



Date: 6 September 2022
Ontoit
Level 5, 4-6 Bligh Street
Sydney NSW 2000

GRC Hydro
Level 9, 233 Castlereagh Street
Sydney NSW 2000

Re: 35 Banks Avenue, Daceyville Floodplain Risk Management Plan

Dear Christian,

A Flood Risk Management Plan has been prepared for 35 Banks Avenue, Daceyville as part of development at the site. The Plan was included in the report "Flood Study – 35 Banks Avenue, Daceyville – Rugby Club of Excellence" (GRC Hydro, August 2021). The Plan has since been slightly amended based on information on the operation of the facility, please find below.

Yours Sincerely

Felix Taaffe
Senior Engineer

1. FLOOD RISK MANAGEMENT PLAN

35 Banks Avenue, Daceyville is subject to flooding. Relevant flood, ground and floor levels for the Rugby Centre of Excellence site are:

- 1% AEP Flood Level = 20.17 mAHD
- Probable Maximum Flood = 21.68 mAHD
- Finished Floor Level = 20.67 mAHD
- Second Floor Level = 24.05 mAHD
- Front Boundary Level = 19.80 mAHD
- Lowest Ground Level = 19.80 mAHD

The above levels give an indication of how the various floods will impact this property and what level of protection is provided. Finished floor levels are designed to be a minimum of 0.5 m above the 1% AEP Flood Level and with the building's second floor providing protection for all flood up to and including the Probable Maximum Flood which is the largest event which can occur at this location.

A Flood Management Plan for the site is detailed below with a consolidated, single page plan, suitable for display provided at the end of this document. The plan covers the range of possible flooding including the 1% AEP event and the PMF. The plan is to be used as part of operation of the site as a sports facility. Based on information provided on past and future events, the total number of attendees is typically between 100 and 400 people.

1.1 Preparedness

Preparations for flooding are to be incorporated into the management of the site. These measures are the responsibility of the centre's management staff and are to ensure the centre is prepared for a flood when it occurs. The preparatory measures are as follows:

- Keep a hard copy and digital version of this Flood Management Plan;
- Brief relevant staff of its contents on an annual basis, or more frequently if staff turnover is high. There should always be at least one employee familiar with the Plan on duty whilst the centre is open.
- During a public sports event such as a rugby match, one staff member is to be designated as being the flood warden. They are to ensure the weather forecast is checked, and if there are any warnings issued by the Bureau of Meteorology for potential flooding for the time of the event, then either:
 - The match is postponed or cancelled or,
 - If the total attendance will be able to safely evacuate to the second storey of the building in the event that a flood occurs, the match can be held. The attendance and available floor area is to be determined by the flood warden. The flood warden should then monitor weather warnings as they are updated, and monitor for flooding on Banks Avenue. If flooding begins, move to the During a Flood section of the plan.

The Warden must monitor the weather and if raining, potential flooding, even if no warnings are issued. Flooding may occur without warning.

- Design temporary warning signage (see examples below) to marshal site occupants during a flood, including:
 - Temporary warning signs stating the car park is currently flooding and to remain within the centre;
 - Temporary warning signs to stop cars entering the carpark from surrounding roads are NOT to be used due to the risk posed to staff responsible for erecting signage.
- Maintain a loudspeaker system inside the centre that can be used for announcements during a flood. A flood warning message should be prepared for dissemination to occupants during times of flood. The message should contain information about the dangers of flood waters and advising people remain within the centre until an all-clear message is announced.



1.2 During a Flood

The main responsibilities during a flood are to notify emergency services, to marshal site occupants into areas of safety, and to assist those impacted by floodwaters. The greatest risks are estimated to be to those entering areas of flooding in the car park. The actions to be taken by the site's management, in chronological order, are to:

1. Call the State Emergency Service and advise that the centre site is flooding, and that assistance may be required.
2. Erect temporary warning signs at each building exit, stating the car park is currently flooding and to remain within the centre.
3. If floodwaters appear to be likely to enter the building, turn off the buildings power to reduce the risk of electrocution.
4. Announce (over the loudspeaker and in-person) to occupants of the building that flooding is occurring outside, and to remain calm and stay within the building until the flooding passes. The centre should not be evacuated during the flood event as the greatest flood risk is experienced in the carpark and surrounding areas.
5. Check outside if any vehicles or pedestrians have been caught in floodwaters or injured. Assist them if safe to do so (fast moving or deep floodwaters should be avoided) and if injuries are noted, call an ambulance.
6. If floodwaters enter the building, announce to building occupants that they must evacuate to the second story of the building which is above the level of the Probable Maximum Flood.
7. Assist the elderly or those with children in finding a safe area to wait within the building.

There are three categories of time when the flood event can occur. These are:

- (1) Late night/early morning when the site is completely unoccupied;

- (2) During site's normal day to day operation; and
- (3) During a sports match at the site with public attendance.

No actions are required for (1), however (2) and (3) both require the same actions listed previously.

1.3 Recovery

Once the floodwaters subside, announce that it is safe to now leave the building and the car park, and take down the signage. Attend to occupants that are injured or show symptoms of shock. Call Emergency 000 for assistance if required. If electrical or gas services have been inundated do not turn these appliances on until they have been checked by a qualified electrician or gas fitter.

Following the flood event, the centre management should assess the consequences of the flood event, including where repairs are required. This plan should then be reviewed and updated if necessary, with any lessons learned. Damages to the building, car park or other assets will be dealt with following the flood and they are not the focus of this plan.

A Flood Management Plan for the site is detailed below with a consolidated, single page plan, suitable for display provided below.

FLOOD MANAGEMENT PLAN

Rugby Centre of Excellence
35 Banks Avenue, Daceyville, NSW 2032

Preparedness

Remain vigilant for flood risk:

- Keep a hard copy and digital version of this Flood Management Plan.
- Brief relevant staff of its contents on an annual basis. There should always be at least one employee familiar with the Plan on duty whilst the centre is open.
- A staff member is to be designated as the Flood Warden during any sporting events held with public attendance. The Warden has responsibility for monitoring for flooding. Any events with large attendance may need to be postponed if flood warnings are present.
- Design and maintain temporary warning signage to advise that car park is flooded.
- Maintain a loudspeaker system inside the centre to advise of flood risk.

Response

During a flood the actions to be taken by the site's management are:

1. Call the State Emergency Service and advise that the centre site is in flood.
2. Erect temporary warning signs at each building exit, stating the car park is currently flooding and to remain within the centre.
3. If floodwaters appear to be likely to enter the building, turn off the buildings power.
4. Announce (over the loudspeaker and in-person) to occupants of the building that flooding is occurring outside, and to remain within the building. Do not evacuate.
5. Check outside if any vehicles or pedestrians have been caught in floodwaters or injured. Assist them if safe to do so and if injuries are noted, call an ambulance.
6. If floodwaters enter the building, announce to building occupants that they must evacuate to the second story of the building which is above the level of the Probable Maximum Flood.
7. Assist the elderly or those with children in moving to the second floor if required.

Recovery

Once the floodwaters subside, announce that it is safe to now leave the building and the car park, and take down the signage. Attend to occupants that are injured or show symptoms of shock. Call Emergency 000 for assistance if required. If electrical or gas services have been inundated do not turn these appliances on until they have been checked by a qualified electrician or gas fitter.

Important phones numbers

NSW State Emergency Service: **Emergency – 132 500** General enquiries – 4251 6111
Police, Fire, Ambulance: **Emergency – 000**

Bureau of Meteorology: Website: <http://www.bom.gov.au/nsw/warnings/> , p:1300 659 218