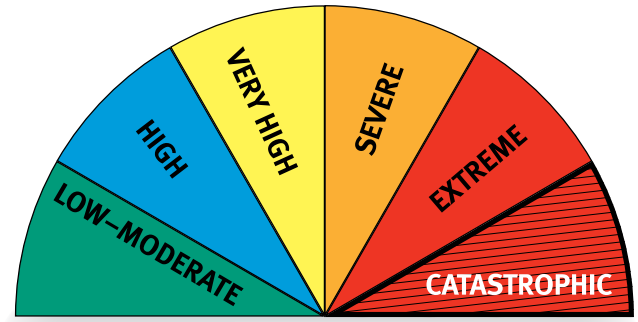
- NSPs do not cater for pets.
- Firefighters may not be present, as they will be elsewhere fighting the main fire front.
- NSPs do not provide meals or amenities.
- They may not provide shelter from the elements, particularly flying embers.

If you are a person with special needs, you should consider what assistance you may require at an NSP.

Although QFES cannot guarantee an immediate presence during a bushfire, every effort will be made to provide support as soon as resources are available.

If an NSP is part of your contingency plan, it should not require extended travel through fire-affected areas to get there.

FIRE DANGER RATING



The Fire Danger Rating (FDR) is an early indicator of potential danger, and should act as your first trigger for action. The higher the rating, the greater the need for you to act.

The FDR is an assessment of the potential fire behaviour, the difficulty of suppressing a fire, and the potential impact on the community should a bushfire occur on a given day.

A Fire Danger Index (FDI) of 'low–moderate' means that the fire will burn slowly and that it will be easily controlled, whereas a FDI in excess of 'catastrophic 100+' means that the fire will burn so fast and hot, it will be uncontrollable.

CATASTROPHIC

A fire with a rating of **'catastrophic'** may be uncontrollable, unpredictable and fast-moving. The flames will be higher than roof tops. Many people may be injured, and many homes and businesses may be destroyed.

During a **'catastrophic'** fire, well-prepared and constructed homes will not be safe. Leaving is the only option for your survival.

EXTREME

A fire with an **'extreme'** rating may be uncontrollable, unpredictable and fast-moving. The flames may be higher than roof tops. During an **'extreme'** fire, people will be injured, and homes and businesses may be destroyed.

During an **'extreme'** fire, well-prepared and well-constructed homes may not be safe. Leaving is the only option for your survival.

SEVERE

A fire with a **'severe'** rating may be uncontrollable and move quickly, with flames that may be higher than roof tops. A **'severe'** fire may cause injuries, and some homes or businesses will be destroyed.

During a fire with a **'severe'** rating, leaving is the safest option for your survival. Use your home as a place of safety only if it is well-prepared and well-constructed.

VERY HIGH

A fire with a **'very high'** danger rating is one that can be difficult to control with flames that may burn into the tree tops. During a fire of this type, some homes and businesses may be damaged or destroyed.

During a fire with a **'very high'** danger rating, you should use your home as a place of safety only if it is well-prepared and well-constructed.

HIGH

A fire with a **'high'** danger rating is one that can be controlled, where loss of life is unlikely, and damage to property will be limited.

During a fire with a **'high'** danger rating, you should know where to get more information and monitor the situation for any changes.

LOW–MODERATE

A fire with a **'low to moderate'** rating can be easily controlled and poses little or no risk to life or property.

During a fire with a **'low to moderate'** rating, you should know where to get more information and monitor the situation for any changes.

BUSHFIRE SURVIVAL PLAN

Complete your personalised Bushfire Survival Plan lift-out.

Personal details:

Important phone numbers: **000 (Triple Zero)** (Fire, Police and Ambulance)

Family: Family: Family:

Work: Friends: Friends:

School:

Important contact details – name and phone number:

Insurer: Policy Number: Phone:

Electricity: Phone:

Water: Phone:

Gas: Phone:

Phone Company: Phone:

Council: Phone:

Leave early:

List all names and contact phone numbers of household members who have decided to leave early – then complete Section 1.

Names:

Phone:

Stay:

List all names and contact phone numbers of household members who have decided to stay – then complete Section 2.

Names:

Phone:

Leave early – Section 1

Pull this Bushfire Survival Plan lift-out from this document and keep in a safe place.

Leaving early will always be the safest option for you and your family. It is extremely important for you to prepare a detailed leave-early plan to ensure everyone understands what to do and when. Use the boxes below to list tasks to do.

When to go – Think of different triggers that will cause you and your family to leave early. Think about what y ou will do if you have sent the children to school that day. Think about whether or not you will have to travel from work into the fire zone.

Where to go – Identify one or more safer locations.
Consider putting on personal protective clothing before you leave home.

How to get there – What roads will you take to your destination? Have an alternative route if your first choice is impassable.

What to take – Make a list of your most valuable items (e.g. insurance papers, electronic records, photo albums, passports, birth certificates and other important information).

Stay – Section 2

Anyone who is not going to leave early must be involved in completing this stay-and-defend plan to ensure they know what to do. Every stay plan will be different depending on your circumstances. Use the boxes below to list tasks to do.

Before the fire approaches – Start getting yourself and your property ready for a bushfire.

As the fire approaches – Prepare for ember an attack on or near your home. Remember to put on personal protective clothing.

As the fire front arrives – Stay safe by monitoring the fire from inside your home.

After the fire passed – Patrol your property and extinguish any spot fires or burning embers. You may need to keep this up for several hours.

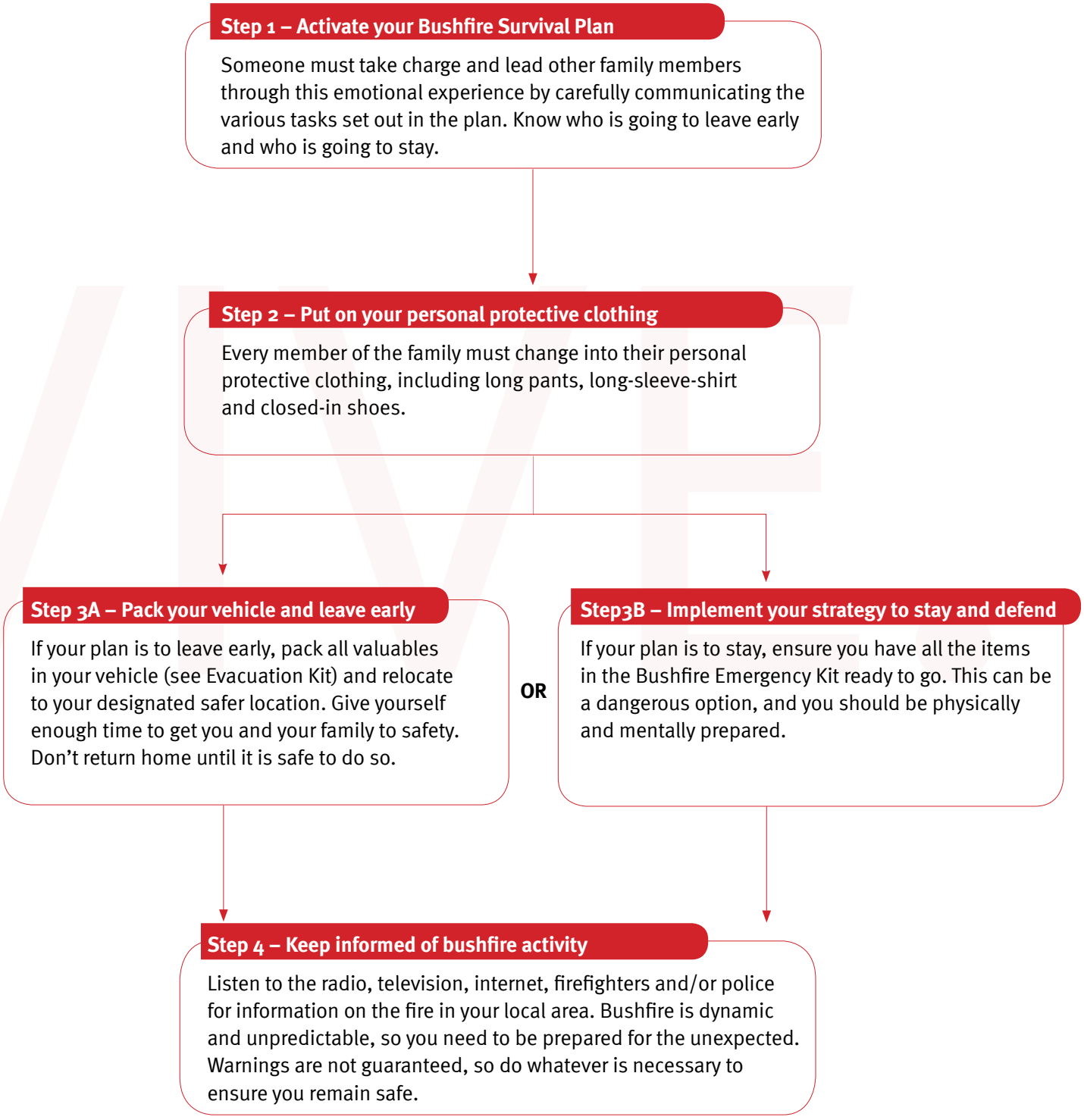
Everyone must have a contingency plan

Have a contingency plan – what will you do if you can't activate your Bushfire Survival Plan? Remember that leaving late can lead to loss of life.

Know where your nearest NSP is and how to get there.

ACTIVATING YOUR BUSHFIRE SURVIVAL PLAN

Once you have prepared your Bushfire Survival Plan and completed your preparations, it is absolutely essential that you regularly practise and review your plan. This will make sure you and your family are well organised in the event of a bushfire. If a bushfire threatens the health and safety of you, your family, home or property, you should follow these steps:



BUSHFIRE EMERGENCY KIT

You need to have a Bushfire Emergency Kit stored in an area of the house that is safe and easy to access. It should contain:

- protective clothing
- mop
- gloves
- torch
- hoses
- shovel
- towels
- buckets
- safety goggles
- ladder
- medications
- bottled drinking water
- fire extinguishers
- battery-operated radio
- spare batteries
- smoke mask
- woollen blankets
- first-aid kit
- knapsack sprayer
- protective clothing for the whole family.



































EVACUATION KIT

Write a list of all items your family will need before, during, and after your relocation.
The list below shows items that you might like to put in your evacuation kit:

- protective clothing for the whole family
- battery-operated radio and spare batteries
- safety goggles
- mobile phone and battery charger
- medications
- wallet or purse and money
- clothing (two sets of clothes for each family member)
- identity information (passports, birth certificates)
- bottled water (enough for each relocated family member)
- family and friends' phone numbers
- items of high importance (e.g. family photos, valuables, important documents)
- blankets (natural fibres)
- children's toys.









BUSHFIRE RISK SELF-ASSESSMENT CHECKLIST

This basic self-assessment checklist is designed to give you a greater understanding of the bushfire risk level relevant to your property. Information provided in this assessment will assist you when completing your Bushfire Survival Plan.

Address:

Postcode:

Property Owner / Property Name:

ACCESS/EGRESS	Road/Street/Driveway	PLEASE √ APPROPRIATE BOX	
Clear of overhanging vegetation	Yes ☐	No ☐	
Unrestricted gate access	Yes ☐	No ☐	
Clear of overhead power lines	Yes ☐	No ☐	
Able to reverse in	Yes ☐	No ☐	
Turning/passing areas	Yes ☐	No ☐	
Heavy vehicle access on cattle grid/bridge	Yes ☐	No ☐	
Alternative way out	Yes ☐	No ☐	
Two-wheel drive access	Yes ☐	No ☐	

STRUCTURE/S		
Exterior walls – non-combustible	Yes ☐	No ☐
Roof ridge capping sealed	Yes ☐	No ☐
Eaves enclosed	Yes ☐	No ☐
Roofing gutters and valleys clear of leaf litter and fine fuels	Yes ☐	No ☐
Underfloor enclosed	Yes ☐	No ☐
Vents screened	Yes ☐	No ☐
Windows – non-combustible finishing	Yes ☐	No ☐
Deck/veranda non-combustible	Yes ☐	No ☐

WATER SUPPLY		
Reticulated water supply	Yes ☐	No ☐
Tank supply with QFES access – 50 mm male camlock fitting so fire figthers can use water if needed	Yes ☐	No ☐
QFES accessible external open water supply (dam/pool)	Yes ☐	No ☐
Firefighting pump and hose connected to water supply	Yes ☐	No ☐

Other considerations

There are a range of other things to be considered regardless of your decision to leave early or stay:

- Firefighting equipment (such as pumps, hoses and sprinkler systems) should be tested regularly and maintained in maximum operational working condition.
- Firefighters may need access to your property during a bushfire. So, it is in your best interests to allow enough space for fire trucks (4 metres wide by 4 metres high).
- Your pets, livestock, and other animals require proper care and attention during fires. Consider food, medication, transportation and sleeping arrangements for your animals.

FAQ'S

Will there always be a fire truck available to fight a bushfire threatening my home?

No, not always. Fire trucks and firefighters are a limited resource, so it is important they are deployed in an appropriate manner to best manage the fire. The QFES cannot guarantee a fire truck will be available to defend every home during a large bushfire event.

Is my home at risk from burning if there is more than 50 metres between my home and nearly bushland?

Yes, most houses destroyed in bushfires are lost as a result of ember attack. Under certain conditions, embers can cause fires to ignite up to 20 kilometres in front of the main fire. A combination of your level of preparation and your home construction will determine the survivability of your home.

Will someone from an emergency service knock on my door when it is time to leave?

Emergency services personnel are not always available to alert the community of potential risks by door knocking and encouraging you to leave. Monitor local radio stations, television networks and emergency service websites for information updates. Remember, the safest option is to leave early. Leaving too late can be fatal.

What does leaving early mean?

Leaving early means before a bushfire event has reached your neighbourhood. Leaving early could be the day before or morning of predicted extreme or catastrophic bushfire weather.

Can I be made to leave my home during a bushfire?

In Queensland, you can be ordered by the Police or Fire Service to evacuate if they believe it is necessary for your safety.

Is cleaning my gutters and mowing my lawns enough to prepare my property for bushfire?

No! Fire requires fuel, heat and oxygen to occur. The radiant heat and flying embers produced by bushfires mean that overhanging trees, shrubs and mulch against homes, woodpiles, old building materials, outdoor furniture or other objects stored under the deck or chemicals in the garden will quickly ignite. Do yourself and your neighbours a favour by taking the time to properly prepare your whole property, which includes yourself, your house and your land.

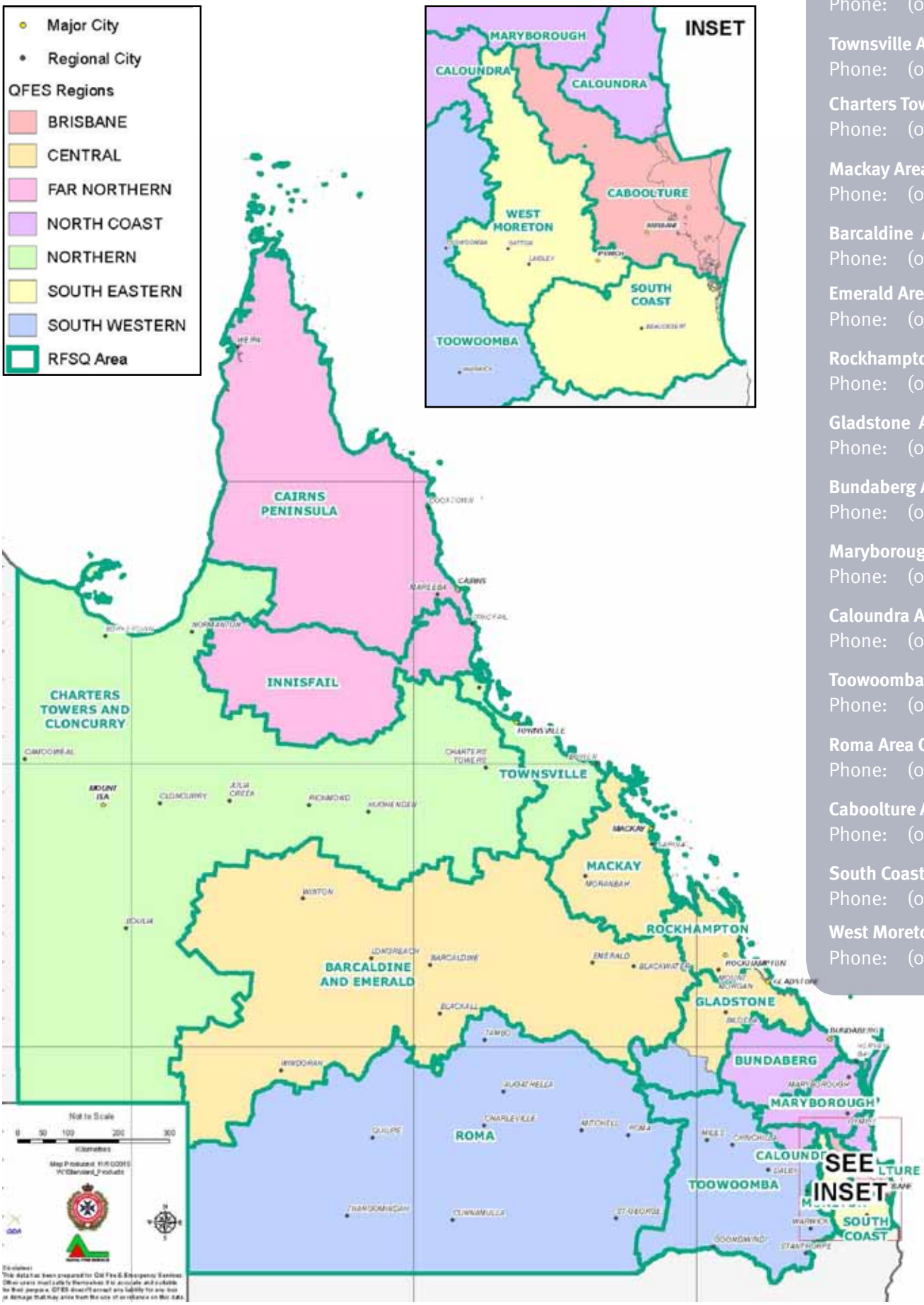
If I know the backstreets in my suburb or town very well, is it okay for me to leave at the last minute?

If your decision in your Bushfire Survival Plan is to leave early, then you should leave well before the fire front reaches your property. Irrespective of your local area knowledge, you must stick to your plan and leave early. Leaving late can be fatal.

NOTES

Rural Fire Service Queensland Areas

For further assistance contact your local Area Office



Cairns Area Office
Phone: (07) 4232 5468

Innisfail Area Office
Phone: (07) 4061 0650

Townsville Area Office
Phone: (07) 4769 9082

Charters Towers Area Office
Phone: (07) 4761 5130

Mackay Area Office
Phone: (07) 4965 6641

Barcaldine Area Office
Phone: (07) 4651 1190

Emerald Area Office
Phone: (07) 4983 7580

Rockhampton Area Office
Phone: (07) 4938 4736

Gladstone Area Office
Phone: (07) 4899 2200

Bundaberg Area Office
Phone: (07) 4153 3244

Maryborough Area Office
Phone: (07) 4190 4839

Caloundra Area Office
Phone: (07) 5420 7517

Toowoomba Area Office
Phone: (07) 4616 1945

Roma Area Office
Phone: (07) 4622 2074

Caboolture Area Office
Phone: (07) 5420 1333

South Coast Area Office
Phone: (07) 5587 4101

West Moreton Area Office
Phone: (07) 3294 4944

Bushfire is a very real risk to many of our suburbs, so make sure you are prepared now!

FOR FURTHER INFORMATION

GO TO www.ruralfire.qld.gov.au
www.qfes.qld.gov.au

OR book a free **"Are you Bushfire Prepared?"** presentation by calling

13 QGOV

facebook.com/QldFireandRescueService

twitter.com/QldFES or @QldFES

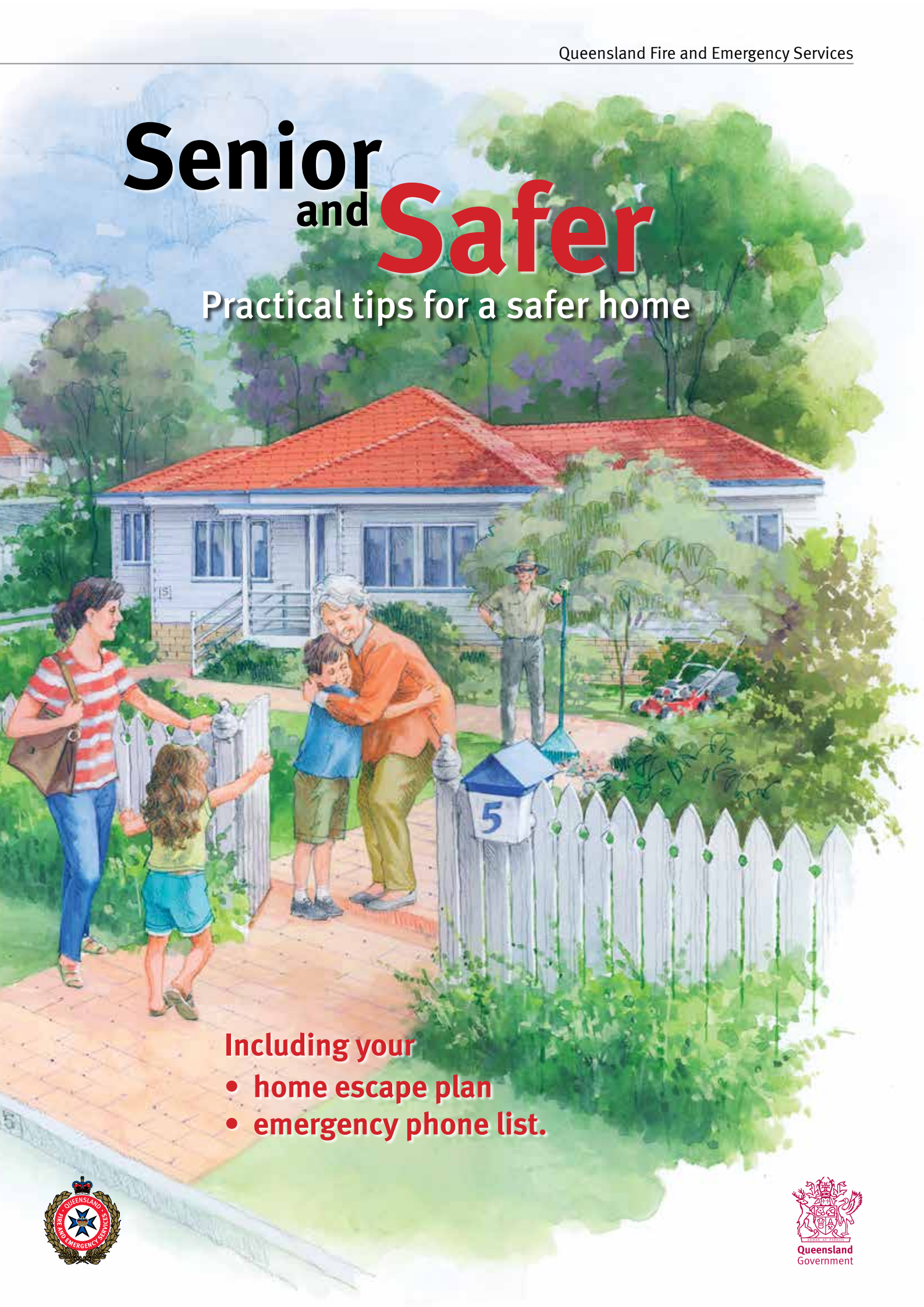
youtube.com/FireRescueQld

© State of Queensland (Queensland Fire and Emergency Services) 2015
All Queensland Fire and Emergency Services material in this document – except any material protected by a trademark, and unless otherwise noted – is licensed under a Creative Commons Attribution 4.0 licence.

Ver 10/2015

Senior and Safer

Practical tips for a safer home



Including your

- **home escape plan**
- **emergency phone list.**

Queensland Government

Contents

Welcome to the front yard 1
Making living areas safe 2
Reduce electrical shocks.....2
Greater fire risk in the kitchen 3
Learn to use fire safety equipment 3
Stovetop oil or fat fires.....4
First aid for burns and scalds 4
Bedrooms – plan a safe sleeping area.....5
Prevention of heat related illness 6
Laundry – keep the path clear.....7
Bathroom – a high risk fall area 7
Steps to safety in a house fire 8
First aid for smoke inhalation.....8
Working photoelectric smoke alarms save lives..9
Balancing security against safety 10
The backyard – simple steps for safety..... 11
Care with flammable items and household chemicals 12
Fire safety for caravans or mobile homes 13
Natural disasters 14
Natural disaster action guide 15
Bushfire Warnings 19
Emergency kit at the ready 20
First aid kit..... 20
Triple Zero (000) calls 21
Emergency information list..... 22
Home escape plan 23
Draw your home escape plan 24
Develop an emergency plan 25
Learn CPR 25
Pets in emergencies 25
Your final home safety checklist 26

Queensland Fire and Emergency Services – making Queensland a safer place

This booklet is an initiative of the Queensland Fire and Emergency Services, produced with the assistance of the Queensland Ambulance Service.

For details of all community programs and initiatives phone 13 QGOV (13 74 68) or go to www.qld.gov.au.

© State of Queensland (Queensland Fire and Emergency Services) 2016

The Queensland Government, acting through the Queensland Fire and Emergency Services (QFES), supports and encourages the dissemination and exchange of publicly funded information and endorses the use of the Australian Governments Open Access and Licensing Framework (AusGOAL).

All Queensland Fire and Emergency Services material in this document – except the QFES logo, any material protected by a trademark, and unless otherwise noted – is licensed under a Creative Commons Attribution 4.0 licence.

The Queensland Fire and Emergency Services has undertaken reasonable enquiries to identify material owned by third parties and secure permission for its reproduction. Permission may need to be obtained from third parties to re-use their material.

Written requests relating to the copyright in this document should be addressed to:

Intellectual Property Coordinator
Legal Services, Ministerial and Executive Services
Public Safety Business Agency
GPO Box 9879, Brisbane 4001
EM: QFES.IPCopyright@qfes.qld.gov.au

Disclaimer

To the extent possible under applicable law, the material in this document is supplied as-is and as-available, and makes no representations or warranties of any kind whether express, implied, statutory, or otherwise. This includes, without limitation, warranties of title, merchantability, fitness for a particular purpose, non-infringement, absence of latent or other defects, accuracy, or the presence or absence of errors, whether or not known or discoverable. Where disclaimers of warranties are not allowed in full or in part, this disclaimer may not apply.

To the extent possible under applicable law, neither the Queensland Government or the Queensland Fire and Emergency Services will be liable to you on any legal ground (including, without limitation, negligence) or otherwise for any direct, special, indirect, incidental, consequential, punitive, exemplary, or other losses, costs, expenses, or damages arising out of the use of the material in this document. Where a limitation of liability is not allowed in full or in part, this limitation may not apply.

Welcome to the front yard

The advice in this home safety booklet, designed to reduce the risk of injury to yourself, loved ones and visitors, begins at the front gate. For example, a wet path, covered with grass clippings or with a hose lying across it, has the potential to cause a fall. Check these safety tips:

- [ ] Make sure your street number can be clearly identified day and night.
- [ ] Keep pathways clear of obstructions such as hoses and plant material.
- [ ] Check branches overhanging power lines. Ask for advice from relevant electricity authorities; seek help in cutting back the branches.
- [ ] At night, make sure the outside lighting on your house is bright enough so occupants and visitors can see. If necessary, install sensor lighting along well-used pathways.
- [ ] Make sure pets can be secured during an emergency.

Entry to your home

While a security door may keep intruders out, it can also trap occupants during an emergency and prevent access by emergency services. Check these safety tips:

- [ ] Make sure the location of the security door key is known and accessible to all occupants so people inside can leave quickly or allow swift access by emergency services.
- [ ] Check that steps to the house are in good order with handrails on both sides. Fix non-slip strips to the steps to reduce the risk of falls.
- [ ] Minimise clutter on the front verandah, patio or porch for ease of access or exit.

In the entry area, shiny, slippery floors, wrinkled carpet runners or dim lighting can cause a fall. Therefore, consider your family, emergency services personnel and others who make regular house calls, such as delivered meals or other home support services so they are not at risk.



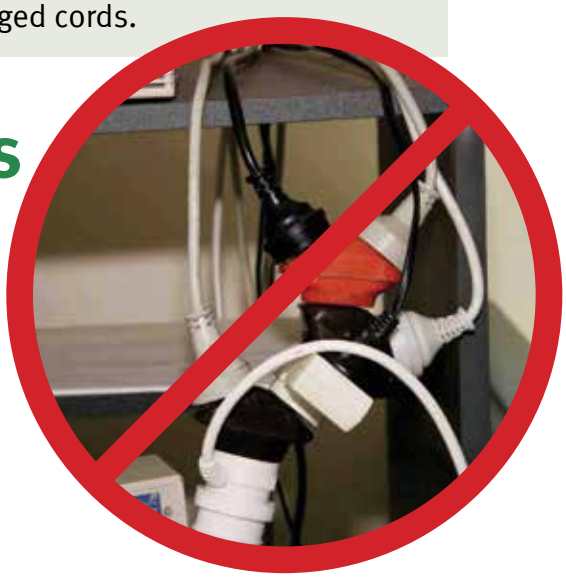
Making living areas safe

Reducing clutter in the living area goes a long way towards creating a safer place. Check these safety tips:

- [ ] Rearrange furniture so pathways are clear.
- [ ] Secure top-heavy items such as entertainment units to the wall so they do not topple onto someone.
- [ ] Check for sharp corners or edges on furniture (senior people's skin is very vulnerable and easily torn, or the body can be bruised more easily).
- [ ] Remove small lightweight mats and place anti-slip strips on the back of heavier mats or rugs on polished floors.
- [ ] Place a metal firescreen in front of an open fireplace to contain burning embers.
- [ ] Carefully stub out cigarette butts in a solid ashtray to reduce the risk of fire.
- [ ] Check the furniture for cigarette butts and ashes before going to bed. Cigarette embers can smoulder unnoticed and later burst into flame.
- [ ] Keep furniture and curtains at least one metre from heaters.
- [ ] Dry clothes in a clothes dryer, not in front of a heater.
- [ ] Allow plenty of ventilation around home entertainment equipment so heat can escape and turn off electrical appliances when not in use.
- [ ] Never run electrical cords under mats or carpets or across a room.
- [ ] Maintain electrical appliances as per manufacturers' instructions; always have repairs carried out by an authorised agent or electrician.
- [ ] Do not load up power points with double adaptors – use power boards; those with an overload switch that meets Australian Standards are recommended.
- [ ] Do not use appliances with frayed, taped or damaged cords.

Reduce electrical shocks

To reduce the risk of electrical shocks or fire, make arrangements for an electrician to fit an earth leakage safety switch (these are already fitted in homes built after 1992). Ask your electrician to make sure any extra needs, such as air conditioners, do not overload the mains power board.



Greater fire risk in the kitchen

The kitchen, the heart of a home, can become an area of potential fire risk. In fact, Queensland Fire and Emergency Services reports that one third of all house fires begin in the kitchen.

However, there are some simple solutions to minimise the risk of both fire and injury – check these safety tips:

- [ ] Plan a clutter-free kitchen – make sure frequently-used items are within easy reach.
- [ ] Do not allow curtains, blinds or other combustibles near cooking appliances.
- [ ] When cooking, avoid wearing garments with long, loose-fitting sleeves.
- [ ] Make sure frying pan/saucepan handles are turned away from the stove's front edge.
- [ ] Turn off hotplates when you leave the kitchen or when the phone rings. When all cooking is finished, turn off the stove safety switch (where fitted).
- [ ] Wipe up spilt water and food immediately to avoid slipping.
- [ ] Turn off electrical appliances at the wall before cleaning.
- [ ] Make sure you have a fully stocked and regularly maintained first aid kit (see page 20).
- [ ] Have a fire blanket and extinguisher available and know how to use them.
- [ ] In case of fire, ALWAYS have a clear escape route.

Learn to use fire safety equipment



Place fire safety equipment* (e.g. extinguisher or fire blanket) in the kitchen between the stove and exit so you can reach them without getting too close to the fire, while ALWAYS being in a position to escape. Learn how to use an extinguisher/fire blanket before an emergency occurs.

** This equipment can be purchased from most hardware stores or through 'Fire Protection Equipment and Consultants' in the Yellow Pages.*

Stovetop oil or fat fires



Stovetop fires are often the start of a blaze that destroys homes. If the fire has spread beyond the stovetop, evacuate immediately. Phone Triple Zero (000) from a mobile or from a neighbour's house.

If oil or fat catches fire in a pot or pan, turn off the heat (if possible) and use a correctly fitted lid to smother the flames. If the lid is not available, a fire blanket (the larger the size the better) can be used. A domestic fire extinguisher can also be effective if you follow the manufacturer's instructions. Under no circumstances remove the lid or fire blanket or move the pot, until the pot has fully cooled down. NEVER put water on a oil/fat fire.

