

Engineering Services Report

Proposed Multi-Residential Development

1-3 Folkestone Street, Bowen Hills

For: Rothschild Kingsbridge

28 July 2021

Ref: B21-110



A QUALITY ASSURED COMPANY

CERTIFIED QUALITY ASSURANCE – ISO AS/NZS 9001, 4801 & 14001

▼
SUNSHINE COAST
Suite 2, Norval Corporate Centre
13 Norval Court
Maroochydore QLD 4558

P: 0431 803 337 F: 07 5646 5857

PO Box 2016
Fortitude Valley BC, QLD 4006

E: sunshinecoast@westerapartners.com.au

▼
BRISBANE
Level 2, 33 Longland Street
Newstead QLD 4006

P: 07 3852 4333 F: 07 5646 5857

PO Box 2016
Fortitude Valley BC, QLD 4006

E: brisbane@westerapartners.com.au

▼
GOLD COAST
Level 3, 17 Welch Street
Southport QLD 4215

P: 07 5571 1599 F: 07 5646 5857

PO Box 6138
Southport Mail Centre 9726

E: goldcoast@westerapartners.com.au

▼
NORTHERN NSW
11 Sailfish Way
Kingscliff NSW 2487

P: 02 6674 8047 F: 07 5646 5857

PO Box 1131
Kingscliff NSW 2487

E: nsw@westerapartners.com.au

DOCUMENT INFORMATION

Project Name: Proposed Multi-Residential Development at 1-2 Folkestone Street, Bowen Hills

Westera Partners Ref: B21-110

Westera Partners Contact:

James Crabb

Phone: (07) 3852 4333

Email: jamesc@westerapartners.com.au

Certified for Issue by:

Samuel Ide

RPEQ 12231

28 July 2021

Document Control:

Revision	Author	Approved for Issue	Date
DRAFT	J. Crabb	S.Ide RPEQ 12231	09.07.2021
A	J. Crabb	S.Ide RPEQ 12231	28.07.2021

This report has been prepared for Rothschild Kingsbridge for the purpose of accompanying a development application to Brisbane City Council. This report must only be used by Rothschild Kingsbridge for this purpose and must not be used or relied upon by any other person for any other purpose.

The assessment, conclusions or recommendations in this report are based on conditions encountered and information received at the time of preparing the report and may not be relied upon as site conditions or operations vary over time.

CONTENTS

1	INTRODUCTION	1
2	SITE DESCRIPTION	1
2.1	Location and Land Use.....	1
3	STORMWATER DISCHARGE	2
4	SEWER RETICULATION	2
5	WATER RETICULATION	2
6	FLOODING	3
7	EARTHWORKS.....	3
8	GAS, ELECTRICITY & COMMUNICATIONS.....	3
9	CONCLUSION.....	4
10	APPENDICES	A-1
	Appendix A – Stormwater Code.....	A-1
	Appendix B – Infrastructure Design Code.....	B-1
	Appendix C – Filling and Excavation Code.....	C-1
	Appendix D – BCC Flood Wise Property Report	D-1
	Appendix E – BCC eBimap Information	E-1
	Appendix F – Dial Before You Dig Information	F-1
	Appendix G – Engineering Drawings	G-1
	Appendix H – Site Survey and Architectural Plans	H-1

List Of Figures

Figure 1 – Indicative Site Location (Nearmap, 2021)	1
Figure 2 – River Flooding Overlay; BCC CityPlan 2014	3

1 INTRODUCTION

Westera Partners Pty Ltd has been commissioned by Rothschild Kingsbridge to prepare an Engineering Services Report to accompany a development application for a proposed multi-residential development.

The development involves the construction of a new multi-residential residential development, including ground floor commercial tenancy and associated infrastructure. Driveway access shall be provided via a standard commercial driveway crossover from Folkestone Street.

This report documents how the site will be serviced by the necessary infrastructure in accordance with Brisbane City Council's (BCC's) requirements.

2 SITE DESCRIPTION

2.1 Location and Land Use

The proposed development site is located at 1-3 Folkestone Street, Bowen Hills; formally known as Lots 3-4 on RP10094.

The proposed development area is approximately 728m² and is currently occupied by two detached dwellings. The site currently falls north towards Folkestone Street and the adjoining property at an average grade of approximately 11%. The site is bound by residential dwellings to the south, east and west, and Folkestone Street to the north. Refer to Figure 1 for an indicative site location and Appendix C for detailed site survey information.



Figure 1 – Indicative Site Location (Nearmap, 2021)

3 STORMWATER DISCHARGE

Stormwater drainage for the proposed development shall ensure no adverse impact to upstream, downstream or adjoining properties.

Stormwater runoff from the existing dwellings appears to discharge to ground level where it falls north to Folkestone Street as overland flow. The proposed lawful point of discharge for the development shall be the existing gully pit in Folkestone Street. Stormwater runoff from the roof and ground areas of the development site shall be collected on site and directed here via the construction of new on site drainage. Refer to separate Stormwater Management Report and Appendix G for further information.

According to Brisbane City Council's Stormwater Code (see Appendix A) the site is classified as a 'low risk' development. The development is not required to meet the Queensland Governments State Planning Policy (July 2017) as the site does not exceed the 2,500m² minimum site area. However stormwater quality management must still be undertaken via the application of best management practices (BMPs) to ensure no adverse impacts to the downstream environment.

Refer to detailed Stormwater Report prepared by Westera Partners Pty Ltd and engineering drawings in Appendix G for further information on proposed stormwater works for the development. All stormwater works shall be in accordance with Brisbane City Council's Stormwater Code (see Appendix A) and the Infrastructure Design Code (see Appendix B).

4 SEWER RETICULATION

The existing dwellings are currently serviced by two 100mm property connections (PC263164 & PC263165) that connect to the existing 150mm sewer (LS150305) in Folkestone Street. As part of the sewer works it is proposed to provide a new DN160PE sewer property connection for the development. The property connection shall connect to the existing maintenance hole in Folkestone Street (MH149297). The existing 100mm sewer property connections shall be sealed at the main. Refer to Appendix G for further information.

All sewer reticulation works shall be in accordance with Brisbane City Council's Infrastructure Design Code (see Appendix B), QUU standards and specifications and the SEQ Water and Sewerage Code.

A separate water and sewer connection application shall be lodged to QUU for water and sewer connection approval.

5 WATER RETICULATION

The existing dwellings are currently serviced by two existing services connected to the existing 150mm main (RS198380) located on the opposite side of Folkestone Street.

As part of the works for the development the existing water services shall be sealed at the main and a new water service shall be constructed to service the development. The size of the required connection shall be designed for the hydraulic demand of the development and be subject to QUU approval.

Upgrades to the existing infrastructure may be required at the advice of QUU.

All water reticulation works shall be in accordance with Brisbane City Council's Infrastructure Design Code (see Appendix B), QUU standards and specifications and the SEQ Water and Sewerage Code.

6 FLOODING

The Brisbane City Council (BCC) generated *FloodWise Property Report* (refer Appendix D) notes that the site is not impacted by any River, Creek/Waterway, or Overland Flow Flood Planning Areas, and notes there is no applicable minimum habitable flood level for the property. Refer to Figure 2 for an extract from the BCC City Plan 2014 mapping for extent of the River Flooding overlay.



Figure 2 – River Flooding Overlay; BCC CityPlan 2014

However, the current *FloodWise Property Report* also notes river flood may occur, and includes a level of 2.7 mAHd for the January 2011 flood event. Earlier revisions of the *FloodWise Property Report* noted a minimum habitable floor level of 3.2 mAHd which appears to have been based on the January 2011 event. The proposed ground floor level is 4.70 mAHd, which is well above the minimum habitable floor level included in earlier revision of the report and is therefore considered acceptable.

7 EARTHWORKS

The proposed development will involve earthworks over the majority of the site to construct the proposed basement carpark (Refer Appendix H for further information).

The site is identified as having the potential for acid sulphate soils on Councils potential and actual acid sulphate soils mapping. If required, an acid sulphate soils investigation can be commissioned as part of detailed design.

All earthworks on site shall be in accordance with BCC's Filling and Excavation Code (see Appendix C).

8 GAS, ELECTRICITY & COMMUNICATIONS

There is an existing gas main in Folkestone Street.

Telstra services are available within Folkestone Street.

There is above ground and underground electrical infrastructure within Folkestone Street.

Refer to Appendix E & F for further information.

9 CONCLUSION

This engineering services report establishes that the proposed development can be adequately serviced by the sewer, stormwater, water and other services infrastructure surrounding the site.

The proposed lawful point of discharge the development shall be the existing gully pit in Folkestone Street. Stormwater runoff shall be directed here via new the construction of new on site drainage. Stormwater detention is not considered to be required and stormwater treatment is proposed to be managed on site by best management practices.

It is proposed to construct a new 160mm property connection from the existing maintenance structure in Folkestone Street to service the development. The existing 100mm property connections servicing the existing dwellings shall be sealed at the main.

A new water service will be required from the existing water main in Folkestone Street and the existing services shall be sealed at the main.

Excavation is required across the majority of the development site. An acid sulphate soils investigation can be undertaken as part of detailed design.

Final details regarding sewer, stormwater, water and other services can be addressed during the detailed design stage.

10 APPENDICES**Appendix A – Stormwater Code**

Stormwater Code

Stormwater Code

Performance Outcomes		Acceptable Outcomes	Proposal
Section A—If for a material change of use, reconfiguring a lot, operational work or building work Note—Compliance with the performance outcomes and acceptable outcomes in this section should be demonstrated by the submission of a site-based stormwater management plan for high risk development only.			
PO1 Development provides a stormwater management system which achieves the integrated management of stormwater to: (a) minimise flooding; (b) protect environmental values of receiving waters; (c) maximise the use of water sensitive urban design; (d) minimise safety risk to all persons; (e) maximise the use of natural waterway corridors and natural channel design principles.		AO1 Development provides a stormwater management system designed in compliance with the Infrastructure design planning scheme policy.	The proposal complies. See separate SWMP by Westera Partners Pty Ltd for details.
PO2 Development ensures that the stormwater management system and site work does not adversely impact flooding or drainage characteristics of premises which are up slope, down slope or adjacent to the site.	AO2.1 Development does not result in an increase in flood level or flood hazard on up slope, down slope or adjacent premises.		The proposal is considered to comply. See separate SWMP by Westera Partners Pty Ltd for details.
	AO2.2 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.		The proposal stormwater management system complies. See separate SWMP by Westera Partners Pty Ltd for details.
PO3 Development ensures that the stormwater management system does not direct stormwater run-off through existing or	AO3.1 Development ensures that the location of the stormwater drainage system is contained within a road reserve, drainage		The location of stormwater drainage complies. See separate SWMP by Westera Partners Pty Ltd for details.

Stormwater Code

Performance Outcomes		Acceptable Outcomes	Proposal
PO4 Development provides a stormwater management system which has sufficient capacity to safely convey run-off taking into account increased run-off from impervious surfaces and flooding in local catchments.	proposed lots and property where it is likely to adversely affect the safety of, or cause nuisance to properties.	reserve, public pathway, park or waterway corridor. AO3.2 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy. AO3.3 Development obtains a lawful point of discharge in compliance with the standards in the Infrastructure design planning scheme policy. AO3.4 Where on private land, all underground stormwater infrastructure is secured by a drainage easement.	The proposal complies. See separate SWMP by Westera Partners Pty Ltd for details. The proposed lawful point of discharge complies. See separate SWMP by Westera Partners Pty Ltd for details. Not applicable. No stormwater drainage easements required.
	Development provides a stormwater management system which has sufficient capacity to safely convey run-off taking into account increased run-off from impervious surfaces and flooding in local catchments.	AO4.1 Development provides a stormwater conveyance system which is designed to safely convey flows in compliance with the standards in the Infrastructure design planning scheme policy. AO4.2 Development provides sufficient area to convey run-off which will comply with the standards in the Infrastructure design planning scheme policy.	The proposed stormwater conveyance system will safely convey flows in accordance with the Infrastructure Design Planning Scheme Policy. See separate SWMP by Westera Partners Pty Ltd for details. The proposal complies. See separate SWMP by Westera Partners Pty Ltd for details.
		AO5 Development ensures the design of stormwater channels, creek modifications or other infrastructure, permits terrestrial and aquatic fauna movement.	No modifications to creeks proposed.
	PO6 Development ensures that location and design of stormwater detention and water	AO6.1 Development locates stormwater detention and water quality treatment:	The proposed stormwater detention system complies. See separate SWMP by Westera Partners Pty Ltd for details.

Stormwater Code

Performance Outcomes		Acceptable Outcomes	Proposal
PO7 Development is designed, including any car parking areas and channel works to: (a) reduce property damage; (b) provide safe access to the site during the defined flood event.	quality treatment: (a) minimises risk to people and property; (b) provides for safe access and maintenance; (c) minimises ecological impacts to creeks and waterways.	(a) outside of a waterway corridor; (b) offline to any catchment not contained within the development. AO6.2 Development providing for stormwater detention and water quality treatment devices are designed in compliance with the standards in the Infrastructure design planning scheme policy.	Stormwater detention is not considered to be required. See separate SWMP by Westera Partners Pty Ltd for details.
		AO7.1 Development (including any ancillary structures and car parking areas) is located above minimum flood immunity levels in Table 9.4.9.3.B, Table 9.4.9.3.C, Table 9.4.9.3.D, Table 9.4.9.3.E and Table 9.4.9.3.F. Note—Compliance with this acceptable outcome can be demonstrated by the submission of a hydraulic and hydrology report identifying flood levels and development design levels (as part of a site-based stormwater management plan).	The development complies. See separate SWMP by Westera Partners Pty Ltd for details.
		AO7.2 Development including the road network provides a stormwater management system that provides safe pedestrian and vehicle access in accordance with the standards in the Infrastructure design planning scheme policy.	Development does not involve stormwater management within the road network.
PO8 Development designs stormwater channels, creek modification works and the drainage network to protect and enhance the environmental values of the waterway corridor or drainage path.		AO8.1 Development ensures natural waterway corridors and drainage paths are retained.	Development does not impact any water corridors.
		AO8.2 Development provides the required hydraulic conveyance of the drainage channel and floodway, while maximising its	No modifications to existing drainage channels or floodways.

Performance Outcomes		Acceptable Outcomes	Proposal
		potential to maximise environmental benefits and minimise scour. Editor's note—Guidance on natural channel design principles can be found in the Council's publication Natural channel design guidelines.	
		AO8.3 Development provides stormwater outlets into waterways, creeks, wetlands and overland flow paths with energy dissipation to minimise scour in compliance with the standards in the Infrastructure design planning scheme policy.	No stormwater outlets proposed into waterways, creeks, wetlands or overland flow paths.
		AO8.4 Development ensures that the design of modifications to the existing design of new stormwater channels, creeks and major drains is in compliance with the standards in the Infrastructure design planning scheme policy.	No modifications proposed to existing stormwater channels, creeks, or major drains.
	PO9 Development is designed to manage run-off and peak flows by minimising large areas of impervious material and maximising opportunities for capture and re-use.	AO9 No acceptable outcome is prescribed.	See separate SWMP by Westera Partners Pty Ltd for details.
PO10 Development ensures that there is sufficient site area to accommodate an effective stormwater management system. Note—Compliance with the performance outcome should be demonstrated by the submission of a site-based stormwater management plan for high-risk development only.		AO10 No acceptable outcome is prescribed.	Effective stormwater management system is proposed. See separate SWMP by Westera Partners Pty Ltd for details.

Stormwater Code

Performance Outcomes		Acceptable Outcomes	Proposal
PO11 Development provides for the orderly development of stormwater infrastructure within a catchment, having regard to the: (a) existing capacity of stormwater infrastructure within and external to the site, and any planned stormwater infrastructure upgrades; (b) safe management of stormwater discharge from existing and future up-slope development; (c) implication for adjacent and down-slope development.	AO11.1 Development with up-slope external catchment areas provides a drainage connection sized for ultimate catchment conditions that is directed to a lawful point of discharge. AO11.2 Development ensures that existing stormwater infrastructure that is undersized is upgraded in compliance with the Priority Infrastructure plan and the standards in the Infrastructure design planning scheme policy.	Not applicable.	
PO12 Development provides stormwater infrastructure which: (a) remains fit for purpose for the life of the development and maintains full functionality in the design flood event; (b) can be safely accessed and maintained cost effectively; (c) ensures no structural damage to existing stormwater infrastructure.	AO12.1 The stormwater management system is designed in compliance with the Infrastructure design planning scheme policy. AO12.2 Development provides a clear area with a minimum of 2m radius from the centre of an existing manhole cover and with a minimum height clearance of 2.5m.	The proposal complies. See separate SWMP by Westera Partners Pty Ltd for details.	
PO13 Development ensures that all reasonable and practicable measures are taken to manage the impacts of erosion, turbidity and sedimentation, both within and external to the development site from construction activities, including vegetation clearing, earthworks, civil construction, installation of services, rehabilitation, revegetation and landscaping to protect: (a) the environmental values and water quality objectives of waters; (b) waterway hydrology;	AO13 No acceptable outcome is prescribed.	The proposal complies. See separate SWMP by Westera Partners Pty Ltd for details.	
		As the site scored a medium risk level in the BCC erosion hazard assessment an erosion and sediment control plan will be developed and implemented to ensure that the impacts of erosion, turbidity and sedimentation, both within and external to the development site from construction activities, including vegetation clearing, earthworks, civil construction, installation of services, rehabilitation, revegetation and landscaping will be managed appropriately.	
		See separate SWMP by Westera Partners Pty Ltd for details.	

