



# Smithfield RSL and Surrounds

## Flood Emergency Response Plan Planning Proposal Report

**Date 28<sup>th</sup> July 2025**

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## Summary

Floods create hazardous conditions to which humans are particularly vulnerable. Fast flowing shallow water or slow-flowing deep water can unbalance people and vehicles and sweep them away. Furthermore, floodwaters can result in impacts to structures and the built environment, whereby structures can be undermined, damaged or even destroyed (Commonwealth of Australia, 2017). Flood Hazard is defined by the Australian Institute of Disaster Resilience (Commonwealth of Australia, 2017) as

*The potential loss of life, injury and economic loss caused by future flood events. The degree of hazard varies with the severity of flooding and is affected by flood behaviour (extent, depth, velocity, isolation, rate of rise of floodwaters, duration), topography and emergency management.*

This Flood Emergency Response Plan (FERP) will address the Flood Hazard for the proposed development and surrounding lots at 88 Smithfield Road, Smithfield NSW 2164 in support of a Planning Proposal (PP) for Smithfield RSL Pty Ltd.

## Flood Behaviour Overview

The following table provides a summary of the findings of the PMF flood behaviour, noting that the critical location for flooding is at the access/egress point and driveway across the site. However, it should be noted that a Flood Emergency Response Plan is not required for storm events up to and including the 1% AEP.

*Table 0-1 Summary of flood behaviour across the site*

### Probable Maximum Flood (PMF) Behaviour

|                     |                                                                                                                                                                                                                                                                                                         |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flood Levels</b> | Ranges from 30.50 mAHD at the western entrance, down to 26.00 mAHD to the southern entrance, and from 25.00 mAHD at the southeastern corner down to 22.80 mAHD at the northeastern corner.                                                                                                              |
| <b>Flood Depths</b> | The maximum flood depth on site occurs along the driveway where flood depths are up to and over 1.00 m. Flood depths along Smithfield Road/Cumberland Highway east of the site can exceed 2.00 m.                                                                                                       |
| <b>Flood Hazard</b> | <p>Across the site egress and driveway through the residential blocks, the flood hazard is up to H5 from both overland flow and sag ponding.</p> <p>Along Smithfield Road/Cumberland Highway east of the site, the flood hazard ranges from H2 south of the site up to H6 to the north of the site.</p> |

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## Flood Emergency Response Plan Shortcuts

### WHERE TO FIND:

- The *Flood Response Plan* can be found in *Appendix A on page 31*
- The *Emergency Contact List* can be found in *Appendix B on page 34*
- The *Emergency Evacuation Map* can be found in *Appendix C on page 37*
- *NSW SES Educational Information* can be found in *Appendix D on page 39*

### NEVER ENTER OR TRAVEL THROUGH FLOODWATERS

**This includes walking, driving, riding, and playing.**

## DOCUMENT CONTROL

| Issue | Date       | Purpose           | Author | Approved |
|-------|------------|-------------------|--------|----------|
| A     | 28/07/2025 | Planning Proposal | M.Y.   | B.H.     |
|       |            |                   |        |          |
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## Acknowledgement of Country

Colliers Engineering & Design (NSW) acknowledges the Cabrogal Peoples of the Dharug Nation as the Traditional Custodians of the lands and waterways upon which this project is located. We also acknowledge the Wangal Peoples of the Eora Nation as the traditional custodians of the land upon which our Rhodes Office is located.

We pay our respects to elders past, present and emerging and to all Aboriginal and Torres Strait Islander Peoples.

## Abbreviations

|      |                                                           |
|------|-----------------------------------------------------------|
| AEP  | Annual Exceedance Probability                             |
| AIDR | Australian Institute for Disaster Resilience              |
| ARI  | Annual Recurrence Interval                                |
| BMT  | British Maritime Technology Group Ltd                     |
| BoM  | Bureau of Meteorology                                     |
| CBD  | Central Business District                                 |
| CED  | Colliers International Engineering & Design (NSW) Pty Ltd |
| DCP  | Development Control Plan                                  |
| DEM  | Digital Elevation Model                                   |
| DP   | Development Proposal                                      |
| DPE  | Department of Planning and Environment                    |
| FERC | Flood Emergency Response Classification                   |
| FERP | Flood Emergency Response Plan                             |
| FIA  | Flood Impact Assessment                                   |
| LEP  | Local Environmental Plan                                  |
| LGA  | Local Government Area                                     |
| PMF  | Probable Maximum Flood                                    |
| PP   | Planning Proposal                                         |
| RSL  | Returned and Services League of Australia                 |

## Table of Contents

|                                                          |           |
|----------------------------------------------------------|-----------|
| <b>Summary .....</b>                                     | <b>1</b>  |
| <i>Flood Behaviour Overview .....</i>                    | <i>1</i>  |
| <i>Flood Emergency Response Plan Shortcuts .....</i>     | <i>2</i>  |
| <b>Acknowledgement of Country .....</b>                  | <b>3</b>  |
| <b>Abbreviations .....</b>                               | <b>4</b>  |
| <b>1 Introduction .....</b>                              | <b>8</b>  |
| 1.1 Background.....                                      | 8         |
| 1.2 Study Area .....                                     | 8         |
| 1.3 Proposed Development Description.....                | 10        |
| <b>2 Post-development Flood Behaviour .....</b>          | <b>12</b> |
| 2.1 Referenced Controls and Guidelines.....              | 12        |
| 2.2 Flood Hazard Categories .....                        | 12        |
| 2.3 Post-development Flood Results.....                  | 13        |
| <b>3 Flood and Evacuation Warnings .....</b>             | <b>16</b> |
| 3.1 Subscription and Alert Services .....                | 16        |
| 3.2 Australian Warning System.....                       | 16        |
| 3.3 Weather Warning Systems .....                        | 16        |
| <b>4 Flood Emergency Management Considerations .....</b> | <b>17</b> |
| 4.1 Flood Duration and Rate of Rise .....                | 17        |
| 4.2 Flood Emergency Response Classification.....         | 19        |
| 4.3 Emergency Response Strategies .....                  | 21        |
| 4.4 Warning Time.....                                    | 23        |
| 4.5 Consultation with SES.....                           | 23        |
| <b>5 Flood Response Preparation .....</b>                | <b>24</b> |
| 5.1 Flood Preparedness .....                             | 24        |
| 5.2 Staff Preparedness and Training.....                 | 25        |
| 5.3 Flood Evacuation Route.....                          | 26        |
| <b>6 Conclusion.....</b>                                 | <b>30</b> |
| Appendix A. Flood Emergency Response Plan .....          | 31        |

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|                    |                                              |           |
|--------------------|----------------------------------------------|-----------|
| <i>Appendix B.</i> | <i>Emergency Contact List.....</i>           | <i>34</i> |
| <i>Appendix C.</i> | <i>Emergency Evacuation Map.....</i>         | <i>37</i> |
| <i>Appendix D.</i> | <i>NSW SES Educational Information .....</i> | <i>39</i> |

## Table of Figures

|                                                                                                     |    |
|-----------------------------------------------------------------------------------------------------|----|
| Figure 1-1 Subject site and locality plan (Source: Nearmaps, taken 20/01/2025) .....                | 9  |
| Figure 1-2 Existing Land Zoning.....                                                                | 10 |
| Figure 1-3 Proposed development layout.....                                                         | 11 |
| Figure 2-1 : General flood hazard vulnerability curves (Smith et al., 2014). .....                  | 13 |
| Figure 2-2 1% AEP Flood Hazard Map (BMT, 2025).....                                                 | 14 |
| Figure 2-3 PMF Flood Hazard Map (BMT, 2025) .....                                                   | 15 |
| Figure 4-1 Locations of Flood level vs time graphs.....                                             | 17 |
| Figure 4-2 Flood level vs time graph at the Site Egress .....                                       | 18 |
| Figure 4-3 Flood level vs time graph at the Driveway On Site .....                                  | 18 |
| Figure 4-4 Flood level vs time graph at Smithfield Road/Cumberland Highway and Brenan Street .....  | 19 |
| Figure 4-5 Flood level vs time graph at Smithfield Road/Cumberland Highway and Neville Street ..... | 19 |
| Figure 4-6 FERC Map of the Site .....                                                               | 21 |
| Figure 5-1 Proposed Flood Evacuation Route(s) with PMF Flood Depths.....                            | 27 |
| Figure 5-2 Typical Flood Depth Marker Sign .....                                                    | 28 |
| Figure 5-3 Typical Flood Warning Signs .....                                                        | 29 |

## Table of Tables

|                                                            |    |
|------------------------------------------------------------|----|
| Table 0-1 Summary of flood behaviour across the site ..... | 1  |
| Table 4-1 Flood Emergency Response Classifications .....   | 20 |
| Table 6-1 Sample Emergency Contact Details Proforma .....  | 34 |

## 1 Introduction

### 1.1 Background

Colliers Engineering & Design (NSW) Ltd (CED) was engaged by Smithfield RSL Pty Ltd to undertake a Flood Evacuation Response Plan to support the Planning Proposal (PP) submission for the proposed development and surrounding lots at 88 Smithfield Road, Smithfield NSW 2164 (the subject site).

The proposed development covers the following lots:

- 3, 4, 5 & 6 DP26819
- 1 DP542629
- 1, 2, 3 & 4 DP567165
- 20 DP575281
- 1 & 4 DP582485
- 21 DP598459
- 21 & 22 DP605517
- 1 & 2 DP815265
- 1 & 2 DP882031
- 7 DP1037645
- 4 DP1059050
- 1 DP1254549
- 6 DP26819
- 4 DP567165

A full set of concept civil engineering drawings prepared by CED will accompany this report and PP submission, referred to as Drawings 124-23C-PP-0001 to 0902 Revision E.

### 1.2 Study Area

The subject site is located in Smithfield, NSW within the Local Government Area (LGA) of Fairfield City Council and is approximately 25km west of Sydney CBD. The subject site grades down from the western and northern side to Smithfield Road at approximately 3% to the south and east. The site lies at a minimum elevation of 21.30 mAHD at the northeast corner to a maximum elevation of 33.10 mAHD at the northwest corner. Refer to Figure 1-1 below for the site locality.



Figure 1-1 Subject site and locality plan (Source: Nearmaps, taken 20/01/2025)

The land is currently being used for residential and recreational purposes. The western portion is zoned as R3 (Medium Density Residential), and the eastern portion is zoned as RE2 (Private Recreation). Refer to Figure 1-2 for the existing zoning map.



Figure 1-2 Existing Land Zoning

### 1.3 Proposed Development Description

The proposed development consists of the demolition of existing houses and structures, modification of the existing RSL building including construction of a new 5-level carpark, construction of 436 residential unit dwellings, a 168-room hotel, and other uses inclusive of a medical centre, restaurant spaces and an immediate convenience store. Refer to Figure 1-3 for the proposed works layout.

The proposed stormwater network includes diversion of the existing Council drainage easement (with the 525 to 600 mm diameter pipe) and upsizing these existing pipes. The proposed works include a new access road and swale to assist with conveying the larger storm events. A flood storage tank at the south of the site is proposed to reduce the 1% AEP flood levels along Smithfield Road.

