

BUSHFIRE EMERGENCY MANAGEMENT AND EVACUATION PLAN

Construction Phase 2 & 3 Lindfield
Learning Village
100 Eton Road, Lindfield

RING

'000'

for all emergencies

Prepared for

Hindmarsh Construction

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Prepared by	Lew Short
Client Details:	NSW Department of Education

BlackAsh Contact Details

Lew Short	Principal
M: 0419 203 853	E: lew.short@blackash.com.au

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Lew Short | Director

BlackAsh Bushfire Consulting

B.A., Grad. Dip. (Design for Bush fires), Grad. Cert. of Management (Macq), Grad. Cert. (Applied Management)
Fire Protection Association of Australia BPAD Level 3 BPD-PA 16373

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1. Plan Authorisation & Review

This document has been provided to Hindmarsh Construction for the construction phase 2 and 3 of Lindfield Learning Village.

Responsibility for enacting, testing and implementing the document rests with Hindmarsh Construction. This document does not include evacuation arrangements for specific hazards (e.g. floods, storm, active shooter, internal structure fire etc).

This document is to be reviewed through consultation with stakeholders affected by this document:

- no less than every three years;
- following an emergency resulting in significant evacuations

The site manager from Hindmarsh is responsible for authorisation of the plan and review as per Table 1. The Plan is to be reviewed and signed by 1 August in each year, prior to the start of the Bushfire Danger Period on 1 October.

Table 1 Plan authorisation and review

	Name	Signature	Date
2020 Authorised by			
2021 Authorised by			
2022 Authorised by			

2. Site Details

This plan is for Lindfield Learning Village located at 100 Eton Road, Lindfield and legally known as Lot 2 DP1151638. It is provided for Hindmarsh Construction and is applicable to all personnel and contractors on site during the construction period.

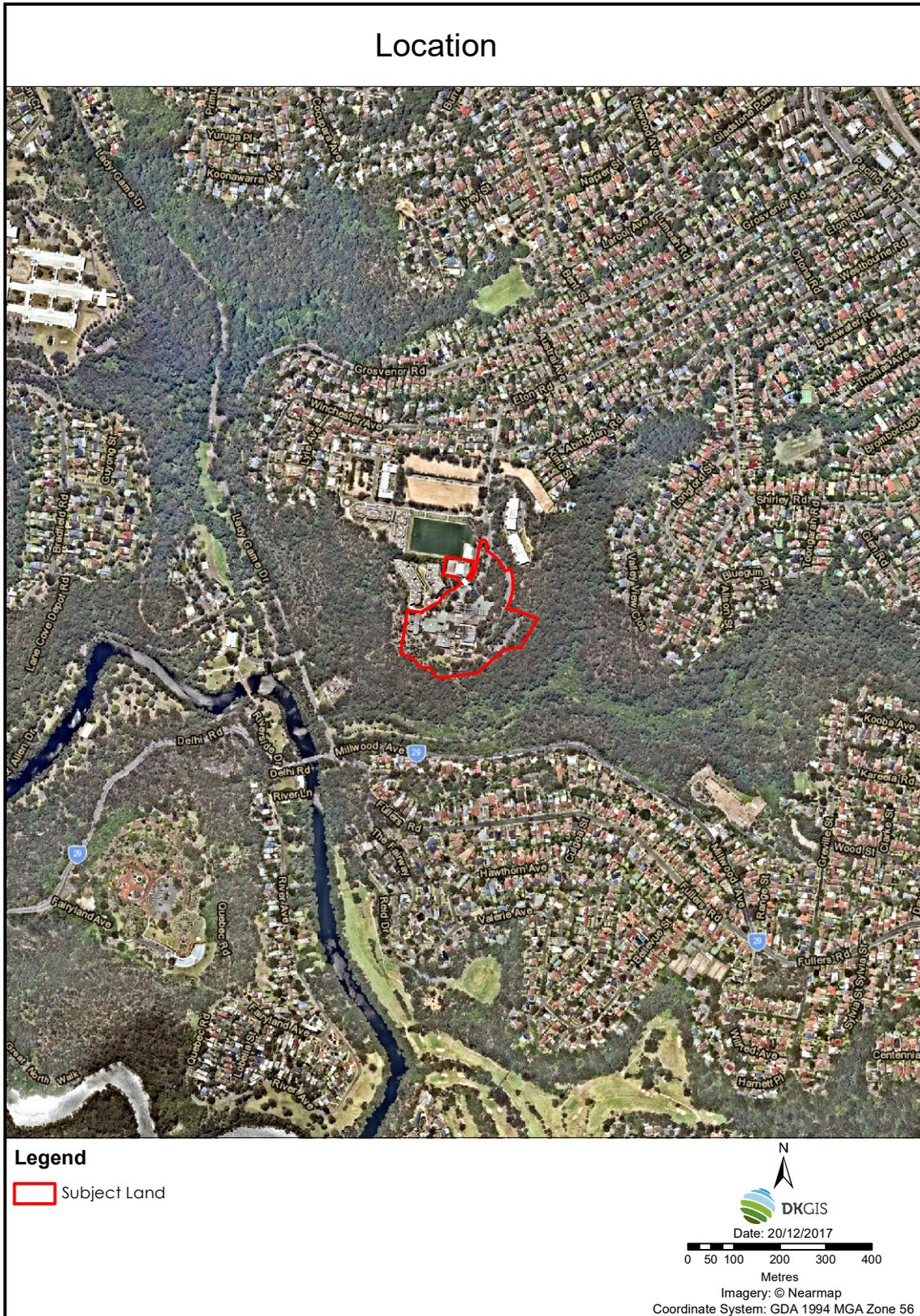
The Lindfield Learning Village construction site includes all areas within the site.

The *Bushfire Emergency Management and Evacuation Plan* has been designed to assist Hindmarsh to protect life of staff and contractors on site in the event of a bushfire.

This Plan outlines procedures for both evacuation to enhance the protection of occupants from the threat of a bushfire attack.

Contact Person		
Primary Place of Assembly	NA. Evacuation from site	
Assembly point for off-site evacuation	Workers use own vehicles if time permits to relocate out of bushfire prone areas Or Abingdon Reserve. Corner of Abingdon Road and Eton Road	
On site Refuge	NIL	
Off-site evacuation to	Workers use own vehicles if time permits to relocate out of bushfire prone areas Or Abingdon Reserve. Corner of Abingdon Road and Eton Road	

Figure 1 Lindfield Learning Village Location



3. Overview

This *Emergency Management and Bushfire Evacuation Plan* (Evacuation Plan) has been prepared by Blackash Bushfire Consulting on behalf of the Hindmarsh Construction. It accompanies a Response to Submissions Report in support of State Significant Development Application (SSD 16_8114) for Lindfield Learning Village (the site).

On 24 October 2018 the Minister for Planning granted partial development consent to SSD 8114 for Phase 1 construction and operation of a new school for 350 students. The remainder of SSD 8114 (as originally proposed) has not yet been granted consent and has been subject to further approvals, assessment and engagement with the relevant agencies (DPE, RFS, OEH, RMS, TfNSW) and Council. The Response to Submissions and supporting documents seek approval for the remainder of SSD 8114 as follows:

Phase 2(b)

- Works to accommodate 1,050 students (including the approved 350 in Phase 1 and 35 in the modification to Phase 1).
- Repurposing of the Phase 1 area.
- An extended driveway for car and bus access within the eastern portion of the site from Eton Road. A fire trail linking the new extended driveway to Dunstan Grove is proposed for access by emergency vehicles.

Phase 3

- Works to accommodate an additional 950 students in the western wing of the building.