Before fighting any fire, always consider the size of the fire, the tools you have available to fight it and your physical capabilities. ALWAYS have a clear escape route behind you.

Don't forget to regularly clean the filter/s in the rangehood above the stove as these may ignite and take the flames through the flue into the ceiling.

First aid for burns and scalds

Contact with any excessive heat source may lead to a burn or scald. Prompt first aid will help the healing process and assist in a full recovery. Check these safety tips:

- ☐ Cool the affected area immediately with cold running water from a tap or shower and continue for at least 20 minutes.
- ☐ Do not remove any clothing that is sticking to the skin or wound at the burn site. Remove any rings, watches or other jewellery as quickly as possible due to likely swelling of the affected area.
- ☐ After cooling the injured area, apply a sterile non-stick dressing.
- ☐ If the burn is larger than the palm of the hand, phone Triple Zero (000).

Remember:

- *Do not apply ice directly to the burn*
- *Cool the burn area only with water for 20 minutes*
- *Do not break blisters or remove peeled skin*
- *Do not try to remove any clothing that is stuck to a burn*
- *Do not apply creams, ointments, lotions or gels to a burn injury*
- *Elevate burned limbs where possible*
- *Maintain the injured person's body temperature*
- *Rest and reassure the injured person*
- *Monitor breathing until medical help arrives.*

Bedrooms – plan a safe sleeping area

Injuries can occur in bedrooms so it is important to plan for future physical needs.

Not all measures require a huge outlay. Changes may include simply reducing clutter on the bedroom floor or making sure there is space for reading glasses on the bedside table. Check these safety tips:

- [ ] Install a telephone wall socket beside the bed for convenience and emergency calls (remember, cordless phones do not work if the power fails).
- [ ] Keep a torch handy if you cannot reach a light switch from your bed. If you have bedside lights, make sure you can reach them from the bed.
- [ ] Have a battery-powered radio nearby in case of power failure.
- [ ] Turn off the electric blanket before getting into bed.
- [ ] Never smoke in bed.
- [ ] Turn off and unplug electric blankets when not in use. When storing electric blankets roll them up – do not fold them.
- [ ] Keep the bedroom floor free of electrical cords and general clutter.
- [ ] Make sure your glasses are within easy reach for when you get out of bed.
- [ ] When getting out of bed, sit up and place both feet firmly on the floor before standing up.
- [ ] If you have a personal alarm pendant, sleep with it on.

safehome

Individual households may receive free in-home safety advice from local firefighters. Find out more about smoke alarms, escape plans and other key safety issues.

For Safehome bookings, phone 13 QGOV (13 74 68).

Prevention of heat related illness

A heat wave occurs when there are more than a few days in a row of above-average temperature, often combined with high humidity. Babies, children under four years, older people, people with a chronic condition or illness, people who are overweight and people who undertake vigorous exercise are the most susceptible to the effects of a heat wave.

If a heatwave is predicted or is happening, you should do the following:

1. Drink water

- Drink small amounts of water every 15-20 minutes, even if you don't feel thirsty.
- Drink cool drinks – avoid the use of ice as it can cause cramps.
- Avoid drinks that contain alcohol, caffeine or a lot of sugar. They can cause dehydration.
- Monitor urine output. If you are passing less urine than usual you are not drinking enough. Urine should be clear to light straw colour – any darker could be a sign of dehydration.
- If you are on medication, check with your doctor about how much water you should drink.

Tip
Each morning, fill a large jug with water and ensure it is finished by the end of the day.

2. Modify your lifestyle

- Eat small meals and eat more often.
- Slow down and avoid strenuous activity.
- Wear lightweight, light coloured, cotton clothing.
- Take additional cool showers during the day.

Tip
Stay inside (with adequate ventilation) or visit an air conditioned building such as a shopping centre.

3. Staying inside

- Use blinds and curtains to shade your house from the sun.
- Stay inside between 10.00am and 3.00pm.

Tip
While you are at home, keep windows and doors open and use a fan to keep the air circulating.

4. Call family or friends

- Check on the wellbeing of family members, friends and neighbours.

Be alert to these signs of heat stress:

- *loss of appetite*
- *rising body temperature*
- *dry mouth and eyes*
- *tiredness, dizziness, headache*
- *nausea, loss of concentration*
- *muscle weakness or cramps.*

Remember:

If you have any doubts about your condition (or someone else's), phone Triple Zero (000), request the ambulance service and ask the Queensland Ambulance Service Emergency Medical Dispatcher for advice.



Laundry – keep the path clear

Always keep laundries tidy because they are often used as an emergency exit or entry. Check these safety tips:

- [ ] Reduce clutter – set up a storage area for the ironing board, brooms etc
- [ ] Clean the clothes dryer filter after each use to reduce fire risk.
- [ ] Look after appliances and electrical leads such as the iron cord because these can fray and cause an electrical fire.
- [ ] Always have electrical repairs carried out by an authorised agent or electrician.
- [ ] Avoid the risk of chemical poisoning or misuse: do not transfer chemicals from their original container to another.
- [ ] Store chemicals in a locked cupboard which is inaccessible to children.
- [ ] Turning off the tap to the washing machine can reduce the risk of a burst hose causing an internal flood and a dangerously slippery floor.

Bathroom – a high risk fall area

Slippery surfaces or difficulties getting in or out of the bath or shower can cause slips, trips or falls in the bathroom or toilet. Plan NOW for your future needs in these areas. Check these safety tips:

- [ ] If the bathroom floor becomes particularly slippery when wet, investigate ways to reduce its slippery nature.
- [ ] Even if you are not currently frail, consider planning for the future by installing grab rails over the bath, in the shower recess and beside the toilet to reduce the risk of falls.
- [ ] Use non-slip strips in the bottom of the shower or bath.
- [ ] Where possible, avoid using the bath if you are unsteady on your feet.
- [ ] Make sure items such as hair dryers, radios and electric razors are not used in any damp areas and are out of the reach of children.
- [ ] Store medication and cleaning agents separately in locked cupboards.
- [ ] Re-fit bathroom/toilet doors or fit lift hinges so doors open outwards (a person may become trapped if they collapse against an inward-opening door).
- [ ] Most personal alarm pendants are water-proof. If you have one, wear it when you shower.

Scalds

To protect children and seniors, check the water temperature when running a bath or shower. Turn on the cold first, then add hot water and finish with cold. (The hot water temperature in most Australian homes is about 60˚C, 10˚C more than the ideal maximum safe temperature of 50˚C.)

Steps to safety in a house fire

If fire strikes your home, the air is much cleaner, cooler and clearer near the floor. When making your escape, keep as low as possible. Check these safety tips:

- [ ] Survival means crawling on your hands and knees, so 'Get down low and go, go, go'.
- [ ] After leaving the home, gather everyone at a suitable, safe location such as the letterbox.
- [ ] Once everyone is out, DO NOT GO BACK INSIDE THE HOUSE, not even for family pets or treasured belongings.
- [ ] Go to a neighbour's house and phone Triple Zero (000). For mobile phones see details in the Emergency Information List (on page 22).
- [ ] Wait outside for firefighters. Tell them where the fire started and whether anyone is still inside the house.
- [ ] Always make sure your house number is clearly visible to emergency vehicles.

First aid for smoke inhalation

If a person has been exposed to smoke from a fire they may be suffering from smoke inhalation. The treatment for smoke inhalation is:

1. Assess the situation for danger.
2. Phone Triple Zero (000) and ask for the ambulance service.
3. Check the person for a response.
4. If the person is unconscious and not breathing normally, begin cardiopulmonary resuscitation (CPR).
5. If the person is conscious, reassure them and make them comfortable, sitting them upright often helps.
6. Monitor breathing until paramedics arrive.

Working photoelectric smoke alarms save lives



Fires start quietly and can spread very quickly. Smoke is a silent killer and when people are asleep they are unlikely to smell smoke.

Photoelectric smoke alarms give earlier warning of smouldering fires which maximises a person's escape time. As they are less prone to nuisance alarms, it's less likely that occupants will tamper with them which means they are ready to work when needed.

Smoke alarms help save lives by producing a loud warning sound that can give you time to get out of the house.

For your safety and peace of mind, correctly install smoke alarms on each level of your home, fitting them in living areas and outside bedrooms.

QFES recommends...

All residential accommodation be fitted with photoelectric type smoke alarms.

- Smoke alarms be either hard-wired or powered by a non-removable 10-year lithium battery.
- Smoke alarms be located -
  - in every bedroom;
  - in hallways that serve bedrooms; and
  - between bedrooms and living space.
- All smoke alarms should be interconnected.

Advantages of interconnecting your smoke alarms

- When one smoke alarm is activated, all interconnected smoke alarms operate.
- When you close your door, the sound of the smoke alarm in the hallway or downstairs may not be loud enough to wake you.
- A Victoria University study indicates that 50% of deaths in house fires may have been prevented by interconnected smoke alarms.

Maintaining your smoke alarms

- [ ] Test your smoke alarms regularly and follow the manufacturer's instructions.
- [ ] Change the batteries of battery-operated alarms at least once a year – decide on a memorable day (e.g. April 1) or an anniversary, birthday or public holiday.
- [ ] Test and clean smoke alarms monthly using the nozzle of a vacuum cleaner or soft brush.
- [ ] Check the manufacturer's instructions for mains-powered smoke alarms as the back-up battery may require changing every 12 months.







Balancing security against safety

Home security measures, such as deadlocks on doors and windows, may be necessary, however it is important not to let these precautions trap you inside your home in an emergency. Check these safety tips:

- [ ] Have one common key for all door locks.
- [ ] Keep a spare key where it cannot be seen or reached by intruders. For example, hang it in the middle of the back of a door.
- [ ] Choose window security screens that can be opened from the inside.
- [ ] Show all occupants, including overnight visitors, how to escape through security doors or windows if an emergency occurs.
- [ ] A spare key can be kept outside in a secure key safe.



Don't let security fittings trap you in your home



The backyard – simple steps for safety

While the backyard is a natural retreat, as with many other areas of the home, there are a number of risky situations which may cause an injury. Check these safety tips:

- [ ] Clear out gutters regularly to prevent fire or storm damage (safety authorities recommend professional home maintenance people be engaged for this task).
- [ ] During the storm season, clean up and secure all loose items around the house.
- [ ] When moving a vehicle, know exactly where children are so they are not at risk. A safe method is to place them in the vehicle with you or ask an adult to supervise them.
- [ ] If operating electric garage doors, be extra careful when young children are around.
- [ ] Secure tools in a shed, particularly if there are children around.
- [ ] Store chemicals securely (see page 12).
- [ ] Keep pathways clear of slippery items and beware of uneven paving.
- [ ] Tidy up dog food and water bowls. Make sure dry dog food is not scattered on a path – the pellets can have the effect of ball bearings and lead to a serious fall.
- [ ] Remove poisonous or irritating plants or weeds (for further information visit www.health.qld.gov.au/PoisonsInformationCentre/default.asp).
- [ ] Mow your lawn wearing closed-in footwear, long pants, a hat and ear protectors.
- [ ] Wear protective gloves when hands are likely to come into contact with venomous spiders (e.g. under pot plants, in wood pile).



Care with flammable items and household chemicals

Chemicals used every day around the home have the potential to harm people, the environment and can either cause or fuel a fire. Check these safety tips:

- [ ] Do not transfer chemicals from one container to another.
- [ ] Remove flammable materials such as oily rags, old newspapers and timber from under the house, in the shed or carport.
- [ ] Never store flammable materials near heat sources such as portable heaters and BBQs.
- [ ] When using chemicals, follow the directions on the label for storage and disposal and check the manufacturer's advice for recommended protective equipment and clothing.
- [ ] Avoid mixing common household chemicals; stored chemicals should be clearly marked.

For enquiries about chemicals: phone Smart Service Queensland on 13 QGOV (13 74 68).



Learn first aid

A first aid course with Queensland Ambulance Service (QAS) provides practical hands-on training so the public can gain the necessary skills and confidence to respond to an emergency. To enrol in a course or to find out more about any QAS product, phone 13 QGOV (13 74 68) or visit www.ambulance.qld.gov.au

Fire safety for caravans or mobile homes



Caravans and mobile homes can be used for recreational purposes or occupied as permanent dwellings in caravan parks.

Whatever the purpose, check these safety tips:

- [ ] Fit gas cylinders on the outside of the van or mobile home, or install them in a storage cabinet approved to Australian Standards.
- [ ] Make sure the relief valve of the gas cylinder is pointed away from the van in case the cylinder overheats.
- [ ] Turn off gas cylinders before towing your van or starting the engine of a mobile home.
- [ ] If your van or mobile home has been driven on rough roads, arrange for a qualified person to check gas cylinders, pipes and fittings.
- [ ] Make sure the power lead for your van or mobile home is a suitable size for the power load and is in good condition. Damaged cords must be replaced.
- [ ] Store clothes and linen away from the kitchen.
- [ ] Never leave cooking unattended.
- [ ] Know where the escape windows and hatches are located and how they work.
- [ ] Keep doors, windows and hatches clear of obstructions.
- [ ] Fit and maintain a smoke alarm.
- [ ] Make sure fire extinguishers are inspected and regularly serviced.
- [ ] For added safety, install a fire blanket near the caravan door.
- [ ] Store all flammable liquids outside the van but not under it.
- [ ] Have a first aid kit in your van or mobile home (see page 20).





Natural disasters

Nature reminds everyone from time to time not to take it for granted. Although storms, lightning, cyclones, floods, heatwaves and bushfires are some of the most common threats, tidal surges, landslides and earthquakes may also occur. You can help prepare your family and your home by developing an Emergency Plan, preparing your home and preparing an Emergency Kit (See page 20).

If you decide to evacuate or are requested to evacuate by a government agency, do so as soon as possible. Do not delay your departure until the last moment, especially if you are older or caring for young children. If you are instructed to evacuate, check these safety tips:

- [ ] Follow all instructions from emergency services personnel.
- [ ] Before an emergency situation develops, if time permits, telephone an out-of-town relative or friend to let them know where you are likely to be.
- [ ] Use travel routes specified by emergency services. Do not travel via a shortcut because certain areas may be impassable or dangerous.
- [ ] Allow for the special needs of infants, the aged and people with disabilities.
- [ ] Turn off the electricity, gas and water, unplug appliances, and lock doors and windows.
- [ ] Make sure all people in the household are wearing long-sleeved shirts, long pants, a hat and sturdy shoes for their protection.
- [ ] Take your emergency kit.
- [ ] Take important documents, as many as you can safely manage.
- [ ] Stay away from fallen power lines.
- [ ] If you go to an evacuation centre, notify the registration desk so others can find you.
- [ ] If you go to the home of a relative or friend, advise the evacuation centre.
- [ ] When told it is safe, return to your home and open windows to provide ventilation.

Signal sounds a warning

During major emergencies, Queensland residents are alerted by the sound of the Standard Emergency Warning Signal (SEWS) on radio or television, along with a message. To hear the signal, check the website www.emergencyalert.gov.au/frequently-asked-questions/what-is-emergency-alert/48-emergency-alarm-sound.html

If you decide to stay in your home during a natural disaster, make sure your home has been well prepared in advance. Check the following safety tips:

- [ ] Tune into your local radio and TV station to listen out for warnings, weather updates and local community safety announcements.
- [ ] Log onto the Bureau of Meteorology www.bom.gov.au (phone 1300 659 219- Qld only) for weather warnings and www.qldalert.com for further information on disaster events.
- [ ] Have your emergency kit ready.
- [ ] Prepare a supply of medications for children and seniors with special needs.
- [ ] Have sufficient quantities of food (plus can opener) and water for at least three days.
- [ ] Pack sturdy footwear/clothing, strong plastic bags for documents, clothing and rubbish.

Natural disaster action guide



Storm and lightning

Severe storms can produce large hail, damaging wind, lightning and heavy rainfall and cause more damage than any other event. Preventative action, both outdoors and indoors, can reduce the risk from storms and lightning strikes. For example, check with your local electrical contractor for advice on surge protectors and lightning conductors. Check these safety tips on preparations you should take to minimise the risk to you and your property:

Before the storm

- [ ] Tune into your local radio station to listen for storm updates (portable radio).
- [ ] Disconnect computers, televisions and other electrical/electronic appliances.
- [ ] Keep guttering and downpipes clear; secure loose items in your yard.
- [ ] Store poisons above ground level in case of flash floods.
- [ ] Secure all windows and doors.

For more information *to assist in developing your Emergency Plan, Emergency Kit and preparing your home, visit getready.qld.gov.au/.*

During a storm

- [ ] Stay inside, take shelter, remain clear of windows and make sure your pets are safe. Avoid using fixed line telephones unless essential.
- [ ] Avoid contact with metal fixtures such as roofs, guttering, downpipes and taps.
- [ ] If outdoors, find safe shelter (solid building) but not under trees or metal structures. If far from shelter, crouch down, don't lie flat.
- [ ] Avoid metal objects such as ladders, umbrellas, fences and clothes lines.
- [ ] If driving, stop clear of trees, power lines and streams.
- [ ] If boating or swimming, leave the water immediately.

After the storm has passed

- [ ] Check the radio for updated weather reports and power outages.
- [ ] Confirm the location and safety of family members and neighbours.
- [ ] Beware of fallen power lines.
- [ ] Check your house for damage and trees for stability.
- [ ] Check your fuse box. Operate only essential household items.



Flood

Floods can happen in a flash so it's important to know your local area, particularly if there is a history of flooding. The Bureau of Meteorology provides the following warnings:

- Generalised flood warnings where flooding is occurring, or is expected to occur, in a particular region where no specialised warning systems have been installed
- Warnings for severe storms that may cause flash flooding
- Warnings of minor, moderate or major flooding in areas where specialised warning systems have been installed. In these areas the warning message will identify the river valley, the locations expected to be flooded, the likely severity of the flooding and when it is likely to occur.

When you hear warnings for the potential of flood or severe storm:

- [ ] Stay tuned into your local radio/ television station for warnings and updates.
- [ ] Identify evacuation routes and centres via your local council website and be ready to evacuate if necessary.
- [ ] Follow instructions from local authorities.
- [ ] Move vehicles, outdoor equipment, garbage, chemicals, poisons and valuables to higher locations.
- [ ] Check your Emergency Kit is fully stocked.

SES
FLOOD STORM EMERGENCY
132 500
www.132500.qld.gov.au
SES Assistance QLD Mobile App
☑ storm damage ☑ rising flood water
☑ damaged roof ☑ fallen trees on buildings

Cyclone

Cyclones are dangerous because they produce destructive winds, heavy rainfall and damaging storm surges. Collect information by asking neighbours, your State Emergency Service (SES) and the local council about whether cyclones have occurred in your area, what to expect and appropriate action to take. Be prepared with these safety tips:

Before the cyclone

- [ ] Tune into warnings via your local radio, TV station or BOM website to keep up to date on the progress of a cyclone.
- [ ] Find out if your home is in a storm tide evacuation area. If it is, arrange a safer place for your evacuation as part of your preparations.
- [ ] Decide as early as possible whether you are going to evacuate and check the radio for details of safe routes and when to move (evacuations may be necessary based on reports of predicted wind speeds and storm surge heights).
- [ ] Clear your property of loose material which could blow about causing injury or damage.
- [ ] Fit window shutters or metal screens.
- [ ] Trim tree branches well clear of your home.
- [ ] Follow the advice of local authorities for appropriate action during each cyclone stage.



During a cyclone

- [ ] Move into the strongest part of the house and shelter well clear of windows, doors and skylights.
- [ ] If the building begins to break up immediately seek shelter under a strong table or bench or under a heavy mattress.
- [ ] If you are told to return to your home, do so using the recommended routes only.
- [ ] Confirm the location and safety of family members and neighbours.

After a cyclone

- [ ] Remain indoors until you have received official advice that it is safe to go outside.



Bushfire

Bushfire is one of nature's most devastating forces and the risks increase with the number of people in or near bushland, in semi-rural areas and residential estates on the outskirts of cities and towns. Check these basic bushfire safety tips:

Before a bushfire

- [ ] Clean out gutters and clear overhanging trees.
- [ ] Tidy the yard, mow the grass and remove rubbish.
- [ ] Store flammable items away from the house.
- [ ] Check your firefighting equipment.
- [ ] Have an emergency kit and first aid kit ready.
- [ ] Ensure your property is easily identifiable.

During a bushfire

- [ ] Refer to your prepared Bushfire Survival Plan.

If you are going to prepare and leave:

- [ ] Notify your family and friends that you are leaving and where you are going.

If you are going to prepare and stay:

- [ ] Follow the plans you have made in your Bushfire Survival Plan.
- [ ] Notify your family and friends that you are staying.
- [ ] "Tune in" to the bushfire warnings and messages on your local radio.

After a bushfire

- [ ] Don't return to your home until it is safe.
- [ ] Remember to look out for dangers as you return home.
  - Emergency Crews working around the area.
  - Animals not behaving normally.
  - Trees that may have been weakened by the fire and can fall at any time.
  - Power lines that have come down or may fall and impact you.
  - Water and other infrastructure which may not be working.

People who are well prepared, both physically and mentally, can shelter in their homes and survive. If you are caught on the road during a bushfire, you stand a better chance of survival in your vehicle rather than fleeing on foot.

PREPARE.ACT.SURVIVE.



In a bushfire, your ability to make wise decisions depends on good planning and preparation. Information from the Rural Fire Service is available to assist you in this planning. Help may not always be close by, therefore you need to know the options without relying on authorities to tell you what is your best course of action. Apart from what you see, hear and smell, you may also receive fire updates directly from firefighters and police or via your telephone or local radio stations. Preparedness is the key.

Phone 13 QGOV (13 74 68) to receive free printed advice or to organise a bushfire presentation from local firefighters for your community group or street; or go to www.ruralfire.qld.gov.au.

Bushfire Warnings

When are warnings issued?

If a fire starts that may threaten life or property, warnings are issued. It's up to you to take notice, seek information, make decisions and act.

Remember, don't rely on one source of information.

What do warnings mean?

ADVICE

There is a fire in your local area, access information and monitor conditions.

WATCH AND ACT

Fire is heading toward you, conditions are changing and you need to take action now to protect yourself and your family.

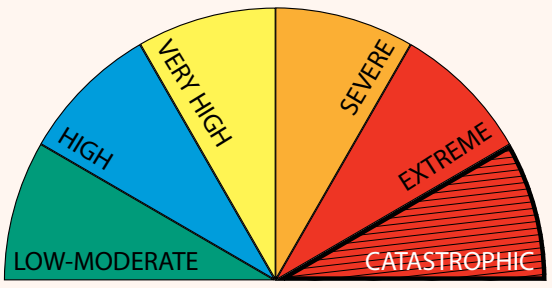
EMERGENCY WARNING

You are in imminent danger and need to take action immediately. You will be impacted by fire.

Fire Danger Ratings

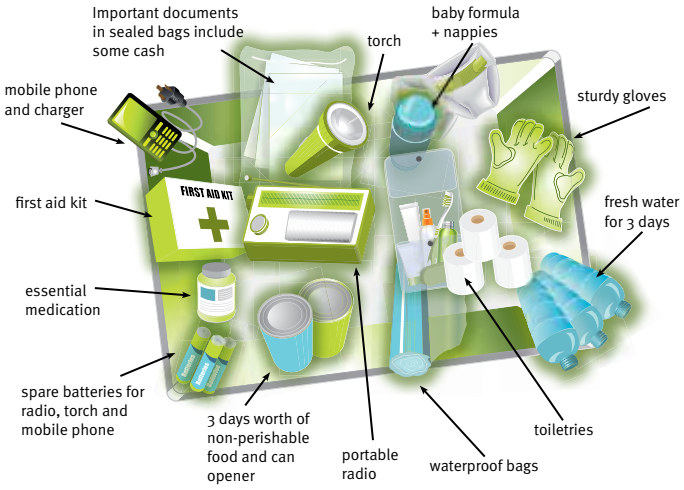
The Fire Danger Rating (FDR) is an early indicator of potential danger, and should act as your first trigger for action. The higher the rating, the greater the need for you to act.

The FDR is an assessment of the potential fire behaviour, the difficulty of suppressing a fire, and the potential impact on the community should a bushfire occur on a given day.



Emergency kit at the ready

For many emergencies, you may be able to shelter at home. In this situation you will need to rely on items you've included in your Emergency Kit. The items, which can include the following, should be stored in a sturdy carry bag or water-resistant container.



- [ ] Fresh water for three days
- [ ] Three days worth of non-perishable food and can opener
- [ ] First aid kit
- [ ] Portable radio
- [ ] Torch
- [ ] Sturdy gloves
- [ ] Spare batteries for radio and torch
- [ ] Essential medication
- [ ] Mobile phone and charger
- [ ] Important documents in sealed bags + cash
- [ ] Waterproof bags
- [ ] Toiletries

Additional items can include: medications, toiletry and sanitary supplies; special needs for infants, the aged and people with disabilities; sleeping equipment and spare clothes, including strong shoes, broad brimmed hat, leather gloves and sunscreen for each household member.

First aid kit

For further suggested items *visit the website getready.qld.gov.au/.*

A general-purpose first aid kit should contain the following items which your pharmacist will be able to identify and supply.

1 packet of plastic strips	1 pair stainless steel scissors (sharp/blunt)
1 roll of non-allergenic tape	2 square gauze swabs
2 sterile eye pads	1 pair forceps
4 triangular bandages	1 pack (10) latex gloves
1 conforming gauze bandage (10cm)	1 resuscitation mask
1 conforming gauze bandage (7.5cm)	2 bottles eye irrigation (15ml)
1 conforming gauze bandage (5cm)	1 bottle antiseptic cream (50g)
1 hospital crepe bandage (10cm)	1 wound closure steri-strip
1 sterile combine dressing (9x10cm)	1 stainless steel splinter remover
1 sterile combine dressing (20x20cm)	1 bottle antiseptic solution (30ml)
1 sterile combine dressing (#14)	5 alcohol swabs
2 non-adhesive dressings (5x7.5cm)	1 first aid hints booklet
1 non-adhesive dressing (10x7.5cm)	

Triple Zero (000) calls



When should you make a Triple Zero (000) call?

Calls should only be made to Triple Zero (000) when police, fire or ambulance attendance is necessary in an emergency situation. When a situation does not fulfil this criterion, but still requires police, fire or ambulance attendance, you should obtain the appropriate numbers from the telephone directory or directory assistance.

What happens when you phone Triple Zero (000)?

Callers can be connected to police, fire or ambulance by phoning Triple Zero (000) from any fixed or mobile phone in Australia. Telstra operates the Triple Zero (000) emergency call service. Their role is to connect callers to the designated emergency services answer points as quickly as possible. You do not need to explain your emergency to this operator, simply advise them which service you require. The Triple Zero (000) service only deals with emergencies requiring police, fire or ambulance.

When requesting an emergency service, it is important to:

- STAY FOCUSED – answer the prompted questions
- STAY RELEVANT – use for emergency assistance only
- STAY ON THE LINE – until you speak to the requested emergency service.



Emergency information list

Complete the emergency information list (on page 22) including your current health details, medications and allergies as well as your doctor/ specialist details. Detach the page from this booklet and place it by your telephone.



Emergency information list

Ambulance • Fire • Police **Triple Zero (000)**	**Other Emergency Numbers**
Phone 000 or 112 from mobiles if unsuccessful*	Local Council ..... State Emergency Service (SES) ..... **132 500** Electricity supplier ..... Gas supplier ..... Poisons Information Centre ..... **13 11 26** QLD Government Electrical Safety Office..... **1300 650 662** For TTY phone ..... **106** *Record other personal information in the sections below*

In an emergency, contact...

Name	Relationship (e.g. next of kin / friend) and address	Telephone

Personal details of household residents

(You can bend this section underneath for privacy before placing this list by your phone)

Resident's name. Date of birth	Medical conditions and allergies	Current medications and dose	Doctor/Specialist name and telephone

*For emergencies throughout Australia, phone Triple Zero (000). Although this number works on landline phones, if you phone Triple Zero (000) on some mobile phones it may not connect. In such cases, phone 112 on your mobile phone. If there is no mobile coverage available, you must phone Triple Zero (000) from a landline phone.

Complete this emergency information list and keep by the phone.

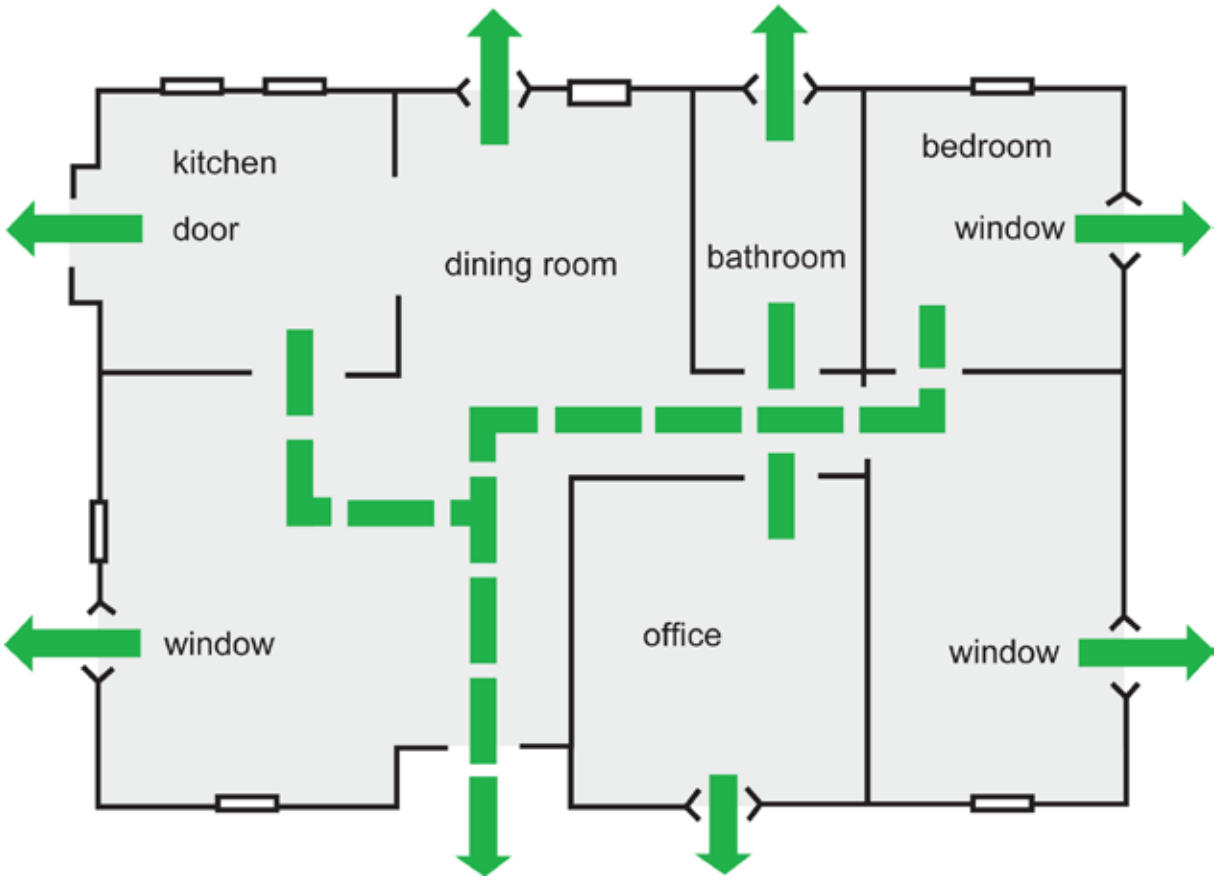
Home escape plan

When fire breaks out in the home it's far too late to start planning how to get out. That is why it is essential to prepare an escape plan in advance (see page 24).

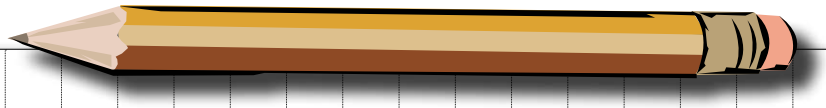
First, draw a floor plan of the house showing two ways out of every room – particularly bedrooms – and make sure everyone knows the plan, even your guests.

Secondly, practise your escape, especially at night, first with the lights on and then with the lights off. This is a sensible method because distances are difficult to judge in the dark. In addition, during a fire, heavy smoke could add to the pressure of locating an exit point.

See 'Steps to safety in a house fire' on page 8.



Draw your home escape plan



Place your home escape plan and emergency information list where the family and visitors can see it.

Develop an emergency plan

Find out about natural disasters that can occur in your area and decide how you can best prepare for such events. Here are some ideas to discuss and record on your Emergency Plan:

- Decide how you would keep in touch with carers and family and where you would evacuate to if required. Include a list of contact numbers on your Emergency Plan.
- Nominate two meeting places, one near your home and another outside your neighbourhood that you can easily evacuate to. Family or friends who live in secure accommodation further inland and on higher ground are the best option. Record these two locations on your Emergency Plan.
- Nominate an out of town or interstate family member or friend to be a point of contact in case you and your immediate family become separated and record their contact details on your Emergency Plan.
- Make a list of personal and household items to take with you in the case of evacuation.