Performance Outcomes		Acceptable Outcomes	Proposal
(c) the maintenance and serviceability of stormwater infrastructure.			
Note—The Infrastructure design planning scheme policy outlines the appropriate measures to be taken into account to achieve the performance outcome. PO14 Development ensures that: (a) unnecessary disturbance to soil, waterways or drainage channels is avoided; (b) all soil surfaces remain effectively stabilised against erosion in the short and long term. PO15 Development does not increase: (a) the concentration of total suspended solids or other contaminants in stormwater flows during site construction; (b) run-off which causes erosion either on site or off site.		AO14 No acceptable outcome is prescribed. AO15 No acceptable outcome is prescribed.	As the site scored a medium risk level in the BCC erosion hazard assessment an erosion and sediment control plan will be developed and implemented to ensure compliance. See separate SWMP by Westera Partners Pty Ltd for details. As the site scored a medium risk level in the BCC erosion hazard assessment an erosion and sediment control plan will be developed and implemented to ensure compliance. The proposal complies. See separate SWMP by Westera Partners Pty Ltd for details.
Section B—Additional criteria which apply to high-risk development, being one or more of the following: (a) a material change of use for an urban purpose which involves greater than 2,500m² of land that: (i) will result in an impervious area greater than 25% of the net developable area; or (ii) will result in 6 or more dwellings. (b) reconfiguring a lot for an urban purpose that involves greater than 2,500m² of land and will result in 6 or more lots; (c) operational work for an urban purpose which involves disturbing greater than 2,500m² of land.			
PO16 Development ensures that the entry and transport of contaminants into stormwater is avoided or minimised to protect receiving water environmental values. Note—Prescribed water contaminants are defined in the <i>Environmental Protection Act 1994</i>.		AO16 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	The proposal complies.

Stormwater Code

Performance Outcomes		Acceptable Outcomes	Proposal
Note—Compliance with the performance outcome should be demonstrated by the submission of a site-based stormwater management plan for high-risk development only. PO17 Development ensures that: (a) the discharge of wastewater to a waterway or external to the site is avoided; or (b) if the discharge cannot practicably be avoided, the development minimises wastewater discharge through re-use, recycling, recovery and treatment. Note—The preparation of a wastewater management plan can assist in demonstrating achievement of this performance outcome. Editor's note—This code does not deal with sewerage which is the subject of the Wastewater code.		AO17 No acceptable outcome is prescribed.	The proposal complies.

Appendix B – Infrastructure Design Code

Infrastructure Design Code

Performance Outcomes		Acceptable Outcomes	Response
PO1 Development provides roads, pavement, edging and landscaping which: (a) are designed and constructed in accordance with the road hierarchy; (b) provide for safe travel for pedestrians, cyclists and vehicles; (c) provide access to properties for all modes; (d) provide utilities; (e) provide high levels of aesthetics and amenity, improved liveability and future growth; (f) provide for the amelioration of noise and other pollution; (g) provide a high-quality streetscape; (h) provide a low-maintenance asset with a minimal whole-of-life cost. Note—This can be demonstrated in an engineering report prepared and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.		AO1 Development provides roads and associated pavement, edging and landscaping which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	The proposal complies. Existing sealed road & kerb and channel is evident along site frontage. Any additional works can be conditioned.
		AO2 Development provides road pavement surfaces which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	The proposal complies. Existing sealed road & kerb and channel is evident along site frontage. Any additional works or alterations can be conditioned.

Infrastructure Design Code

Performance Outcomes		Acceptable Outcomes	Response
all-weather access; (d) allows for reasonable travel comfort.			
PO3 Development provides a pavement edge which is designed and constructed to: (a) control vehicle movements by delineating the carriageway for all users; (b) provide for people with disabilities by allowing safe passage of wheelchairs and other mobility aids.		AO3 Development provides pavement edges which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	The proposal complies. Any additional works or alterations can be conditioned.
PO4 Development provides verges which are designed and constructed to: (a) provide safe access for pedestrians clear of obstructions and access areas for vehicles onto properties; (b) provide a sufficient area for public utility services; (c) be maintainable by the Council.		AO4 Development provides verges which are designed and constructed in compliance with the road corridor design and streetscape locality advice standards in the Infrastructure design planning scheme policy.	The proposal complies. Existing verge profile to be maintained where adequate. Standard verge profile to be provided as required.
PO5 Development provides a lane or laneway identified in a neighbourhood plan which: (a) allows equitable access for all modes; (b) is safe and secure; (c) has 24-hour access; (d) is a low-speed shared zone environment; (e) has a high-quality streetscape.		AO5 Development provides a lane or laneway identified in a neighbourhood plan which is embellished in compliance with the streetscape locality advice standards in the Infrastructure design planning scheme policy.	No laneway construction proposed.
PO6 Development of an existing premises provides at the frontage to the site, if not already provided, the following infrastructure to an appropriate urban standard: (a) an effective, high-quality paved roadway; (b) an effective, high-quality roadway kerb		AO6 Development of an existing premises provides at the frontage of the site, if not already existing, the following infrastructure to the standard that would have applied if the development involved new premises as stated in the road corridor design standards in the Infrastructure design planning scheme policy: (a) concrete kerb and channel;	Not applicable, works are for a new development.

Infrastructure Design Code

Performance Outcomes		Acceptable Outcomes	Response
and channel; (c) safe, high-quality vehicle crossings over channels and verges; (d) safe, accessible, high-quality verges compatible and integrated with the surrounding environment; (e) safe vehicle access to the site that enables ingress and egress in a forward gear; (f) provision of and required alterations to public utilities; (g) effective drainage; (h) appropriate conduits to facilitate the provision of required street-lighting systems and traffic signals.		(b) forming and grading to verges; (c) crossings over channels and verges; (d) a constructed bikeway; (e) a constructed verge or reconstruction of any damaged verge; (f) construction of the carriageway; (g) payment of costs for required alterations to public utility mains, services or installations; (h) construction of and required alterations to public utility mains, services or installations; (i) drainage works; (j) installation of electrical conduits.	
PO7 Development provides both cycle and walking routes which: (a) are located, designed and constructed to their network classification (where applicable); (b) provide safe and attractive travel routes for pedestrians and cyclists for commuter and recreational purposes; (c) provide safe and comfortable access to properties for pedestrians and cyclists; (d) incorporate water sensitive urban design into stormwater drainage; (e) provide for utilities; (f) provide for a high level of aesthetics and amenity, improved liveability and future growth; (g) are a low-maintenance asset with a minimal whole-of-life cost; (h) minimise the clearing of significant native vegetation.		AO7 Development provides cycle and walking routes which are located, designed and constructed in compliance with the road corridor design and off-road pathway design standards in the Infrastructure design planning scheme policy.	Works can be conditioned.

Performance Outcomes		Acceptable Outcomes	Response
Note—This can be demonstrated in an engineering report prepared and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.			
PO8 Development provides refuse and recycling collection, separation and storage facilities that are located and managed so that adverse impacts on building occupants, neighbouring properties and the public realm are minimised.	AO8.1 Development provides refuse and recycling collection and storage facilities in accordance with the Refuse planning scheme policy.	Development complies	
	AO8.2 Development ensures that refuse and recycling collection and storage location and design do not have any adverse impact including odour, noise or visual impacts on the amenity of land uses within or adjoining the development.	Development complies.	
	Note—Refer to the Refuse planning scheme policy for further guidance.		
PO9 Development ensures that: (a) land used for an urban purpose is serviced adequately with regard to water supply and waste disposal; (b) the water supply meets the stated standard of service for the intended use and fire-fighting purposes.	AO9.1 Development ensures that the reticulated water and sewerage distribution system for all services is in place before the first use is commenced.	Development will be provided with reticulated water and sewer connections. See Engineering Services Report by Westera Partners Pty Ltd for details.	
	AO9.2 Development provides the lot with reticulated water supply and sewerage to a standard acceptable to the distributor–retailer.	Development will be provided with reticulated water and sewer connections. See Engineering Services Report by Westera Partners Pty Ltd for details.	
	PO10 Development provides public utilities and street lighting which are the best current or alternative technology and facilitate accessibility, easy maintenance, minimal whole-of-life costs, and minimal adverse environmental impacts.	AO10.1 Development provides public utilities and street lighting which are located and aligned to: (a) avoid significant native vegetation and areas identified within the Biodiversity areas overlay map; (b) minimise earthworks; (c) avoid crossing waterways, waterway corridors and wetlands or if a crossing is	Any additional works can be conditioned.

Performance Outcomes		Acceptable Outcomes	Response
		unavoidable, tunnel-boring techniques are used to minimise disturbance, and a disturbed area is reinstated and restored on completion of the work. Note—Guidance on the restoration of habitat is included in the Biodiversity areas planning scheme policy.	
		AO10.2 Development provides compatible public utility services and street-lighting services which are co-located in common trenching for underground services.	Any additional works can be conditioned.
		AO10.3 Development provides public utilities and street lighting which are designed and constructed in compliance with the public utilities standards in the Infrastructure design planning scheme policy.	Any additional works can be conditioned.
PO11 Development ensures that land used for urban purposes is serviced adequately with telecommunications and energy supply.		AO11 Development provides land with the following services to the standards of the approved supplier: (a) electricity; (b) telecommunications services; (c) gas service where practicable.	Development will comply. See Engineering Services Report by Westera Partners Pty Ltd for details.
PO12 Development ensures that major public projects promote the provision of affordable, high-bandwidth telecommunications services throughout the city.		AO12 Development provides conduits which are provided in all major Council and government works projects to enable the future provision of fibre optic cabling, if: (a) the additional expense is unlikely to be prohibitive; or (b) further major work is unlikely or disruption would be a major concern, such as where there is a limited capacity road; or (c) there is a clear gap in the	Works can be conditioned.

Performance Outcomes		Acceptable Outcomes	Response
		telecommunications network; or (d) there is a clear gap in the bandwidth available to the area. Editor's note—An accurate, digital 'as built' three-dimensional location plan is to be supplied for all infrastructure provided in a road.	
PO13 Development provides public art identified in a neighbourhood plan or park concept plan which: (a) is provided commensurate with the status and scale of the proposed development; (b) is sited and designed: (i) as an integrated part of the project design; (ii) as conceptually relevant to the context of the location; (iii) to reflect and respond to the cultural values of the community; (iv) to promote local character in a planned and informed manner.		AO13 Development provides public art identified in a neighbourhood plan or park concept plan which is sited and designed in compliance with the public art standards in the Infrastructure design planning scheme policy.	Not applicable.
PO14 Development provides signage of buildings and spaces which promote legibility to help users find their way.		AO14 Development provides public signage: (a) at public transport interchanges and stops, key destinations, public spaces, pedestrian linkages and at entries to centre developments; (b) which details the location of the key destinations, public spaces and pedestrian linkages in the vicinity, the services available within the development and where they are located. Editor's note—Signage is to be in accordance with Local Law Number 1 (Control of Advertisements Local Law).	Works can be conditioned.

Infrastructure Design Code

Performance Outcomes		Acceptable Outcomes	Response
PO15 Development that provides community facilities which form part of the development is functional, safe, low maintenance, and fit for purpose.		AO15 Development that provides community facilities which form part of the development is designed in compliance with the community facilities standards in the Infrastructure design planning scheme policy.	No community facilities are proposed
PO16 Development provides public toilets which: (a) are required as part of a community facility or park; (b) are located, designed and constructed to be: (i) safe; (ii) durable; (iii) resistant to vandalism; (iv) able to service expected demand; (v) fit for purpose.		AO16 Development that provides public toilets is designed and constructed in compliance with the public toilets standards in the Infrastructure design planning scheme policy.	No public toilets are proposed
PO17 Development provides bridges, tunnels, elevated structures and water access structures that are designed and constructed using proven methods, materials and technology to provide for: (a) safe movement of intended users; (b) an attractive appearance appropriate to the general surroundings and any adjacent structures; (c) functionality and easy maintenance; (d) minimal whole-of-life cost; (e) longevity; (f) current and future services. Note—All bridges and elevated and associated elements must be designed and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme		AO17 Development that provides bridges, tunnels, elevated structures and water access structures is designed and constructed in compliance with the standards in the Infrastructure design planning scheme policy.	No bridges, tunnels or water access structures proposed. All structural elements will be designed by an RPEQ to the relevant standards

Infrastructure Design Code

Performance Outcomes		Acceptable Outcomes	Response
PO18 Development provides culverts which are designed and constructed using proven methods, materials and technology to provide for: (a) safety; (b) an attractive appearance appropriate to the general surroundings; (c) functionality and easy maintenance; (d) minimal whole-of-life cost; (e) longevity; (f) future widening; (g) current and future services; (h) minimal adverse impacts, such as increase in water levels or flow velocities, and significant change of flood patterns. Note—All culverts and associated elements are to be designed and certified by a Registered Professional Engineer Queensland in accordance with the applicable design standards.		AO18 Development that provides culverts is designed and constructed in compliance with the structures standards in the Infrastructure design planning scheme policy.	No culverts proposed.
PO19 Development provides batters, retaining walls, and seawalls and river walls which are designed and constructed using proven methods, materials and technology to provide for: (a) safety; (b) an attractive appearance appropriate to the surrounding area; (c) easy maintenance; (d) minimal whole-of-life cost; (e) longevity; (f) minimal water seepage.		AO19 Development that provides batters, retaining walls, seawalls and river walls is designed and constructed in compliance with the structures standards in the Infrastructure design planning scheme policy.	All batters and retaining walls shall comply. No river or sea walls proposed.

Performance Outcomes		Acceptable Outcomes	Response
Note—All retaining walls and associated elements are to be designed and certified by a Registered Professional Engineer Queensland in accordance with the applicable design standards.			
If for development with a gross floor area greater than 1,000m²			
PO20 Development ensures that construction is managed so that use of public spaces and movement on pedestrian, cyclist and other traffic routes is not unreasonably disrupted and existing landscaping is adequately protected from short- and long-term impacts.	Note—The preparation of a construction management plan can assist in demonstrating achievement of this performance outcome.	AO20 Development ensures that during construction: (a) the ongoing use of adjoining and surrounding parks and public spaces, such as malls and outdoor dining, is not compromised; (b) adjoining and surrounding landscaping is protected from damage; (c) safe, legible, efficient and sufficient pedestrian, cyclist and vehicular accessibility and connectivity to the wider network are maintained.	The development will comply.
Note—The Transport, access, parking and servicing planning scheme policy provides advice on the management of vehicle parking and deliveries during construction.			
PO21 Development ensures that construction and demolition activities are guided by measures that prevent or minimise adverse impacts including sleep disturbance at a sensitive use, due to noise and dust, including dust from construction vehicles entering and leaving the site.	Note—A noise and dust impact management plan prepared in accordance	AO21.1 Development ensures that demolition and construction: (a) only occur between 6:30am and 6:30pm Monday to Saturday, excluding public holidays; (b) do not occur over periods greater than 6 months. AO21.2 Development including construction and demolition does not release dust emissions beyond the boundary of the site.	Construction will take place within normal work hours. Construction is not expected to take longer than 6 months.
			An acceptable solution can be achieved through the implementation of a management plan for the control of dust and emissions throughout the earthworks period, until such time as the site is deemed

Infrastructure Design Code

Performance Outcomes		Acceptable Outcomes	Response
with the Management plans planning scheme policy can assist in demonstrating achievement of this performance outcome.			rehabilitated.
PO22 Development ensures that: (a) construction and demolition do not result in damage to surrounding property as a result of vibration; (b) vibration levels achieve the vibration criteria in Table 9.4.4.3.B, Table 9.4.4.3.C, Table 9.4.4.3.D and Table 9.4.4.3.E. Note—A vibration impact assessment report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome.	AO21.3 Development construction and demolition does not involve asbestos-containing materials.	Asbestos materials are not expected to be encountered.	
	AO22 Development ensures that the nature and scale of construction and demolition do not generate noticeable levels of vibration.	A noise management report can be prepared for the development at the detailed design phase.	

Appendix C – Filling and Excavation Code

Filling and Excavation Code

Filling and Excavation Code

Performance Outcomes		Acceptable Outcomes	Response
PO1 Development for filling or excavation minimises visual impacts from retaining walls and earthworks.		AO1 Development ensures that the total height of any cut and fill, whether or not retained, does not exceed: (a) 2.5m in a zone in the Industry zones category; (b) 1m in all other zones, or if adjoining a sensitive zone.	The proposal complies. Excavation primarily for construction of basement carpark and is not expected to visually impact on surroundings.
PO2 Development of a retaining wall proposed as a result of filling or excavation: (a) is designed and constructed to be fit for purpose; (b) does not impact adversely on significant vegetation; (c) is capable of easy maintenance. Editor's note—A retaining wall also needs to comply with the Building Regulation and embankment gradients will need to comply with the Building Regulation. Note—Guidance on the protection of native vegetation is included in the Biodiversity areas planning scheme policy.		AO2.1 Development of a retaining structure, including footings, surface drainage and subsoil drainage: (a) is wholly contained within the site; (b) if the total height to be retained is greater than 1m, then: (i) the retaining wall at the property boundary is no greater than 1m above the ground level; (ii) all further terracing from the 1m high boundary retaining wall is 1 vertical unit:1 horizontal unit; (iii) the distance between each successive retaining wall (back of lower wall to face of higher wall) is no less than 1m horizontally to incorporate planting areas. AO2.2 Development of a retaining wall over 1m in height protects significant vegetation on the site and on adjoining land and is designed and constructed in accordance with the structures standards in the Infrastructure design planning scheme policy and certified by a Registered Professional Engineer Queensland.	All retaining walls are to be wholly contained within the site. Any retaining walls exceeding 1.0m in height shall be designed by RPEQ. Any retaining walls exceeding 1.0m in height shall be designed by RPEQ.
		AO2.3 Development provides a retaining wall finish that presents to adjoining land that is maintenance free if the setback is less than 750mm from the boundary.	Retaining wall finishes to Architects' specification as to not impact on the visual amenity for adjoining properties.