4. Introduction

The Lindfield Learning Village (the School) incorporates Lot 2 and 4 in DP 1151638 known as 100 Eton Road Lindfield (the site). 'Lindfield Learning Village' is proposed to eventually accommodate approximately 2,000 students from kindergarten to Year 12 and approximately 350 staff.

The aim of this document is to inform and enhance emergency management arrangements during forecast bad fire weather and provide for evacuations during actual and or forecast bushfires.

This *Bushfire Management and Emergency Evacuation Plan* is for the construction phase of Stage 2 and 3 parts of the school.

The bushfire evacuation procedures have been completed in accordance with NSW Rural Fire Service *Guide to Developing A Bushfire Emergency Management Plan* and with consideration of Australian Standard AS 3745-2010 – *Planning for Emergencies in facilities* and NSW Government *Evacuation Management Guidelines (March 2014)*.

Specific building evacuations for internal structure fires are not within the scope of this Plan.

Based on recommendations from NSW Rural Fire Service, the plan addresses provisions relating to single access into the site, that firefighting assistance may be limited in the event of a bushfire, and that evacuation may not be possible as escape routes may be blocked. The Hindmarsh emergency management arrangements are fundamentally different to that for the school staff, contractors and children where a range of redundancies has been provided depending on the fire scenario.

The Construction Evacuation Plan is based on capable and independent adults enacting direction from Hindmarsh and or emergency services.

5. Bushfire Risk

Bushfire is a normal part of Australia's natural environment, particularly in eucalypt forests. However, the frequency and intensity of bushfires varies throughout the landscape and seasons. Bushfires are a common occurrence during drier parts of the year.

Climate change is expected to bring longer bushfire seasons to parts of Australia, an increasing number of extreme fire weather days, and increasing fire intensity.

Bushfires of low or moderate intensity often pose little threat to life, property and community assets, but the potential for changes in wind direction can be a significant hazard. However, bushfires that burn in heavy fuels, steep terrain or on hot, dry and windy days often spread rapidly, crown in forests, produce powerful convection columns and create extensive spot fires ahead of the fire front, often making their control impossible until weather conditions moderate.

As the fire danger reaches "extreme", bushfires are often described as firestorms and become impossible to control. When the fire danger reaches 'Catastrophic", the risk of serious injury or death to people in the path of a bushfire increases significantly, and many properties and other community infrastructure can become difficult or impossible to defend.

The intensity of a bushfire, which determines to a large extent how much damage it will do, is a product of the fuels burning (quantity, arrangement, size, moisture content), the weather at the time (temperature, wind speed and direction, relative humidity, atmospheric stability) and the topography of the land where the fire is burning (slope and aspect).

Vulnerability to bushfire risk is a combination of the physical location of the persons under threat and the understanding and ability that person has that enables them to deal with the risk.

It is the position of Australian fire agencies that the safest action to protect life is for people to be away from the bushfire or threat of bushfire as early as possible.

6. Schools as Vulnerable Uses

In NSW, schools are identified as Special Fire Protection Purpose (SFPP) development under section 100B of the *Rural Fires Act, 1997*. Occupants of SFPP developments require special care and are considered vulnerable uses.

The nature of SFPPs means that occupants may be more vulnerable to bushfire attack for one or more of the following reasons (Planning for Bushfire Protection 2019 p. 50):

- *They may be less educated in relation to bush fire impacts;*
- *They may have reduced capacity to evaluate risk and to respond adequately to the bushfire threat;*
- *They may present organisational difficulties for evacuation and or management;*
- *They may be more vulnerable through stress and anxiety arising from bush fire threat and smoke;*
- *There may be significant communication barriers;*
- *Supervision during a bush fire may be difficult; and*
- *Logistical arrangements for the numbers of residents may be complicated in terms of alternate accommodation, transport, healthcare and food supplies.*

Students within school facilities and those who care for them, are likely to need more time, resources, support and assistance to take the appropriate actions and or to evacuate safely.

School children are particularly vulnerable to the effects of bushfire and are more likely to be adversely affected by smoke or heat and health related issues (such as stress, respiratory issues etc) while being evacuated.

6.1. The need for early action

The Evacuation Plan has been completed such that it does not rely on the immediate availability of emergency service personnel to undertake the evacuation. As such, the decision to evacuate must be undertaken confidently and without hesitation by the Hindmarsh Chief Fire Warden.

The site is complex with significant numbers of workers with varying degrees of site familiarity which will require early advice and decisions to evacuate or close the school.

Avoiding risk (i.e. closing the site) should always be the first option. The fundamental priority of people within the school site must be to leave the area to the primary evacuation point (Lindfield Public School) well before there is a risk of bushfire, either in the area, or along a route to an area not prone to bushfire attack.

6.2. Off-site evacuation

Workers use own vehicles if time permits to relocate out of bushfire prone areas

Or

Abingdon Reserve. Corner of Abingdon Road and Eton Road

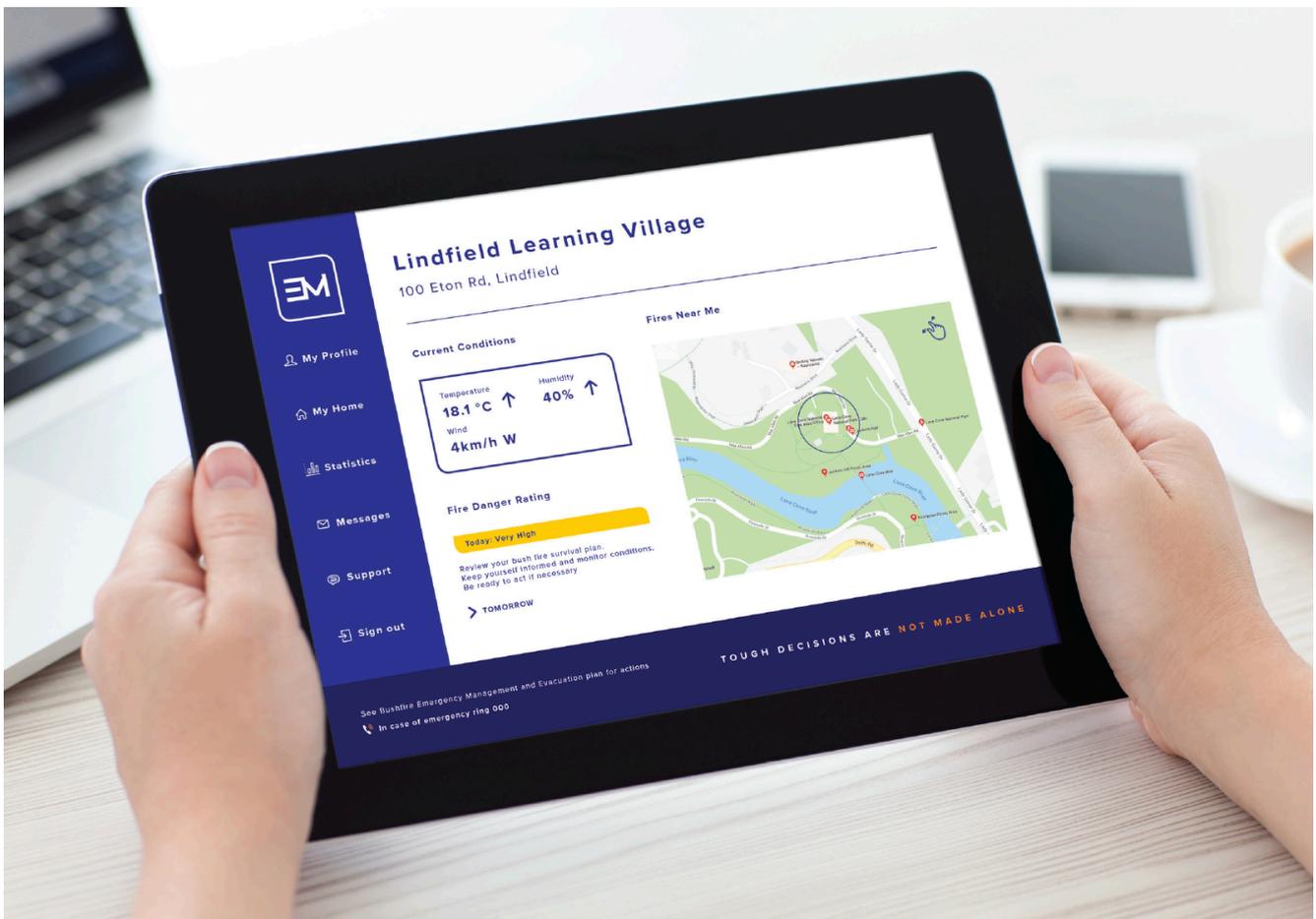
6.3. Emergency Management System

A Bushfire Emergency Management System (Figure 2) has been developed to be utilised by the Hindmarsh to provide a single point of information to inform decision making.