Learn CPR

Queensland Ambulance Service (QAS) provides an accredited Perform Cardiopulmonary Resuscitation (CPR) course. The CPR training course assists members of the public to respond to and manage an unconscious casualty, perform CPR and communicate details of the incident.

To enrol in a course or to find out more about any QAS product, phone Smart Service Queensland on 13 QGOV (13 74 68) or visit www.ambulance.qld.gov.au.

Pets in emergencies

- ☐ Some evacuation centres may not accept animals so have an alternative plan
- ☐ If moving animals to a safer place, do so early to avoid unnecessary risk
- ☐ If staying at home, secure animals early so they do not take flight
- ☐ If you have to leave pets behind, try to leave them indoors in separate rooms with small or preferably no windows (e.g. laundry, bathroom)
- ☐ Provide adequate food and water in large heavy bowls
- ☐ If pets are left outside, do not tie them up.

Remember:

Your family's safety is paramount. Do not risk human life trying to find and protect pets.

Your final home safety checklist

At the very least, make sure you have these items covered in a final safety check:

- [ ] Emergency Information List completed
- [ ] Street number clearly visible day and night
- [ ] Smoke alarm cleaned and a fresh battery installed
- [ ] Home escape plan prepared
- [ ] Fire extinguisher and fire blanket available
- [ ] Emergency plan developed
- [ ] Emergency kit prepared
- [ ] First aid kit available
- [ ] Evacuation plan prepared



Version 06/2016

Fire Bans and Restrictions

If there is a period of extreme fire danger where predicted conditions and weather forecasts indicate that fires may be difficult to control and pose a danger to communities, or if there is a rising fire emergency, the Commissioner QFES can impose either a Local Fire Ban or declare a State of Fire Emergency. A Fire Ban or State of Fire Emergency can be declared to parts or all of the state and remains in force until cancelled.

All Fire bans are advertised widely in local media and on the RFS website. There is also an Information Hotline by phoning free call **1800 020 440** at any time.

Local Fire Bans – A local fire ban can be declared over an entire or part of a local government area and generally prohibits the lighting of all or certain types of fires.

State of Fire Emergency - A State of Fire Emergency can be declared throughout the state or in part of the state. This declaration imposes stricter restrictions and prohibitions on lighting fires and can prohibit the use of certain tools and equipment that can pose a fire risk. If a State of Fire Emergency is declared it must be published in the Queensland Government Gazette and advertise the timeframe of the declaration and the area to which the emergency situation applies.

What restrictions are in place during a local Fire Ban or during a State of Fire Emergency?

- The lighting of fires in the declared fire ban areas are prohibited, subject to any special conditions or exemptions.
- All open fires are prohibited (Gas and electric barbecues may be used).
- All Permits to Light Fire issued in the declared area are cancelled.
- Other special conditions (or exemptions) may be imposed.

Where can I find information on fire bans?

- Check the RFS website at **www.ruralfire.qld.gov.au**
- Call the Fire Ban Information Line on **1800 020 440**
- Check the weather forecast and warnings at www.bom.gov.au
- Monitor your local radio station, television channel and newspaper.

Further Information

These documents will provide you with additional information that will assist you in safely using fire on your property. They are available from RFS Area offices or the RFS website.

- Applying to Light Fires in Queensland
- Obligations and Responsibilities of Permit Holders
- Information for Landholders

Contact Us

Barcaldine	(07) 4651 1190
Bundaberg	(07) 4153 3244
Burnett	(07) 4162 3163
Caboolture (Brisbane)	(07) 5420 3733
Cairns	(07) 4232 5468
Caloundra	(07) 5420 7517
Charters Towers	(07) 4761 5130
Emerald	(07) 4983 7580
Gladstone	(07) 4899 2200
Innisfail	(07) 4061 0650
Mackay	(07) 4965 6641
Maryborough	(07) 4190 4839
Rockhampton	(07) 4938 4736
Roma	(07) 4622 2074
South Coast (Gold Coast)	(07) 5587 4101
Darling Downs	(07) 4616 1945
Townsville	(07) 4796 9082
West Moreton (Ipswich)	(07) 3294 4944

Lighting Fires
in Queensland

As a landholder in Queensland you are ultimately responsible for managing fire on your land. The following information aims at providing advice for those planning to burn vegetation or use fire on their property.

Remember - Your fire – your responsibility!

www.ruralfire.qld.gov.au

CC BY

RFS 00011 06/17A

Queensland Government

Fire can be a useful tool for removing vegetation, managing pastures and reducing bushfire risk. Fire can also be used to achieve ecological outcomes such as the regeneration of some plant species or the improvement of habitat for wildlife. However, if used inappropriately, fire can endanger lives, properties and the environment.

Lighting fires on your property is regulated under the *Fire and Emergency Services Act 1990* (The Act) which is the principal legislation for fire prevention and fire protection in Queensland. The Act provides the authorisation for the use of fire throughout the state. You may require a permit to use fire on your property for debris removal (stack burn) or to burn a larger area for hazard reduction, pasture management or other land management purposes.

Note: Smoke from your fire can negatively impact on your community and neighbours and can contribute to local and regional air pollution issues. Many Local Government Authorities have local laws in place that restrict or prohibit the lighting of fires in part or all of the local government area. Always check with your local Council if you can use fire on your property.

Do you need a Permit to Light Fire?

A Permit to light fire is required for most fires throughout the year. You must obtain a Permit to Light Fire from your local Fire Warden to use fire on your land. There are significant liabilities and penalties for failing to obtain a permit or for failing to comply with permit conditions. You can find your local Fire Warden by using the Fire Warden Finder on the Rural Fire Service (RFS) website at **www.ruralfire.qld.gov.au** or by contacting the local RFS Area Office.

Note: if you plan to mechanically clear native vegetation to burn it in a stack or windrow you may need to obtain a separate permit for clearing vegetation from the Department of Natural Resources and Mines Queensland. .

The aim of the Permit to Light Fire is to ensure your fire will be managed safely and may include certain conditions on the way the fire is lit and maintained. It also informs Queensland Fire and Emergency Services (QFES) on when and where you intend to burn and ensures that adequate and appropriate measures are in place so that fires remain under control.

An Application for a Permit to Light Fire is made through your local Fire Warden. It is also available from the local RFS Area Office, the Fire Warden or it can be downloaded from the RFS website.

Following receipt of your application, the Fire Warden will assess your application and if a permit is issued, impose a range of conditions to reduce risk or nuisance to people, property, and the environment. The Fire Warden can also refuse an application if they believe that appropriate safety measures cannot be reasonably achieved, or if neighbouring owners/occupiers have not been given enough time to raise any concerns about the intended fire.

Before applying for a permit to light fire you need to undertake reasonable steps to contact your neighbours and inform them of your intent to apply for a permit. The reason for this notification is to allow a reasonable timeframe for your neighbours to contact the Fire Warden to lodge an objection to the intended burn or to assist with a more coordinated property burn.

Fires that do not require a permit

Under The Act there are a number of fires that normally do not require a permit to light fire (unless the fire is not permitted under a local law or other legislation). If there is a local law in your local government area prohibiting the lighting of fires, a permit will not be issued by the fire warden unless you have obtained written permission from the local government.

Providing that adequate precautions are taken to prevent the spread of fire the following fires may be lit without a permit:

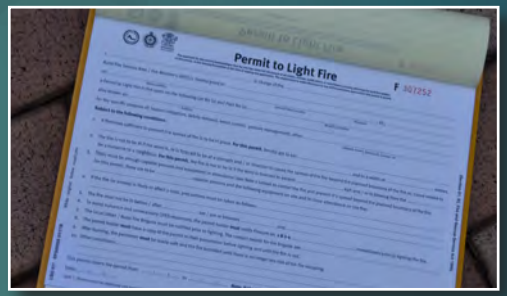
- Fires less than two (2) metres in all directions (these fires are not exempt during notification periods and you must obtain a permit from a fire warden).
- BBQs and campfires (for cooking) enclosed in a fireplace, constructed as to prevent the escape of fire or any burning materials.
- A fire lit for the purpose of burning the carcass of a beast.
- A fire lit at a sawmill for the purpose of burning sawdust or other residue resulting from the operation of a sawmill.
- A cane fire may also be subject to a notification and may be lit under certain conditions.

Note: During periods of increased fire danger the Commissioner QFES can issue an official notification under The Act to amend the permit requirements for some fires in your area. This notification can be activated at any time of the year within a nominated area or across the whole state.

Check the RFS website at **www.ruralfire.qld.gov.au** for fire ban information.













Visit

www.ruralfire.qld.gov.au

For More Information



BUSHFIRE MANAGEMENT REPORT
FM 3812-3
for
SANDSON PTY LTD
at
202 BAILEYS MOUNTAIN ROAD
UPPER COOMERA
PREPARED BY

ELDON BOTTCHER ARCHITECT PTY LTD
145 VARSITY PARADE
VARSITY LAKES
PH 07 55920082
EMAIL bushfires@eb-a.com.au

23/03/2020





QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

TABLE OF CONTENTS

DISCLAIMER

1. REPORT BRIEF

1.1. Address
1.2. Local Authority
1.3. R.P.D.
1.4. Site Area
1.5. Responsible Fire Authority
1.6. Potential Bushfire Hazard Rating.
1.7. Land Tenure
1.8. Adjoining Owners
1.9. Current Land Use
1.10. Fire Danger Index
1.11. Topography
1.12. Predominant Wind Direction
1.13. Slope
1.14. Aspect
1.15. Fuel Type
1.16. Fire History
1.17. Location of Access Tracks
1.18. Location of Fire Breaks
1.19. Location of Existing Fire Fighting Infrastructure
1.20. Historical and Cultural Sites

2. SITE AND HAZARD ASSESSMENT

2.1. Discussion with Responsible Fire Authority
2.2. Vegetation Types
2.3. Potential Bushfire Hazard Rating.
2.4. Building Construction
2.5. Ecological Requirements

3. RISK MANAGEMENT PLAN

3.1. Agencies / Persons Responsible
3.2. Bushfire Safety Objectives
3.3. Aims
3.4. Functional Requirements
3.5. Proposed Fire Fighting Infrastructure
3.6. Fencing
3.7. Building Construction
3.8. Street Numbering
3.9. Less Flammable Landscaping
3.10. Insurance
3.11. Emergency Response Procedures
3.12. Community Awareness Strategies
3.13. Administering Staff

4. FIRE MANAGEMENT ACTION SUMMARY AND SCHEDULE

5. APPENDICES

5.1. Form 15
5.2. Site Plans
5.3. Concept Rehabilitation Notes-Planting Species Schedule Saunders Havill Group
5.4. Supporting Information

6. PROFILES

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

DISCLAIMER

Experienced fire fighters with extensive knowledge of building have prepared this Report. Their practical knowledge of fire fighting has been backed up by academic study.

However, fire is an element of nature. Small natural occurrences can disastrously affect the outcome of the best planning. Human actions similarly can have disastrous results.

Whilst every care has been taken in the formulation of this management report, there can be no guarantee that even the strictest adherence to its recommendations can guarantee safety of life and property.

The authors of this report accept no responsibility for any damage to life or property caused by fire or any other cause to persons using land or structures, which could in any way be construed to be the subject of this report.

The report has been commissioned as the land falls within an area deemed a fire risk by the local authority.

As such, it must be recognized that structures upon this land and those using the structures could be deemed at risk.

Very Important Note;

This report is valid for the following periods;

a) A time of 5 years from date of preparation.
b) The currency of the legislation referred to in Section 1 Report Brief
c) Changes to any legislation generally that may impact on the report outcomes.
d) Changes to vegetation which may impact on the results of this report
e) Any other changes that may impact on the report in any manner.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

THE COPYRIGHT ACT AND MORAL RIGHTS ACT PROTECT THIS REPORT.

IRRESPECTIVE OF THIS REPORT APPEARING ON A COUNCIL PD OR OTHER ONLINE SITE, THERE IS NO PERMISSION IMPLIED OR GIVEN TO ANY PARTY TO DOWN LOAD OR TO USE THIS REPORT IN WHOLE OR IN PART IN ANY MANNER OTHER THAN THAT FOR WHICH IT WAS ORIGINALLY PREPARED.
ANY SUCH USE WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

THIS REPORT RELIES ON THE AS 3959-2009 FOR THE CALCULATION OF CONSTRUCTION LEVELS.
ANY POSSIBLE ERRORS IN THE STANDARD ARE NOT THE RESPONSIBILITY OF THE AUTHOR.

THIS REPORT IS ONLY TO BE USED AND DISTRIBUTED AS A COMPLETE REPORT CONTAINING AS A MINIMUM SECTIONS 1,2,3,4 AND 5 (SECTIONS 5.1 & 5.2)

THIS REPORT IS NOT TO BE AMENDED IN ANY WAY BY ANY PERSONS OTHER THAN THE ORIGINAL AUTHOR.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

1 REPORT BRIEF

This Fire Management Report has been written for the benefit of future occupants of this proposed site and developed in accordance with the requirements of;

- The Gold Coast City Council Town Plan,
- SPP 2016.
- Queensland Planning Act 2016
- The National Construction Code and
- Australian Standard AS3959,
- International Fire Safety Engineering Guidelines

The report has been prepared as supporting documentation for a Material Change of Use (Building) Application. The report has been modified from the original to accord with requirements from Gold Coast City Council

1.1. Address:
202 Baileys Mountain Road
Upper Coomera

1.2. Local Authority
Gold Coast City Council

1.3. R.P.D.
Lot 58 on SP191940

1.4. Site area
3.087ha

1.5. Responsible Fire Authority
Rural Fire Service Queensland via the rural fire brigade for rural fires and QFES for Structural fires.

1.6. Potential Bushfire Hazard Rating.
The hazard rating maps prepared for the Council show the ratings on this property ranging from Medium to being in a Bushfire Hazard Buffer Area
The draft risk rating maps prepared for the State Government show the ratings on this property ranging from Medium to being in a Bushfire Hazard Buffer Area

1.7. Land tenure
Freehold

1.8. Adjoining owners are:
Freehold

1.9. Current Land Use:
Rural Residential

1.10. Fire danger Index
FDI 40 (nominated by AS 3959-2009)

1.11. Topography
Plain on subject site
Undulating under predominate threat vegetation

1.12. Predominant Wind Direction
The predominate wind direction is from the South East. In times of severe fire weather, the wind direction will be from the North West. The Topography will create microclimates, which will cause swirling, which will modify the apparent wind direction according to primary direction and velocity

1.13. Slope
-4.5degrees under threat vegetation

1.14. Aspect
West to South under threat vegetation

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING
BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58
This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

1.15. Fuel Type

REGIONAL ECOSYSTEM	VHC	VHC DESCRIPTION	POTENTIAL FUEL LOAD STATE-WIDE BUSHFIRE PRONE AREA MAPPING	PERCENTAGE COVER	EFFECTIVE FUEL LOAD
12.11.24 (12.11.5a)	9.2	Moist to dry eucalypt woodland on Coastal lowlands and ranges.	17.2	100	17.2

1.16. Fire History
There is no evidence of a recent fire event

1.17. Location of Access Tracks
The site is served by a sealed road system

1.18. Location of Fire Breaks
There are no formal firebreaks, Managed vegetation and road systems form effective fire breaks a minimum of 25m wide.

1.19. Location of existing firefighting Infrastructure
The site is served by reticulated water

1.20. Historical and Cultural Sites
There is no evidence of Historical and Cultural sites on the property.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING
BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58
This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

2. SITE AND HAZARD ASSESSMENT

2.1. Discussion with Responsible Fire Authority

The fire management report has not been discussed with the First Officer of the Rural Fire Brigade.

2.2. Vegetation Types

The vegetation type predominate to this site is as scheduled below. Note that under SPP 2016, differing vegetation types are used. This report does not refer to these but does consider draft mapping prepared under different methodology and published by the State Government.

VEGETATION TYPE	AS 3959 CATEGORY	COMMENTS
Grassy Eucalypt and acacia forest, exotic pine plantations, Cyprus pine forests, wallum heath	B	For the purposes of construction level assessment under AS 3959-2009, woodland is the appropriate vegetation type to use due to fuel load.
Orchards, farmlands, kikuyu pastures	Low Threat Or G	Note that where grassland is maintained below 100m it is regarded as Low Threat by AS 3959.
Grazed grasslands, slashed grass	Low Threat Or G	Note that where grassland is maintained below 100mm it is regarded as Low Threat by AS 3959. State variation (Qld) to Section 3.7.4.0 of Volume 2 Building Code of Australia states that *"The requirements of (a) do not apply when the classified vegetation is Group F rainforest (excluding wet sclerophyll forest types), mangrove communities and grasslands under 300mm high."* This is interpreted as stating that where these communities exist within a Designated Bushfire Prone Area construction in accordance with AS 3959 is not required in relation to this vegetation.
Desert lands (sparse fuels) Mowed grasslands	Low threat Or G	Note that where grassland is maintained below 100m it is regarded as Low Threat by AS 3959 State variation (Qld) to Section 3.7.4.0 of Volume 2 Building Code of Australia states that *"The requirements of (a) do not apply when the classified vegetation is Group F rainforest (excluding wet sclerophyll forest types), mangrove communities and grasslands under 300mm high."* This is interpreted as stating that where these communities exist within a Designated Bushfire Prone Area construction in accordance with AS 3959 is not required in relation to this vegetation.
Intact Rainforest, mangrove, intact riverine rainforest	F	State variation (Qld) to Section 3.7.4.0 of Volume 2 Building Code of Australia states that *"The requirements of (a) do not apply when the classified vegetation is Group F rainforest (excluding wet sclerophyll forest types), mangrove communities and grasslands under 300mm high."* This is interpreted as stating that where these communities exist within a Designated Bushfire Prone Area construction in accordance with AS 3959 is not required in relation to this vegetation.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING
BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58
This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

2.3. Potential Bushfire Hazard Rating.

Site inspection confirms the mapping intent but not the detail.
Predominate vegetation is Medium Hazard and the site is in a Bushfire Hazard Buffer Area (See Appendix 5.3.1 for Fireline Intensity Calculations) .

2.4. Building Construction

All buildings situated within the site are in a Designated Risk Area. There is a requirement that certain Buildings within this area be constructed in accordance with the Building Code of Australia, which refers to either the Australian Standard for Construction in Bushfire Prone Areas or NASH Standard-Steel Framed Construction in Bushfire Areas.
The levels determined effect the types and usage of materials in relation to the type of Bushfire Attack, which may occur as assessed under the Standard. The Level of Bushfire Attack is assessed taking the vegetation types, slope, and distance from vegetation into account. The most common elements affected are Windows and flyscreening, with some restrictions on cladding and timber types. A comprehensive breakdown is available in either the National Construction Code or the Australian Standard for Construction in Bushfire Prone Areas. Extracts of these documents are not provided due to copyright reasons. Full details can be obtained from your building designer or certifier.

Note that the Building Code of Australia only requires Classes 1,2 and 3 buildings and Class 10a building associated with those buildings to comply with the requirements of AS 3959-2009.

The proposed building does not include any of these classifications and is therefore not required to comply with AS 3959-2009.

2.5. Ecological Requirements

There are specific ecological requirements in relation to bushfire management. A proposed rehabilitation plan has been prepared by Saunders Havill Group, with the proposed planting schedule provided as Appendix 5.3 of this document.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

3. RISK MANAGEMENT PLAN

3.1. Agencies / Persons Responsible

The responsible Fire Authority is the Rural Fire Service Queensland through the Rural Fire Brigade being responsible for Bush Fires and the Queensland Fire and Emergency Service being responsible for Structural Fires

It is the responsibility of the Owners of the properties to ensure that the relevant measures required by this Management Report are in place prior to inspection by the Council and the Building Certifier and to ensure that those measures are in place prior to the occupation of any buildings, which are the subject of this report. It is the responsibility of Council and Building Certifiers to ensure that relevant measures within their responsibility are in place prior to the issuance of any certification.

3.2. Bushfire Safety Objective

The objective of this report is to minimise potential risk to life and property by protecting the buildings from the effects of bushfire.

3.3. Aims

The aims to achieve this objective are to mitigate the effect of the bushfire attack mechanisms of: -

3.3.1. Radiant Heat
3.3.2. Direct Flame Contact
3.3.3. Wind
3.3.4. Ember Attack
3.3.5. Smoke

3.4. Functional Requirements

The functional requirements to achieve this objective are: -

3.4.1. The provision of safe conditions for fire fighters
3.4.2. The provision of safe conditions for residents
3.4.3. Ensure adequate and safe access to and from the property
3.4.4. Ensure adequate and safe water supply to the property and the establishment of firefighting water reserves
3.4.5. Provide a system of fire breaks and trails to protect the building component
3.4.6. Remove vegetation that is considered dangerous and a hazard in Fire Conditions
3.4.7. To ascertain the required standard of construction of the buildings in accordance with the requirements of the National Construction Code and the Australian Standard for Construction in Bushfire Prone Areas or the provision of a satisfactory alternative solution
3.4.8. Facilitate the return to “normalcy “

3.5. Proposed Fire Fighting Infrastructure

3.5.1. The proposed building will be served by a reliable reticulated water supply.

3.6. Building Construction

Construction is not required to be in accordance with Australian Standard AS 3959 2009 Construction of Buildings in Bush Fire-Prone Areas .

The proposed building does not include any of the required classifications and is therefore not required to comply with AS 3959-2009.

The plans lodged for Building Certification are to be assessed on this basis by the Building Certifier.

A final stage completion certificate (Form 21) issued by the Building Certifier is to be received prior to occupation of the building.

Buildings are not to be occupied until certification is received

Buildings are to be maintained in a manner that protects the integrity of the construction and building elements as outlined in this report

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

3.7. Street Numbering

Numbering is to be installed in accordance with the current Street Numbering System at time of completion of building.

3.8. Less Flammable Landscaping

Any landscaping within the site is to be Less Flammable, in accordance with the list enclosed as an Appendix at the rear of this Report, rainforest species, or cultivated gardens, and as the proposed rehabilitation planting schedule prepared by Saunders Havill Group and attached as Appendix 5.3 of this document. The proposed schedule is generally in accordance with the schedules noted in Appendices 5.4.9 and 5.4 10, which are provided for guidance only.

3.9. Insurance

Failure to comply with this management report may have a detrimental effect upon the Insurance of the subject Buildings.

3.10. Emergency Response Procedures

3.10.1. In the event of Fire Emergency, assistance is to be obtained by dialling 000

3.10.2. The owner should read thoroughly the brochures contained and those recommended at the rear of this report. They contain valuable information that could assist in the saving of lives and property in a fire event!

3.11. Community Awareness Strategies

3.11.1. Each subsequent owner is to be provided with a copy of this Fire Management report with an alert placed on either Title or Council Rate searches that the Report is in existence and is to be made available to ensuing owners.

3.11.2. The hazard ratings are to be placed on Council Plans and Rate notices.

3.12. Administering Staff

It is the responsibility of the developers and owners to ensure compliance with this Report and the Town Plan, and to ensure that each of the new owners is provided with a copy of this report.

It is the responsibility of the Council and the Building Certifier to ensure that the relevant measures required by this management report are in place prior to the final completion stage inspection of any buildings on any sites which are the subject of this report as noted in Clause 3.1 of this report.

It is the responsibility of the ensuing owners of the properties to maintain the properties in the conditions outlined in this report.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

4. FIRE MANAGEMENT ACTION SUMMARY AND SCHEDULE

DEVELOPMENT REQUIREMENTS	BUILDING REQUIREMENTS	MAINTENANCE
	Buildings not required to comply with the Australian Standard for Construction with in Bush Fire Prone Areas due to Building Classification.	Regular mowing and maintenance of the landscaping as set out in this report. Building materials are to be maintained in "as new "condition to preserve the integrity of the relevant materials.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

5. APPENDICES

5.1. Form 15
5.2. Site Plans
5.3. Concept Rehabilitation Notes-Planting Species Schedule Saunders Havill Group
5.4. Supporting Information:
5.4.1. Fire line Intensity Calculations
5.4.2. Fuel Load Calculation

Note. These items below are referenced for information purposes only and are not to be construed as being part of the management report
This information is generic and not provided or included within the documentation for approval purposes.
It is only provided for end user knowledge

5.4.3. Prepare. Act. Survive
5.4.4. Rural property Fire Management Guide 2010
5.4.5. Notes for Landholders
5.4.6. Bushfire Action Guide
5.4.7. Bushfire Safety in Urban Fringe Areas
5.4.8. Water + Power -Vital for Fire fighting
5.4.9. Less Flammable Vegetation
5.4.10. Tree selection for Fire-Prone Areas
5.4.11. First Draft (specifying timber in bush fire zones)
5.4.12. External water spray system
5.4.13. Fire Retardant Coating Solutions
5.4.14. Archicentre Bushfire Design Guide
5.4.15. Section 3.8 Sign Types - Fire Trail Signage of the GCCC Natural Areas Management Unit Guidelines (Page 16) Signage
5.4.16. Trail Number and Key Point signage
5.4.17. Bushfire Hydrant detail
5.4.18. Tank detail
5.4.19. Recycled Water for Firefighting
5.4.20. Sample Easement Document
5.4.21. Bushfire Windows and Shutters
5.4.22. A guide to retrofit your home for better protection from a bushfire.
5.4.23. FireFly BAL-FZ System
5.4.24. Extracts from Planning Act 2016 relating to clearing.
5.4.25. Bushfire Planning and Design Certification Scheme Update
5.4.26. SAC Notification Form

We also recommend that the landholder obtains and reads the following;

5.4.27. Bushfire Hazard Planning in Queensland
5.4.28. Protecting your home against Bushfire
Both available from the Dept. of Local Government and Planning, and

5.4.29. Building in Bushfire Prone Areas
Available from Standards Australia

5.4.30. Fire in Bushland Conservation
Available from the National Heritage Trust

Signed

E J Bottcher

Eldon Bottcher
Grad. Dip. DBPA (UWS) Dip. Arch. (QIT), Cert. R.F.M. (USQ), F.R.A.I.A., M.A.I.E.S. AIFireE
Architect
BPAD-L3 Practitioner

BPAD Bushfire Planning & Design Accredited Practitioner Level 3

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING
BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58
This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

APPENDIX 5.1
FORM 15

Queensland Government

Department of Housing and Public Works

Form 15—Compliance certificate for building design or specification

Version 4 – July 2017

NOTE: This is to be used for the purposes of section 10 of the *Building Act 1975* and/or section 46 of the *Building Regulation 2006.*

RESTRICTION: A building certifier (class B) can only give a compliance certificate about whether building work complies with the BCA or a provision of the Queensland Development Code (QDC). A building certifier (Class B) can not give a certificate regarding QDC boundary clearance and site cover provisions.

1. Property description

This section need only be completed if details of street address and property description are applicable.

E.g. in the case of (standard/generic) pool design/shell manufacture and/or patio and carport systems this section may not be applicable.

The description must identify all land the subject of the application.

The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice.

If the plan is not registered by title, provide previous lot and plan details.

Street address (include no., street, suburb/locality and postcode)

202 Baileys Mountain Road Upper Coomera

Postcode

Lot and plan details (attach list if necessary)

Lot 58 on SP191940

In which local government area is the land situated?

Gold Coast City Council

2. Description of component/s certified

Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.

Work as required for bushfire mitigation purposes as set out in the Bushfire Management Report prepared by Eldon Bottcher Architect Pty Ltd including assessment of Construction Levels assessed under AS 3959.

3. Basis of certification

Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon.

Compliance with the Bushfire Management Report prepared by Eldon Bottcher Architect Pty Ltd

No certification of components covered by The Building Act 1975, The building Code of Australia or AS 3959.

Gold Coast City Council Town Plan Bushfire Management Constraint code.

4. Reference documentation

Clearly identify any relevant documentation, e.g. numbered structural engineering plans.

Bushfire Management Report FM 3812-3

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

LOCAL GOVERNMENT USE ONLY

Date received		Reference Number/s	

5. Building certifier reference number

Building certifier reference number

6. Competent person details

A competent person for building work, means a person who is assessed by the building certifier for the work as competent to practice in an aspect of the building and specification design, of the building work because of the individual's skill, experience and qualifications in the aspect. The competent person must also be registered or licensed under a law applying in the State to practice the aspect.

If no relevant law requires the individual to be licensed or registered to be able to give the help, the certifier must assess the individual as having appropriate experience, qualifications or skills to be able to give the help.

If the chief executive issues any guidelines for assessing a competent person, the building certifier must use the guidelines when assessing the person.

Name (in full)

Eldon John Bottcher

Company name **(if applicable)**

Eldon Bottcher Architect Pty Ltd

Contact person

Eldon Bottcher

Phone no. (business hours)

07 55920082

Mobile no.

0412434134

Fax no.

Email address

bushfires@eb-a.com.au

Postal address

P.O. Box 3606

Robina Town Centre **Postcode 4230**

Licence or registration number (if applicable)

Reg Architect Qld 1325

FPA Australia BPAD Level 3 practitioner 16935

7. Signature of competent person

This certificate must be signed by the individual assessed by the building certifier as competent.

Signature

E J Bottcher

Date

23 March 20

The *Building Act 1975* is administered by the Department of Housing and Public Works

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

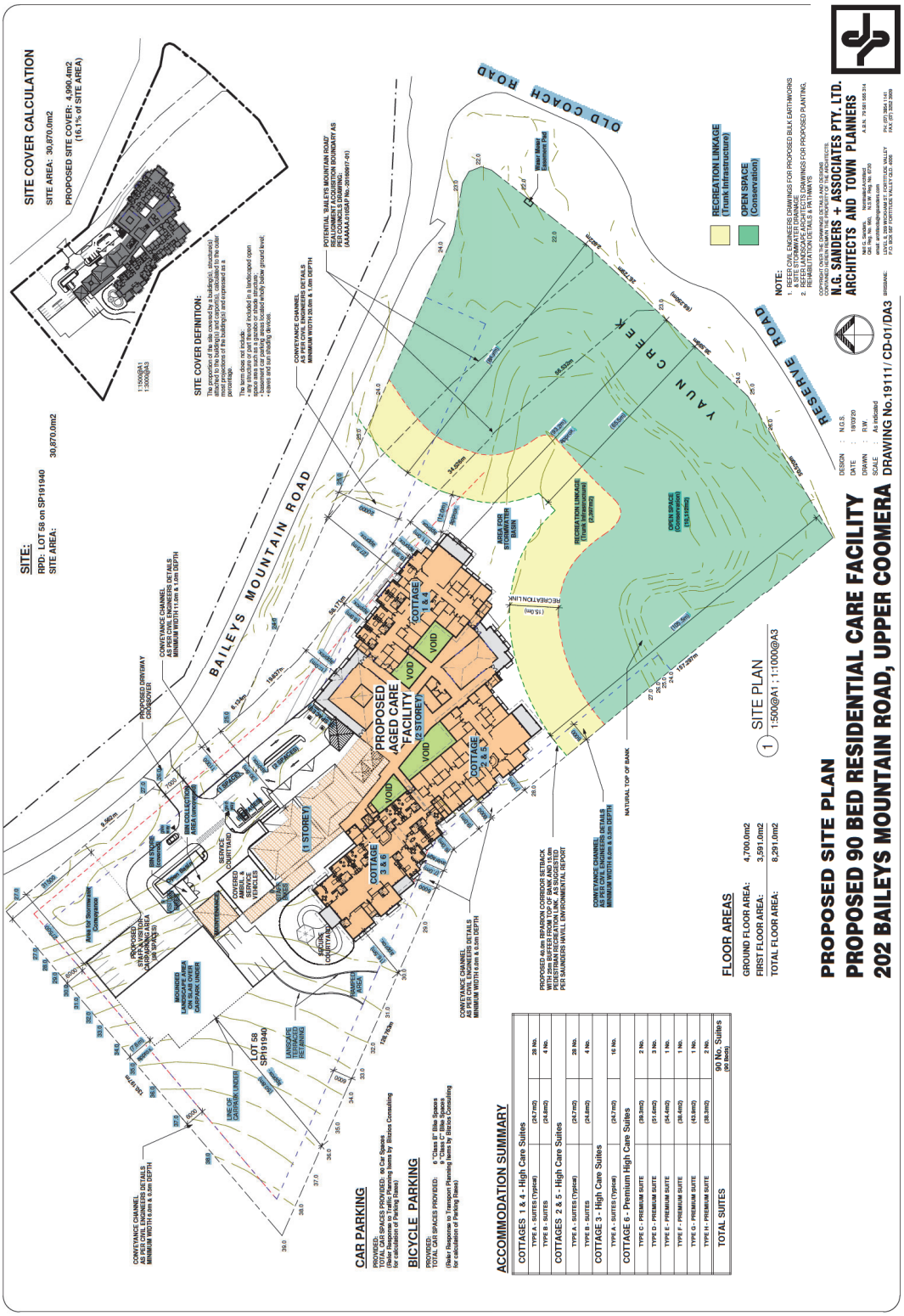
APPENDIX 5.2
SITE PLANS

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.



