



Level 7
104 Melbourne Street
SOUTH BRISBANE QLD
4101

PO Box 3635
SOUTH BRISBANE QLD
4101

T 07 3844 5900
F 07 3844 7588

Flood Risk Assessment

120 Montague Road, South Brisbane

Prepared for: Stockwell Development Group

Document no: NA261030_CIV_FloodRisk_RPT001_REV03

Revision no: 03

Disclaimer

This Report has been prepared in accordance with the scope of services described in the agreement between ACOR Consultants and the Client. The Report relies upon data, surveys, measurements and results based on instructions from, and in consultation with, the Client. Except as otherwise stated, ACOR Consultants has not attempted to verify the accuracy or completeness of any information provided by the Client. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that changes may be required to the Report. Changes in circumstances or facts, the passage of time, manifestation of latent conditions or impacts of future events may also impact on the accuracy, completeness or currency of the information or material set out in this Report. This Report has been prepared solely for use by the Client, ACOR Consultants Pty Ltd and its related body corporates accepts no responsibility for its use by any third parties without the specific authorisation of ACOR Consultants. ACOR Consultants reserves the right to alter, amend, discontinue, vary or otherwise change any information, material or service at any time without subsequent notification. All access to, or use of, the information or material is at the user's risk and ACOR Consultants Pty Ltd and its related body corporates accepts no responsibility for the results of any actions taken on the basis of information or material provided, nor for its accuracy, completeness or currency. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this Report, to the extent permitted by law.

Use of AI

ACOR utilises many proprietary tools, software platforms and other sources to prepare its reports and deliverables, including AI. ACOR's AI Acceptable Use Policy only permits the use of Microsoft 365 Copilot with Enterprise Data Protection for analysis of identifiable or project specific information. If AI generated content has been used in the development of this Report (as permitted by the Client), it has been reviewed and validated by both the report author and the approver noted below and is identified or referenced within the body of the Report.

Revisions

Revision	Description	Date	Prepared by	Approved by	Signature
01	Draft	19/05/26	G. Mamalis	S. Suffolk	
02	For Approval	02/06/26	G. Mamalis	S. Suffolk	
03	Updates in accordance with PPDA Draft Provisional Land Use Plan (May 2026)	08/06/26	G. Mamalis	S. Suffolk	

Review Panel

Division/ office	Name
CIV/BNE	K. Umlauff

COPYRIGHT

This document, including the concepts and information contained within it, are the property of ACOR Consultants Pty Ltd or any of its related or associated entities. Use or copying of this document in whole or in part without the written permission of ACOR Consultants Pty Ltd constitutes an infringement of copyright. No part of this document may be copied, reproduced, adapted, transmitted or stored in a retrieval system in any form or by any means without written permission or unless otherwise permitted under the Copyright Act 1968. Removal or modification of any copyright or other proprietary protection from this document will be a breach of copyright.

© ACOR Consultants Pty Limited

All intellectual property and copyright reserved.

Table of Contents

1	Introduction	5
1.1	Scope	5
1.2	Assessment Criteria	5
2	Site Characteristics	6
2.1	Location and description	6
2.2	Topography	6
2.3	Local area flooding	7
2.4	Proposed development	8
3	Flood Risk Assessment	9
3.1	Introduction	9
3.2	Flood context	9
3.2.1	Flood planning areas	9
3.2.2	Kurilpa Sustainable Growth Precinct performance outcomes	9
3.2.3	Brisbane River flood levels applicable to the subject site	10
3.2.4	Overland flow flood levels applicable to the subject site	11
3.2.5	Flood characteristics	12
3.3	Risks	13
3.3.1	Risk to people (identification of stakeholders)	13
3.3.2	Risk to property and infrastructure	13
3.3.3	Quantitative analysis (Response to Brisbane City Council SC 6.11 Flood planning scheme policy 9.3.2d)	15
4	Assessment against relevant PDA Development Requirements	21
4.1	Flood management and resilience (s4.1.4.1)	21
4.2	Flood Management development criteria for Precinct 3 (s4.4.3.3)	22
5	Proposed risk management measures	23
5.1	Design Levels	23
5.2	Structural design	24
5.3	Flood resistant design and materials	24
5.4	Flood preparation	25
5.5	Flood recovery	25
5.6	Other considerations	25
5.6.1	Flood impacts	25
5.6.2	Emergency services	26
5.6.3	Compensatory earthworks	26
6	Conclusion	27
7	Recommendations	27
8	References	28
	Appendix A Glossary	29
	Appendix B Detail Survey prepared by RPS dated 20/04/2026	30
	Appendix C FloodWise Property Report	31

Appendix D Flood Overlay Code Reponses	32
--	----

List of Figures

Figure 1: Site locality (Nearmap, 2026)	6
Figure 2: Brisbane City Council flood awareness mapping showing riverine flood extent relative to Site	7
Figure 3: Brisbane City Council flood awareness mapping showing overland flow flood extent relative to Site	7
Figure 4: Proposed Site context plan (Archipelago, 2026)	8
Figure 5: Thresholds for building stability in floods (AIDR, 2014)	14

List of Tables

Table 1: Summary of property details	5
Table 2: Flood sources and levels	10
Table 3: Summary of peak water levels at Site (BCC, 2019)	11
Table 4: Flood characteristics for Brisbane River Flood Planning Area FPA2b	12
Table 5: Flood risk likelihood	15
Table 6: Flood risk consequence	16
Table 7: Flood consequence and likelihood risk matrix	16
Table 8: Flood risk rating	16
Table 9: Quantitative analysis for likelihood and consequence	17
Table 10: Summary of flood planning levels in accordance with BCC Flood planning scheme policy 9	23

1 Introduction

ACOR Consultants Pty. Ltd. were engaged by Stockwell Development Group to undertake a Flood Risk Assessment to support the Development Application to Economic Development Queensland for a proposed multi-storey tower development at 114, 120-122 Montague Road, 8-12 Oxford Street & 39A Boundary Street, South Brisbane, QLD 4101. Refer to Table 1 for further property details.

This Material Change of Use (MCU) application relates specifically to the subject lots and the proposed tower.

Table 1: Summary of property details

Address	Lots
120-122 Montague Road	LOT 50 ON RP885764, LOT 52 ON RP10840, LOT 1 ON RP95549
8-12 Oxford Street	LOTS 37, 38, 39 ON RP10840
39A Boundary Street	LOT 2 ON RP95549

1.1 Scope

A pre-lodgement meeting between representatives of Stockwell, its consultants and Council was held on 7 May 2026, with minutes issued by Council. The minutes confirm that a Flood Risk Assessment (FRA) is required to accompany the development application and demonstrate compliance with Council requirements, including flood resilience, safe access, and functionality during flood events. This report has been prepared in response to that advice and addresses the following:

- Flood risk assessment for the proposed development within the subject site
- Responses to Council's Flood Overlay Code
- Comments on the Kurilpa Sustainable Growth Precinct performance outcomes in accordance with TLPI 02/2025
- Responses to Land Activation Program (SEQ Tranche 1) Provisional Property Development Area (PPDA) Draft Provisional Land Use Plan (29/05/2026).

1.2 Assessment Criteria

This assessment is based on:

- Council's FloodWise Property Report for 104 Montague Rd, South Brisbane 4101 (Multiple Lots)
- Council's Flood Planning Scheme Policy (City Plan 2014)
- Temporary Local Planning Instrument No. 2 of 2025 – Kurilpa Sustainable Growth Precinct (TLPI 02/2025), released on 9 October 2025
- Land Activation Program (SEQ Tranche 1) Provisional Property Development Area (PPDA) Draft Provisional Land Use Plan (29/05/2026)
- Council's Flood Overlay Code
- Council's Flood Awareness Maps
- Information obtained from Council's CityPlan2014 mapping
- Minutes from pre-lodgement meeting with Council
- Discussions with Council and Client.

2 Site Characteristics

2.1 Location and description

The site is located at 114 and 120 – 122 Montague Road, 8 – 12 Oxford Street, and 39A Boundary Street, South Brisbane, QLD 4101. The total site area is approximately 9,044 m².

The site is wholly situated within the Brisbane City Council Local Government Area (LGA) and falls within the Kurilpa Sustainable Growth Precinct Plan Area 001 (PPA-001: Kurilpa core area). It also falls within the declared Precinct 3: Montague Road Provisional Property Development Area (PPDA).

The north-western boundary of the site fronts Montague Road, while the south-western boundary backs onto Oxford Street.

The site is currently developed and contains several existing warehouse buildings along with associated hardstand areas.

The broader site locality is shown in Figure 1.



Figure 1: Site locality (Nearmap, 2026)

2.2 Topography

Based on detailed survey, the site has a consistent fall toward the northern boundary. Existing ground levels range from approximately 13.6 m AHD at the southern site entry from Boundary Street, falling to approximately 4.7 m AHD at the northern boundary fronting Montague Road.

Refer to Appendix B for detailed survey.

2.3 Local area flooding

The primary flooding mechanism affecting the site is Brisbane River (fluvial) flooding, which governs the flood levels applicable to the development. During major flood events, elevated river levels result in backwater effects that inundate low-lying areas of the surrounding floodplain, including the subject site. Refer to Figure 2 for the location of the site in the context of Brisbane River flood levels and flood extents.



Figure 2: Brisbane City Council flood awareness mapping showing riverine flood extent relative to Site

The site is also subject to overland flow flooding, which occurs due to local catchment runoff during high-intensity rainfall events. Overland flow is influenced by local topography, road corridors, and urban drainage capacity, and can result in shallow but fast-flowing inundation across parts of the site. This mechanism occurs within Montague Road and extends onto the adjacent verge, marginally encroaching into the frontage of the proposed development during frequent storm events. Refer to Figure 3 for further context.

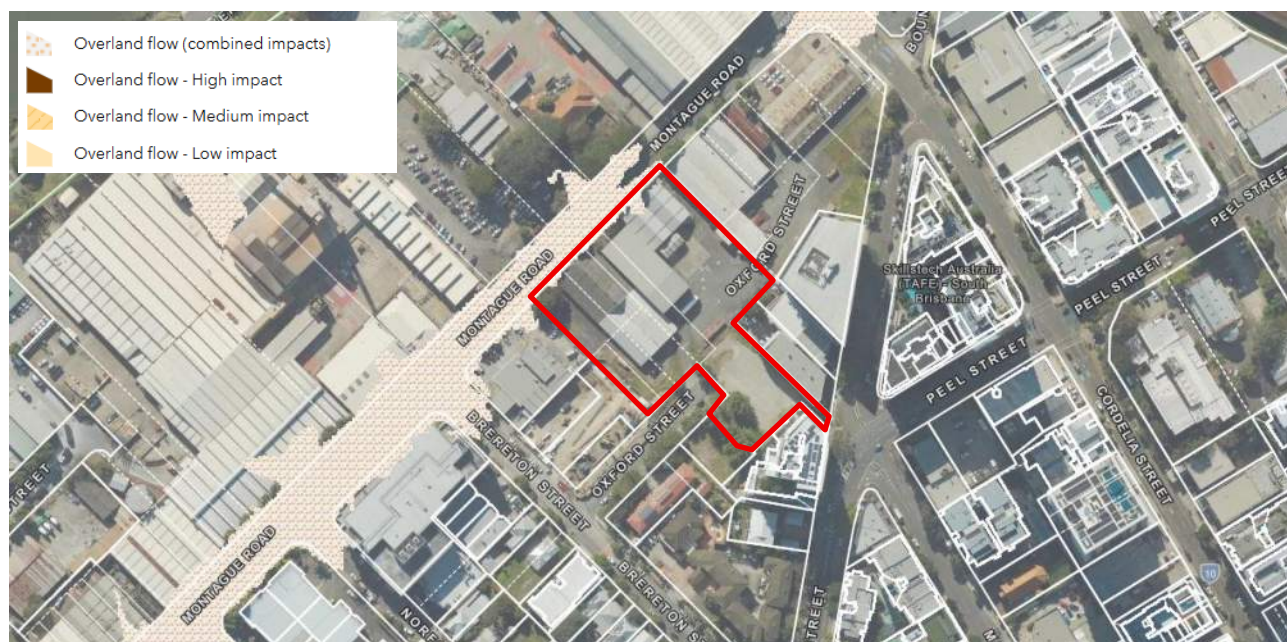


Figure 3: Brisbane City Council flood awareness mapping showing overland flow flood extent relative to Site

In addition to the mapped overland flow along Montague Road, site topography indicates that higher ground to the south and south-east (around Oxford Street) may generate additional local overland flow toward the site during high-intensity rainfall events. This flow is not explicitly captured within Council mapping but is evident from the surrounding contours, which show a general fall from the elevated land (~7–10 m AHD) toward the lower-lying areas of the subject site (~4.7–5.5 m AHD). The strategy involves regrading sections of Oxford Street to form a localised high point, redirecting these overland flows into the Brereton Street road reserve.

2.4 Proposed development

The proposed development comprises a residential-led mixed-use tower with centre uses.

The development consists of a 30-storey tower (plus rooftop terrace) with an approximate total building height of 106.600 m AHD. The tower footprint is approximately 1,825 m².

Residential uses commence from Level T1 at approximately 22.75 m AHD, providing a significant level of flood immunity above the applicable flood planning levels. The development will deliver a total of 299 residential units, comprising a mix of apartment configurations.

The building is classified as a Class 2 structure and is expected to have a design life of approximately 100 years, which necessitates consideration of long-term flood risk, including potential future climate change impacts.

This assessment relates specifically to the subject tower as shown in Figure 4.

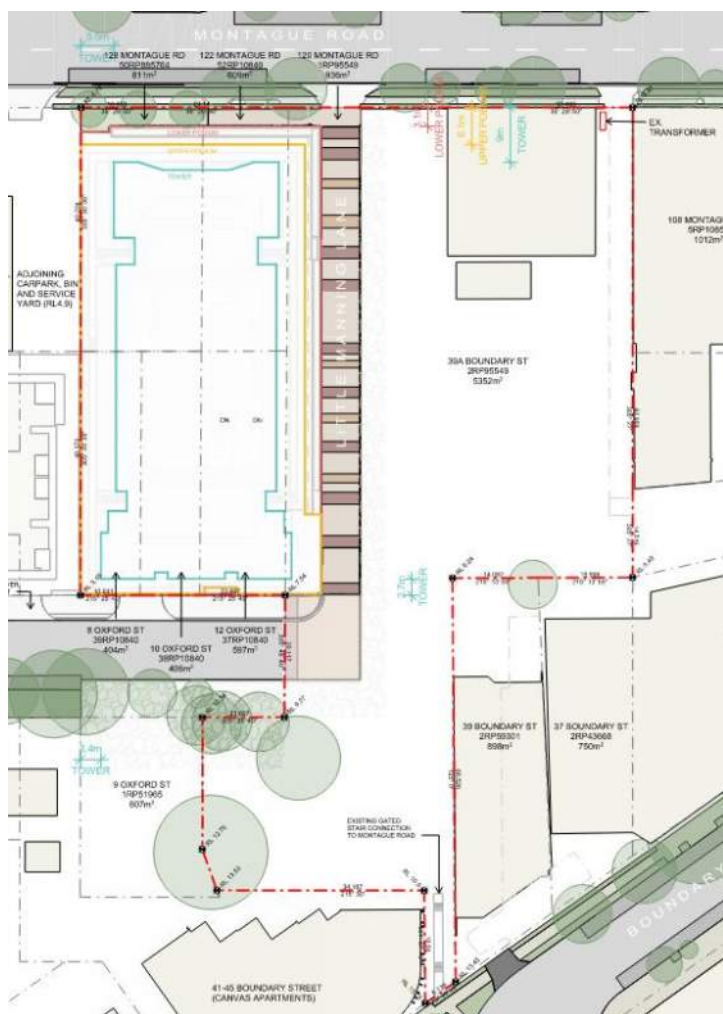


Figure 4: Proposed Site context plan (Archipelago, 2026)

3 Flood Risk Assessment

3.1 Introduction

This Flood Risk Assessment (FRA) has been prepared in accordance with the requirements of Brisbane City Council Planning Scheme Policy SC6.11 – Flood Planning Scheme Policy and provides a comprehensive evaluation of flood-related risks associated with the proposed development.

The FRA assesses the interaction between the proposed development and the defined flood regime, with regard to:

- The nature, extent, behaviour and characteristics of flooding affecting the site (including riverine flooding and overland flow)
- The compatibility of the proposed land uses with the flood hazard, including the achievement of appropriate flood immunity levels
- Potential risks to people, property, and infrastructure during flood events
- The safety and functionality of site access, including evacuation and emergency response considerations
- The impacts of the development on surrounding properties, including potential changes to flood behaviour (e.g. afflux, flow redistribution, or loss of flood storage).

The assessment also considers the vulnerability of the development, including building design, basement configuration, and the location of critical infrastructure and essential services.

Appropriate mitigation measures are identified and incorporated into the development's design to manage flood risk and ensure compliance with Council requirements, including maintaining the safety of occupants, minimising damage, and ensuring the continued operation and serviceability of the development during and following flood events.

3.2 Flood context

3.2.1 Flood planning areas

The Brisbane City Plan 2014 has established different Flood Planning Areas (FPA) for different sources of flooding; being river, creek/waterway, overland flow or coastal hazard. Available information has been reviewed and is summarised below.

The subject site is:

- Located within Council's Brisbane River Flood Planning Areas (FPA) 2b, 3, 4 and 5
- Located within Council's Overland Flow Flood Planning Area sub-category.
- Not located in any creek/waterway FPAs
- Not located within Council's coastal hazard overlay code.

3.2.2 Kurilpa Sustainable Growth Precinct performance outcomes

The site is located within the Kurilpa Sustainable Growth Precinct PPA-001. The applicable precinct provisions do not include specific performance outcomes relating to flood risk. Accordingly, flood-related matters have been addressed in accordance with the Brisbane City Plan Flood Overlay Code and relevant planning scheme policies.

3.2.3 Brisbane River flood levels applicable to the subject site

The subject site is affected by Brisbane River flooding upwards of the 1% AEP event. The following table summarises the applicable flood levels for the subject site that were obtained from the FloodWise Property Report.