The Evacuation Plan has been digitised that draws on the strategies from the Evacuation Plan in a simple user interface. The Emergency Management System (EM System) provides a framework for the Site Manager to view risks and to inform decision making actions.

The EM System (has been deployed and is available for use by Hindmarsh.

Figure 2 Emergency Management System



7. Basis of the Evacuation Plan

The plan is based on the premise that:

1. On Total Fire Ban days and above, the Chief Fire Warden will determine the operation of the site.
2. On declared Catastrophic Fire Danger Rating days, the site will be closed.
3. Leaving a high-risk bushfire location is the safest action and evacuating before a bushfire threatens is always safer than remaining until a bushfire starts. Leaving early becomes increasingly appropriate with higher Fire Danger Ratings.

8. Types of Evacuation

Evacuation is a risk management strategy that may be used to mitigate the effects of an emergency on a community. It involves the movement of people to a safer location and their return. The types of evacuation and alternatives to evacuation include¹:

Immediate Evacuation This results from a hazard impact that forces immediate action, thereby allowing little or no warning and limited preparation time.

Pre-Warned/Managed Evacuation This follows the receipt of sufficient and reliable information which prompts a decision to evacuate ahead of a potential hazard impact.

Self-Managed Evacuation/Relocation This is a spontaneous type of evacuation involving the self-initiated movement of people as individuals, families or community groups. This may include circumstances where residents are advised to leave early ahead of dangerous conditions

Shelter in Place Shelter in place should be considered as an alternative when the risk associated with evacuation is seen as being greater than that of sheltering in place or as an outcome of an immediate threat to individuals where evacuation cannot be initiated in a safe manner.

¹ NSW Evacuation Management Guidelines (March 2014)

9. Authority to Evacuate

The Site Manager can initiate closure and or an evacuation of the construction site or associated use.

Authority to evacuate can be directed by:

- Instructions from the NSW Police or Fire Authority (NSW Rural Fire Service or Fire and Rescue NSW)
- Instruction from NSW Department of Education authorised officer;
- Instruction from Director, Educational Leadership
- Local decision by the Site Manager

NSW Agencies with legislated authority to order an evacuation are:

- a) Combat Agencies with appropriate legislation; and
- b) the NSW Police Force.

A Combat Agency generally issues an order to evacuate; consideration should be given to how affected people may respond to such an order. Police Officers generally enforce such orders.

NSW Police Force may issue an evacuation order under Section 60L State Emergency & Rescue Management Act 1989. A senior police officer may, if satisfied that there are reasonable grounds for doing so for the purpose of protecting persons from injury or death threatened by an actual or imminent emergency, direct, or authorise another police officer to direct, a person to do any or all of the following once a danger areas is declared:

- (a) to leave any particular premises and to move outside the danger area,
- (b) to take any children or adults present in any particular premises who are in the person's care and to move them outside the danger area,
- (c) not to enter the danger area. A 'danger area' means the areas specified by a senior police officer as the area affected by an emergency.

Fire & Rescue NSW under Section 19 Fire Brigades Act 1989 through the officer in charge at a fire or hazardous material incident may cause to be removed any person, vehicle, vessel or thing the presence of whom or which at or near a fire or hazardous material incident might, in the officer's opinion, interfere with the work of any fire brigade or the exercise of any of the officer's functions.

NSW Rural Fire Service Section 22A of the Rural Fires Act 1997 provides that an officer of a rural fire brigade or group of rural fire brigades may cause to be removed any person, vehicle, vessel or thing the presence of whom or which at or near a fire, incident or other emergency might, in the officer's opinion, interfere with the work of any rural fire brigade or the exercise of any of the officer's function

10. Emergency Roles & Responsibilities

The Chief Fire Warden, in consultation with the Emergency Control Organisation and other emergency control agencies, has overall responsibility for evacuations within the school grounds and can initiate an evacuation.

When so directed, the Chief Fire Warden is to act under the authority of NSW Police.

Where emergency services are not present and direction has not been provided, the Chief Fire Warden should initiate evacuation procedures. Emergency roles and responsibilities are identified in Table 2.

Table 2 Emergency Roles & Responsibilities

Position	Name of Person	Responsibility	Mobile Phone Number
Chief Fire Warden		See Appendix 2	
Deputy Chief Fire Warden		See Appendix 2	
First Aid Officer			

11. Emergency Contacts

Organisation	Office	Phone Number
Emergency	General emergency number Fire/ Police/ Ambulance	000
NSW Police	2 Park Ave, Gordon NSW 2072	(02) 9418 5399 000
NSW Rural Fire Service Hornsby Fire Control Centre	1049 Pacific Hwy, Cowan NSW 2081	(02) 9883 2000 000
NSW Rural Fire Service	Bushfire Information Line	1800 679 737
Fire and Rescue NSW Gordon Station	Pacific Hwy, Gordon NSW 2072	(02) 9449 9834 000
Ku-ring-gai Council	Local Emergency Management Officer (LEMO) 818 Pacific Highway, Gordon NSW	02 9424 0000
Health and Safety Directorate	Incident Report and Support Hotline	1800 811 523 (Select Option 1)
Director, Educational Leadership	Sue Lowe	
Lindfield Public School (off site evacuation)	218 Pacific Hwy, Lindfield NSW	(02) 9416 1903

12. Preparation for bushfires

The official Bushfire Danger Period generally starts on 1 October and extends through to the following April. However, the fires season has been starting earlier and finishing latter. During this period, bushfires can occur at any time.

12.1. Before the commencement of the Bush Fire Danger Period

Before the commencement of the Bush Fire Danger Period, the site manager will:

- Review and update the Bushfire Emergency Management Plan and Evacuation Plan.
- Ensure Landscape Management Program and Vegetation Management Plan have been completed prior to 1 October each year.
- Certification should be received prior to October that the work has been completed in accordance with RFS Standards for Asset Protection Zones to Inner Protection Zone standard.
- Check emergency equipment and first aid resources are available and operational (battery radio, mobile telephone)
- Provide updated contact details including a mobile number for emergency contact after school hours to local Emergency Services and Police.
- Make the Evacuation Plan available to all occupants of the site.

12.2. During the bushfire danger period

During the bushfire danger period including during periods of increased fire danger, the site manager will monitor information sources for bushfire conditions by:

- Display the Emergency Management System information in prominent places throughout the site office
- Listening to the local radio station, TV and/or monitoring the NSW Rural Fire Service website at www.rfs.nsw.gov.au for information on bushfire activity or fire danger ratings.
- Knowing the Fire Danger Ratings for the area
- Staying alert for warnings such as Bush Fire Alert Levels issued by the RFS
- Watching for signs of fire, especially smoke or the smell of smoke
- Calling the RFS Bush fire Information Line on 1800 NSW RFS (1800 679 737)
- Downloading the free iPhone application from NSW Rural Fire Service – Fires Near Me NSW and keeping aware of fire in the vicinity of the school.