Filling and Excavation Code

Performance Outcomes		Acceptable Outcomes		Response
		AO2.4 Development for filling only uses clean fill that does not include any construction rubble or debris.		All required fill can be sourced from clean external sources.
PO3 Development ensures that a rock anchor is designed and constructed to be fit for purpose.		AO3 Development ensures that a rock anchor: (a) is constructed in accordance with the standards in the Infrastructure design planning scheme policy; (b) where it extends beyond the property boundary, is supported by a letter of consent from the adjoining land and building owners.		Works can be conditioned.
PO4 Development protects all services and public utilities.		AO4 Development protects services and public utilities and ensures that any alteration or relocation of services or public utilities meets the standard design specifications of the responsible service authorities.		The proposal complies.
PO5 Development provides surface and sub-surface drainage to prevent water seepage, concentration of run-off or ponding of stormwater on adjacent land.		AO5 Development ensures all flows and subsoil drainage are directed to a lawful point of discharge of a surface water diversion drain, including to the top or toe of a retaining wall in accordance with the stormwater drainage section of the Infrastructure design planning scheme policy.		The proposal complies.
PO6 Development ensures that the design and construction of all open drainage works is undertaken in accordance with natural channel design principles, being the development of a stormwater conveyance system for major flows, by using a vegetated open channel or drain that approximates the features and functions of a natural waterway to enhance or improve riparian values of those stormwater conveyance systems. Editor's note—Guidance on natural channel design principles can be found in the Council's publication Natural channel design guidelines.		AO6 No acceptable outcome is prescribed.		No open drainage works detailed

Filling and Excavation Code

Performance Outcomes		Acceptable Outcomes	Response
PO7 Development for filling or excavation: (a) does not degrade water quality or adversely affect environmental values in receiving waters; (b) ensures site sediment and erosion control standards are best practice.	AO7.1 Development for filling or excavation provides water quality treatment that complies with the stormwater drainage section of the Infrastructure design planning scheme policy. AO7.2 Development provides erosion and sediment control standards that are in accordance with the stormwater drainage section of the Infrastructure design planning scheme policy.	AO7.1 Development for filling or excavation provides water quality treatment that complies with the stormwater drainage section of the Infrastructure design planning scheme policy. AO7.2 Development provides erosion and sediment control standards that are in accordance with the stormwater drainage section of the Infrastructure design planning scheme policy.	Water quality treatment is to be managed via best management practices. An erosion and sediment control plan shall be prepared at the detailed design phase.
PO8 Development for filling or excavation is conducted such that adverse impacts at a sensitive use due to noise and dust are prevented or minimised. Note—A noise and dust impact management plan prepared in accordance with the Management plans planning scheme policy can assist in demonstrating achievement of this performance outcome.	AO8.1 Development ensures that no dust emissions extend beyond the boundary of the site, including dust from construction vehicles entering and leaving the site. AO8.2 Development for filling or excavation activity only occurs between the hours of 6:30am and 6:30pm Monday to Saturday, excluding public holidays.	AO8.1 Development ensures that no dust emissions extend beyond the boundary of the site, including dust from construction vehicles entering and leaving the site. AO8.2 Development for filling or excavation activity only occurs between the hours of 6:30am and 6:30pm Monday to Saturday, excluding public holidays.	An acceptable solution can be achieved through the implementation of a management plan for the control of dust and emissions throughout the earthworks period, until such time as the site is deemed rehabilitated. Construction will take place within normal work hours.
PO9 Development ensures that vibration generated by the filling or excavation operation does not exceed the vibration criteria in Table 9.4.3.3.D, Table 9.4.3.3.E, Table 9.4.3.3.F and Table 9.4.3.3.G. Note—A noise management report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome.	AO9 Development involving filling or excavation does not cause a ground-borne vibration beyond the boundary of the site.	AO9 Development involving filling or excavation does not cause a ground-borne vibration beyond the boundary of the site.	A noise management report can be prepared for the development at the detailed design phase.

Filling and Excavation Code

Performance Outcomes		Acceptable Outcomes	Response
PO10 Development ensures that heavy trucks hauling material to and from the site do not affect the amenity of established areas and limits environmental nuisance impact on adjacent land.		AO10 Development ensures that heavy trucks hauling material to and from the site: (a) occur for a maximum of 3 weeks; (b) use a major road to access the site; (c) only use a minor road for the shortest-most-direct route that has the least amount of environmental nuisance if there is no major road alternative.	Trucks utilised for the import/export of earth for the site can be conditioned to use a route that is acceptable to council. Traffic management to be addressed as part of the construction management plan.
PO11 Development for filling or excavation protects the environment and community health and wellbeing from exposure to contaminated land and contaminated material.		AO11 Development does not involve: (a) excavation on land previously occupied by a notifiable activity or on land listed on the Environmental Management Register or the Contaminated Land Register; (b) filling with material containing a contaminant.	A geotechnical report shall be commissioned to inform detailed design. If contaminated land is found or if the site is on a contaminated land register then no excavation shall be undertaken unless an appropriate management plan is prepared to the satisfaction of Council. All fill can be sourced from clean external sources
PO12 Development provides for: (a) landscaping for water conservation purposes; (b) water sensitive urban design measures which are employed within the landscape design to maximise stormwater use and to reduce any adverse impacts on the landscape; (c) stormwater harvesting to be maximised and any adverse impacts of stormwater minimised.		AO12.1 Development provides landscaping which is designed using the standards in the Landscape design guidelines for water conservation planning scheme policy.	Landscape design will follow appropriate standards
		AO12.2 Development ensures that the design and requirements for irrigation are in compliance with the standards in the Landscape design guidelines for water conservation planning scheme policy.	Landscape design and maintenance will follow appropriate standards
		AO12.3 Development provides areas of pavement, turf and mulched garden beds which are drained. Note—This may be achieved through the provision and/or treatment of swales, spoon drains, field gullies, sub-surface drainage and stormwater connections.	The proposal complies.

Filling and Excavation Code

Performance Outcomes		Acceptable Outcomes	Response
PO13 Development ensures cutting and filling For the development of canals or artificial waterways avoids adverse impacts on coastal resources and processes.	AO13 Development does not involve the creation of canals or artificial waterways.	No canals or artificial waterways proposed.	

Appendix D – BCC Flood Wise Property Report



Brisbane City Council FloodWise Property Report

Report Reference

1626668806540

19/07/2021 14:26:46

Dedicated to a better Brisbane

THIS REPORT IS FOR BUILDING AND DEVELOPMENT PURPOSES ONLY

The FloodWise Property Report provides property or lot-based flood information for building and development requirements. This report provides information on estimated flood levels, habitable floor level requirements and more technical information on the four sources of flooding: river, creek / waterway, storm tide and overland flow. Refer to the Useful Definitions section for a glossary of terms.

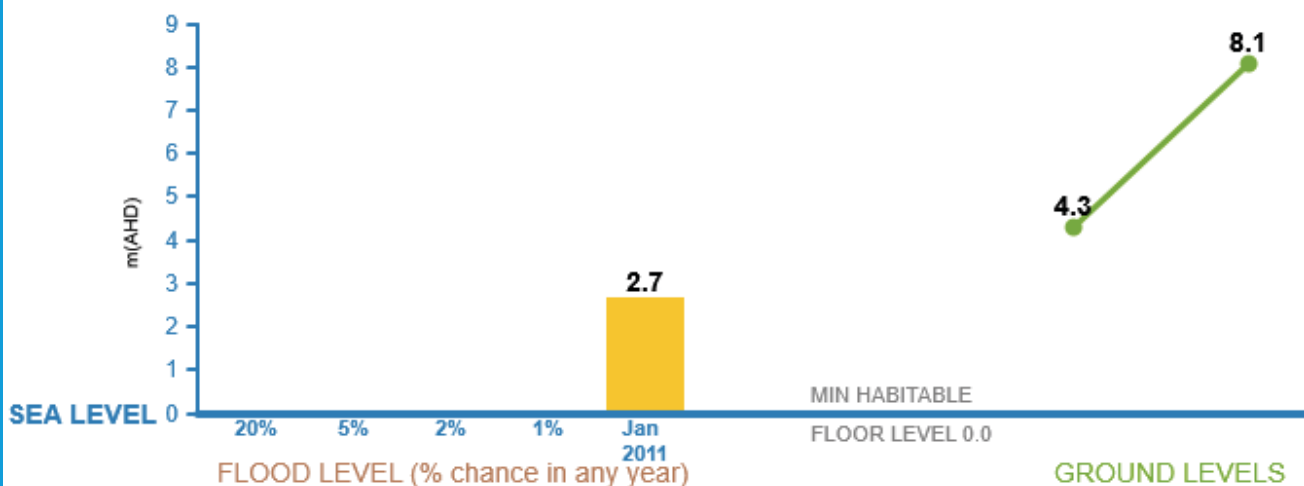
To find out more about how the contents of this report may affect building or development on this property, please visit www.brisbane.qld.gov.au/planning-building. For more general information about understanding your flood risk and how to prepare your property, family or business for potential flooding visit www.brisbane.qld.gov.au/beprepared

THIS IS A REPORT FOR:

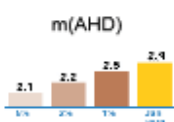
Rateable Address: 1 FOLKESTONE ST, BOWEN HILLS QLD 4006

Lot Details: L3 RP.10094

FLOOD LEVEL INFORMATION



EXPLANATION



m(AHD) - Metres Australia Height Datum. The level of 0.0m AHD is approximately mean sea level.

Flood Levels - The Flood level bar chart above shows the possible flooding level and percentage chance of that level being reached or exceeded in any year. If an orange bar shows, it is the calculated January 2011 flood level at this address or lot. Refer to 'Useful Definitions' for further information.

Minimum Habitable Floor Level - Applies to residential development only. Please refer to Council's planning scheme to learn how this may affect you. If a property is in an overland flow path, or a large allotment, a minimum habitable floor level cannot be provided. Refer flood and planning development flags below.

Ground Levels - The green line above shows this property's approximate lowest and highest ground levels based on latest available information (2019 airborne laser survey) to Council. If you are building, please confirm with a surveyor.

For further information and definitions please refer to the Useful Definitions page



Brisbane City Council FloodWise Property Report

Report Reference

1626668806540

19/07/2021 14:26:46

Dedicated to a better Brisbane

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. For more information about building and development in Brisbane please visit www.brisbane.qld.gov.au/planning-building or talk to a Development Assessment Planning Information Officer via Council's Contact Centre on (07) 3403 8888.

THIS IS A REPORT FOR:

Rateable Address: 1 FOLKESTONE ST, BOWEN HILLS QLD 4006

Lot Details: L.3 RP.10094

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)
Minimum Ground Level	4.3
Maximum Ground Level	8.1
Min Habitable Floor Level	N/A*
Defined Flood Event Level	N/A*
Defined Flood Event Level Source	UNKNOWN
Source of Highest Flooding	
Flooding may also occur from	RIVER

ESTIMATED PEAK FLOODING LEVELS

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 Development Information.

Note that the overland flow flooding level maybe higher than the levels below from other sources.

DESCRIPTION	LEVEL (mAHD)	SOURCE
January 2011	2.7	RIVER



FLOOD PLANNING 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

There are currently no River, Creek/Waterway, or Overland Flow Flood Planning Areas that apply to this property.

COASTAL HAZARD OVERLAY CODE

There are currently no Coastal Hazard Overlays that apply to this property.



Brisbane City Council FloodWise Property Report

Report Reference

1626668806540

19/07/2021 14:26:46

Dedicated to a better Brisbane

Useful 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.

Defined Flood Level (DFL) - The DFL for Brisbane River flooding is a level of 3.7m AHD at the Brisbane City Gauge based on a flow of 6,800 m³/s.

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 - 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.

Council's Planning Scheme - The City Plan (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.

Residential Flood Level (RFL) - Residential flood level (RFL) for the Brisbane River flooding equates to the 1% Annual Exceedance Probability flood level.

Rateable Address - A Lot or Property may have more than one street address. The address shown on this report is the address used by Council for the Lot or property selected.

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.

Brisbane City Council's Online Flood Tools

Council provides a number of online flood tools:

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

Planning and Development Online Flood Tools

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 to talk to a Development Assessment Customer Liaison Officer
- visit www.brisbane.qld.gov.au/planning-building
- visit a Regional Business Centre.

Helping residents and businesses be prepared for flooding

Council has a range of free tools and information to help residents and businesses understand potential flood risks and how to be prepared. This includes:

- Flood Awareness Map
- Flooding in Brisbane - A Guide for Residents
- Flooding in Brisbane - A Guide for Businesses
- Early Warning Alert Service. Visit www.brisbane.qld.gov.au/earlywarning to register for email, home phone or SMS severe weather alert updates.

Note: The Flood Awareness Map shows four levels of flood likelihood from high likelihood (flooding is very likely to occur) through to very low likelihood (very rare and extreme flood events).

For more information on Council's online flood tools for residents and business:

- Visit www.brisbane.qld.gov.au/beprepared
- Phone (07) 3403 8888.



Brisbane City Council FloodWise Property Report

Report Reference

1626668806540

19/07/2021 14:26:46

Dedicated to a better Brisbane

Disclaimer

1. Defined Flood Levels and Residential Flood Levels, and the Minimum Habitable Floor Levels are determined from the best available information to Council at the date of issue. These flood levels, for a particular property, may change if more detailed information becomes available or changes are made in the method of calculating flood levels.
2. Council makes no warranty or representation regarding the accuracy or completeness of a FloodWise Property report. Council disclaims 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 www.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.

