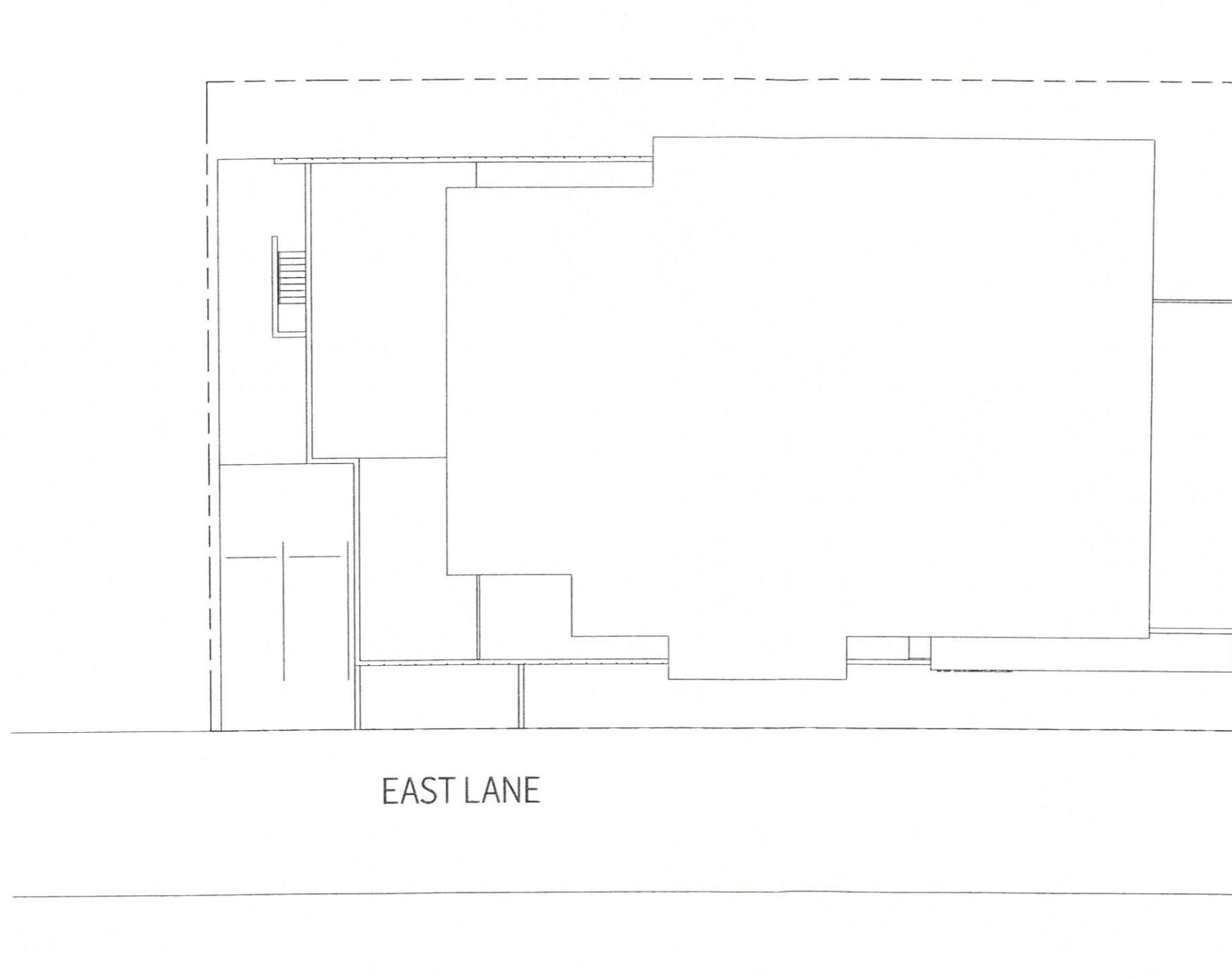


SITE PLAN

1:200@A3



EAST LANE

ARCHER ST

Lot 3 on RP607653
1012 M²
Parish of Rockhampton
County of Livingstone

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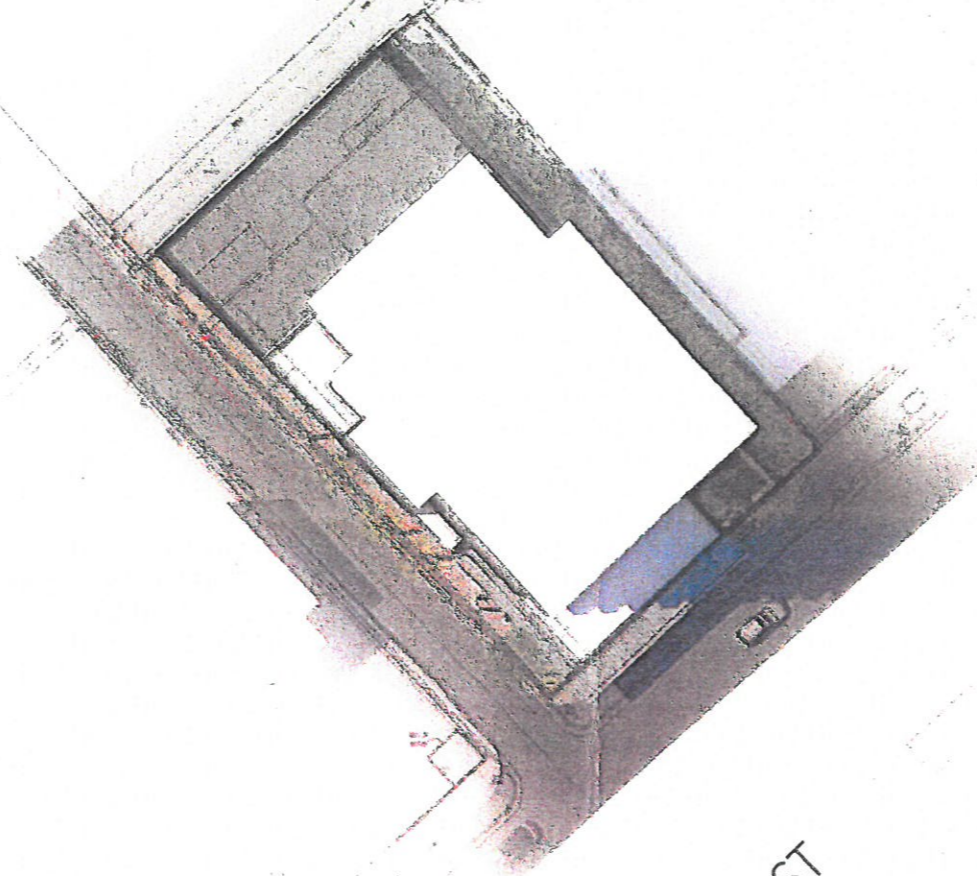
SITE PLAN EXTENDED

1:500@A3



EAST LANE

ARCHER ST



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Rev.	Date	Description	Iss.	Appr.
A	19.10.16	For information	LH	PW
B	03.11.16	Plan & Elevation update	LH	PW
C	09.02.17	Plan & Elevation Update	LH	PW
D	22.04.20	4 Units Per Typical Floor	PW	PW
E	26.05.20	Amend 4 Unit per Floor	PW	PW
F	16.02.21	Minor Amendment	PW	PW