ACCOMMODATION SUMMARY		
COTTAGES 1 & 4 - High Care Suites		
TYPE A - SUITES (Typical)	(24.7m2)	28 No.
TYPE B - SUITES	(24.6m2)	4 No.
COTTAGES 2 & 5 - High Care Suites		
TYPE A - SUITES (Typical)	(24.7m2)	28 No.
TYPE B - SUITES	(24.6m2)	4 No.
COTTAGE 3 - High Care Suites		
TYPE A - SUITES (Typical)	(24.7m2)	16 No.
COTTAGE 6 - Premium High Care Suites		
TYPE C - PREMIUM SUITE	(39.3m2)	2 No.
TYPE D - PREMIUM SUITE	(51.6m2)	3 No.
TYPE E - PREMIUM SUITE	(54.4m2)	1 No.
TYPE F - PREMIUM SUITE	(38.4m2)	1 No.
TYPE G - PREMIUM SUITE	(43.8m2)	1 No.
TYPE H - PREMIUM SUITE	(38.3m2)	2 No.
TOTAL SUITES		90 No. Suites (90 Beds)

CAR PARKING
PROVIDED:
TOTAL CAR SPACES PROVIDED: 60 Car Spaces
(Refer Response to Traffic Planning Items by Bitzios Consulting for Confirmation of Parking Rates)

BICYCLE PARKING
PROVIDED:
TOTAL CAR SPACES PROVIDED: 6 "Class B" Bike Spaces
9 "Class C" Bike Spaces
(Refer Response to Transport Planning Items by Bitzios Consulting for Confirmation of Parking Rates)

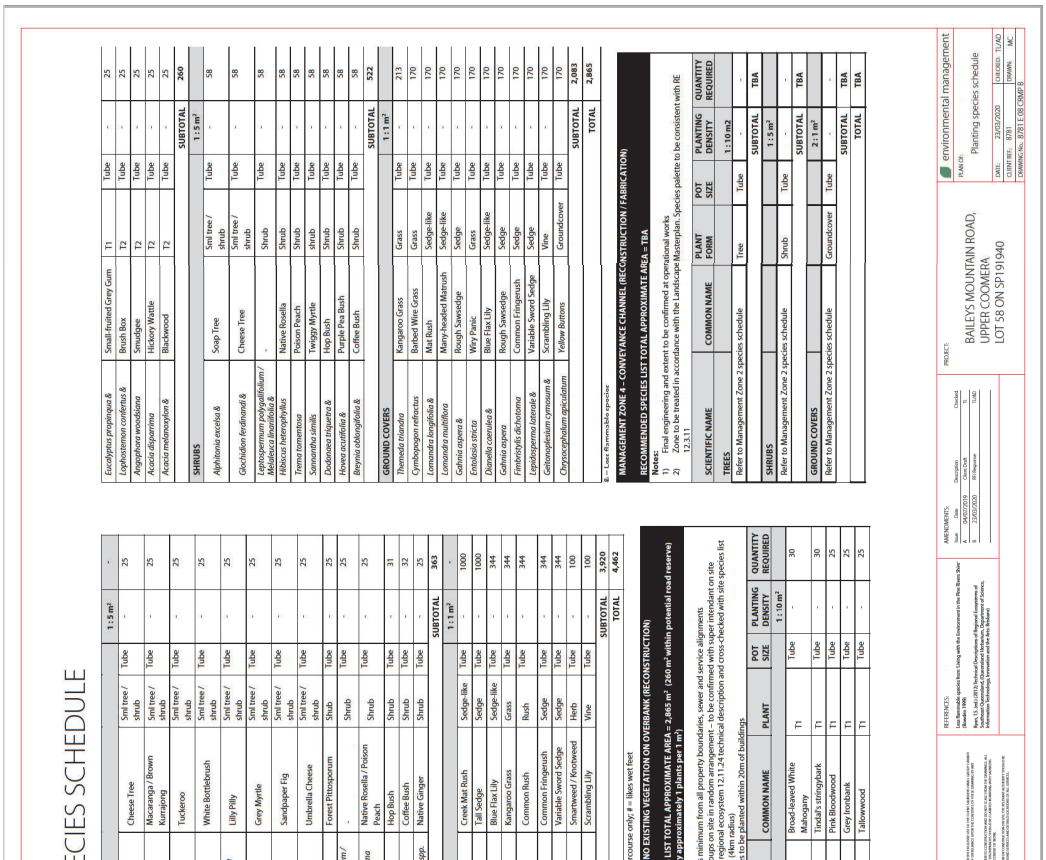
QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

APPENDIX 5.3
CONCEPT REHABILITATION NOTES
PLANTING SPECIES SCHEDULE
SAUNDERS HAVILL GROUP



BAILEYS MOUNTAIN ROAD, UPPER COOMERA

CONCEPT REHABILITATION NOTES - PLANTING SPECIES SCHEDULE

MANAGEMENT ZONE 1 – EXISTING NATIVE VEGETATION ON BANKS AND FLOODPLAIN (ASSISTED NATURAL REGENERATION)

RECOMMENDED SPECIES LIST TOTAL APPROXIMATE AREA = 3,065 m² (Overall minimum density approximately 2 plants per 1 m²)

Notes:
1) Setback trees 3 metres minimum from all property boundaries, sewer and service alignments
2) Distribute plants in groups on site in random arrangement - to be confirmed with super intendant on site
3) Species selected from regional ecosystem 12.3.17/12.3.1a technical descriptions and cross-checked with site specific list and Wildnet Online Search (4km radius). As a general rule, 12.3.1 species to be planted along waterway banks, with RE 12.3.11 species to be planted on floodplains.
4) Infill planting in this zone only. Final planting quantities to be confirmed by super intendant on site

SCIENTIFIC NAME	COMMON NAME	PLANT FORM	POT SIZE	PLANTING DENSITY 1 : 10 m²	QUANTITY REQUIRED
TREES					
Refer to Management Zone 2 species schedule		Tree	Tube	-	-
				SUBTOTAL	**TBA**
SHRUBS				**1 : 5 m²**	
Refer to Management Zone 2 species schedule		Shrub	Tube	-	-
				SUBTOTAL	**TBA**
GROUND COVERS				**2 : 1 m²**	
Refer to Management Zone 2 species schedule		Groundcover	Tube	-	-
Goodenia rotundifolia @	Star Goodenia	Ground	Tube	-	-
Opdismenus aemulus @	Creeping Beard Grass	Grass	Tube	-	-
Ottochloa gracillima @	Graceful Grass	Grass	Tube	-	-
				SUBTOTAL	**TBA**
				TOTAL	**TBA**

@ = To be planted in shaded locations only

MANAGEMENT ZONE 2 – NO EXISTING NATIVE VEGETATION ON BANKS AND FLOODPLAIN (RECONSTRUCTION)

RECOMMENDED SPECIES LIST TOTAL APPROXIMATE AREA = 2,505 m² (690 m² within potential road reserve) (Overall minimum density approximately 2 plants per 1 m²)

Notes:
1) Setback trees 3 metres minimum from all property boundaries, sewer and service alignments
2) Distribute plants in groups on site in random arrangement – to be confirmed with super intendant on site
3) Species selected from regional ecosystem 12.3.17/12.3.1a technical descriptions and cross-checked with site specific list and Wildnet Online Search (4km radius). As a general rule, 12.3.1a species to be planted along waterway banks, with RE12.3.11 species to be planted on floodplains)

SCIENTIFIC NAME	COMMON NAME	PLANT FORM	POT SIZE	PLANTING DENSITY 1 : 10 m²	QUANTITY REQUIRED
TREES					
Eucalyptus tereticornis (D)	Forest Red Gum	T1	Tube	-	32
Eucalyptus siderophloia	Northern Grey Ironbark	T1	Tube	-	10
Corymbia intermedia	Pink Bloodwood	T1	Tube	-	10
*Waterhousia floribunda**	Weeping Lily Pily	T1	Tube	-	10
*Elaeocarpus obovatus / Grandis**	Quandong	T1	Tube	-	10
Melicope elleryana	Pink Doughwood	T1	Tube	-	10
Ficus spp.	Strangler Fig	T1	Tube	-	10
*Agonis flexuosa**	Foam Bark	T2	Tube	-	10
*Acacia / Racosperma spp. * / Cryptocarya spp. **		T2	Tube	-	10
Lophostemon confertus (D)*	Brush Box	T2	Tube	-	20
*Melaleuca philippensis**	Red Kanuka	T2	Tube	-	10
*Alphitonia philippinensis**	Rough-barked Elm	T2	Tube	-	10
Lophostemon suaveolens &	Swamp Box	T2	Tube	-	10
Allocasuarina littoralis &	Black She-oak	T2	Tube	-	10
Melaleuca quinquenervia &	Broad-leaved Paperbark	T2	Tube	-	10
				SUBTOTAL	**182**

SHRUBS				1 : 5 m²	-
Glochidion ferdinandi	Cheese Tree	Smt tree / shrub	Tube	-	25
Macaranga tanarius / Commersonia bartramia.	Macaranga / Brown Kurrajong	Smt tree / shrub	Tube	-	25
Cupaniopsis anacardioides	Tuckeroo	Smt tree / shrub	Tube	-	25
Melaleuca salicina	White Bottlebrush	Smt tree / shrub	Tube	-	25
*Syzygium australe / Acmena smithi**	Lilly Pilly	Smt tree / shrub	Tube	-	25
*Backhousia myrtifolia**	Grey Myrtle	Smt tree / shrub	Tube	-	25
*Ficus coronata**	Sandpaper Fig	Smt tree / shrub	Tube	-	25
*Glochidion sumatranum**	Umbrella Cheese	Smt tree / shrub	Tube	-	25
*Pittosporum revolutum * / Pittosporum rhombifolium / Melaleuca linariifolia*	Forest Pittosporum	Shrub	Tube	-	25
Hibiscus heterophyllus / Senna tamentosa	Native Rosella / Poison Peach	Shrub	Tube	-	25
Dodonaea triquetra	Hop Bush	Shrub	Tube	-	31
Breynia oblongifolia	Coffee Bush	Shrub	Tube	-	32
Alpinia caerulea / Cordyline spp.	Native Ginger	Shrub	Tube	-	25
				SUBTOTAL	**363**
GROUND COVERS				**1 : 1 m²**	-
Lomandra hystrix #	Creek Mat Rush	Sedge-like	Tube	-	1000
Carex appressa #	Tall Sedge	Sedge	Tube	-	1000
Dianella caerulea &	Blue Flax Lily	Sedge-like	Tube	-	344
Themeda triandra	Kangaroo Grass	Grass	Tube	-	344
*Juncus usitatus * / J. polyanthemus. **	Common Rush	Rush	Tube	-	344
*Fimbristylis dichotoma**	Common Fringerush	Sedge	Tube	-	344
Lepidosperma laterale &	Variable Sword Sedge	Sedge	Tube	-	344
Persicaria spp. #	Smartweed / Knotweed	Herb	Tube	-	100
Geitonoplesium cymosum	Scrambling Lily	Vine	Tube	-	100
				SUBTOTAL	**3,920**
				TOTAL	**4,462**

*= To be planted along watercourse only; # = likes wet feet

MANAGEMENT ZONE 3 – NO EXISTING VEGETATION ON OVERBANK (RECONSTRUCTION)

RECOMMENDED SPECIES LIST TOTAL APPROXIMATE AREA = 2,885 m² (260 m² within potential road reserve) (Overall minimum density approximately 1 plants per 1 m²)

Notes:
1) Setback trees 3 metres minimum from all property boundaries, sewer and service alignments
2) Distribute plants in groups on site in random arrangement – to be confirmed with super intendant on site
3) Species selected from regional ecosystem 12.11.24 technical description and cross-checked with site species list and Wildnet Online Search (4km radius)
4) Less flammable species to be planted within 20m of buildings

SCIENTIFIC NAME	COMMON NAME	PLANT FORM	POT SIZE	PLANTING DENSITY 1 : 10 m²	QUANTITY REQUIRED
TREES					
Eucalyptus camea (CD)	Broad-leaved White Mahogany	T1	Tube	-	30
Eucalyptus tindaliae (CD)	Tindal's Stringybark	T1	Tube	-	30
Corymbia intermedia (CD)	Pink Bloodwood	T1	Tube	-	25
Eucalyptus siderophloia	Grey Ironbark	T1	Tube	-	25
Eucalyptus macrocorys	Tallowwood	T1	Tube	-	25
Eucalyptus propinqua &	Small-fruited Grey Gum	T1	Tube	-	25
Lophostemon confertus &	Brush Box	T2	Tube	-	25
Angophora woodsiana	Smudgee	T2	Tube	-	25
Acacia disparrima	Hickory Wattle	T2	Tube	-	25
Acacia melanoxylon &	Blackwood	T2	Tube	-	25
				SUBTOTAL	**260**
SHRUBS				**1 : 5 m²**	
Alphitonia excelsa &	Soap Tree	Smt tree / shrub	Tube	-	58
Glochidion ferdinandi &	Cheese Tree	Smt tree / shrub	Tube	-	58
Leptospermum polygalifolium / Melaleuca nodosa &	-	Shrub	Tube	-	58
Hibiscus heterophyllus	Native Rosella	Shrub	Tube	-	58
Trema tomentosa	Poison Peach	Shrub	Tube	-	58
Samoentus similis	Twiggy Myrtle	shrub	Tube	-	58
Dodonaea triquetra &	Hop Bush	Shrub	Tube	-	58
Hovea acutifolia &	Purple Pea Bush	Shrub	Tube	-	58
Breynia oblongifolia &	Coffee Bush	Shrub	Tube	-	58
				SUBTOTAL	**522**
GROUND COVERS				**1 : 1 m²**	
Themeda triandra	Kangaroo Grass	Grass	Tube	-	213
Cymbopogon refractus	Barbed Wire Grass	Grass	Tube	-	170
Lomandra longifolia &	Mat Rush	Sedge-like	Tube	-	170
Lomandra multiflora	Many-headed Matrush	Sedge-like	Tube	-	170
Gahnia aspera &	Rough Saweedge	Sedge	Tube	-	170
Entolasia stricta	Wiry Panic	Grass	Tube	-	170
Dianella caerulea &	Blue Flax Lily	Sedge-like	Tube	-	170
Gahnia aspera	Rough Saweedge	Sedge	Tube	-	170
Fimbristylis dichotoma	Common Fringerush	Sedge	Tube	-	170
Lepidosperma laterale &	Variable Sword Sedge	Sedge	Tube	-	170
Geitonoplesium cymosum &	Scrambling Lily	Vine	Tube	-	170
Chrysocephalum apiculatum	*Yellow Buttons*	Groundcover	Tube	-	170
				SUBTOTAL	**2,083**
				TOTAL	**2,865**

& = Less flammable species

MANAGEMENT ZONE 4 – CONVEYANCE CHANNEL (RECONSTRUCTION / FABRICATION)

RECOMMENDED SPECIES LIST TOTAL APPROXIMATE AREA = TBA

Notes:
1) Final engineering and extent to be confirmed at completion of bulkworks
2) Zone to be treated in accordance with the Landscape Masterplan. Species palette to be consistent with RE 12.3.11

SCIENTIFIC NAME	COMMON NAME	PLANT FORM	POT SIZE	PLANTING DENSITY 1 : 10 m2	QUANTITY REQUIRED
TREES					
Refer to Management Zone 2 species schedule		Tree	Tube	-	-
				SUBTOTAL	**TBA**
SHRUBS				**1 : 5 m²**	
Refer to Management Zone 2 species schedule		Shrub	Tube	-	-
				SUBTOTAL	**TBA**
GROUND COVERS				**2 : 1 m²**	
Refer to Management Zone 2 species schedule		Groundcover	Tube	-	-
				SUBTOTAL	**TBA**
				TOTAL	**TBA**

ISSUE	DESCRIPTION	DRAWN	CHECKED
A	09/01/2019	Client Draft	TL
B	23/01/2020	RFI Response	TL/MC

DISCLAIMER:

REFERENCES:

CLIENT:
SANDSON PTY LTD

CONSULTANTS:
saunders havill group
Saunders Havill Group Pty. Ltd. ABN 76 144 672 945
Brisbane Office: 9 Thompson St Bowen Hills Q 4006
Gold Coast Office: 2/3 Olsen Ave Southport Q 4215
e brisbane@saundershavill.com w saundershavill.com
landscape architecture & urban design • environmental management • landscape architecture

PROJECT:
BAILEYS MOUNTAIN ROAD, UPPER COOMERA
LOT 58 ON SP191940

environmental management
PLAN OF:
Planting species schedule
DATE: 23/03/2020 CHECKED: TL/MC
CLIENT REF.: 8781 DRAWN: MC
DRAWING No.: 8781.E.08.CRMP.B

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

APPENDIX 5.4
SUPPORTING INFORMATION

(NOTE: SOME OF THIS INFORMATION IS GENERIC AND NOT INCLUDED FOR APPROVAL PURPOSES. IT IS ONLY PROVIDED FOR END USER KNOWLEDGE)

BUSHFIRE HAZARD ASSESSMENT

ELDON BOTTCHER ARCHITECT PTY LTD
145 VARSITY PARADE
VARSITY LAKES
QLD. 4327
PH 0755920082
E architects@eb-a.com.au

THIS ASSESSMENT IS BASED ON "A NEW METHODOLOGY FOR STATE WIDE MAPPING OF BUSHFIRE PRONE AREAS IN QUEENSLAND"
CSIRO
JANUARY 2014

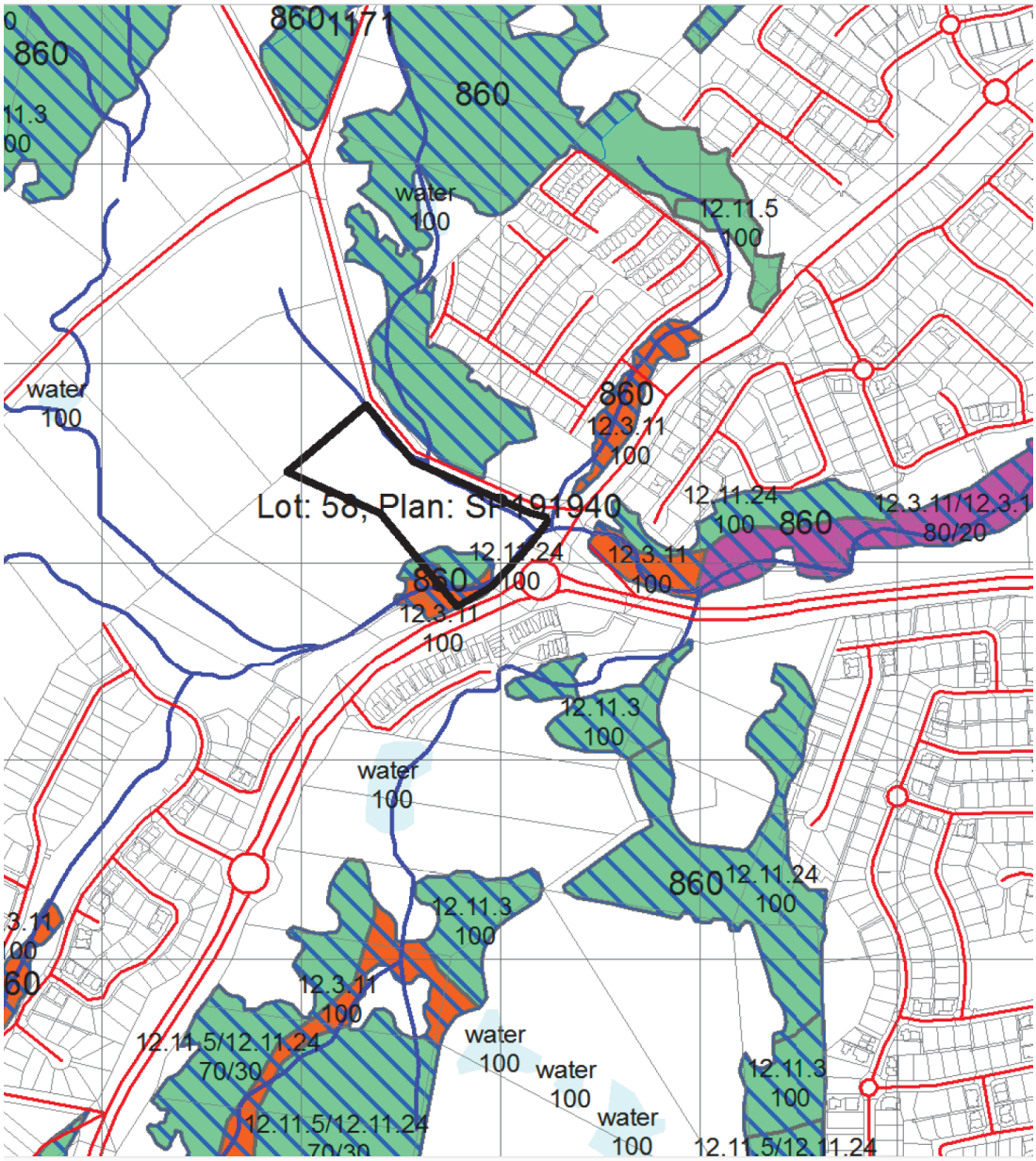
PROJECT	PROPOSED DEVELOPMENT	
SITE ADDRESS	202 BAILEYS MOUNTAIN ROAD UPPER COOMERA	
	12.11.24	
	VHC 9.2	
INPUTS		
FFDI	55	
TOTAL FUEL LOAD	17.2	tonnes/ha
SLOPE UNDER VEGETATION	4.5	degrees
RESULTS		
POTENTIAL FIRE LINE INTENSITY	13761.31	kw/m
HAZARD	MEDIUM	
APPROPRIATE MAPPING COLOUR		

ELDON BOTTCHER ARCHITECT PTY LTD (C) 23/3/20 1 OF 1

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.



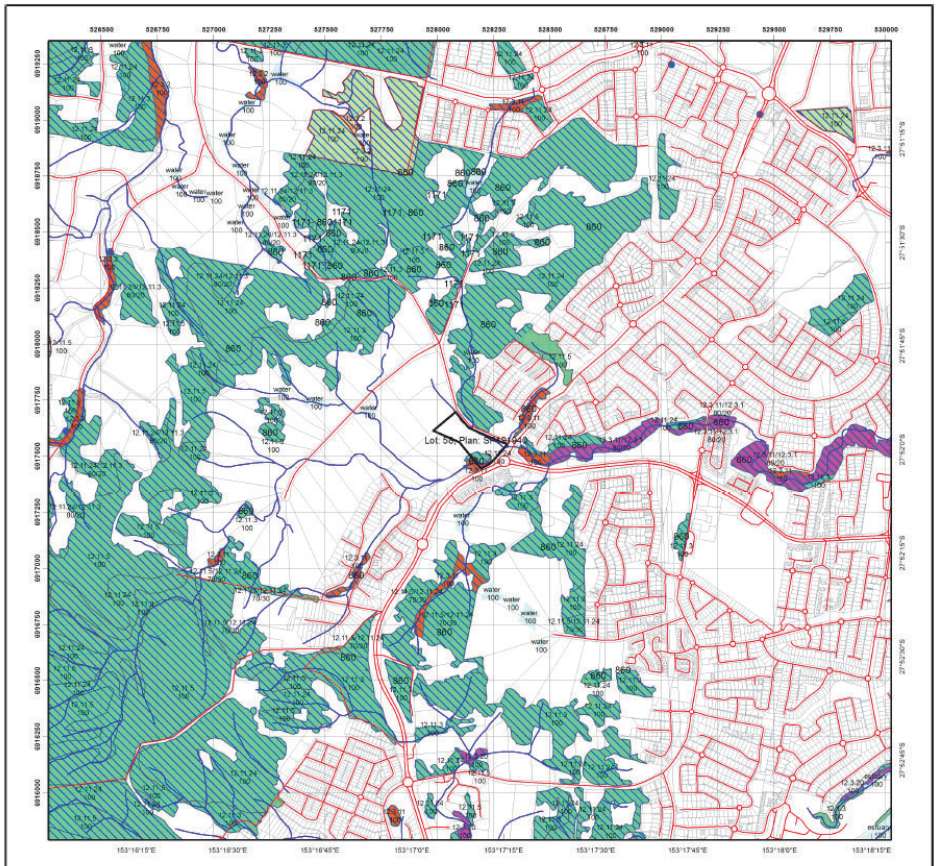
QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

23/03/2020 14:30:43
Lot: 58 Plan: SP191940



Vegetation Management Supporting Map

Legend

- Lot and Plan
- Category A or B area containing endangered regional ecosystems
- Category A or B area containing of concern regional ecosystems
- Category A or B area that is a least concern regional ecosystem
- Category A or B area under Section 20AH
  These areas are edged in yellow and filled with the remnant RE Status
- Category C or R area containing endangered regional ecosystems
- Category C or R area containing of concern regional ecosystems
- Category C or R area that is a least concern regional ecosystem
- Category C area under Section 20AI
  These areas are edged in purple and filled with the remnant RE Status
- Category X area
- Water
- Wetland on the vegetation management wetlands map
- Essential habitat on the essential habitat map
- Essential habitat species record
- Watercourses and drainage features on the vegetation management watercourse and drainage features map
  (Stream order shown as black number against stream where available)
- Roads
- National Parks, State Forest and other reserves
- Cadastral line
  Property boundaries shown are provided as a locational aid only

Queensland Government

LOCALITY DIAGRAM

N

0 140 280 420 560 700 m

This product is projected into:
GDA 1994 MGA Zone 56

Labels for Essential Habitat are centred on the area of enquiry.

Regional ecosystem linework has been compiled at a scale of 1:100 000, except in designated areas where a compilation scale of 1:50 000 is available. Linework should be used as a guide only. The positional accuracy of RE data mapped at a scale of 1:100 000 is +/- 100 metres.

Disclaimer:
While every care is taken to ensure the accuracy of this product, the Department of Natural Resources, Mines and Energy makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or incomplete in any way and for any reason.

Additional information may be required for the purposes of land clearing or assessment of a regional ecosystem map or PMAV applications. For further information go to the web site: www.dnrme.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

Digital data for the vegetation management watercourse and drainage feature map, vegetation management wetlands map, essential habitat map and the vegetation management remnant and regional ecosystem map are available from the Queensland Spatial Portal at http://www.information.qld.gov.au/

© The State of Queensland (Department of Natural Resources, Mines and Energy), 2020

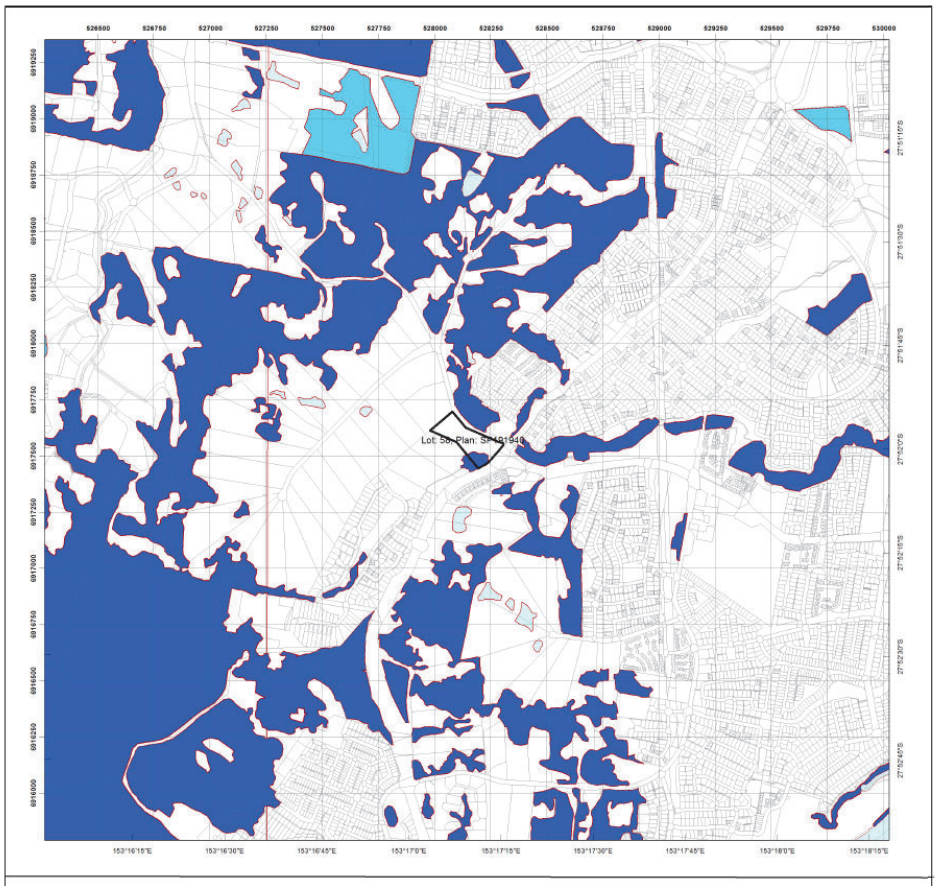
QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

23/03/2020 14:30:43
Lot: 58 Plan: SP191940



Regulated Vegetation Management Map

Legend

- Lot and Plan
- Category A area (Vegetation offsets/compliance notices/VDecs)
- Category B area (Remnant vegetation)
- Category C area (High-value regrowth vegetation)
- Category R area (Reef regrowth watercourse vegetation)
- Category X area (Exempt clearing work on Freehold, Indigenous and Leasehold land)
- Water
- Area not categorised
- Cadastral line
  Property boundaries shown are provided as a locational aid only

LOCALITY DIAGRAM

N

0 200 400 600 800 1,000 m

This product is projected into:
GDA 1994 MGA Zone 56

Disclaimer:
While every care is taken to ensure the accuracy of this product, the Department of Natural Resources, Mines and Energy makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or incomplete in any way and for any reason.

Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.dnrme.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

Digital data for the regulated vegetation management map is available from the Queensland Spatial Portal at http://www.information.qld.gov.au/

This map is updated on a monthly basis to ensure new PMAVs are included as they are approved.

