



23 February 2026

211734

William St Residential Pty Ltd
 Sydney, NSW 2000

164-192 WILLIAM STREET

SSDA (SSD-80211463) RTS Comments

TTW's responses to the agency comments on the Flood Impact and Risk Assessment (FIRA) Report for 164-192 William Street (SSD-80211463) are provided below.

Item	Comment	TTW Response
CITY OF SYDNEY COUNCIL – Advice on EIS 11 November 2025		
13	Flooding The submitted Flood Impact and Risk Assessment must be updated to confirm compliance with the City's Interim Floodplain Management Policy. In particular, the report identifies that several of the proposed entries to the basement, including the vehicular entry on Forbes Street and those through the residential lobbies on William Street, are affected by PMF depths greater than 150mm. As such, the proposed finished floor levels of those entry points must comply with either 1% AEP + 500mm freeboard or the PMF, whichever is greater.	<p>As noted in Section 3.0 of TTW's Flood Impact and Risk Assessment, both the Interim Floodplain Management Policy (2014) and the Draft DCP (2023) require basement openings to be protected to either the 1% AEP level + <u>500mm freeboard</u> or the PMF level, whichever is higher.</p> <p>However, as noted in Section 8.0 of the FIRA, TTW's assessment of basement and entry levels has been undertaken with reference to Council's definition of flooding, which considers surface water depths exceeding 150mm to constitute flooding.</p> <p>Applying 500mm freeboard to the 1% AEP flood level at locations affected by shallow nuisance flows is not consistent with the intent of the policy and would result in an unreasonable design outcome. The adopted approach ensures flood risk is appropriately managed while avoiding unnecessary elevation of access points where credible flood risk is not present. At all basement entry locations, 1% AEP flood depths are less than 150mm (refer to Table 10 of TTW's FIRA). As such, the PMF level has been adopted as the appropriate Flood Planning Level.</p>
	The finished floor levels for the retail tenancies on William Street and Bridge Street must also comply with 1% AEP CC2030 levels.	<p>As shown in the flood depth and level mapping for the 1% AEP CC2030 scenario (attached in Appendix A, Figure 1 of this letter) and summarised in Table 10 of TTW's FIRA, flood depths at all retail tenancy ingress points are less than 150mm in this event.</p> <p>Consistent with the adopted assessment approach and Council's definition of flooding, these entry points are not considered flood affected under the 1% AEP CC2030 scenario. Accordingly, the proposed finished floor levels for the retail tenancies are considered compliant from a flood risk perspective.</p>
NSW SES – 12 November 2025		
S.1	We recommend the consent authority ensures that all openings to the basement	As aforementioned (Item 13), basement openings have been assessed in accordance with Council's

	(ramp, vents, etc) are situated above the PMF or 1% AEP plus freeboard, whichever is higher as a condition of consent. If this is not feasible reconsider basement carparking as any openings to the basement are below the PMF will pose risk to life and property.	definition of flooding and the applicable Flood Planning Level criteria. As demonstrated in the compliance assessment (Table 10 of the FIRA), all basement openings are located at or above the PMF level. It is not considered reasonable to impose a condition requiring basement openings to be set to the higher of the PMF or 1% AEP level plus freeboard where 1% AEP conditions do not constitute flooding.
S.2	We recommend the consent authority requests the proponent demonstrates consistency with the Shelter in Place Guideline (NSW Government, 2024) prior to granting consent to ensure the risk to life is adequately managed and/or mitigated. The current proposal has not demonstrated consistency and the streets surrounding the site are inundated by high hazard flooding during the PMF event	As noted in Table 12 of TTW's FIRA, modelling indicates that inundation of adjacent road frontages occurs within approximately 10 minutes of the onset of the critical 15-minute PMF storm, with flows across Forbes Street rapidly reaching H5-H6 hazard levels, preventing safe access to the basement car park. Given the limited warning time and rapid escalation of flood hazard, attempting evacuation once a severe storm has commenced would increase risk to life by moving occupants from safe refuge into high-hazard flood conditions. The proposal provides onsite refuge above the PMF level, enabling occupants to safely shelter in place without reliance on evacuation. High hazard flooding of surrounding streets during the PMF reflects broader catchment behaviour. Mitigation of surrounding high-hazard flows (which are offsite) is not considered reasonable to demonstrate overall consistency with the guideline.

ATTACHMENT A: Principles in the Support for Emergency Management Planning Guideline

Principle 1: Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.