Review Bushfire Dashboard

Review the Emergency Management Systems Bushfire Dashboard (Dashboard) for predicted fire weather at <https://em-systems.firebaseio.com/dashboard> and take appropriate steps in the Evacuation Plan.

The Dashboard displays information collated from a number of official sources including NSW Rural Fire Service and the Bureau of Metrology.

12.3. Be aware of hazard reduction burning

Land managers will often undertake hazard reduction burns in the cooler months of the year. Hazard reduction burns are planned fires in specific areas. Some hazard reduction burns will be undertaken further that may cause smoke drift onto the school. Until it is confirmed that a hazard reduction burn is being undertaken, all fires should be considered as uncontrolled.

13. Fire Danger Ratings

The Bushfire Danger Ratings give an indication of the possible consequences of a fire, if one was to start.

Bushfire Danger Ratings are based on predicted weather conditions such as temperature, humidity, wind and the dryness of the landscape. Bushfires are more likely to spread and cause damage on days when the weather is very hot, dry and windy. The higher the fire danger rating, the more dangerous the conditions. Figure 3 describes each of the Fire Danger Ratings.

Figure 3 Fire Danger Ratings and what they mean (Source AFAC [www.fireandbiodiversity.org.au/ literature.../AFAC Fire Danger Ratings explained](http://www.fireandbiodiversity.org.au/literature.../AFAC_Fire_Danger_Ratings_explained))

Fire Danger Rating	Description
CATASTROPHIC FDI 100+ (Code Red)	<ul style="list-style-type: none"> • Fires will be uncontrollable, unpredictable and fast moving – flames will be higher than roof tops. • People will die and be injured. Thousands of homes and businesses will be destroyed. • Well prepared, well constructed and defended homes may not be safe during the fire. Construction standards do not go beyond a Fire Danger Index of 100. • Thousands of embers will be blown around. • Spot fires will move quickly and come from many directions, up to 20 km ahead of the fire. <p>Leaving is the best option.</p>
EXTREME FDI 75-99	<ul style="list-style-type: none"> • Fires will be uncontrollable, unpredictable and fast moving – flames will be higher than roof tops. • People will die and be injured. Hundreds of homes and businesses will be destroyed. • Only well prepared, well constructed and actively defended houses are likely to offer safety during a fire. • Thousands of embers will be blown around. • Spot fires will move quickly and come from many directions, up to 6 km ahead of the fire. <p>Leaving is the safest option for your survival.</p>
SEVERE FDI 50-74	<ul style="list-style-type: none"> • Fires will be uncontrollable and move quickly– flames may be higher than roof tops. • There is a chance people may die and be injured. Some homes and businesses will be destroyed. • Well prepared and actively defended houses can offer safety during a fire. • Expect embers to be blown around. • Spot fires may occur up to 4 km ahead of the fire <p>Leaving is the safest option for your survival. Your home will only offer safety if it and you are well prepared and you can actively defend it during a fire.</p>
VERY HIGH FDI 25-49	<ul style="list-style-type: none"> • Fires can be difficult to control – flames may burn into the tree tops. • There is a low chance people may die or be injured. Some homes and businesses may be damaged or destroyed. • Well prepared and actively defended houses can offer safety during a fire. • Embers may be blown ahead of the fire. • Spot fires may occur up to 2 km ahead of the fire. <p>Leaving is the safest option for your survival. Your home will only offer safety it is and you are well prepared and you can actively defend it during a fire.</p>
HIGH FDI 12-24	<ul style="list-style-type: none"> • Fires can be controlled • Loss of life is highly unlikely and damage to property will be limited • Well prepared and actively defended houses can offer safety during a fire. • Embers may be blown ahead of the fire. • Spot fires can occur close to the main fire. <p>Know where to get more information and monitor the situation for any changes</p>
LOW-MODERATE FDI 0-11	<ul style="list-style-type: none"> • Fires can be easily controlled • Little to no risk to life and property <p>Know where to get more information and monitor the situation for any changes</p>

The Rural Fire Service provides a map of the Fire Danger Ratings at:

<https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans>. The school is within the Greater Sydney Region.

Fire Danger Ratings give an indication of the consequences of a fire, if one was to start. The higher the fire danger, the more dangerous the conditions. The Fire Danger Ratings should act as a trigger to take action as per Section 25.

14. Total Fire Ban and Extreme Fire Weather

The NSW RFS has reviewed the *Bushfire Emergency Management and Evacuation Plan* (Version 1.1, dated 11 December 2018, and is comfortable with the school operating on days of Total Fire Ban (TOBAN).

- A TOBAN is a day of elevated bushfire danger potential.
- A TOBAN is declared by the RFS on days when fires are likely to spread rapidly and will be difficult to control.
- Fire Danger Ratings are updated twice daily by the RFS at 6.00am and 4pm.

Total Fire Bans are normally declared by 5pm on the day before a ban but can be declared or revoked at any time. Always check the RFS web page for latest information at:

<http://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans>

Given the location of the school and the single accessway into and out of the school, the site may consider closing when a Total Fire Ban has been declared by the Commissioner of the NSW Rural Fire Service.

15. Catastrophic Fire Danger Rating

The school is on the Department's Bushfire Register and is required to close on days when a **Catastrophic** Fire Danger Rating is issued in this NSW Fire Area. Schools on the Bushfire Register will be alerted by the Health and Safety Directorate to preliminary weather forecasts where a Catastrophic Fire Danger Rating is predicted (but not confirmed) up to four days before the event. Preliminary weather forecasts will provide the school with the opportunity to undertake initial preparation should a Catastrophic Fire Danger Rating be issued, requiring them to temporarily cease operations on relevant days.

The State Emergency Operations Centre (SEOC) will notify the department at approximately 4.30pm each day when there are Catastrophic Fire Danger Ratings predicted for the following day. The site manager is to check fire danger ratings and determine the Fire Danger Rating for each day during the Bushfire Danger Period. This can be done through EM Systems or RFS website at <https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans>

16. Evacuation Process

The evacuation process has been adopted from NSW *Evacuation Management Guidelines* (March 2014).