Table 2: Flood sources and levels

Description	Flood source	Level	Comment
Existing ground level of subject site	-	4.7 – 13.6 m AHD	Sourced from detail survey prepared by RPS on 20/04/226.
Defined Flood Level for Site	River (Brisbane River)	5.1 m AHD	Per FloodWise Property Report
Chance of flood in any year (AEP)	Flood source	Level	Comment
20%	-	-	Existing ground level at subject site is not inundated.
5%	-	-	Existing ground level at subject site is not inundated.
2%	-	-	Existing ground level at subject site is not inundated.
Defined Flood Level	River (Brisbane River)	5.1 m AHD	'The DFL is used for commercial and industrial development. The Defined flood level (DFL) for Brisbane River flooding is a level of 3.7 m AHD at the Brisbane City Gauge based on a flow of 6,800 m ³ /s. DFL is only applicable for non-residential uses affected by Brisbane River flooding.' Source: FloodWise Property Report.
1%	River (Brisbane River)	6.0 m AHD	1% chance in any year of a river flood inundating the existing ground level at the Site with flood depth up to approximately 1.3 m at the lowest portion of the Site.
0.2%	River (Brisbane River)	9.3 m AHD	0.2% chance in any year of a river flood inundating the existing ground level at the Site with flood depth up to approximately 4.6 m at the lowest portion of the Site. This event is considered to represent an extreme (very low probability) flood scenario in accordance with ARR terminology.
January 2011 flood	River (Brisbane River)	5.3 m AHD	The January 2011 flood inundated the existing ground level at the Site with flood depth of approximately 600 mm.
Residential Flood Level (RFL)	River (Brisbane River)	6.0 m AHD	'This flood level for the Brisbane River equates to the 1% annual exceedance probability (AEP) flood level.' Source: FloodWise Property Report. The minimum habitable floor level is 0.5 m above the RFL.

3.2.4 Overland flow flood levels applicable to the subject site

The Citywide Creek and Overland Flow Path Mapping Flood Study prepared by Council comprises a series of hydraulic models covering the Brisbane City Council region, including the Norman sub-catchment overland flow model applicable to the subject site. Model outputs provide flood level, depth and hazard data across a range of design events from 39% AEP (2-year ARI) through to 0.05% AEP (2000-year ARI).

Extracted model results for the subject site indicate that overland flow inundation commences from approximately the 5% AEP event, with increasing flood levels for more infrequent events. The derived peak water levels for the site are summarised in Table 3 below.

These results indicate that ground-level areas (café nook) of the development at 4.7 m AHD are susceptible to inundation from overland flow during events greater than or equal to the 5% AEP. Flood levels increase to approximately 5.15 m AHD at the 0.2% AEP event, resulting in shallow to moderate inundation depths across these areas. The implications of overland flow inundation for these spaces have been considered within this assessment, and appropriate mitigation and management measures are outlined in Section 3 and 5.

Table 3: Summary of peak water levels at Site (BCC, 2019)

Flood event	Peak water level (m AHD)
39% AEP	Site not affected
20% AEP	Site not affected
10% AEP	Site not affected
5% AEP	4.71
2% AEP	4.85
1% AEP	4.95
0.2% AEP	5.15

3.2.5 Flood characteristics

The flood characteristics for Brisbane River Flood Planning Area FPA2b (applicable for the subject site), as described in Council's Flood planning scheme policy, are described below.

Table 4: Flood characteristics for Brisbane River Flood Planning Area FPA2b

Flood characteristic	Description
Flood hazard	DV greater than 1.2 m ² /s for residential flood level (RFL = 6.0 m AHD). RFL sourced from FloodWise Property Report.
Flood Depth	Flood depths in the order of 1.3 m to 2.0 m are anticipated across the site during the 1% AEP event.
Flood warning time	Bureau of Meteorology (BOM, 2025) states the target warning time for Brisbane River flooding to reach minor, moderate or major flood classification is 18 hours for Jindalee (Centenary Bridge) and 24 hours for Brisbane City. The Site is between these two gauges therefore the approximate flood warning time for the Site is between 18 and 24 hours.
Flood duration	The duration of flooding from the Brisbane River that affects the subject site may be at least several days before water recedes.
Extreme floods	The Flood Overlay Code requires consideration of the 0.2% AEP (1 in 500 AEP) flood event for estimating safety. This represents an extreme flood event that has a very low probability of occurrence over the temporary life of the subject site's land use. The subject site is affected by the 0.2% AEP event (river flood), however the river flood characteristics for a 0.2% AEP event such as hazard are not available in Council's documentation.

Flood forces can include (WRL, 2014):

- Hydrostatic forces resulting from standing water or slow-moving flow around the structure
 - These forces are not expected to cause adverse impact on the proposed tower
- Buoyant forces due to displaced volume of water
 - Mitigation against buoyancy forces are recommended to be provided by a suitably experienced, qualified and registered structural engineer (RPEQ)
- Hydrodynamic forces arising from moderate-to-high-velocity water flow around the structure
 - Flood water around the structure could have velocity in the order of 0.9 m/s (or higher) at the Site (based on DV product of 1.2 m²/s and flood depth of 1.3 m at the lowest part of the Site)
- Impulsive forces caused by the leading edge of the water impacting the structure
 - Significant impulsive forces are not expected from river backwater flooding
- Uplift forces on elevated floors of a structure that are submerged during a flood event
 - Mitigation against uplift forces are to be provided
- Debris impact forces generated by floating debris colliding with the structure
 - Floating debris may impact the structure
- Damming of waterborne debris due to the accumulation of debris on the upstream side of the structure, which results in an increase in the hydrodynamic force
 - Significant damming of waterborne debris on the upstream side is not expected from river backwater flooding
- Wave actions from wind and wakes
- Erosion and scour due to flood actions
 - Significant erosion and scour due to flood action are not expected from river backwater flooding.

The building must be designed, constructed, connected and anchored according to Mandatory Part 3.5 – Construction of buildings in flood hazard areas (Department of Housing and Public Works, 2013).

3.3 Risks

The following risk assessment has been undertaken according to Section 9: Flood Risk Management of the Flood Planning Scheme Policy.

3.3.1 Risk to people (identification of stakeholders)

Due to the nature of the development, it is not possible to identify specific stakeholders with certainty as the building will have an evolving residential population over time.

The development is expected to accommodate a broad demographic, including children, working-age adults, elderly persons and potentially mobility-impaired individuals. This diversity inherently introduces a range of vulnerabilities, levels of flood awareness, and response capabilities, which are relevant considerations in assessing overall flood risk to occupants. Habitable areas are located well above projected extreme flood levels and are therefore considered to have a low level of risk.

In addition to permanent residents, the development includes non-residential uses at lower levels, which will generate a transient population of staff and visitors. The commercial and publicly accessible components of the development are anticipated to operate primarily during daytime hours, which is a relevant factor in the assessment of flood risk. Daytime operation increases the likelihood that approaching floodwaters will be visually apparent to occupants, thereby enhancing situational awareness and enabling a more informed and timely response. In combination with the relatively long warning times associated with Brisbane River flooding, this provides a greater opportunity for safe management of occupants, including relocation within the building or evacuation if required.

Overall, while the development will accommodate a diverse and potentially vulnerable population, the risk to people is mitigated by several key factors, including the substantial elevation of residential levels above applicable flood planning levels, the limited occupation of flood-affected lower levels, and the expected visibility and warning associated with flood events. These considerations support the conclusion that risk to people can be appropriately managed.

3.3.2 Risk to property and infrastructure

The proposed development comprises a 30-storey mixed-use tower incorporating six levels of podium car parking, with residential uses commencing from Level T1 (22.75 m AHD). This provides a clear vertical separation between habitable areas and flood levels, with flood exposure limited to the lower, non-residential functions of the building.

To manage flood impacts within the basement and carparking, the development includes a flood protection wall extending around the tower footprint to approximately 7.25 m AHD (Level P2). This is 2.15 m above the DFL. The design intent is for vehicles in the basements below Plaza to egress to Oxford Street when required. The relatively long warning times associated with Brisbane River flooding will facilitate this process and enable vehicle evacuation prior to the onset of extreme flood conditions.

Key essential services and infrastructure (e.g. communications, main switchboard and substation) are located at the plaza level (~8.8 m AHD), exceeding the required flood immunity level (Category A infrastructure: 1% AEP + 500 mm freeboard = 6.5 m AHD) by approximately 2.3 m. Electrical and communications services are provided from Oxford Street, while water and sewer connections are sourced from Montague Road at lower levels. Water services are delivered via high-level wall penetrations above 6.5 m AHD, including connections to the café nook. Sewer infrastructure is located beneath the slab above 6.5 m AHD. No service penetrations are proposed below 6.5 m AHD, in accordance with planning scheme policy. All service entry points and connections are located at or above the applicable flood planning levels outlined in Table 8.2.11.3.D of Council's planning scheme policy.

Therefore, the primary risk to property and infrastructure during the defined flood event becomes associated with flood impacts at the lower levels of the development, particularly at and below ground level where non-residential uses are proposed.

Riverine flooding and overland flow may impact ground-level areas such as the café nook along Montague Road. These areas are designed to accommodate periodic inundation and support activation along Montague Road. The proposed café nook, at approximately RL 4.7 m AHD, remains subject to flooding. Flood events may result in temporary loss of functionality and require repair or replacement works.

The site is located within Brisbane River Flood Planning Area 2b, which is characterised by a depth–velocity product (DV) exceeding $1.2 \text{ m}^2/\text{s}$ for flood levels up to the Residential Flood Level (RFL = 6.0 m AHD, sourced from FloodWise Property Report). Based on an indicative flood depth of approximately 1.3 m above the proposed ground slab level (~4.7 m AHD), this flood hazard is at the lower end of the moderate/high hazard zone and just above the low hazard range (green line) for structures (refer Figure 5 below). The green line is the lower threshold for residential homes, built without consideration of flood forces (WRL, 2014). Within this hazard range, purpose-designed structures can be engineered to withstand flood forces; however, detailed performance is dependent on the final structural design.

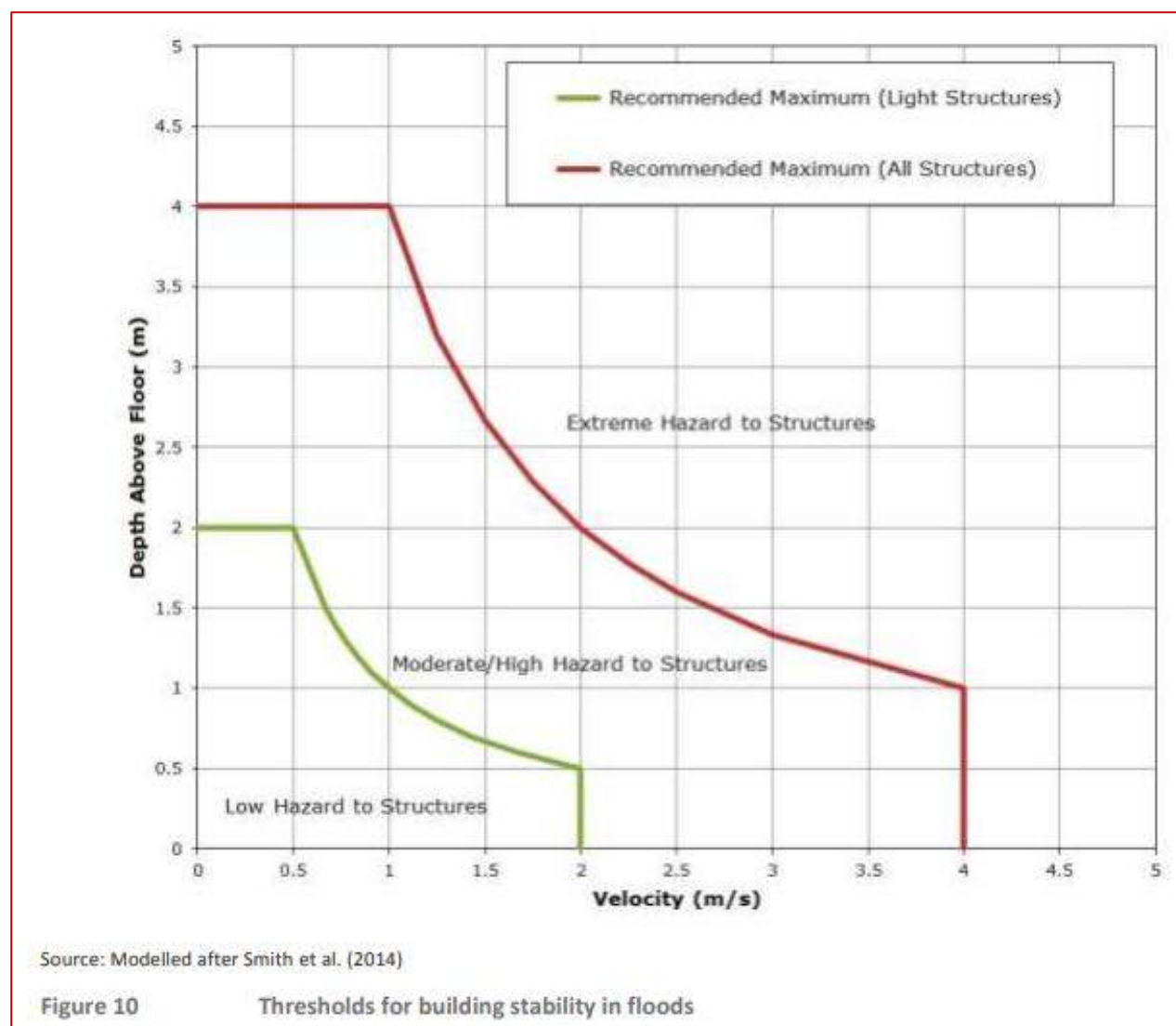


Figure 5: Thresholds for building stability in floods (AIDR, 2014)

3.3.3 Quantitative analysis (Response to Brisbane City Council SC 6.11 Flood planning scheme policy 9.3.2d)

A quantitative analysis for likelihood and consequence has been undertaken per the table below according to AS4360:2004 and Section 9 of the Flood Planning Scheme Policy. Consequences for all equipment are described according to categories as stated by Brisbane City Council flood planning scheme policy, being:

- Damage to property,
- economic downtime due to flood recovery,
- impacts to downstream properties due to the site's contents (e.g. hazardous substances), and
- health and safety (additional consequence assessed).

Table 5: Flood risk likelihood

Flood likelihood (description) Aust. Bureau of Meteorology	Annual Exceedance Probability (AEP) range (frequency)*	Flood event at subject site
Very frequent to Frequent	> 10%	-
Frequent to Infrequent	1% to 10%	Defined Flood Level (5.1 m AHD). January 2011 flood (5.3 m AHD). For other floods refer to Table 2.
Infrequent to Rare	0.001% (1 in 1 000) to 1% (1 in 100)	-
Rare to Extremely Rare to Extreme	< 0.001% (1 in 1 000)	-
Probable Maximum Flood	PMF	Probable Maximum Flood

* As defined by Australian Bureau of Meteorology

Risks to the environment and downstream properties associated with hazardous materials are considered negligible. The proposed development does not involve the storage or handling of significant quantities of hazardous substances. Minor quantities of common chemicals associated with daily operations (e.g. cleaning products within the café tenancy) are expected to be present; however, these are limited in volume and do not present a material risk to the environment or downstream receptors during flood events. There is sufficient warning time for Brisbane river flooding which allows the tenancy sufficient time to vacate the premises including the contents for the duration of the event.

Given the residential nature of the development, the economic risk associated with business interruption is limited. The development is not reliant on ongoing operational revenue, and any flood-related disruption would primarily affect non-residential uses (e.g. café nook). Impacts are therefore expected to be limited to temporary loss of use and localised repair costs, rather than broader economic consequences.

The following tables are referenced to inform the assessment of likelihood and consequence as part of the quantitative flood risk evaluation for the proposed development.

Table 6: Flood risk consequence

Consequence	Health and safety	Damage to property	Business operations
Insignificant	Injury or illness requiring first aid treatment. Medical Treatment/Suitable Duties Injury or illness. Short term illness.	No property damage requiring replacement or repair. Site clean-up only.	Operations unable to proceed for up to 3 days.
Minor	Professional medical treatment. Lost Time Injury or Illness < 4 days. Short term disability. Reversible minor health effects to one or more persons.	Flood damage or replacement of property that is easily procurable.	Operations unable to proceed for 3 days to 2 weeks (repairs of flood damage or replacement of equipment).
Moderate	Serious / Hospitalisation injury. Long term > 4 days Lost Time Injury or illness. Long term disability.	Flood damage or replacement of property that takes more than 2 weeks to procure and install.	Operations unable to proceed for 2 weeks to 2 months.
Major	Permanent disability. Irreversible health impacts to one or more persons.	Major flood damage of property that takes more than 2 months to procure and install.	Operations unable to proceed for 2 months to 6 months.
Catastrophic	Fatality. Terminal illness.	Total damage of property that takes longer than 6 months to procure and install.	Operations unable to proceed for > 6 months OR operations cease indefinitely OR Total loss of venue.

Table 7: Flood consequence and likelihood risk matrix

Consequence level	Consequence	Flood risk likelihood				
		Probable Maximum Flood	Rare to Extremely Rare to Extreme	Infrequent to Rare	Frequent to Infrequent	Very frequent to Frequent
	Insignificant	1	2	4	7	11
	Minor	3	5	8	12	16
	Moderate	6	9	13	17	20
	Major	10	14	18	21	23
	Catastrophic	15	19	22	24	25

Table 8: Flood risk rating

Low	Medium	High	Extreme
-----	--------	------	---------

Due to the current stage of design, detailed information regarding equipment, floor layouts and levels within the areas under assessment (e.g. café nook) is not available. As such, the following assessment adopts a typical small-format café fit out using best available information and judgement.

Table 9: Quantitative analysis for likelihood and consequence

Equipment name and details	Likelihood	Consequence	Rating and justification
Equipment below DFL (5.1 m AHD)			
Fixed and loose joinery (benches, counters and shelving)	Between 1% and 2% AEP (Frequent to Infrequent)	Property damage: Minor – full inundation will require replacement of standard, non-specialised joinery. Economic downtime: Minor – short-term disruption while joinery is reinstated. Environmental and downstream impacts: None – no hazardous materials associated. Health/safety: Insignificant – no direct risk to occupants. Overall: Minor.	Medium The café nook will incorporate flood-resilient fittings and finishes. Materials and joinery will be selected to withstand inundation and allow for effective wash-down and recovery following flood events.
Espresso machines and grinders located on benchtops	“	Property damage: Moderate – partial submergence likely to result in loss of function of higher-value equipment requiring replacement. Economic downtime: Moderate – procurement and reinstatement typically require 1–2 weeks, delaying operation of the coffee nook. Environmental and downstream impacts: None – no hazardous materials present. Health/safety: Insignificant – no direct risk to occupants. Overall: Moderate.	High Typically located at ~0.9–1.0 m above FFL. With ~1.3 m flood depth, equipment will likely be partially submerged, making damage likely. Replacement units are readily available. Flood risk can be reduced by removal of assets prior to flood inundation.
Under-bench refrigeration units and display fridges	“	Property damage: Minor – full inundation will result in loss of standard refrigeration units requiring replacement. Economic downtime: Minor – replacement achievable within short timeframes (days to weeks) with limited operational impact. Environmental and downstream impacts: None – minor refrigerant contained with no off-site impact expected. Health/safety: Insignificant – no direct risk to occupants. Overall: Minor.	Medium Benchtop equipment (typically ~0.9–1.0 m above FFL) may be partially submerged or exposed to moisture ingress, resulting in likely damage. Equipment is commercially available and can be replaced within standard procurement timeframes.

