

Waterloo Metro Quarter Over Station Development

SSD-10438 Basement Car Park – S4.55

To: Perry Milledge

From: Michele Zornitta (prepared)
Aleks Vasiloski (reviewed)

Subject: Basement Finished Floor Levels

Our ref: PS119449-HYD-MEM-.docx

Date: 21 April 2022

This note has been prepared to confirm that the design modifications made for the Basement Car Park after the development submission (i.e., SSD-10438) are compliant with flood protection requirements.

Flood protection at the basement car park is achieved by adopting finished floor levels (FFLs) at the basement access points above flood planning levels (FPLs).

There are eight access points to the Basement Car Park. Four are located at the Northern building ground floor and four are located at Central Precinct ground floor.

Figure 1 below shows the basement car park access points at the Northern Building.

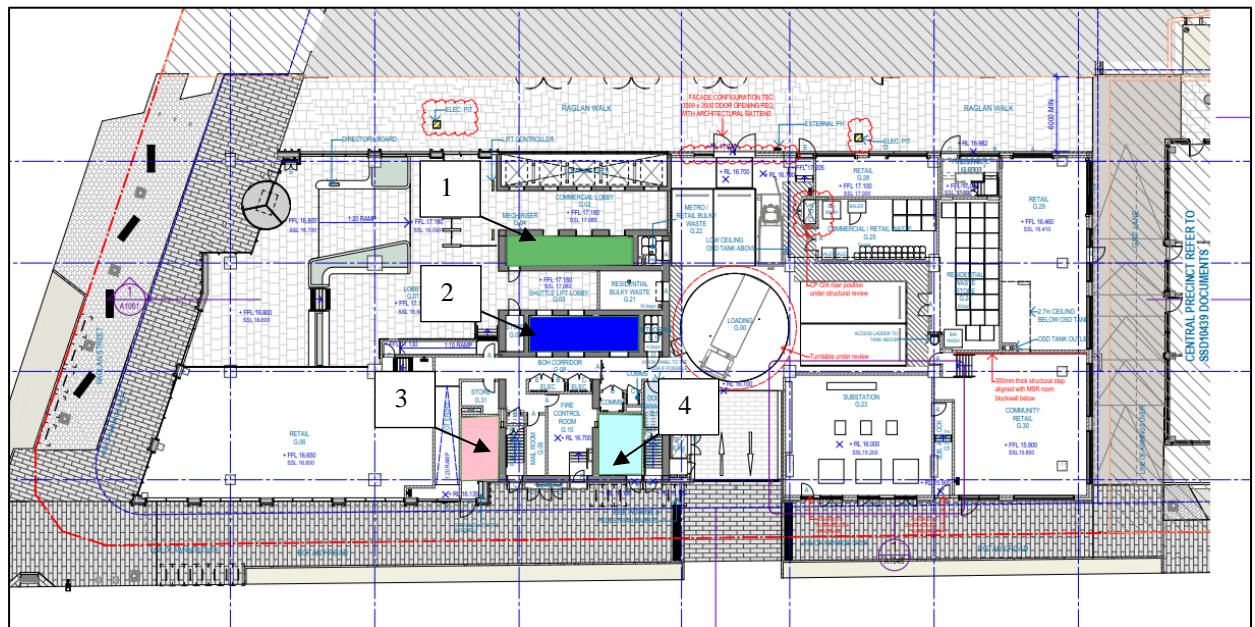


Figure 1: Access points to basement car park – Northern building

Figure 2 below shows the basement car park access points at the Central Building

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WSP acknowledges that every project we work on takes place on First Peoples lands. We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