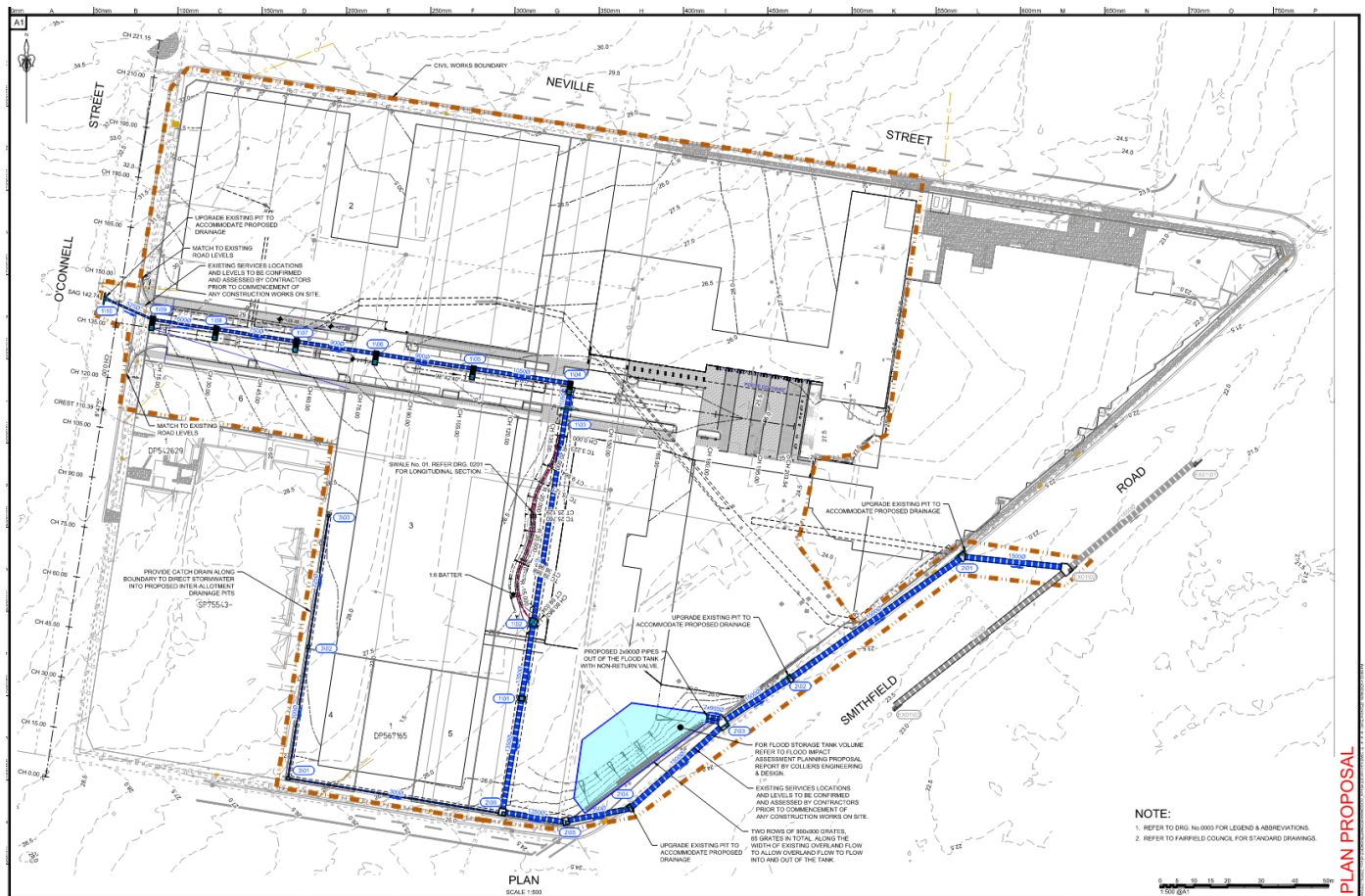


Figure 1-3 Proposed development layout

According to findings from the Flood Impact Modelling by BMT (2025), the post-development site is affected by flooding as overland flows and sag ponding for both the 1% AEP and PMF events. The site is within the Medium Flood Risk Precinct according to the Smithfield Overland Flood Study (Sinclair Knight Merz, 2011).

In response, and to ensure flood education and safe evacuation of occupants, this Flood Emergency Response Plan (FERP) has been prepared. The plan details the following:

- Identification of flood behaviour in the locality of the site;
- Nomination of flood response personnel, as well as roles and responsibilities in the event of a flood emergency;
- Identification of available flood and evacuation warning systems;
- Assess the flood emergency responses, namely potential evacuation routes and on site refuge details; and
- Provision of flood education and information to raise awareness of flood behaviour on site and procedures to be undertaken.

## 2 Post-development Flood Behaviour

This section discusses in detail the behaviour of the flooding within a 1% AEP event and an extreme, PMF storm event.

### 2.1 Referenced Controls and Guidelines

The following documents have been referenced in developing the FERP for the proposed development:

#### 2.1.1 Guidelines & Reports

- Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), 2019, Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia
- Australian Institute of Disaster Resilience in the Flood Hazard Guidelines (Commonwealth of Australia, 2017)
- Australian Emergency Management Manual Series – Manual 21 – Flood Warning (AIDR, 2009)
- Australian Emergency Management Manual Series – Manual 22 – Flood Response (AIDR, 2009)
- Flood Emergency Response Classification of the Floodplain – Guideline 7-2 - Australian Disaster Resilience Handbook 7 Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia (AIDR, 2017)
- Fairfield Citywide Development Control Plan, amendment 23 (2013)
- Fairfield City Council Flood Risk Management Policy 2005
- Fairfield City Local Flood Plan – Volume 1 – Fairfield City Local Flood Emergency Sub Plan (NSW SES, 2023)
- Flood hazard - Flood risk management guideline FB03 (NSW DPE, 2023)
- Support for emergency management planning - Flood risk management guideline EM01 (NSW DPE, 2023)
- Specification for Roadworks and Drainage associated with subdivision or other development, Policy Number 4-515 (2011)
- Smithfield Overland Flood Study (2011) prepared by Sinclair Knight Merz & Fairfield Consulting Services
- Flood Impact Modelling for the Proposed Development of Smithfield RSL (BMT, 2025).
- Smithfield RSL and Surrounds – Flood Impact Assessment Planning Proposal Report (CED, 2025)

#### 2.1.2 Data

- Flood Impact Modelling for the Proposed Development of Smithfield RSL (BMT, 2025).
- Underground stormwater drainage network for proposed development (CED, 2025)
- Civil design earthworks grading (CED, 2025)
- Detailed Survey (CED 2022)

### 2.2 Flood Hazard Categories

The flood hazard categories adopted for this report are as outlined by the Australian Institute of Disaster Resilience in the Flood Hazard Guidelines (Commonwealth of Australia, 2017). See Figure 2-1 below for the general flood hazard vulnerability curves, based on depth (in metres) multiplied by velocity (in metres/second).

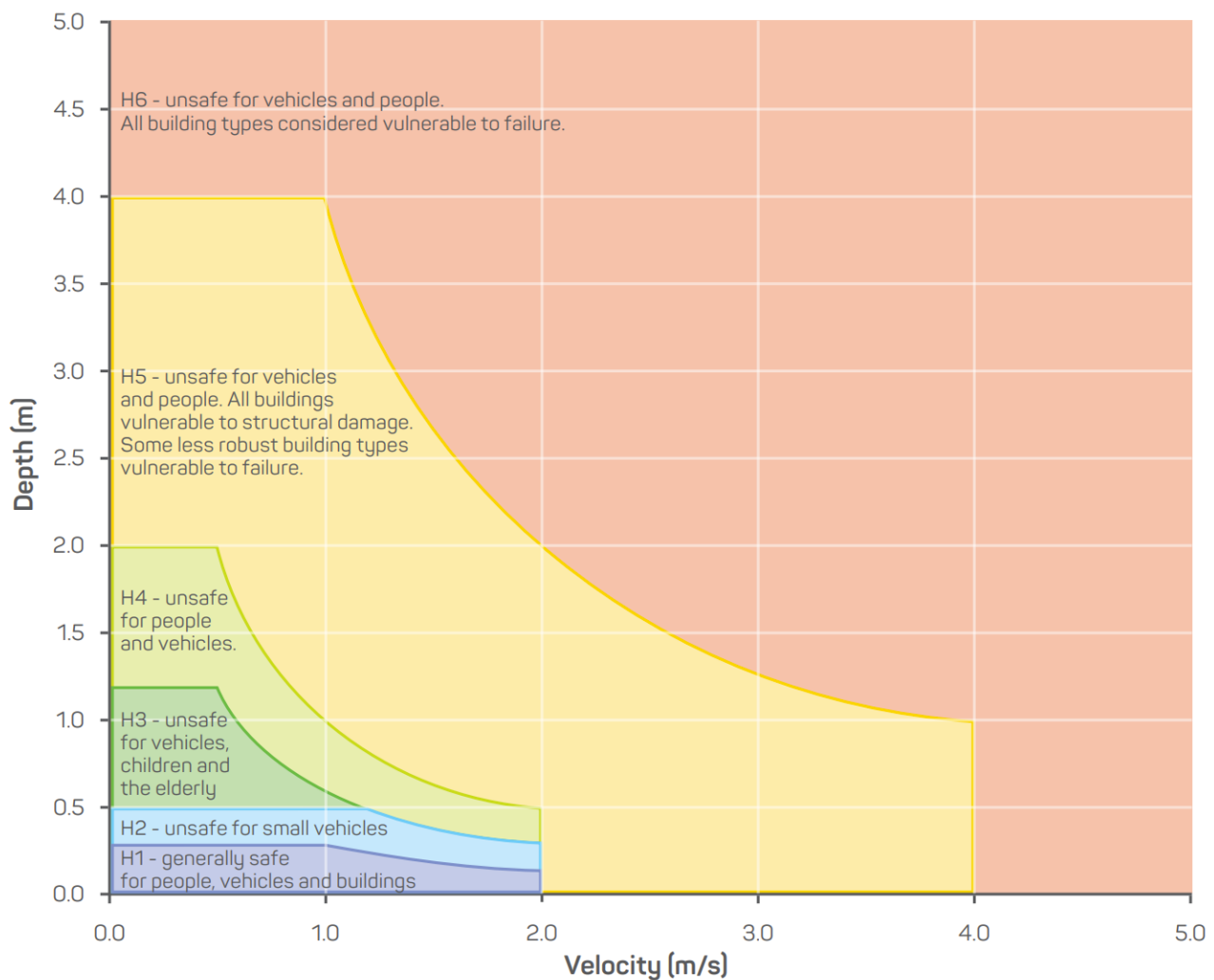


Figure 2-1 : General flood hazard vulnerability curves (Smith et al., 2014).

## 2.3 Post-development Flood Results

### 2.3.1 Frequency of Inundation

Flood results derived from the Flood Impact Modelling Report (BMT, 2025) indicate that flooding along the driveway on site that exceeds unsafe depths of 0.30 m is possible for 1% AEP event only. Thus, it is expected that inundation of the site would occur on average once every 100 years.

Along Smithfield Road/Cumberland Highway to the east, flood depths can exceed .30 m down to the 10% AEP event. Thus, it is expected that inundation along the main road would occur on average once every 10 years.

### 2.3.2 1% AEP Event

The flood results for the post-development 1% AEP event have been summarised in Section 4.2 of the Flood Impact Assessment (FIA) Report (CED, 2025), with flood results derived from the Flood Impact Modelling Report (BMT, 2025)

The proposed development located within the Smithfield RSL Planning Proposal has been designed such that in the Flood Planning Level (FPL), all residential and commercial areas will be filled to an elevation above the 1% AEP peak flood level plus 0.50 m freeboard as is consistent with the planning proposal and to meet the

Fairfield Citywide Development Control Plan (2013) and the Fairfield Council Flood Risk Management Policy (2005). The habitable floor level of 31.00 mAHD at the western end of the site is higher than the highest 1% AEP flood level plus 0.50 m freeboard requirement of 30.50 mAHD at the western entrance of the site.

Three storm durations were assessed for the 1% AEP event at 25 minutes, 90 minutes and 120 minutes. The critical duration of the 1% AEP event is 25 minutes on site and 120 minutes (2 hours) along Smithfield Road, which is equivalent to short-duration flash flooding. The peak flood hazard for the site is H2 (unsafe for small vehicles), occurring along the driveway on site.

Figure 2-2 below provides a map of peak flood hazards for the 1% AEP event on site.

