

**Mark Surtess**  
**Development Manager**  
**Wee Hur (Australia) Pty Ltd**

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19 September 2022

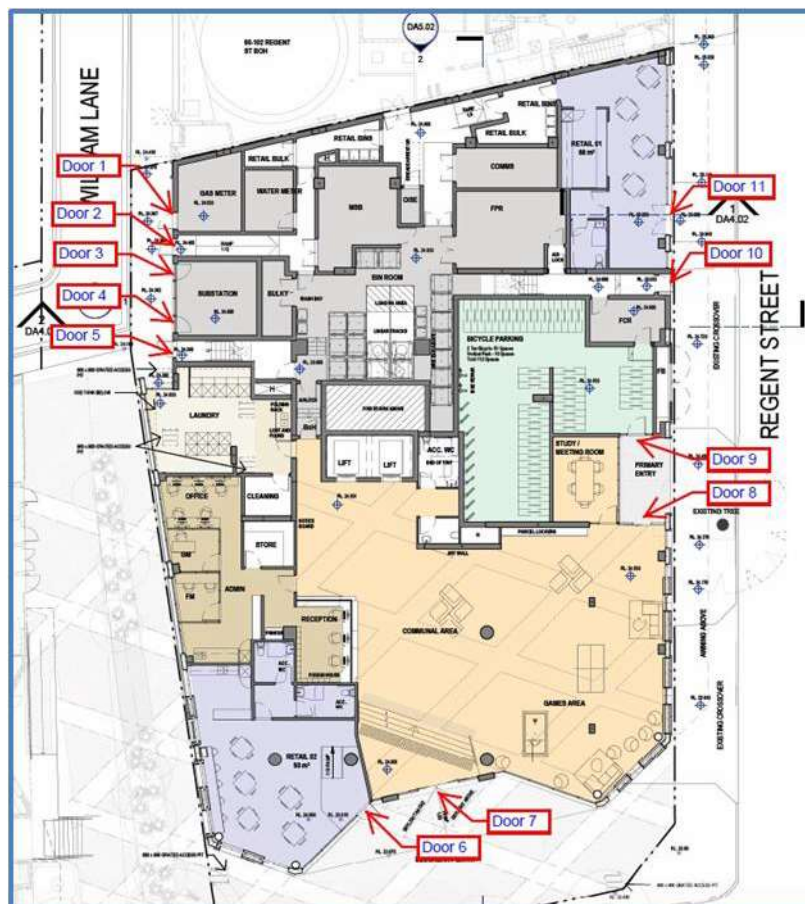
Dear Mark,

**Re: Review of Flood Related Development Controls for Building Floors**  
**104-116 Regent Street, Redfern, Response to Council's Submission of 11 July 2022**

**INTRODUCTION**

The ground floor of the above proposed commercial enterprise comprises entry, storage, office, retail, study and service spaces. There is no residential space or car parking on the ground floor. Entry is by eleven doors as shown below. The site is surrounded by overland flow in times of flood and therefore potentially subject to above floor inundation by floodwaters. Council's letter of 11 July 2022 states.

A new comment is raised in relation to flooding on the site. The previously submitted Flood Statement, prepared by WMA Water, incorrectly states entry door nos. 10 and 11 as having a freeboard of 100mm for the internal 1% AEP. However, it has a 0.0 freeboard. Clarification is required on the necessary freeboard for the proposed development.



**WMAwater Pty Ltd**

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## OUTCOME

This letter responds to Council's comments in their letter of 11 July 2022 and provides an updated table (refer below) listing the description of the internal space at each door, the finished floor level (FFL) and the 1% AEP and PMF flood levels. Also listed are the height of the FFL above the 1% AEP and PMF flood levels. It should be noted that whilst the proposed finished floor levels on the plans are quoted to 2 decimal places the peak flood levels at each door cannot be accurately quoted to 2 decimal places.

DOOR NO.	DESCRIPTION	INTERNAL RL @ BOUNDARY	INTERNAL RL @ FFL	1% AEP LEVEL	INTERNAL RL - 1% AEP	PMF LEVEL	INTERNAL RL - PMF
1	Gas Meter Room	24.5	24.5	24.4	0.1	24.5	0.0
2	Bin Room	24.4	24.5	24.4	0.1	24.5	0.0
3	Substation 1	24.5	24.5	24.4	0.1	24.5	0.0
4	Substation 2	24.4	24.5	24.4	0.1	24.5	0.0
5	Fire Egress William Lane	24.4	24.8	24.4	0.4	24.5	0.3
6	Margaret St Retail	23.8	24.0	23.9	0.1	23.9	0.1
7	Margaret St Main Entry	24.0	24.5	23.9	0.6	23.9	0.6
8	Regent St Main Entry	24.5	24.5	24.3	0.2	24.4	0.1
9	Bicycle Store	24.5	24.5	24.5	0.0	24.6	-0.1
10	Fire Egress Regent St	25.1	25.1	24.8	0.3	24.9	0.2
11	Retail Door	25.0	25.0	25.0	0.0	25.1	-0.1

The City of Sydney's Interim Floodplain Management Policy (copy below) advises the required floor level flood planning levels as indicated below.