Queensland Government

© The State of Queensland (Department of Natural Resources, Mines and Energy), 2020

Page 1

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

RE8	RE8_Label	VHC	VHC_DESC
12.1.1	Casuarina glauca woodland on margins of marine clay plains	28.2	28.2 Woodlands in coastal locations with species such as she-oak or swamp box
12.1.2	Saltpan vegetation including grassland, herbland and sedgeland on marine clay plains	35.4	35.4 Tidal saltmarshes
12.1.3	Mangrove shrubland to low closed forest on marine clay plains and estuaries	35.3	35.3 Shrubland associated with mangroves and tidal saltmarshes
12.11.1	Simple notophyll vine forest often with abundant Archontophoenix cunninghamiana (gully vine forest) on metamorphics ± interbedded volcanics	4.1	4.1 Notophyll and notophyll palm or vine forest
12.11.10	Notophyll vine forest ± Araucaria cunninghamii on metamorphics ± interbedded volcanics	2.1	2.1 Complex to simple, semi-deciduous mesophyll to notophyll vine forest
12.11.11	Araucarian microphyll vine forest on metamorphics ± interbedded volcanics; usually southern half of bioregion	5.1	5.1 Notophyll to microphyll vine forests
12.11.12	Araucarian complex microphyll vine forest on metamorphics ± interbedded volcanics; usually northern half of bioregion	5.1	5.1 Notophyll to microphyll vine forests
12.11.13	Semi-evergreen vine thicket on metamorphics ± interbedded volcanics; usually northern half of bioregion	7.1	7.1 Semi-evergreen to deciduous microphyll vine forest
12.11.14	Eucalyptus crebra, E. tereticornis, Corymbia intermedia woodland on metamorphics ± interbedded volcanics	13.2	13.2 Dry to moist eucalypt woodlands on undulating metamorphics and granite
12.11.15	Eucalyptus tereticornis, Corymbia intermedia open woodland with Xanthorrhoea johnsonii understorey on serpentinite	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.16	Eucalyptus cloeziana open forest on metamorphics ± interbedded volcanics	8.1	8.1 Wet eucalypt tall open forest
12.11.16x1	Eucalyptus cloeziana ± E. propinqua, E. acmenoides, E. microcorys and E. grandis tall open forest on sedimentary rocks	8.1	8.1 Wet eucalypt tall open forest
12.11.17	Eucalyptus acmenoides or E. portuensis open forest on metamorphics ± interbedded volcanics	9.1	9.1 Moist to dry eucalypt open forests on coastal lowlands and ranges
12.11.18	Eucalyptus moluccana woodland on metamorphics ± interbedded volcanics	13.2	13.2 Dry to moist eucalypt woodlands on undulating metamorphics and granite
12.11.18a	Eucalyptus moluccana, E. tereticornis and Lophostemon confertus open forest in gullies on metamorphics ± interbedded volcanics	13.1	13.1 Dry to moist eucalypt open forests on undulating metamorphics and granite
12.11.19	Eucalyptus fibrosa subsp. fibrosa woodland on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.2	Eucalyptus saligna or E. grandis, E. microcorys, Lophostemon confertus tall open forest on metamorphics ± interbedded volcanics	8.1	8.1 Wet eucalypt tall open forest
12.11.20	Corymbia intermedia, Lophostemon suaveolens woodland on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.21	Allocasuarina luehmannii, Melaleuca nervosa woodland on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.22	Angophora leiocarpa, Eucalyptus crebra woodland on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.23	Eucalyptus pilularis open forest on coastal metamorphics and interbedded volcanics	8.1	8.1 Wet eucalypt tall open forest
12.11.3	Eucalyptus siderophloia, E. propinqua ± E. microcorys, Lophostemon confertus, Corymbia intermedia, E. acmenoides open forest on metamorphics ± interbedded volcanics	9.1	9.1 Moist to dry eucalypt open forests on coastal lowlands and ranges
12.11.3a	Lophostemon confertus ± Eucalyptus microcorys, E. carnea, E. propinqua, E. major, E. siderophloia woodland on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.3b	Eucalyptus pilularis tall open forest on subcoastal hills and ranges of metamorphics ± interbedded volcanics	8.1	8.1 Wet eucalypt tall open forest
12.11.4	Semi-evergreen vine thicket on metamorphics ± interbedded volcanics	7.1	7.1 Semi-evergreen to deciduous microphyll vine forest
12.11.5	Corymbia citriodora subsp. variegata, Eucalyptus siderophloia, E. major open forest on metamorphics ± interbedded volcanics	10.1	10.1 Spotted gum dominated open forests
12.11.5a	Eucalyptus tindaliae, E. carnea, Corymbia intermedia ± E. siderophloia or E. crebra, Corymbia citriodora subsp. variegata woodland on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.5e	Corymbia citriodora subsp. variegata woodland ± Eucalyptus siderophloia or crebra, E. carnea, E. acmenoides, E. propinqua on metamorphics ± interbedded volcanics	10.2	10.2 Spotted gum dominated woodlands
12.11.5h	Eucalyptus planchoniana woodland to open forest on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.5j	Eucalyptus racemosa subsp. racemosa and/or E. seeana and Corymbia intermedia woodland on metamorphics ± interbedded volcanics	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.11.5k	Corymbia henryi ± Eucalyptus crebra, E. carnea, E. tindaliae, E. fibrosa subsp. fibrosa woodland on metamorphics ± interbedded volcanics	10.2	10.2 Spotted gum dominated woodlands
12.11.6	Corymbia citriodora subsp. variegata, Eucalyptus crebra woodland on metamorphics ± interbedded volcanics	10.2	10.2 Spotted gum dominated woodlands
12.11.7	Eucalyptus crebra woodland on metamorphics ± interbedded volcanics	13.2	13.2 Dry to moist eucalypt woodlands on undulating metamorphics and granite
12.11.8	Eucalyptus melanophloia, E. crebra woodland on metamorphics ± interbedded volcanics	17.2	17.2 Dry woodlands dominated by poplar box, silver-leaved ironbark or White's ironbark on sand or depositional plains
12.11.9	Eucalyptus tereticornis open forest on metamorphics ± interbedded volcanics. Usually higher altitudes	9.1	9.1 Moist to dry eucalypt open forests on coastal lowlands and ranges
12.11.9x1	Eucalyptus montivaga open forest on metamorphics ± interbedded volcanics	8.1	8.1 Wet eucalypt tall open forest
12.12.1	Simple notophyll vine forest usually with abundant Archontophoenix cunninghamiana (gully vine forest) on Mesozoic to Proterozoic igneous rocks	4.1	4.1 Notophyll and notophyll palm or vine forest
12.12.10	Shrubland of rocky peaks on Mesozoic to Proterozoic igneous rocks	29.3	29.3 Heathlands and associated scrubs and shrublands
12.12.11	Eucalyptus portuensis or E. acmenoides, Corymbia trachyphloia subsp. trachyphloia woodland on Mesozoic to Proterozoic igneous rocks	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.12.12	Eucalyptus tereticornis, Corymbia intermedia, E. crebra ± Lophostemon suaveolens woodland on Mesozoic to Proterozoic igneous rocks	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges
12.12.13	Araucarian Complex microphyll to notophyll vine forest on Mesozoic to Proterozoic igneous rocks	2.1	2.1 Complex to simple, semi-deciduous mesophyll to notophyll vine forest
12.12.14	Eucalyptus racemosa subsp. racemosa ± Lophostemon confertus, Syncarpia glomulifera, Eucalyptus acmenoides woodland usually on rocky near coastal areas on Mesozoic to Proterozoic igneous rocks	9.2	9.2 Moist to dry eucalypt woodland on coastal lowlands and ranges

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

RURAL FIRE SERVICE

Queensland Government

State-wide Bushfire Prone Area Mapping

Vegetation Hazard Class Descriptions and Fuel Characteristics – Jan 2017

Vegetation Hazard Class		Potential Fuel Load (t/ha)						Prone Type [1]		Fuel Continuity[2]	
		Surface	Near Surface	Elevated	Bark	Total (Remnant)	Total (Non-Remnant)	Remnant	Non-Remnant	Remnant	Non- Remnant
1.1	*Complex mesophyll to notophyll vine forests*	2.6	0.0	0.0	0.0	2.6	12.0	3	1	2	1
2.1	*Complex to simple, semi-deciduous mesophyll to notophyll vine forest*	3.5	0.0	0.0	0.0	3.5	12.0	3	1	2	1
3.1	*Notophyll vine forest*	4.5	0.0	0.0	0.0	4.5	12.0	3	1	2	1
3.3	*Notophyll vine thicket*	4.4	0.0	0.0	0.0	4.4	12.0	3	1	2	1
4.1	*Notophyll and notophyll palm or vine forest*	4.5	0.0	0.0	0.0	4.5	12.0	3	1	2	1
5.1	*Notophyll to microphyll vine forests*	3.9	0.0	0.0	0.0	3.9	12.0	3	1	2	1
5.2	*Notophyll to microphyll vine forest with sparse overstorey*	3.9	0.0	0.0	0.0	3.9	12.0	3	1	2	1
5.5	*Sedgeland within Notophyll to microphyll vine forests*	3.9	0.0	0.0	0.0	3.9	12.0	3	1	2	1
6.1	*Montane Notophyll vine forest and microphyll fern forest*	3.9	0.0	0.0	0.0	3.9	12.0	3	1	2	1
6.3	*Montane Notophyll vine thicket and microphyll fern thicket*	3.9	0.0	0.0	0.0	3.9	12.0	3	1	2	1
7.1	*Semi-evergreen to deciduous microphyll vine forest*	6.0	0.0	0.0	0.0	6.0	12.0	3	1	2	1
7.2	*Sparse semi-evergreen to deciduous microphyll vine forest*	6.0	0.0	0.0	0.0	6.0	12.0	3	1	2	1
8.1	*Wet eucalypt tall open forest*	28.0	3.0	2.0	2.0	35.0	35.0	1	1	1	1
8.2	*Wet eucalypt tall woodland*	18.0	3.1	1.7	1.0	23.8	23.8	1	1	1	1
9.1	*Moist to dry eucalypt open forests on coastal lowlands and ranges*	17.5	3.5	2.2	1.0	24.2	24.2	1	1	1	1
9.2	*Moist to dry eucalypt woodland on coastal lowlands and ranges*	11.4	3.5	1.3	1.0	17.2	17.2	1	1	1	1
9.3	*Shrubland within moist to dry eucalypt on coastal lowlands and ranges*	7.8	3.0	1.9	0.0	12.7	12.7	1	1	1	1
10.1	*Spotted gum dominated open forests*	16.3	3.0	1.5	0.0	20.8	20.8	1	1	1	1
10.2	*Spotted gum dominated woodlands*	14.0	3.0	1.0	0.0	18.0	18.0	1	1	1	1
11.2	*Moist to dry eucalypt woodlands on basalt areas*	7.5	4.0	0.5	1.0	13.0	13.0	1	1	1	1
12.1	*Dry eucalypt open forest on sandstone and shallow soils*	15.0	3.5	1.5	1.0	21.0	21.0	1	1	1	1
12.2	*Dry eucalypt woodlands on sandstone and shallow soils*	12.0	2.6	1.8	1.0	17.4	17.4	1	1	1	1
13.1	*Dry to moist eucalypt open forests on undulating metamorphics and granite*	15.9	3.5	1.4	1.0	21.8	21.8	1	1	1	1

[1] Prone Type: 1 = Bushfire Prone, 2 = Grass Fire Prone, 3 = Low Hazard

[2] Fuel Continuity: 1 = Continuous, 2 = Discontinuous

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING

BUSHFIRE MANAGEMENT PLAN ASSESSED

File No: MCU/2018/58

This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.

6.PROFILES

ELDON BOTTCHER

EDUCATION AND QUALIFICATIONS

Graduate Diploma in Design in Bushfire Prone Areas
University of Western Sydney
Diploma in Architecture
Queensland Institute of Technology
Certificate of Rural Fire Management
University of Southern Queensland
Registered Architect
Queensland
A+ Architect
Australian Institute of Architects
FPA Australia Certified Practitioner (BPAD-Level 3-16935)
Bushfire Planning and Design (BPAD-LEVEL 3), Alternate Solutions & DTS

PROFESSIONAL MEMBERSHIPS

Fellow
Australian Institute of Architects
Member
Australian Institute of Emergency Services
Member
Australian Institute of Engineers Society of Fire Safety
Member
Queensland Environmental Law Association.
Member Board of Experts
Bushfire Building Council of Australia
Associate Member
Institution of Fire Engineers
Corporate Member
Fire Protection Association of Australia

PROFESSIONAL EXPERIENCE

Director
Eldon Bottcher Architect Pty Ltd since 1978
Bushfire Assessment and Planning Consultant since 1998
Group Officer
Albert Rural Fire Brigades Group
Queensland Fire and Rescue Service
Group Officer
Gold Coast Rural Fire Brigades Group
Queensland Fire and Rescue Service
Group Officer
South East Regional Support Group
Queensland Fire and Rescue Service
Planning Officer
Gold Coast Rural Fire Brigades Group
Queensland Fire and Rescue Service
Member Practice Committee AIA Qld Chapter
BBCA representation to Australian Standards Committee FP20 (AS 3959)
Foundation & Life Member
Guanaba Rural Fire Brigade

OTHER BUSHFIRE RELATED COURSES AND TRAINING

I.C.S./AIIMS (40 hr. course) in Incident Command Systems
Certificate 4 (Workplace Training and Assessment)
RFSQ Level 1
RFSQ Level 2 (Officer)
RFSQ Fire Management 1
RFSQ Crew Leader
Certificate II in Public Safety (Firefighting Operations)
Fire Weather 1

BUSHFIRE RELATED AWARDS

National Planning Award
State Planning Award
Planning Institute of Australia
Gold Coast Bushfire Management Strategy
(Co-Initiator and Member of Preparation Committee)

Australian Government
National Medal
Long and Distinguished Service to Fire fighting
Queensland Fire and Rescue Service
Diligent and Ethical Service Medal + Clasp
Service to Fire fighting

Queensland Government
Australia Day Medallion
Services to Rural Fire Fighting
Queensland Government
Year of the Volunteer Medallion
Services to Fire fighting
UDIA
Best Consultancy Team Award in 2007.

SERVICES OFFERED

Bushfire management Reports

Bushfire Safety Engineering

Bushfire Planning and Design

Bushfire Hazard Assessment

Alternative Solutions

Expert Witnessing
(See Planning and Environment Court of Queensland Determination
File No. BD 624 of 2005 sections 28 to 35)

Continuing Professional Development Lectures

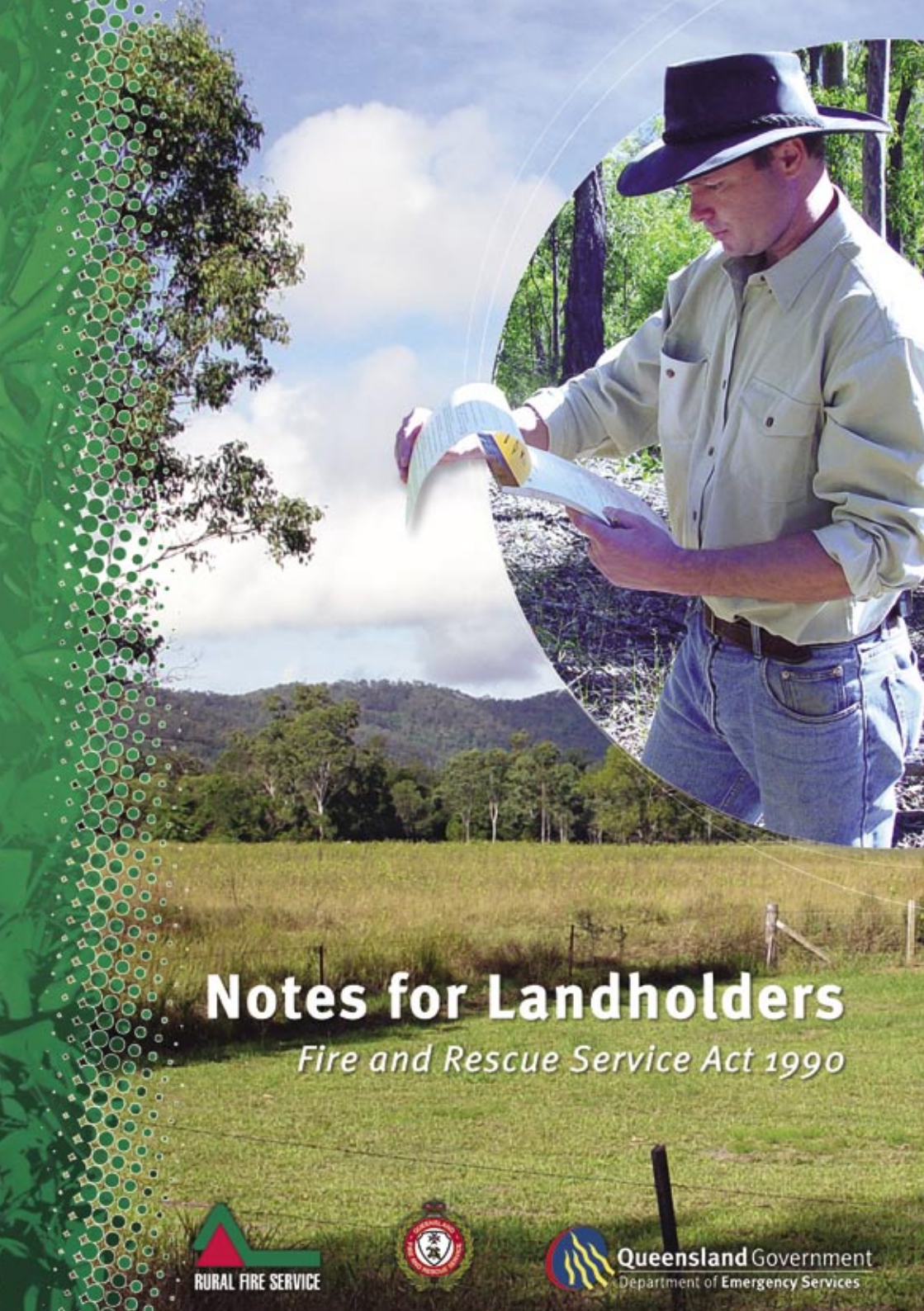
Tertiary Education Lectures and Tutorials

Town Planning Bushfire Codes for Local Authorities

Bushfire Burn Planning

General consultancy relating to all aspects of Bushfire

QLD FIRE & EMERGENCY SERVICES
CITY OF GOLD COAST BUSHFIRE PLANNING
BUSHFIRE MANAGEMENT PLAN ASSESSED
File No: MCU/2018/58
This Plan is to be read in conjunction with QFES Cover Sheet bearing the same file number.



Notes for Landholders

Fire and Rescue Service Act 1990

RURAL FIRE SERVICE

Queensland Government
Department of Emergency Services

Fire And Rescue Service Act 1990

This brochure contains a brief outline of the relevant parts of the *Fire and Rescue Service Act 1990* free from legal technicalities. The explanations are not intended to be exhaustive and if any Section of the Act is not fully understood, enquiries should be made at your local Rural Fire Service District Office. Contact numbers are included in this brochure.

The *Fire and Rescue Service Act 1990* is the legal document supporting all activities relevant to emergency services personnel involved with the -

- prevention of fire
- response to fire
- response to other incidents endangering life, property and the environment.

It should be noted that the Act does not seek to prevent or prohibit the use of fire, but promotes the safe use of fire as a land management tool within the framework of the Fire Warden network and the Permit to Light Fire system.

A network of Fire Wardens and Chief Fire Wardens operates throughout the State. A Fire Warden is a voluntary officer responsible for providing sound advice to property owners on fire management issues. Fire Wardens control the use of fire through the issue of Permits to Light Fire to ensure the safety of the environment in their local community.



1. Permits to light fire

In Queensland, there is no designated "fire season" and a permit is required at all times for a fire that is larger than 2 metres in any direction.

The procedures for applying for a permit are –

- Obtain an "Application for a Permit to Light Fire" (Form RF 11A) from your Fire Warden. The application may be made in writing, by telephone, facsimile or orally.
- Notify each and every neighbour* of your intention to burn. Specific details of location, area and special precautions should be provided at this time.
- If requested, present the completed Form RF 11A to the Fire Warden to obtain a "Permit to Light Fire" (Form RF 10B).

***In this instance, 'neighbour' refers to the occupier of adjoining land**

Special notes –

- Only the Fire Warden has the authority to issue a Permit to Light Fire.
- The Fire Warden has no authority to issue a permit outside his/her Fire Warden's district.
- The Fire Warden may impose such conditions on the permit as considered necessary and may direct that the local Rural Fire Brigade take charge of the operation.
- The Fire Warden has power to issue a permit even if one or more neighbours object to the burning. In such cases, the Fire Warden must include on the permit a condition that the neighbour must be given at least 2 hours prior notice by the permittee that the fire is to be lit.
- A Fire Warden may cancel a permit at any time, but must do so in writing.
- Rural Fire Service District Inspectors have an over-riding authority to issue permits in situations where disputes exist.
- Failure to obtain or comply with the conditions of a permit is an offence against The *Fire and Rescue Service Act 1990*. Penalties apply.
- Permits are available at no charge.



Powers of Chief Fire Warden

The Chief Fire Warden for the local Rural Fire District may issue a permit where there is no appointed Fire Warden for the district where a fire is to be lit. (If a Fire Warden is appointed and available, the Chief Fire Warden has no authority to issue such permit).

Cane Burning

Fires lit for the routine burning of sugar cane in accordance with the established practice of the industry are covered by a separate agreement under the *Fire and Rescue Service Act 1990*. Persons requiring further information on cane burning should contact their local Fire Warden or their Rural Fire Service District Office.

The rights of adjoining neighbours must be considered by the person lighting the cane (or residual trash or tops) in accordance with provisions outlined in the official Rural Fire Service documentation of 21 June 1993 (QFS 2831).

2. Fires not requiring a permit

Some fires are exempt from permit, provided that adequate precautions are taken to prevent the spread of fire and the lighting of the fire conforms with any local government local law. Exempt fires are those:

- in which neither the height, width nor length of the material to be consumed exceeds 2 metres
- lit for the purpose of burning the carcass of a beast
- at a sawmill lit for the purpose of burning sawdust or other residue resulting from the operation of a sawmill
- lit out-doors, if enclosed in a fireplace so constructed as to prevent the escape of fire or any burning material.

It is advisable to check Local Government Bylaws and Regulations which may be applicable to these types of fires. Penalties apply to the lighting of these fires when they are prohibited under local government local laws, the Health Act 1937, or the Environmental Protection Act 1994.

Most local governments have provided alternative means (other than fire) for disposal of vegetation and waste materials through refuse collection and/or free disposal of green waste at council tips.



3. Reporting fires

Where occupiers become aware of an unauthorised fire burning on their land (irrespective of how it was lit), they must:

(a) take all reasonable steps to extinguish or control the fire

(b) as soon as practicable, report the existence and location of the fire to the Fire Service by telephone to **000** (triple zero).

4. Fire Hazards

Any person creating a fire hazard may be instructed by an authorised fire officer to reduce the hazard. Failure to carry out these instructions renders the offender liable for prosecution and costs incurred in either reducing the hazard or in legal proceedings, are recoverable by law.

The Commissioner, Queensland Fire and Rescue Service, may require any occupier of premises or land to:

- take measures to reduce the risk of fire starting
- reduce the potential danger to persons, property or the environment, should a fire occur
- burn off or remove any flammable material, subject to specific conditions
- through an authorised fire officer, order the extinguishment of any fire considered dangerous.



5. Emergency provisions

The Commissioner, QFRS, with the approval of the Minister, can declare a State of Fire Emergency when fire weather conditions become extremely dangerous. The restrictions are normally imposed over an entire local government area and prohibit the lighting of all or only certain types of fires, depending on the severity of the emergency. (Gas and electric barbecues may be used).

During a State of Fire Emergency:

- all open fires are prohibited
- all Permits to Light Fire issued in the area under a declaration are cancelled
- other special conditions (or exemptions) may be imposed

Penalties for breaches of the Act are increased during a State of Fire Emergency.

Fire and Rescue Service Act 1990

6. Investigation of offences

All persons are required to supply their names and address when required by an authorised fire officer investigating a breach of the Act. Failure to do so is an offence in itself, irrespective of any other breach of the Act.

7. Offences/Penalties

Penalties apply to persons committing breaches of the Act. Depending on the severity of the breach, penalties may constitute fines, or, for criminal offences, fines and prison term with hard labour.

It is an offence against the Act to -

- fail to comply with any conditions of a permit
- leave a fire unattended
- fail to take reasonable measures to extinguish any fire in such circumstances as to allow the fire to escape into another property;
- provide misleading or false information in respect of an application for a permit

In addition, the person lighting the fire may be held responsible for any damage caused by the fire.



8. Damages

No proceedings under the *Fire and Rescue Service Act 1990* prevent a person seeking compensation at Common Law for damages caused by fire. However, a person holding a Permit to Light Fire and observing all conditions of the permit when lighting such fire, will not be held to be liable for damages, unless it can be proven that such actions were the result of reckless or malicious actions causing loss, injury or damage.

9. Further information

Definitions *Definitions of terms used are –*

Term	**Definition**
Adjoining	Refers to the land mentioned in Section 64(3)(a) and (b) of the Act namely: (a) the land that touches some part of the land in question; or (b) not separated from that land by a watercourse, road or firebreak not less than 10 metres wide and clear of all flammable material in every direction.
Occupier of land	Refers to the person who owns or is charged by the owner or by law with the management of the land. It includes the situation where there is no person in actual occupation of the land.
Authorised Officer	Refers to a permanent officer of the Queensland Fire and Rescue Service, all auxiliary Urban Fire Officers, Assistant Commissioner Rural Operations, Regional Inspector, District Inspector, Rural Training Manager, Rural Training Officer

All Queensland legislation is accessible through the Internet at – www.legislation.qld.gov.au.



Rural Fire Service Offices

Southern Region	07 3284 3917
Bundaberg	07 4153 3244
Caboolture	07 5499 1009
Ipswich	07 3202 1444
Maryborough	07 4123 0542
Miles	07 4627 1848
Roma	07 4622 2074
Toowoomba	07 4639 9172
Northern Region	07 4799 7183
Barcaldine	07 4651 1190
Cairns Peninsula	07 4039 8240
Charters Towers	07 4787 8213
Cloncurry	07 4742 2358
Emerald	07 4982 0001
Innisfail	07 4061 0650
Mackay	07 4965 6641
Rockhampton	07 4938 4736

www.ruralfire.qld.gov.au

Be aware of the risks of living in a rural environment and be prepared in case of bushfire.

Educate children about fire safety and survival.

Join your local Rural Fire Brigade. Keep names and telephone numbers of your local Rural Fire Brigade Officers by the telephone.

For further information or general fire protection safety matters, contact the Rural Fire Service District Office nearest to you -

SOUTHERN REGION

Redcliffe	*07 3284 3917*
Ipswich	*07 3202 1444*
Bundaberg	*07 4153 3244*
Caboolture	*07 5499 1009*
Maryborough	*07 4123 0543*
Miles	*07 4627 1848*
Roma	*07 4622 2074*
Toowoomba	*07 4639 9172*

NORTHERN REGION

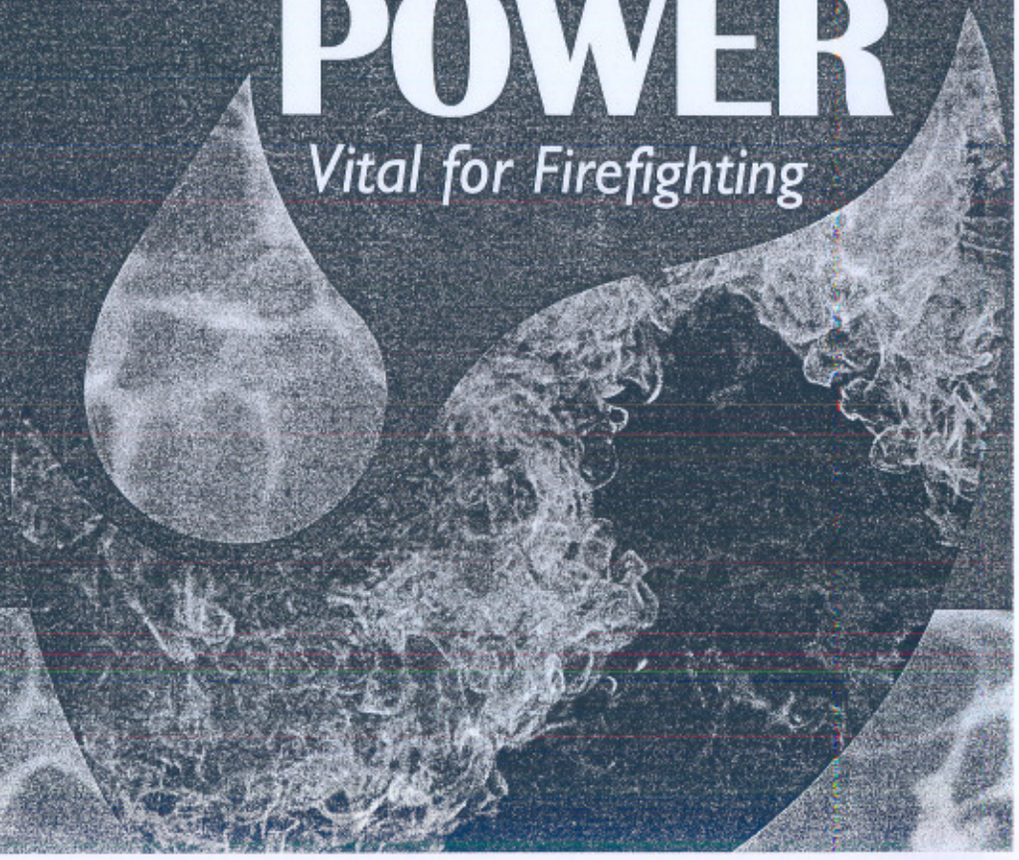
Charters Towers	*07 4722 1183*
Barcaldine	*07 4651 1190*
Cairns North	*07 4052 3240*
Cairns South	*07 4054 4333*
Townsville	*07 4787 8213*
Cloncurry	*07 4742 2358*
Mackay	*07 4951 8836*
Rockhampton	*07 4938 4736*

Rural Fire Service

A Division of Queensland Fire and Rescue Authority

WATER *plus* POWER

Vital for Firefighting



WATER *plus* POWER

Vital for Firefighting

The trend towards rural residential living has increased the dangers to life and property from wildfire. The risk of losing life and property during a bushfire or grassfire is affected by many factors: the location and accessibility of the property, the amount and type of surrounding vegetation, the condition and placement of buildings and the availability of water.

The garden hose can save your house in a bushfire, if the right preparations have been made. But an emergency water supply will be needed, because in most bushfires the mains water supply is likely to fail and electric power supplies will probably be cut off.

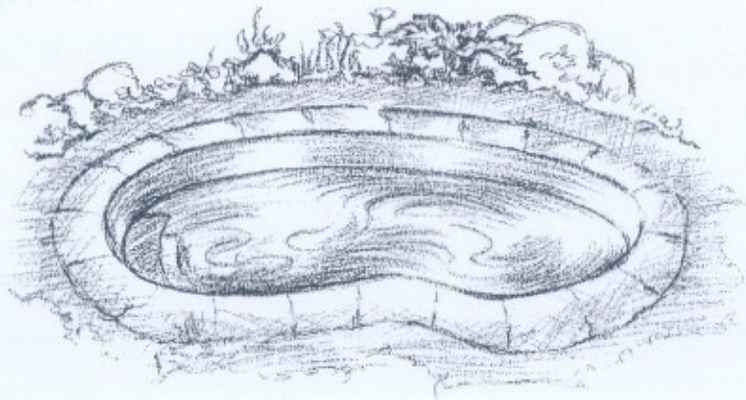
The emergency supply needs to be gravity fed, unless you put in a petrol/diesel pump to provide water pressure.

Here's how to keep the water up to a fire.

Store It

If your house is on mains water, you can run it through a storage tank, so that the tank is always full. If you use tanks make sure that a water supply for fire fighting is always kept in reserve. A swimming pool or dam is fine.

Old Fire & Rescue ...ervice
Gold Coast Bushfire ...annin...
Bushfire Management Plan
Sighted File No
Plan to be read in conjunction with OFR's
cover sheet bearing name of the ...



How Much to Store?

To protect the house itself, you need a minimum of 1,000 litres - preferably more. For a sprinkler system, allow at least 22,000 litres - plus a further supply for household fire fighting.

Where reticulated water is not available, a 45,000 litre tank is recommended as backup water supply.

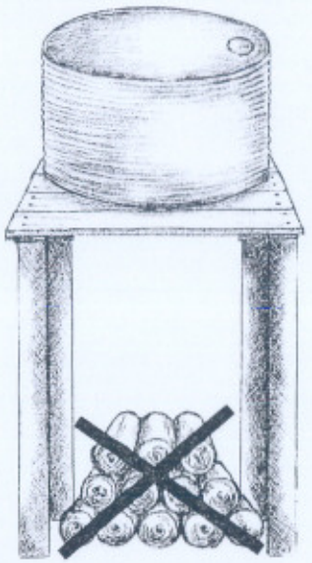
Raise It

Your emergency supply should be gravity fed. Put the tank on a raised stand, and put another small tank in the ceiling. Fit a tap to the ceiling tank, for filling buckets.

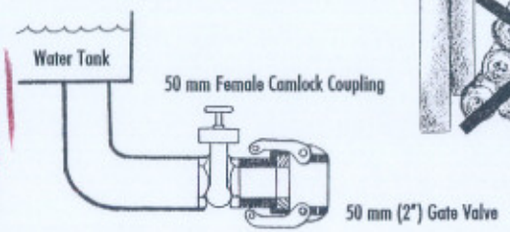
CAUTION:- Be aware that under extreme bushfire conditions, elevated water supply tanks may crack as reinforcing metal expands. Plastic pipes above ground may also fail.

Protect It

A metal tank stand may buckle in the heat of a bushfire, so put a heat shield around it - corrugated iron is fine. Do not store the woodheap, or any other flammable material, under the tank stand.



Tanks should be fitted with a 50mm female Camlock coupling to enable the Rural Fire Brigade appliance to couple up to them and should be fitted with a gate or ball valve.



Pump It

If you are mechanically minded, a small pump can be a real help in boosting water pressure for your hoses. A small 3.75 kW (5 hp) petrol or diesel pump is all you need. Make sure the pump can be operated by any member of the family. Check the pump on high fire danger days to be sure it is fuelled and starts readily. (A key start ignition system is of course ideal). But don't rely on a pump unless you are prepared to maintain it in working order.

If you wish to use an electric pump to secure your property in the event of a house fire, ensure there is an independent supply from a pole mounted switch and meter box.

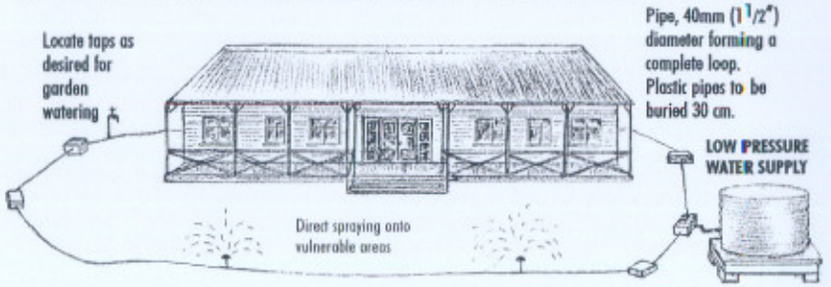
Sprinklers & Hoses

Sprinkler systems can be extremely valuable in defending your home against wildfire, provided you have sufficient water supplies. You will need at least 22,000 litres of water from a tank, dam or swimming pool. Do not rely on mains water except to help replenish the water tanks. The system need not be elaborate. An extension of your garden watering system can be used to wet the most vulnerable areas of the house, such as the immediate surrounding garden or lawn area, under floors, roofs, eaves, LP gas cylinder and timber balcony areas.