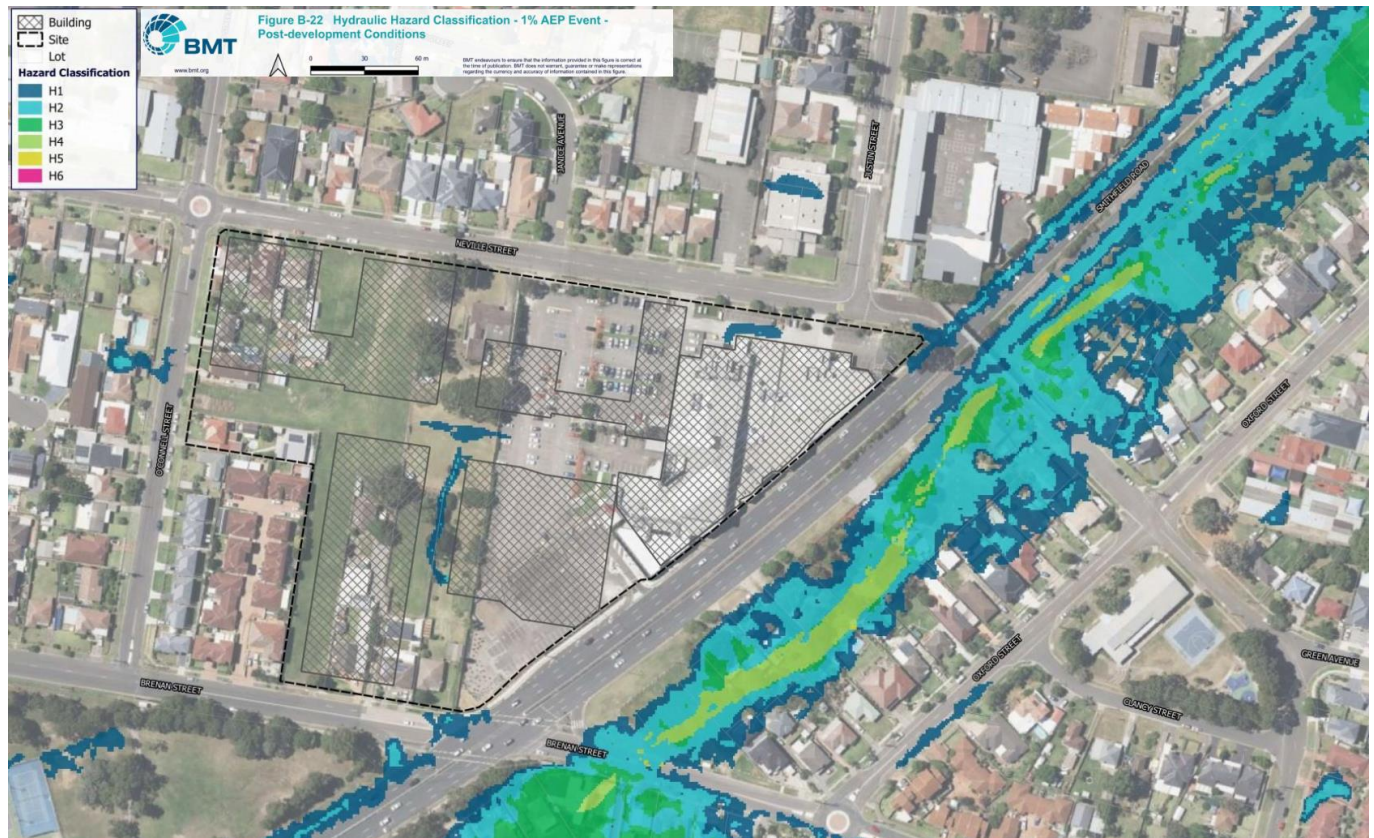


Figure 2-2 1% AEP Flood Hazard Map (BMT, 2025)

## 2.3.3 PMF Event

Three storm durations were assessed for the PMF storm event at 30 minutes, 60 minutes and 90 minutes. The critical duration was found to be 30 minutes on site and 60 minutes (1 hour) along Smithfield Road/Cumberland Highway, which is equivalent to short-duration flash flooding. The peak flood hazard for the site is H5, occurring along the main driveway entrance approaching from the access/egress point to the west and along the swale running from north to south.

There is significant overland flow through the site approaching from the west and exiting at the southern boundary of the site. This overland flow can reach depths of over 1.00 m and hazardous velocities of over 3 m/s.

Smithfield Road/Cumberland Highway is flooded to hazards ranging from H2 south of the site up to H6 north of the site, this will cut off access to a major road for residents, employees and visitors of the site in the case of a PMF event.

Figure 2-3 PMF Flood Hazard Map (BMT, 2025)

## 3 Flood and Evacuation Warnings

### 3.1 Subscription and Alert Services

There are various flood warning systems and alert systems in place in the Sydney area which assist with preparation and response to extreme weather events at the site. These range from official notifications from governing bodies and entities, such as the Bureau of Meteorology (BoM), State Emergency Services (SES), and other third-party organisations such as Weatherzone. As the site is subject to flash flooding in the PMF event, it is recommended that residents subscribe and register to text and email notifications from the Early Warning Network, which aggregates and notifies of BoM weather warnings.

### 3.2 Australian Warning System

The Australian Warning System is a national approach to information and warnings during emergencies including bushfire, flood, storm, extreme heat, and severe weather. The system uses a nationally consistent set of three warning levels and signs: Advice (Yellow), Watch and Act (Orange), and Emergency Warning (Red). These allow for a unified approach to informing occupants of affected areas, which includes preparation of evacuation, monitoring of conditions, early evacuation, when to take shelter as well as notifications when evacuation is too late/dangerous. This system and alerts should be followed where possible by the residents of the proposed development.

### 3.3 Weather Warning Systems

There are various repositories of information with regards to flooding in relation to the site. These systems should also be made known to residents for residents to subscribe to the warnings.

- BoM weather warnings
- SES emergency alerts
- ABC National Broadcaster (<https://www.abc.net.au/emergency>)
- Websites with flooding information (Weatherzone, Early Warning Network etc.)
- Door knocking (police, SES)
- Media alerts (TV, radio, websites, text messages, etc.)

## 4 Flood Emergency Management Considerations

### 4.1 Flood Duration and Rate of Rise

Figure 4-1 below provides a map of the locations of the flood level vs. time graphs with the flood depths of the PMF event.

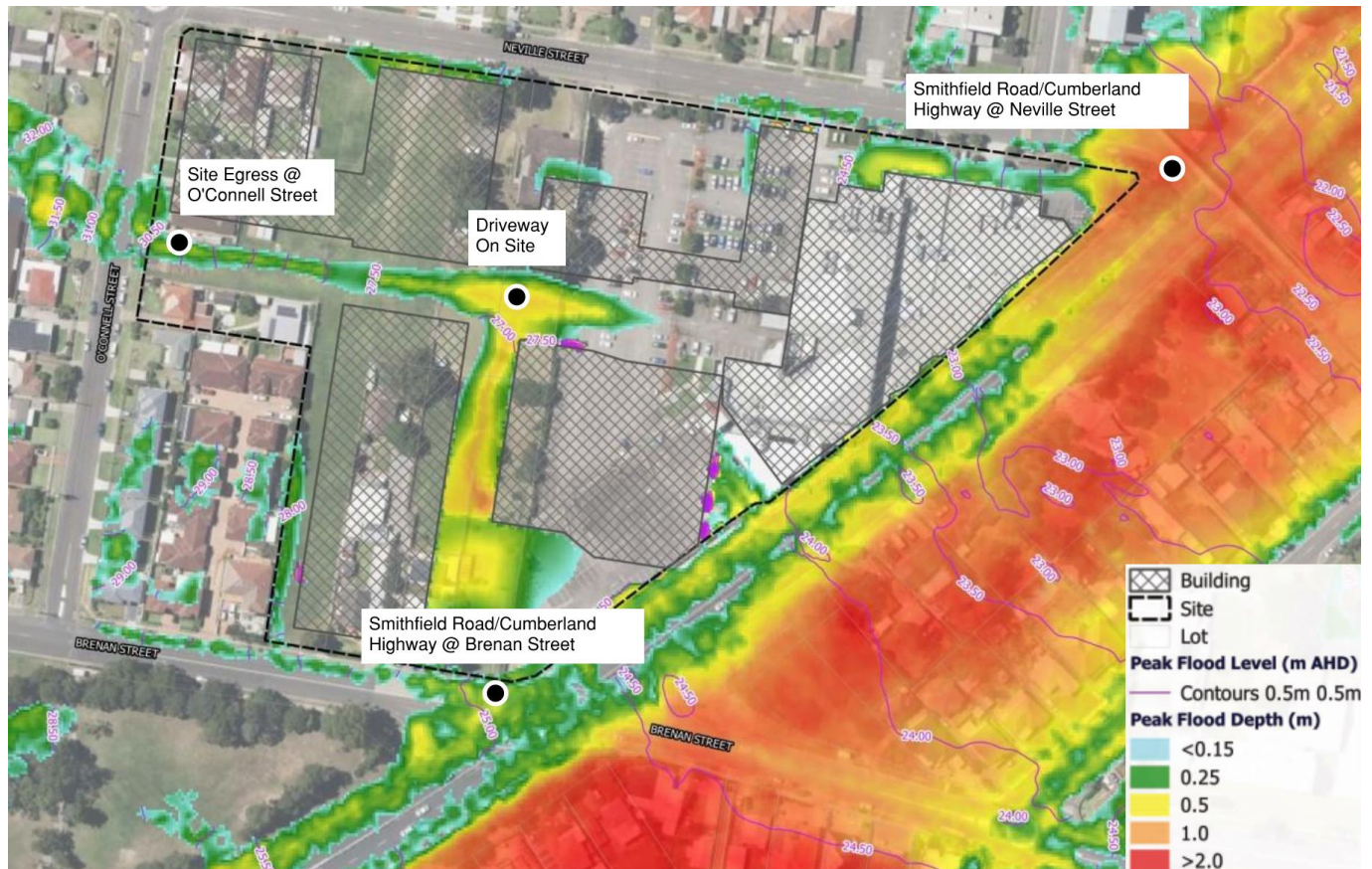


Figure 4-1 Locations of Flood level vs time graphs

On the site, the flood level vs. time graphs show that, for the PMF, critical duration (30 minute) flood event:

- The time for flood waters to exceed a safe depth of 0.30 m is approximately 6 minutes.
- The time for flood waters to peak across the site is approximately 10-13 minutes.
- The time for flood waters to return to a safe depth of 0.30 m is approximately 26-28 minutes and,
- The time for flood waters to fully recede is approximately 60-90 minutes.

The exact rate of rise can vary depending on the location on site, with floodwaters at the site egress in Figure 4-2 peaking slightly before the driveway downstream in Figure 4-3.