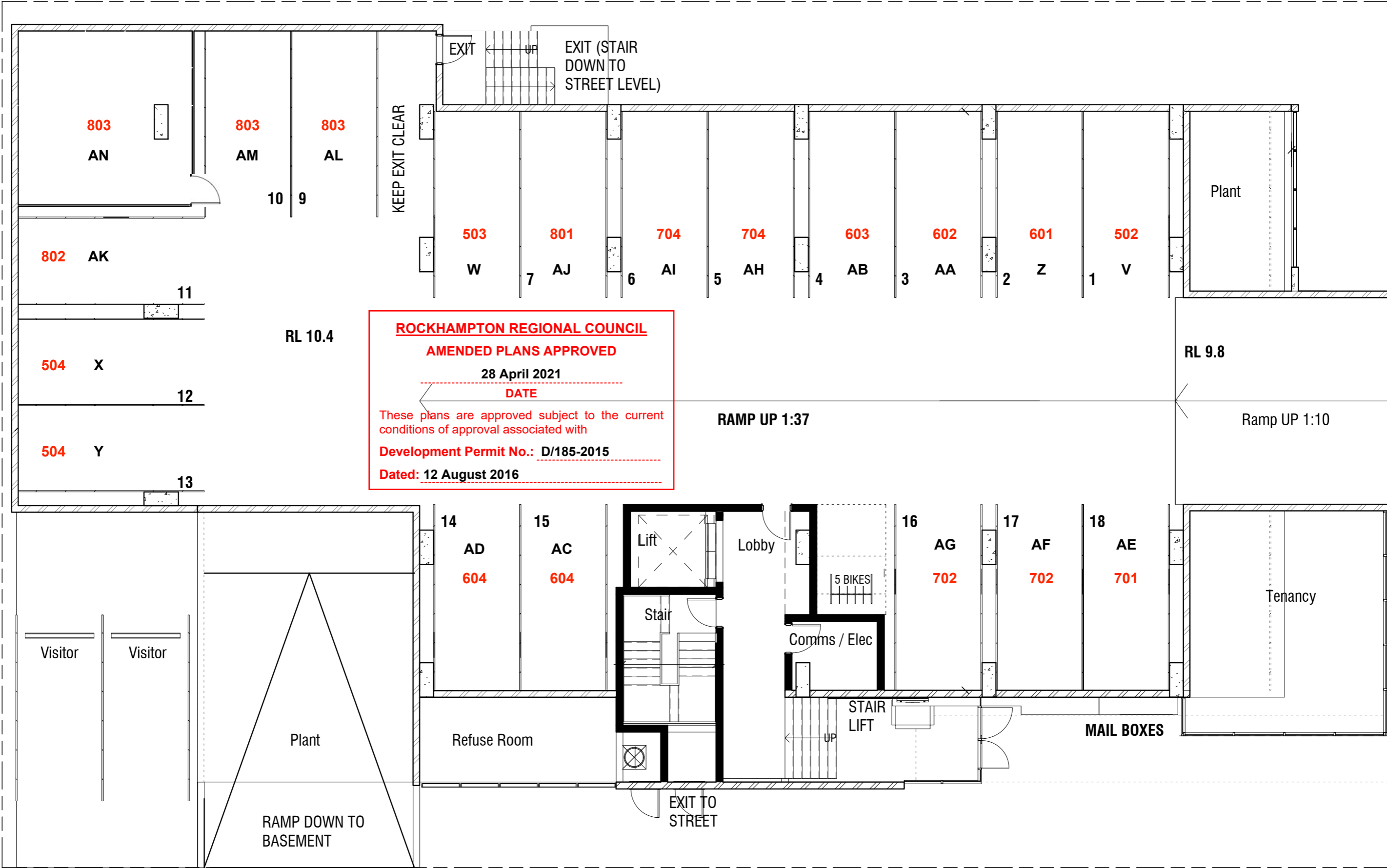
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Project
LOFT on the Lane
Archer Street, ROCKHAMPTON Queensland
Project Number
715107

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Date Plotted 16-Feb-21 3:59:11 PM
Date Issued 16.02.21
Scale 1 : 100 @A3
0mm

Drawing Title
BASEMENT LEVEL
Drawing Number
1000

Revision
F
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Rev.	Date	Description	Iss.	Appr.
A	19.10.16	For information	LH	PW
B	03.11.16	Plan & Elevation update	LH	PW
C	09.02.17	Plan & Elevation Updates	LH	PW
D	22.04.20	4 Units Per Typical Floor	PW	PW
E	26.05.20	Amend 4 Unit per Floor	PW	PW
F	12.06.20	Tenancy Plan Updated	PW	PW
G	16.02.21	Minor Amendment	PW	PW

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Project
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Archer Street, ROCKHAMPTON Queensland

Project Number
715107

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Date Issued	16.02.21
Scale	1 : 100 @A3