Run the reticulation system into a loop right around the house. Put in gate or ball valves and hose couplings at each corner, so you can deliver the full force of water wherever you need it.

Remember that plastic water pipes are likely to melt. Use metal pipes, or bury plastic ones at least 30 cm underground. Make sure you have enough hoses to cover all the house. If they are plastic, you will need to take them inside while the fire front passes, to stop them melting.

For Fire Protection



Locate 25 mm (1") gate valves and hose couplings opposite the corners of the house. Hoses of sufficient length to cover the whole of the house (e.g. 10m) should be available for fire fighting. Shut-off nozzles should be fitted.

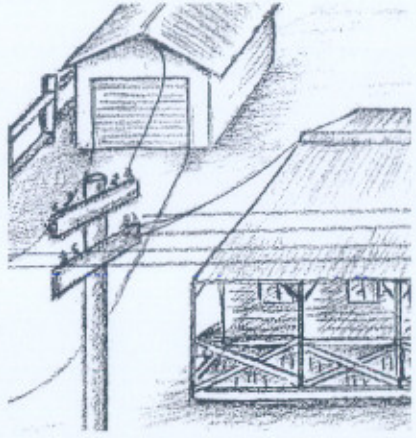
Ground level or roof sprinklers may be fitted if sufficient water is available.

Petrol/diesel pump (5h.p./3.75kW) for fire fighting - connect to allow bypass of any electrical pump. The pump should be in a shed or otherwise enclosed, giving a 45 cm airspace around pump.

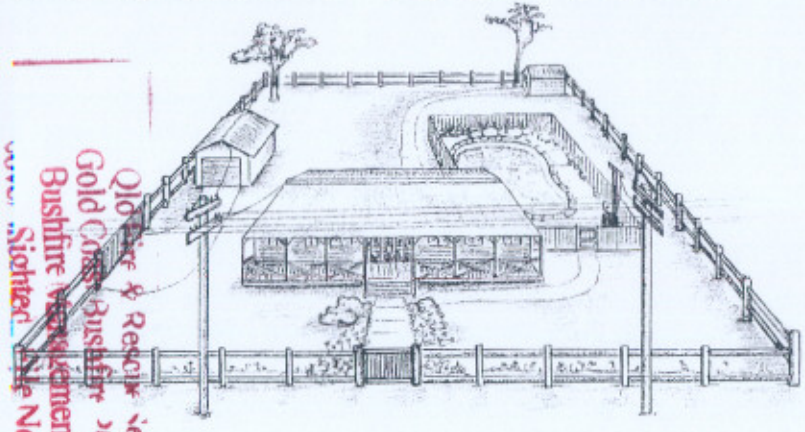
Using Electricity

Electric power normally fails during the early stages of a house fire if the meter and switch box is consumed by the fire.

Have the power supply connected to a pole mounted meter and switch box with independent power supplies to both the house and pump, sheds etc.



Minimise the Risk



- Fires are spread and fuelled by flammable material on the ground. Clear away all dried grass, dead leaves and branches, brush etc under trees near your house.
- Clean out your gutters. Consider installing mesh or gutter guard.
- Ensure the roof and roof capping is well sealed to prevent entry of sparks. Also check for gaps near the chimney and guttering where embers may accumulate .
- Place appropriate fire extinguishers in prominent and easily accessible locations.
- Set up sprinklers to keep the ground, roof and walls damp. A portable diesel or petrol pump drawing water from your tank, pool or dam is ideal. It will make you independent of pressure loss in mains water or power failure.
- Maintain a well cut green lawn around the house, with well spaced trees, to act as a break.
- A wide gravel or paved drive will provide additional protection.
- Keep wooden trellises and other timber addition to a minimum and use metal support posts around the house.
- Avoid the real danger of wind blown debris and embers starting fires under your house by covering in all underfloor areas.•
- Check walls for cracks and gaps. A well sealed wall increases your protection against wind blown sparks.
- A roof of low profile is the safest. Securely fix metal roofing to withstand high velocity "fire storm" winds.
- Protect vents and windows externally with fine wire mesh to prevent spark entry.
- Store firewood well away from the house.
- Store flammable fuels well away from the house.
- Increase your safety by paving around buildings with masonry, slate or concrete.
- Masonry garden walls help stop embers blowing onto house walls and deflect grass fires.
- Ensure farm animals are in a well cleared, preferably bare, paddock or large yard.
- Keep all your firefighting equipment in one convenient location and easily accessible.
- Connect large diameter gate valve fittings to the outlet of your tanks to provide ample water supply to your firefighting pump.
- Ensure that all pumps and hoses are working well by testing fire equipment regularly. The hoses should reach every part of the house.

LESS FLAMMABLE VEGETATION (After C. Tran)

The following species are proposed within Inner Radiation Zones & gullies. The balance of species for Outer Zones are to include locally indigenous species, such as Ficus obliqua, & F. platypoda.

SPECIES	COMMON NAME
Trees	
Macaranga tanarius	Macaranga
Melicope elleryana	Pink Flowered Doughwood
Elaeocarpus reticulatus	Blueberry Ash
Glochidion ferdinandii	Cheese Tree
Acmena smithii	Lilly-pilly
Ficus platypoda	Rock Fig
Ficus macrophylla	Moreton Bay Fig
Cupaniopsis anacardioides	Tuckeroo
Eupomatia laurina	Bolwarra
Palms	
Archontophoenix cunninghamiana	Piccabeen Palm
Livistona australis	Cabbage Tree Palm
Shrubs	
Persoonia cornifolia	Broad-leaved Geebung
Hibiscus heterophyllus	Native Rosella
Alpinia caerulea	Native Ginger
Melastoma affine	Blue Tongue
Dodonea triquetra	Forest Hop Bush
Cassine australis	Red Olive Plum
Groundcovers	
Crinum pendunculatum	Spider Lily
Alocasia brisbaniensis	Cunjevoi
Myoporum acuminatum	Coastal Boobialla
Lomandra longifolia	Spiny-headed Mat Rush
Lomandra hystrix	Mat Rush
Lomandra multiflora	Many-flowered Mat Rush
Carpobrotus glaucescens	Angular Pigface
Hibbertia scandens	Climbing Guinea Flower
Hibbertia obtusifolia	Grey Guinea Flower
Hardenbergia violacea	Native Sarsaparilla
Scaevola calendulacea	Scented Fan Flower
Viola hederacea	Native Violet
Ferns	
Cyathea cooperi	Straw Treefern
Todea barbara	King Fern

Qld Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted - File No.
Plan to be read in conjunction with QFRS
cover sheet bearing same file no.

DISCLAIMER

Determined by research in Gold Coast Hinterland by Chuong Tran as part of his PHD Research Project.

The use of these plans must be supplemented by other fire mitigation strategies (Zoning/Landscape Management etc) to ensure maximum preparedness to wildfire.

Under extreme conditions, these plants will be less effective and may increase hazard. Be sure to plant outside / away from structures.





Fire Safety Publications

Tree Selection for Fire-Prone Areas

Flammability

All plants will burn, but some are more tolerant of fire than others.

Severe fires cause more damage. Low to moderate fires scorch or burn plants. High-intensity fires incinerate plants. Young plants are more susceptible to damage than mature plants.

Features of plants that provide protection from fire include:

- high salt content of leaves

- high moisture content of leaves

- low volatile oil content of leaves

- thick bark protecting conductive tissues and dormant buds

- seeds enclosed in woody capsules

- dense crown

- lowest branches out of reach of ground fires

Plants that retain or accumulate dead leaves and twigs will burn, especially if this material is continuous from the ground to the crown. Trimmed cypress hedges, for example, are an extreme fire hazard.

Volatile oils in leaves of eucalypts, callistermons and melaleucas burst into flames on heating and increase fire intensity.

Thick bark will protect trees, but may be a fire hazard if it is loose, fibrous or stringy. These types of bark easily ignite and encourage fire to spread through the crown of the trees. Wind can carry burning bark, especially loose, flaky or ribbon bark, away to start new fires - a process called "spotting"

Ability to regenerate

Many plants can regrow or regenerate after a fire. Native plants have evolved with fire and most will regenerate well. They have survival mechanisms such as dormant buds, thick bark and thick, woody capsules to protect seeds, or they store seed in the soil. Introduced plants have few survival mechanisms, but burn less readily than most natives.

Eucalypts can reshoot from dormant buds beneath their bark. Casaurinas and some acacias reshoot from roots. Some eucalypts, acacias, tea-trees, banksias, hakeas and callistemons regenerate from seed. Seed of many acacias is stored in the soil and germinates after fire. Larger acacias are more tolerant of fire than smaller ones.

If crowns and trunks of native species such as eucalypts, acacias and casaurinas are killed by fire, the tree will often reshoot from the stump when felled.

Introduced deciduous trees, such as poplars and willows, reshoot from roots, and oaks reshoot from stumps when the fire-killed crown and trunk is felled. Most pines will not recover if more than half their foliage is burnt, although Canary Island pine, Ponderosa pine, Aleppo pine, and Redwood are more fire-tolerant than this.

After the fire

Ground cover and prunings from fodder trees may provide supplementary stockfeed when pastures are burnt. Saltbush, most casaurinas, several species of eucalypt and acacia, poplars and willows are all fodder trees.

Fire-damaged shelterbelts will still protect stock from wind and sun, so retain them until new shelterbelts are established.

Fire-tolerant plants may provide a valuable refuge and source of food after a fire for wildlife such as small marsupials, nectar-feeding birds, bees and other insects.

c - prefers cool climate,

x - extensively naturalised: might be declared noxious weed in some areas.

Qld Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted - File No.
Plan to be read in conjunction with QFRS
cover sheet bearing same file no.

The more fire resistant native trees and shrubs include:

- Acacia cyclops
- Acacia glandulicarpa
- Acacia howittii
- Acacia iteaphylla
- Acacia melanoxylon
- Acacia pravissima
- Acacia prominens
- Acacia terminalis
- Acacia vestita
- Acmena smithii
- Agonis juniperina
- Angophora costata
- Atriplex spp.
- Brachychiton populneus
- Casuarina cristata
- Casuarina cunninghamiana
- Eucalyptus maculata
- Ficus macrophylla
- Hakea salicifolia
- Hakea suaveolens
- Heterodendrum oleifolium
- Lagunaria patersonii
- Melaleuca lanceolata
- Melia azedarach
- Myoporum insulare
- Pittosporum undulatum
- Tristania conferta West Australian Coastal Wattle
- Hairy Pod Wattle
- Sticky Wattle
- Gawler Range Wattle
- Blackwood
- Ovens Wattle
- Golden Rain Wattle
- Cedar Wattle
- Hairy Wattle
- Lilly Pilly
- Juniper Myrtle
- Apple Jack
- Saltbush
- Kurrajong
- Belah

Qld Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted - File No.
Plan to be read in conjunction with QFRS
cover sheet bearing same file no.

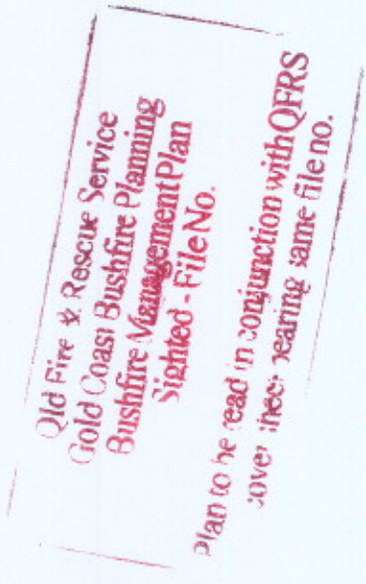
- River She-Oak
- Spotted Gum
- Moreton Bay Fig
- Willow Hakea
- Sweet Hakea
- Cattlebush
- Pyramid Tree
- Moonah
- White Cedar
- Boobialla
- Sweet Pittosporum
- Brush Box

Introduced plants that are hard to burn include:

- Acer campestre
- Acer negundo
- Acer platanoides c
- Acer pseudoplatanus c
- Aesculus hippocastanum c
- Alnus jorullensis
- Calodendrum capense
- Castanea sativa c
- Celtis occidentalis
- Ceratonia siliqua
- Cercis siliquastrum
- Coprosma repens
- Cornus capitata c
- Corynocarpus leavigatus
- Elaeagnus angustifolia
- Fagus sylvatica c
- Fraxinus spp. x
- Griselinia littoralis
- Ilex aquifolium
- Laurus nobilis
- Liridendron tulipifera c
- Olea europaea x
- Photinia glabra
- Photinia serrulata c
- Pittosporum eugenioides
- Platanus orientalis
- Populus spp.
- Prunus laurocerasus
- Prunus lusitanica

Qld Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted - File No.
Plan to be read in conjunction with QFRS
cover sheet bearing same file no.

- Quercus canariensis
- Quercus cerris c
- Quercus ilex
- Quercus robur
- Salix babylonica
- Schinus molle
- Sorbus aucuparia c
- Tamarix aphylla
- Tilia vulgaris c
- Ulmus spp. Common Maple
- Box-Elder maple
- Norway Maple
- Sycmore
- Horse Chestnut
- Evergreen Alder
- Cape Chesnut
- Sweet Chestnut
- Hackberry
- Carob
- Judas Tree
- Mirror Bush
- Evergreen Dogwood
- New Zealand Laurel
- Russian Olive
- Common Beech
- Ash
- New Zealand Broadleaf
- Holly
- Laurel
- Tulip Tree
- Olive
- Red-leaf Photinia
- Chinese Hawthorn
- Tarata
- Plane
- Poplar
- Cherry Laurel
- Portugal Laurel
- Algerian Oak
- Turkey Oak
- Holm Oak
- English Oak



- Weeping Willow
- Pepper-Tree
- Rowan
- Athel
- Linden
- Elms

Ground cover plants that are hard to burn include:

- Ajuga reptans
- Atriplex spp.
- Carpobrotus spp.
- Coprosma 'kirkii'
- Delosperma 'alba'
- Drosanthemum floribundum
- Gazania spp.
- Hedera spp.
- Heliaxthemum spp. c
- Kennedia spp.
- Kochia spp.
- Lampranthus multiradiatus
- Myoporum parvifolium
- Portulacaria spp.
- Pelargonium spp.
- Rhadgodia spp.
- Rosmarinus officinalis prostatus
- Rosemary (prostrate form)
- Santolina spp.
- Verbena peruviana
- Vinca spp.
- Bugle
- Saltbush
- Pigface
- Gazanias
- Clinging types of ivy
- Sunroses
- Coral Peas
- Bluebushes
- Noonflower
- Creeping Myoporum
- Jade Plants
- Pelargoniums
- Saltbush
- Stonecrops

Old Fire & Rescue Service
Bushfire Planning
Bushfire Management Plan
Sighted - File No.
Plan to be read in conjunction with QFRS
over-arching same file no.

FIRST DRAFT

first draft

A NEWSLETTER FOR BUILDING DESIGN PROFESSIONALS FROM BORAL TIMBER

specifying timber in bush fire zones

Changing weather patterns over the last decade are indicating that Australian summers will become hotter and drier than ever before. This will have a significant impact on the bush fire season each year and in turn, on the professional building designer's role in the creation of structures that are better designed for bushfire-prone areas.

However, it is important to note that this does not mean that timber cannot be used when designing structures for bushfire-prone areas. In fact, there are a number of hardwood timber species that are classified as naturally resistant.



Blackbutt is listed as a "naturally fire resistant timber species" and can therefore be specified for use in bush fire zones

Australian Standard 3959 – 1999 (AS 3959) was developed to provide standard guidelines for specifying timber products for use in bushfire-prone areas.

AS 3959 does not impose any restrictions on the use of timber when applied to the interior of a building, therefore hardwood timber flooring, structural wall framing and roof trusses are acceptable. There are no requirements for elements commonly found in backyard structures such as pergolas, gazebos, pool surrounds, fences or garden sheds.

The Australian Standard restrictions do apply to the specification of timber on the external treatment of a structure such as window frames, exterior cladding, eaves, facias, decking and exposed posts.

Refer to each state authority for site assessment requirements. If these do not exist use the methodolofy outlined in AS 3959.

AS 3959 requires that a site assessment be made and the building be classified according to the vegetation type, its proximity to the proposed building and the slope of the land leading to the site. Vegetation types such as forests and tall shrubs represent a mid to upper range of fuel sources.

Buildings are categorised into one of the following four classes to which construction level requirements are applied.

> Buildings that are less than 15 metres from vegetation represent an "extreme risk" and therefore require Level 3 Construction.

> Buildings ranging from 15 – 40 metres from vegetation represent a "high risk" and therefore require Level 2 Construction.

> Buildings ranging from 40 – 100 metres from vegetation vary in risk according to the slope of land. Sites which slope more than 10 degrees represent a "medium risk" and therefore require Level 1 Construction; sites which slope less than 10 degrees represent a "low risk" and are therefore not restricted to a specific construction level.

Continued on page 3

From the Editor

The subjects covered in this issue of First Draft are a direct response to requests from subscribers for technical information on specific timber issues. First Draft is designed to be an information resource on technical issues, so please keep the requests coming and we'll do our best to fill its pages with the information that building design professionals are looking for.

First Draft is also designed to be a resource for inspiration – a place to showcase the use of hardwood timber in some of the best building design work in the country. If you have worked on a project using hardwood timber, which you think demonstrates excellence in design, please contact me with the details. We'd like to feature the work of our subscribers.

Enjoy this issue!

MALCOLM JOHNSTON

Editor, First Draft

Email: Malcolm.Johnston@boral.com.au

The floor was a critical choice because so much of it would be visible in such a large open space," says Jim.

Boral Timber Uni-Nail tongue and groove 80mm strip flooring in Blackbutt Classic Grade was installed over the bearers and joist floor structure and was finished using Basic Coatings StreetShoe XL in satin.

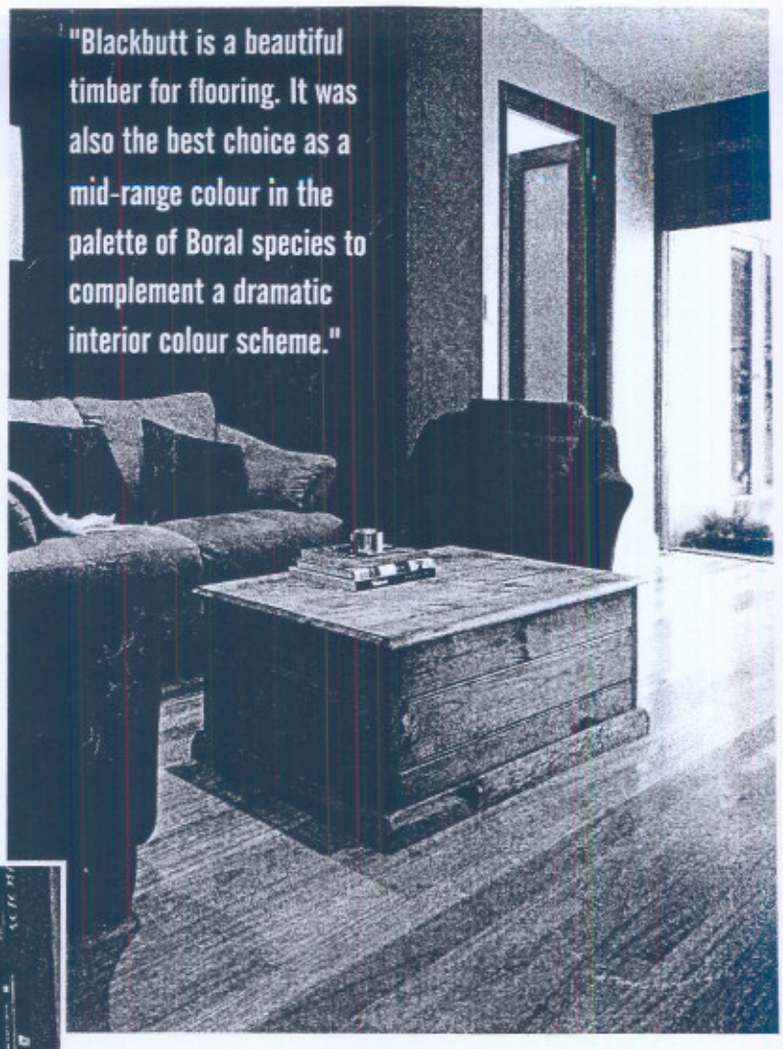
"The timber floor enhanced the consistency of colour and finish from the front of the house to the back," continues Jim. "It has created uniformity in its simplicity."

Project Summary

Architect: Jim Mitchell, Mitchell Partners Architects, Sydney
Phone 02 9712 4470

Builder: Owner Builder

Boral Timber products used: Blackbutt Uni-Nail tongue and groove strip flooring in Classic Grade, finished with Basic Coatings StreetShoe XL in satin; F27 structural hardwood





Pictured left, F27 hardwood in Blackbutt (usually specified for structural applications) has been used for shelving in a tall feature column that emphasises the height of the ceilings. A deep groove was routed into the edges of each board to slide over aluminium rails, concealing the fixing mechanism for a very clean finish.

specifying timber in bush fire zones ...continued

> Level 1 Construction permits the use of timber for exterior cladding, window frames, eaves, facias, decking and exposed posts but they must be either treated with a fire retardant or be of a naturally resistant timber species. There are no restrictions on elements that are close to the ground (less than 400mm).

> Level 2 Construction permits the same use of timber as for Level 1 but requires that elements close to the ground are also either treated with a fire retardant or be of a naturally resistant timber species.

> Level 3 Construction permits the same use of timber as for Level 2 but also requires that exposed balustrades and open subfloor timbers be either treated with a fire retardant or be of a naturally resistant timber species.

As with all regulations, it is necessary to check with the local approving authority for specific requirements.

Some hardwood timber species are classified as naturally fire resistant. These are generally the high-density timber species such as Blackbutt, Spotted Gum, Ironbark and Turpentine. In order to meet AS 3959 requirements, timber must be at least 18mm thick.

Boral Timber supplies 19mm decking timber in Blackbutt and Spotted Gum which can be specified under Construction Levels 1, 2 and 3. Boral's other decking species can be applied to Construction Level 1 and these include Australian Beech, Swan River Reds and Mixed Hardwoods. Boral Timber also supplies hardwood posts, beams and external cladding.

It is recommended that a continuing hazard reduction program be put in place to reduce vegetation around buildings and to minimise the intensity of any bushfire hazard. This can be enhanced by subdivision layout, use of appropriate landscaping species and the location of buildings relative to surrounding vegetation.

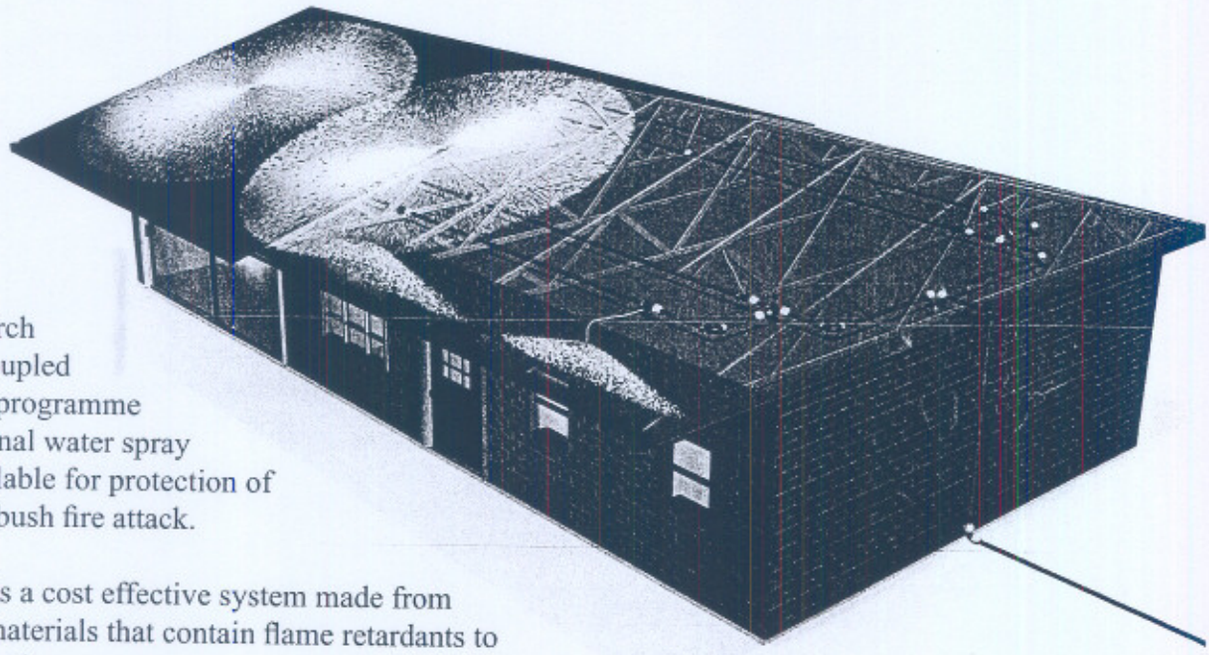
For a full list of construction requirements for bush fire zones as defined in AS 3959 visit the Australian Standards website at www.standards.com.au or phone 1300 654 646.

Old Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Signed - File No
Drawing to be read in conjunction with QFRS
Approved plans bearing same file no.

For maximum protection of life and property against bush fires

External Water Spray System

All pipe is located in the roof space.
No unsightly pipe on the roof.



After years of research and development coupled to an extensive test programme a new **EWSS** (external water spray system) is now available for protection of life and property in bush fire attack.

Fire-Pro® - EWSS is a cost effective system made from advanced polymer materials that contain flame retardants to inhibit flame propagation.

Fire- Pro® - EWSS is available as a D.I.Y. system or installed by a Calair Pipe Systems professional.

Old Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted - File No
Plan to be read in conjunction with OFRS
Hearing Name File No



Pipe & Fittings

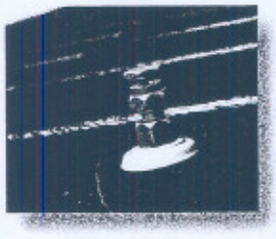
Pro-Pipe II® pipe & fittings are designed to allow installation without welding, gluing, threading or requiring special tools. The design allows for quick and easy installation that results in a lower installed cost.

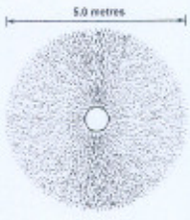
Spray Nozzles

Advanced spray nozzle design provides maximum droplet size at minimal pressure to prevent early depletion of available water supply. The low profile of the spray nozzle is unobtrusive with minimum impact on building aesthetics.

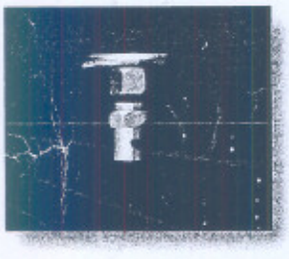
ROOF SPRAY

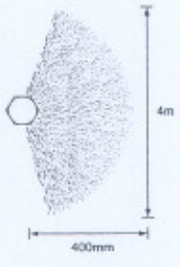
The RS1 roof spray is designed for protection of the roof area including, the ridge and gutters, from flying embers. It will provide coverage over a 5 metre area and is supplied with a cup seal and hose adaptor for easy installation.





spray pattern of roof spray





spray pattern of eaves drencher

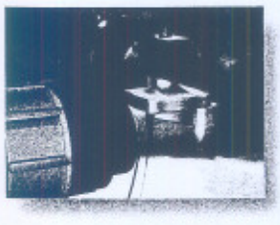
WINDOW DRENCHERS

The ED1 drencher is designed to protect windows and doors from the high radiant heat of approaching bush fire and is activated by heat sensors. It will provide coverage over a 4 metre area and is supplied with a mounting flange and hose adaptor for easy installation.

Heat Sensors

Special heat sensors are located at strategic points to detect rising temperature. At 95°C the heat sensors send a signal to the solenoid valves to open and provide water to the window drenchers.





Low Voltage Solenoid Valves

High flow/low voltage solenoid valves are installed in the branch lines feeding the window drenchers and are automatically activated by the heat sensors.

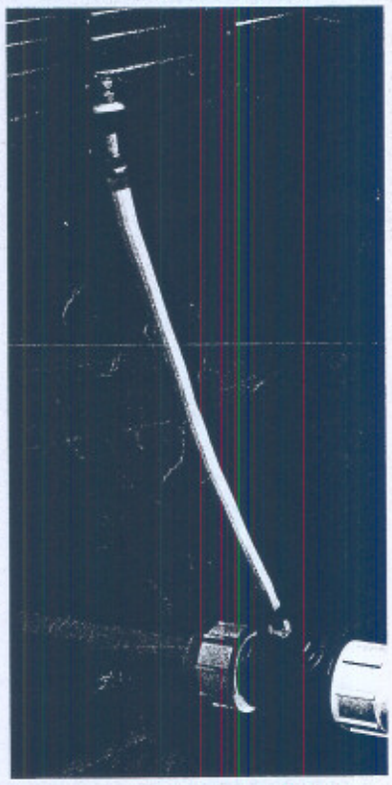
Power supply

Long life Alkaline batteries provide power to activate the solenoid valves. The12volt power supply is supplied with plug connectors for easy installation.

Flexibility is the key

The hose assembly HS1 is designed to accommodate thermal expansion and contraction over large temperature variations.

HS1 Hose Assembly is supplied with Nut & Tail connectors to allow for quick and easy installation. The Hose Assembly and Connectors are crimped for added security.



Old Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted File No

Plan to be read in conjunction with DFR
cover sheet dated

CALAIR PIPE SYSTEMS
email: sales@calair.net.au
web: www.calair.net.au
A.B.N. 44 096 558 977

Local branch or distributor:

PRO PIPE II®

Calair Systems Pty Ltd All rights reserved. This document and all photographs and copy contained herein are protected by Copyright. They may not be altered in whole or part, without written permission from Calair Systems Pty Ltd. We reserve the right to change the specification, colour range and price for any model or item described in this publication.
Bush fire photos by Tony Miller.

3D Fire Safety Centre

Fire Retardant Coating Solutions: ✓Bushfire ✓Commercial ✓Domestic

The 3D Fire Safety Centre offers a range of passive fire control paints and coatings. Passive fire protection has a vital role in establishing and maintaining an ongoing overall protection in commercial and domestic premises. Important applications are within homes located in bushfire risk areas that must meet with the AS-3959 (construction in bushfire prone areas) requirements. All Cease-Fire products have been tested to meet with the appropriate BCA fire standards. The Cease-Fire coatings range will be launched in October 2005 and will be available nationally throught 3D Paint and Colour stores.

Cease-Fire Timber FR

Cease-Fire Timber FR is a water based intumescent fire retardant three component solid colour coating system. It is developed to meet the performance requirements for "Fire Retardant Timber" as defined in AS/NZS 3838:1998 and the weather exposed durability test ASTM/D.2898 accelerated age weathering as called for in AS 3959. All three individual components must be used as directed to comply with the requirements. The coating system is suitable for both exterior and interior applications where fire retardant performance within domestic premises is required.



PART 1 – Primer: A premium quality white timber primer that has been formulated to provide the ideal base for the CFT Fire Retardant coating. 1 coat required. The product can be applied by brush, roller or spray.

PART 2 – Fire retardant coating: Intumescent fire retardant coating that is the heart of the coating system. It has been formulated to provide maximum protection against fire. The coating can be applied by brush, roller, or airless spray. Refer to Product Technical Data Sheet for more information.

PART 3 – Exterior topcoat: The topcoat is available in gloss or low sheen. This premium quality topcoat has been designed to provide a long life protection for the Timber FR coating system. It is tintable to most exterior paint colours and can be applied by brush, roller or spray. Two coats are required.

Cease-Fire Fabric FR

Fabrics are one of the most combustible items in homes or commercial premises. They represent a significant fuel load in the event of fire. Cease-Fire Fabric FR is a colourless and odourless fabric fire retardant for interior fabrics, textiles and furniture.

Fabric FR can be used to fire retard a broad range of fabrics. The objective of the product is to retard ignition and halt the spread of flame. These vital performance factors can play a significant role in containing the spread of flames through the interior of a home or a building. The product has been tested to AS 1530-3:1999 and performs as required within this standard.



By using Cease-Fire Fabric FR to fire retard all soft furnishings that are potentially a danger, the risk of fire spreading within the building can be significantly reduced.

Matador FR Solid Colour





Cease-Fire Matador FR Solid Colour paint system for timber is an intumescent fire retardant two component solid colour paint system for commercial interiors. It delivers world class fire retardant protection to substrates such as soft wood timbers, plywood and MDF board for interior applications.

The system has been tested to the fire hazard properties required under BCA Specification C1.10a and achieved a Group 1 result. This fire retardant performance makes the system applicable to commercial applications where a AS/NZS 3837 Group 1 rating is specified and demanded on timber.

The two part system consists of a water based white fire retardant self-priming base coat which may be tinted as desired. The base coat is then over coated with a solvent based clear durable top coat.

Where premium interior timber fire protection is required the Matador FR Solid Colour paint system delivers!