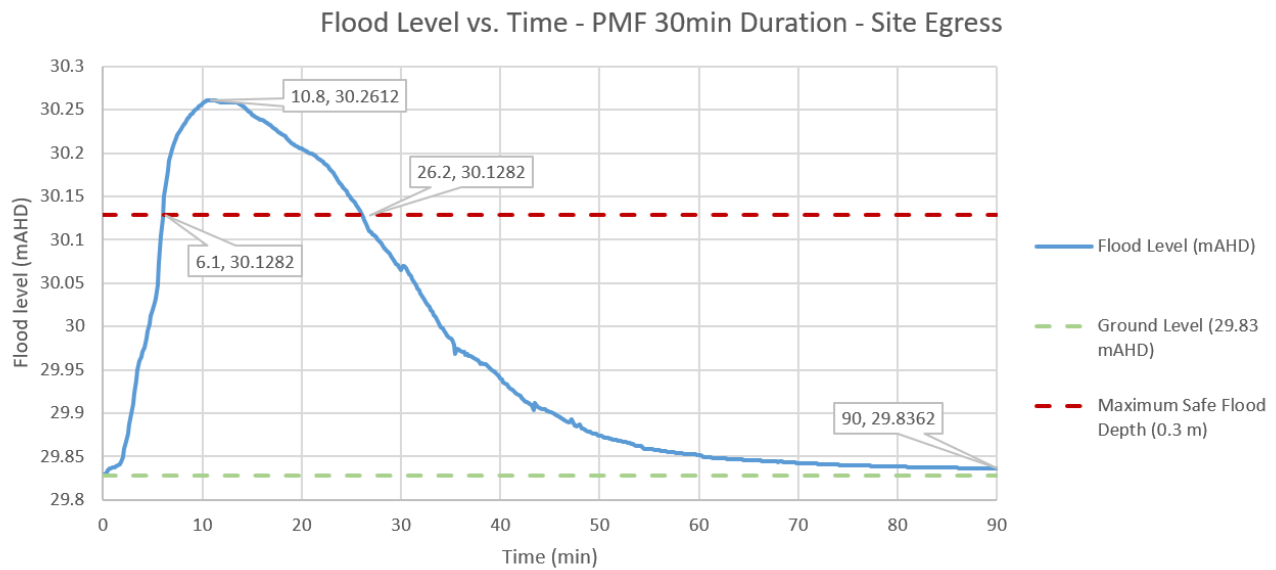


Figure 4-2 Flood level vs time graph at the Site Egress

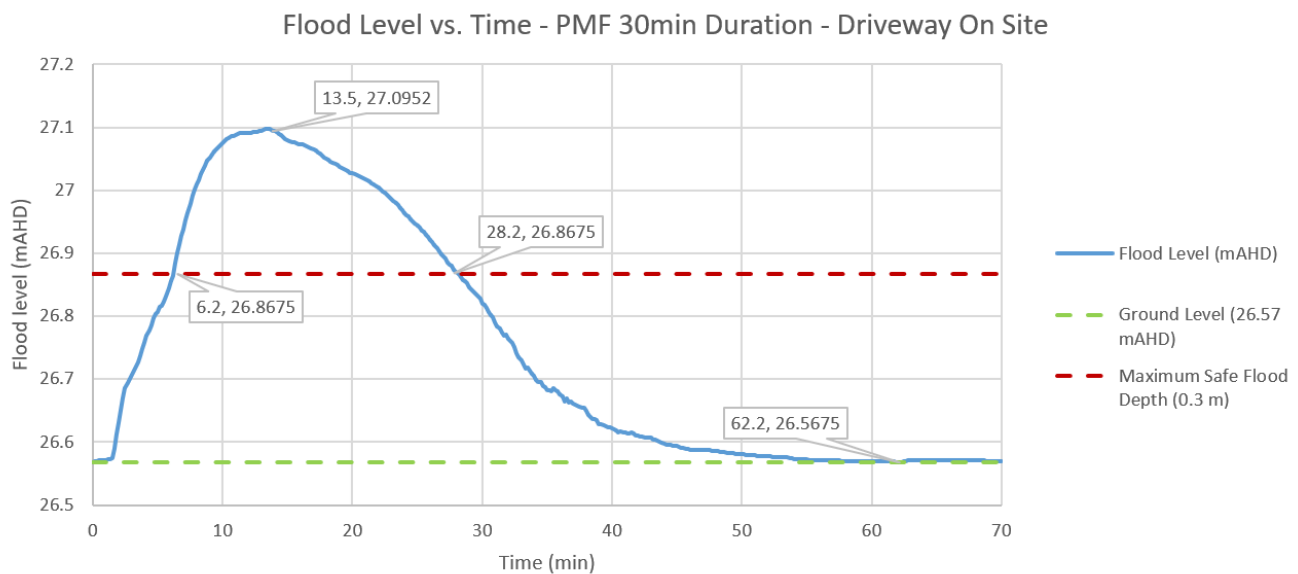


Figure 4-3 Flood level vs time graph at the Driveway On Site

Along Smithfield Road/Cumberland Highway, the flood level vs. time graphs show that, for the PMF, critical duration (60 minute) flood event:

- The time for flood waters to exceed a safe depth of 0.30 m is approximately 9-13 minutes.
- The time for flood waters to peak across the site is approximately 20-40 minutes.
- The time for flood waters to return to a safe depth of 0.30 m is approximately 40-80 minutes and,
- The time for flood waters to fully recede is approximately 90 minutes.

The exact rate of rise can vary depending on the location on site, with floodwaters at the site egress in Figure 4-4 peaking slightly before the driveway downstream in Figure 4-5.

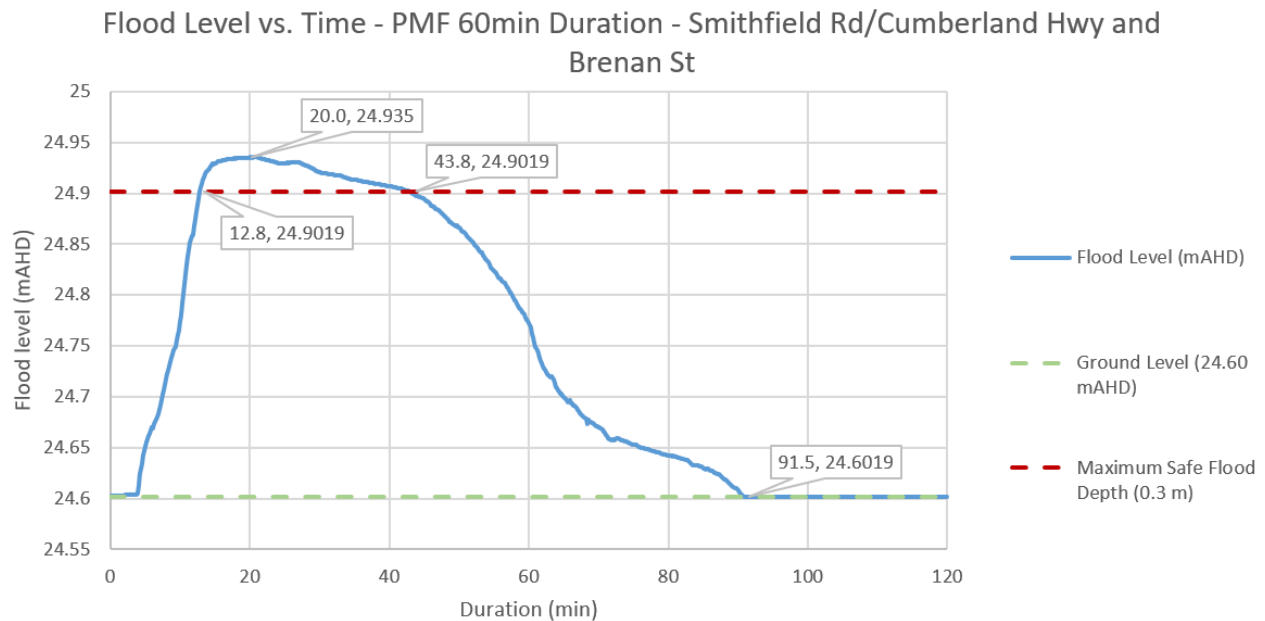


Figure 4-4 Flood level vs time graph at Smithfield Road/Cumberland Highway and Brenan Street

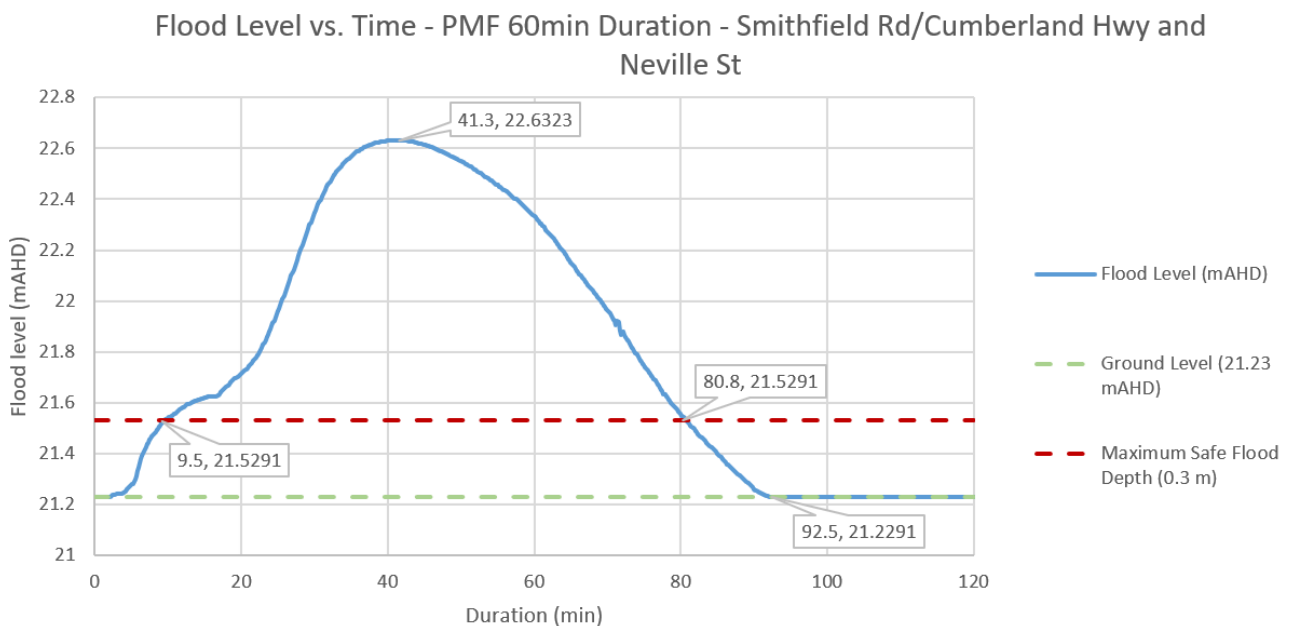


Figure 4-5 Flood level vs time graph at Smithfield Road/Cumberland Highway and Neville Street

## 4.2 Flood Emergency Response Classification

The Flood Emergency Response Classification (FERC) aims to categorise the floodplain based upon differences in isolation due to the potential for entrapment of an area by floodwaters, potentially in combination with impassable terrain. The FERC is a useful mapping tool for emergency services and evacuation planning for a floodplain.

The Australian Institute for Disaster Resilience (AIDR) provides guidance on mapping response classification setting, which is intended to be undertaken at the community or precinct scale and not at the lot scale. A

summary of these classifications is provided from an excerpt of the guidelines titled “Flood Emergency Response Classification of the Floodplain” by the AIDR (2017), shown below in Table 4-1.

*Table 4-1 Flood Emergency Response Classifications*

| Primary classification | Description                        | Secondary classification | Description                                                                                                                                                                                                                                                                                                | Tertiary classification                                                                                                        | Description                                                                                                                        |                                                                                              |
|------------------------|------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Flooded (F)            | The area is flooded in the PMF     | Isolated (I)             | Areas that are isolated from community evacuation facilities (located on flood-free land) by floodwater and/or impossible terrain as waters rise during a flood event up to and including the PMF. These areas are likely to lose electricity, gas, water, sewerage and telecommunications during a flood. | Submerged (FIS)                                                                                                                | Where all the land in the isolated area will be fully submerged in a PMF after becoming isolated.                                  |                                                                                              |
|                        |                                    |                          |                                                                                                                                                                                                                                                                                                            | Elevated (FIE)                                                                                                                 | Where there is a substantial amount of land in isolated areas elevated above the PMF.                                              |                                                                                              |
|                        |                                    | Exit Route (E)           |                                                                                                                                                                                                                                                                                                            | Areas that are not isolated in the PMF and have an exit route to community evacuation facilities (located on flood-free land). | Overland Escape (FEO)                                                                                                              | Evacuation from the area relies upon overland escape routes that rise out of the floodplain. |
|                        |                                    |                          |                                                                                                                                                                                                                                                                                                            |                                                                                                                                | Rising Road (FER)                                                                                                                  | Evacuation routes from the area follow roads that rise out of the floodplain.                |
| Not Flooded (N)        | The area is not flooded in the PMF |                          |                                                                                                                                                                                                                                                                                                            | Indirect Consequence (NIC)                                                                                                     | Areas that are not flooded but may lose electricity, gas, water, sewerage, telecommunications and transport links due to flooding. |                                                                                              |
|                        |                                    |                          |                                                                                                                                                                                                                                                                                                            | Flood free                                                                                                                     | Areas that are not flood affected and are not affected by indirect consequences of flooding.                                       |                                                                                              |