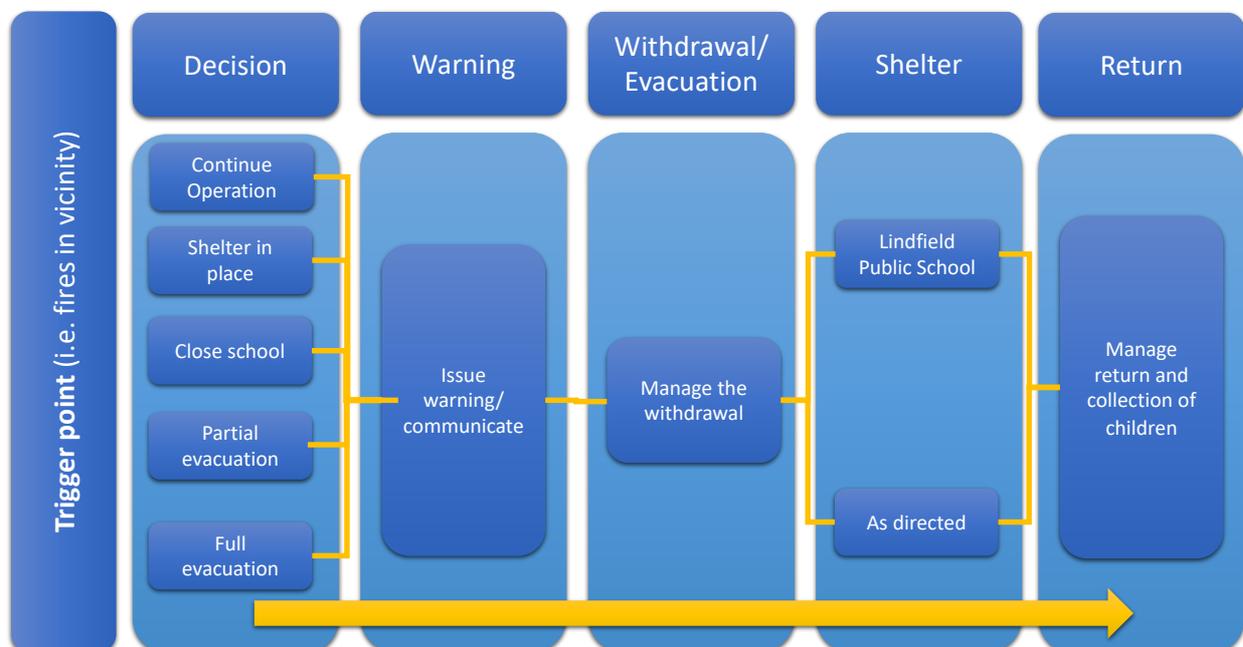
The decision to advise or direct evacuation should be considered whenever there is a potential need to move people to a safer place. This process should be constantly reviewed in changing circumstances.

The decision to evacuate people who are at immediate risk during an emergency is not always straightforward, as it is often based on incomplete or unverified information in a rapidly developing and dynamic situation. Timing of the decision is a significant factor.

The Site Manager and Chief Fire Warden must consider whether the lead warning times they have available to them permit a safe evacuation of a location threatened by bushfire. If sufficient time is available, then properly planned and executed evacuation is the most effective strategy.

Figure 4 shows the evacuation process.

Figure 4 Evacuation Process



17. Evacuation Procedures

17.1. Evacuation Preparedness

The Chief Fire Warden is responsible for implementing the following procedures to facilitate the objectives of this Plan:

- Ensure all staff, contractors, workers and visitors to the site are alerted of the Fire Danger Rating during the bushfire danger period;
- Ensure key site staff are trained and familiar with the Evacuation Plan necessary for their efficient and effective operation in an emergency;
- Ensure evacuation procedures are displayed in strategic locations

17.2. Procedures for Evacuations

Evacuation involves relocating people to where they are safer and by a route that is relatively safe.

The action taken is largely determined by the nature of the fire threat, the people involved and their location. Welfare of evacuees following evacuation is also an important consideration. Such procedures require careful and timely consideration of all factors.

Every bushfire attack scenario will be different. The response to each must therefore be specific and include consideration of the following:

- Location of fire;
- Fire behaviour including;
- Rate and direction of spread;
- Ember affecting the area;
- Smoke affecting the area;
- Numbers of potential evacuees;
- Availability of access;
- Transport

The chief warden (or delegate), on becoming aware of a bushfire emergency, will take the following steps:

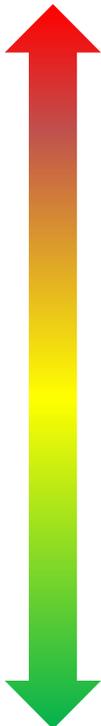
1. Ascertain the nature of the emergency or potential emergency situation and determine appropriate response using the Bushfire Emergency Management and Evacuation Plan;
2. Contact Emergency Services for advice;

Check triggers for evacuation off site (Section 21);

18. Triggers for Evacuation

The following is provided as a guide for evacuation. Evacuate only if safe to do so. The Emergency Assembly Area provides shelter in place options. If fires are within the region, monitor resources for situational awareness.

Observation/ situation	Bushfire Danger Rating						
	Low/ Moderate	High	Very High	TOTAL Fire Ban Declared	Severe	Extreme	Catastrophic
Out of control fire north of Lane Cove Road of school	- Evacuation triggered if safe to do so. Or - Move to assembly areas	- Move to Emergency Assembly Area - Evacuate if safe to do so - Seek instruction from emergency services	- Move to Emergency Assembly Area - Evacuate if safe to do so - Seek instruction from emergency services		- Close site - Move to assembly area or use private vehicles to evacuate the site	- Close site - Move to assembly Area - Seek instruction from emergency services	- Close site Move to assembly area or use private vehicles to evacuate the site
Out of control fire south of Lane Cove Road from school	- Normal operation - Seek guidance from emergency services	- Move to Emergency Assembly Area - Initiate evacuation of the site	- Move to Emergency Assembly Area - Trigger evacuation - Seek instruction from emergency services		- Close site - Move to assembly area or use private vehicles to evacuate the site	- Close site - Move to assembly areas - Seek instruction from emergency services	- Close site - Move to assembly area or use private vehicles to evacuate the site
Bushfires within region but not within Area of Concern	- Normal operation	- Normal operation - Situational awareness	- Normal operation - Situational awareness		- Situational awareness	- Situational awareness	- Close site
No Fires	- Normal operation	- Normal operation - Situational awareness	- Normal operation - Situational awareness	- Situational awareness	- Situational awareness	- Close school	



19. Emergency Alerts

Emergency Alert is a national telephone warning system that aims to save lives by letting people know about threats such as bushfire as early as possible. When danger is imminent, authorised groups such as NSW Rural Fire Service, NSW Police or the NSW SES can send a warning message to residents in high risk areas.

Emergency Alerts are sent in the form of:

- recorded voice messages to landline numbers based on handset location
- text messages to mobile phones based on billing address

If the school receive an Emergency Alert, follow the instructions in the message.

20. Bushfire Alert Levels

During a bush fire, Alert Levels are used to give an indication of the level of threat from a fire.

Don't wait for a warning. Some fires start and spread so quickly there may not be any time for a warning. If you get a Bush Fire Alert, you must take it seriously. Failure to take action can result in death or injury. There are three levels of Bush Fire Alerts:

Table 3 Bushfire Alert Levels



Advice

A fire has started. There is no immediate danger. Stay up to date in case the situation changes.



Watch and Act

There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect students, staff and visitors.



Emergency Warning

An Emergency Warning is the highest level of Bush Fire Alert. The school may be in danger and need to take action immediately. Any delay now puts the lives of students, staff and visitors at risk.

21. Actions During Dangerous Fire Danger Weather

Table 5 provides the triggers and actions required depending on a range of different scenarios.

Table 4 Extreme Weather & Catastrophic Fire Rating

Triggers	Actions	Responsible for Implementation
Total Fire Ban is Declared	No hot works outside	Site manager
Catastrophic Fire Danger Rating	Close site	Site Manager
If Catastrophic, Extreme or Severe, Fire Danger Rating (above Fire Danger Index of 50)	When Catastrophic, Extreme or Severe Fire Danger Rating is issued, the site may be closed on the designated day.	Site Manager
	Initiate preparation i.e. determines availability of temporary relocation or alternative place of work and prepare notification to construction staff.	Site Manager
	Monitor local weather conditions for further advice.	Site Manager

22. Actions & General Principles for Evacuation

Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
Emerging Bushfire Risk / Catastrophic Fire Danger Rating	Watch & Act		
	Controlled Closure of Site	Activate (close) bushfire shutters for Stage 2 and 3 if installed	Site manager
Bushfire in the surrounding area Fire WILL NOT arrive in next 2 hours	Watch & Act	Bushfires within the surrounding area will trigger evacuation of the site. The surrounding area includes any lands within the Lane Cover River Catchment SAFETY NOTE: Evacuation must be COMPLETED well in advance of the fire arrival to ensure people are not caught in the open or on access roads between Dunstan Grove or bushland adjacent to Charles Bean Oval and Eton Road (see Appendix 4).	Site Manager
	Off-site Evacuation	If this cannot be achieved, then on-site shelter in place should be sought. Off-site evacuation should always be the first option.	
	Controlled Closure of site	Activate (close) bushfire shutters for Stage 2 and 3 if installed	Site Manager
		Consult through NSW RFS Website www.rfs.nsw.gov.au , contact 1800 NSW RFS, check smart phone Fires Near Me application	Site Manager

Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
		Inform staff of fire situation	Site Manager
		Continue to monitor situation and stay contactable with mobile phone at all times	Chief Fire Warden
Imminent bushfire threat to the site (less than 2 hrs to impact)	Emergency Warning Off-site Evacuation (if time permits) Controlled Closure of School	Careful assessment of fire potential required by experts, evacuation only to proceed if it can be completed at least 30 minutes before potential arrival of fire.	Chief Fire Warden
		Activate (close) bushfire shutters	Site Manger
		Report missing persons to Chief Warden	Site Manager
		Floor Wardens check that all site and toilets are clear and close doors	
		Evacuation commences	
General	Advice	Contact 000 and advise fire services that fire is imminently about to impact the school and advise of the staff and student location. Advise 000: <ul style="list-style-type: none"> • Location: school Auditorium, in the main building • Number of students, staff and visitors 	Site Manager

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BUSHFIRE CONSULTING

Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
		<ul style="list-style-type: none">• Request immediate assistance from emergency services	

23. Sheltering Procedures

The site does not provide a temporary shelter in place point for the construction workers. The fundamental priority of the Site Manager and Chief Fire Warden must be to leave an area well before there is a risk of bushfire, either in the area, or along a route to an area not prone to bushfire attack.

24. Post-bushfire Event Actions

The Site Manager decides when to re-open the site, in consultation with local emergency services, based on review and confirmation of the safety of the site including:

- Confirm with NSW Fire and Rescue that utilities (water, electricity and gas) are safe to use;
- The air quality is safe and does not trigger health issues in students or staff;
- A qualified arborist should check impacted (burnt) trees within the school to certify structural integrity and that they will not fail as a result of being impacted by fire. In some instances, areas can be marked as unsafe until specialist felling trees have made the area safe;
- All burnt areas and structures should be avoided until they have been checked for safety issues by a qualified person.

General housekeeping should include:

- Review buildings/structure integrity including inspection of all BAL-FZ specifications, bushfire shutters, intumescent grills & fire dampers;
- Review tree integrity;
- Telecommunications/IT/equipment checks;
- Review Emergency Management and replenish First Aid stocks.

25. Debriefing

Debriefing after the event is critical to identify lessons learnt and to tighten procedures that will facilitate a better activation in future.

The aim of debriefing is to ensure that lessons learnt (both positive and negative) are applied for future bushfire events, not to lay blame on people for mistakes.

Debriefing should be conducted by an independent third party and should include key stakeholders activated during the event.

- The debrief should consider (at minimum)
- Fire behaviour and impact on the school and evacuation pathways;
- Activation procedures and trigger points
- Communications
- Implementation of the Evacuation Plan;

- Logistics
- Performance of fire systems
- Identification of training needs
- Information that can enhance the lessons learnt

Debriefings should include a discussion of:

1. What you set out to do
2. What actually happened
3. Why things happened the why they did
4. What could be done better next time
5. What lessons can be applied across schools as a vulnerable community.

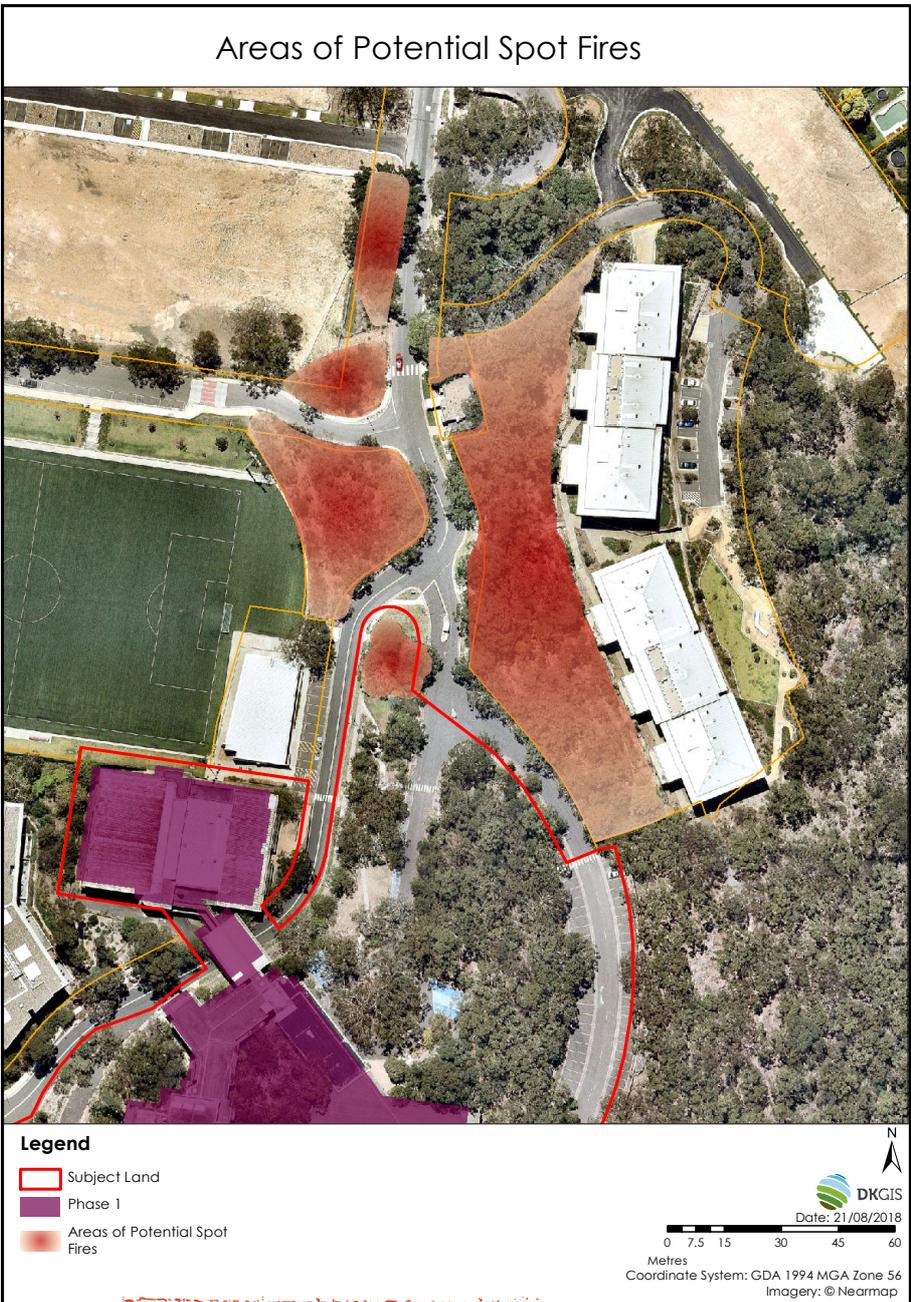
If the fire involved a critical incident, arrange for critical incident counselling through the Department of Education.

Ensure injuries are recorded and reported.

Appendix 1 - Areas of Potential Spot Fires

The approaches to and from the school are not in the care, control or management of the Department of Education or the site. Various land management arrangements are in place with Kuring-gai Council and Defense Housing Australia that prevent areas being managed to meet Asset Protection Zone Standards. In the absence of a maintenance regimen, it is possible that spot fires can start and develop in the areas identified on Figure 5. As such, evacuation to the off-site location is not to occur if embers are dropping out in the surrounds of the school. Guidance from emergency services should be sought and escort provided through these areas if required.