Appendix E – BCC eBimap Information

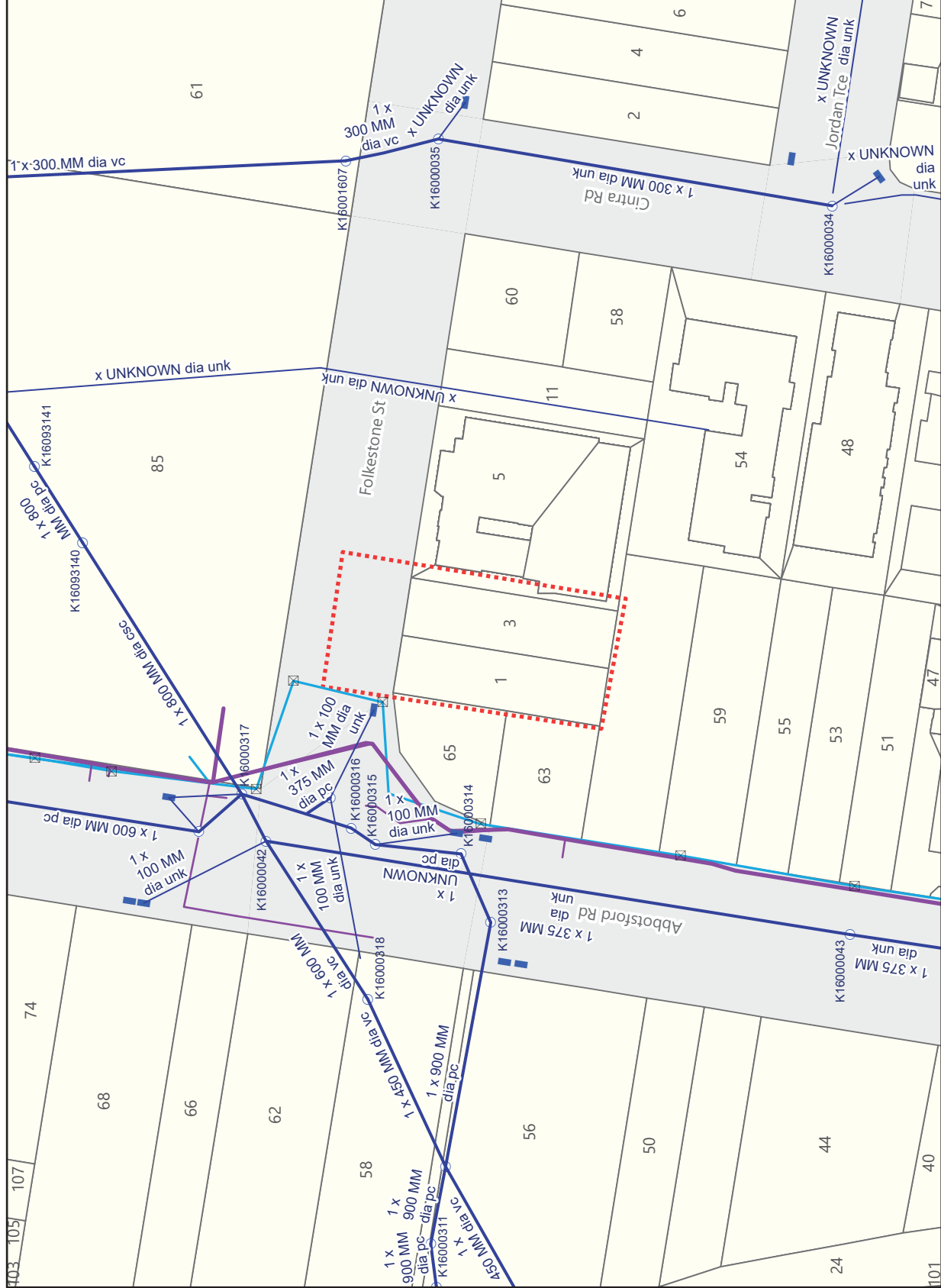
Legend

Acid Sulfate Soils	Low	Medium	High	Very High
Extremely High	50m Contour	50m Contour	10m Contour	5m Contour
1m Contour	25cm Contour	Recycled Water Device	Recycled Water Device	Recycled Water Device
FLOW METER	LEVEL SENSOR	PRESSURE GAUGE - OFFLINE	FLOW METER - OFFLINE	LEVEL SENSOR - OFFLINE
<all other values>	Recycled Water Fitting	BEND	END CAP	CROSS
JOINT	GIBAULT JOINT	TAPPING BAND	TAPPING	REDUCER
WYE	TEE	RESERVOIR INLET	SCOUR OUTLET	PIGGING POINT
CHEMICAL INJECTION POINT	HEAD WALL	<all other values>	Recycled Water Structures	ANCHOR BLOCK
CONCRETE STOP	Recycled Water Hydrant	PIER	PIPE BRIDGE	PILLAR HYDRANT
Recycled Water Chamber	Recycled Water Control Valve	REFLUX	SCOUR	AIR
Recycled Water Flow Meter	Recycled Water System Valve	ALTITUDE	FLOW CONTROL	REFLUX - OFFLINE
PRESSURE SUSTAINING	PRESSURE REDUCING	PRESSURE SUSTAINING - OFFLINE	PRESSURE REDUCING - OFFLINE	ALTITUDE - OFFLINE
SCOUR - OFFLINE	AIR - OFFLINE	GATE, CLOSED	GATE, OPEN	BUTTERFLY, OPEN
FLOW CONTROL - OFFLINE	BALL, OPEN	<all other values>	Recycled Water Service Valve	SERVICE VALVE CLOSED
BALL CLOSED	<all other values>	Recycled Water- Reservoirs	RESERVOIR	RESERVOIR - OFFLINE
SERVICE VALVE OPEN	TREATMENT PLANT	FILLING STATION	Recycled Water Pump Stations	PUMP STATION
Recycled Water Network Structure	Recycled Water Network Structure	LIFT PUMP - OFFLINE	Recycled Water Pressure Main	LIFT PUMP
BOOSTER PUMP - OFFLINE	TRUNK MAIN	SCOUR MAIN	RETIC MAIN - OFFLINE	MODEL LINK
RETIC MAIN	Recycled Water Service	Service	Model Link	TRUNK MAIN - OFFLINE
SCOUR MAIN - OFFLINE	CHAMBER	CHAMBER - OFFLINE	Sewer Fitting - Main Fittings	Common Service
Sewer Chamber	OUTLET	VACUUM LIFT	Sewer Fitting - All Other Fittings	END FLUSHING POINT
INLINE FLUSHING POINT	RODDING JOINT	JUNCTION	END CAP	JOINT
WYE	TEE	REDUCER	GIBAULT JOINT	BEND
INLET	OUTLET	<all other values>	Sewer Structure - by Type	CROSS
PIPE BRIDGE	ANCHOR BLOCK	HEAD WALL	PIER	CONCRETE STOP
MANHOLE	MANHOLE - OFFLINE	SEWER DOOR	<all other values>	Sewer Support Structure Boundary
Flume Pit	REFLUX	SEWER DOOR	Sewer Control Valve - by Type	AIR
SCOUR	VACUUM, AS CONSTRUCTED	GATE - OFFLINE	AIR - OFFLINE	SCOUR - OFFLINE
VACUUM - OFFLINE	REFLUX - OFFLINE	TREATMENT PLANT - OFFLINE	BUTTERFLY - OFFLINE	GATE
BUTTERFLY	SEWER DOOR - OFFLINE	STORAGE FACILITY - OFFLINE	Sewer Network Structure - All Fe	STORAGE FACILITY
Sewer Network Structure - Treat	WET WELL	PUMP STATION - OFFLINE	WET WELL - OFFLINE	ODOUR CONTROL - OFFLINE
ODOUR CONTROL	PUMP STATION	Model Link	Sewer Network Structure Boundary	Sewer Vertical Gravity Main
Sewer Pump Station	SEWER SERVICE	DISCHARGE	Service	<all other values>
Sewer Gravity Main - by Type	SYPHON	SYPHON - OFFLINE	TRUNK MAIN	RETICULATION MAIN
OVERFLOW MAIN	MODEL LINK	MODEL LINK - OFFLINE	DISCHARGE - OFFLINE	TRUNK MAIN - OFFLINE
RETICULATION MAIN - OFFLINE	OVERFLOW MAIN - OFFLINE	VACUUM MAIN	<all other values>	Sewer Pressure Main - by Type
MODEL LINK	LOW PRESSURE MAIN	RISING MAIN - OFFLINE	Sewer Drainage Plan	MODEL LINK - OFFLINE
LOW PRESSURE MAIN - OFFLINE	Culvert	End Structure	End cap	Sewer Drainage Plan Joiner
Sewer Drainage Plan Extension	Gully	Junction	Manhole	Flood Gate
Pipe End Outlet	Foul Water and Roof Water	SQID	Surface Drain	Drain
Artesian Well	Detention Basin	Lake	Water Device - All Other Assets	Waterbody
PRESSURE GAUGE	LEVEL SENSOR	FLOW METER - OFFLINE	PRESSURE GAUGE - OFFLINE	FLOW METER
<all other values>	Water Fitting	BEND	PIGGING POINT	LEVEL SENSOR - OFFLINE
CROSS	JOINT	GIBAULT JOINT	TAPPING BAND	END CAP
REDUCER	WYE	TEE	RESERVOIR INLET	TAPPING
SCOUR OUTLET	CHEMICAL INJECTION POINT	SAMPLING STATION	<all other values>	RESERVOIR OUTLET
ANCHOR BLOCK	PIPE BRIDGE	CONCRETE STOP	PILLAR HYDRANT	Water Structures
<all other values>	Water Chamber	Water Hydrant	Service Valve, OPEN	PIER
QUU	SEWATER	PRIVATE	QUU - NON POT	INGROUND HYDRANT
PRIVATE - NON POT	QUU - OFFLINE	SEQ - OFFLINE	PRIV - OFFLINE	SEQ - NON POT
SEWATER - OFFLINE	PRIVATE - OFFLINE	SEWATER	PRIVATE	Water Network Structure Boundary
BOOSTER PUMP	BORE PUMP	LIFT PUMP	Water Sampling Point	QUU - OFFLINE
LIFT PUMP - OFFLINE	Water Vertical Pressure Main	Trunk Main	Water Pressure Main - by Type	Water Pumps
Reticulation Main	MODEL LINK	COMMON SERVICE	Property Holding	BORE PUMP - OFFLINE
Parcel - Outside Brisbane	Parcel	Parcel	Sealed Plan	Raw Water Main
				SERVICE
				Parcel

Appendix F – Dial Before You Dig Information



Job # 30086214
Seq # 200488408
Provider: Brisbane City Council
Telephone: 07 3403 8888



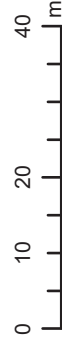
- Legend**
- DBYD Enquiry
 - Stormwater Network
 - Stormwater Drain
 - Stormwater Gully / Roofwater Connection
 - Stormwater Maintenance Hole
 - Stormwater Gully Pit
 - BCC Cable Network
 - Fibre Optic Pit Location
 - Traffic System Cable
 - Traffic Signal Ducting
 - Fibre Optic Cable Location

Disclaimer:
© Brisbane City Council [2020]
In consideration of Council, and the copyright owners listed below, permitting the use of this data, you acknowledge and agree that Council, and the copyright owners, give no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accept no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage), relating to any use of this data.
Data must not be used for direct marketing or be used in breach of the privacy laws.

Copyright of data is as follows:
Cadastral and Street Names © 2020 State of Queensland (Department of Natural Resources, Mines and Energy)

Caution: This map may contain the locations of abandoned underground asbestos pipes. Council gives no warranty to the completeness or accuracy of these records. Appropriate care needs to be taken in all cases.

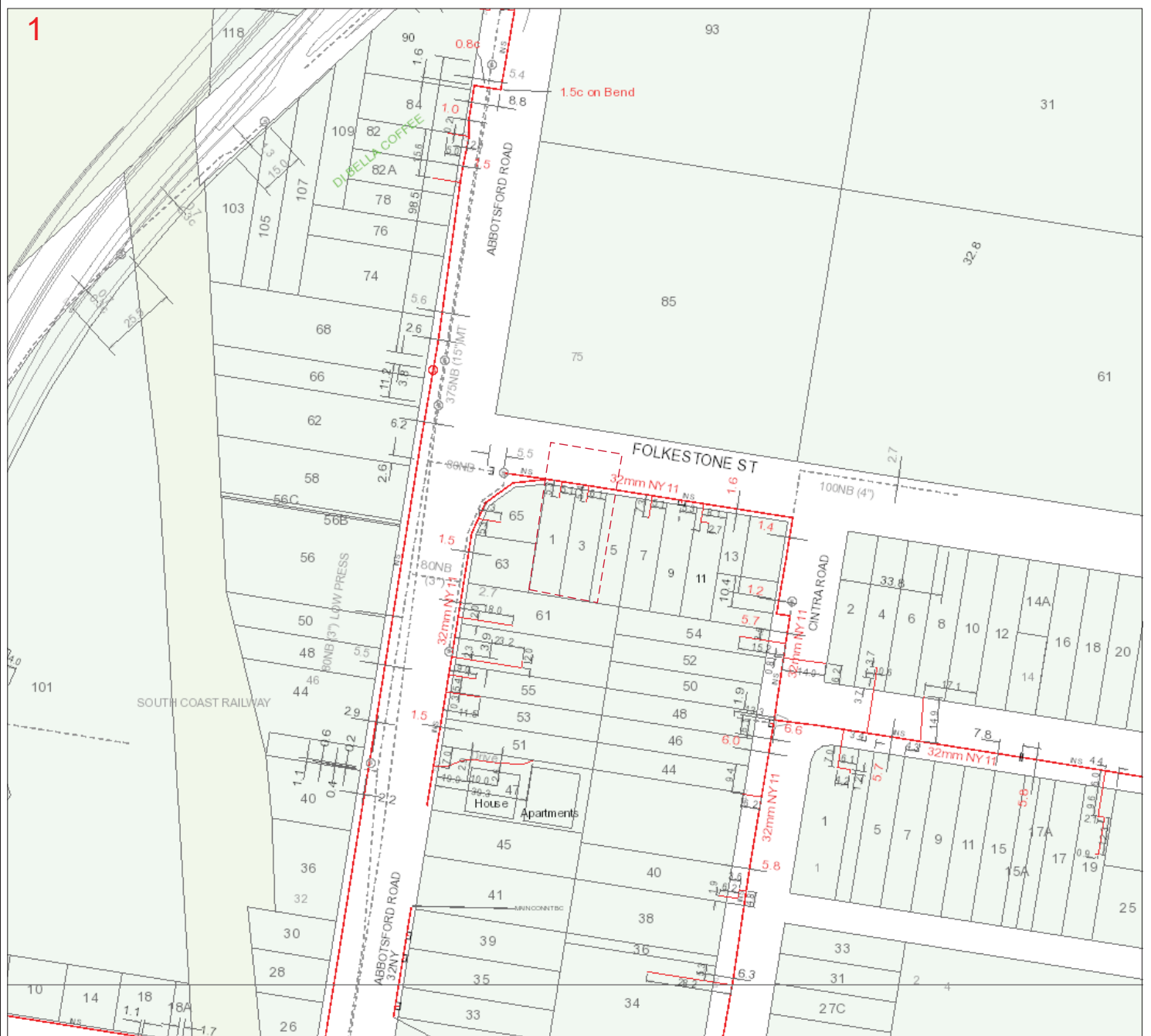
In an emergency contact Brisbane City Council on 07 3403 8888
09/07/21 (valid for 30 days)



Scale 1:1,000



Plans generated by
SmarterWX™ Automate



200488406 Map Sheet: 1

Scale: 1: 1000

0 0.01km



Map Key:

1

Legend

Distribution Main

- Class 900 Transmission
- Class 600 Transmission
- Class 300 Transmission
- High Pressure Steel
- High Pressure PE Trunk
- High Pressure/ Class 500
- Medium Pressure PE/ Nylon
- Medium Pressure (Allgas)
- Low Pressure
- LPG
- TLP
- Proposed/ Under Construction
- Idle Gas Pipe
- Abandoned Gas Pipe
- Sleeve

[1] Medium Pressure in AGN Nylon in Allgas

Gas Assets and Fittings

- Gate Station
- Regulator Station
- Block/ Emergency Valve
- Isolation Valve
- Test Point
- Syphon
- Anode
- Pipeline Marker
- Trace Wire Point
- Reducer
- Pipe Connector/ Tee
- Pipe Connector
- End Cap

Pipe Materials

- CI Cast Iron
- CU Copper
- GAL Wrought Galvanised Iron
- PGAL Poly Coated Wrought Galvanised Iron
- ST Steel
- NY/ NY11 Nylon
- PE Polyethylene
- MDPE Medium Density Polyethylene
- HDPE High Density Polyethylene
- DN Nominal Diameter
- OD Outside Diameter

Examples:

40PE in DN80 CI

40mm Polyethylene in an 80mm (Nominal Diameter) Cast Iron Sleeve

63PE INS

63mm Polyethylene inserted in another pipe

Line/ Polygon Request

Data Source

Pipeline Data Copyright APA Group, Property Parcels Copyright QLD Government, UBD Imagery - Copyright Sensis, DBYD Dig Location provided by DBYD.



This document is confidential and may also be privileged, and neither confidentiality nor privilege is waived lost or destroyed by virtue of it being transmitted to an incorrect addressee. Unauthorised use of the contents is therefore strictly prohibited. Any information contained in this document that has been extracted from our records is believed to be accurate, but no responsibility is assumed for any error or omission.

Job Location

Line Point Area

Underground Asset

Uecomm

North Arrow

Uecomm
Cable Uecomm Underground
 Scale: #INSERT MAP SCALE#
 Printed On: 09/07/2021

Sequence Number: 200488409
 Location: 1 Folkstone Street



All underground cables shall be treated as being energised. Where a cable is located that is not represented on the ENERGEX EnerGISE DBYD map, then ENERGEX shall be contacted immediately.

For Emergency Situations
Please call 13 19 62



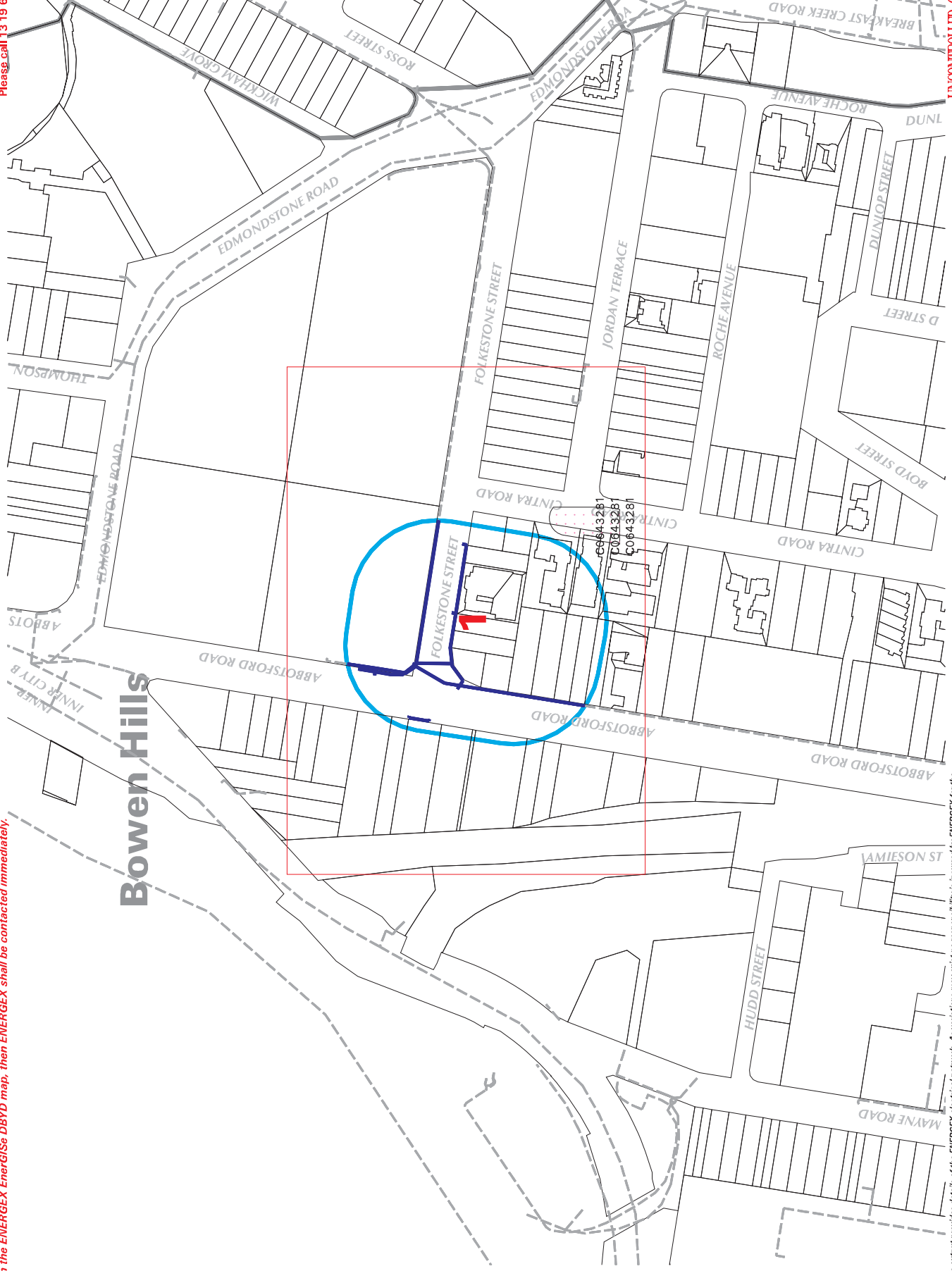
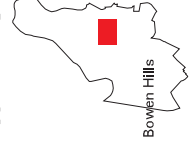
Date: 09 Jul 21 Time: 15:25:28
Requested By: DBYD

NOT TO SCALE
0 50m

Enquiry No: 200488410
KEY MAP

Enquiry Area

LOCALITY DIAGRAM



This output provides details of the ENERGEX electrical network. As variations may exist no responsibility is incurred by ENERGEX for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed on site.