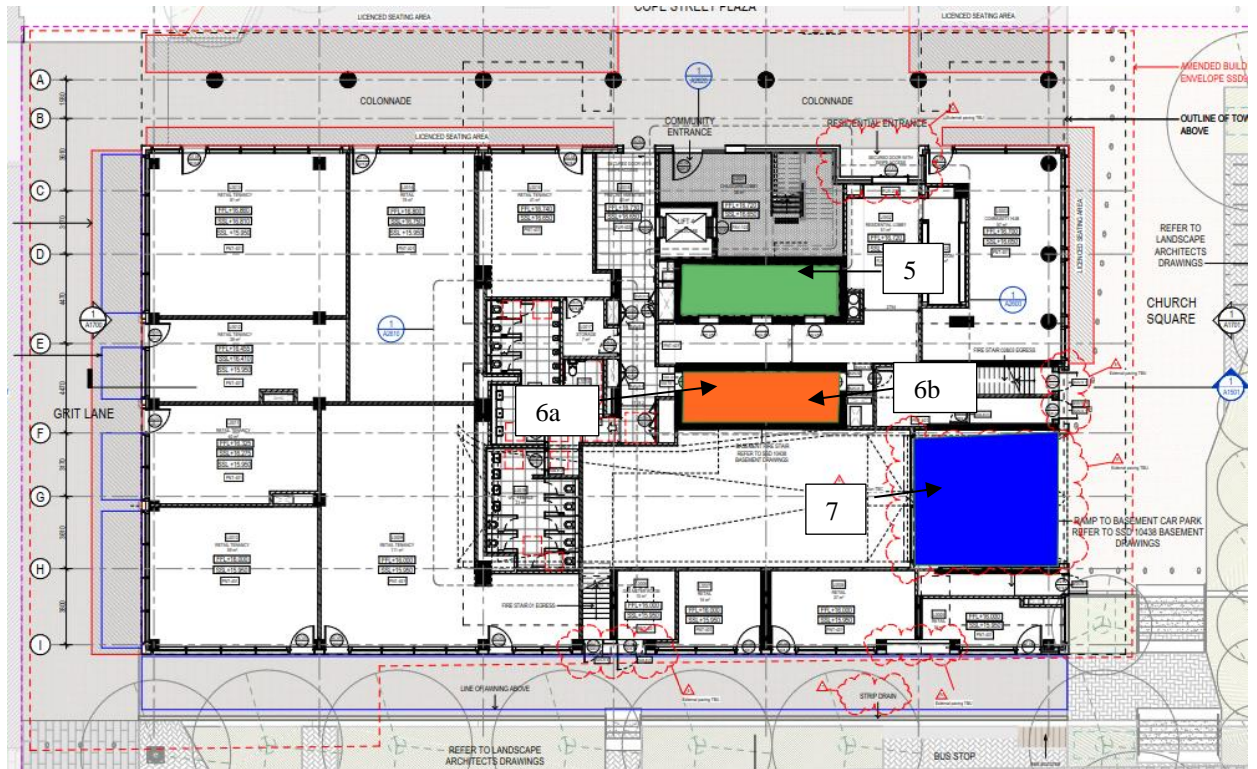


Figure 2: Access points to basement car park – Central building

Table 1 below compares the updated FFLs with the FPLs.

Table 1: Finished Floor levels

Area	Flood Planning Levels	Finished Floor Levels	Compliance
1	PMF = 16.92 m AHD 100 ARI+0.5m= 17.17 m AHD	17.18 m AHD	Yes
2	From Raglan Street PMF = 16.92 m AHD 100 ARI+0.5m= 17.17 m AHD From Botany Road PMF = 16.52 m AHD 100 ARI+0.5m= 16.70 m AHD	From Raglan Street 17.18 m AHD From Botany Road 16.70 m AHD	Yes
3	PMF = 16.52 m AHD 100 ARI+0.5m= 16.70 m AHD	16.70 m AHD	Yes
4	PMF= 16.47 m AHD 100 ARI+0.5m= 16.55m AHD	16.73 m AHD	Yes

Area	Flood Planning Levels	Finished Floor Levels	Compliance
5	PMF= 16.67 m AHD 100 ARI+0.5m= 16.38 m AHD	16.72 m AHD	Yes
6a	PMF= 16.67 m AHD 100 ARI+0.5m= 16.38 m AHD	16.73 m AHD	Yes
6b	PMF= 16.67 m AHD 100 ARI+0.5m= 16.38 m AHD	16.72 m AHD	Yes
7	PMF= 16.59 m AHD 100 ARI+0.5m= 16.23 m AHD	16.60 m AHD	Yes

Appendix A includes floor plans for the northern and central buildings.