Equipment name and details	Likelihood	Consequence	Rating and justification
Dishwasher and small sink units	"	Property damage: Minor – full replacement of standard fixtures required. Economic downtime: Minor – short-term disruption until reinstated. Environmental and downstream impacts: None – no hazardous materials present. Health/safety: Insignificant – no direct risk to people. Overall: Minor.	Medium Equipment located at or near ground level will be fully submerged. Damage is expected; however, reinstatement is simple and does not affect broader building function.
Point-of-sale (POS) systems and small electrical appliances	"	Property damage: Minor – loss of low-value, easily replaceable equipment. Economic downtime: Minor – negligible replacement time with minimal disruption. Environmental and downstream impacts: None – no hazardous materials present. Health/safety: Insignificant – no direct risk to occupants. Overall: Minor.	Medium Equipment located on benchtops may be partially above flood level; however, exposure to moisture and splash will result in damage. Replacement is immediate and low complexity.
Associated electrical outlets and minor plumbing connections	"	Property damage: Minor – localised damage to fittings requiring replacement of outlets and minor plumbing components. Economic downtime: Minor – short-term disruption during reinstatement works. Environmental and downstream impacts: None – no hazardous materials present. Health/safety: Insignificant – no direct risk to occupants. Overall: Minor.	Medium Drainage services located at low wall levels will be submerged during a flood event. Supply will be from high level. Required repair works will be localised and standard in nature.
Lift system components (lift car, shaft interfaces, call panels, electrical controls)	"	Property damage: Moderate – inundation of ground-level lift components will result in damage to specialised electrical and mechanical interfaces requiring repair or replacement. Economic downtime: Moderate – lift outages may extend over several weeks during specialist repair and recommissioning, impacting building access and operation. Environmental and downstream impacts: None – no hazardous materials present. Health/safety: Minor – reduced lift availability may affect accessibility and emergency egress arrangements during recovery. Overall: Moderate.	High Components are specialised, requiring contractor intervention and longer reinstatement timeframes compared to other tenancy equipment. Lifts can be programmed to 'home' to higher levels above flood affectation.

Equipment name and details	Likelihood	Consequence	Rating and justification
Equipment above DFL (5.1 m AHD)			
Electrical infrastructure (Substation, MSB – 8.8 m AHD)	Between 1% and 0.2% AEP (Infrequent to Rare)	Property damage: Minor – infrastructure is located above the Category A flood planning level (6.5 m AHD) and is not subject to inundation during the defined flood event. Economic downtime: Minor – systems may be shut down as a precaution; however, no flood-related damage is expected and operations can be reinstated following the event. Environmental and downstream impacts: None – equipment can be isolated prior to flooding with no release of hazardous materials. Health/safety: Insignificant – no direct impact to occupants. Overall: Minor.	Low Has been specifically designed and located at and above 8.8 m AHD.
Communications (8.8 m AHD)	“	Property damage: Insignificant – no flood exposure due to location above Category A flood planning level. Economic downtime: Insignificant – systems remain operational or can be rapidly reinstated with no reliance on flood-affected components. Environmental and downstream impacts: None – no hazardous materials present. Health/safety: Insignificant – no direct impact to occupants. Overall: Insignificant.	Low As above.
Mechanical systems (11.8 m AHD)	Above 0.2% (Rare to Extremely Rare to Extreme)	Property damage: Minor – systems are located above flood levels and are not subject to inundation. Economic downtime: Minor – no direct damage expected; minor inspection or recommissioning may be required post-event. Environmental and downstream impacts: None – no flood-related impacts expected. Health/safety: Insignificant – no direct impact to occupants or building function. Overall: Minor.	Low Located well above flood levels. Systems are not exposed to inundation, and any impacts are limited to minor post-event checks.
Fire services infrastructure (Level 1 – 13.25 m AHD)	Above 0.2% (Rare to Extremely Rare to Extreme)	Property damage: Minor – infrastructure is located above flood levels and not subject to inundation. Economic downtime: Insignificant – systems remain operational with only inspection or minor checks required post-event.	Low Located well above flood levels. Systems remain operational and are not subject to direct flood impact.

Equipment name and details	Likelihood	Consequence	Rating and justification
		Environmental and downstream impacts: None – no flood-related impacts expected. Health/safety: Insignificant – fire services remain functional during and after flood events. Overall: Minor.	
Waste management facilities (8.8 m AHD)	Between 1% and 0.2% AEP (Infrequent to Rare)	Property damage: Insignificant – no flood exposure expected. Economic downtime: Insignificant – operation unaffected, with only minor cleaning required if necessary. Environmental and downstream impacts: None – no risk of contaminant mobilisation. Health/safety: Insignificant – no direct impact. Overall: Minor.	Low As above.
Mail room / parcel facilities (10.26 m AHD)	Above 0.2% (Rare to Extremely Rare to Extreme)	Property damage: Insignificant – no inundation expected. Economic downtime: Insignificant – no impact on core operations. Environmental and downstream impacts: None – no hazardous materials present. Health/safety: Insignificant – no impact to occupants. Overall: Insignificant.	Low Located well above flood levels with no exposure to flood hazard.
Plaza café and kitchen (10.26 m AHD)	Above 0.2% (Rare to Extremely Rare to Extreme)	Property damage: Minor – no direct flood impact; equipment not exposed to inundation. Economic downtime: Minor – potential temporary shutdown due to site-wide conditions rather than damage. Environmental and downstream impacts: None – no flood-related impacts. Health/safety: Insignificant – no direct risk.	Low Same as above
Residential apartments (above 22.75 m AHD)	Never affected	None	Low
Roof and terrace plant (98.65 m AHD)	Never affected	None	Low

4 Assessment against relevant PDA Development Requirements

4.1 Flood management and resilience (s4.1.4.1)

- (a) Habitable rooms, non-habitable areas, and essential services are designed to achieve appropriate levels of flood immunity. Refer to Section 5.1, which outlines the required design levels for the development. All proposed levels are set above these requirements where necessary to maintain occupant safety and building resilience.

The café nook along the Montague Road frontage is located below the required non-habitable flood planning level. This design outcome is intentional to maintain an engaged interface with Montague Road, supporting the desired streetscape activation. The associated flood risk has been considered, and the associated flood risk will be mitigated with appropriate measures. Refer to section 5.3 for further details.

- (b) The development includes regrading of Oxford Street towards Brereton Street to better manage upstream flows. Flood risk is mitigated by locating all essential electrical and communications infrastructure along the Oxford Street frontage at or above 8.8 m AHD, exceeding required flood planning levels (1% AEP + 500 mm = 6.5 m AHD). Residential floor levels are also set above 22.75 m AHD, ensuring appropriate freeboard and flood resilience for habitable areas.
- (c) A flood protection wall is proposed from the basement car park up to 7.25 m AHD, corresponding to the first level of activation. This provides immunity to the 1% AEP flood event. Additional flood-resilient measures are incorporated into the ground-level café along the Montague Road frontage. While this area may experience inundation during large riverine flood events, finished floor levels and fit-outs are designed accordingly with flood-compatible materials (e.g. hose-out finishes). Critical services, utilities, and residential areas are located above the required flood planning levels.
- (d) Car parking is provided across six levels, ranging from 2.8 m AHD to 19.25 m AHD. The lower levels are protected by a proposed flood protection wall up to 7.25 m AHD. Sufficient flood warning time is available to enable the safe relocation of vehicles from lower levels to higher levels within the structure or off-site prior to inundation.
- (e) Flood warning time is available for Brisbane River flood events (between 18 to 24 hours), supporting safe and orderly evacuation. Tenants and visitors can evacuate via Oxford Street through the plaza, which provides the highest available evacuation route. Emergency access arrangements remain available from Oxford Street during flood events up to and including the 0.2% AEP.
- (f) This is a single-building development and not a precinct-scale application; therefore, flood management is addressed at the site level. The proposed development will not result in any material impact on Brisbane River flood behaviour, including flood levels, flow paths, or hazard. An assessment of broader catchment-level impacts is not required by Council for this scale of development. Safe access and egress are maintained, with vehicle and pedestrian evacuation provided via Oxford Street. No additional mitigation measures are proposed in relation to the Montague Road overland flow area.

4.2 Flood Management development criteria for Precinct 3 (s4.4.3.3)

While the proposal is for a single-building development and not part of the coordinated precinct scheme, the design has been developed to integrate with the existing road network. Safe and effective evacuation is facilitated via direct access to Oxford Street, which provides a higher elevation evacuation route. The site layout, including the plaza interface supports clear pedestrian and vehicle egress paths during flood events.

The ground-level interface along Montague Road is set below the required non-habitable flood planning level. This approach has been adopted to retain levels as close as practicable to existing conditions to maintain an engaged interface with Montague Road. The visibility of overland flow along this frontage allows tenants and visitors to readily identify flood onset and undertake timely evacuation. In the case of Brisbane River flood events, extended warning times provide additional opportunity for preparedness and response. Flood-resilient materials and finishes will also be incorporated to minimise potential damage during inundation. Refer to Section 5.3 for further details.

Given the scale of the development, formal coordinated design testing with adjoining sites has not been undertaken. However, the proposal does not preclude or constrain future coordinated flood management or evacuation improvements and is consistent with a flood-resilient urban outcome.

5 Proposed risk management measures

5.1 Design Levels

Table 10 summarises the relevant flood levels applicable to the proposed development and demonstrates compliance with Brisbane City Council's minimum flood planning levels, where achievable. It also identifies areas where development occurs below the required levels and outlines how associated risks are managed.

Table 10: Summary of flood planning levels in accordance with BCC Flood planning scheme policy 9

Description	Flood source	Level	Comment
Existing ground level of subject site	-	4.7 – 13.6 m AHD	Sourced from 2019 digital elevation data.
Defined Flood Level for Site	River (Brisbane River)	5.1 m AHD	Per FloodWise Property Report
Minimum basement parking entry level	-	5.4 m AHD	(Category C + 300 mm = DFL + 300 mm) Basement access is provided from both Montague Road and Oxford Street. The Montague Road entry is set between 7.2 m AHD and 7.35 m AHD, exceeding the minimum required level. The Oxford Street entry ranges between 9.330 m AHD and 9.665 m AHD, also significantly above flood planning levels. Both access points are therefore considered compliant with Council requirements.
Minimum habitable floor level	-	6.5 m AHD	(Category A = 1% AEP + 500 mm) Residential levels commence from Level 4 (T1) at approximately 22.75 m AHD, which exceeds the minimum requirement.
Minimum non-habitable floor level	-	6.3 m AHD	(Category B = 1% AEP + 300 mm) Ground-level non-habitable area (café nook at approximately 4.7 m AHD) is below the required level. This area is subject to inundation during the defined flood event and require specific mitigation measures.
Essential electrical services	-	6.5 m AHD	(Category A = 1% AEP + 500 mm) Essential services are located from the plaza level (10.0 m AHD at Montague Road frontage) and approximately 8.8 m AHD within the tower footprint along Oxford Street, both of which exceed the minimum requirement. The development is compliant.

The development achieves compliance with Council's minimum planning levels for habitable areas, basement access, and essential infrastructure.

The café nook at ground-level is located below the required planning level and represents the only source of flood risk.

These areas are intentionally located at existing ground level to maintain urban interface, accessibility, and activation outcomes, and therefore cannot achieve the prescribed non-habitable floor level of 6.3 m AHD. As a result, they are expected to be fully inundated during the Category B (1% AEP) flood event (approximately 1.3 m depth).

To manage this, a range of risk mitigation measures is adopted, including:

- Designing ground-level areas for flood compatibility, including the use of durable and water-tolerant materials where appropriate. Refer to Section 5.3 for further details.
- Locating critical building services and essential infrastructure above the required level
- Ensuring all equipment within these areas is non-essential, low-value and readily replaceable
- Incorporating flood emergency management procedures, including early warning, site shutdown, and removal (where practicable) of vulnerable equipment. A Flood Emergency Management Plan has been prepared by ACOR to support this assessment and demonstrate how flood risks will be managed.

These measures ensure that while localised inundation of the commercial frontage is expected, impacts are confined to non-critical elements, are manageable in extent, and do not compromise the safety, structural integrity, or functionality of the broader development.

5.2 Structural design

The proposed tower structure is to be designed, constructed, connected and founded to withstand the effects of flooding up to the required level (1% AEP plus 0.5 m freeboard, minimum habitable floor level). This includes provision for hydrostatic and hydrodynamic forces, buoyancy, and uplift pressures acting on the basement, without resulting in structural failure, excessive deformation or loss of stability under flood conditions identified in Section 3.1.3.

The depth and configuration of the footing system will be determined during detailed design, considering site-specific conditions such as foundation material properties, flood velocities, ground profile, and whether foundations are supported on fill or natural soils. The final design will ensure adequate resistance to flood-induced forces in accordance with relevant structural design standards. Refer to structural documentation for further details.

5.3 Flood resistant design and materials

In addition to the operational measures outlined in the Flood Emergency Management Plan (FEMP) prepared by ACOR, the proposed development incorporates flood-resilient design measures and materials to minimise damage to ground-level areas susceptible to inundation, particularly the café nook and residential entrance.

Given that these areas are located below the minimum non-habitable floor level and are expected to be inundated during defined flood events, the design adopts a flood-compatible (hose-down) approach, allowing for rapid clean-up and reinstatement following floodwaters recede.

The following design principles are to be incorporated into the café nook and other ground-level spaces:

- Floor finishes to comprise durable, water-resistant materials such as sealed concrete, ceramic tiles or similar finishes capable of withstanding inundation and wash-down
- Wall construction to utilise robust materials such as concrete, masonry or water-resistant linings, with wall cavities detailed to allow drainage and prevent water entrapment
- Joinery and fixtures to be constructed from flood-resistant materials such as stainless steel, marine-grade plywood or plastic, avoiding water-sensitive finishes
- Fixtures and equipment to be either freestanding, easily removable, or designed to tolerate partial inundation where practical
- Doors and glazing at ground level to be detailed to resist water ingress where feasible, while allowing controlled inflow where required as part of the flood-compatible design
- Plumbing fixtures to be constructed from corrosion-resistant materials and detailed for ease of cleaning and reinstatement

In addition, building services within flood-affected areas are to be designed to minimise damage and facilitate recovery, including:

- Electrical conduits and services below the flood level to be appropriately sealed or waterproofed
- Service penetrations and underground conduits to be designed to resist erosion and scour effects
- Electrical outlets, switches and sensitive equipment to be mounted above flood levels where practicable

These measures ensure that flood impacts to ground-level areas are limited to non-structural elements, with affected components able to be cleaned, repaired or replaced with minimal downtime. The approach aligns with Council's intent for flood-compatible development, where lower-level uses accept inundation but are designed to recover efficiently without long-term damage to the building or its operation.

5.4 Flood preparation

Refer to the Flood Emergency Management Plan prepared by ACOR for the development that describes the procedures to conduct emergency flood management and evacuation.

5.5 Flood recovery

Following a flood event, recovery of ground-level areas (café nook) will be facilitated through a flood-compatible design approach, allowing for efficient clean-up and reinstatement.

The primary recovery strategy for these areas is based on a “hose-down” approach, whereby flood-affected spaces are designed to be safely inundated and subsequently cleaned using water flushing and drainage.

Recovery measures include:

- Removal of debris and sediment following floodwaters receding
- Wash-down of floors, walls and fixtures using hose-out methods
- Use of durable, water-resistant materials that can withstand repeated inundation and cleaning without degradation
- Inspection and replacement of affected equipment and fittings, noting that items are generally low-value and readily replaceable
- Drying and ventilation of internal spaces to prevent moisture-related damage and restore amenity
- Electrical and plumbing services within flood-affected areas will be inspected and reinstated as required prior to recommencement of use.

This approach ensures that recovery is rapid, practical and cost-effective, with impacts limited to non-structural elements and downtime restricted to short durations following the event.

5.6 Other considerations

5.6.1 Flood impacts

Stormwater and overland flow conveyance will be designed to direct flows to a lawful point of discharge (LPD) without increasing flood risk to adjacent properties, in accordance with Council requirements and the Stormwater Management Plan. Refer to Stormwater Management Plan and Appendices prepared by EDGE Consulting Engineers for further details.

5.6.2 Emergency services

The scale and intensity of the proposed development is not considered to be significant in the context of emergency services and is not expected to place an additional burden on emergency services in terms of evacuation prior to or during a flood event.

In the event of flooding, the site benefits from available flood warning time associated with Brisbane River flooding, allowing for the implementation of planned response measures. This includes the removal of vehicles from basement levels, which will be managed by building operations staff in accordance with established procedures.

Occupants, including residents and onsite workers, will have sufficient time to evacuate prior to inundation if required.

A FEMP has been prepared by ACOR, which outlines procedures for flood preparedness, response and recovery, including measures to minimise reliance on external emergency services.

5.6.3 Compensatory earthworks

The subject site is not located within a Waterway Corridor (Brisbane River, Citywide or Local waterway corridor) or within a creek/waterway flood planning area. Therefore, the Material Change of Use (MCU) development application for the site is not subject to the compensatory earthworks planning scheme policy.

6 Conclusion

The proposed development at 120 Montague Road, South Brisbane QLD 4101 is located within Brisbane River flood planning and overland flow areas. This Flood Risk Assessment (FRA) has been prepared in support of a development application to Brisbane City Council.

Relevant flood levels applicable to the site have been identified and assessed against the proposed development design levels. Risks to people, property and infrastructure have been evaluated, and associated flood hazards have been analysed. Essential building services and critical infrastructure are located above the Category A flood planning levels to support safe operation during and following flood events. Appropriate flood risk management measures have been identified and are recommended to be implemented as part of the development (refer to section 7). The proposal considers flood behaviour and incorporates design measures to manage flood impacts. Building access, entry, and egress arrangements are provided above known flood levels where required, with multiple and alternative access pathways available during flood events.

A Flood Emergency Management Plan (FEMP) has been prepared specifically for the development in accordance with Brisbane City Council Planning Scheme Policy requirements, to manage residual flood risk. The FEMP (Document No. NA261030_CIV_FEMP_RPT001_REV02) provides procedures for preparedness, response and recovery and should be read in conjunction with this report.

The assessment concludes that the proposed structural design, combined with the identified risk management measures and the FEMP, appropriately manages and mitigates flood risk to people and property. The quantitative risk assessment identifies a 'Medium' risk rating associated with equipment and infrastructure located below 5.1 m AHD (DFL), and a 'Low' risk rating for all components located above this level.

These risk levels are considered acceptable and tolerable for the proposed development, based on the nature and scale of potential impacts, the resilience of the building design, and the implementation of appropriate mitigation and emergency management measures.