Within the development, flooded areas of the site during the PMF event have been classified as “Rising Road” (FER), due to the access of the site to an extensive road network rising out of the PMF flood events. Areas within the development that are not flooded are classified as “Indirect Consequence” (NIC), due to the inundation of Smithfield Road/Cumberland Highway blocking off access to a major arterial road during flooding as well as disruptions to utilities provided to the site from Smithfield Road/Cumberland Highway. A summary of this is provided in Figure 4-6 below:

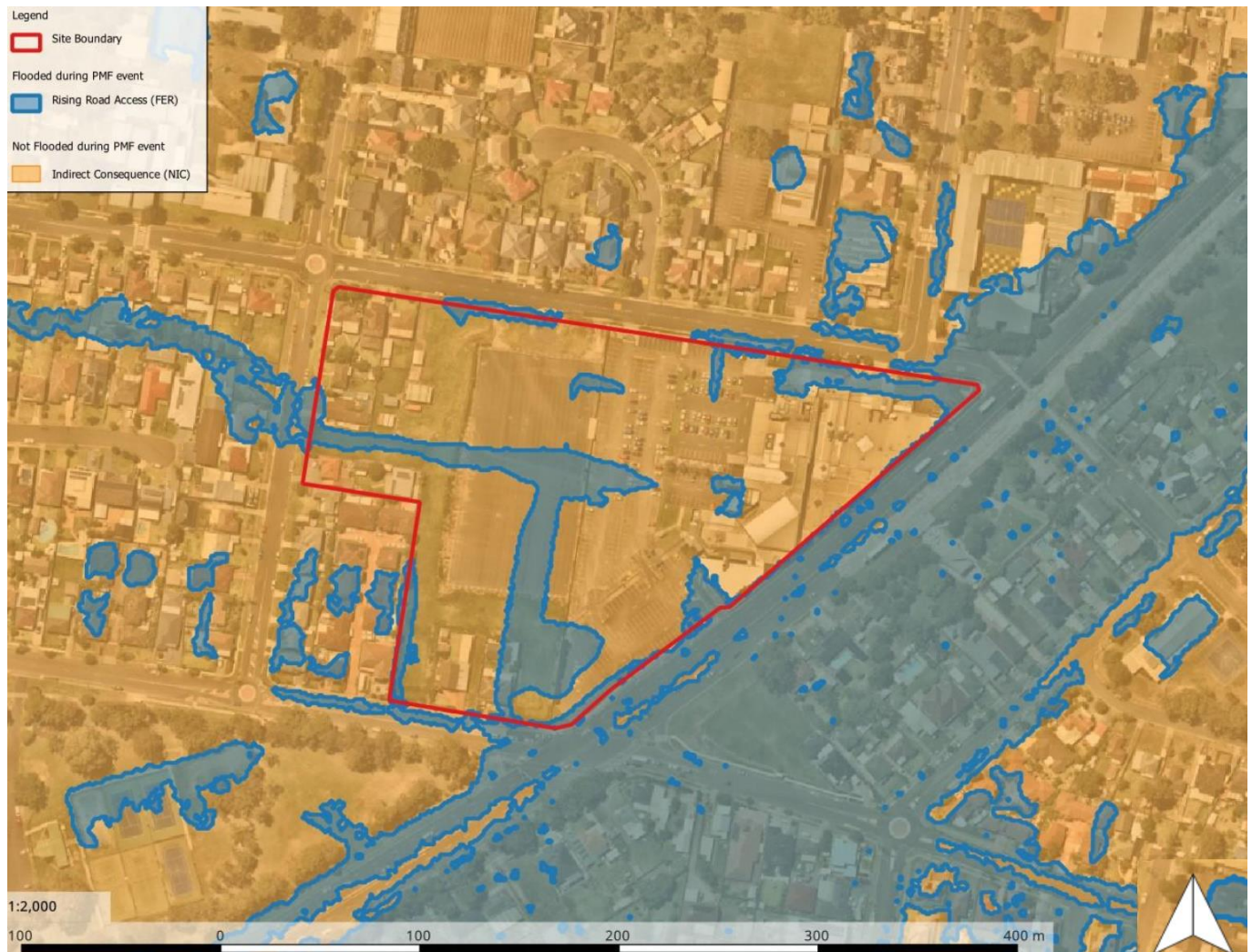


Figure 4-6 FERC Map of the Site

## 4.3 Emergency Response Strategies

The two primary types of emergency response to a flood emergency are detailed below:

- Evacuate to an area above the reach of the PMF floodwaters, and
- Shelter in place within the site (above the PMF level) until floodwaters have receded and the emergency has passed.

### 4.3.1 Shelter In Place

Given that overland flows across the site can reach hazardous depths in as little as 6 minutes, as well as the habitable floor levels of all buildings on site being above PMF flood levels, a Shelter-In-Place strategy down to the habitable floor level should be the most appropriate for all residents, employees and visitors. Residents and employees of the site that intend to pursue a shelter in place strategy should be prepared with a FloodSafe Emergency Kit and additional Food and Medical Supplies to last a 24-hour duration. The FloodSafe Emergency Kit is discussed in detail in Section 5.

The Smithfield RSL Club on site can provide amenities for residents and employees sheltering in place. All residents and employees have access to Smithfield Family Medical Practice one block north of the site if medical attention is urgently required; the nearby Smithfield Medical and Dental Centre is not available as it will be flooded during the 1% AEP and PMF events.

## 4.3.2 Evacuation

Given that Smithfield Road/Cumberland Highway is flooded to a hazardous depth in as little as 9 minutes, it is not recommended to pursue an evacuation strategy to the east for residents and employees of the proposed development, making it extremely hazardous for all transversing vehicles.

If in the rare case that evacuation is the preferred strategy, it must be performed by heading west along Neville Street and Brenan Street prior to the onset of the storm event, as once the storm occurs, the flooding reaches peak depth within 10 minutes on site. Evacuation by vehicle or foot is therefore possible prior to the onset of the storm event provided residents evacuate immediately and do not spend time gathering personal effects. However, during the storm, due to PMF flood hazards of up to H5 along the main driveway and the egress at O'Connell Street and to prevent vehicular congestion, it is recommended that all residents and employees in buildings fronting Neville Street or Brenan Street should evacuate by foot directly onto those roads, while the main driveway and O'Connell Street should be avoided. The remainder of the residents should shelter in place, if possible, as discussed above. Evacuees heading west along Brenan Street should turn right onto Market Street as Brenan Street is likely to be cut off by overland flow paths beyond Market Street.

The longest distance for evacuation is from the southeast corner of the development to Smithfield Public School at approximately 1.1 km long, this can be achieved by turning right onto O'Connell Street from Neville Street. This school is a major Place of Interest (POI) capable of sheltering hundreds of people and is located at a higher elevation of 35.50 mAHD away from any major overland flow paths.

An alternative but longer route to higher ground in is to turn left onto Bourke Street from Neville Street towards Brenan Park Community Hall at 1.4 km long. This POI is at a height of 40.50 mAHD and has a smaller capacity compared to Smithfield Public School.

The third alternative route is to continue west along Neville Street then south along Wetherill Street to Smithfield West Public School. This school is also a major POI capable of sheltering many people and is located at a local ridge line/high point ranging from 43.50 mAHD to 48.00 mAHD.

The nearest places for amenities are Budget Petrol and La Italiana Panini & Donut Café located across Horsley Drive from Smithfield Public School, Cafe 77 Bakery and Restaurant located at Dublin Street near Brenan Park Community Hall, or 7 Eleven located at Polding Street near Smithfield West Public School.

If medical attention is urgently required, Smithfield Family Medical Practice is available 300 m west of Smithfield Public School, or for all evacuees for in the other two sites, Fairfield Hospital and MyHealth Wetherill Park are accessible around 2.0-2.7 km to the west.

## 4.3.3 Signage

It is also recommended that flood depth markers and warning signs be installed at appropriate locations along the access/egress roads to ensure that residents do not enter or leave the development via the flooded roads once flooding reaches depths above 0.30 m.

Signage and depth markers are discussed in detail below in Section 5.3.1.

## 4.4 Warning Time

Given that the nature of flooding on site is of flash flooding caused by short duration, high intensity rainfall events from thunderstorms, it is important to give all people on site adequate warning time before the onset of the flood to ensure that standard shelter in place/evacuation procedures are followed safely.

According to the Australian Emergency Management Manual Series (AIDR, 2009), flood warnings are to be given by the BoM in the form of Severe Weather Warnings and Severe Thunderstorm Warnings. Severe Weather Warnings are given to a wider area of the Metropolitan Sydney up to 24 hours in advance based on weather maps and synoptic charts, which indicates a possibility of heavy rainfall. Severe Thunderstorm Warnings are given to a smaller area that may envelop Fairfield City Council and the site, from a few hours down to 30 minutes in advance, based on radar tracking of thunderstorms. This indicates the imminency or a high possibility of heavy rainfall.

Given the worst-case scenario that warnings are given with a minimum of 30 minutes of notice prior to the onset of the storm, all people on site should be trained/taught to follow procedures outlined below in Section 5 - Flood Response Preparation within a maximum time frame of only 30 minutes.

## 4.5 Consultation with SES

This Flood Emergency Response Plan will be submitted to the NSW SES for their input and comment. This plan should be revised following their formal input.

## 5 Flood Response Preparation

### 5.1 Flood Preparedness

It is the responsibility of the staff, particularly the Facility Manager, to prepare the facility for a flood event. This is achieved through adequate design, training, flood wardens, flood emergency kits, and education and awareness of the flood evacuation plan. These factors above are crucial to understanding and managing the flood risk at the site and this information should be on display onsite throughout the facility at key locations, such as noticeboards etc.

Storage areas for chemicals, materials and other goods which may be harmful in a flood event are to be provided above the PMF flood level, which ranges from 30.50 mAHD at the egress to the west down to 26.00 mAHD to the south of the site, and designed to structurally withstand the forces of floodwaters, debris, and buoyancy in a flood event.

Evacuation routes and procedures are to be displayed in key areas and staff members are to be educated both via induction and through regular training. In addition, staff should be informed when extreme weather events are expected.

FloodSafe emergency kits should be prepared and maintained by residents which have all the necessary items in one place. This will include, but is not limited to the following suggested items:

- Drinking water, non-perishable food items for 24 hours
- Radio with spare batteries
- Torch with spare batteries
- Two-way radio with spare batteries
- First aid kit and manual
- Medications (including prescriptions) and toiletries, such as a roll of toilet paper
- Special needs for infants, the aged and people with disabilities
- Mobile phone, spare battery and charger with stored contact details of your agreed out-of-town contacts
- Spare clothes and sleeping equipment including strong shoes, broad brimmed hat, leather gloves and sunscreen for each household member, pillows and blankets strong plastic or waterproof bags (for clothing, valuables, documents and photographs)
- Gloves and/or snake gaiters (if required)
- Copy of the Flood Emergency Response Plan
- Emergency contact numbers

These FloodSafe kits should be kept in waterproof storage containers in an easily accessible location for each unit.

More information can be found on the NSW SES website at <https://www.ses.nsw.gov.au/floodsafe/prepare-your-home/emergency-kit/>

## 5.2 Staff Preparedness and Training

It is the responsibility of the Facilities Manager and the Chief Flood Warden to prepare the facility for a flood event. Training of staff and induction training is to be provided by the Facilities Manager in conjunction with the NSW SES. Flood Personnel roles should be designated to staff and these staff will require additional training to perform these designated roles. The NSW SES will train personnel for their expected flood operation roles and NSW SES will regularly brief stakeholders and exercise the arrangements contained in the NSW Flood Emergency Sub Plan (NSW SES, 2023).

In addition to the staff preparedness training, a training and skills register should be maintained, and the Facilities Manager should ensure that there are sufficiently skilled staff rostered available for every shift. A sample training skills matrix is provided in Section 9.

Awareness training is to be provided to all employees, contractors, and visitors and this is detailed in Sections 5.2.1 and 5.2.2 respectively.