5 Flood Planning Levels			
A Flood Planning Level refers to the permissible minimum building floor levels. For below-ground parking or other forms of below-ground development, the Flood Planning Level refers to the minimum level at each access point. Where more than one flood planning level is applicable the higher of the applicable Flood Planning Levels shall prevail.			
Development	Type of flooding	Flood Planning Level	
Residential	Habitable rooms	Mainstream flooding	1% AEP flood level + 0.5 m
		Local drainage flooding (Refer to Note 2)	1% AEP flood level + 0.5 m or Two times the depth of flow with a minimum of 0.3 m above the surrounding surface if the depth of flow in the 1% AEP flood is less than 0.25 m
		Outside floodplain	0.3 m above surrounding ground
Industrial or Commercial	Non-habitable rooms such as a laundry or garage (excluding below-ground car parks)	Mainstream or local drainage flooding	1% AEP flood level
	Business	Mainstream or local drainage flooding	Merits approach presented by the applicant with a minimum of the 1% AEP flood level
	Schools and child care facilities	Mainstream or local drainage flooding	Merits approach presented by the applicant with a minimum of the 1% AEP flood level + 0.5m
	Residential floors within tourist establishments	Mainstream or local drainage flooding	1% AEP flood level + 0.5 m
	Housing for older people or people with disabilities	Mainstream or local drainage flooding	1% AEP flood level + 0.5 m or a the PMF, whichever is the higher
	On-site sewer management (sewer mining)	Mainstream or local drainage flooding	1% AEP flood level
	Retail Floor Levels	Mainstream or local drainage flooding	Merits approach presented by the applicant with a minimum of the 1% AEP flood. The proposal must demonstrate a reasonable balance between flood protection and urban design outcomes for street level activation.
Below-ground garage/ car park	Single property owner with not more than 2 car spaces.	Mainstream or local drainage flooding	1% AEP flood level + 0.5 m

Development	Type of flooding	Flood Planning Level
All other below-ground car parks	Mainstream or local drainage flooding	1% AEP flood level + 0.5 m or the PMF (whichever is the higher) See Note 1
Below-ground car park outside floodplain	Outside floodplain	0.3 m above the surrounding surface
Above ground car park	Enclosed car parks	1% AEP flood level
	Open car parks	5% AEP flood level
Critical Facilities	Floor level	1% AEP flood level + 0.5m or the PMF (whichever is higher)
	Access to and from critical facility within development site	1% AEP flood level

Notes

- 1) The below ground garage/car park level applies to all possible ingress points to the car park such as vehicle entrances and exits, ventilation ducts, windows, light wells, lift shaft openings, risers and stairwells.
- 2) Local drainage flooding occurs where:
  - The maximum cross sectional depth of flooding in the local overland flow path through and upstream of the site is less than 0.25m for the 1% AEP flood, and
  - The development is at least 0.5m above the 1% AEP flood level at the nearest downstream trapped low point, and
  - The development does not adjoin the nearest upstream trapped low point, and
  - Blockage of an upstream trapped low point is unlikely to increase the depth of flow past the property to greater than 0.25m in the 1% AEP flood.
- 3) Mainstream flooding occurs where the local drainage flooding criteria cannot be satisfied.
- 4) A property is considered to be outside the floodplain where it is above the mainstream and local drainage flood planning levels including freeboard.

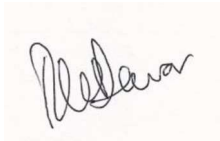
We have reviewed the requirements of Council's Interim Floodplain Management Policy and the proposed finished floor and design flood levels. For "Business" use the minimum is the 1% AEP flood level and the above table indicates that this is achieved.

However, all critical facilities (electricity supply) or any use that is critical to the operation or use of the space (computers, electricity outlets etc.) must be located above the PMF flood level. There is little difference between the 1% AEP and PMF flood levels as the floodplain (i.e., the streets) are relatively wide and thus an increase in flow produces only a small increase in peak flood level.

Should you have any questions or require further clarification regarding the above please do not hesitate to contact the undersigned by email ([dewar@wmawater.com.au](mailto:dewar@wmawater.com.au)) or on 0493 031 451.

Yours Sincerely,

**WMAwater**

A handwritten signature in black ink, appearing to read "R W Dewar", on a light-colored rectangular background.

R W Dewar  
**Director**