7 Recommendations

- The building is to be designed, constructed, connected and anchored in accordance with Mandatory Part 3.5 – Construction of buildings in flood hazard areas (Department of Housing and Public Works, 2013).
- Ground-level areas (café nook) are to adopt a flood-compatible design, incorporating durable and water-tolerant materials suitable for inundation and hose-down recovery (refer Section 5.3).
- All critical building services and essential infrastructure are located above the required flood planning levels.
- Equipment located within flood-affected areas is to be non-essential, low-value and readily replaceable, to minimise recovery time and cost.
- Flood emergency management procedures are to be implemented, including early warning monitoring, site shutdown, and removal (where practicable) of vulnerable equipment. A Flood Emergency Management Plan (FEMP) prepared by ACOR supports these measures.
- Flood-resistant materials and detailing are to be incorporated into lower-level construction (refer Section 5.3), including:
 - sealing or waterproofing of electrical conduits and services below flood levels
 - designing service penetrations and underground conduits to resist erosion and scour
 - mounting electrical outlets, switches and sensitive equipment above flood levels where practicable
- The development is to incorporate flood recovery measures (refer Section 5.5), including hose-down capability, use of durable finishes, and provision for rapid cleaning and reinstatement of flood-affected areas.

8 References

- ACBC (2012). Construction of buildings in flood hazard areas. Information handbook. Version 2012.3. Australian Building Codes Board.
- AIDR (2014). Australian Disaster Resilience Guideline 7-3: Technical flood risk management guideline: Flood hazard. Australian Institute for Disaster Resilience.
- BCC (2025). SC6.11 Flood planning scheme policy.
<https://cityplan.brisbane.qld.gov.au/eplan/rules/0/255/0/6279/0/264>. Brisbane City Council.
- Brisbane City Council (2019), *Flood Study – Citywide Overland Flow (Norman Sub-model)*. Available at: <https://data.brisbane.qld.gov.au/explore/dataset/flood-study-citywide-overland-flow-norman-sub-model/information/> (accessed May 2026).
- Bureau of Meteorology (2025), Service Level Specification for Flood Forecasting and Warning Services for Queensland, Commonwealth of Australia. Available at: https://www.bom.gov.au/qld/flood/brochures/QLD_SLS_current.pdf (accessed May 2026).
- Department of Housing and Public Works (2013). MP 3.5 – Construction of buildings in flood hazard areas.
https://www.hpw.qld.gov.au/_data/assets/pdf_file/0015/4263/mandatory3.5constructionofbuildingsinfloodhazardareas.pdf
- Standards Australia & Standards New Zealand (2004). AS/NZS 4360:2004 Risk Management. Sydney: Standards Australia.
- QUDM (2017). *Queensland Urban Drainage Manual*. Fourth Edition. Institute of Public Works Engineering Australasia, Queensland.
- WRL (2014). Flood Hazard. WRL Technical Report 2014/07 FINAL September 2014. Water Research Laboratory. UNSW.

Appendix A Glossary

Average Recurrence Interval (ARI)	The average return period between events of a given size. For example, a 100 year ARI will statistically on average occur every 100 years. This has been recognised as somewhat unclear to the public and following the January 2011 floods, future flood events should be referred to using the AEP terminology (see below).
Annual Exceedance Probability (AEP)	The probability of a rainfall or flood event of a given size will be exceeded within a single year period, expressed as a percentage annual chance. For example, a 1% AEP event has a 1% chance of that event or greater occurring within a year period.
Australian Height Datum (AHD)	Vertical reference level for defining ground level elevation within Australia. Mean sea level is approximately 0.0 m AHD.
Bureau of Meteorology (BoM)	Australian government run weather forecasting organisation.
Defined Flood Level (DFL)	The DFL for Brisbane River flooding is a level of 3.7 m AHD at the Brisbane City Gauge based on a flow of 6 800 m ³ /s. (BCC, 2019).
Depth Velocity product (DV)	The product of the depth and velocity of flood waters used to assess safety of egress through flood waters.
Hazard	Condition or practice with the potential for causing harm to people or the environment.
Residential Flood Level (RFL)	Residential flood level (RFL) for Brisbane River flooding equates to the flood level applicable to the extent of January 2011 floods as depicted by mapping on the Queensland Reconstruction Authority website or the Council's defined flood level (DFL) for the Brisbane River, whichever is higher. (BCC, 2019)
Risk	The probability of a hazardous situation occurring and the potential consequences of that event.

Appendix B Detail Survey prepared by RPS dated 20/04/2026

PURPOSE OF PLAN

This plan represents a ground survey of the site to enable architectural and engineering design. For reason of clarity, certain information is not shown on this plan. This plan reflects the accompanying digital data for all survey points and boundaries. The survey data is available on a separate file.

This plan was used information for Berneet and Francis Detail Survey 040201 01 Rev B and the AUS Detail Survey 222501 01, which have been verified by this survey.

CONTENTS

The contours shown represent the site as it was at the time of survey. This is not necessarily the "natural surface" or "ground level" as defined by some works and thus cannot be used to calculate compliance with some council building height limits. Mean Contour Interval: 0.2m

VEGETATION

There is trees greater than or equal to 100mm breast height diameter have been located. Tree heights are approximate only. The species of trees shown are layman's estimates and were not determined by experts.

PROPERTY BOUNDARIES

The property boundaries shown on this plan are plotted from original title records and adjoining property boundaries. They have been plotted using surveying methodology that is generally accurate to within 50 millimetres. The boundaries are not necessarily true boundaries. Discrepancies can only be determined by completing a cadastral survey as defined by the Survey and Mapping Infrastructure Act 2003 and Surveyors Act 2003.

The property boundaries shown on this plan must not be relied upon when designing services, buildings or structures. The boundaries are not necessarily true boundaries. Discrepancies can only be determined by completing a cadastral survey as defined by the Survey and Mapping Infrastructure Act 2003 and Surveyors Act 2003.

Boundary corners were not marked at the time of the survey.

These boundaries will be updated upon the completion of the identification survey which is currently in progress.

SUBSURFACE UTILITIES

Quality Levels have been determined according AS4588-1:2022 The Australian Standard for Classification of Subsurface Utility Information (SUI).

- Quality Level 4 (QL4 - <50mm horizontal and vertical) is the highest quality survey. The exposed utility was directly visible.
- Quality Level 6 (QL6 - <300mm horizontal and <1500mm vertical) The subsurface utility was traced then exposed without being exposed.
- Quality Level 8 (QL8 - <300mm horizontal and may contain no vertical depth). The subsurface utility was plotted by correlation or an interpretation of subsurface utilities using GPR point identification.
- Quality Level 10 (QL10 - >300mm horizontal and may contain no vertical depth). The subsurface utility was plotted from existing records only and was not directly surveyed.

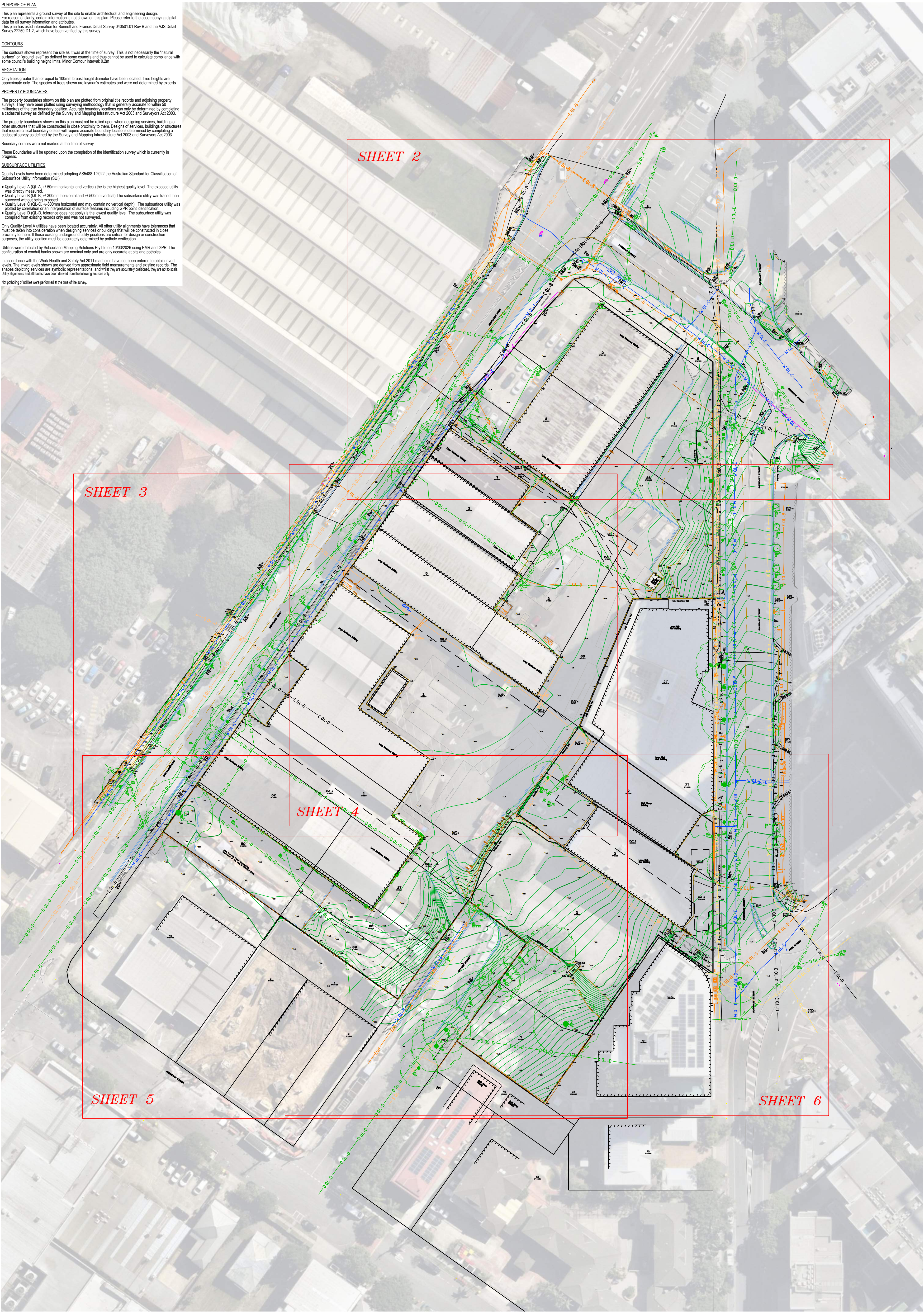
Only Quality Level 4 utilities have been located accurately. All other utility alignments have tolerances that are not necessarily accurate. The tolerances are not necessarily accurate for buildings that are constructed too proximity to them; in these existing underground utility positions are critical for design or construction. The tolerances are not necessarily accurate for buildings that are constructed too close to them.

Utilities were detected by Subsurface Mapping Solutions Pty Ltd on 10/03/2025 using EMI and GPR. The configuration of conduit banks shown are nominal only and are only accurate at plots and polygons.

In accordance with the Work Health and Safety Act 2011 mandates have been been entered to obtain invert levels. The invert levels shown are derived from approximate field measurements and existing records. The invert levels are not necessarily accurate. The invert levels are not necessarily accurate for buildings that are constructed too proximity to them; in these existing underground utility positions are critical for design or construction. The tolerances are not necessarily accurate for buildings that are constructed too close to them.

Utility alignments and attributes have been derived from the following sources:

- Not plotting of utilities was performed at the time of the survey.



Amd	Description	Date	Surveyor	Locator	Drafter	Manager
	First Issue	20/04/2026	JMR	SMS	JMR	DAC
Hz Datum: Plane Hz Origin: IS341643 Vin Datum: AHD Vri Origin: PM160114 Origin RL: 8.561m Local Authority: South Brisbane Local Authority: Brisbane City Council Lie Long: S27°29'02"E (15°10'04"S) DWS: TLX429945 Detail-01 Rev A RPS Detail NORTH SCALE IN METERS AT ORIGINAL REDUCTION RATIO			CLIENT Stockwell Level 8 31 Duncan St Fortitude Valley QLD 4006 A TETRA TECH COMPANY PROJECT 108 Montague Road Contour and Detail Survey ----- ----- ----- T -61 7 3339 9600 W ppsgroup.com			
© Copyright protects this plan						
		SHEET	1	%	6	TLX429945 01 A



Description	Date	Surveyor	Locator	Drafter	Manager
	20/04/2026	JMR	SMS	JMR	DAC

Hz Datum: Plane	Local Authority: South Brisbane	 A1 1:200	Stockwell RPS AAP Consulting Pty Ltd Level 6 31 Duncan St Fortitude Valley QLD 4006 T +61 7 3539 9500 W rpsgroup.com	 A TETRA TECH COMPANY
Hz Origin: IS341643	Local Authority: Brisbane City Council			
Vin Datum: AHD	Local Authority: PM150149			
Vin Origin: PM150149	Local Authority: RPS Detail			

Scale in Meters at Original Reduction Ratio

4 2 0 2 4 6 8 10

108 Montague Road

Contour and Detail Survey

© Copyright protects this plan

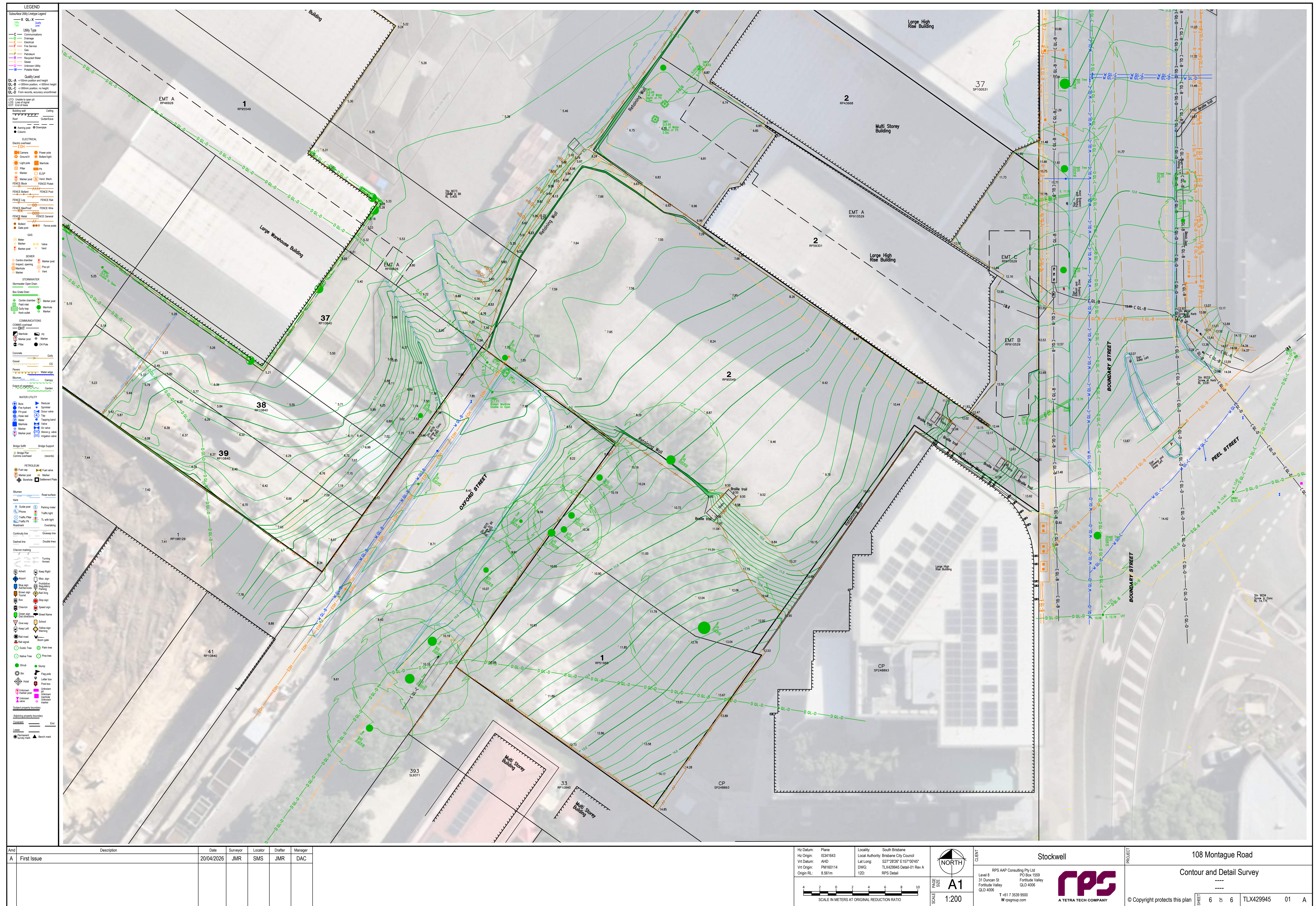
3 5 6

TLX429945

01







Appendix C FloodWise Property Report

FloodWise Property Report

104 MONTAGUE RD, SOUTH BRISBANE 4101
Multiple Lots (refer to Appendices)



Dedicated to a better Brisbane

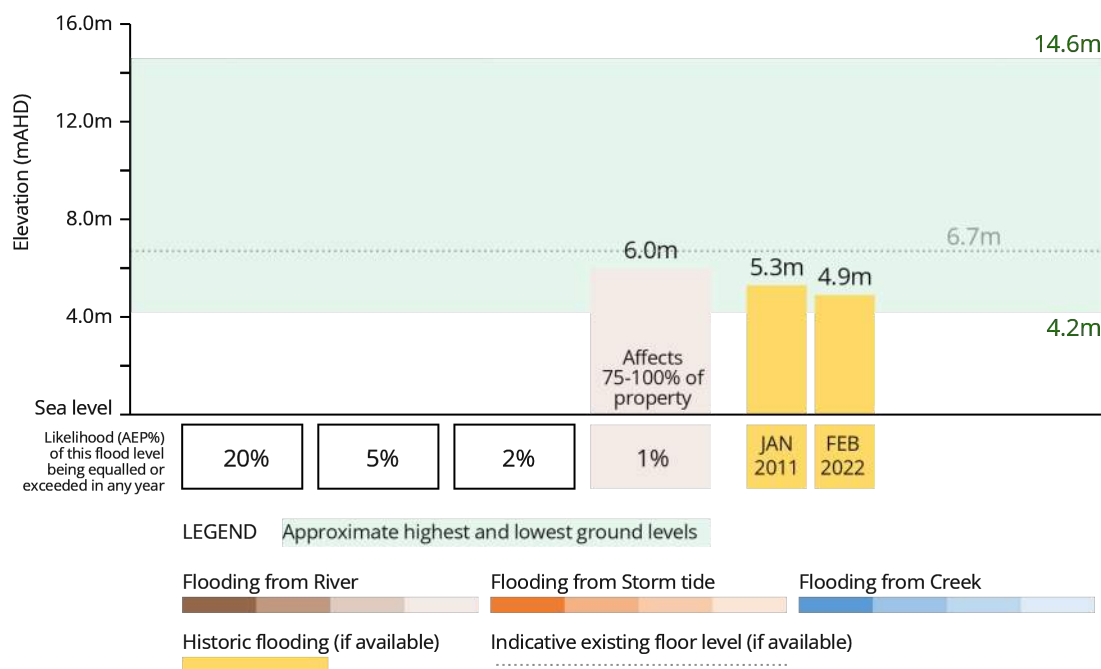
THE PURPOSE OF THIS REPORT IS FOR BUILDING AND DEVELOPMENT

Brisbane City Council's FloodWise Property Report provides technical flood planning information including estimated flood levels, habitable floor level requirements and more. This report uses the adopted flood planning information in Brisbane City Plan 2014, that guides how land in Brisbane is used and developed for the future. Find out more about [planning and building](#). To understand how to be resilient and prepare for floods, visit Council's [Be Prepared](#) webpage. Find more information about [how to read a FloodWise Property Report](#).