Figure 5 Areas of Potential Spot Fires



Appendix 2 - Roles and Responsibilities

In accordance with Australian Standard AS 3745-2010, an Emergency Control Organisation (ECO) is to be established for the planning, preparation and implementation of the on-site evacuation and emergency procedures and is to consist of Department of Education staff and or specialist providers with the following skills:

- Physical capability to perform the duties required
- Strong leadership qualities
- Maturity of judgement, good decision-making skills and capability to remain calm under pressure
- Sound knowledge of the local area
- Ability to be on site during the fire danger period; and
- Ability to complete the required training

The ECO does not have a 'statutory standing'. It is to follow any instructions or advice from authorised Emergency Service personnel related to evacuation.

Each person in the ECO shall have clearly defined duties and responsibilities.

Implementation of the Evacuation Plan is the responsibility of the Site Manager and Chief Fire Warden. The Site Manager will ensure that:

- The evacuation plan is updated annually
- All staff and contractors on site are made aware of the existence of the Evacuation Plan and the Evacuation procedures to be adopted in the event of an emergency. Yearly training is to be provided for all staff in the implementation of the Evacuation Plan.
- The 'Evacuation Procedure' and map are displayed in strategic locations throughout school
- Evacuation procedures are tested regularly. Evacuation Drills conducted twice a year (1 each semester) and recorded in the Department's in Case of Emergency (ICE) system.
- Deficiencies in the Evacuation Plan/evacuation management systems are reviewed, and changes implemented to address these deficiencies
- Sirens (alarm system) on Fire units are tested and maintained on a regular basis
- A copy of the current plan is distributed to the local emergency management committee and emergency services.

The **Chief Warden** is responsible for the following:

- Implementation of evacuation preparedness procedures
- Management and overseeing of any evacuation; until relieved of this responsibility by the attending commanding officer of Emergency Services, or the Police
- Liaising with Emergency Services and maintaining the Emergency Service contact lists
- Maintaining and displaying a current list of contact telephone numbers
- Maintaining Chief Warden and Deputy Chief Wardens rosters

Appendix 3 - Glossary

assembly point	An area or building/structure that is used to assemble people for evacuation or that have evacuated from a site in an emergency situation.
Bushfire Attack	Attack by burning embers, radiant heat or flame generated by a bush fire.
District Emergency Management Officer (DEMO)	For emergency management purposes, NSW is divided into emergency management districts. Each Emergency Management District has a District Emergency Management Committee. The Committee is chaired by the District Emergency Operations Controller (DEOCON), supported by the District Emergency Management Officer (DEMO). The DEMO is also responsible for assisting local committees and communities within the relevant District on emergency management matters.
emergency	An event that arises internally, or from external sources, which may adversely affect the occupants or visitors in a facility, and which requires an immediate response.
Emergency Planning Committee (EPC)	Persons responsible for the documentation and maintenance of an emergency plan.
Emergency warning and intercommunication system (EWI)	A combined emergency warning and intercommunication system that facilitates both way communications and control during an emergency.
evacuation	The orderly movement of people from a place of danger.
Fire Danger Index (FDI)	The chance of a fire starting, its rate of spread, its intensity and the difficulty of its suppression, according to various combinations of air temperature, relative humidity, wind speed and both the long- and short-term drought effects.
Local Emergency Management Officer (LEMO)	The State is divided into Local Government areas with a Local Emergency Management Committee for each area. This Committee is chaired by a senior representative of the council and is supported by a Council appointed Local Emergency Management Officer (LEMO).
occupant	A person attending a facility on a permanent or temporary basis, such as an employee, contractor, student or resident, but not a visitor

on-site refuge	<p>A building within the premises that is able to accommodate the people that will shelter. The place is not under threat from a bushfire. The school provides a temporary refuge point within the school.</p> <p>Off-site evacuation should always be the first option.</p>
off-site evacuation point	<p>A venue at another location some distance away that is able to accommodate all the people being evacuated. The place is not under threat from a bushfire.</p>
relocation	<p>Movement of persons and/or organisations to an alternate area</p>
State Environmental Planning Policy (SEPP)	<p>State Environmental Planning Policy (SEPP) is a legislated policy that deals with issues significant to the state and people of New South Wales.</p>
sheltering	<p>Procedures for a relevant situation where the safest course of action is to remain in a building or location.</p>
support needs	<p>People with physical, intellectual, visual, or auditory disabilities or impairments, either temporary or permanent who require support. It also includes aged persons and juveniles who are dependent on others for their care and wellbeing.</p>

Appendix 4 Charles Bean Oval (Synthetic Turf)

The areas immediately to the north of the proposed school buildings, are large public open playing fields, known as Charles Bean Oval. It is not to be used as an assembly / refuge area for students and staff due to the synthetic, and potentially hazardous, nature of material used in oval.

Generally, large open space areas that are well separated / shielded from adjoining hazards, present good opportunities for evacuation assembly, and even safe refuge, when the potential bushfire impacts are minimal. Charles Bean Oval is well separated from the significant hazard areas contained within Lane Cove National Park; however, remnant hazards are present adjacent to the north eastern corner and southern boundary of the oval, in the form of retained conservation and landscaped areas, respectively. Therefore, some residual risks are in place for the oval based on its location / context within Crimson Hill.

Blackash has undertaken consultation with the manufacturer of the synthetic oval materials and investigated research / testing materials provided, in order to determine the suitability and level of risk involved in utilising the oval for evacuation / assembly purposes.

In summary, the following overview of the synthetic oval product is provided:

- The synthetic turf material utilised is a plastic and, therefore, is 'petroleum-based'.
- Key area of concern is not the turf itself, but the black rubber that is used as both an underlay and to lay across the top of the turf. The rubber is recycled car tyres.
- The manufacturer has had significant testing of the synthetic product, but the focus of testing has been for response of material during internal / structural fires - rather than external bushfire impacts. These bushfire responses are still unknown; however, some assumptions can be extrapolated from existing information.
- The key threshold for the plastic turf and recycled rubber is 120 degrees Celsius - this is the melting point. Potentially toxic / harmful fumes will likely be emitted even before melting point is reached.
- The oval also has the potential to be impacted by 'spot fires' possibly for several hours before and after the main fire front has passed. The impact of these spot fires is to likely cause the emission of toxic smoke throughout the vicinity of the oval.

Therefore, based on the above key points, and supporting testing / research materials, it is recommended that Charles Bean Oval only be utilised as part of the evacuation/emergency planning for Lindfield Learning Village as short-term assembly / evacuation as part of the bus collection procedures when fire is not within 1 hour of the site and or embers are not observed dropping in the vicinity.

If fire is within 1 hour of the site or embers are observed, Charles Bean Oval is not to be used in any capacity.

Due to the toxic nature of the smoke and the potential for the substrate to burn, the oval should not be used if spot fires or ember attack is occurring. The preference is to evacuate students and staff off site early (where possible) and to also shelter in place within the refuge area if time permits.