UNCONTROLLED COPY

All underground cables shall be treated as being energised. Where a cable is located that is not represented on the ENERGEX Energise DBVD map, then ENERGEX shall be contacted immediately.



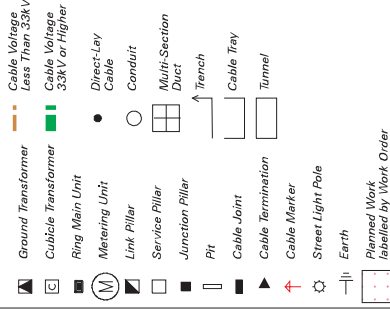
EnerGISE
DBYD

Date: 09 Jul 21 Time: 15.25.39
Requested By: DBYD

SCALE 1:1000

Enquiry No: 200488410

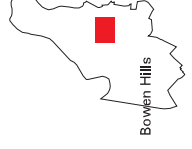
STRIP No: 1



INDEX TO SHEETS

1

LOCALITY DIAGRAM



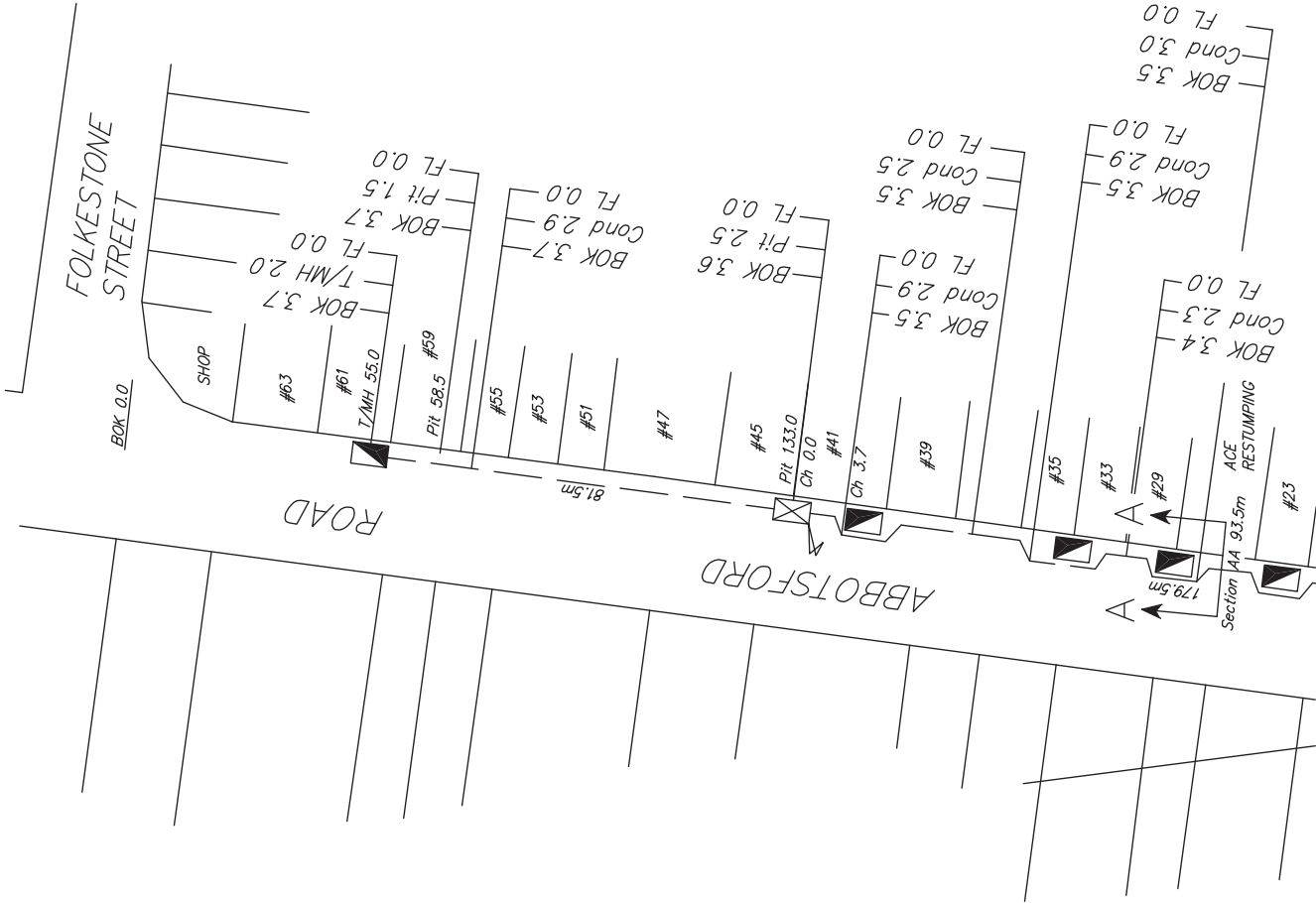
This output provides details of the ENEREX electrical network. As variations may exist no responsibility is incurred by ENEREX for the accuracy or completeness of the information provided. Exact positions of cables and electrical connectivity should be confirmed on site.

UNCONTROLLED COPY

PAPER SIZE A3 Map has been designed to be reproduced in colour

LEGEND

- ELECTRICITY POLE
- BORE TUNNELLING
- TRENCHING
- UE P8 PIT
- UE P6 PIT
- UE P4 PIT
- FENCE LINE
- BACK OF KERB
- CONDUIT
- TELSTRA PIT
- MAIN ROADS DEPARTMENT PIT



SECTION AA

Note:
Conduit depths quoted are approximate only and may change due to unforeseen circumstances.
Excavate by hand until conduit depth is determined.

TYPICAL SECTION

Note:
Conduit depths quoted are approximate only and may change due to unforeseen circumstances.
Excavate by hand until conduit depth is determined.

SHEET 1 OF 5

K.J. BLAIN SURVEYS

Land Development, Planning
& Surveying Consultants

Suite 35, 10-14 Masthead Drive, Cleveland, Qld 4163
Ph: (07) 3821 2016 FAX: (07) 3821 2253

UeComm Pty Ltd
Level 13, 12 Creek Street
Brisbane, QLD 4000
Phone (07) 3815 9997
Facsimile (07) 3211 8940

MICROTUNNELLING
SERVICES PTY LTD
Ph: (07) 3286 7311 Fx: (07) 3286 7322

NO	DATE	REVISIONS
1	31.07.01	MOVE PIT 24.1.04

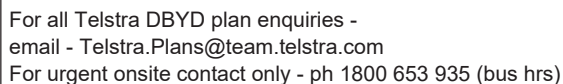
APPROVED
T.Sultana

DETAILS:
ABBOTSFORD ROAD
TO LONGLAND STREET
BOWEN HILLS - 4006

UBD:
MAP 140 C20
SCALE 1: 1000

SURVEYED	DRAWN	POB	DATE
22/12/00	22/12/00	22/12/00	22/12/00
FILE REF	CHECKED	AJS	FB
OFN5/BNE/4132/1			

The diagram is a complex cable plan for a railway station area. It shows various cable types and their dimensions, such as OC (Optical Cable), MC (Main Cable), P (Power Cable), and GI (Galvanized Iron). The plan includes a north arrow and a scale bar. The stations shown are IOWEN HILLS RAILWAY STATION, FOLKESTONE, JORDAN, and ROCHE. The plan also shows various cable types and their dimensions, such as OC (Optical Cable), MC (Main Cable), P (Power Cable), and GI (Galvanized Iron). The plan includes a north arrow and a scale bar.



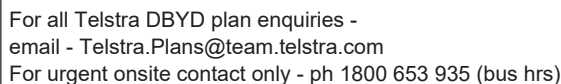
Generated On 09/07/2021 15:31:55

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

Page 1 of 2

[illegible]

Generated On 09/07/2021 15:31:58

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

Appendix G – Engineering Drawings

EARTHWORKS SUMMARY

AREA OF CUT - 710m²
VOLUME OF CUT - 3118m³
AREA OF FILL - 0m²
VOLUME OF FILL - 0m³

THE EARTHWORKS VOLUMES SHOWN ARE INDICATIVE NETT FIGURES ONLY BETWEEN EXISTING SURFACE LEVEL AND FINISHED EARTHWORKS LEVEL AND DO NOT ALLOW FOR DEMOLITION WORKS, STRIPPING OF TOPSOIL, UNSUITABLE MATERIAL AND VEGETATION OR COMPACTION LOSSES.

PAVEMENT LEVELS SHOWN ARE 200mm BELOW F.S.L. BUILDING PAD LEVELS SHOWN ARE 200mm BELOW F.S.L. LANDSCAPING LEVELS SHOWN ARE 100mm BELOW F.S.L.

EARTHWORKS LEVELS MAY BE ADJUSTED TO SUIT FFL'S. CONSTRUCTION METHODS BASED ON STRUCTURAL DESIGN AS APPROVED BY SUPERINTENDENT.

AREA OF FILL - AREA OF CUT -

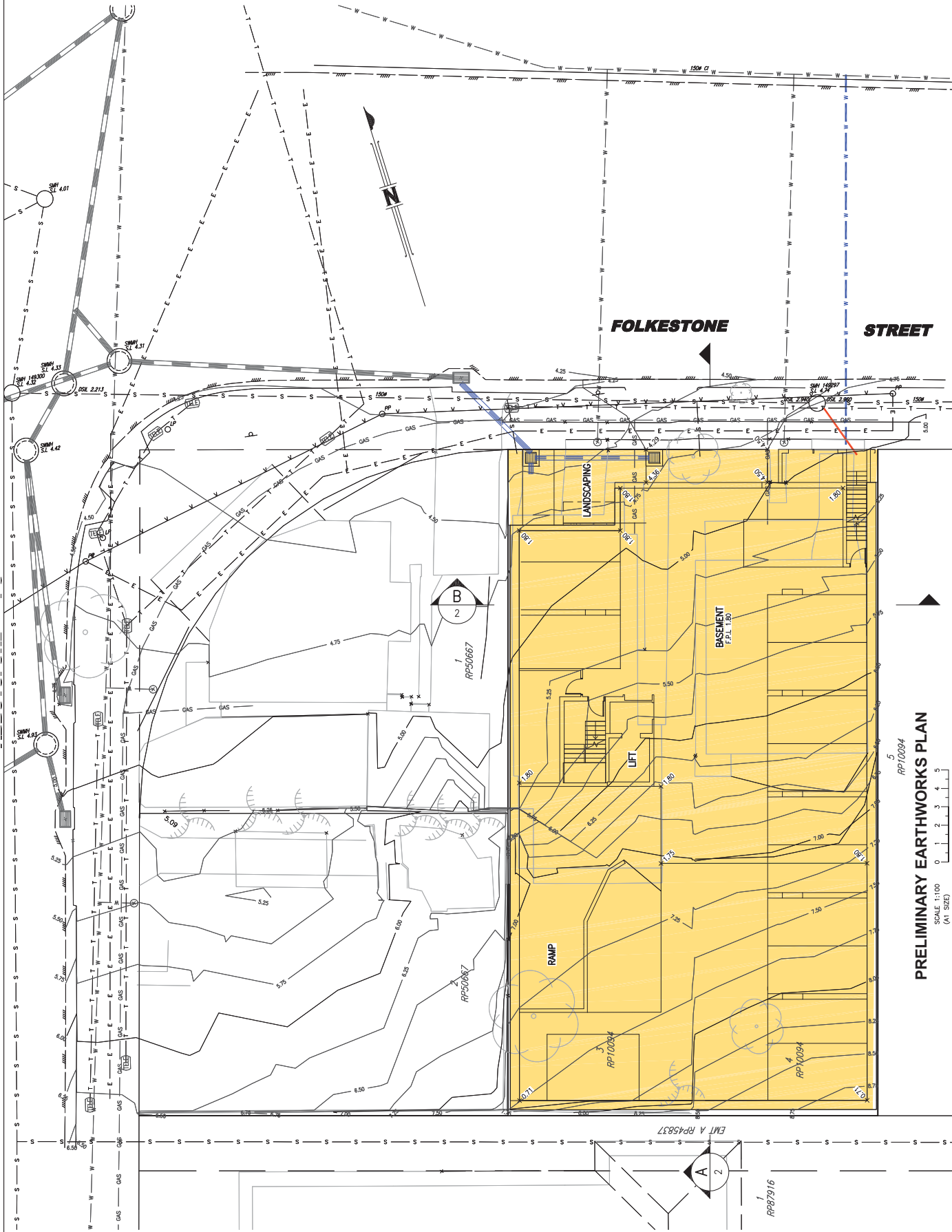
GENERAL NOTES

1. IN CASE OF DOUBT - AS4
2. ALL LEVELS TO AHD, DIMENSIONS IN METERS UNLESS OTHERWISE STATED
3. THE CONTRACTOR'S RESPONSIBILITY
4. THE LOCATION OF EXISTING SERVICES IS FOR CONTRACTOR'S INFORMATION ONLY, THE LOCATION OF SERVICES WILL BE CONFIRMED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS.
5. ANY DAMAGE CAUSED TO THE EXISTING SERVICE WILL BE REPAIRED BY THE CONTRACTOR AT HIS OWN COST.
6. EARTHWORKS PROCEDURES ARE TO BE CARRIED OUT IN ACCORDANCE WITH AS 3798 - 2007 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS".
7. EARTHWORKS OPERATIONS ARE TO BE CARRIED OUT IN GENERAL ACCORDANCE WITH THE GEOTECHNICAL REPORT.
8. WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS OF THE LOCAL AUTHORITY.
9. THE CONTRACTOR IS TO ALLOW FOR ALL FEES AND HAULAGE COSTS ASSOCIATED WITH DISPOSAL OF MATERIAL FROM THE SITE.
10. ALL COSTS ASSOCIATED WITH NOISE AND DUST MONITORING ARE TO BE DEEMED THE CONTRACTOR'S RESPONSIBILITY.
11. COMPACTION STANDARDS
 - MODIFIED TO AS 1289 TEST 5.2.1
 - STANDARD TO AS 1289 TEST 5.1.1
12. PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR WILL PROVIDE SCOUR AND EROSION PROTECTION INCLUDING PROVISION OF Silt TRAPS AND FENCES TO MINIMISE EROSION OF THE EXISTING SURFACE OF THE PROPERTY.
13. NO BASTING WILL BE PERMITTED.
14. THE LOCATION OF THE SITE SHEDS, SITE OFFICE AND AMENITIES BUILDING WILL BE LOCATED TO SUIT TEMPORARY UTILITY SERVICES OR AS AGREED WITH THE MANAGER.
15. TESTING FREQUENCY AS 3798 - 2007 SECTION 8.0 OR AS AGREED WITH THE MANAGER.
16. AT COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL ARRANGE FOR AN INDEPENDENT LICENSED SURVEYOR TO CARRY OUT A "WORKS AS CONSTRUCTED" SURVEY AND SUBMIT THE DETAIL PLAN TO THE MANAGER.
17. THE LOCATION OF TEMPORARY STOCKPILES DURING CONSTRUCTION IS TO BE AGREED WITH THE MANAGER.

NOTE:
TEMPORARY EXCAVATIONS ARE TO BE SUPERVISED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.

ALL EXCAVATION WALLS TO BE WITHIN THE SET TO STAKES. EXCAVATION TO BE WITHIN THE PROPERTY BOUNDARY INCLUDING ALL ASSOCIATED FOOTINGS AND SUB-SOIL DRAINAGE.

CONTRACTOR TO USE EXCAVATION TECHNIQUE THAT WILL MINIMISE VIBRATION TO ADJACENT PROPERTIES IN ACCORDANCE WITH GEOTECHNICAL ENGINEERS REPORT AND ADVICE ON SITE.