Graph showing only the highest source/type of flooding for 1%, 2%, 5% and 20% likelihoods. Also shows historic flood levels.

Other flood types and levels may be present and will be listed in the Flood Planning Information table below. This graph does not include overland flow flooding. If applicable, overland flow information is shown in the Planning and Development Information section below.

NOTE: See Useful Definitions section to explain terminology.



Combined 1% AEP for river, creek and storm tide flood extent (if applicable) from the adopted Brisbane City Plan 2014.

Read more about [Brisbane City Plan 2014](#).



Are you resilient and ready for flood?

- Sign up to the Brisbane Severe Weather Alert at brisbane.qld.gov.au/beprepared
- Visit bom.gov.au for the latest weather updates.
- Have an evacuation plan, emergency kit and important phone numbers ready.
- Observe where water flows from and to during heavy rain.
- Consider how flood-resilient building techniques will have you home faster and with less damage.

Life threatening emergencies
000 Police/fire/ambulance
(mobiles **000** and **112**)

State Emergency Service (SES) **132 500**
Energex **13 19 62**
Brisbane City Council **3403 8888**

Technical Summary

This section of the FloodWise Property Report contains more detailed flood information for this property so **surveyors, builders, certifiers, architects, and engineers can plan and build** in accordance with Council's planning scheme.

Find more information about [planning and building](#) in Brisbane or talk to a Development Services Planning Information Officer via Council's Contact Centre on (07) 3403 8888.

Property Information Summary

The following table provides a summary of flood information for this property. More detailed flood level information is provided in the following sections of this report.

Property Summary	Level (mAHD) / Comment	Data Quality Code
Minimum ground level	4.2	C
Maximum ground level	14.6	C
Indicative existing floor level	6.7	C
Source of highest flooding	Brisbane River and Creek/Waterway	

Flood Planning Information

The table below displays the peak estimated flood levels by probability for this property. Estimated flood level data should be used in conjunction with applicable planning scheme requirements - Refer to Flood Planning and Development Information section below for further information.

Note this table does not include overland flow. If overland flow is applicable to this property, refer to the Flood Planning and Development section below for further information.

Likelihood / Description	Level (mAHD)	Source
20%	N/A	
5%	N/A	
2%	N/A	
1%	6.0	River (Brisbane River)
0.2%	9.3	River (Brisbane River)
January 2011	5.3	River (Brisbane River)
February 2022	4.9	River (Brisbane River and Creeks/Waterways)
Defined Flood Level (DFL)	5.1	River (Brisbane River)
Residential Flood Level (RFL)	6.0	River (Brisbane River)
Minimum Habitable Floor Level (dwelling house)	N/A*	

* Council may not have this data available. Customers are recommended to engage a Registered Professional Engineer of QLD (RPEQ) for further advice. For information on seeking Planning Advice, please visit www.brisbane.qld.gov.au/planning-and-building.

Flood Planning and Development Information

This section of the FloodWise Property Report contains information about Council's planning scheme overlays. Overlays identify areas within the planning scheme that reflect distinct themes that may include constrained land and/or areas sensitive to the effects of development.

Flood overlay code

The Flood overlay code of Council's planning scheme uses the following information to provide guidelines when developing properties. The table below summarises the flood planning areas (FPAs) that apply to this property. Development guidelines for the FPAs are explained in [Council's planning scheme](#).

Flood planning areas (FPA)		
River	Creek / waterway	Overland flow
FPA2b		Applicable
FPA3		
FPA4		
FPA5		

To find more information about Council's flood planning areas (FPAs) for Brisbane River and Creek/waterway flooding to guide future building and development in flood prone areas, please review [Council's Flood Planning Provisions](#).

Coastal hazard overlay code

The Coastal hazard overlay code of Council's planning scheme uses the following information to provide guidelines when conducting new developments. The table below summarises the coastal hazard categories that apply to this property. Development guidelines for the following Coastal hazard overlay sub-categories are explained in Council's [planning scheme](#).

Coastal hazard overlay sub-categories
There are currently no Coastal hazard overlay sub-categories that apply to this property.

Note: Where land is identified within one for more flood planning areas on the Flood overlay or is identified within one of the Storm tide inundation area sub-categories on the Coastal hazard overlay, the assessment criteria that provides the highest level of protection from any source of flooding applies.

Property development flags

Overland flow path - Mapping indicates this property may be located within an overland flow path. Overland flow flooding usually occurs when the capacity of the underground piped drainage system is exceeded and/or when the overland flow path is blocked. It is recommended you consult a Registered Professional Engineer of Queensland (RPEQ) to determine this property's habitable floor level and flooding depth. Please refer to Council's planning scheme for further information.

Large allotment - This property is either a Large Allotment of over 1000 square metres or is located within a Large Allotment. Flood levels may vary significantly across allotments of this size. Further investigations may be warranted in determining the variation in flood levels and the minimum habitable floor level across the site.
For more information or advice, please consult a Registered Professional Engineer of Queensland (RPEQ).

Useful Flood Information Definitions

Australian Height Datum (AHD) - The reference level for defining ground levels in Australia. The level of 0.0m AHD is approximately mean sea level.

Annual Exceedance Probability (AEP) - The probability of a flood event of a given size occurring in any one year, usually expressed as a percentage annual chance.

- **0.2% AEP** - A flood event of this size is considered rare but may still occur. A flood of size or larger has a 1 in 500 chance or a 0.2% probability of occurring in any year.
- **1% AEP** - A flood of this size or larger has a 1 in 100 chance or a 1% probability of occurring in any year.
- **2% AEP** - A flood of this size or larger has a 1 in 50 chance or a 2% probability of occurring in any year.
- **5% AEP** - A flood of this size or larger has a 1 in 20 chance or a 5% probability of occurring in any year.
- **20% AEP** - A flood of this size or larger has a 1 in 5 chance or a 20% probability of occurring in any year.

Data quality

- **Data Quality Code A** - Level data based on recent surveyor report or approved as-constructed drawings.
- **Data Quality Code B** - Level data based on ground-based mobile survey or similar.
- **Data Quality Code C** - Level data derived from Airborne Laser Scanning or LiDAR information.

Defined Flood Level (DFL) - The DFL is used for commercial and industrial development. The Defined flood level (DFL) for Brisbane River flooding is a level of 3.7m AHD at the Brisbane City Gauge based on a flow of 6,800 m/s. DFL is only applicable for non-residential uses affected by Brisbane River flooding.

Flood planning area (FPA) - Council has developed five Flood planning areas (FPAs) as part of Brisbane City Plan 2014 Flood overlay mapping for Brisbane River, Creek/waterway flooding and Overland flow to guide future building and development in flood prone areas. Storm tide flooding is mapped separately. The FPAs are designed to recognise the flood hazard for different flooding types. Flood hazard is a combination of frequency of flooding, the flood depth, and the speed at which the water is travelling. [Find more information here.](#)

Maximum and minimum ground level - Highest and lowest ground levels on the property based on available ground level information. A Registered Surveyor can confirm exact ground levels.

Minimum habitable floor level (dwelling house) - The minimum level in metres AHD at which habitable areas of development (generally including bedrooms, living rooms, kitchen, study, family, and rumpus rooms) must be constructed as required by the Brisbane City Plan 2014.

Indicative existing floor level - The approximate level in metres AHD of the lowest habitable floor in the existing building (excluding apartments). The data is sourced from a range of sources with varying accuracy levels.

Property - A property will contain 1 or more lots. The multiple lot warning is shown if you have selected a property that contains multiple lots.

Residential flood level (RFL) - This flood level for the Brisbane River equates to the 1% annual exceedance probability (AEP) flood level.

To learn more, visit [Brisbane City Council's Flood Information Hub](#)

Brisbane City Council's Online Flood Tools

Council provides several online flood tools:

- to guide planning and development
- to help residents and businesses understand their flood risk and prepare for flooding.

Council's online flood tools for planning and development purposes include:

- **FloodWise Property Report**
- **Flood Overlay Code**

For more information on Council's planning scheme and online flood tools for planning and development:

- phone (07) 3403 8888 and ask to talk to a Development Services Planning Information Officer

- visit brisbane.qld.gov.au/planning-building

Council's Planning Scheme - The Brisbane City Plan 2014 (planning scheme) has been prepared in accordance with the Sustainable Planning Act as a framework for managing development in a way that advances the purpose of the Act. In seeking to achieve this purpose, the planning scheme sets out the Council's intention for future development in the planning scheme area, over the next 20 years.

Disclaimer

1. Defined flood levels and residential flood levels, minimum habitable floor levels and indicative existing floor levels are determined from the best available information to Council at the date of issue. These levels, for a particular property, may change if more detailed information becomes available or changes are made in the method of calculating levels.
2. Council makes no warranty or representation regarding the accuracy or completeness of a FloodWise Property Report. Council disdains any responsibility or liability in relation to the use or reliance by any person on a FloodWise Property Report.



Planning to build or renovate?

For information, guidelines, tools and resources to help you track, plan or apply for your development visit brisbane.qld.gov.au/planning-building

You can also find the Brisbane City Plan 2014 and Neighbourhood Plans as well as other information and training videos to help, with your building and development plans.

Appendices

Lot Details
Lot 39 on RP10840, Lot 1 on RP51965, Lot 37 on RP10840, Lot 38 on RP10840, Lot 36 on SP100531, Lot 2 on SP224104, Lot 1 on RP10859, Lot 5 on RP10855, Lot 2 on RP10859, Lot 2 on RP10861, Lot 1 on RP10860, Lot 50 on RP885764, Lot 1 on RP95549, Lot 52 on RP10840, Lot 2 on RP95549, Lot 3 on SP224104, Lot 4 on SP224104, Lot 5 on SP224104

Appendix D Flood Overlay Code Reponses

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
Section A—If for accepted development subject to compliance with identified requirements (acceptable outcomes only) or assessable development for a dwelling house including any secondary dwelling Note—Development for a dwelling house does not require assessment against any other sections of this code.				
PO1 Development involving any habitable or non-habitable part of a dwelling house, including any secondary dwelling, is located and designed to: a) minimise the risk to people from flood hazard; b) achieve acceptable flood immunity; c) minimise property impacts from a flood event up to and including the defined flood event; d) minimise disruption to residents, recovery time and rebuilding or restoration costs after a flood event up to and including the defined flood event.	AO1.1 Development for a dwelling house including any secondary dwelling: a) is not located in the Brisbane River flood planning area 1, 2a or 2b sub-categories or the Creek/waterway flood planning area 1 or 2 sub-categories; or b) is only located in these sub-categories, if a Registered Professional Engineer Queensland certifies that the dwelling house and any secondary dwelling are structurally designed to be able to resist hydrostatic and hydrodynamic loads associated with flooding up to and including the defined flood event.	N/A	Proposed development is not for a dwelling house	
	AO1.2 Development for a dwelling house and any secondary dwelling complies with the minimum flood planning levels in Table 8.2.11.3.B. Note—If located in an area that has no flood level information available from the Council such as an overland flow path, a Registered Professional Engineer of Queensland with expertise in undertaking flood studies is to certify that the flood level and development levels for the dwelling house and any secondary dwelling achieve the required flood planning levels in Table 8.2.11.3.B.	N/A	Proposed development is not for a dwelling house	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
	AO1.3 Development involving a building undercroft complies with the minimum clearance requirements in Table 8.2.11.3.E. Editor's note—For creek/waterway, storm-tide and river flooding, applicable flood planning information is available from Council's FloodWise Property Report. Note—The Flood planning scheme policy provides guidance on undercroft design.	N/A	Proposed development is not for a dwelling house	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
PO2 Development within the Creek/waterway flood planning area sub-categories or Overland flow flood planning area sub-category: a) maintains the conveyance of flood waters to allow flow and debris to pass predominantly unimpeded through the site; b) does not concentrate, intensify or divert floodwater onto upstream, downstream or adjacent properties; c) will not result in a material increase in flood levels or flood hazard on upstream, downstream or adjacent properties.	AO2 Development: a) is not located within the Creek/waterway flood planning area 1, 2 or 3 sub-categories or the Overland flow flood planning area sub-category; or b) provides an open undercroft area from natural ground level to habitable floor level for any area inundated by the defined flood event; or Note—This undercroft area is not suitable for providing non-habitable rooms, secure storage of valuables, or future enclosing for storage or car parking. The clear area may include structural elements such as columns and floor substructure. The Flood planning scheme policy provides guidance on undercroft design. Editor's note—An open undercroft design may be achieved through a 'valance' treatment around the perimeter of an otherwise internally clear undercroft. Editor's note—For Creek/waterway, storm-tide and river flooding, applicable flood planning information is available from Council's FloodWise Property Report. c) a flood study from a Registered Professional Engineer Queensland with expertise in undertaking flood studies certifies that the development in the Creek/waterway flood planning area or Overland flow flood planning area sub-categories will not result in a material increase in flood level or flood hazard on upstream, downstream or adjacent properties. Note—Flood studies demonstrate that the development and engineering design methods conform to the principles within	N/A	Proposed development is not for a dwelling house	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
	the Flood planning scheme policy and the Infrastructure design planning scheme policy and ensure that where an undercroft is required to manage flood impacts it complies with Table 8.2.11.3. E.			

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
Section B—If accepted development subject to compliance with identified requirements (acceptable outcomes only) or assessable development other than for a dwelling house or reconfiguring a lot Note—If development that is accepted development subject to compliance with identified requirements complies with the acceptable outcomes of this part, no further assessment against this code is required.				
PO3 Development: a) is compatible with flood hazard in a defined flood event; b) minimises the risk to people from flood hazard; c) does not reduce the ability of evacuation resources including emergency services to access and evacuate the site in a flood emergency, with consideration to the scale of the development; d) minimises impacts on property from flooding; e) minimises disruption to residents, business or site operations and recovery time due to flooding; f) minimises the need to rebuild structures after a flood event greater than the defined flood event. Note — Where Table 8.2.11.3.C identifies that a flood risk assessment is required, compliance with this performance outcome can be achieved by submitting a flood risk assessment, which may be included within a	AO3 Development for a material change of use is identified in Table 8.2.11.3.C as compatible with the flood hazard in the relevant flood planning area.	✓	In accordance with Table 8.2.11.3.C, the development location is identified as being subject to a flood risk assessment. Risk has been assessed and minimised by locating all habitable areas and critical infrastructure above the associated flood planning levels. Emergency access and evacuation are maintained, with sufficient flood warning time available to implement managed responses. A Flood Emergency Management Plan has been prepared to guide site operations, including evacuation or shelter-in-place strategies, reducing reliance on emergency services. Impacts to property are minimised through appropriate design levels, the use of flood-compatible approaches at lower levels, and the incorporation of flood protection measures. Disruption to building operations is limited by ensuring that affected areas are restricted to non-essential uses, with equipment that is low-value and readily replaceable.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
flood study, addressing the criteria within this performance solution. Preparing flood risk assessments and flood studies is required to be in accordance with the Flood planning scheme policy. Note — An emergency management plan prepared in accordance with the Flood planning scheme policy, which sets out procedures for evacuation due to flooding may be used to demonstrate compliance with this performance outcome.				

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
PO4 Development for a park ensures that the design of a park and location of structures and facilities responds to the flood hazard and balances the safety of intended users with: a) maintaining continuity of operations; b) impacts of flooding on asset life and ongoing maintenance costs; c) efficient recovery after flood events; d) recreational benefits to the city; e) availability of suitable land within the park.	AO4.1 Development involving a building or structure in a park complies with the flood planning levels specified in Table 8.2.11.3.D	N/A	Proposed development does not include a park	
	AO4.2 Development involving a building or structure where Table 8.2.11.3.D does not apply: a. is not located within the 20% AEP flood extent of any creek/waterway or overland flow path; or b. is located above the 20% AEP flood level of any creek/waterway or overland flow path.	N/A	Proposed development does not include a park	
Section C—If accepted development subject to compliance with identified requirements (acceptable outcomes only) for a park or assessable development other than for a dwelling house				