As demonstrated in Table 1 above, FFLs are proposed above FPLs. Thus, the design configuration (included in appendix A) satisfies the flood protection requirements.

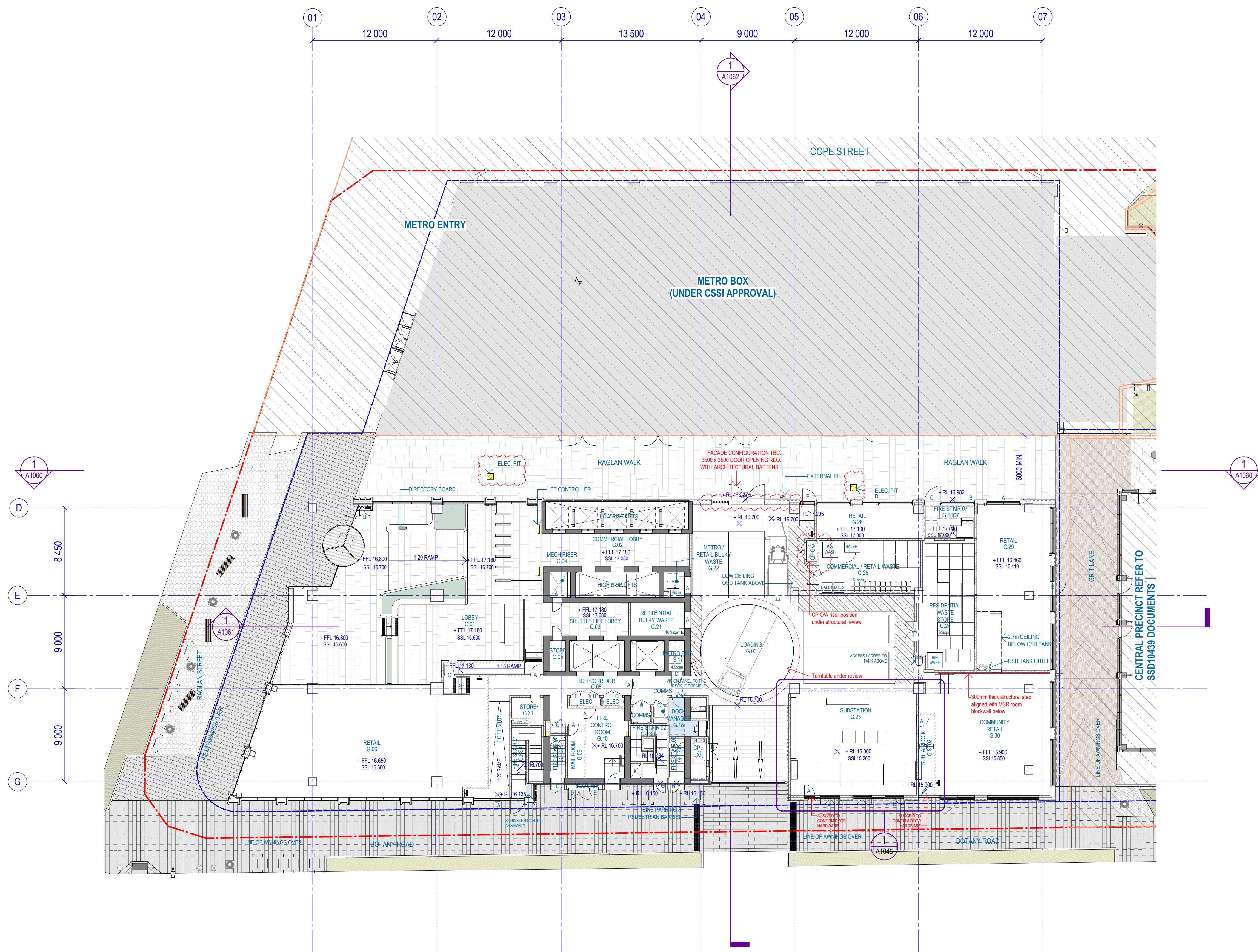
All point of ingresses to the basement car park are located above the PMF and the 1% AEP+500 mm flood level (whichever is higher).