The Matador FR Solid Colour is suitable for professional application only. Where works are for BCA Compliance within commercial buildings, the product must be applied by a professional fire retardant coatings applicator.

Due to the some times complex nature of the BCA commercial building fire standards approval process CFT would like to recommend that users consult with, as appropriate, Councils, Private Building Surveyors and Fire Service personnel for a project specific approval prior to application of the product.

Please refer to detailed technical data sheet for more information. Note - BCA Compliance is contingent upon Building Surveyor reviewing durability statements and allowing the use of a fire-retardant coating to make the timber substrates comply with the Fire Hazard Properties (Group Numbers).

CEASE-FIRE TECHNOLOGIES

For technical information, visit www.ceasefire.com.au.

3D Paint & Colour

Paint & Colour Coomera
1/64 Siganto Drive
Oxenford QLD 4210
Ph: 07 5573 2100
Fax: 07 5573 2600

Archicentre

Bushfire Design Guide

1

ARCHICENTRE BUSHFIRE DESIGN GUIDE

Protection from bushfires for both people and property has become a significant issue, with legislation now in place in most states to regulate construction in designated bushfire-prone areas.

Archicentre, the housing advisory service of the Royal Australian Institute of Architects, has played a pivotal role in bushfire situations, sending teams of experts into fire zones to assess damage and to assist people who suddenly face the prospect of rebuilding.



Greg Butler

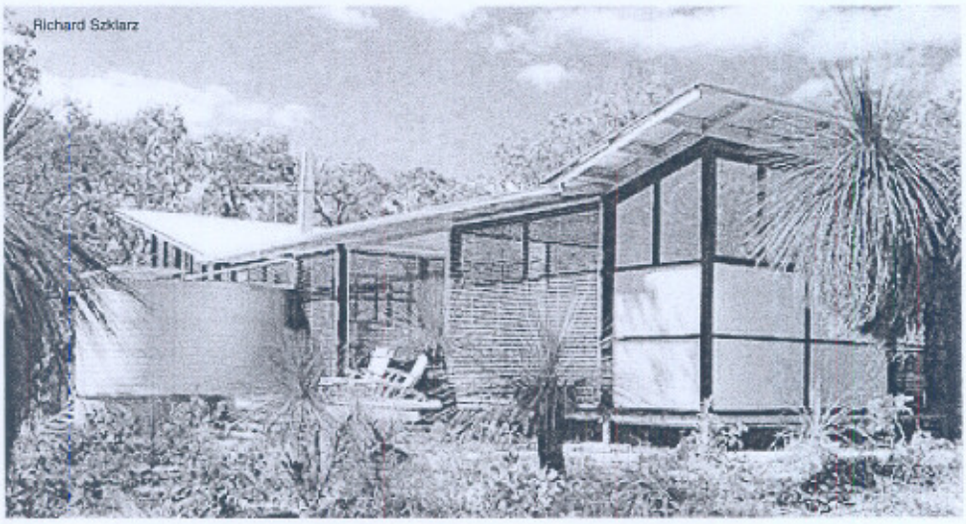
As bushfire risk grows, so does the need for good design. By using sound architectural design principles, the home can appropriately respond to the environment and at the same time minimise the threat of being lost to a bushfire. An Archicentre architect can show you how. This guide is for anyone intending to build, rebuild or renovate their homes in bushfire-prone areas. Before you begin your building project, Archicentre asks you to consider taking professional advice to ensure that a bushfire resistant design is put in place.



Splinter Group / Gary Catt

CHOOSING A SITE

Houses should be sited to minimise the risk - this may mean keeping away from steep hillsides where the intensity of the fire can double for each 10 degrees of slope, or ensuring enough cleared land is available between the house and the bush. The extent of cleared land required varies according to the type of vegetation in proximity to the land. Where the available building area is limited, design issues for bushfire-prone areas become paramount and expert advice is required.



Richard Szklarz

LANDSCAPING

Several landscaping features can slow the momentum of a bushfire. These include rivers, lakes, dams, swimming pools, irrigated or green summer crops, orchards, vegetable gardens, sporting ovals or tennis courts. Many tree species have been classified as bushfire-resistant and can be used as wind breaks and barriers. These include native as well as imported species.

Qld Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted - File No

Plan to be read in conjunction with OPR
cover sheet bearing same file no

© Copyright September 2003 - Unauthorised use prohibited - Archicentre Limited

DESIGN DEVELOPMENT

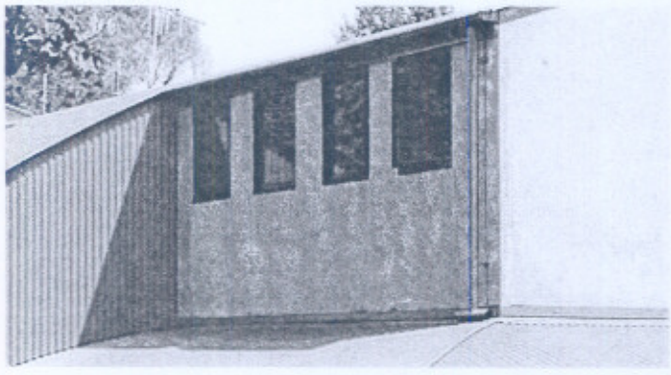
All bushfire design principles seek to protect the home from burning debris.

The key differences between bushfire design and traditional architectural design are that bushfire design uses a plan with a simple roofline, a minimum of angles and a range of fire-resistant alternative construction materials. These measures are put in place to protect a home from burning debris.

Good design for bushfire-prone areas seeks to protect the house and its occupants from the five major dangers:-

- wind
- radiant heat
- direct flame
- ember attack
- smoke

Principles such as simple rooflines, uncomplicated layouts, window protection, inbuilt water storage, fire-resistant materials (where necessary) and sprinkler systems can be integrated to achieve good protection as well as good design.





B+C Design

ESSENTIAL CONSTRUCTION REQUIREMENTS

Houses are classified by legislation as being in low, medium, high or extreme bushfire attack areas, or as being in the flame zone. There are no requirements for the low category, and the flame zone category is always subject to separate assessment by authorities. For the medium, high and extreme categories of bushfire attack, the Building Code of Australia and Australian Standard 3959 set out levels of acceptable construction, summarised briefly below. Non-combustible materials are generally acceptable, but the use of timber is sometimes restricted as follows:

Floors

Timber is acceptable in most categories of bushfire attack, however if the floor is not enclosed, or in the case of the extreme bushfire attack category, it must be sheeted underneath with non-flammable material or constructed using "fire-retardant treated timber". If the floor is closer than 600mm to the ground, it should be enclosed or constructed using "fire-retardant treated timber". "Fire-retardant treated timber" is not currently commercially available in Australia, however 7 species of timber comply with the criteria:-

- Blackbutt
- Spotted gum
- Merbau (imported rainforest timber!)
- Turpentine
- Red Ironbark
- Red River Gum
- Silver Top Ash

Note that the term "treated timber" commonly refers to copper/chrome/arsenic treatment which is meant to protect against moisture, rotting and termites. It does not have any fire-retardant value and in fact the fumes from burnt "treated timber" could be toxic.

Supporting Posts

These can be timber provided they stand on 75mm high metal shoes or are constructed in "fire-retardant treated timber" for a minimum of 400mm above ground level. In the extreme bushfire attack category, they must be "fire-retardant treated timber" for the full height.

Old Fire
Gold Coas
Bushfire Managemen
Sighter File
Plan to be read in conjunction with
cover sheet, bearin
THE ROYAL AUSTRALIAN INSTITUTE OF ARCHITECTS

© Copyright September 2003 - Unauthorised use prohibited - Archicentre Limited

External doors

External doors must have weather strips or draught excluders and tight fitting metal flyscreens (aluminium, steel or bronze). For the high risk category, aluminium mesh cannot be used and any leadlight windows must be protected by non-combustible shutters or toughened glass. For the extreme category, timber doors must be "fire-retardant treated", have a non-combustible covering, be protected by non-combustible shutters or be solid core doors at least 35mm thick.

Roofing

Roofs can be tiled or sheeted, but timber shakes or shingles are not acceptable. All types of roofs must have all junctions sealed and be fully sarked. Sheeted roofs can only be metal or fibre-cement except in the extreme risk category where fibre-cement or aluminium sheeting cannot be used. Rooflights may be thermoplastic sheeting for the medium category but not for high or extreme risk categories, where wired glass (not toughened) is needed.

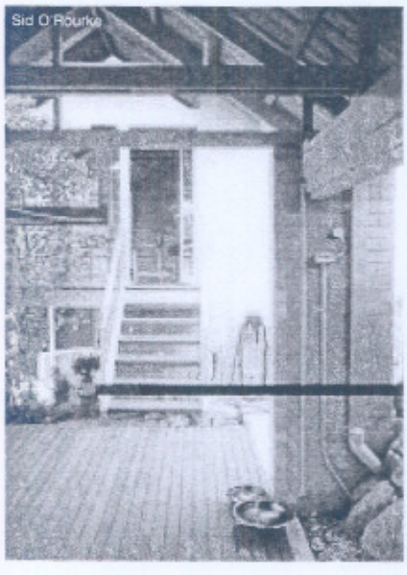
Eaves

Eaves must be enclosed and gaps sealed. If timber is used in the high risk category, it must be "fire-retardant treated", while in the extreme risk category aluminium cannot be used.


Juerg Hunziger

Fascias

For the medium risk category fascias can be timber, but for the high risk category they must be "fire-retardant treated". For the extreme risk category, fibre-cement or aluminium sheet cannot be used.


Sid O'Rourke

Gutters and Downpipes

These should have metal leaf guards. Systems for water retention can help protect the eaves and dampen flying debris which may gather during fire. By connecting them to a recirculating sprinkler system the wetting time can be prolonged.

Verandahs and Decks

Verandahs and decks can be timber, but sheeted or tongue and grooved flooring should be treated in the same way as floors. Where the height above ground is less than 400mm, all joints must be covered or sealed. Spaced decking boards must be 5mm apart and the underside must not be enclosed (to allow access for firefighting). For high and extreme categories, decking timbers must be "fire-retardant treated". There must be a separation between decking timbers and the rest of the house to prevent the spread of fire into the building.


Richard Szklarz

Water and Gas Pipes

All water and gas pipes should be metal where exposed, or buried at least 300mm in the ground.

Qld Fire & Rescue Service
Gold Coast Bushfire Planning
Bushfire Management Plan
Sighted File No.

Plan to be read in conjunction with DFU cover sheet bearing date Ref #

© Copyright September 2003 - Unauthorised use prohibited - Archicentre Limited

4 Bushfire Design Guide

IDEAS FOR BUSHFIRE RESISTANT CONSTRUCTION



• Simple shapes without too many re-entrant corners



• Metal cladding and roofing; metal rooflights instead of dormer windows and metal roller shutters for windows and doors.

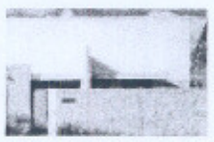


• Water tank (10,000 litres minimum) with a diesel fuel pump helps avoid water pressure and power problems.



• Toughened glass or laminated glass with heat-absorbing interlayer

• Concrete floors



• Radiant heat barriers (fences, masonry walls) on the danger side of the house.



• Design for high wind strength



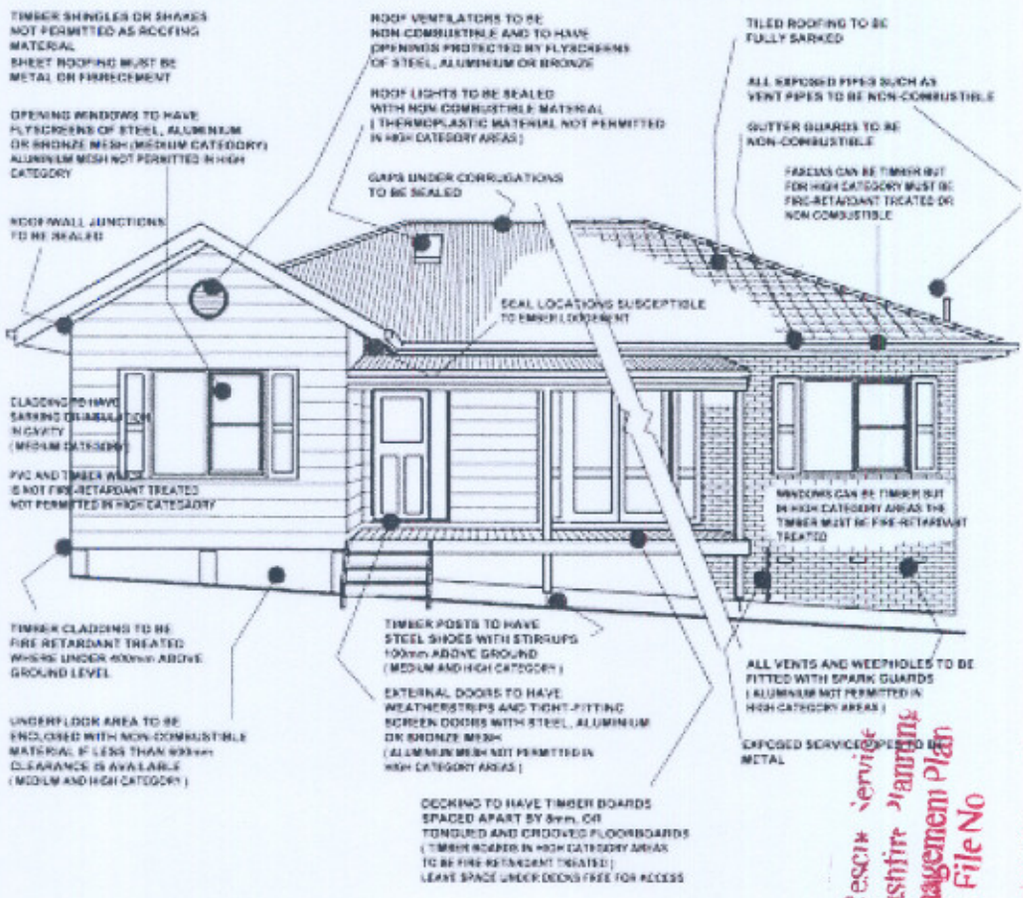
• Downpipe valves to enable easy filling of gutters



• Active, external sprinkler system with appropriate metal pipes and brass sprinkler heads.

BUSHFIRE PROTECTION DESIGN DETAILS FOR MEDIUM AND HIGH RISK CATEGORIES

(MEDIUM AND HIGH BUSHFIRE ATTACK CATEGORIES DEFINED IN AUSTRALIAN STANDARD 3959 - EXTREME RISK CATEGORY HAS FURTHER RESTRICTIONS)



For information on regulations, refer to the Building Code of Australia under the heading *Housing Provisions*. Here you will learn how to build and what to build with under the heading "Acceptable Construction Practice". All construction must be in accordance with Australian Standard AS 3959-"Construction of Buildings in Bushfire-prone areas". To find out if your home is situated in a Designated Bushfire-prone Areas, contact your local council.

Archicentre is the largest provider of design reports and house inspections in Australia. Phone us today for advice on designing your fire-resistant dream home on 1300 13 45 13.

Plan to be read in conjunction with OFR's Bushfire Management Plan Lighter File No

National Telephone 1300 13 45 13

www.archicentre.com.au

Archicentre Limited
ABN 34 001 866 520
A wholly owned subsidiary
of The Royal Australian Institute of Architects

Victoria
530 Glenferrie Road
Hawthorn Victoria 3122
Tel: (03) 9819 4577 Fax: (03) 9819 5413

Queensland
70 Merivale Street
South Brisbane QLD 4101
Tel: (07) 3846 4957 Fax: (07) 3846 4970

Northern Territory
1 Shepherd Street
Darwin NT 0800
Tel: (08) 8941 4544 Fax: (08) 8981 3042

New South Wales
479 Darling Street
Balmain NSW 2041
Tel: (02) 9555 5111 Fax: (02) 9555 5011

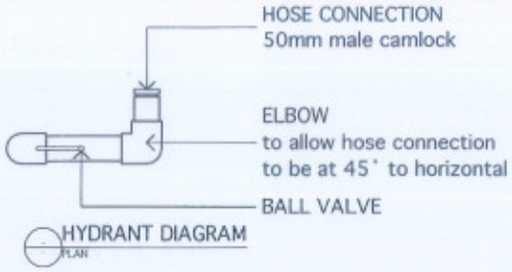
Tasmania
Top Floor, 2 Castray Esplanade
Battery Point, Tasmania 7004
Tel: (03) 6224 4738 Fax: (03) 6224 1823

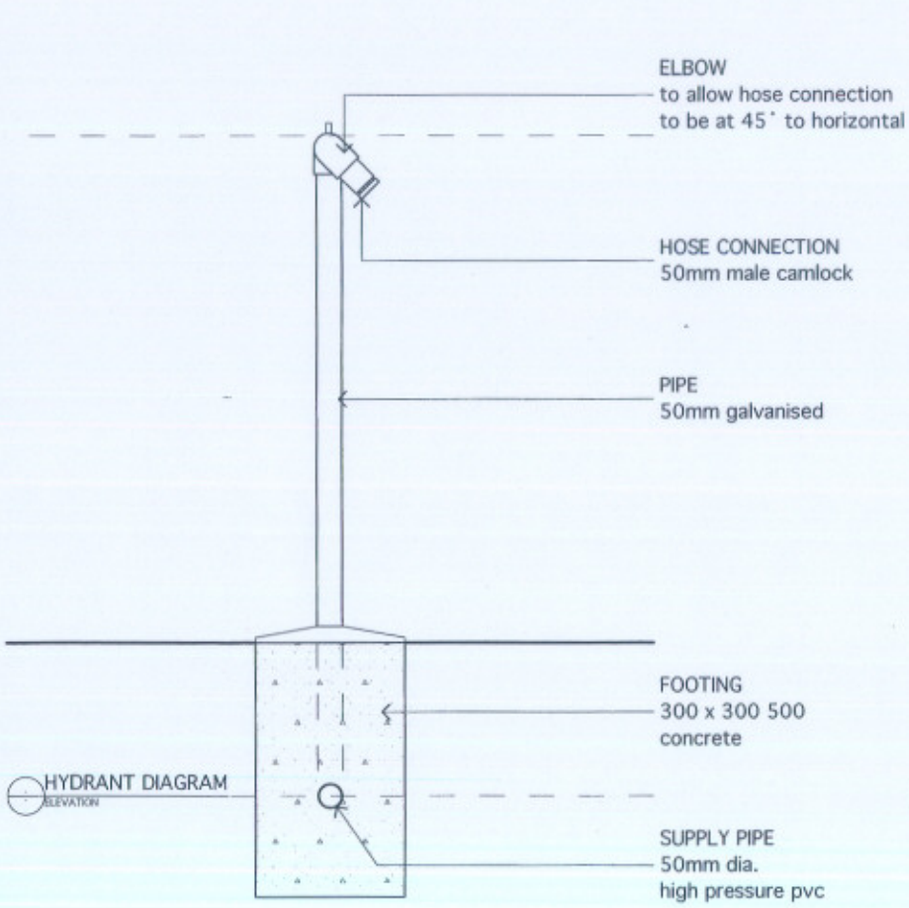
Western Australia
Shop 37, HomeBase Shopping Centre
55 Salvado Road, Subiaco WA 6008
Tel: (08) 9382 4100 Fax: (08) 9382 4011

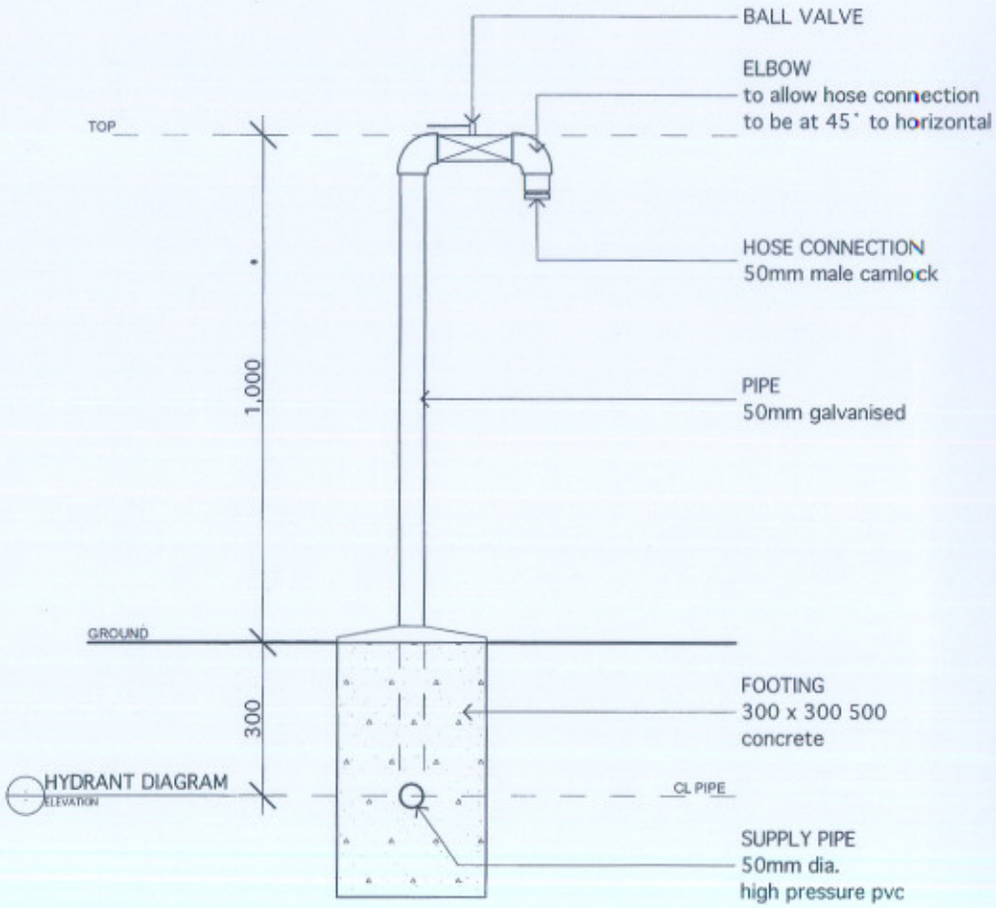
South Australia
100 Flinders Street
Adelaide SA 5000
Tel: (08) 8228 0300 Fax: (08) 8228 0333

Australian Capital Territory
2A Mugga Way
Red Hill ACT 2603
Tel: (02) 6273 2353 Fax: (02) 6273 1953

© Copyright September 2003 - Unauthorised use prohibited - Archicentre Limited







NOTES
1. These designs and plans are subject to the Copyright Act of 1968 and the Copyright Amendment (Moral Rights) Bill 1999 and are not to be used or reproduced, wholly or in part without the written consent of the Architect.

The copyright for these drawings & any construction produced from these drawings is vested with Eldon Bottcher.
2. Do not scale from drawings
3. Verify all dimensions on site
4. Check any discrepencies with Architect

REVISIONS

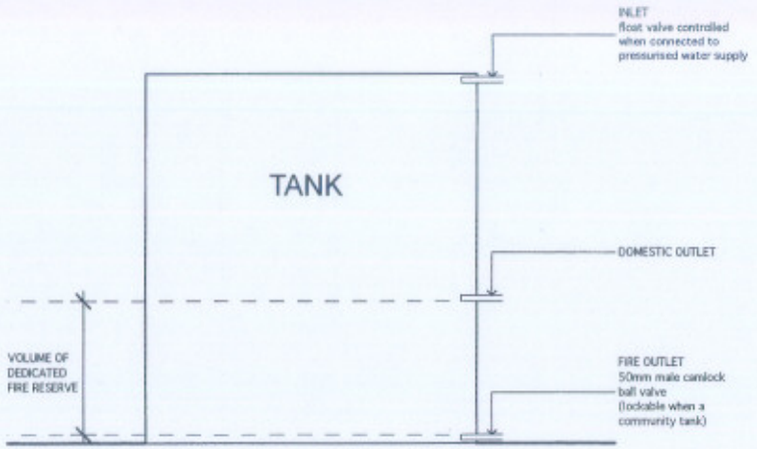
PROJECT TITLE
FIRE MANAGEMENT
-

DRAWING TITLE
DETAILS
BUSH FIRE HYDRANT

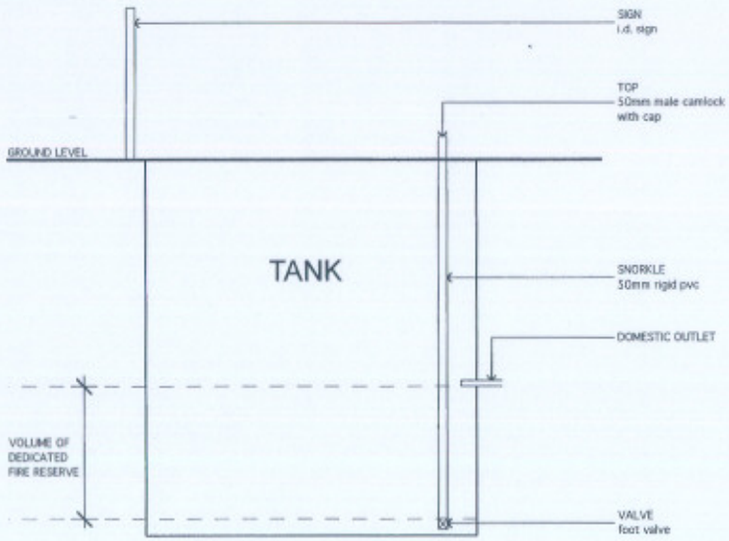
Eldon Bottcher Architect Pty. Ltd
Postal
P.O. Box 907
Surfers Paradise
QLD 4217
W: www.eb-a.com.au
E: architects@eb-a.com.au

Office
Level 5, 58 Cavill Ave
Surfers Paradise QLD 4217
ABN 61616354604
P: (07) 55 600 082
F: (07) 55 360 374

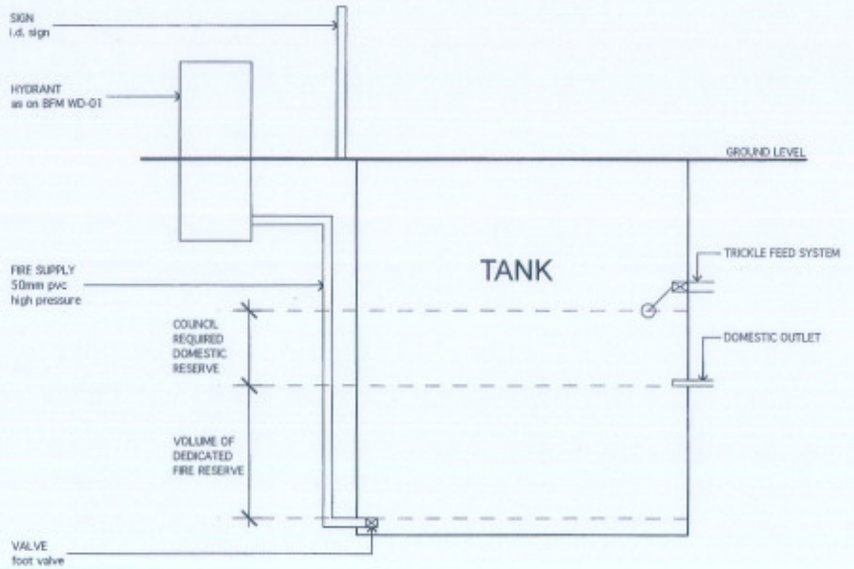
SCALE 1:100@A3
DATE 10.02.09
DRAWN KK
CHECKED
PROJECT NUMBER **BFM**
DRAWING NUMBER **WD-01**



ABOVE GROUND TANK DIAGRAM



UNDERGROUND TANK DIAGRAM



UNDERGROUND TANK DIAGRAM
WITH REMOTE HYDRANT

NOTES:
1. These designs and plans are subject to the Copyright Act of 1968 and the Copyright Amendment (Moral Rights) Bill 1999 and are not to be used or reproduced, wholly or in part without the written consent of the Architect.

The copyright for these drawings & any construction produced from these drawings is vested with Eldon Bottcher.
2. Do not scale from drawings
3. Verify all dimensions on site
4. Check any discrepancies with Architect.

REVISIONS
A REVISE UNDERGROUND TANK DIAGRAM RK 27.04.09

PROJECT TITLE
FIRE MANAGEMENT
-

DRAWING TITLE
DETAILS
TANK

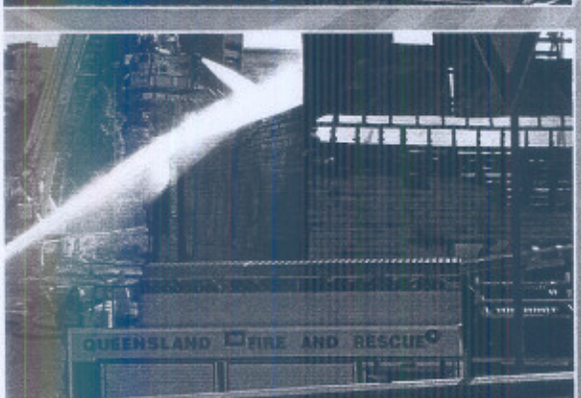
Eldon Bottcher Architect Pty. Ltd
Postal
P.O. Box 907
Suthers Paradise
QLD 4217
W: www.eb-a.com.au
E: architects@eb-a.com.au
Office
Level 5, 50 Cavill Ave
Suthers Paradise QLD 4217
ABN 619 03540 64
P: (07) 55 629 852
F: (07) 55 366 374

SCALE N.T.S
DATE 27.04.09
DRAWN RK
CHECKED
PROJECT NUMBER **BFM**
DRAWING NUMBER **WD-02** A

Recycled Water for FireFighting







Report summary from the Queensland Steering Committee considering the health risks to firefighters from using Class A+ recycled water for firefighting operations.

The Water Crisis

In some parts of Queensland, particularly the South East, water supplies are critically low due to the stresses of drought and population increase. One key solution is to use highly treated recycled water (Class A+, the highest class described in the Queensland Water Recycling Guidelines) to supply non-drinking water needs via a second system of pipework, also known as dual reticulation. In the most efficient dual reticulation system designs, fire flows are transferred from the drinking water pipe system to the recycled system. Recycled water would therefore be the only water available for firefighting.

Addressing Firefighter Concerns

The Queensland Fire and Rescue Service (QFRS) and the United Firefighters Union (UFU) expressed concerns about the possibility of health risks to firefighters if recycled water is used for firefighting. These concerns have focused on the risk of exposure to contaminants in recycled water through inhalation of aerosols, contact with skin, eyes or mucus membranes, and through wounds and burns. Treatment of burns victims was of particular concern to firefighters.

In response, the Queensland Department of Emergency Services convened a Steering Committee comprising representatives of the UFU, QFRS, Queensland Health, the Environmental Protection Agency and the Department of Natural Resources, Mines and Water to oversee a health risk assessment process to investigate the concerns of the Department and the UFU.

Conducting The Risk Assessment

The Steering Committee commissioned an independent health risk assessment by consulting firm GHD. This risk assessment looked at the risks that could arise from the use of Class A+ recycled water for firefighting. To accurately focus the risk assessment, the Steering Committee asked the Consultants to assess the water quality and management system at a particular recycled water treatment plant at Springfield, near Ipswich. GHD concluded that, with appropriate controls in place, Class A+ recycled water from a similar plant could be safely used for firefighting in Queensland. GHD also made recommendations regarding the management of treatment plants producing Class A+ recycled water and operational protocols for use of recycled water by firefighters.

Key Recommendations:

Recycled Water Management Plan (RWMP)

To ensure the consistent production and safe management of Class A+ recycled water for firefighting use, DES expects that all recycled water treatment plant operators will prepare and use a Recycled Water Management Plan (RWMP). The RWMP should incorporate hazard analysis and critical control point (HACCP) principles to ensure the treatment plant is designed, operated and maintained to consistently produce Class A+ quality recycled water to minimise health risks to firefighters.

Developing Operational Protocols

In dual reticulation areas, firefighters will be provided with, and only drink, bottled potable water during firefighting operations. When available, only potable water should be supplied to decontamination showers. First aid drenching for burns and cleaning other wounds will be undertaken with potable water wherever reasonably possible. However, as the principal requirement is to cool the burn, if no potable water is available, Class A+ recycled water should be used. If recycled water is used, the burn should be washed later with drinking water and medical authorities advised that recycled water had been used in first aid. Drinking water for first aid burns treatment will be available from Flushing Points running parallel to recycled water supplies. Flushing Points will also provide potable water where decontamination showers are required. Firefighters will shower with potable water upon return to the station following firefighting with recycled water. Finally, training and education procedures will be developed to brief operational firefighters using Class A+ recycled water.

Additional Recommendations

Where new treatment plants are to commence supplying Class A+ recycled water for firefighting purposes these would be expected to be in compliance with the above recommendations and include mandatory validation, verification, water quality monitoring and audit procedures to ensure all controls are in place and working effectively. To ensure the recycled water provider is meeting their obligations as outlined in the RWMP, compliance with the RWMP should be independently verified through a third party audit. Also, the Queensland Government will maintain a watching brief over new research and technology developments including improved methods for detection and removal of possible contaminants in Class A+ recycled water.