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
PO5 Development is located and designed to: a) minimise the risk to people from flood hazard on the site; b) minimise flood damage to the development and contents of buildings up to the defined flood event; c) provide suitable amenity; d) minimise disruption to residents, recovery time and the need to rebuild structures after a flood event up to and including the defined flood event.	AO5.1 Development complies with the flood planning levels specified in Table 8.2.11.3.D. Note — If located in an area with no Council-derived flood levels such as an overland flow path, a Registered Professional Engineer Queensland with expertise in undertaking flood studies is to derive the applicable flood level and certify that the development meets the required flood planning levels in Table 8.2.11.3.D. The study is to demonstrate that the development and engineering design methods conform to the principles within the Flood planning scheme policy and the Infrastructure design planning scheme policy.	✓	The proposed development meets the intent of PO5 by locating all habitable areas and critical infrastructure above the required flood planning levels in Table 8.2.11.3.D, thereby minimising risk to people and flood damage. Ground-level non-habitable areas (café nook) are below the prescribed level; however, a risk management approach has been adopted in accordance with the Planning Scheme. A Flood Risk Assessment and Flood Emergency Management Plan (FEMP) have been prepared to demonstrate that risks are appropriately mitigated, with impacts limited to non-essential elements.	
	AO5.2 Development is: a. not located in the: i. Brisbane River flood planning area 1, 2a, or 2b sub-categories; ii. Creek/waterway flood planning area 1 or 2 sub-categories; iii. Overland flow flood planning area sub-category; or b. only located in these sub-categories if a Registered Professional Engineer Queensland with expertise in undertaking flood studies certifies that: i. the development design, siting and any	✓	The proposed development is located within Brisbane River Flood Planning Area 2b and the Overland Flow Flood Planning Area. In accordance with AO5.2(b), a Flood Risk Assessment (FRA) has been prepared and certified by a suitably qualified RPEQ. Ground-level commercial areas at the Montague Road frontage are subject to potential inundation; however, these risks have been assessed and managed through design and operational measures. All habitable areas and critical infrastructure are located above the required flood	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
	mitigation measures will ensure the development is structurally adequate to resist hydrostatic, hydrodynamic and debris impact loads associated with flooding up to the defined flood event; and ii. the risk to people is managed to an acceptable level.		planning levels, and the structural design should consider applicable flood forces as outlined in the FRA. Access to the building can be controlled during flood events, and operational procedures are supported by the Flood Emergency Management Plan.	
PO6 Development involving essential electrical services or a basement storage area is suitably located and designed to ensure public safety and minimise flood recovery and economic consequences of damage during a flood.	AO6.1 Development ensures that: a. all areas containing essential electrical services comply with the flood planning levels in Table 8.2.11.3.D; or b. if a basement contains essential electrical services or a private basement storage area, the basement is a waterproof structure with walls and floors impermeable to the passage of water with all entry points and services located at or above the relevant flood planning level in Table 8.2.11.3.D. Note — A basement storage area does not include a bike storage room, change room, building maintenance storage and non-critical electrical services.	✓	All essential electrical services are proposed at the plaza level (from 8.8 m AHD), which exceeds the required flood planning level of 6.5 m AHD by approximately 2.3 m, thereby achieving the required flood immunity. A basement is proposed for the development; however, no essential electrical services are located within the basement. Basement access levels are compliant with minimum flood planning requirements. The basement is designed with a flood protection wall up to approximately 7.25 m AHD (above the DFL) and will function as a wet basement, with provisions to manage groundwater ingress and flood seepage via controlled drainage and pump-out systems.	
	AO6.2 Development involving a basement that relies on a pumping solution to manage floodwater	✓	The basement will include a secondary pump with backup power supply for the pump. This will be documented in building services drawings by	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
	ingress or for dewatering after a flood provides a secondary pump system with a backup power source for the pump.		hydraulic consultant and electrical consultant.	
PO7 Development does not directly or indirectly create a material adverse impact on flood behaviour or drainage on properties that are upstream, downstream or adjacent to the development.	AO7.1 Development: a. does not block, or divert floodwaters for any area affected by creek/waterway or overland flow flooding, excluding storm-tide flooding and Brisbane River flooding sources; or b. does not result in a material increase in flood level or hydraulic hazard on upstream, downstream or adjacent properties. Note — Compliance with this acceptable solution can be demonstrated by the submission of a flood study by a Registered Professional Engineer of Queensland with expertise in undertaking flood studies demonstrating that the development and engineering design methods conform to the principles within the Flood planning scheme policy and the Infrastructure design planning scheme policy.	✓	The development is not located within a defined creek, waterway corridor or flood storage area. The site layout and regarding of Oxford Street ensures overland flows are captured and conveyed toward lawful point of discharge (Brereton street road reserve).	
	AO7.2 Development retains existing overland flow paths and does not rely wholly on piped solutions to manage major flows.	✓	Overland flow from the south-eastern extent of Oxford Street will be diverted by the regrading of the proposed laneway toward Brereton Street.	
	AO7.3 Development which creates a new overland flow path or significantly modifies an existing overland flow path via earthworks does not materially worsen hydraulic hazard on the site from existing conditions. Note — Compliance with this acceptable solution can be demonstrated by the submission of a flood study by a	N/A	No mitigation measures are proposed regarding Montague Road overland flow area.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
	Registered Professional Engineer of Queensland with expertise in undertaking flood studies demonstrating that the development and engineering design methods conform to the principles within the Flood planning scheme policy and the Infrastructure design planning scheme policy.			
PO8 Development for filling or excavation in an area affected by creek/waterway flooding does not directly, indirectly or cumulatively cause any material increase in flooding or hydraulic hazard or involve significant redistribution of flood storage from high to lower areas in the floodplain. Note — This can be demonstrated by undertaking earthworks in compliance with the Compensatory earthworks planning scheme policy. Note — This part of the code applies to all development other than a dwelling house and any secondary dwelling which involves filling or excavation, whether or not the development application comprises a separate development application for operational work involving filling or excavation.	AO8 Development ensures that no filling or excavation greater than 100mm is located in the Creek/waterway flood planning area 1, 2 or 3 sub-categories if contained in the 5% AEP flood extent of any Creek/waterway flood planning area sub-category for which no waterway corridor has been mapped in the Waterway corridors overlay.	N/A	Proposed development works are not within the creek/waterway flood planning areas.	
PO9 Development ensures that the building and site design: (a) maintains the conveyance capacity of existing overland flow paths and creek/waterways; (b) ensures floodwaters and flood debris can pass predominantly unimpeded under a structure or building to minimise property or	AO9.1 Development involving a building undercroft in the Creek/waterway flood planning area sub-categories or the Overland flow flood planning area sub-category: a. complies with the minimum building undercroft clearance requirements in Table 8.2.11.3.E; b. not located directly above any part of a waterway corridor as mapped in the	N/A	The proposed development does not propose a building under croft.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
building damage, including for a flood larger than the defined flood event; (c) mitigates flood impacts by ensuring that filling, excavation and location of services are designed to allow for the conveyance of floodwater across the site. Note—The Flood planning scheme policy provides guidance on relevant considerations in determining minimum undercroft clearances and treatment of ground level in undercroft areas where floodwater conveyance is required underneath development.	Waterway corridors overlay. AO9.2 Development involving a building undercroft in the Creek/waterway flood planning area sub-categories or the Overland flow flood planning area sub category: a. has a ground level within the undercroft area that is free draining; b. does not involve excavation below ground level of more than 300mm within the undercroft area.	N/A	As above.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
PO10 Development for vulnerable uses, difficult to evacuate uses or assembly uses optimises vehicular access and efficient evacuation from the development to parts of the road network unaffected by flood hazard, in order to: a) protect safety of users and emergency services personnel; b) support efficient emergency services access and site evacuation with consideration to the scale of development. Note — A flood risk assessment may be required to address the performance outcomes or acceptable solutions which deal with evacuation and isolation arrangements, and the ability to take refuge. The Flood planning scheme policy provides information for undertaking flood risk assessments.	AO10 Development for vulnerable uses, difficult to evacuate uses or assembly uses: a. is not isolated in any event up to the relevant flood planning level specified in Table 8.2.11.3.L; or b. has direct vehicle access to a critical route or interim critical route in the Critical infrastructure and movement network overlay for evacuation in a flood; or c. can achieve vehicular evacuation to a suitable flood-free location. Note — A suitable flood-free location is of a size and nature sufficient to provide for the size and characteristics of the population likely to need evacuation to that area.	✓	The proposed development is not considered a vulnerable, difficult-to-evacuate or assembly use under the Planning Scheme. While the residential nature of the building may include some vulnerable occupants, it does not fall within the defined categories requiring special consideration under AO10. Flood-free egress is available via Oxford Street, which provides access at a higher elevation above flood-affected areas. This allows for vehicular evacuation to safe, flood-free locations prior to inundation.	
PO11 Development has access which, having regard to hydraulic hazard, provides for safe vehicular and pedestrian movement and emergency services access to adjoining roads.	AO11.1 Development provides an access or driveway into the site which is: a. trafficable during the defined flood event; b. not located in the Creek/waterway flood planning area 1 sub-category; c. not located in the Overland flow flood planning area sub-category if the hydraulic hazard is unsafe in the defined flood event; d. the access or driveway is not inundated by a	✓	The proposed development provides vehicular access from Oxford Street, which is located at a significantly higher elevation and remains trafficable during the defined flood event. The access point is not located within a creek/waterway flood planning area or an overland flow hazard area and is not inundated by a 10% AEP flood event.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
	10% AEP flood.			
	AO11.2 Development located in the Creek/waterway flood planning area 1, 2, 3 or 4 sub-categories locates any disabled access in the highest part of the site. Note — explanation of hydraulic hazard provided in the Flood planning scheme policy.	N/A	Proposed development works are not within the creek/waterway flood planning areas.	
PO12 Development involving a new road, a bridge or culvert is designed to minimise impacts to flood behaviour, minimise disruption to traffic during a flood and allow for emergency access.	AO12 Development involving a new road complies with the flood planning levels in Table 8.2.11.3.F.	N/A	Proposed development does not involve any new roads.	
PO13 Development for pedestrian and cyclist paths: a) provides a suitable level of trafficability; b) manages the impacts of flooding on asset life and ongoing maintenance costs; c) balances route availability with recreational and transport connectivity benefits to the city.	AO13.1 Development for cyclist and pedestrian facilities other than on public roads, including those traversing through a park and adjacent to a watercourse and overland flow path, are located above the 39% AEP (2 year ARI) flood immunity from all flooding sources. Note — If the site is subject to more than one type of flooding, the requirement that affords the greatest level of protection will apply.	✓	The proposed development is not affected by the 39% AEP (2-year ARI) flood event and therefore all cyclist and pedestrian facilities are inherently located above this level.	
	AO13.2 All new on-road cyclist and pedestrian facilities comply with the flood planning levels and trafficability standards for the applicable category of road in Table 8.2.11.3.F or Table 8.2.11.3.K.	N/A	The proposed development does not involve any on-road facilities.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
PO14 Development which increases the residential population within the Brisbane River flood planning area sub-categories minimises the risk to people in all flood events with consideration to flood hazard, including warning time.	AO14 Development in the Brisbane River flood planning area sub-categories in areas where the 1% AEP flood level is greater than 12.8m AHD involving: a. an increase in the number of residential dwellings; or b. additional residential lots is not subject to an unsafe hydraulic hazard in the 0.2% AEP flood event. Note—Explanation of a hydraulic hazard is provided in the Flood planning scheme policy.	N/A	The proposed development is residential, but not at a level greater than 12.8m AHD.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
Additional performance outcomes and acceptable outcomes for essential community infrastructure				
PO15 Development involving essential community infrastructure: a) remains functional to serve community need during and immediately after a flood event, or is part of a network that is able to maintain the function of the essential community infrastructure when parts of the development are unable to function during or after a flood; b) is designed, sited and operated to avoid adverse impacts on the community or the environment due to the impacts of flooding on infrastructure, facilities or access and egress routes; c) is able to remain functional or is part of a network which is able to remain functional even when other infrastructure or services (such as electricity supply) may be compromised in a flood event; d) contains mitigation measures which are not entirely dependent on human	AO15 Development involving essential community infrastructure: a. is ancillary to and not relied upon for the provision of the essential service during a flood; or b. is located above the flood planning levels in Table 8.2.11.3.G; c. has access to or provides the necessary back-up emergency electricity and communications supply in times of flood; d. is designed and constructed to resist hydrostatic and hydrodynamic forces as a result of inundation by the flood event listed for the development type in Table 8.2.11.3.G; e. that services a local area: i. is able to be accessed in times of flood to service local community needs up to the event listed for that development type in Table 8.2.11.3.G; or ii. has a service continuity plan that demonstrates the continued provision of service during the relevant flood event.	N/A	The proposed development is not "essential community infrastructure".	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
activation to respond to a flood event. Note — Protection of function is required up to and including the flood event in Table 8.2.11.3.G.				

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
Additional performance outcomes and acceptable outcomes if development involves the processes in Table 8.2.11.3.H				
PO16 Development involving the storage and handling of hazardous materials avoids or minimises risks to public health and safety and the environment, by: a) protecting underground tanks for hazardous materials against the forces of buoyancy, velocity flow and debris impacts; b) securing above-ground tanks for hazardous materials against flotation and lateral movement; c) preventing damage to hazardous materials pipework or entry of floodwater into hazardous materials pipework; d) preventing damage to or off-site release of packages, drums or containers storing hazardous materials. Note — A chemical hazards flood risk report prepared in accordance with the Management of hazardous chemicals in flood prone areas planning scheme policy can assist in demonstrating achievement of this performance outcome. Note — A pump drainage system is not an acceptable measure to meet the performance outcome.	AO16 a. Development does not include the storage or handling of hazardous chemicals that exceed the hazardous chemicals flood hazard threshold quantities in Table 8.2.11.3.M. b. Development involving the processes listed in Table 8.2.11.3.H: i. where located in the Flood overlay area, occurs only in the Creek/waterway flood planning area 5 sub-category or the Brisbane River flood planning area 5 sub-category; or ii. is consistent with the standards contained in the Management of hazardous chemicals in flood affected areas planning scheme policy and can operate without risk of environmental harm during a flood event. Note—The Management of hazardous chemicals in flood affected areas planning scheme policy sets out further information and processes including risk assessment for the management of hazardous chemicals in flood planning areas.	N/A	The proposed development does not involve processes in Table 8.2.11.3.H	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
Additional performance outcomes and acceptable outcomes for reconfiguring a lot				
PO17 Development locates and designs all lots resulting from reconfiguring a lot to: a) minimise the risk to people from flood hazard; b) minimise damage to property from flood hazard; c) facilitate safe and efficient evacuation. Note: • Consideration of all floods up to the probable maximum flood is relevant to minimising the risk to people. • Flood warning time is not considered sufficient in the Creek/waterway planning area sub-categories or the Overland flow flood planning area sub-category. • Filling above the flood planning level for a flood event greater than the defined flood event cannot be assumed to mitigate the flood hazard.	AO17.1 Development creating new lots is identified in Table 8.2.11.3.I as suitable within the relevant flood planning area.	N/A	The proposed development is not an ROL.	
	AO17.2 Development provides for reconfiguring a lot design that achieves a road and lot layout which: a. provides trafficable vehicular egress for evacuation during a defined flood event; b. optimises hazard-free movement away from sources of flood hazard within the development. Note — Further advice on road and lot layout is contained in the Flood planning scheme policy.	N/A	The proposed development is not an ROL.	
	AO17.3 Development which creates a new residential lot in an area subject to Brisbane River flooding, if the 1% AEP flood level is greater than 12.8m AHD is not subject to a hydraulic hazard greater than 0.6m ² /s DV or 0.6m deep in a 0.2% AEP flood. Note — Refer to the Flood planning scheme policy for further explanation on the 0.2% AEP flood.	N/A	The proposed development is not an ROL.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	SOLUTIONS ¹	COMMENTS	COUNCIL USE ONLY
PO18 Development involving reconfiguring a lot: a) minimises the risk to people from flood hazard; b) creates safe evacuation routes or avoids isolation of the development during a flood greater than the defined flood event; c) minimises damage to property and services; d) provides lots and roads that are not frequently flooded or subject to nuisance ponding or seepage; e) ensures lots created for park or private open space minimise the risk to people from flood hazard and are fit for purpose; f) provides a lot that is not substantially burdened by flood mitigation infrastructure.	AO18.1 Development involving reconfiguring a lot ensures: a. all lots comply with the flood planning levels in Table 8.2.11.3.J; b. a new road complies with the flood planning levels in Table 8.2.11.3.F.	N/A	The proposed development is not an ROL.	
	AO18.2 Development involving reconfiguring a lot creating more than 6 residential lots or a lot for industry ensures the flood planning levels of a dedicated road fronting the development or providing primary access within 200m of the development: a. complies with Table 8.2.11.3.K; or b. has acceptable trafficability in accordance with the requirements in the Flood planning scheme policy and the Queensland Urban Drainage Manual. Note — The Flood planning scheme policy contains supporting information about trafficability on existing roads and serviceability during floods.	N/A	The proposed development is not an ROL.	
	AO18.3 Development protects the conveyance of flood hazard area by providing an easement over the: a. 2% AEP flood extent for overland flow flooding; b. 1% AEP flood extent for creek/waterway flooding.	N/A	The proposed development is not an ROL.	

✓ = Acceptable Outcome

A/S = Alternative Outcome

N/A = Not Applicable to this Proposal



CONSULTANTS

Level 7
104 Melbourne Street
SOUTH BRISBANE QLD
4101

PO Box 3635
SOUTH BRISBANE QLD
4101

T 07 3844 5900
F 07 3844 7588

Flood Emergency Management Plan

120 Montague Road, South Brisbane

Prepared for: Stockwell Development Group

Document no: NA261030_CIV_FEMP_RPT001_REV03

Revision no: 03

Disclaimer

This Report has been prepared in accordance with the scope of services described in the agreement between ACOR Consultants and the Client. The Report relies upon data, surveys, measurements and results based on instructions from, and in consultation with, the Client. Except as otherwise stated, ACOR Consultants has not attempted to verify the accuracy or completeness of any information provided by the Client. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that changes may be required to the Report. Changes in circumstances or facts, the passage of time, manifestation of latent conditions or impacts of future events may also impact on the accuracy, completeness or currency of the information or material set out in this Report. This Report has been prepared solely for use by the Client, ACOR Consultants Pty Ltd and its related body corporates accepts no responsibility for its use by any third parties without the specific authorisation of ACOR Consultants. ACOR Consultants reserves the right to alter, amend, discontinue, vary or otherwise change any information, material or service at any time without subsequent notification. All access to, or use of, the information or material is at the user's risk and ACOR Consultants Pty Ltd and its related body corporates accepts no responsibility for the results of any actions taken on the basis of information or material provided, nor for its accuracy, completeness or currency. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this Report, to the extent permitted by law.

Use of AI

ACOR utilises many proprietary tools, software platforms and other sources to prepare its reports and deliverables, including AI. ACOR's AI Acceptable Use Policy only permits the use of Microsoft 365 Copilot with Enterprise Data Protection for analysis of identifiable or project specific information. If AI generated content has been used in the development of this Report (as permitted by the Client), it has been reviewed and validated by both the report author and the approver noted below and is identified or referenced within the body of the Report.

Revisions

Revision	Description	Date	Prepared by	Approved by	Signature
01	Draft	19/05/26	G. Mamalis	S. Suffolk	
02	For Approval	02/06/26	G. Mamalis	S. Suffolk	
03	Updates in accordance with PPDA Draft Provisional Land Use Plan (May 2026)	08/06/26	G. Mamalis	S. Suffolk	

Review Panel

Division/ office	Name
CIV/BNE	K. Umlauff

COPYRIGHT

This document, including the concepts and information contained within it, are the property of ACOR Consultants Pty Ltd or any of its related or associated entities. Use or copying of this document in whole or in part without the written permission of ACOR Consultants Pty Ltd constitutes an infringement of copyright. No part of this document may be copied, reproduced, adapted, transmitted or stored in a retrieval system in any form or by any means without written permission or unless otherwise permitted under the Copyright Act 1968. Removal or modification of any copyright or other proprietary protection from this document will be a breach of copyright.

© ACOR Consultants Pty Limited

All intellectual property and copyright reserved.