Note, any modifications to the site layout (i.e. including changes to road levels at Botany Road, Ragland Street and Cope Street) may affect the flood conditions at the site and surrounding areas. Additional modelling may be required to verify that any site layout modifications do not affect the FPLs listed in Table 1 above.



Appendix A

Northern building



Recent revision history			
#	Status	Description	Date
R		FOR INFORMATION	16.06.21
S		FOR INFORMATION	28.06.21
T		FOR INFORMATION	26.07.21
U		FOR INFORMATION	30.08.21
V		FOR INFORMATION	10.09.21
W		FOR INFORMATION	17.09.21

Current Revision Amendments

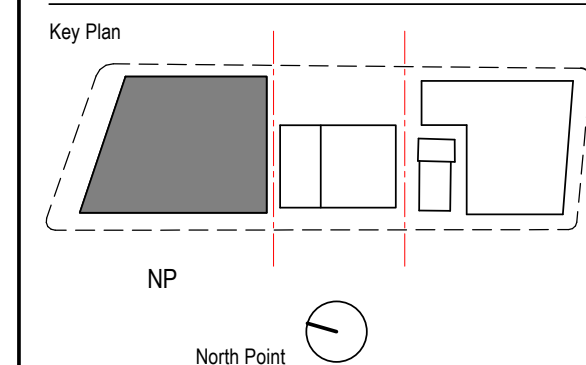
#	Mark	Comments
1	FFL & SSL ADJUSTED	
2	FFL & SSL ADJUSTED / LAYOUT UPDATED	

Notes

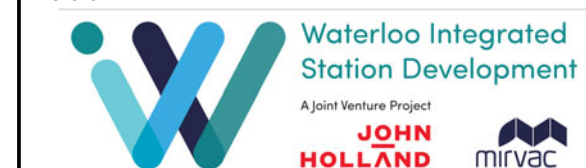
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Do not scale drawings.



Client



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WOODS BAGOT

Project
WATERLOO METRO QUARTER DEVELOPMENT

Project number		Size check	
121234		25mm	
Checked	Approved	Sheet size	Scale
AL	SL	A1	1 : 200