1.1	Any proposed Emergency Management strategy for an area should be compatible with the evacuation strategies identified in the NSW State Flood Plan and the City of Sydney Council Flood Emergency Sub Plan, where evacuation is the preferred emergency management strategy for people impacted by flooding.	This is noted – refer to Section 9.2.1 of the FIRA. The primary response strategy is pre-emptive closure of the retail stores in response to flood warnings or severe thunderstorm warnings, consistent with Section 5.8.3 of the City of Sydney LGA Flood Emergency Sub Plan.
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Principle 2: Decisions should be informed by understanding the full range of risks to the community

2.1	Decisions relating to future development should be risk-based and ensure Emergency Management risks to the community of the full range of floods are effectively understood and managed. Further, risk assessment should consider the full range of flooding, including events up to the Probable Maximum Flood (PMF) and not focus only on the 1% AEP flood.	This is noted – TTW's FIRA includes consideration of events ranging from the 10% AEP up to the Probable Maximum Flood (PMF) event.
2.2	The site is a high flood island, which becomes isolated by shallow depth, high velocity flooding as frequently as the 10%	Shallow sheet flows with depths of less than 50mm are regarded as nuisance flows, not flooding. This is consistent with City of Sydney Council's definition of

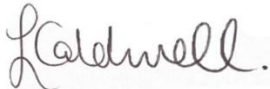
	<p>Annual Exceedance Probability (AEP) event, with low level flooding up to 50mm depth inundating all surrounding streets. During the Probable Maximum Flood (PMF) flooding on William Street, adjacent to the development, reaches depths of up to 500mm. All surrounding streets reach Hazard Level 5 (H5) and isolated areas within the roadway reach Hazard Levels 6 (H6). This level of hazard is unsafe for all people and vehicles.</p>	<p>flooding. Flood depths of 50mm do not result in isolation of the site.</p> <p>Flows across the immediate adjacent roadways are classified as low hazard (H1 – generally safe for people and vehicles) in all modelled events up to the 0.2% AEP. In the PMF event, flows become hazardous, particularly over Forbes St. However, high hazard flows are limited to extremely rare events and will be sufficiently managed via a shelter-in-place strategy.</p>
<p>Principle 3: Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.</p>		
<p>3.1</p>	<p>Evacuation must not require people to drive or walk through flood water. Development strategies relying on an assumption that mass rescue may be possible where evacuation either fails or is not implemented are not acceptable to the NSW SES.</p>	<p>This is noted – the primary response strategy for the site is pre-emptive closure of retail spaces (refer to Section 9.2 of the FIRA), and shelter-in-place for residential floors. This will ensure the ability of the existing community to evacuate will not be compromised. Where pre-emptive closure of retail spaces is not possible, the secondary response is to shelter-in-place.</p>
<p>Principle 4: Decisions on development within the floodplain does not increase risk to life from flooding.</p>		
<p>4.1</p>	<p>Managing flood risks associated with High Flood Islands requires careful consideration of development type, likely users, and their ability respond to minimise their risks. This includes consideration of:</p> <p>Isolation: There is no known safe period of isolation in a flood, the longer the period of isolation the greater the risk to occupants who are isolated.</p> <p>Secondary risks: This includes fire and medical emergencies that can impact on the safety of people isolated by floodwater. The potential risk to occupants needs to be considered and managed in decision-making.</p> <p>Consideration of human behaviour: The behaviour of individuals such as choosing not to remain isolated from their family or social network in a building on a floor above the PMF for an extended flood duration or attempting to return to a building during a flood, needs to be considered.</p>	<p>This is noted. However, shelter-in-place (SIP) guidance published by the NSW Department of Planning, Housing and Infrastructure (DPHI) in January 2025 states that SIP is an appropriate emergency management response when the flood warning time is less than 6 hours and the flood duration is less than 12 hours, which is the case for 164-192 William Street.</p> <p>Secondary risks have been considered in Section 9.2.3 of the FIRA.</p> <p>This is noted. As aforementioned, high hazard flows are limited to extremely rare events (with a magnitude higher than the 0.2% AEP).</p> <p>In addition, the duration of flooding at the site is short, with an isolation period of 1-hour in the 2-hour PMF event.</p>
<p>Principle 5: Risks faced by the itinerant population need to be managed.</p>		
<p>5.1</p>	<p>Any Emergency Management strategy needs to consider people visiting the area or using a development.</p>	<p>This is noted.</p>
<p>Principle 6: Recognise the need for effective flood warning and associated limitations.</p>		
<p>6.1</p>	<p>An effective flood warning strategy with clear and concise messaging understood by the community is key to providing the community an opportunity to respond to a</p>	<p>This is noted.</p>

	flood threat in an appropriate and timely manner. As the site is affected by overland flooding little to no warning time is likely to be available, with Severe Weather Warnings and Severe Thunderstorm Warnings from the Bureau of Meteorology the only warnings currently available for this location.	
Principle 7: Ongoing community awareness of flooding is critical to assist effective emergency response.		
7.1	<p>Development in a floodplain will increase the need for NSW SES to undertake continuous community awareness, preparedness, and response operations.</p> <p>The flood risk at the site and actions taken to reduce risk to life should be communicated to all site users (includes increasing risk awareness, community connections, preparedness actions, appropriate signage and emergency drills) during and after the construction phase. However, it is important to note that the NSW SES is opposed to the imposition of development consent conditions requiring private flood evacuation plans rather than the application of sound land use planning and flood risk management.</p>	This is noted.