Table of Contents

1	Introduction	5
1.1	Scope	5
2	Available data	5
3	Existing site	6
4	Proposed development	7
5	Flood Characteristics	8
5.1	Brisbane River flooding	8
5.2	Overland flow flooding	10
6	Flood Emergency Management Plan	11
6.1	Flood response strategy	11
6.1.1	Management Roles and Responsibilities	11
6.1.2	General preparation procedures	11
6.2	Overland flow flooding	12
6.2.1	Triggers to overland flow response	12
6.2.2	Overland flow emergency procedure	12
6.3	Brisbane River flooding	13
6.3.1	Triggers to Brisbane River flooding response	13
6.3.2	Brisbane River emergency procedure	13
6.4	Forecasts and warnings	14
6.4.1	Bureau of Meteorology	14
6.4.2	Australian Warning System (AWS)	14
6.4.3	Warning and alert services platforms	15
6.5	Consideration of extreme flood events	16
6.6	Emergency Kit and First Aid	16
	Conclusion	17
	Appendix A Flood Emergency Management Plan	18

List of Figures

Figure 1: Site locality (Nearmap, 2026)	6
Figure 2: Proposed Site context plan (Archipelago, 2026).....	7
Figure 3: Brisbane City Council flood awareness mapping showing riverine flood extent relative to Site	8
Figure 4: Brisbane City Council flood awareness mapping showing overland flow flood extent relative to Site10	

List of Tables

Table 1: Summary of property details	5
Table 2: Flood sources and levels	8
Table 3: Flood characteristics for Brisbane River Flood Planning Area FPA2b	9
Table 4: Summary of peak water levels at Site (BCC, 2019)	10
Table 5: Australian Warning System (AWS) icons, warning level and description	14
Table 6: Warning and alert services platforms	15

1 Introduction

ACOR Consultants Pty. Ltd. were engaged by Stockwell Development Group to undertake a Flood Emergency Management Plan to support the Development Application to Economic Development Queensland for a proposed multi-storey tower development at 114, 120-122 Montague Road, 8-12 Oxford Street & 39A Boundary Street, South Brisbane, QLD 4101. Refer to Table 1 for further property details.

This Material Change of Use (MCU) application relates specifically to the subject lots and the proposed tower.

Table 1: Summary of property details

Address	Lots
120-122 Montague Road	LOT 50 ON RP885764, LOT 52 ON RP10840, LOT 1 ON RP95549
8-12 Oxford Street	LOTS 37, 38, 39 ON RP10840
39A Boundary Street	LOT 2 ON RP95549

1.1 Scope

This Flood Emergency Management Plan (FEMP) has been prepared in accordance with the requirements of Brisbane City Council (BCC) City Plan, including the Flood Overlay Code and Flood Planning Scheme Policy. The FEMP demonstrates how flood response will be managed for the proposed development and is intended to support the associated development application and be incorporated into the building's Community Management Statement (CMS).

The FEMP considers the scale and use of the development, population characteristics, and potential flood impacts, and outlines procedures to manage residual flood risk. In accordance with Council requirements, the FEMP includes:

- identification of evacuation routes and response procedures,
- trigger levels for emergency actions,
- roles, responsibilities and emergency contacts, and
- consideration of extreme flood events.

2 Available data

The assessment is based on available information and guidelines that are deemed to be applicable for this the project. The following publications were used for planning and assessment.

- Brisbane City Council (BCC) Flood Awareness Mapping and Overlays
- Australian Disaster Resilience Handbooks, including:
 - Managing the Floodplain – A Guide to Best Practice in Flood Risk Management in Australia
 - Evacuation Planning (Australian Institute for Disaster Resilience)
- FloodWise Property Report obtained from Council
- BCC Flood Overlay Code
- Flood Risk Assessment prepared by ACOR Consultants.

3 Existing site

The site is located at 114 and 120 – 122 Montague Road, 8 – 12 Oxford Street, and 39A Boundary Street, South Brisbane, QLD 4101. The total site area is approximately 9,044 m².

The site is wholly situated within the Brisbane City Council Local Government Area (LGA) and falls within the Kurilpa Sustainable Growth Precinct Plan Area 001 (PPA-001: Kurilpa core area). It also falls within the declared Precinct 3: Montague Road Provisional Property Development Area (PPDA).

The north-western boundary of the site fronts Montague Road, while the south-western boundary backs onto Oxford Street.

The site is currently developed and contains several existing warehouse buildings along with associated hardstand areas.

The broader site locality is shown in Figure 1.



Figure 1: Site locality (Nearmap, 2026)

4 Proposed development

The proposed development comprises a residential-led mixed-use tower with centre uses.

The development consists of a 30-storey tower (plus rooftop terrace) with an approximate total building height of 106.600 m AHD. The tower footprint is approximately 1,825 m². Residential uses commence from Level T1 at approximately 22.75 m AHD, providing a high level of flood immunity above applicable flood planning levels. The development will deliver a total of 299 residential units, comprising a mix of apartment configurations.

The building is classified as a Class 2 structure with an anticipated design life of approximately 100 years, requiring consideration of long-term flood risk and future climate conditions.

The population characteristics of the development cannot be defined at this stage; however, as a residential building it is expected to accommodate a diverse demographic, potentially including vulnerable occupants such as children or elderly residents.

The site is not located within a waterway corridor or designated flood storage area and therefore is not expected to result in adverse environmental, social or economic impacts arising from changes in flood behaviour.

Visitation to the development is expected to be largely discretionary, with building access primarily limited to residents and their visitors. While ground-level commercial tenancies (e.g. café nook and retail uses) may attract external visitors, these uses are small-scale, and access to the site can be managed during flood events where required.

This assessment specifically relates to the subject tower as shown in Figure 2.

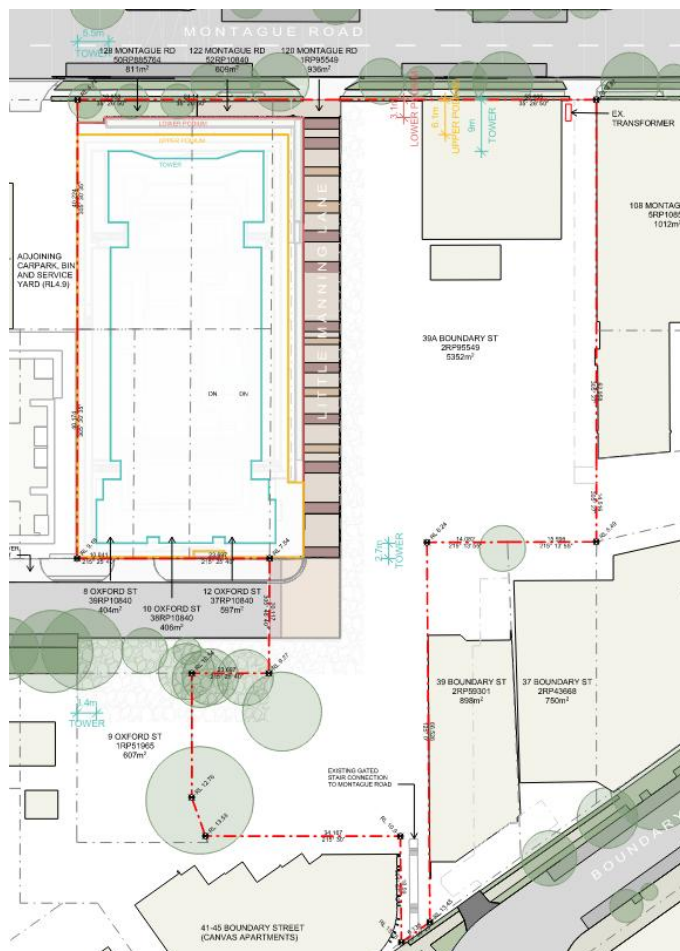


Figure 2: Proposed Site context plan (Archipelago, 2026)

5 Flood Characteristics

5.1 Brisbane River flooding

The primary flooding mechanism affecting the site is Brisbane River (fluvial) flooding, which governs the flood levels applicable to the development. During major flood events, elevated river levels result in backwater effects that inundate low-lying areas of the surrounding floodplain, including the subject site. Refer to Figure 3 the location of the site in the context of Brisbane River flood levels and flood extents.

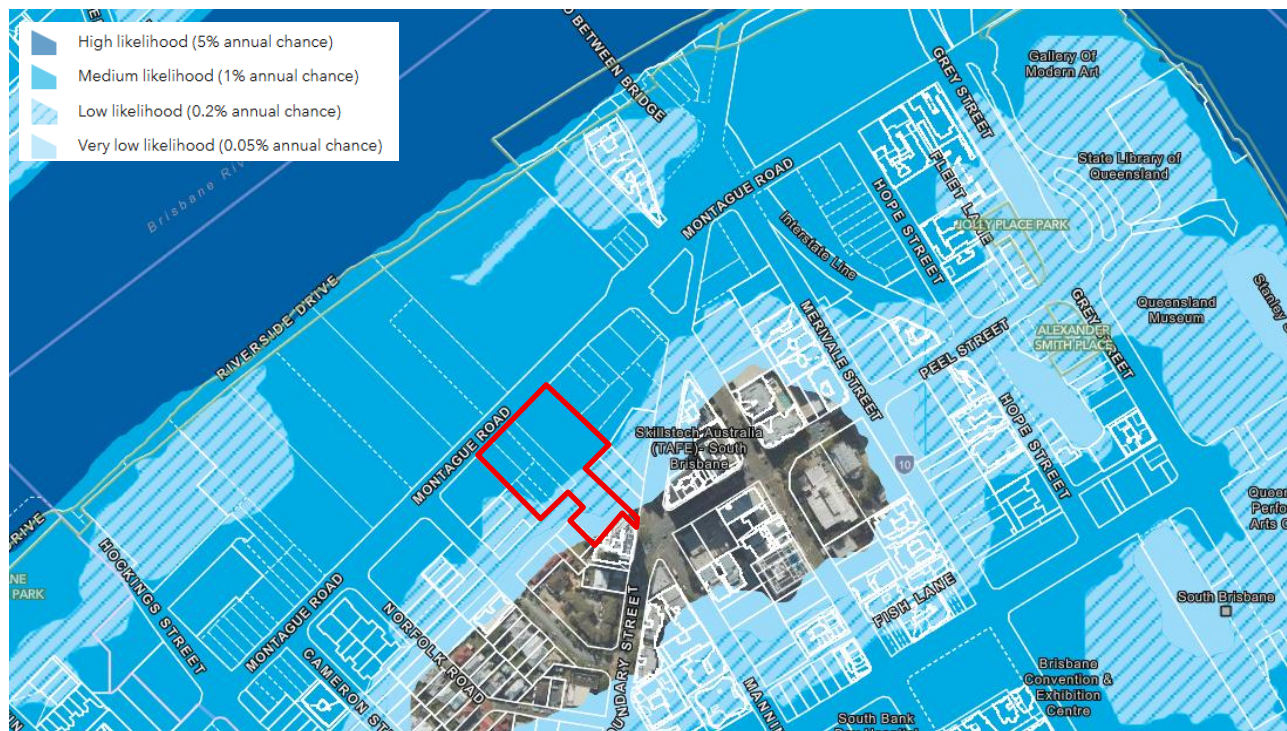


Figure 3: Brisbane City Council flood awareness mapping showing riverine flood extent relative to Site

The following table summarises the applicable flood levels for the subject site that were obtained from the FloodWise Property Report.

Table 2: Flood sources and levels

Description	Flood source	Level	Comment
Existing ground level of subject site	-	4.7 – 13.6 m AHD	Sourced from 2019 digital elevation data.
Defined Flood Level for Site	River (Brisbane River)	5.1 m AHD	Per FloodWise Property Report
Chance of flood in any year (AEP)	Flood source	Level	Comment
20%	-	-	Existing ground level at subject site is not inundated.
5%	-	-	Existing ground level at subject site is not inundated.
2%	-	-	Existing ground level at subject site is not inundated.
Defined Flood Level	River (Brisbane River)	5.1 m AHD	'The DFL is used for commercial and industrial development. The Defined flood level (DFL) for Brisbane River flooding is a level of 3.7 m AHD at the Brisbane City Gauge based on a flow of 6,800 m ³ /s. DFL is only applicable for non-residential uses

Description	Flood source	Level	Comment
			affected by Brisbane River flooding.' Source: FloodWise Property Report.
1%	River (Brisbane River)	6.0 m AHD	1% chance in any year of a river flood inundating the existing ground level at the Site with flood depth up to approximately 1.3 m at the lowest portion of the Site.
0.2%	River (Brisbane River)	9.3 m AHD	0.2% chance in any year of a river flood inundating the existing ground level at the Site with flood depth up to approximately 4.6 m at the lowest portion of the Site. This event is considered to represent an extreme (very low probability) flood scenario in accordance with ARR terminology.
January 2011 flood	River (Brisbane River)	5.3 m AHD	The January 2011 flood inundated the existing ground level at the Site with flood depth of approximately 600 mm.
Residential Flood Level (RFL)	River (Brisbane River)	6.0 m AHD	'This flood level for the Brisbane River equates to the 1% annual exceedance probability (AEP) flood level.' Source: FloodWise Property Report. The minimum habitable floor level is 0.5 m above the RFL.

The flood characteristics for Brisbane River Flood Planning Area FPA2b (applicable for the Site), as described in Council's Flood planning scheme policy, are described below.

Table 3: Flood characteristics for Brisbane River Flood Planning Area FPA2b

Flood characteristic	Description
Flood hazard	DV greater than 1.2 m ² /s for residential flood level (RFL = 6.0 m AHD). RFL sourced from FloodWise Property Report.
Flood Depth	Flood depths in the order of 1.3 m to 2.0 m are anticipated across the site during the 1% AEP event.
Flood warning time	Bureau of Meteorology (BOM, 2018) states the target warning time for Brisbane River flooding to reach minor, moderate or major flood classification is 18 hours for Jindalee (Centenary Bridge) and 24 hours for Brisbane City. The Site is between these two gauges therefore the approximate flood warning time for the Site is between 18 and 24 hours.
Flood duration	The duration of flooding from the Brisbane River that affects the subject site may be at least several days before water recedes.
Extreme floods	The Flood Overlay Code requires consideration of the 0.2% AEP (1 in 500 AEP) flood event for estimating safety. This represents an extreme flood event that has a very low probability of occurrence over the temporary life of the subject site's land use. The subject site is affected by the 0.2% AEP event (river flood), however the river flood characteristics for a 0.2% AEP event such as hazard are not available in Council's documentation.

Refer to the Flood Risk Assessment prepared by ACOR for further details.

5.2 Overland flow flooding

The site is subject to overland flow flooding during high-intensity rainfall events, driven by local catchment runoff, site topography and drainage capacity. Overland flow primarily occurs along Montague Road and the adjacent verge, with minor encroachment into the frontage of the site affecting ground-level areas (See Figure 4).

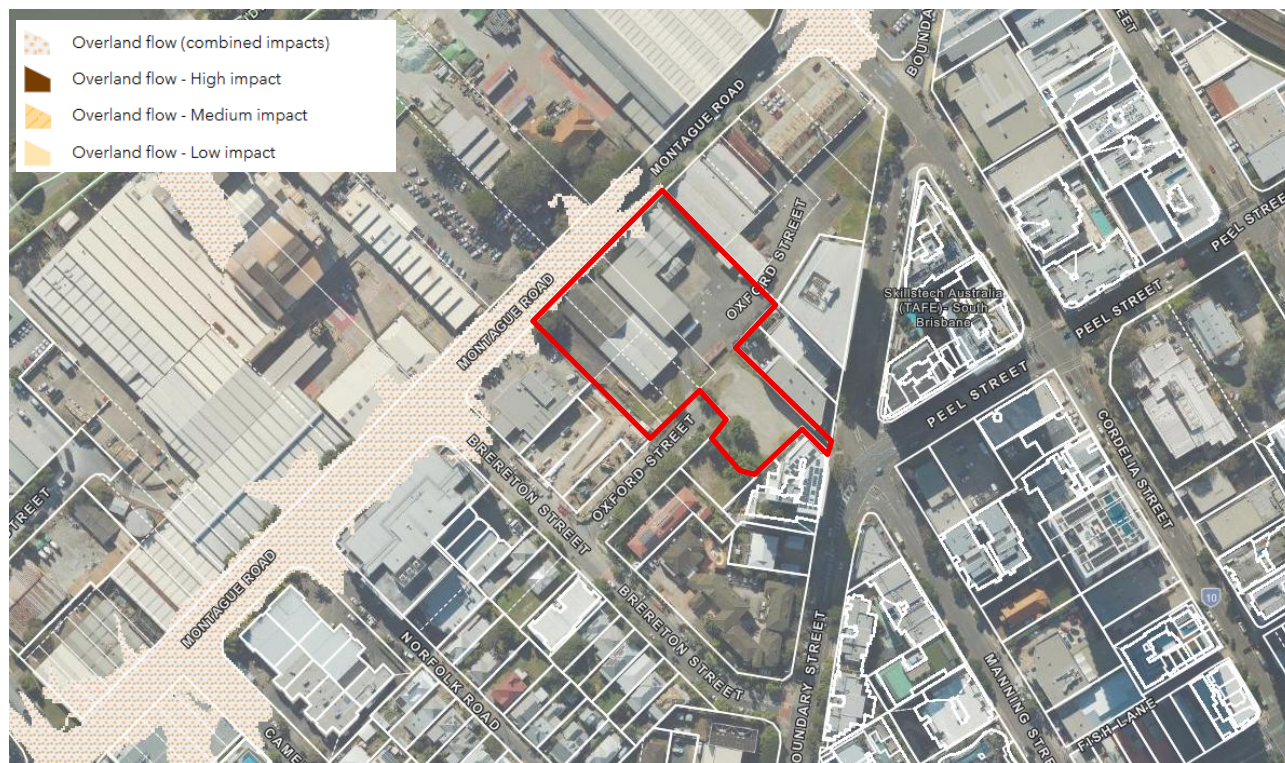


Figure 4: Brisbane City Council flood awareness mapping showing overland flow flood extent relative to Site

Council flood mapping indicates that inundation of the site commences from approximately the 5% AEP event, with shallow to moderate flooding of low-lying areas such as the café nook. Refer to the table below for a summary of peak water levels extracted at the Site.

Table 4: Summary of peak water levels at Site (BCC, 2019)

Flood event	Peak water level (m AHD)
39% AEP	Site not affected
20% AEP	Site not affected
10% AEP	Site not affected
5% AEP	4.71
2% AEP	4.85
1% AEP	4.95
0.2% AEP	5.15

Overland flow impacts are therefore expected to be confined to ground-level, non-habitable areas, and are managed through site grading and drainage design.

6 Flood Emergency Management Plan

6.1 Flood response strategy

6.1.1 Management Roles and Responsibilities

The building management is to nominate a Flood Warden, with an appropriate alternate (stand-in) Flood Warden, responsible for implementing the flood response procedures outlined in this plan. This role may be undertaken by the Facility Manager or an appointed delegate.

The Flood Warden will be responsible for coordinating the site response in the event of a flood warning, including liaison with emergency services, monitoring of flood warnings, and initiation of response actions in accordance with defined triggers.

An off-site building manager will be available to support these functions, with management coverage maintained on a 24/7 basis. They shall oversee the orderly implementation of response measures and ensure coordination with emergency services where required.

6.1.2 General preparation procedures

The Flood Warden and Alternate Flood Warden are to review this FEMP and update with any necessary changes maintaining the State's interest to ultimately reduce the burden on emergency services. Any revisions are to be completed by a suitably qualified professional.