Sheet title

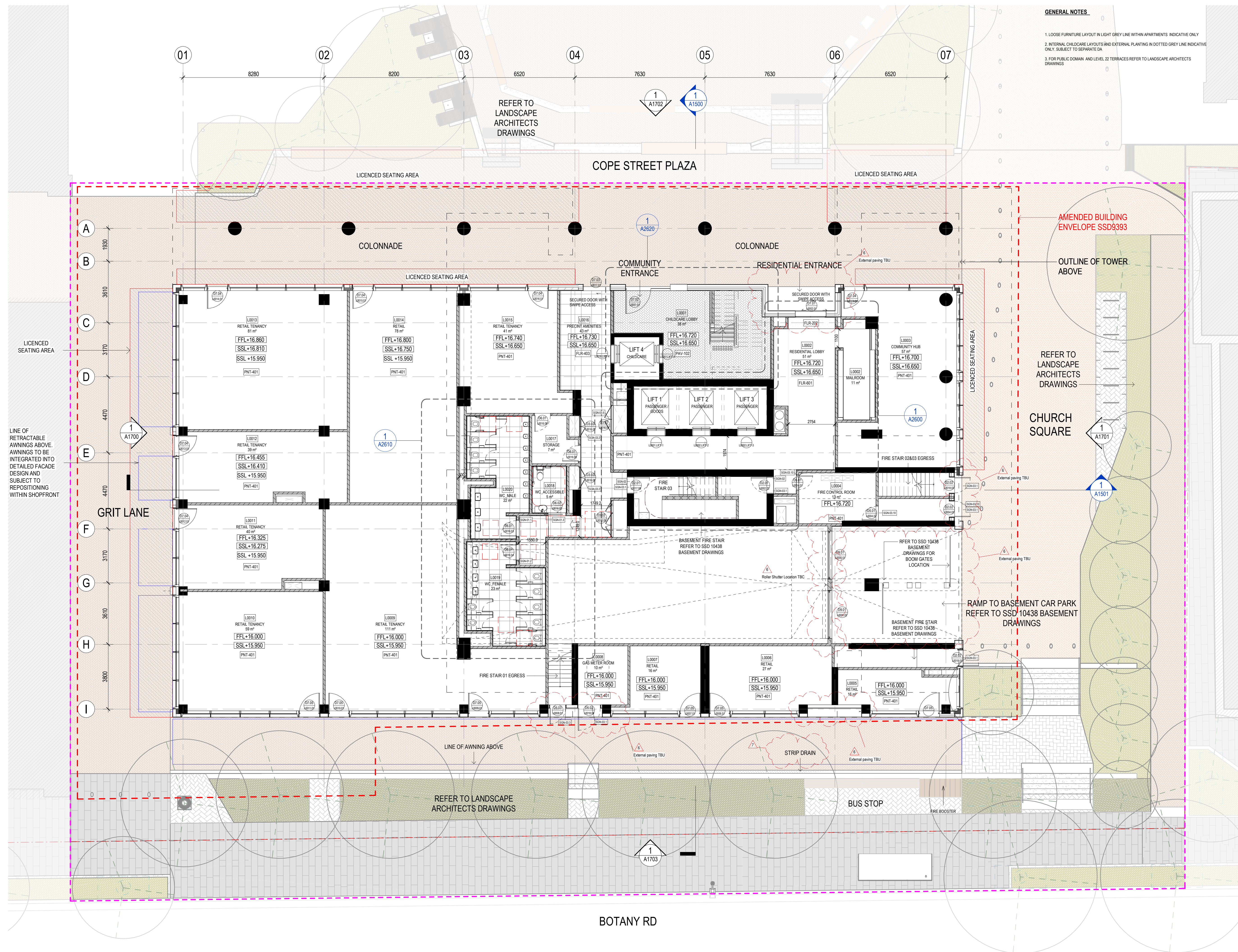
BUILDING 1 - GROUND LEVEL

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FOR INFORMATION

Sheet number Revision
WMQ-BLD1-WBG-AR-DRG-A1000 **W**

Central building



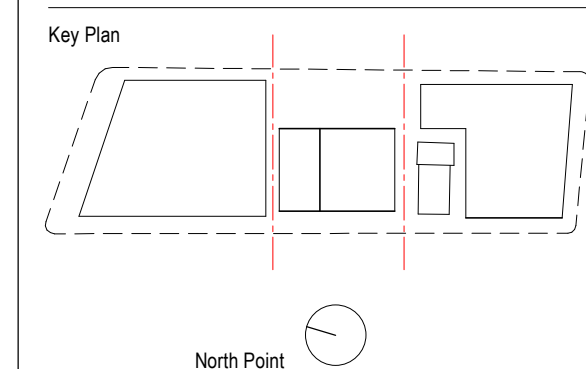
Recent revision history			
#	Status	Description	Date
1		Issue For Information	01/04/21
2		Milestone Issue 2	06/05/21
3		Design Freeze Issue	07/06/21
4		Milestone Issue 3	21/06/21
5		BSMT AFT Coordination	30/08/21
6		BSMT AFT Coordination	10/09/21
7		BSMT AFT Coordination	05/10/21

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 Waterloo Integrated Station Development

A Joint Venture Project

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Consultant
Hassell

Project
WATERLOO METRO QUARTER DEVELOPMENT
Central Precinct

Project number		Size check	
014079-61A-P		25mm	
Checked	Approved	Sheet size	Scale
ZC	LW	A1	As indicated

Sheet title

GA PLAN - GROUND LEVEL

Status	
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Sheet number Revisio
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