In Conclusion

The Steering Committee has concluded that, provided the appropriate controls are implemented, Class A+ recycled water is safe for firefighting.

More information, including the full consultancy report is available on DESPORTAL.

Ian Mitchell
Assistant Commissioner
QFRS Brisbane Region
Chair

Queensland Government
Department of Emergency Services

QUEENSLAND FIRE AND RESCUE SERVICE

Dealing Number

OFFICE USE ONLY

Privacy Statement
Collection of this information is authorised by the Land Title Act 1994 and the Land Act 1994 and is used to maintain the publicly searchable registers in the land registry. For more information about privacy in NR&W see the department's website.

1. Grantor | **Lodger** (Name, address, E-mail & phone number) | **Lodger Code**

2. Description of Easement/Lot on Plan | **County** | **Parish** | **Title Reference**

Servient Tenement (burdened land)
Easement
#Dominant Tenement (benefited land)
NOT APPLICABLE

not applicable if easement in gross

3. Interest being burdened
FEE SIMPLE

#4. Interest being benefited
FEE SIMPLE

not applicable if easement in gross

5. Grantee Given names | Surname/Company name and number | (include tenancy if more than one)

THE STATE OF QUEENSLAND REPRESENTED BY THE DEPARTMENT OF COMMUNITY SAFETY

6. Consideration
$1.00

7. Purpose of easement
FIRE PREVENTION, FIRE FIGHTING, EMERGENCY ACCESS & EVACUATION PURPOSES

8. Grant/Execution

The Grantor for the above consideration grants to the Grantee the easement over the servient tenement for the purpose stated in item 7 and the Grantor and Grantee covenant with each other in terms of:- *the attached schedule; *the attached schedule and document no. ; *document no.

* delete if not applicable

Witnessing officer must be aware of his/her obligations under section 162 of the Land Title Act 1994

.....signature

.....full name

.....Qualification

Witnessing Officer

/ /
Execution Date

.....
Grantor's Signature

(Witnessing officer must be in accordance with Schedule 1 of Land Title Act 1994 eg Legal Practitioner, JP, C Dec)

.....signature

.....full name

.....Qualification

Witnessing Officer

/ /
Execution Date

.....
Grantor's Signature

(Witnessing officer must be in accordance with Schedule 1 of Land Title Act 1994 eg Legal Practitioner, JP, C Dec)

.....signature

.....full name

.....qualification

Witnessing Officer

/ /
Execution Date

.....
Grantee's Signature

(Witnessing officer must be in accordance with Schedule 1 of Land Title Act 1994 eg Legal Practitioner, JP, C Dec)

Title Reference – To Issue

EASEMENT FOR ACCESS

1. **Definitions and Interpretation**

Definitions

1.1 The following words have these meanings in this easement unless the contrary intention appears.

(a) **Act** means *Fire and Rescue Service Act 1990*.

(b) **Grantee** means the person described in item 5 of the form 9 Easement and where the context allows, includes the Grantee's tenants, employees, agents, licensees and invitees.

(c) **Grantor** means the person described in item 1 of the form 9 Easement and includes successive registered proprietors of the Servient Tenement from time to time and, where the context allows, includes the Grantor's contractors, tenants, employees, agents, licensees and invitees.

(d) **Loss** includes claim, liability, damage, cost and expense.

(e) **Servient Tenement** means the land described as that in item 2 of the form 9 Easement, and each and every part of it (including any subdivided parts of it).

Interpretation

1.2 In this easement, unless the contrary intention appears:

(a) a reference to this easement or another instrument includes any variation or replacement of either of them; and

(b) a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them; and

(c) the singular includes the plural and vice versa; and

(d) the word person includes a firm, a body corporate, an unincorporated association or an authority; and

(e) a reference to a person includes a reference to the person's executors, administrators, successors, substitutes (including, but not limited to, persons taking by novation) and assigns; and

(f) an agreement, representation or warranty on the part of or in favour of two or more persons binds or is for the benefit of them jointly and severally; and

(g) if a period of time is specified and dates from a given day or the day of an actor event, it is to be calculated exclusive of that day; and

(h) a reference to a day is to be interpreted as the period of time commencing at midnight and ending 24 hours later; and

(i) where the word "includes" or "including" appears, the words "without limitation" are taken to appear immediately after that word.

1.3 Headings are inserted for convenience and do not affect the interpretation of this easement.

2. **Grant of easement**

Easement for access

Title Reference – To Issue

2.1 The Grantor grants the Grantee non-exclusive pedestrian access and vehicular access to the Servient Tenement at all times and the right to use the Servient Tenement for purposes related to its functions under the Act.

Grantor's own use of Servient Tenement

2.2 The rights granted under this easement are subject to the right of the Grantor and other persons lawfully entitled to use the Servient Tenement from time to time, to use or continue to use the Servient Tenement for the purposes for which it is developed.

Grantee's obligation not to obstruct

2.3 Except in the case of emergency, the Grantee must take all reasonable steps not to obstruct the Servient Tenement in any manner that will prevent or unreasonably restrict the Grantor's use of the Servient Tenement or the Grantor's exercise of its rights under this easement, or the use or rights of any other person lawfully entitled to use the Servient Tenement.

Grantee's acknowledgement

2.4 The Grantee acknowledges that use of this easement this easement is not exclusive.

Grantor to comply with law

2.5 The Grantor must comply with all relevant laws.

3. **Easement to run with the land**

3.1 This easement is intended to run with the Servient Tenement and to:

(a) benefit and bind the Grantor and every successive registered proprietor of the Servient Tenement or any part of it; and

(b) benefit and bind the Grantee.

4. **Exercising rights**

Exercise of rights

4.1 The Grantee must ensure that, in exercising its rights under this easement, it does so in a way that causes as little disruption and inconvenience as reasonably possible to the use and occupation of the Servient Tenement by all people entitled to use and occupy the Servient Tenement.

5. **Maintenance**

5.1 The Grantor must maintain and repair the Servient Tenement in a good and safe condition.

6. **Purpose of easement rights**

6.1 In accordance with State Planning Policy 1/03, the purpose of this easement is to:

(a) provide adequate road access for fire fighting or other emergency vehicles; and

(b) safe evacuation routes in the event of an emergency.

ALTERNATIVE/ADDITIONAL CLAUSE:

(a) provide an adequate and accessible water supply for fire fighting purposes.

Title Reference – To Issue

7.2 The rights given under this easement do not affect any statutory protection from liability in relation to the exercise of those rights duties and functions.

7. **Notices**

7.1 A notice, approval, consent or other communication concerning this easement:

(a) may be given by a party or an authorised officer; and

(b) must be in writing; and

(c) must be left at the address of the addressee or sent by pre-paid ordinary post (air mail if posted to or from a place outside Australia) to the address of the addressee or sent by facsimile to the facsimile number of the addressee.

7.2 A notice, approval, consent or other communication takes effect from the time it is received, unless a later time is specified in it.

8. **Grantee may do anything Grantor should have done**

The Grantee may do anything that the Grantor should have done under this easement, but which the Grantor has not done or has not, in the Grantee's opinion, done properly. The Grantee may recover the cost of doing this from the Grantor as a liquidated debt, payable on demand.

First bushfire shutters pass full Flame Zone testing, Building Products Portal, Safety Products Directory, Architectural Products Por

Try out the new ProjectLink Product Finder

Add My Business



> About Project Link

Category --Select Categories

Search Search All Search by Keyword Search

Home ~ Product Finder ~ Search Suppliers ~ News ~ Events ~ Supplier Login ~ Supplier Benefits ~ Advertise ~ Contact ProjectLink

RSS

First bushfire shutters pass full Flame Zone testing - PAARHAMMER WINDOWS

First bushfire shutters pass full Flame Zone testing

Provided By : PAARHAMMER WINDOWS

Paarhammer Sonnenschutz are the first and only company in Australia to manufacture shutters to the highest Bushfire Attack Level of Flame Zone BAL-FZ in accordance to the new AS 3959-2009.

Paarhammer are the first and only company in Australia to manufacture shutters to the highest Bushfire Attack Level of Flame Zone in accordance to the new AS 3959-2009.

These shutters have not only passed computer simulations, they have been through a vigorous real life fire test at extreme temperatures for a lengthy period of time. The testing was performed by NATA-accredited Exova Warrington Fire Testing Laboratories at Dandenong, Victoria.

Shutters have been a feature for centuries in countries around the Mediterranean with a similar climate to Australia. Now shutters not only provide shading and improve energy efficiency but also make building in bushfire prone areas possible and safe. They can be a decorative feature to any home, new or old, traditional or modern.

Paarhammer shutters are custom made as single, double or bi-fold with Colorbond or powdercoated finishes and their own frame as per the Australian Standard. Patent Pending.

These shutters come with all hinging and locking hardware and the frame can be fitted within the window reveal or surface mounted to the wall face.

While these shutters compliment Paarhammer bushfire windows and doors approved to BAL-40 perfectly, they are also available to be used in conjunction with other window brands and can be retro-fitted.

Manufactured in Victoria, Paarhammer's innovative products for BAL-29, BAL-40 and BAL-FZ are available Australia wide.

Independent comprehensive tests like these performed by a NATA-accredited facility allow building professionals and homeowners to choose appropriate products for buildings in bushfire prone areas.

For more information please contact Paarhammer on 03 5368 1999.

Tags: Windows, Doors, Sliding windows, Sliding doors, Energy rated windows, Bushfire Attack Level of Flame Zone, BAL-FZ

Request information about this News from PAARHAMMER WINDOWS

(All fields compulsory)

Name | Location: Australia

Company | State: Select State

Email | Telephone

Details: Please send me more information about First bushfire shutters pass full Flame Zone testing

64493

Provided By

PAARHAMMER WINDOWS

Find Out More

Visit Storefront | Visit Website

Contact Details | Send Request

More News

» Motorised Sliding Door Giants
» FSC certification
» The French Connection
» Preliminary BAL40 testing with excellent results
» Timber windows and doors BAL 40 approved

SOUTH AUSTRALIAN Major Projects Conference 2010

Delivering South Australia's Major Projects.
Its all part of the Plan

27 - 28 July 2010
Adelaide Convention Centre
Adelaide - South Australia

CLICK HERE TO REGISTER TODAY!



Why Miglas?
Choosing
Windows
Doors
Accessories
Miglas & Environment
Project Gallery
Rating & Certification
Contact us now!
Install & Maintain
FAQ
Resources

Welcome to Miglas Australia

High Performance Double Glazed Windows & Doors - Melbourne

Always leaders, always different Miglas raises the industry bar again..

NEW BUSHFIRE WINDOWS & DOORS - Miglas Fireguard 40™

Miglas introduces the first and only NATA laboratory tested Bushfire window and door range up to and including BAL-40.

Call us today on **[03 9728 3999]** or **click here** for further information.

Miglas - Innovation beyond Double Glazing

Miglas provide the highest quality Australian-made and designed double glazed windows and doors. Miglas combines the advantages of both timber windows and aluminium windows to create a low maintenance, energy efficient and thermally stable window and door system. This unique double glazed window and door system provides comfort and protection in the harsh Australian climate all year round whilst allowing you full architectural freedom with a wide range of styles, sizes and colours.



Regulations for new construction in Bushfire prone areas require assessment for Bushfire attack levels (BAL). Call Miglas today for more information.

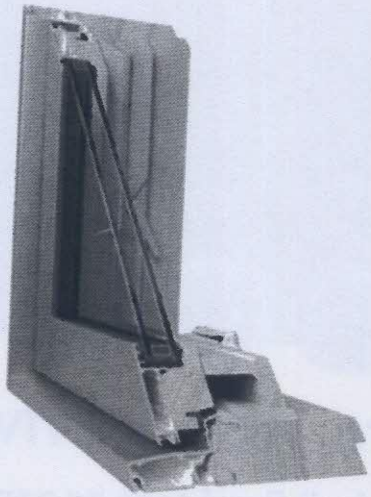
EXTERIOR

DURABLE EXTERIOR
- Weather resistant aluminium exterior
- Over 120 powder coat colours
- Low maintenance - free yourself from painting
- Full façade capability

INSULATING DOUBLE GLAZING
- Optimal thermal performance
- Reduced sound penetration
- All options to match your needs

SUPERIOR GASKETS & SEALS
- Double Sash Gaskets
- Minimal air leakage and thermal loss
- Latest Thermoplastic elastomer technology

RATINGS
- Bushfire Rated & compliant – Up to Bushfire Attack Level 40
- N6 Wind load Ratings



INTERIOR

SUSTAINABLE TIMBER
- Hardwoods low conductive properties assist in natural insulation
- Superior Australian Hardwood strength
- Suitable for all internal finishes to match interior décor

PREMIUM HARDWARE RANGE
- Truth® Hardware for window range
- Fully concealed multi-point sash locking system
- Fully concealed sash operator
- Large Sash size capabilities
- Wider opening; without a chain
- Foldable designer operation handle
- Automation options available
- Stainless options available

INSECT SCREENING
- All screening material options available
- Easy to remove & clean

Visit us

Showroom
57-59 Canterbury Road

News

Residential Excellence - Miglas Windows & Doors contributes

Architect - Builder - Owner

Miglas provides what you need for your project

Features & Benefits

Xtreme® Windows & Doors Flame Zone

1 Bushfire Features
Xtreme® Flame Zone fully integrated System is a compact design that overcomes spacial and aesthetic restrictions other fire systems prescripbe

2 It is a cost efficient solution.

3 Provides full Flame Zone protection requiring FZ rating.

4 Fully Compliant to AS3959-2009, and AS1530.8.2-(2007).

5 The system can easlily be activated externally by fire fighting authorities.

6 Excellent radiant heat shielding properties.

7 Utilises standard toughened glass.

8 Unobstrusive design.

9 Easily maintained.

10 Light weight.

11 Energy Efficiency Options are available.

12 Xtreme® Flame Zone System is available in a wide range of window and door sizes, styles, colours and combinations.

13 Windows are available in Sliding, Casement, Awning and Fixed.

14 Doors are available in Sliding, Sliding Stacker, Hinged and Bifold.

15 Maximum width of Xtreme® Flame Zone Window System is 3000mm with height at 1500mm.

16 Maximum width of Xtreme® Flame Zone Door System is 2400mm with height at 2400mm.

17 Maximum Glass area is 2.4m².

18 Available in powdercoat finishes, woodgrain imaged or galvanised finish.

19 Stainless steel screens are fitted to all opening sashes as per AS3959.-2009.

Product Range

Xtreme® Windows

Available in Sliding, Casement, Awning and Fixed.

Windows are glazed with 5mm toughened glass or 5mm combinations in IGU's (Insulated Glass Unit).

Maximum height is 2400mm with width at 2400mm.

Maximum glass area is 2.4m².

Larger systems are available upon consultation with Trend ®Windows & Doors Xtreme® Specialists.

Xtreme® Doors

Available in Sliding, Sliding Stacker, Single or Double Hinged and Bifold Doors.

Doors are glazed with 6mm toughened glass or 6mm combinations in IGU's (Insulated Glass Unit).

Maximum height is 2400mm with width at 2400mm.

Maximum glass area is 2.4m².

Larger systems are available upon consultation with Trend ®Windows & Doors Xtreme® Specialists.

Please note that drawings are not to scale

Confidentiality Notice: This document and the information it contains are copyright and confidential to Trend® Windows & Doors Pty Limited. Disclosure, use and copying in any form whatsoever, except as authorised by Trend® Windows & Doors in writing, are strictly prohibited. Patents and Design Registrations pending.

The **FIRST** system to pass

FASCIA, EAVES & ROOF

BAL-FZ ROOF SYSTEM Tested to AS 1530.8.2

"We don't aim to SCARE.
We aim to PROTECT"



Lightweight
Flexible
Affordable

For more information contact:

Trevor Kempster - National Sales Manager
Mobile: 0400 966 899 - Email: trevor@tbafirefly.com.au
or
visit - **www.tbafirefly.com.au** - today

FIREFLY
Firetherm
PASSIVE FIRE PROTECTION

Schedule 24 Clearing of native vegetation—not assessable development under schedule 3, part 1, table 4, item 1

schedule 3, part 1, table 4, item 1(e) and (f)

Part 1 Clearing and other activities or matters—general

1 Clearing and other activities or matters for land generally

(1) Clearing under a development approval for a material change of use or reconfiguring a lot, if the approval is given for a development application—

(a) made after 4 October 2004; and

(b) for which the chief executive administering the Vegetation Management Act is a concurrence agency.

(2) Clearing an area of vegetation that is less than 0.5ha within a watercourse or lake for an activity (other than an activity relating to a material change of use of premises or the reconfiguring of a lot) that is subject to an approval process and is approved under the Act or another Act, or is carried out under the document called 'Guideline—Activities in a watercourse, lake or spring carried out by an entity' approved by the chief executive of the department that administers the *Water Act 2000*, if the area is—

(a) a least concern regional ecosystem—

(i) shown on the regional ecosystem map or remnant map as remnant vegetation; or

(ii) shown on a PMAV as a category B area; or

(b) shown on a PMAV as a category X area; or

Part 2 Clearing for particular land

2 Freehold land

For freehold land, clearing that is—

(a) clearing of vegetation to which the Vegetation Management Act does not apply; or

(b) for a forest practice; or

(c) residential clearing; or

(d) necessary for essential management; or

(e) in an area shown on a PMAV as a category X area; or

(f) in an area for which there is no PMAV and the vegetation is not regulated regrowth vegetation or shown on the regional ecosystem map or remnant map as remnant vegetation; or

(g) for urban purposes in an urban area and the vegetation is regulated regrowth vegetation, or an of concern regional ecosystem or a least concern regional ecosystem—

(i) shown on a PMAV for the area as a category B area; or

(ii) if there is no PMAV for the area—shown on the regional ecosystem map or remnant map as remnant vegetation; or

(h) for urban purposes in an urban area in a wild river high preservation area and the vegetation is—

(i) remnant vegetation, shown on the regional ecosystem map or remnant map, that is an of concern regional ecosystem or a least concern regional ecosystem; or

(ii) shown on the regional ecosystem map or remnant map as other than remnant vegetation; or

(iii) regulated regrowth vegetation; or

(i) necessary for routine management in an area of the land and the vegetation is regulated regrowth vegetation, or a least concern regional ecosystem—

(i) shown on a PMAV for the area as a category B area; or

(ii) if there is no PMAV for the area— shown on the regional ecosystem map or remnant map as remnant vegetation; or

(j) in an urban development area; or

(k) on airport land and the operational work—

(i) is consistent with the land use plan approved under the *Airport Assets (Restructuring and Disposal) Act 2008*, chapter 3, part 1 for the land; and

(ii) is carried out on land that is not stated, under the land use plan, to remain undeveloped land; or

(l) clearing of regulated regrowth vegetation under the regrowth vegetation code or a regrowth clearing authorisation, other than if the vegetation is shown on a PMAV for an area of the land as a category A area; or

(m) for development that is for an extractive industry under the Vegetation Management Act, section 22A(3) in a key resource area to the extent it involves clearing regulated regrowth vegetation, other than if the vegetation is shown on a PMAV for an area of the land as a category A area; or

(n) for development that is a significant community project to the extent it involves clearing regulated regrowth vegetation, other than if the vegetation is shown on a PMAV for an area of the land as a category A area.

3 Indigenous land

For indigenous land, clearing that is—

(a) clearing of vegetation to which the Vegetation Management Act does not apply; or

dam see the *Water Act 2000*, schedule 4.

dead marine wood means a branch or trunk that—

(a) is a part of a dead marine plant; or

(b) was a part of a dead marine plant.

declared pest means a declared pest under the *Land Protection (Pest and Stock Route Management) Act 2002*.

designated proponent, for part 6, see section 31.

domestic housing activity means the construction or use of a single residence on a lot and any reasonably associated building or structure.

Examples of a building or structure that could be reasonably associated with a single residence—

caretakers' accommodation, granny flat, building or structure used for a home business

environmental management register means the environmental management register under the Environmental Protection Act.

essential management means clearing native vegetation—

(a) for establishing or maintaining a necessary fire break to protect infrastructure other than a fence, road or vehicular track, if the maximum width of the fire break is equivalent to 1.5 times the height of the tallest vegetation adjacent to the infrastructure, or 20m, whichever is the greater; or

(b) for establishing a necessary fire management line if the maximum width of the clearing for the fire management line is 10m; or

(c) necessary to remove or reduce the imminent risk that the vegetation poses of serious personal injury or damage to infrastructure; or

(d) by fire under the *Fire and Rescue Service Act 1990* to reduce hazardous fuel load; or

(e) necessary to maintain infrastructure including any core airport infrastructure, buildings, fences, helipads, roads,

stock yards, vehicular tracks, watering facilities and constructed drains other than contour banks, other than to source construction material; or

(f) for maintaining a garden or orchard, other than clearing predominant canopy trees to maintain under-plantings established within remnant vegetation; or

(g) on land subject to a lease issued under the *Land Act 1994* for agriculture or grazing purposes to source construction timber to repair existing infrastructure on the land, if—

(i) the infrastructure is in need of immediate repair; and

(ii) the clearing does not cause land degradation as defined under the Vegetation Management Act; and

(iii) restoration of a similar type, and to the extent of the removed trees, is ensured; or

(h) by the owner on freehold land to source construction timber to maintain infrastructure on any land of the owner, if—

(i) the clearing does not cause land degradation as defined under the Vegetation Management Act; and

(ii) restoration of a similar type, and to the extent of the removed trees, is ensured.

excluded work—

1 *Excluded work*, for schedule 3, part 1, table 4, item 5, means maintenance work on a lawful work.

2 *Excluded work*, for schedule 3, part 1, table 4, item 5(b)(i), (iii) and (ix), also means—

(a) minor work that—

(i) has insignificant impact on coastal management; and

(ii) is reversible or expendable; or

other community services for the inhabitants, if the building of the dwelling houses is—

(i) building work for which a development permit for a building development application, or a compliance permit, has been given; or

(ii) building work mentioned in schedule 3, part 2, table 1, item 1; or

(iii) for public housing.

residential land, for schedule 4, table 5, item 11, means land that—

(a) is being used for residential purposes; or

(b) may or is intended to be used for residential purposes under—

(i) a development approval in effect on or before 24 April 2009; or

(ii) a planning scheme as in force on 24 April 2009.

residential zone means land, however described, designated in a planning scheme, temporary local planning instrument, master plan or preliminary approval to which section 242 of the Act applies as residential.

Examples of ways of describing land—

- general residential
- park residential
- residential living
- residential choice
- residential low density
- residential medium density
- residential high density

road frontage, for land, for schedule 4, table 5, item 11, means the boundary between the land and any road adjoining the land.

routine management, for clearing native vegetation on land, means the clearing of native vegetation—

(a) to establish a necessary fence, road or vehicular track if the maximum width of clearing for the fence, road or track is 10m; or

(b) to construct necessary built infrastructure, including core airport infrastructure, other than contour banks, fences, roads or vehicular tracks, if—

(i) the clearing is not to source construction timber; and

(ii) the total extent of clearing is less than 2ha; and

(iii) the total extent of the infrastructure is on less than 2ha; or

(c) by the owner on freehold land to source construction timber for establishing necessary infrastructure on any land of the owner, if—

(i) the clearing does not cause land degradation as defined under the Vegetation Management Act; and

(ii) restoration of a similar type, and to the extent of the removed trees, is ensured; or

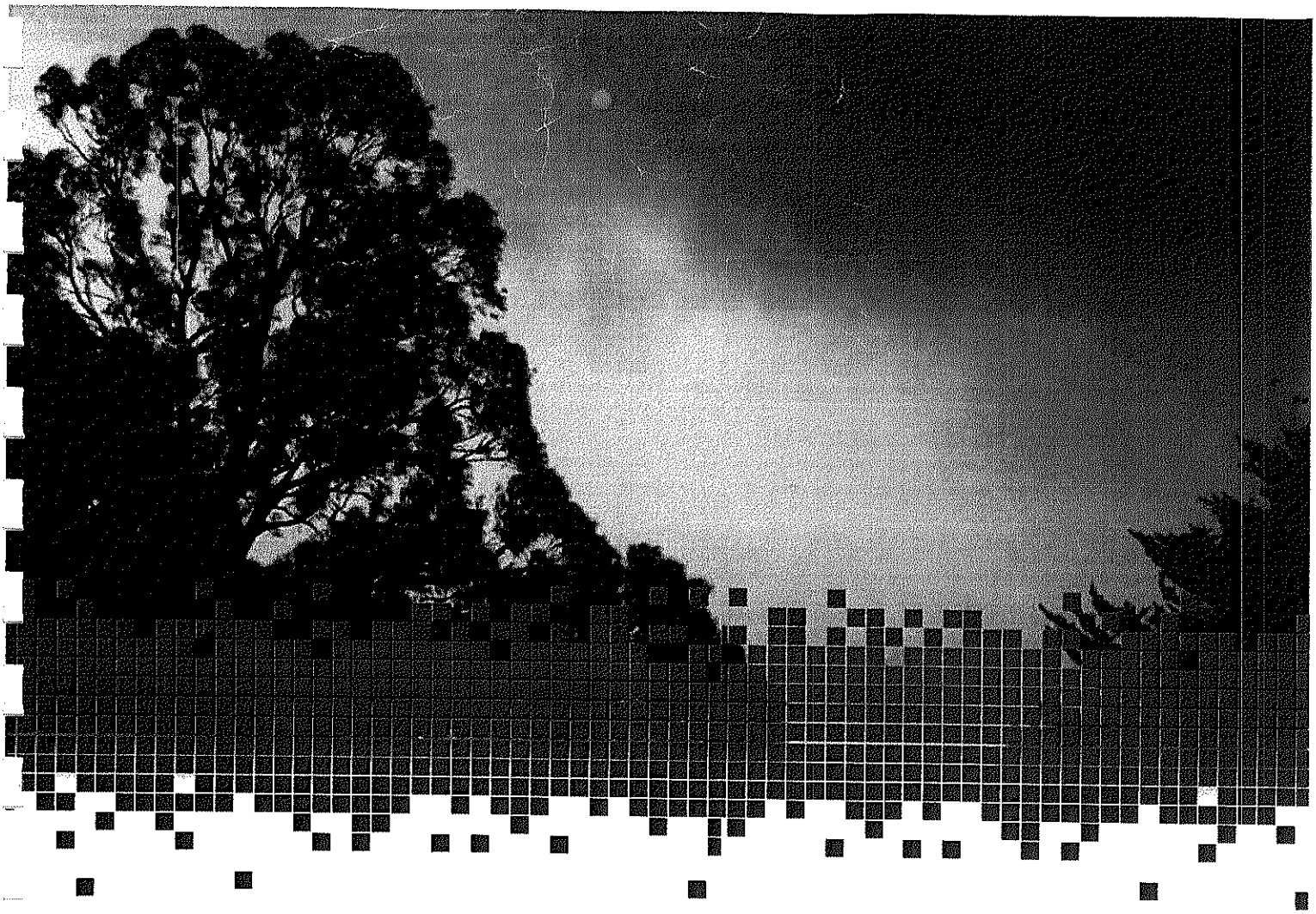
(d) by the lessee of land subject to a lease issued under the *Land Act 1994* for agriculture or grazing purposes to source construction timber, other than commercial timber, for establishing necessary infrastructure on the land, if—

(i) the clearing does not cause land degradation as defined under the Vegetation Management Act; and

(ii) restoration of a similar type, and to the extent of the removed trees, is ensured.

school, for schedule 4, table 5, item 11, means a non-State school or State school.

SEQ koala State planning regulatory provisions means the South East Queensland Koala State planning regulatory provisions published by the department.



Bushfire Planning and Design Certification Scheme update

FPA Australia is proud of the Bushfire Planning and Design (BPAD) Certification Scheme that has been of so much interest lately in the Industry. While the BPAD Certification Scheme has existed for many years as part of FPA Australia, it is only in the past 12 months that it has begun to gain momentum.

In November 2010, Planning NSW released a Fact Sheet (www.housingcode.planning.nsw.gov.au) that they entitled *Facilitating councils' assessing low risk and low impact development applications on bushfire prone land – s.79BA of the Environmental Planning and Assessment Act 1979*. In this Fact Sheet they announced that the Department was commencing an amendment to the Environmental Planning and Assessment Act 1979 (EP&A Act) allowing for Councils to have the option of undertaking the assessment of bushfire risk themselves or seeking assistance from a 'suitably recognised consultant'.

The amendment to the EP&A Act was gazetted in December 2010. The changes to the Act came into effect on the 25th February 2011, and provided for a 12 month transition period in which the RFS had time to work with the Councils to assist them to build the capacity to undertake the assessments, or identify recognised consultants.

The RFS have provided their own Fact Sheet (Fast Facts 5/10) (www.rfs.nsw.gov.au/file_system/attachments/State08/Attachment_20111031_642D90EE.pdf) to assist Councils in identifying 'recognised consultants'. The FPA Australia BPAD Certification Scheme is currently the only scheme recognised by the RFS as their preferred accreditation scheme for professionals in bush fire consultancy. Some Council's choose to do their own assessments however the vast majority of the NSW Councils will only use an FPA Australia BPAD Certified Practitioner to undertake the work.

BPAD Certified Practitioners are pre-eminent professionals who have obtained qualifications in designing for Bushfire Protection. They also hold corporate membership with FPA Australia, ensuring that they sign the FPA Australia Code of Practice and hold appropriate levels of insurance. Obtaining certification is not an easy thing to do. All our applicants must produce examples of their work for a range of situations, and be interviewed by a panel of expert peers from FPA Australia, Industry, RFS and the University of Western Sydney. Once certified, all BPAD professionals must undertake Continuing Professional Development to maintain their certification.

This change to the Act provided further recognition and credibility to the BPAD Certification program that was launched in NSW in 2002. It has also further allowed FPA Australia to demonstrate the merit of the certification program to other regulators around Australia. FPA Australia takes this opportunity to thank the professionalism of BPAD accredited practitioners and the contribution of the NSW Rural Fire Service and the University of Western Sydney in supporting the BPAD certification program.

Visit the FPA Australia website (www.fpaa.com.au) for further information on the BPAD Certification Scheme and for further information about becoming BPAD Certified email certification@fpaa.com.au or contact the Learning & Development team on 1300 731 922.

FPA AUSTRALIA

6.PROFILES

ELDON BOTTCHER

EDUCATION AND QUALIFICATIONS

Graduate Diploma in Design in Bushfire Prone Areas
University of Western Sydney

Diploma in Architecture
Queensland Institute of Technology

Certificate of Rural Fire Management
University of Southern Queensland

Registered Architect
Queensland
New South Wales
Victoria

A+ Architect
Australian Institute of Architects

FPAA Certified Practitioner (BPAD-A-16935)
Bushfire Planning and Design (BPAD-A), Alternate Solutions & DTS

PROFESSIONAL MEMBERSHIPS

Fellow
Australian Institute of Architects

Member
Australian Institute of Emergency Services

Member
Australian Institute of Engineers Society of Fire Safety

Corporate Member
Fire Protection Association of Australia

Member
Urban Development Institute of Australia

Associate
Institution of Fire Engineers

PROFESSIONAL EXPERIENCE

Director
Eldon Bottcher Architect Pty Ltd since 1978

Bushfire Assessment and Planning Consultant since 1998

Group Officer
Albert Rural Fire Brigades Group
Queensland Fire and Rescue Service

Group Officer
Gold Coast Rural Fire Brigades Group
Queensland Fire and Rescue Service

Group Officer
South East Regional Support Group
Queensland Fire and Rescue Service

Planning Officer
Gold Coast Rural Fire Brigades Group
Queensland Fire and Rescue Service

Member Practice Committee AIA Qld Chapter

OTHER BUSHFIRE RELATED COURSES AND TRAINING

I.C.S./AIIMS (40 hr. course) in Incident Command Systems

Certificate 4 (Workplace Training and Assessment)

QFRS Level 1

QFRS Level 2 (Officer)

QFRS Fire Management 1

QFRS Crew Leader

.

BUSHFIRE RELATED AWARDS

National Planning Award
State Planning Award
Planning Institute of Australia
Gold Coast Bushfire Management Strategy
(Co-Initiator and Member of Preparation Committee)

Australian Government
National Medal
Long and Distinguished Service to Fire fighting

Queensland Government
Australia Day Medallion
Services to Rural Fire Fighting

Queensland Government
Year of the Volunteer Medallion
Services to Fire fighting

UDIA
Best Consultancy Team Award in 2007.

SERVICES OFFERED

Bushfire management Reports

Bushfire Safety Engineering

Bushfire Planning and Design

Bushfire Hazard Assessment

Alternative Solutions

Expert Witnessing
(See Planning and Environment Court of Queensland Determination
File No. BD 624 of 2005 sections 28 to 35)

Continuing Professional Development Lectures

Tertiary Education Lectures and Tutorials

Town Planning Bushfire Codes for Local Authorities

Bushfire Burn Planning

General consultancy relating to all aspects of Bushfire

There is no vegetation management within the covenant area.