A register of all current employed staff is to be kept on the premises and updated frequently to ensure currency.

The Flood Warden shall ensure that all measures and procedures within this FEMP are adequately resourced and adequately communicated to the staff.

The Flood Warden shall conduct emergency training yearly to ensure the flood risk and FEMP measures and procedures are understood by the staff.

The emergency contact list is to be updated yearly to ensure currency of contact details.

The Flood Warden and Alternate Flood Warden are to ensure that all equipment and resources required to implement the FEMP are available and in working order.

6.2 Overland flow flooding

6.2.1 Triggers to overland flow response

During storm events, the Site Warden is to monitor conditions along Montague Road, with particular focus on rising water levels within the roadway. Activation of the overland flow response is triggered when water encroaches from the roadway onto the footpath and towards the site frontage.

Overland flow can rise rapidly during high-intensity rainfall events, with limited warning time available compared to riverine flooding. As such, response procedures must be initiated promptly once trigger conditions are observed.

Ground-level uses operate primarily during daytime hours, allowing for visual monitoring of conditions and timely implementation of response actions

6.2.2 Overland flow emergency procedure

Once the trigger has occurred, the following should occur:

Procedure 1 – Ground-level activities are to cease immediately. Staff are to secure the café nook, including switching off services where required and relocating vulnerable or loose equipment to elevated positions (e.g. above bench level where practicable). Access to ground-level areas is to be restricted, and occupants are to be directed away from flood-affected areas.

The Flood Warden is to notify all occupants of the developing conditions and instruct building users to remain within the building and avoid external areas while overland flow is present. Communication may be undertaken via building messaging systems, social media group/s for the tower occupants, SMS messaging, email messaging or direct instruction.

Procedure 2 – If water levels continue to rise and begin to enter the site frontage, all persons located at ground level are to be directed to move to upper levels of the building. Residential occupants remain at levels well above flood impact and are not required to evacuate.

Occupants are to remain within the building until water levels recede and Montague Road and the adjacent footpath are clearly visible and safe. Movement outside the building during active overland flow is to be discouraged due to safety risks. Any person choosing to leave during these conditions does so at their own risk.

Overland flow events are typically of short duration, with floodwaters expected to recede within several hours following the end of the storm under normal conditions.

Residents can choose to evacuate via the publicly accessible walkway at the Plaza Level (FFL 10.25 m AHD), which is above the highest overland flow level to Oxford Street.

6.3 Brisbane River flooding

6.3.1 Triggers to Brisbane River flooding response

The Flood Warden and building manager shall register with BCC to receive their Early Warning Alert Service. This service provides alerts sent by Email and SMS.

These alerts are targeted to areas that are predicted to be affected by an event and are based on potentially dangerous weather events such as:

- Hail and severe thunderstorm,
- Destructive winds and cyclones,
- Floods from several different sources including king tide, storm surge and tsunamis.

Recorded telephone advice is also available via phone no 1300 659 219 and over the internet at: http://www.bom.gov.au/qld/flood/brochures/brisbane_lower/brisbane_lower.shtml (Council excludes all responsibility and liability for information contained on the Bureau of Meteorology website or any linked website, and any resulting consequences from using such information).

It is generally agreed that the warning time for a major Brisbane River flood event is 3 days. Subject to receipt of lower Brisbane River flood warnings, the Emergency Procedures set out at Section 6.3.2 shall be adopted.

6.3.2 Brisbane River emergency procedure

Upon receipt of a Brisbane River flood warning, the following staged response procedure is to be implemented:

1. Notification and coordination

The Flood Warden is to assemble with the site management team and notify all occupants of the flood warning. Staff not on site are to be advised and instructed not to return unless access routes are confirmed safe. No person is to travel through floodwaters.

2. Monitoring of conditions

The Flood Warden is to continuously monitor updates from the Bureau of Meteorology, Brisbane City Council and emergency services, including river levels, flood classifications, and road closures. Relevant updates are to be communicated to occupants as required.

3. Pre-event preparation

Given the available warning time, the following actions are to be undertaken in advance of inundation:

- Removal of vehicles from basement levels
- Shutdown and securing of ground-level uses (e.g. café nook)
- Restriction of access to flood-affected areas.

4. Occupant management

Occupants are to be informed of the appropriate response. As residential levels are located well above flood levels, a shelter-in-place approach is appropriate unless otherwise directed by emergency services.

Residents can choose to evacuate via the Plaza Level (FFL 10.25 m AHD), which is above the 0.2% AEP (1 in 500 AEP) Brisbane River flood level to Oxford Street.

5. Access control

As floodwaters rise and surrounding roads become affected, access to and from the site is to be restricted. Movement outside the building is to be avoided during active flooding conditions.

This procedure provides a controlled and staged response, leveraging the available warning time associated with Brisbane River flooding to minimise risks to people and property.

6.4 Forecasts and warnings

This section describes the forecast and warning systems that could apply to the vicinity of the site for the notification of severe weather events that could lead to flooding.

6.4.1 Bureau of Meteorology

Warnings issued by the Bureau of Meteorology are described below:

- Severe Weather Warning - are provided for potentially hazardous or dangerous weather and are issued (in a flooding context) for very heavy rainfall or intense rainfall that may lead to flash flooding.
- Flood Watch - Flood Watch provides early advice of potential riverine flooding to emergency services and communities at risk of flooding. Flood watches are issued (up to four days in advance of large-scale weather systems) when the combination of forecast rainfall and catchment or other hydrological conditions indicate that there is a significant risk of potential flooding.
- Flood Warning - Flood Warnings are issued by the Bureau to advise that flooding is occurring or expected to occur in a geographical area based on defined criteria. Flood Warnings may include either qualitative or quantitative predications or may include a statement about future flooding that is more generalised.

6.4.2 Australian Warning System (AWS)

As of 1 November 2023, Queensland will use the Australian Warning System (AWS) for notification of natural disaster events (including flooding). Every warning has an icon that tells what the hazard is, and the warning level and colour tells what the danger level is.

In the event of a flood that may impact the local area to the site, the following alerts would be used across local council disaster dashboards, websites or social platforms (refer to section 0 for warning and alert services platforms).

Table 5: Australian Warning System (AWS) icons, warning level and description

Icon	Description
	Alert Level – Advice: An incident has started. Stay up to date as the situation changes.
	Alert Level – Watch and Act: There is a heightened level of threat. Conditions are changing and you need to start taking action now.
	Alert Level – Emergency Warning: You may be in danger and need to take action immediately. Any delay now puts life at risk.

6.4.3 Warning and alert services platforms

The following publicly available platforms are used to communicate natural disaster warnings and alerts. The Building Manager should register with the Brisbane City Council Severe Weather Alert Service and utilise other notification services for notification of severe weather systems that could lead to Brisbane River flooding and flooding of the local area.

Table 6: Warning and alert services platforms

Service (Organisation)	Description	Information source
Severe Weather Alert Service Registration Brisbane City Council	Location-based alerts	https://bswa.brisbane.qld.gov.au/
Severe Weather Warnings Flood Watch and Flood Warnings	Bureau of Meteorology	http://www.bom.gov.au/qld/warnings/
BOM Weather App	Available warnings: ▪ Flood ▪ Severe thunderstorm ▪ Severe weather ▪ Tropical cyclone	Android: https://play.google.com/store/apps/details?id=au.gov.bom.metview iPhone: https://apps.apple.com/au/app/bom-weather/id1100096880
Emergency dashboard	Brisbane City Council	https://www.brisbane.qld.gov.au/community-and-safety/community-safety/disasters-and-emergencies/emergency-dashboard
ABC Emergency Incident Map	Provides locations and general details of incidents Australia-wide. Provides general information.	https://www.abc.net.au/emergency/
Radio	ABC	AM 612
Android smartphones	-	Open Settings, search 'Wireless emergency alerts', turn on 'Allow alerts', select 'Extreme threats', 'Severe threats' and 'Test alerts'.
National telephone warning system Emergency Alert	DO NOT BLOCK +61 444 444 444. This number is related to Emergency Alert service. If the caller ID number or message header on your phone displays the number '+61 444 444 444' it is genuine. Emergency Alert is the national telephone warning system used by emergency services to send voice messages to landlines and text messages to mobile phones within a defined area about potential emergencies. i.e. "Floods, fires and other significant events can impact pose significant threat to members of the community in impacted area. Emergency Alert allows telephony notifications to be distributed to these areas, through both mobile and land line services, to provide warning of these events. Subscription to this service is not required.	https://www.emergencyalert.gov.au/home

6.5 Consideration of extreme flood events

The most extreme flood event considered for the purposes of this assessment is the 0.2% AEP (1 in 500 year) Brisbane River flood event, with an indicative flood level of approximately 9.3 m AHD.

The proposed development significantly exceeds the minimum flood planning levels. The minimum habitable floor level of 6.5 m AHD (Category A) is exceeded by the residential levels, which commence from Level 4 (approximately 22.75 m AHD). This provides a clearance of approximately 16.25 m above the planning level and 13.25 m above the 0.2% AEP flood level.

Based on this substantial level of flood immunity, no direct impacts to residential areas are anticipated under extreme flood conditions. Accordingly, a shelter-in-place strategy remains appropriate, with occupants able to safely remain within the building during both defined and extreme flood events.

Residents can choose to evacuate via the Plaza Level (FFL 10.25 m AHD), which is above the 0.2% AEP (1 in 500 AEP) Brisbane River flood level to Oxford Street.

6.6 Emergency Kit and First Aid

Emergency preparedness for the development is to be managed at both a building-wide level and an individual resident level.

At management level, admin is to ensure that basic first aid provisions are available within common areas, and that nominated personnel (e.g. building manager or First Aid Officer) maintain appropriate training and supplies in accordance with regulatory requirements. These provisions are to be regularly inspected and restocked as needed.

At an individual level, residents are encouraged to maintain their own personal emergency kits within their apartments. Kits should be readily accessible and prepared in accordance with Queensland Government guidance (e.g. Get Ready Queensland), and include as a minimum:

- Drinking water and non-perishable food
- Battery-powered or hand-crank radio
- Torch and spare batteries
- Personal hygiene items
- Copies of important documents
- Essential medications and basic supplies.

Residents should also consider any personal medical requirements and ensure necessary medications and contact information are readily available during a flood event.

This approach ensures that occupants are self-sufficient during shelter-in-place scenarios, while building management maintains appropriate oversight of shared facilities and emergency response capability.

Conclusion

This Flood Emergency Management Plan (FEMP) has been prepared to support the development application and associated Flood Risk Assessment.

Based on available data, the site is affected by both Brisbane River flooding and overland flow. Overland flow is primarily associated with the Montague Road frontage, with additional localised inflows from higher ground toward Oxford Street. Brisbane River flooding extends from the Montague Road frontage into portions of the site. Further detail on flood characteristics is provided in the Flood Risk Assessment prepared by ACOR.

Flood risks are to be managed through the implementation of the emergency procedures outlined in Section 6, supported by appropriate design and operational measures.

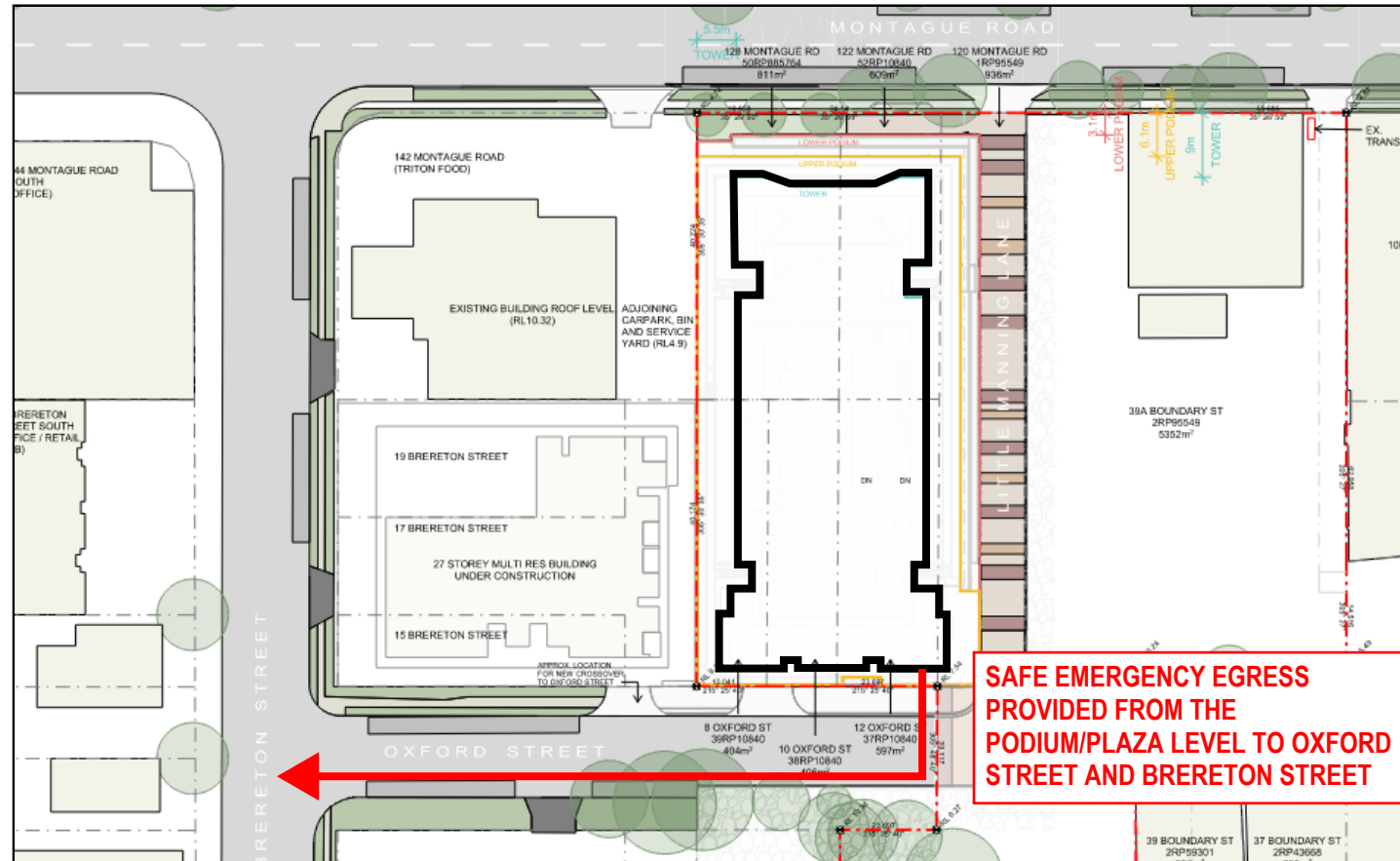
All residential (habitable) levels are located well above the 0.2% AEP Brisbane River flood level, and as such, a shelter-in-place strategy is appropriate, with no requirement for evacuation during flood events. Residents can choose to evacuate via the Plaza Level (FFL 10.25 m AHD), which is above the 0.2% AEP (1 in 500 AEP) Brisbane River flood level to Oxford Street.

Based on the measures outlined in this FEMP, it is considered that risks to people and property can be effectively managed for the proposed development.

Appendix A Flood Emergency Management Plan

FLOOD EMERGENCY MANAGEMENT PLAN

108 MONTAGUE ROAD, SOUTH BRISBANE QLD 4101



SAFE EMERGENCY EGRESS PROVIDED FROM THE PODIUM/PLAZA LEVEL TO OXFORD STREET AND BRERETON STREET

ACCESSING QLD WARNINGS

SOURCE	ACTION	QR CODE / LINK
QLD State Emergency Service	Access official flood warnings, safety advice, and emergency updates. Use this site to check current alerts and instructions from QLD SES.	https://www.ses.qld.gov.au/
Bureau of Meteorology	Check for weather forecasts and warnings	http://www.bom.gov.au/
SES Assistance QLD App	Set up a watch zone to receive notifications on changing conditions	
Bureau of Meteorology Weather App	Download the BOM Weather app for access to hourly and 7 day forecasts, radar and warnings - wherever you are.	

STATE EMERGENCY SERVICE (SES QLD) and AUSTRALIAN WARNING SYSTEM (AWS)



Advice

An incident has started. Stay up to date as the situation changes.



ACTION STATEMENTS

Stay informed
Monitor conditions
Reduced threat: return with caution



Watch and Act

Conditions are changing and you need to start taking action now to protect you and your family.



ACTION STATEMENTS

Do not enter floodwater
Prepare to evacuate
Prepare to isolate
Avoid the area



Emergency Warning

You may be in danger and need to take action immediately.



ACTION STATEMENTS

Evacuate now / Evacuate before [time]
Shelter now
Move to higher ground

NATURE OF FLOODING		
SOURCE	OVERLAND FLOW	BRISBANE RIVER
CAUSE	Generated by intense, short-duration local storm events and limited drainage capacity.	Prolonged regional rainfall, upstream catchment inflows and potential dam releases, often combined with backwater effects from tributary systems.
WARNING TIME	Very limited (~6 hours)	Generally 3 days
HAZARD	Shallow, fast-moving ponding and sheet flow at the Montague Road frontage, with potential for rapid onset	Deeper, slow-moving but persistent inundation affecting lower levels, with extended duration and potential isolation of ground-floor areas.
KEY RISK	Inundation of ground floor areas (café nook, lobby) and basement levels; residential levels unaffected and remain flood-free	

TRIGGERS AND ACTIONS		
SOURCE	OVERLAND FLOW	BRISBANE RIVER
TRIGGER	Water overtopping kerb and entering Montague Rd footpath / site frontage	BoM / Council major river flood warning issued
KEY ACTIONS	Cease ground-floor operations; relocate equipment above bench level; restrict access to lower levels; direct occupants upstairs	Implement staged response; remove vehicles from basement; secure ground floor areas; restrict access to flood-prone areas
FLOOD RESPONSE STRATEGY	Keep occupants indoors; move ground-floor occupants to upper levels	Shelter-in-place (residential levels above flood levels); follow Warden instructions
ACCESS CONTROL	Avoid entry to flooded areas; do not exit during active flow	Restrict site access as roads flood; avoid travel through floodwater

ORGANISATION	CONTACT PHONE	ASSISTANCE PROVIDED
SES QLD	132 500	Emergency assistance during floods
Police / Ambulance / Fire	000	Life-threatening emergencies
Energex (Outages)	13 62 62	Report power outages
Energex (Live wires)	13 19 62	Report fallen powerlines / electric shocks
Brisbane City Council	Online	Emergency dashboard for alerts, road closures and updates: https://www.brisbane.qld.gov.au/community-support-and-safety/natural-disasters-and-emergencies/emergency-dashboard
West End Police	07 3840 9100	General enquiries (non-emergency)
South Bank Police	07 3020 8377	General enquiries (non-emergency)