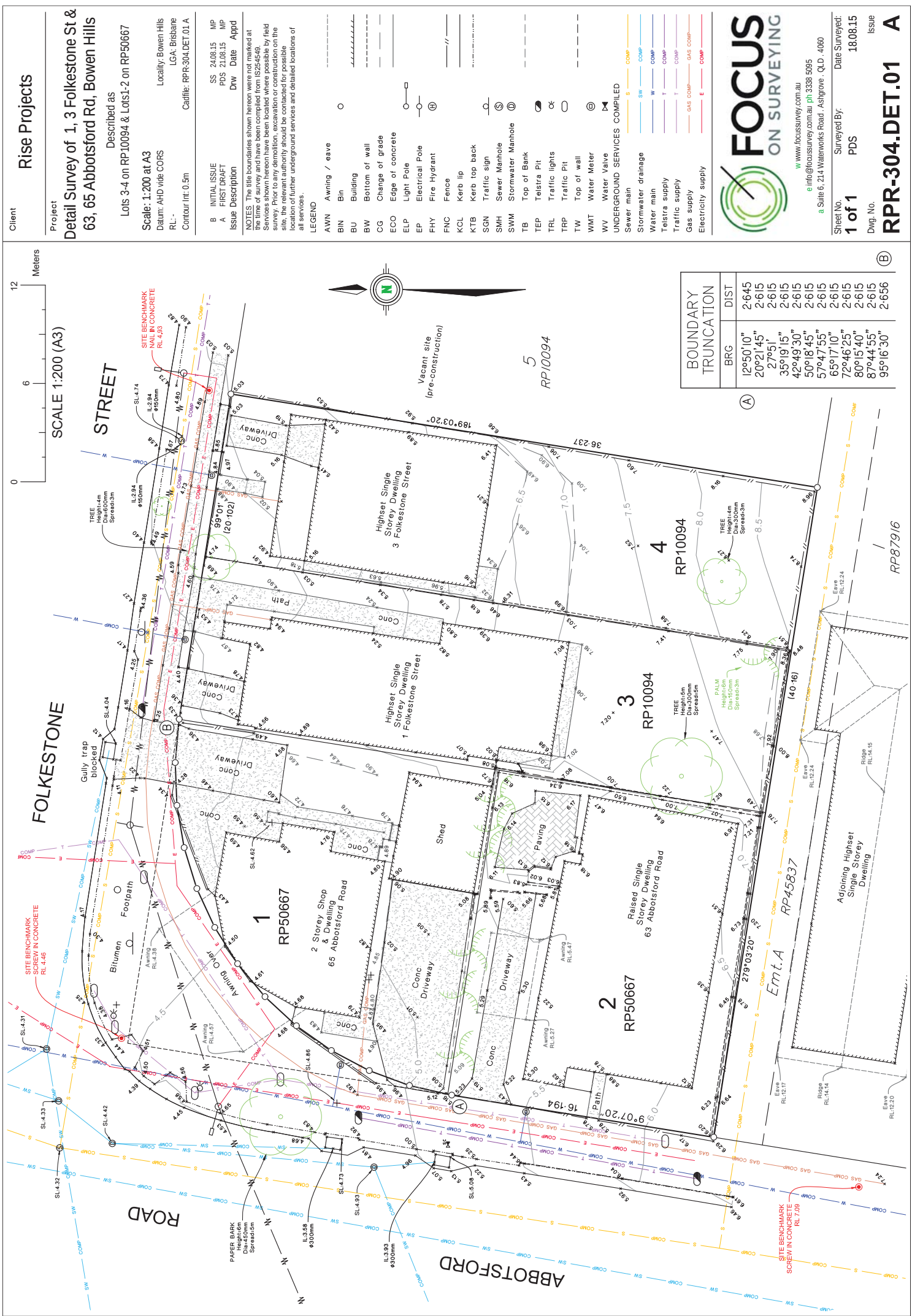


PRELIMINARY EARTHWORKS PLAN

SCALE 1:100 (A1 SIZE)

No.	Date	REVISIONS		APPROVED		WESTERA PARTNERS		STRUCTURAL-CIVIL-ENVIRONMENTAL ENGINEERS		www.westera-engineers.com.au ABN 52 097 417 975		PROJECT		PROPOSED MULTI RESIDENTIAL DEVELOPMENT		DRAWING STATUS																																																																																																																																																																																																																																																																																																																																																																																											
		FILE NAME	PRE_mkg.mwg	DATE	JULY 2021	CHECKED	J.H.H.	DRAWN	R.W.M.	DESIGNED	J.H.C.	DOCUMENT CONTROL	SIL	S. 097 4201	WESTERA PARTNERS PTY. LTD.	DRAWING NUMBER	B21-110-PE01																																																																																																																																																																																																																																																																																																																																																																																										
																		CLIENT	ROTHSCHILD KINGSBRIDGE	SHEET NUMBER	01 of 02																																																																																																																																																																																																																																																																																																																																																																																						
																						TITLE	PRELIMINARY EARTHWORKS PLAN	REVISION																																																																																																																																																																																																																																																																																																																																																																																			
																										LOCATION	LOTS 3-4 ON RP10094	DRAFTING STATUS	PRELIMINARY N.C.																																																																																																																																																																																																																																																																																																																																																																														
																														SURVEYOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND																																																																																																																																																																																																																																																																																																																																																																										
SURVIVOR	PHONE 3338 5095	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR					GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING	DATUM AND	SURVIVOR	GOLD COAST	FOCUS ON SURVEYING

Appendix H – Site Survey and Architectural Plans



Rise Projects

Detail Survey of 1, 3 Folkestone St & 63, 65 Abbotsford Rd, Bowen Hills

Described as

LOIS 3-4 on RP10094 & Lots 1-2 on RP50667

Scale: 1:200 at A3

Datum: AHD vide CORS

RL:-

Contour Int: 0.5m

Locality: Bowen Hills

LGA: Brisbane

Cadfile: RPR-304.DET.01.A

SS: 24.08.15 MP

PDS: 21.08.15 MP

Dwg Date: Appd

Issue Description

NOTES: The title boundaries shown hereon were not marked at the time of survey and have been compiled from IS254549.

Services shown hereon have been located where possible by field survey. Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

LEGEND

AWN Awning / eave

BIN Bin

BU Building

BW Bottom of wall

CG Change of grade

ECO Edge of concrete

ELP Light Pole

EP Electrical Pole

FHY Fire Hydrant

FNC Fence

KCL Kerb lip

KTB Kerb top back

SGN Traffic sign

SMH Sewer Manhole

SWM Stormwater Manhole

TB Top of Bank

TEP Telstra Pit

TRL Traffic lights

TRP Traffic Pit

TW Top of wall

WMT Water Meter

WV Water Valve

UNDERGROUND SERVICES COMPILED

Sewer main

Stormwater drainage

Water main

Telstra supply

Traffic supply

Gas supply

Electricity supply



www.focusurvey.com.au

e info@focusurvey.com.au ph 3338 5095

a Suite 6, 2/4 Waterworks Road - Ashgrove, QLD - 4080

Sheet No. 1 of 1

Surveyed By: PDS

Date Surveyed: 18.08.15

Issue

Dwg. No. RPR-304.DET.01

A

DEVELOPMENT APPROVAL

24 x MULTIPLE DWELLINGS

1 & 3 FOLKESTONE ST, BOWEN HILLS

MAYHILL

URBAN PLANNING • ARCHITECTURE



BOWEN HILLS PDA - ZONE PLAN

- MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- MIXED USE
- SPORT AND RECREATION





EXISTING SURROUNDING BUILDINGS

EXISTING MULTIPLE DWELLINGS



EXISTING DWELLING HOUSE



EXISTING SHOPS





LEVEL 7 (STOREY 8) 2 UNITS	2 x 3 BED
LEVEL 6 (STOREY 7) 4 UNITS	3 x 2 BED 1 x 1 BED
LEVEL 5 (STOREY 6) 4 UNITS	3 x 2 BED 1 x 1 BED
LEVEL 4 (STOREY 5) 4 UNITS	3 x 2 BED 1 x 1 BED
LEVEL 3 (STOREY 4) 4 UNITS	3 x 2 BED 1 x 1 BED
LEVEL 2 (STOREY 3) 4 UNITS	3 x 2 BED 1 x 1 BED
LEVEL 1 (STOREY 2) 2 UNITS	1 x 2 BED 1 x 3 BED COS
GROUND (STOREY 1)	9 CARPARKS CAFE
BASEMENT (NOT A STOREY) 14 CARPARKS	

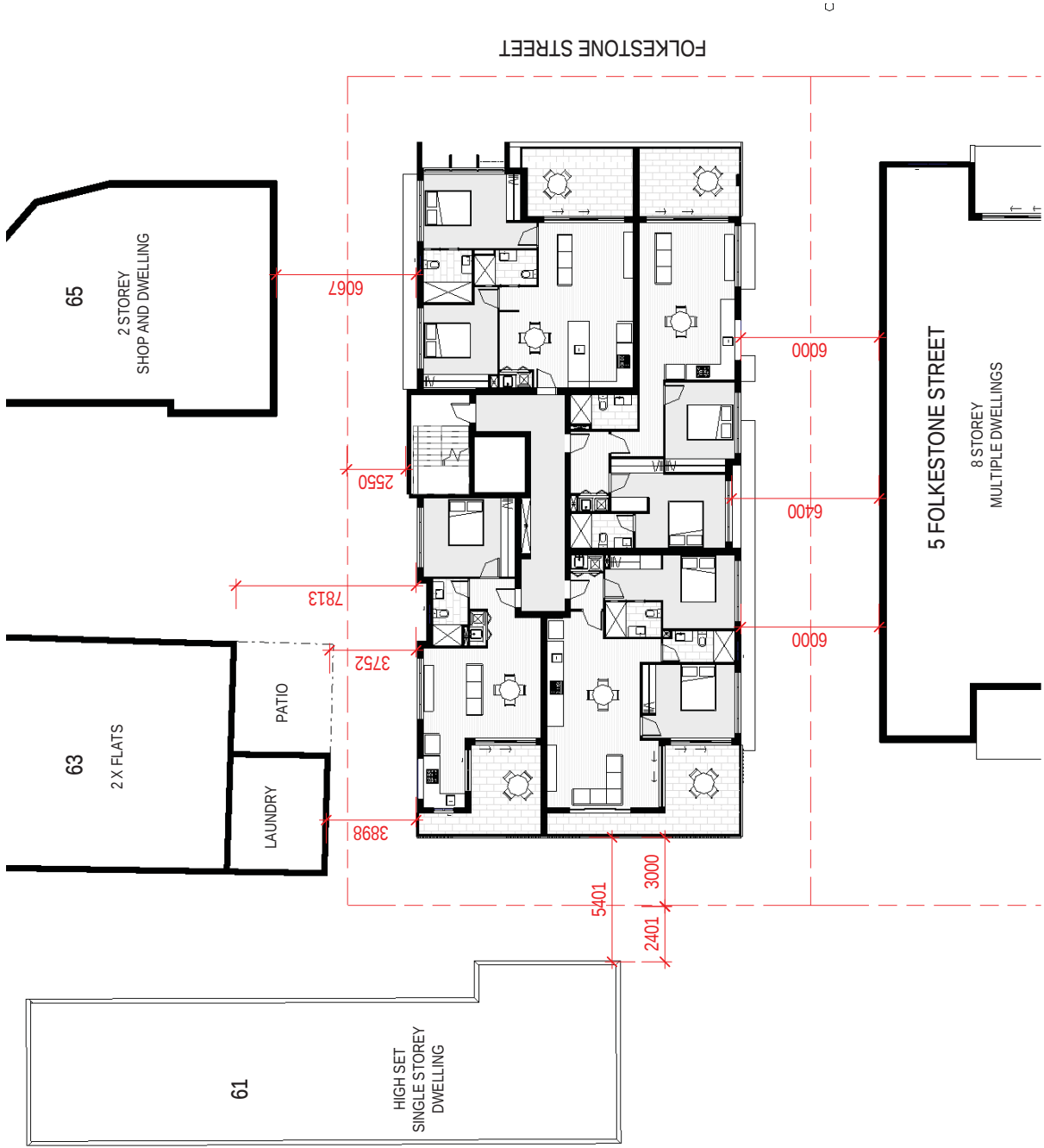
UNDER 25m EFFECTIVE BUILDING HEIGHT
22.6m

SITE DETAILS	
AREA	728m²
WIDTH	20.1m
DEPTH	36m
LOT AND PLAN	LOTS 3 & 4 ON RP10094
ZONING	HIGH DENSITY RES

DEVELOPMENT DETAILS	
NUMBER OF UNITS	24
NUMBER OF CARS	23
NUMBER OF STOREY	8 STOREY
COS	187m²
SITE COVER	59%
PLOT RATIO	3.5:1
LANDSCAPE	35m²

PROPOSED CAR PARKING	
BASEMENT	14 SPACES
GROUND	9 SPACES
TOTAL	23 SPACES (INCL. 2 x PWD)