Should you require anything further please contact the undersigned.

Yours faithfully,

TTW (NSW) PTY LTD



LAURA CALDWELL
Civil Flood Modeller

Appendix A

1% AEP FLOOD DEPTHS AND LEVELS – CC2030

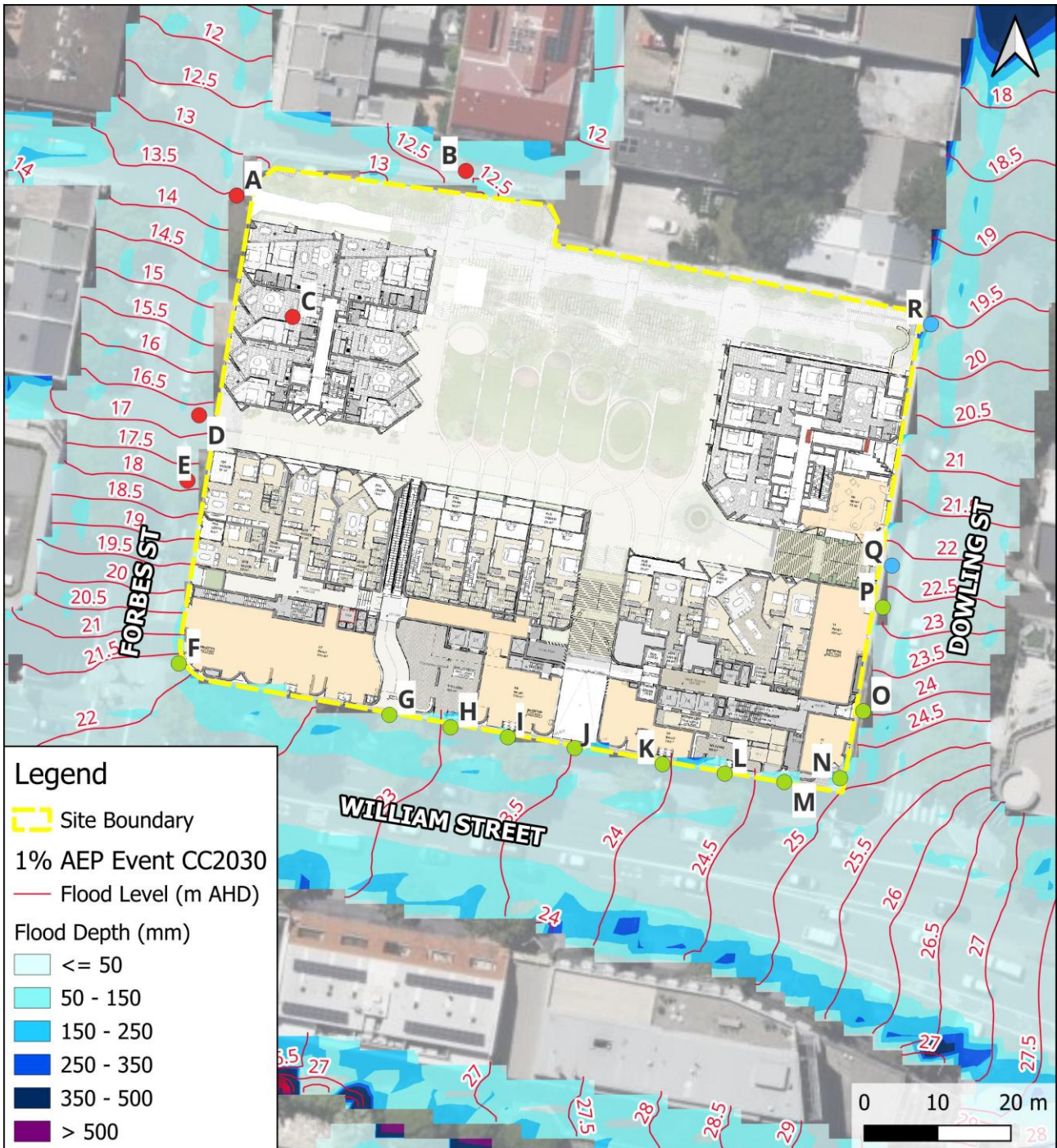


Figure 1: Flood ingress points in relation to flood depths and levels in the 1% AEP CC2030 event