### 5.2.1 Staff

Detailed below is the preparedness training required for residents and staff of the facility:

1. Staff are to be familiarised with the potential site flooding conditions and the Flood Emergency Response Plan and Procedures, evacuation routes and the muster point during their initial site induction.
2. Regular briefings should be provided to staff, detailing the contents of the plan (Bureau of Meteorology).
3. Flood evacuation drills are to be undertaken at least twice per year and this can be done in conjunction with the NSW SES.
4. The flood evacuation drills provide opportunities to ensure that the FERP is workable and effective and can be used as a tool for regular revision of the plan to ensure the plan is kept alive and up to date.
5. Flood evacuation drills allow staff members to practice their designated roles and responsibilities and to provide feedback into the FERP.
6. Run briefings detailing the contents of the plan (Commonwealth of Australia, 2009).
7. Additionally, several staff should be trained in First Aid and there should be First Aid Trained staff rostered for every shift.
8. All lessons learned from training exercises and drills should be documented and areas of improvement should be implemented into the FERP (Zurich Insurance Group, n.d.)

### 5.2.2 Visitors

Detailed below is preparedness training that should be provided to contractors and visitors to the facility:

1. Contractors and Visitors are to be inducted to the facility and if attending regular, induction should be updated on a regular basis.
2. Site induction should include familiarisation with the site flooding conditions, the evacuation routes, the emergency muster point and the Flood Emergency Response Plan and Procedures.
3. Contractors and visitors should be educated about the content of the Flood Emergency Response Plan, especially actions to be undertaken that are consistent with the strategies contained within the plan in case of an emergency.
4. Contractors and visitors should be directed to the notice board which displays emergency contact details and the evacuation route and muster point during the site induction.
5. Contractors and visitors should be made aware of the emergency alarm tones and the Chief Flood Warden during induction.

## 5.3 Flood Evacuation Route

The proposed flood evacuation route(s) are outlined as follows:

Option A:

1. Either:
  - a. Walk/Drive west along Neville Street towards O'Connell Street
  - b. Walk/Drive west along Brenan Street towards Market Street, then north along Market Street towards Neville Street, then east along Neville Street towards O'Connell Street
2. Walk/Drive north along O'Connell Street towards Smithfield Public School (Maximum distance: 1.1 km).

Approximate travel time:

- 3 minutes by vehicle (assuming a speed of 20 km/h)
- 15 minutes by walking (assuming a speed of 4 km/h)

Option B:

1. Either:
  - a. Walk/Drive west along Neville Street towards Bourke Street.
  - b. Walk/Drive west along Brenan Street towards Market Street, then north along Market Street towards Neville Street, then west along Neville Street towards Wetherill Street.
2. Walk/Drive south along Bourke Street to Brenan Park Community Hall (Maximum distance: 1.4 km).

Approximate travel time:

- 4 minutes by vehicle (assuming a speed of 20 km/h)
- 20 minutes by walking (assuming a speed of 4 km/h)

Option C:

1. Either:
  - a. Walk/Drive west along Neville Street towards Wetherill Street.
  - b. Walk/Drive west along Brenan Street towards Market Street, then north along Market Street towards Neville Street, then west along Neville Street towards Wetherill Street.
2. Walk/Drive south along Wetherill Street to Smithfield West Public School (Maximum distance: 2.5 km).

Approximate travel time:

- 8 minutes by vehicle (assuming a speed of 20 km/h)
- 40 minutes by walking (assuming a speed of 4 km/h)

Smithfield Public School, Brenan Park Community Hall and Smithfield West Public School are the closest and most easily accessible designated evacuation centres and as such will be specified by the NSW SES in Section 5.9.2 of the Fairfield City Local Flood Emergency Sub Plan.

In Smithfield, residents will have access to Medical Facilities, Food and Drink, Petrol, and other facilities as required. Further west is the location of Fairfield Hospital should it be required. Residents should carry their FloodSafe Emergency Kit and a copy of their own Emergency Contact Numbers.

The emergency evacuation route is illustrated in Figure 5-1 below and the full map is provided in Appendix C.

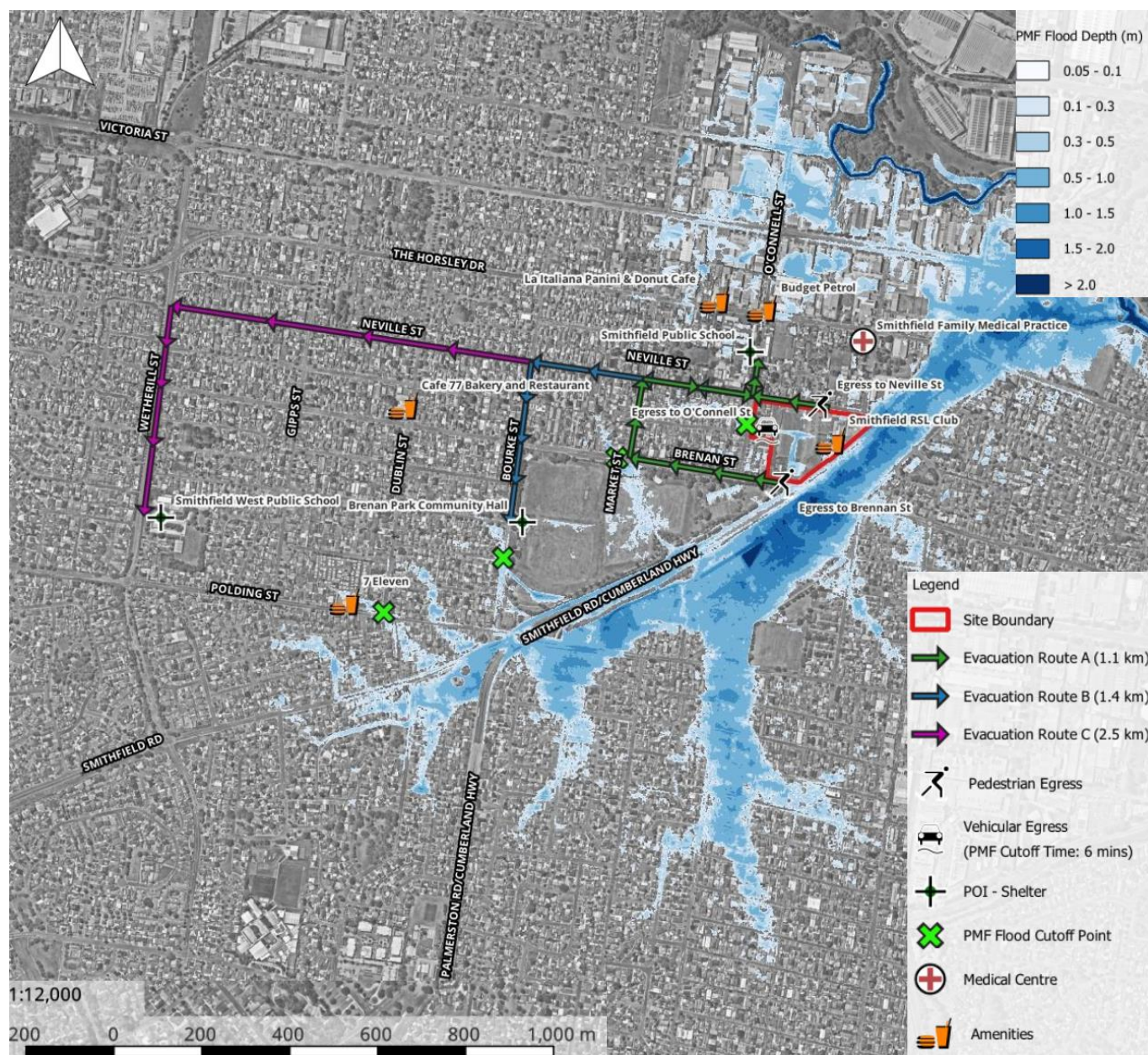


Figure 5-1 Proposed Flood Evacuation Route(s) with PMF Flood Depths

## 5.3.1 Signage

Upon final construction of the development, Flood Warning signs and Flood Depth markers will be installed at key locations along the main roads where flood depth has the potential to be high and is blocking access/egress to the development in the event of a PMF storm. Key locations may include the main driveway within the site and the point of access to/egress from the site at O'Connell Street.

Flood depth indicators should include signs to warn residents not to drive through flood waters. Other signage may indicate that the area is prone to flooding and to take appropriate precautions.

Typical examples of flood depth indicators are illustrated in Figure 5-2 and typical flood warnings signs for the key entrance and road locations are illustrated in Figure 5-3.



*Figure 5-2 Typical Flood Depth Marker Sign<sup>1</sup>*

<sup>1</sup>Source: [https://www.hobbiesplus.com.au/signspotters/information\\_signs\\_5.htm](https://www.hobbiesplus.com.au/signspotters/information_signs_5.htm)



Figure 5-3 Typical Flood Warning Signs<sup>2</sup>

<sup>2</sup> Source: <https://nationalsafety signs.com.au/safety-signs/flood-zone-do-not-enter-sign-c1993/>

## 6 Conclusion

A development is proposed to be built at 88 Smithfield Road, Smithfield NSW (of LOT 3, 4, 5 & 6 DP26819, 1 DP542629, 1, 2, 3 & 4 DP567165, 20 DP575281, 1 & 4 DP582485, 21 DP598459, 21 & 22 DP605517, 1 & 2 DP815265, 1 & 2 DP882031, 7 DP1037645, 4 DP1059050, 1 DP1254549, 6 DP26819, 4 DP567165). Colliers Engineering & Design (NSW) Pty Ltd were engaged by Smithfield RSL Pty Ltd to prepare civil and stormwater documentation to support the Planning Proposal to Fairfield City Council. This report accompanies the Flood Impact Assessment Report and supports the proposed development at this location and outlines in detail the flood behaviour and an appropriate Flood Emergency Response Strategy in response to the extreme flooding events up to the Probable Maximum Flood.

The site is located within the catchment of Prospect Creek, and although most of the site is typically flood free, there is the main driveway and a small corridor of the residential development that will be inundated in a PMF storm event due to overland flows approaching the site from the west.

The flood behaviour was discussed in detail above and in summary, the flood waters rise to a depth of 0.60 m and a hazard of H5 along the driveway, reaching peak depth within 25-30 minutes for the 30-minute PMF storm event. The nearest distance to elevated land and a major evacuation centre is 1.1 km away, taking at most 15 minutes by foot; this is the recommended evacuation procedure prior to the onset of the storm or after the waters recede. If warning times are inadequate or if the storm is already underway, it is recommended that a shelter-in-place strategy be adopted. This is acceptable as it is expected that isolation times caused by flooding are relatively short and the waters will fully recede within approximately 60-90 minutes. In addition, if most residents adopt a shelter-in-place strategy, this will avoid road congestion for residents that do require evacuation.

The full Flood Emergency Response Plan, Emergency Contact List and Emergency Evacuation Routes are included in the Appendices for ease of reference. In addition, further Educational Information from the NSW SES is included in Appendix D.

## Appendix A. Flood Emergency Response Plan

### NEVER ENTER OR TRAVEL THROUGH FLOODWATERS

This includes walking, driving, riding, and playing.

#### FLOOD EMERGENCY RESPONSE PLAN (FERP)

For further information also visit:

<https://www.ses.nsw.gov.au/floodsafe/prepare-your-home/before-a-flood/>

##### Preparation (Before Flood)

##### Residents & Developers

- Residents to be subscribed to BoM and other broadcast services to alert to severe weather warnings.
- Residents to prepare shelter-in-place FloodSafe Emergency Kits <https://www.ses.nsw.gov.au/floodsafe/prepare-your-home/emergency-kit/>
- Residents to prepare an emergency evacuation kit which includes all necessities in one place such as radio, torch, spare batteries, First Aid Kit, gloves, important documents, three days' supply of non-perishable food and water, emergency contact numbers and a copy of the flood emergency plan. (See also Section 5 on page 24).
- List of emergency contacts is to be kept in a prominent location and with the FloodSafe Kits. An example is attached below.
- Flood warning signs and flood depth markers are to be installed in the development at key locations such as the development entrance and access/egress creek crossings.
- Resident training with the NSW SES where available
- Residents should proactively equip themselves for the possibilities of flooding via reviewing the NSW SES website and other available resources.