PROPOSED BICYCLE PARKING	
RESIDENTS	24 SPACES
VISITORS	6 SPACES
TOTAL	30 SPACES



1

BUILDING SEPARATION PLAN - TYPICAL TOWER

1 : 200 @ A3

ROTHSCHILD KINGSBRIDGE PTY LTD

client

1 & 3 FOLKESTONE ST, BOWEN HILLS

address

BUILDING SEPARATION PLAN

drawing title

2020-108

job number

LP

drawn

1 : 200

scale at A3

DA 1.02

dwg number

J

issue

27.07.21

date

DA

description

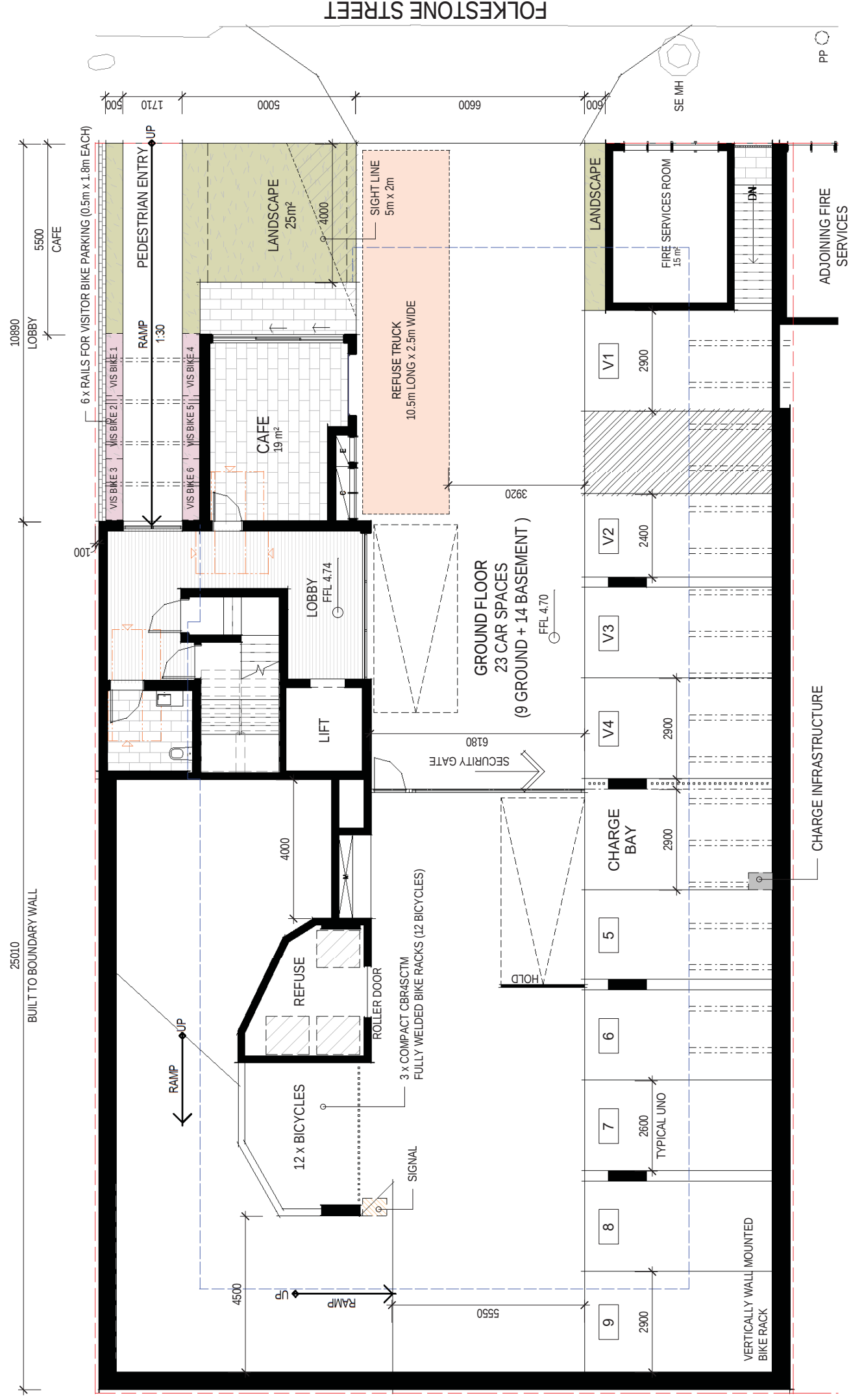


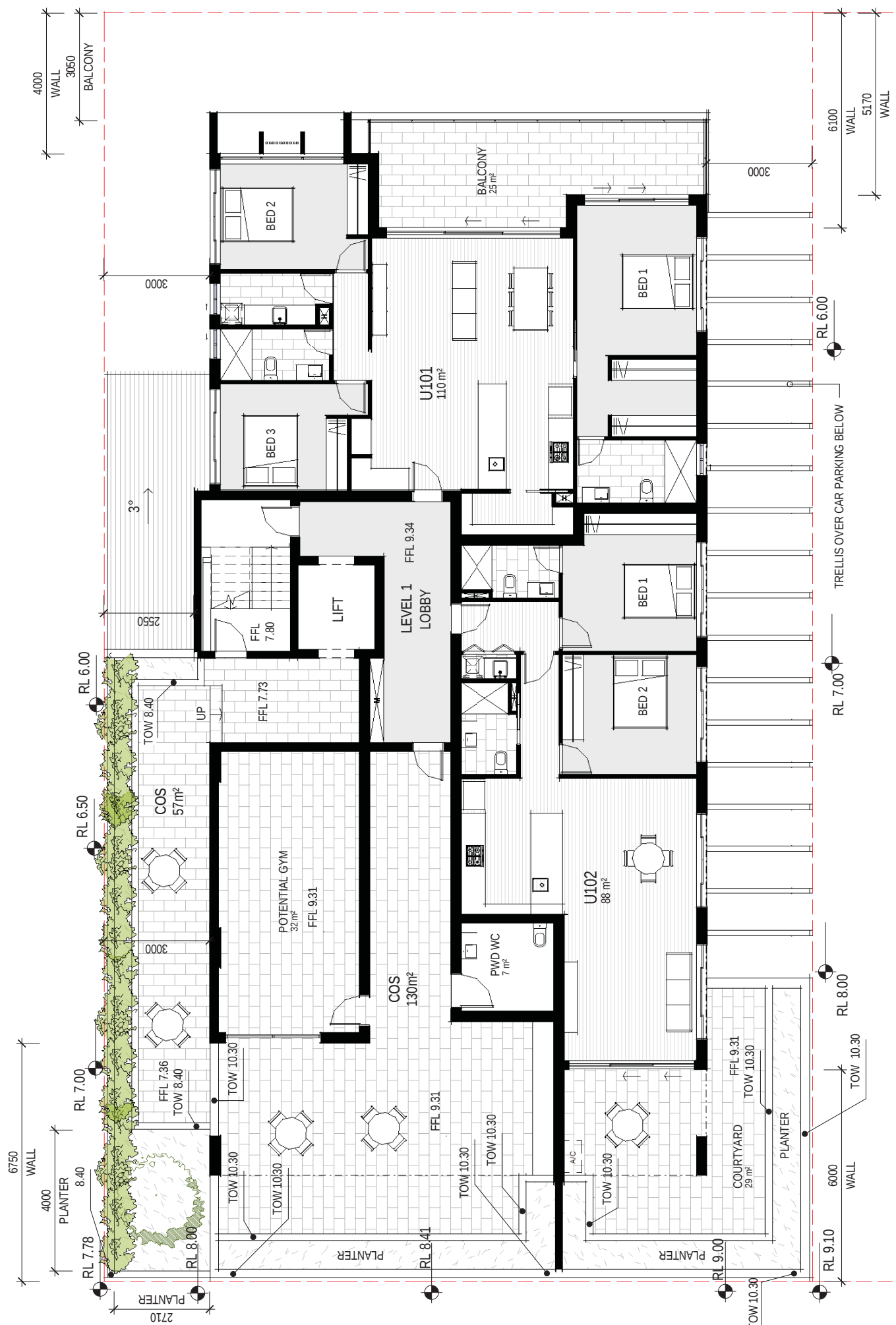
MAYHILL

URBAN PLANNING • ARCHITECTURE



GROUND FLOOR PLAN





FOLKESTONE STREET

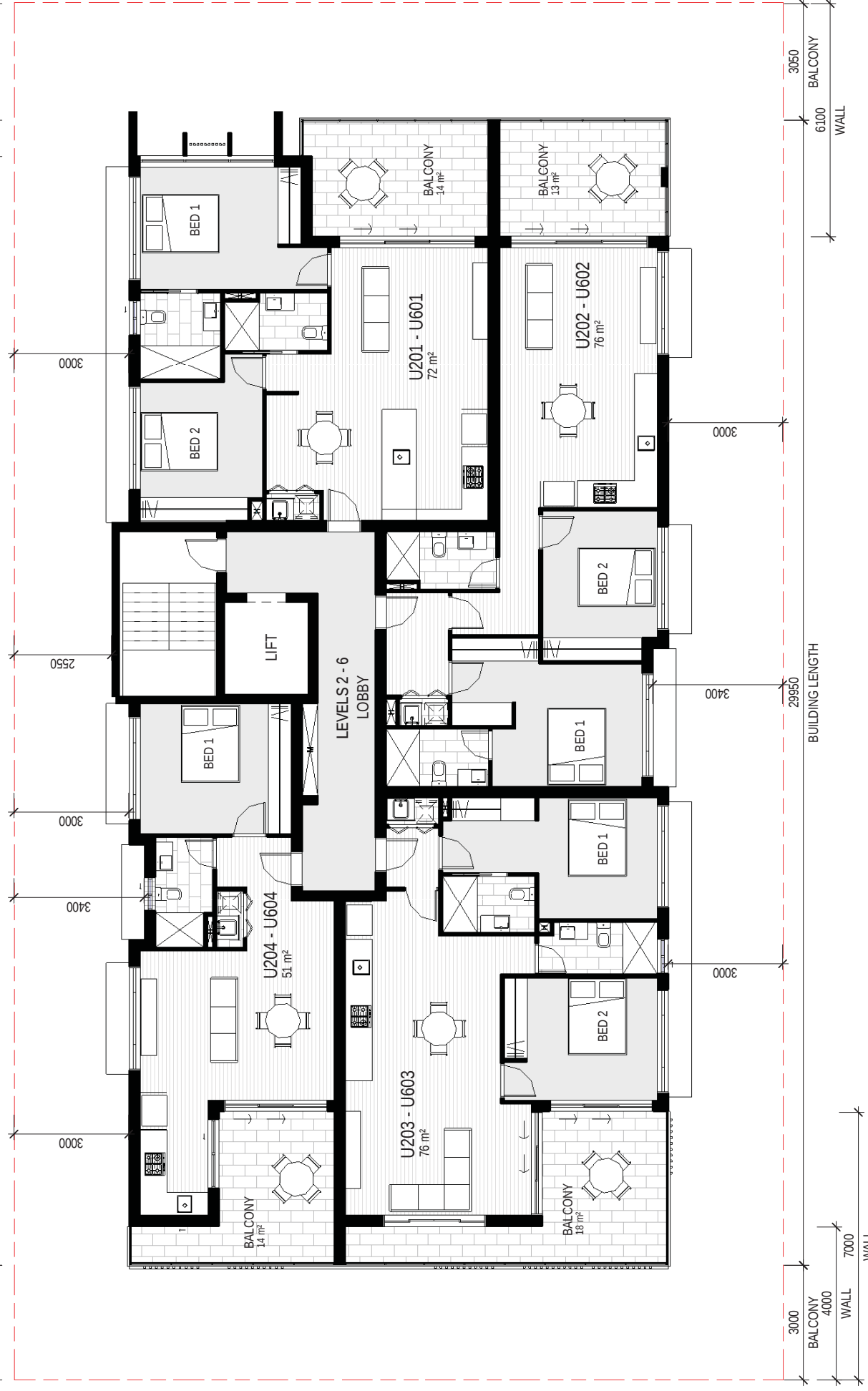


1 FLOOR PLAN - LEVEL 1
1:100 @ A3

Diagram illustrating the calculation of building length by summing individual segments:

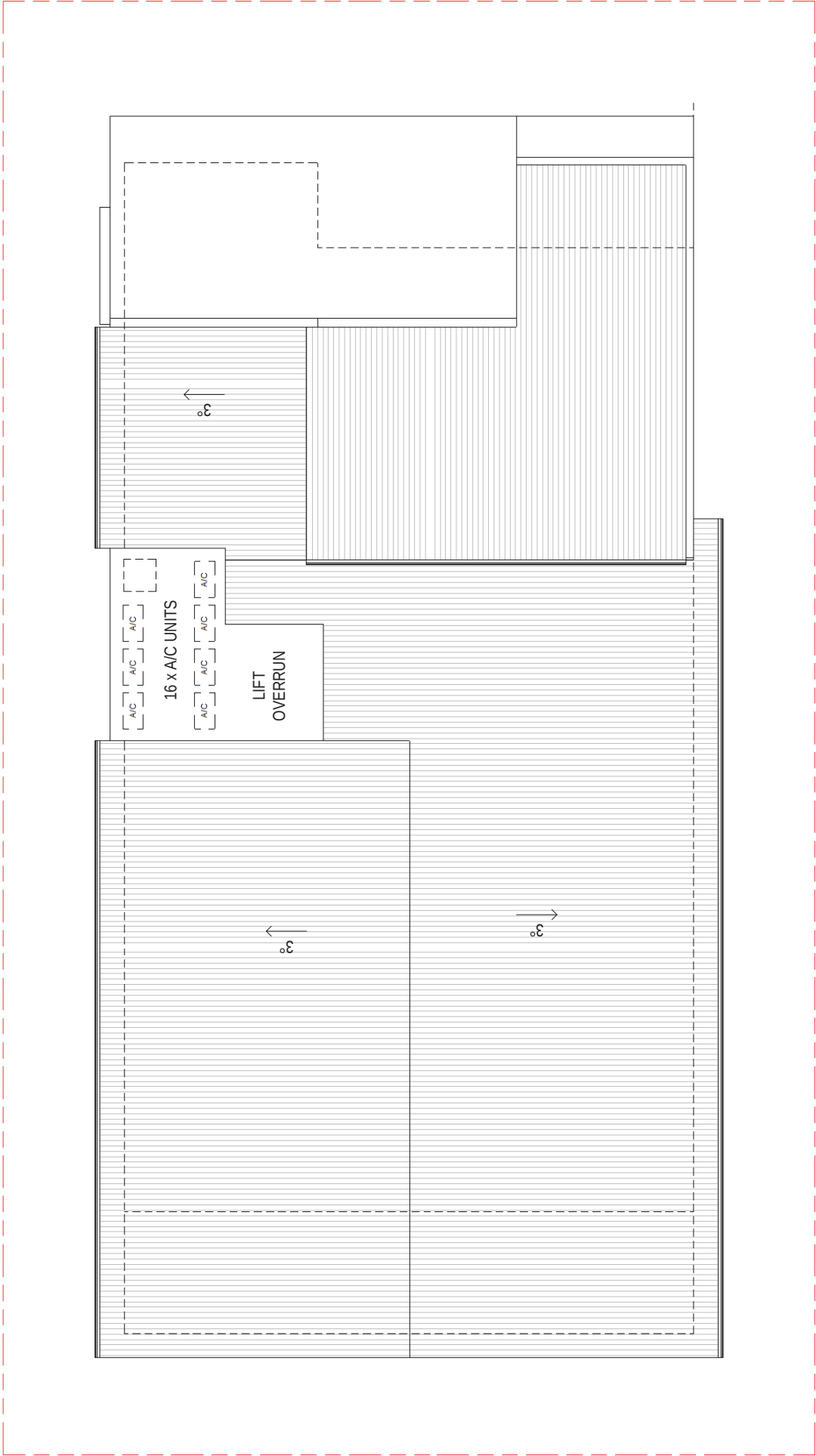
- 7000 WALL
- 4000 WALL
- 3000 BALCONY
- 6100 WALL
- 4000 WALL
- 3050 BALCONY

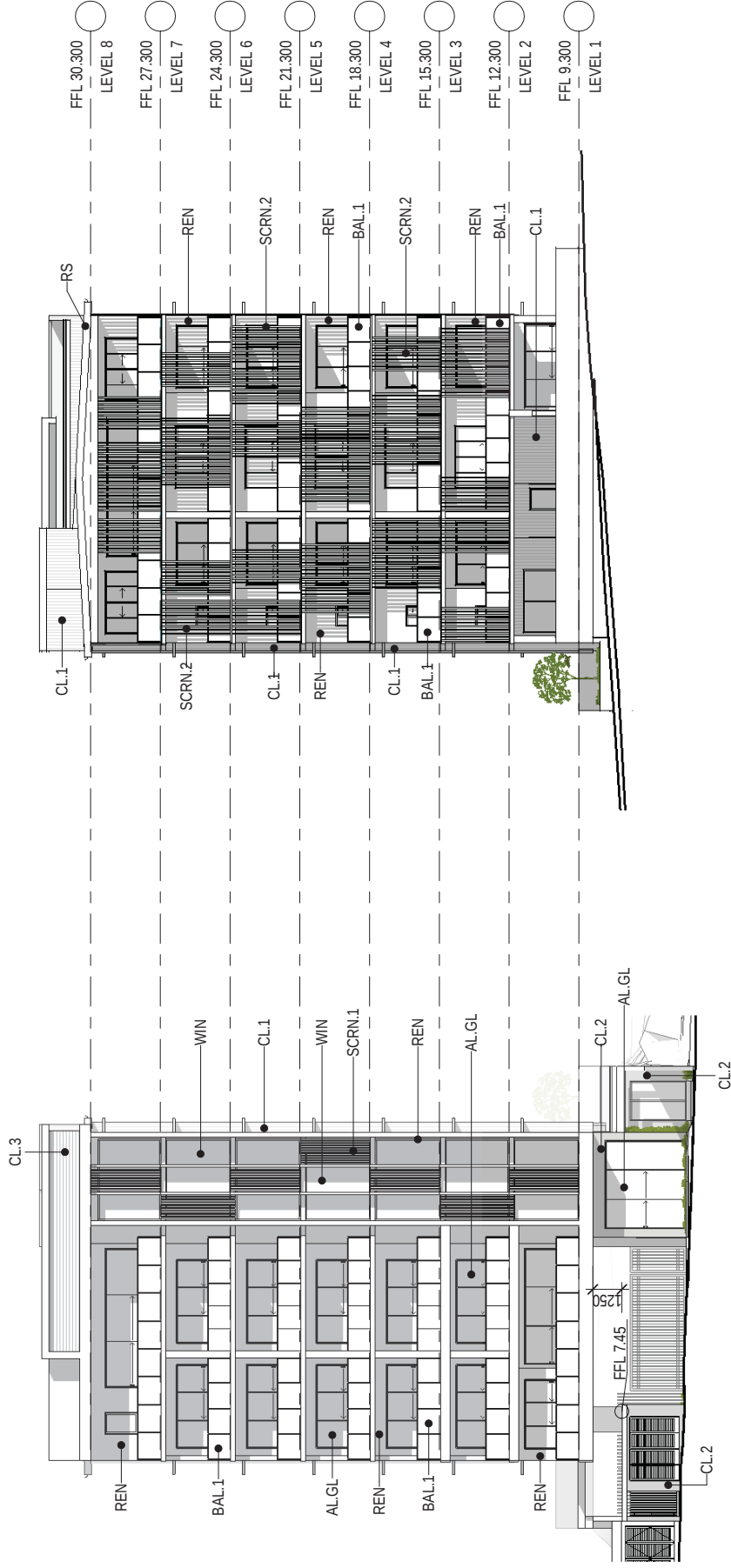
Total: 29000 BUILDING LENGTH



MAYHILL
URBAN PLANNING • ARCHITECTURE







1 NORTH ELEVATION (FOLKESTONE STREET)
1 : 200 @ A3

2 SOUTH ELEVATION
1 : 200 @ A3



FACE BRICK CLADDING
PGH DRY PRESSED BRICK FACINGS
'FLINDERS RED' WITH 'MACQUARIE
BLEND' MIX.



COLORBOND COLOUR
MONUMENT



BRISTOL COLOUR
'COTTON BALL'

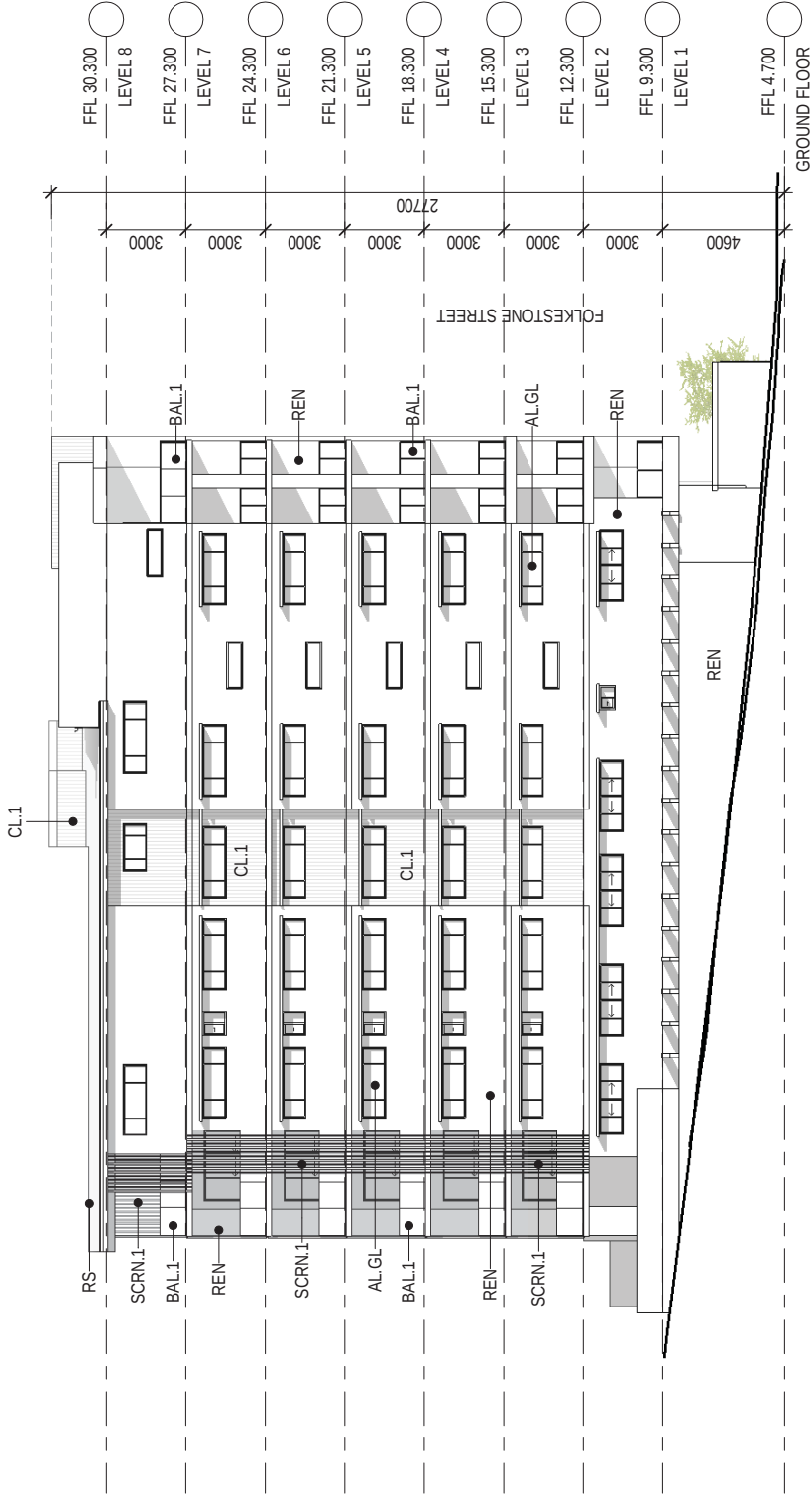
MATERIALS LEGEND

DESCRIPTION

- POWDER COATED ALUMINIUM FRAMED GLAZING.
- ALUMINIUM FRAMED CLEAR GLASS SOLID BALUSTRADE WITH NO GAPS.
- CLADDING TYPE 1. VERTICAL CLADDING. PAINT FINISH.
- CLADDING TYPE 2. FACE BRICK CLADDING.
- CLADDING TYPE 3. HORIZONTAL CLADDING. PAINT FINISH.
- RENDERED BLOCK WALL. PAINT FINISH.
- ROOF SHEETING. REFER TO FINISHES SCHEDULE.
- SCREEN TYPE 1. POWDER COATED ALUMINIUM FIXED FEATURE BATTENS.
- SCREEN TYPE 2. POWDER COATED ALUMINIUM MOVEABLE SCREENS.
- DOUBLE HUNG WINDOW. TOP OPEN, BOTTOM FIXED.