Appendix 5 Summary Bushfire Evacuation Plan

BUSHFIRE EVACUATION PLAN SUMMARY

Lindfield Learning Village
100 Eton Road, Lindfield





EMERGENCY CONTACT INFORMATION

FIRE, POLICE, AMBULANCE	CALL 000
PRINCIPAL	Stephanie McConnell 0417 712 089
DEPUTY PRINCIPAL	Mark Burgess 0422 268 172
HEALTH & SAFETY DIRECTORATE	Sus Lowe 1800 811 523 (Select Option 1)



AWARENESS OF SITUATION

RFS BUSH FIRE INFORMATION LINE 1800 679 737
RFS WEBSITE www.rfs.nsw.gov.au
FIRES NEAR ME APPLICATION



LOCATION INFORMATION

ADDRESS	Lindfield Learning Village 100 Eton Road, Lindfield
NUMBER OF STUDENTS	350
NUMBER OF STAFF	30 - 50
TOTAL STAFF / STUDENTS	380 - 400
OFF SITE EVACUATION	Lindfield Public School, 218 Pacific Hwy, Lindfield 9416 1903



ACTIONS

1. See Triggers for Evacuation (page 3)
2. Raise alarm & Call 000
3. Call Health & Safety Directorate & advise of bushfire emergency
4. All classes to report to Assembly Point
5. Complete rollcall
6. Activate shutters from main control panel
7. Determine bushfire threat
 - Activate communication protocols for parent notification
 - If unsafe, seek temporary refuge in Evacuation Assembly Point
8. Activate communication protocols for parent notification
9. Principal of Lindfield Public notified

EVACUATION



THE SAFEST OPTION IS TO LEAVE EARLY

Authority to evacuate can be directed by:

- Instructions from the NSW Police or Fire Authority (NSW Rural Fire Service or Fire and Rescue NSW)
- Instruction from NSW Department of Education authorised officer;
- Instruction from Director, Educational Leadership
- Instruction from Director, Educational Leadership

Evacuate if directed & it is safe to do so.

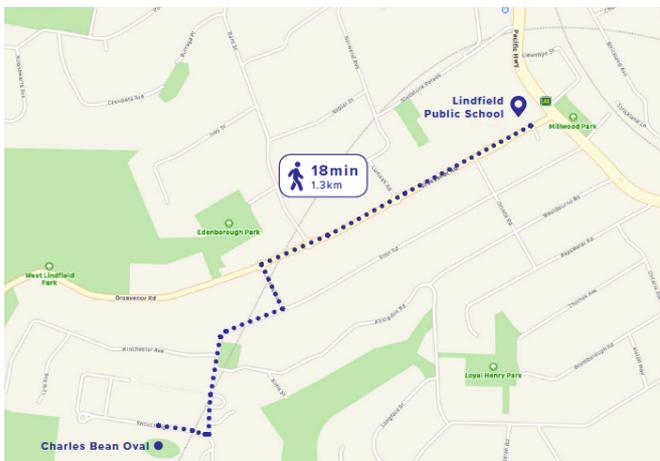


WALKING EVACUATION

- Evacuate if it is safe to do so.
- Walking evacuation is to Lindfield Public School at 218 Pacific Hwy, Lindfield
- Use route as indicated below
- Teachers to walk with class
- Seek guidance from emergency services
- Escort provided by emergency services if required



EVACUATION ROUTE



Charles Bean Oval
End of, Eton Rd, Lindfield NSW 2070

- ↑ Walk east on Shout Ridge towards Eton Rd
99 m
- ↶ Turn left onto Eton Rd
400m
- ↶ Turn left onto Austral Ave
110m
- ⊙ At the roundabout, take the 1st exit onto Grosvenor Rd
Go through 2 roundabouts
Destination will be on the left
- 📍 Lindfield Public School
218 Pacific Hwy, Lindfield NSW 2070

EVACUATION CONTINUED

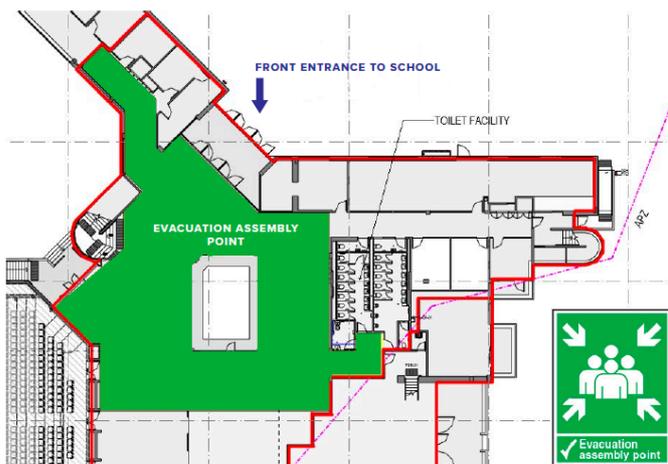
DO NOT EVACUATE IF:

- Spot fires are observed
- Embers are observed
- It is unsafe
- Directed by emergency services to remain in place
- Shelter in Place should be considered as an alternative when the risk associated with evacuation is greater than that of sheltering in place, or evacuation cannot be initiated and completed in a safe manner.
- Contact 000 and request immediate assistance

ASSEMBLY POINT / SHELTER LOCATION

- Evacuation Assembly Point is inside entry to main building – outside the Auditorium. This area has been separated from the rest of the school by 2 hour fire walls
- Assembly Point may provide temporary shelter from the immediate effects of a bushfire

ACTIONS



- Close all fire & smoke doors
- Close bushfire shutters
- Assemble first aid kits including Ventolin
- Keep watch for spot fires in and around the building
- When safe, evacuate or as instructed by emergency services



TRIGGERS FOR EVACUATION

The following is provided as a guide for evacuation. Evacuate only if safe to do so. The Emergency Assembly Area provides shelter in place options.

Observation / Situation	Bushfire Danger Rating						
	Low/ Moderate	High	Very High	Severe	Extreme	Catastrophic	
Out of control fire north of Lane Cove Road of school	<ul style="list-style-type: none"> Evacuation triggered if safe to do so. <u>Or</u> Move to assembly areas 	<ul style="list-style-type: none"> Move to Emergency Assembly Area Evacuate if safe to do so Seek instruction from emergency services 	<ul style="list-style-type: none"> Move to Emergency Assembly Area Evacuate if safe to do so Seek instruction from emergency services 	TOTAL Fire Ban Declared	<ul style="list-style-type: none"> Close school Move to Emergency Assembly Area Seek instruction from emergency services 	<ul style="list-style-type: none"> Close school Move to assembly Area Seek instruction from emergency services To <u>be escorted</u> from site by emergency services 	<ul style="list-style-type: none"> Close school Move to assembly areas Seek instruction from emergency services To <u>be escorted</u> from site by emergency services
Out of control fire south of Lane Cove Road from school	<ul style="list-style-type: none"> Normal operation Seek guidance from emergency services 	<ul style="list-style-type: none"> Move to Emergency Assembly Area Initiate evacuation of the site 	<ul style="list-style-type: none"> Move to Emergency Assembly Area Trigger evacuation Seek instruction from emergency services 		<ul style="list-style-type: none"> Close school Move to assembly areas Seek instruction from emergency services 	<ul style="list-style-type: none"> Close school Move to assembly areas Seek instruction from emergency services 	<ul style="list-style-type: none"> Close school Move to assembly areas Seek instruction from emergency services To <u>be escorted</u> from site by emergency services
Bushfires within region but not within Area of Concern	<ul style="list-style-type: none"> Normal operation 	<ul style="list-style-type: none"> Situational awareness 	<ul style="list-style-type: none"> Situational awareness 		<ul style="list-style-type: none"> Normal operation 	<ul style="list-style-type: none"> Situational awareness 	<ul style="list-style-type: none"> Situational awareness
No Fires	<ul style="list-style-type: none"> Normal operation 	<ul style="list-style-type: none"> Situational awareness 	<ul style="list-style-type: none"> Situational awareness 		<ul style="list-style-type: none"> Principal to consider precautionary closure of school Situational awareness 	<ul style="list-style-type: none"> Principal to consider precautionary closure of school Situational awareness 	<ul style="list-style-type: none"> Close school