##### Advice (Flooding possible)

- Residents to monitor conditions every 30 minutes via the BoM, NSW SES or the ABC (<https://www.abc.net.au/emergency>)
- Listen to the radio and monitor the NSW SES website for more information and advice.
- Go over your flood emergency plan. Pack food, drink, medications, clothing, and other required extra items into the Emergency Kit for preparation of either shelter-in-place or evacuation.
- If evacuating, pack the car with the FloodSafe Emergency Kit and any other necessities
- Secure onsite objects that may be likely to float and cause damage. Move and secure any hazardous items which may be harmful in the event of a flood to ensure they are above the PMF flood level.

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## Watch & Act (Flood Incipient)

- Ensure residents and neighbours are aware of the situation.
- Prepare to evacuate if necessary. Act early. Conditions change rapidly. Roads and escape routes can be covered or blocked.
- Lock down homes. Turn off water, gas, and electricity at the mains.
- Evacuate now. Immediately evacuate, prior to the onset of the storm event
- Obey speed limits within the site and public roads.
- Stay away from waterways, water can flow quickly and have strong currents.
- Avoid known flooding hotspots.

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## Emergency (During Flood)

- Remain calm.
- If sheltering in place, do not leave homes until flood waters have fully receded (which is approximately 2 hours for this development)
- Do not drive through flooded access/egress roads and wait until they are declared safe by the relevant authorities
- For emergency assistance, call [132 500](tel:132500) for NSW SES or 000.

---

## Recovery (After Flood)

- NSW SES to confirm access roads are clear to the subject site (i.e. flooding and debris), and confirm if the development was affected by flooding.
- If access roads are clear and the development is no longer affected by flooding, the development access/egress roads may be used.
- If access roads are not clear, under no circumstances should residents drive through floodwaters.
- If access roads are clear but residents homes are affected by flooding, residents should ensure that any precautionary measures recommended by the SES are put in place.
- If homes were flood affected, they should be appropriately checked for hazards such as contaminated water, venomous animals and sharp objects by appropriately qualified personnel in conjunction with NSW SES, prior to residents returning home.
- If homes were flood affected, utilities (including gas, water and electrical) should be professionally checked prior to use.

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## Maintenance and Review

- Following the flood event, this Flood Emergency Response Plan including the use of this FERP and any emergency procedures should be reviewed by individual residents to ensure improvement for future use.
-

- Changes may be made to the FERP and the requirements for future emergency response should be reviewed and identify any improvements required.
- Residents should proactively seek additional Flood Emergency Support where required
- This Flood Emergency Response Plan should be reviewed every three years regardless of use.

## **NEVER ENTER OR TRAVEL THROUGH FLOODWATERS**

**This includes walking, driving, riding, and playing.**

## Appendix B. Emergency Contact List

A sample emergency contact details proforma is illustrated in Table 6-1 below, that can be utilised by residents to include within the FloodSafe Emergency Kits.

Table 6-1 Sample Emergency Contact Details Proforma

| Contact Person/<br>Organisation      | Role                             | Contact Details                                                                                                                                                                                                                                                  |
|--------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Emergency Services</b>            | <b>Ambulance / Fire / Police</b> | <b>000</b>                                                                                                                                                                                                                                                       |
| <b>NSW State Emergency Services</b>  | SES Local Controller             | 132 500<br><a href="https://www.ses.nsw.gov.au/floodsafe/prepare-your-home/before-a-flood/">https://www.ses.nsw.gov.au/floodsafe/prepare-your-home/before-a-flood/</a>                                                                                           |
| <b>Bureau of Meteorology</b>         | NSW Flood Warning Centre         | (02) 9296 1511<br><a href="http://www.bom.gov.au/australia/warnings/">http://www.bom.gov.au/australia/warnings/</a>                                                                                                                                              |
| <b>Fairfield City Council</b>        | Customer Service Centre          | 9725 0222<br><a href="https://www.fairfieldcity.nsw.gov.au/">https://www.fairfieldcity.nsw.gov.au/</a>                                                                                                                                                           |
| <b>Smithfield Public School</b>      | POI/Designated Evacuation Centre | (02) 9604 5475<br><a href="https://smithfield-p.schools.nsw.gov.au/">https://smithfield-p.schools.nsw.gov.au/</a>                                                                                                                                                |
| <b>Brennan Park Community Centre</b> | POI/Designated Evacuation Centre | 9724 0222<br><a href="https://www.fairfieldcity.nsw.gov.au/Services/Halls-and-Community-Centres/Find-a-Hall/Brenan-Park-Community-Centre">https://www.fairfieldcity.nsw.gov.au/Services/Halls-and-Community-Centres/Find-a-Hall/Brenan-Park-Community-Centre</a> |
| <b>Smithfield West Public School</b> | POI/Designated Evacuation Centre | (02) 9604 3161<br><a href="https://smithfielw-p.schools.nsw.gov.au/">https://smithfielw-p.schools.nsw.gov.au/</a>                                                                                                                                                |

|                                                                              |                          |                                                                                                                                         |
|------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fairfield Hospital</b>                                                    | Emergency Medical Centre | (02) 9616 8111<br><a href="https://www.swslhd.health.nsw.gov.au/fairfield/">https://www.swslhd.health.nsw.gov.au/fairfield/</a>         |
| <b>Smithfield Family Medical Practice, 710 The Horsley Drive, Smithfield</b> | Medical Centre           | (02) 9725 1323<br><a href="https://sfmp.com.au/">https://sfmp.com.au/</a>                                                               |
| <b>MyHealth Wetherill Park, Shop 220, Stockland Wetherill Park</b>           | Medical Centre           | (02) 8788 5788<br><a href="https://www.myhealth.net.au/clinics/wetherill-park/">https://www.myhealth.net.au/clinics/wetherill-park/</a> |
| <b>Smithfield RSL Club, 88 Smithfield Rd, Smithfield</b>                     | Amenities                | (02) 9061 7167<br><a href="https://smithfieldrsl.com.au/">https://smithfieldrsl.com.au/</a>                                             |
| <b>La Italiana Panini &amp; Donut Café, 753A The Horsley Dr, Smithfield</b>  | Amenities                | 0467 823 732<br><a href="https://laitaliana.orderup.com.au/">https://laitaliana.orderup.com.au/</a>                                     |
| <b>Budget Petrol, 729 The Horsley Dr, Smithfield</b>                         | Amenities                | (02) 9604 3046                                                                                                                          |
| <b>Cafe 77 Bakery and Restaurant, 60 Dublin St, Smithfield</b>               | Amenities                | (02) 9603 4129<br><a href="http://www.cafe77.com.au/">http://www.cafe77.com.au/</a>                                                     |

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|                                                     |           |                                                                                         |
|-----------------------------------------------------|-----------|-----------------------------------------------------------------------------------------|
| <b>7 Eleven, 320<br/>Polding St,<br/>Smithfield</b> | Amenities | (02) 9757 2250<br><a href="https://www.7eleven.com.au/">https://www.7eleven.com.au/</a> |
|-----------------------------------------------------|-----------|-----------------------------------------------------------------------------------------|

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|                               |                       |
|-------------------------------|-----------------------|
| <b>Personal<br/>Contact 1</b> | Chief Flood<br>Warden |
|-------------------------------|-----------------------|

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|                               |                        |
|-------------------------------|------------------------|
| <b>Personal<br/>Contact 2</b> | Deputy Flood<br>Warden |
|-------------------------------|------------------------|

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|                               |                    |
|-------------------------------|--------------------|
| <b>Personal<br/>Contact 3</b> | Facilities Manager |
|-------------------------------|--------------------|

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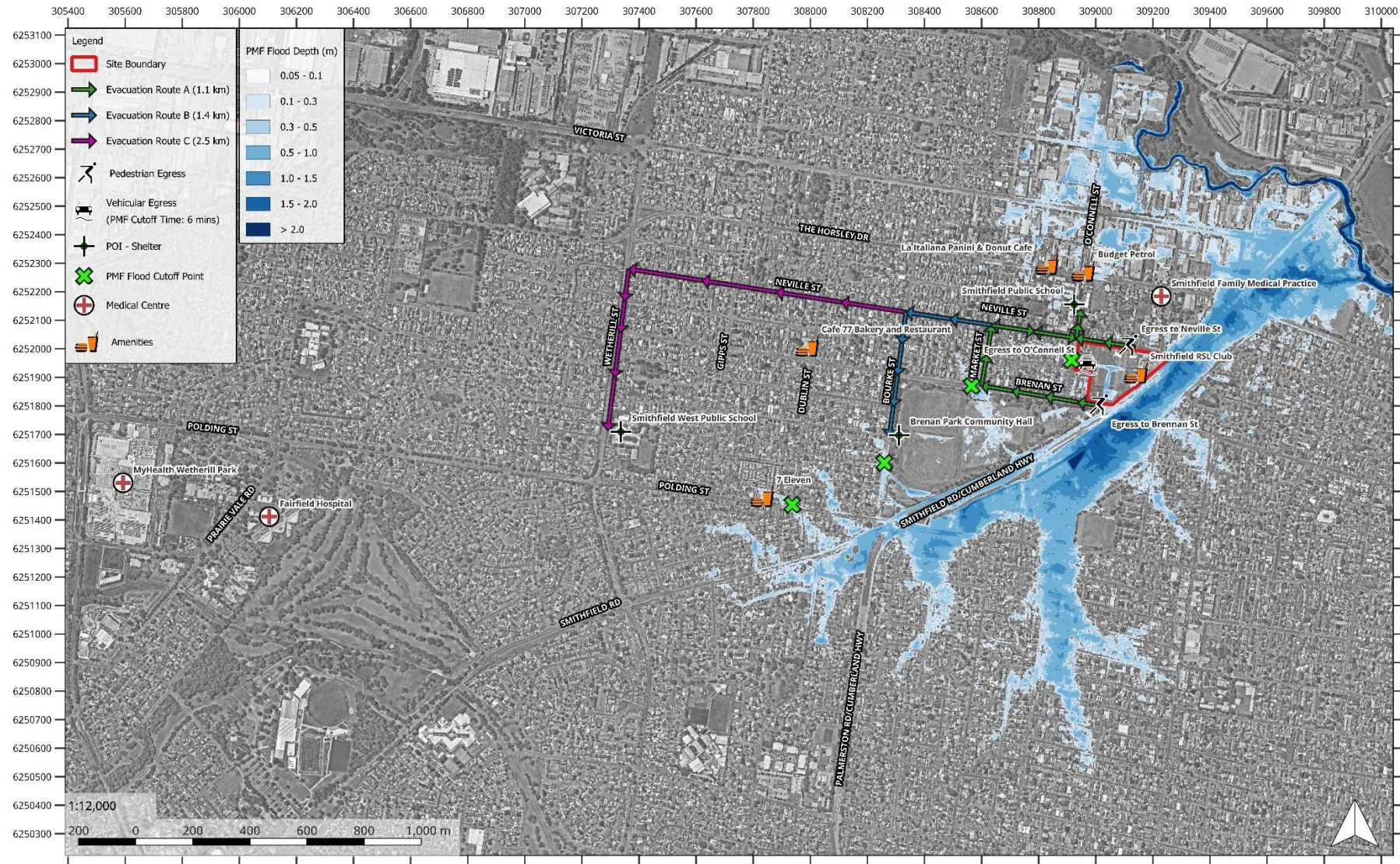
|                               |                   |
|-------------------------------|-------------------|
| <b>Personal<br/>Contact 4</b> | First Aid Officer |
|-------------------------------|-------------------|

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## Appendix C. Emergency Evacuation Map

# Flood Emergency Response Plan



Colliers Engineering & Design (NSW) Pty Ltd endeavours to ensure that the information provided in this map is correct at the time of publication. Colliers Engineering & Design (NSW) Pty Ltd does not warrant, guarantee or make representations regarding the currency and accuracy of information contained within this map.

Map 01: Evacuation Routes  
Project: Smithfield RSL and Surrounds - Rezoning Planning Proposal, Smithfield  
Project Number: 124-23  
Client: Smithfield RSL Pty Ltd.