ABBRV.

- AL.GL
- BAL.1
- CL.1
- CL.2
- CL.3
- REN
- RS
- SCRN.1
- SCRN.2
- WIN



1 EAST ELEVATION
1:200 @ A3

FACE BRICK CLADDING
PGH DRY PRESSED BRICK FACINGS
'FLINDERS RED' WITH 'MACQUARIE
BLEND' MIX.

COLORBOND COLOUR
MONUMENT

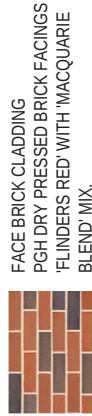
BRISTOL COLOUR
"COTTON BALL"

MATERIALS LEGEND

ABBREV.	DESCRIPTION
AL.GL	POWDER COATED ALUMINIUM FRAMED GLAZING.
BAL.1	ALUMINIUM FRAMED CLEAR GLASS SOLID BALUSTRADE WITH NO GAPS.
CL.1	CLADDING TYPE 1. VERTICAL CLADDING. PAINT FINISH.
REN	RENDERED BLOCK WALL. PAINT FINISH.
RS	ROOF SHEETING. REFER TO FINISHES SCHEDULE.
SCRN.1	SCREEN TYPE 1. POWDER COATED ALUMINIUM FIXED FEATURE BATTENS.



1 WEST ELEVATION
1 : 200 @ A3



FACE BRICK CLADDING
PGH DRY PRESSED BRICK FACINGS
'FLINDERS RED' WITH 'MACQUARIE
BLEND' MIX.



COLORBOND COLOUR
MONUMENT

BRISTOL COLOUR
'COTTON BALL'

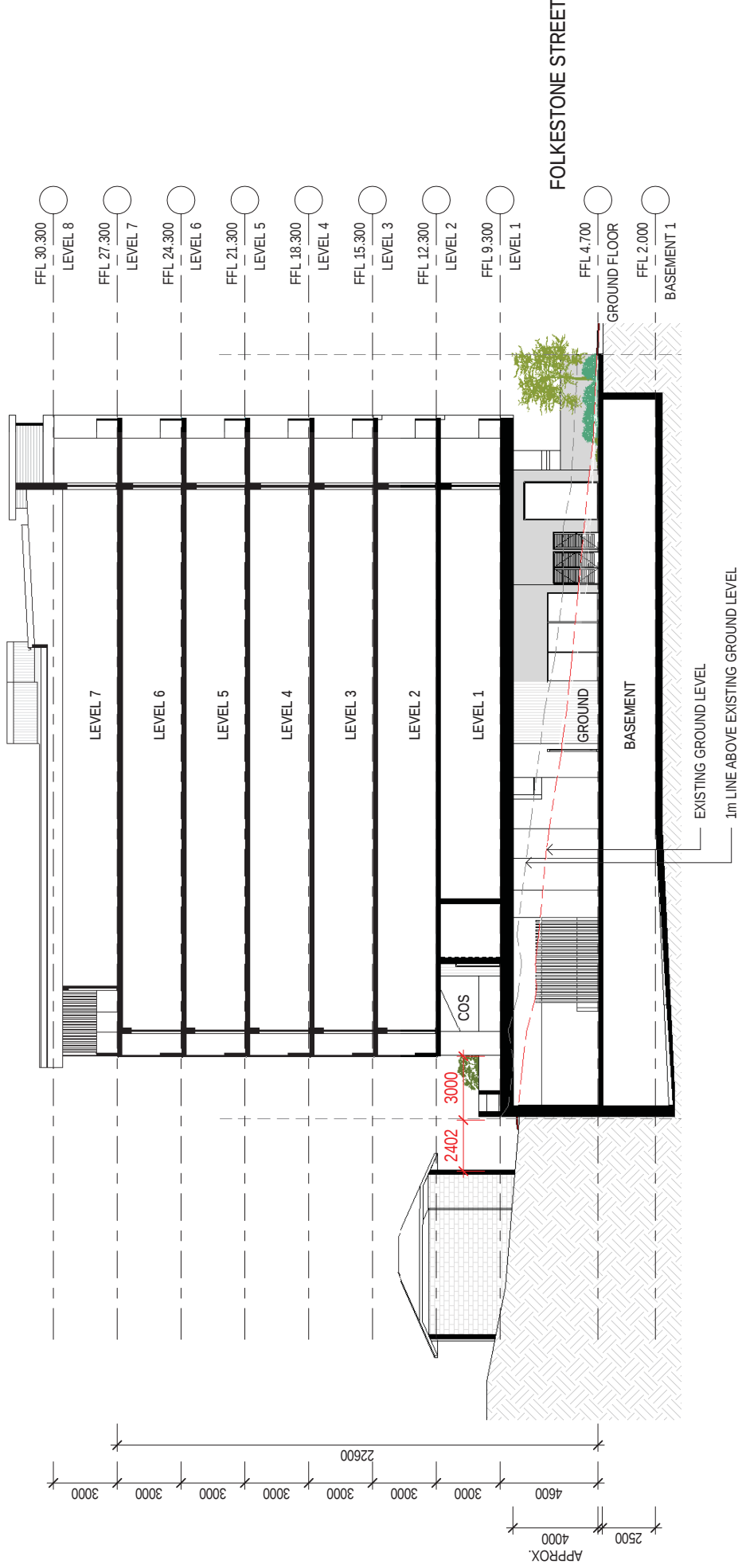
ABBREV.

AL.GL
BAL.1
CL.1
CL.2
CL.3
REN
RS
SCRN.1

DESCRIPTION

POWDER COATED ALUMINIUM FRAMED GLAZING.
ALUMINIUM FRAMED CLEAR GLASS SOLID BALUSTRADE WITH NO GAPS.
CLADDING TYPE 1. VERTICAL CLADDING. PAINT FINISH.
CLADDING TYPE 2. FACE BRICK CLADDING.
CLADDING TYPE 3. HORIZONTAL CLADDING. PAINT FINISH.
RENDERED BLOCK WALL. PAINT FINISH.
ROOF SHEETING. REFER TO FINISHES SCHEDULE.
SCREEN TYPE 1. POWDER COATED ALUMINIUM FIXED FEATURE BATTENS.

MATERIALS LEGEND



A SCHEMATIC SECTION A
1 : 200 @ A3

client

ROTHSCHILD KINGSBRIDGE PTY LTD

address

1 & 3 FOLKESTONE ST, BOWEN HILLS

drawing title

SCHEMATIC SECTION A

job number

2020-108

drawn

LP

scale at A3

1 : 200

dwg number

DA 4.01

issue

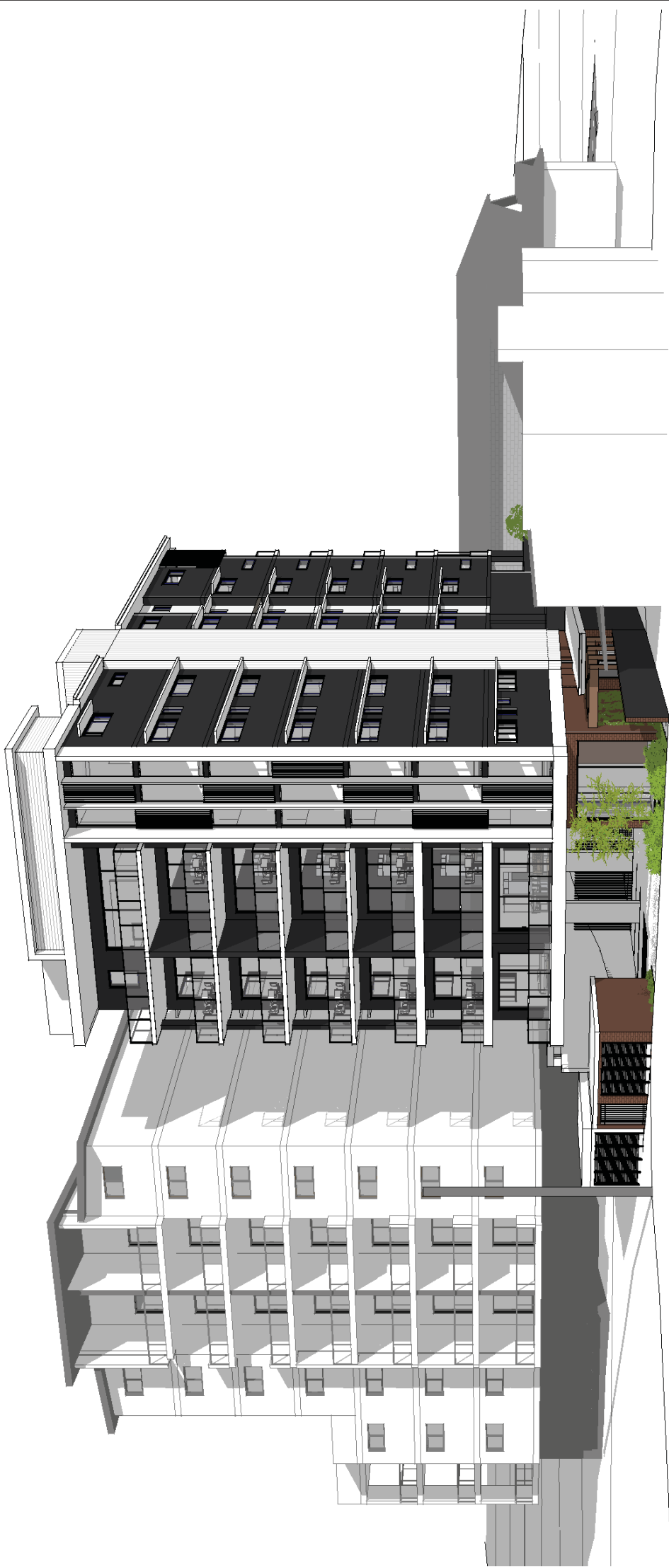
J

date

27.07.21

description

DA



client

ROTHSCHILD KINGSBRIDGE PTY LTD

address

1 & 3 FOLKESTONE ST, BOWEN HILLS

drawing title

PERSPECTIVE

job number

2020-108

drawn

LP

scale at A3

DA 5.01

dwg number

J

issue

27.07.21

date

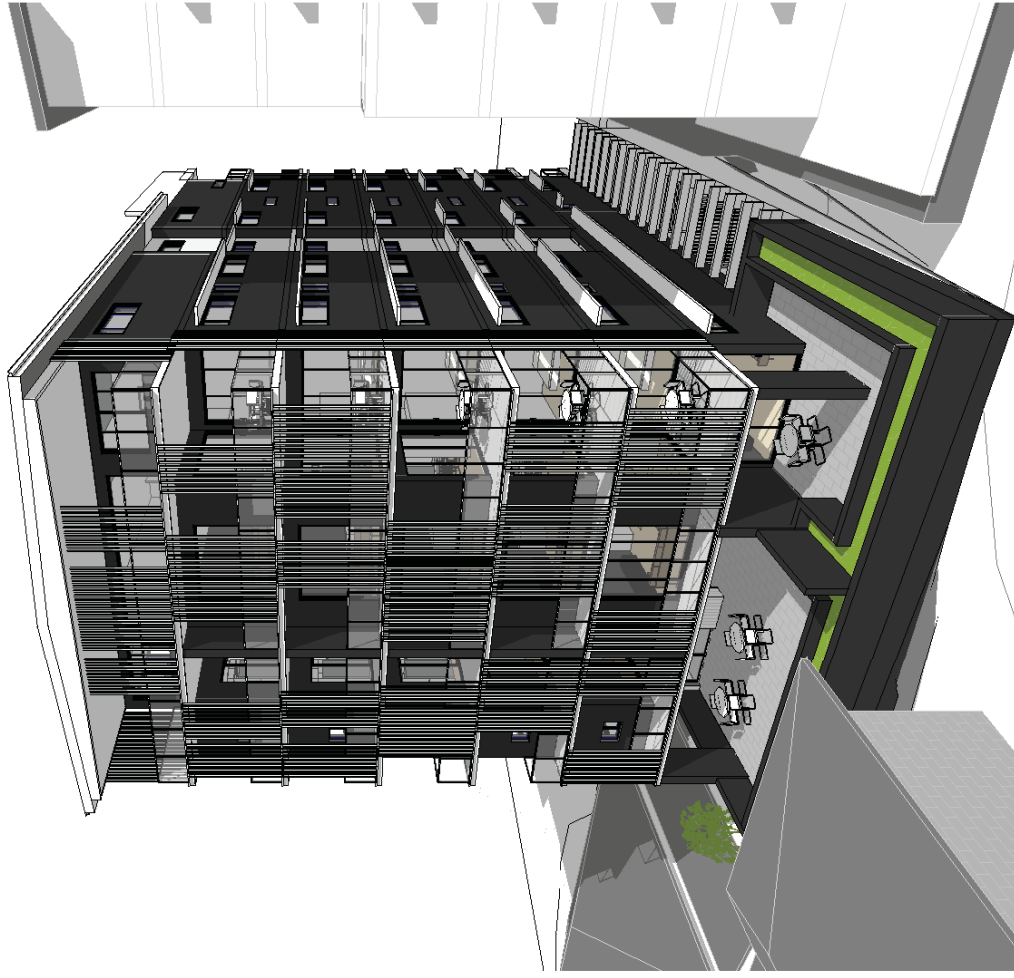
DA

description

MAY HILL

URBAN PLANNING • ARCHITECTURE





client

ROTHSCHILD KINGSBRIDGE PTY LTD

address

1 & 3 FOLKESTONE ST, BOWEN HILLS

drawing title

PERSPECTIVE

job number

drawn

LP

scale at A3

dwg number

DA 5.03

issue

J

date

27.07.21

description

DA

MAY HILL

URBAN PLANNING • ARCHITECTURE



client

ROTHSCHILD KINGSBRIDGE PTY LTD

address

1 & 3 FOLKESTONE ST, BOWEN HILLS

drawing title

PERSPECTIVE

job number

2020-108

drawn

LP

scale at A3

dwg number

DA 5.04

issue

J

date

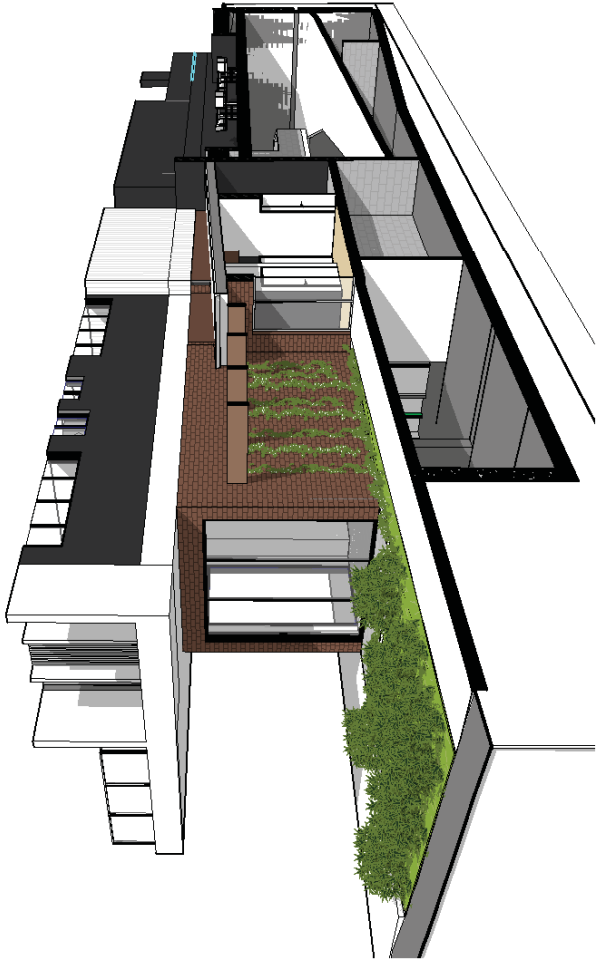
27.07.21

description

DA

MAY HILL
URBAN PLANNING • ARCHITECTURE





1 3D SECTION - PEDESTRIAN ENTRY
@ A3