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## Appendix D. NSW SES Educational Information

# Flood Emergency Response Plan

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## During a flood

A Flood Warning is issued by the Bureau of Meteorology when flooding is about to happen. Flood Warnings provide a predicted flood level and time at which a river will reach that level. Flood Warnings are issued in relation to gauges along rivers.

- Never drive, ride or walk through floodwater – this is the main cause of death during floods. Floodwater may be deeper and faster flowing than you think and may contain hidden snags and debris. This includes causeways and low-lying roads
- Stack possessions, records, stock or equipment on benches and tables, placing electrical items on top
- Secure objects that are likely to float and cause damage
- Relocate waste containers, chemicals and poisons well above floor level
- Keep listening to your local radio station for further information, updates and advice
- Keep in contact with your neighbours
- Be prepared to evacuate if advised
- Act early, as roads may become congested or close

## If you are isolated

The NSW SES will coordinate the supply of essential items to communities and properties which are isolated by floodwater. Being trapped by floodwater can be very dangerous. It is safer to evacuate well before flooding begins than to be isolated by floodwater and have to rely on the NSW SES for supplies. You can also lose essential amenities such as power, water and sewerage.

## Assistance for animals

NSW Department of Trade and Investment, Regional Infrastructure and Services provides assistance for livestock, companion animals and wildlife during floods. This may include emergency supply or delivery of fodder to stranded livestock, evacuation of livestock and animal rescue.

## Preparing to evacuate

During a flood the NSW SES and other emergency services may ask you to prepare for evacuation.

The NSW SES aims to keep people safe and minimise the risks to life and property when floods occur. It is important that you follow evacuation advice. Being prepared will allow you to respond quickly should you need to evacuate.

- Locate important papers, valuables and mementoes. Put them in your emergency kit
- Take your emergency kit with you
- Turn off the electricity and gas at the mains before you leave and turn off and secure any gas bottles
- Prepare to take your pets with you

## When you evacuate

If evacuation becomes necessary, the NSW SES and other emergency services may doorknock to advise residents and businesses of what to do and where to go.

There may be other ways that you will be notified if an evacuation is necessary. Keep listening to the radio and follow any instructions given to you by the emergency services.

You may choose to evacuate to a friends or relatives. If you do, ensure the property is well above the predicted flood level. Otherwise, proceed to the Evacuation Centre the emergency services direct you to. You must leave well before roads to high ground are closed by floodwater.

The Department of Community Services (DoCS) may establish evacuation centres in your area where help may be available including:

- Temporary accommodation
- Financial help
- Personal support
- Refreshments and meals
- Clothing and personal needs
- Contacting family and friends

## After a flood

A local recovery centre may be established by Department of Family and Community Services.

This centre will be staffed by representatives from a range of government departments and community agencies to help you return to normal living. At the centre you will be able to get advice on everything from insurance to counselling.

In the event of a flood, information will be available from the Department of Family and Community Services State Disaster Recovery Centre on 1800 018 444.



Principal Partner



FOR EMERGENCY HELP IN FLOOD,  
STORM AND TSUNAMI CALL

**132 500**

In life-threatening emergencies call 000 (triple zero)

For more information call the NSW SES

on **1800 201 000**

or visit: [www.floodsafe.com.au](http://www.floodsafe.com.au)



#NSWSES



/NSWSES



/NSWSES

Community FloodSafe



## Are you at risk from floods?

If you live close to a creek, river, major stormwater drain or in a low-lying area, you may be at risk from flooding even if you have not experienced it personally. This brochure contains information that can help you protect your property and members of your household.



## How the NSW SES can help?

The NSW SES is responsible for responding to floods in NSW. This includes planning for floods and educating people about how to protect themselves and their property.

During floods the NSW SES will provide flood information, safety advice and can arrange for the delivery of essential supplies to people isolated by floodwater. Where possible, the NSW SES will conduct evacuations and undertake flood rescue.

## What you can do now

### 8 TIPS YOU CAN DO NOW TO PREPARE FOR FLOODS

- 1 **KNOW YOUR FLOOD RISK**
- 2 **KNOW WHERE TO GO**
- 3 **KNOW WHO TO CALL**
- 4 **KNOW YOUR PLAN**
- 5 **GET YOUR KIT TOGETHER**
- 6 **PREPARE NOW TO ACT EARLY**
- 7 **CHECK YOUR INSURANCE**
- 8 **LISTEN TO LOCAL RADIO**

## Prepare yourself

### Your Emergency Kit



### Your emergency kit contents

- ✓ A portable radio with spare batteries
- ✓ A torch with spare batteries
- ✓ A first aid kit
- ✓ Candles and waterproof matches
- ✓ Important documents including emergency contact numbers
- ✓ Copies of any emergency plans
- ✓ A waterproof bag for valuables

### If you have to evacuate, add to your emergency kit

- ✓ Medications
- ✓ Supplies for your baby or any other people in your care
- ✓ Appropriate clothing and footwear
- ✓ Food and drinking water

Keep your emergency kit in a waterproof storage box. Check your emergency kit regularly and restock any out-of-date items such as batteries.

## When flooding is likely (Flood Watch)



A Flood Watch is issued by the Bureau of Meteorology when flooding is likely. You should be prepared to act should flooding occur.

### RESIDENTS

- Listen to your local radio station for information, updates and advice
- Locate and check your emergency kit
- Check on your neighbours and make sure they are aware of the Flood Watch
- Move pets, including agisted animals, to high ground

### BUSINESS OWNERS AND MANAGERS

- Locate and activate your Business FloodSafe Plan (developed by working through the Business FloodSafe Toolkit on the NSW SES website – [www.floodsafe.com.au](http://www.floodsafe.com.au))
- Check neighbouring businesses are aware of the Flood Watch
- Where possible, back up records and store off-site
- Make preparations to raise or relocate stock, records and equipment
- Find out about evacuation routes for your business and make sure your employees know when they are likely to close. This will ensure they can leave safely when a Flood Watch is issued

### RURAL PROPERTY OWNERS

- Relocate livestock and farm equipment, including pumps, to high ground
- Check sheds and outbuildings. Equipment, feed and chemicals should be raised or moved to high ground

### ALL PROPERTIES

- Activate your Home Emergency Plan
- If isolation is likely, have sufficient non-perishable food, essential medications, fuel and other necessities to last at least a week. Remember to include pet food and/or stockfeed if required

# Flood Emergency Response Plan

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## When flooding is likely

When flash flooding is likely the best action to take is to leave low-lying homes and businesses (evacuate) well before flooding begins, but only if it is safe to do so.

Do not enter floodwater as there is a high risk you may be swept away. Consider alternative ways to evacuate if possible.

Do not start driving in affected areas during flash flooding. If you are already driving, avoid flooded roads and find the highest nearby place to stop. Flash flooding can cause cars to stall, fill with water or be swept away.

If you are trapped by rising floodwater, seek refuge inside a sturdy multi-storey building with access to upper levels, higher natural ground such as a hill or onto the roof of a sturdy building. Do not enter the roof cavity as you may become trapped.

Stay there and call '000' (triple zero) if it is a life-threatening situation.

Stay clear of possible flash flood areas when severe weather is forecast and reconsider non-essential travel. Schools and work places have emergency procedures for these situations to keep children and workers safe.

- ✓ Access local media for information, updates, warnings and advice
- ✓ Locate and activate your Business or Home Emergency Plan and check your Emergency Kit or Grab and Go bag
- ✓ Check on your neighbours and make sure they are aware of potential flooding
- ✓ Stack possessions, records, stock or equipment on benches and tables, placing electrical items on top
- ✓ Relocate waste containers, chemicals and poisons well above floor level
- ✓ Move animals, including agisted animals, to high ground and prepare pets for possible evacuation
- ✓ Secure objects that are likely to float and cause damage
- ✓ Stay away from and keep children clear of drains, culverts, creeks and low lying areas

## How the NSW SES can help you

The NSW SES is responsible for responding to floods in NSW. This includes planning for floods and engaging with communities about how to protect themselves and their property.

During floods the NSW SES will provide flood information, safety advice and can arrange for the delivery of essential supplies to people isolated by floodwater. Where possible, the NSW SES will conduct evacuations and undertake flood rescue.



FOR EMERGENCY HELP IN FLOOD,  
STORM AND TSUNAMI CALL

**132 500**

In life-threatening emergencies call 000 (triple zero)

For more information visit:

[www.ses.nsw.gov.au](http://www.ses.nsw.gov.au)



#NSWSES



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## Flash Flood Guide



Cover image: Toowoomba Queensland.  
Image provided by Reuters

# Flood Emergency Response Plan

Colliers

## What is flash flooding?

Flash flooding is a rapid rise in water after heavy rainfall over a short period of time. It does not usually last more than a few hours.

Low-lying areas (under bridges or around culverts, drains, creeks and causeways) can be more susceptible to flash flooding. These are often dangerous places to be if it floods.

Water associated with flash flooding can also move quickly over land in either natural depressions or along roadways and parkland.

Flash floodwater can place lives at risk. It can be several metres deep, rise quickly and move fast.



If you live in an area with a potential for flash flooding, there will be less time for you to act to protect your family and property.

Prepare now. Put together an Emergency Kit consisting of a portable battery powered radio and torch, spare batteries, first aid kit, candles, waterproof matches, important papers, emergency plans and a waterproof bag.

## Stay informed

Monitor weather conditions and be aware of environmental cues such as very heavy rainfall. In flash flood areas, this may be the only indication of possible flash flooding.

The Bureau of Meteorology ([www.bom.gov.au](http://www.bom.gov.au)) issues Severe Thunderstorm Warnings and Severe Weather Warnings for a range of dangerous weather. They may also provide warnings for possible flash flooding.

NSW SES may issue warnings based on the predictions of the Bureau of Meteorology with additional information about the expected consequences for local communities and what actions you should take.

Check with your local council to find out if there is a flash flood warning system for your area.

It is important to remember that most flash floods happen with little or no warning. Plan to act early. It is safer to stay well clear of flash floods.

- ✓ Flood information including, safety advice, evacuations and road closures may be broadcast over local radio stations
- ✓ Keep monitoring local media for further information, updates, warnings and advice
- ✓ Check with friends and neighbours to make sure they are aware of any warnings

## Prepare your family and property now

### Know your risk

- ✓ If you live or work close to a river, water course, creek, drain, culvert or in a low-lying area, you may be at risk from flash floods even if you have never experienced them. It is important to be aware of the possibility of flooding where you live, where you work, where you keep livestock and where you travel
- ✓ Find out about the local flood history. A copy of the local flood plan may be available from your council. Check with the local NSW SES unit or at [www.ses.nsw.gov.au](http://www.ses.nsw.gov.au) to find out if there is a local FloodSafe Guide. Contact your local council for specific information on how floods may affect your property
- ✓ Be aware of natural signs of flash flooding. These can include heavy rainfall and rushing or pooling water
- ✓ Talk with your neighbours and people who have lived in the area for a while about the local flood risk
- ✓ Knowing your flood risk will help you plan. It is important to plan now so that you know what to do when flooding occurs
- ✓ Even if your property is not inundated by floodwater, you could become isolated. Access to other areas may be cut and you might lose power, water and sewerage

### Know where to go

- ✓ Find the safest route to travel in the event that you might need to evacuate. Identify places where evacuation routes may be cut and locate alternate routes
- ✓ Check with friends or relatives outside the flood prone area to organise a place to go. Find out where potential evacuation centres could be in your area

### Know who to call

- ✓ For emergency help in floods and storms, call the NSW SES on 132 500
- ✓ In a life-threatening emergency, call 000 (triple zero)
- ✓ Keep local emergency numbers handy (near your phone or on your fridge)

### Know your plan

- ✓ If you have a Home and/or Business Emergency Plan, review it. Otherwise, have a conversation and plan for what you will do and take with you if you need to evacuate.
- ✓ Review your plan annually or after any floods to keep it current



## NEVER ENTER FLOODWATER



Never enter or travel through floodwater. This includes walking, driving, riding and playing in floodwater. Entering floodwater is the leading cause of death during floods.



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