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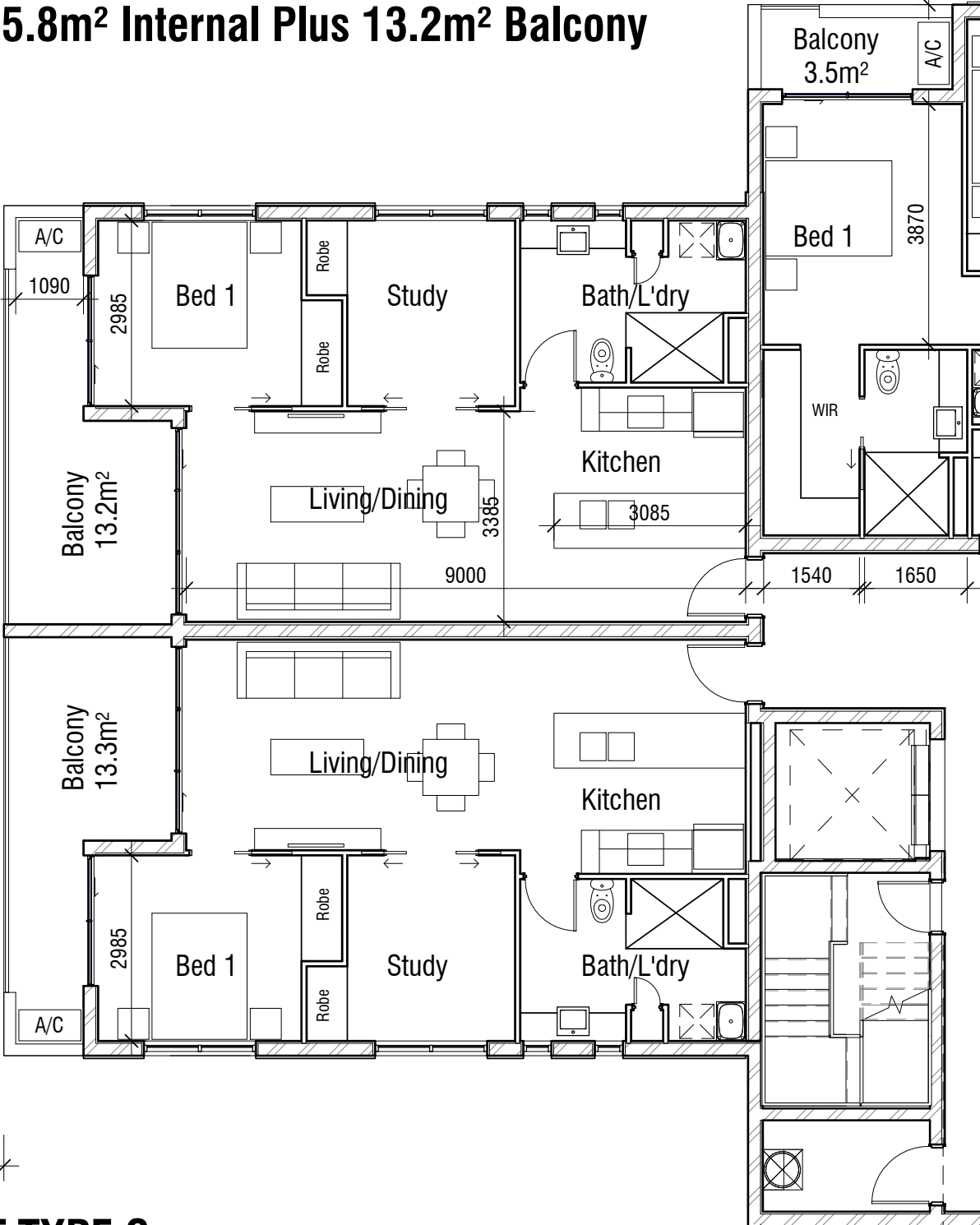
Drawing Number
1001

Revision
G

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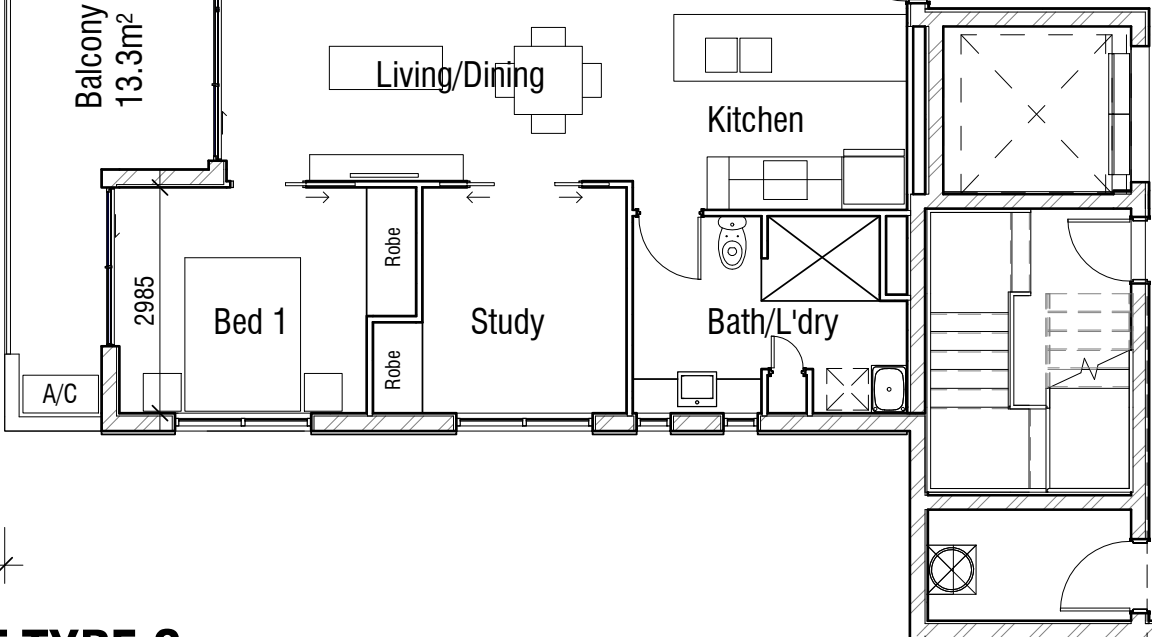
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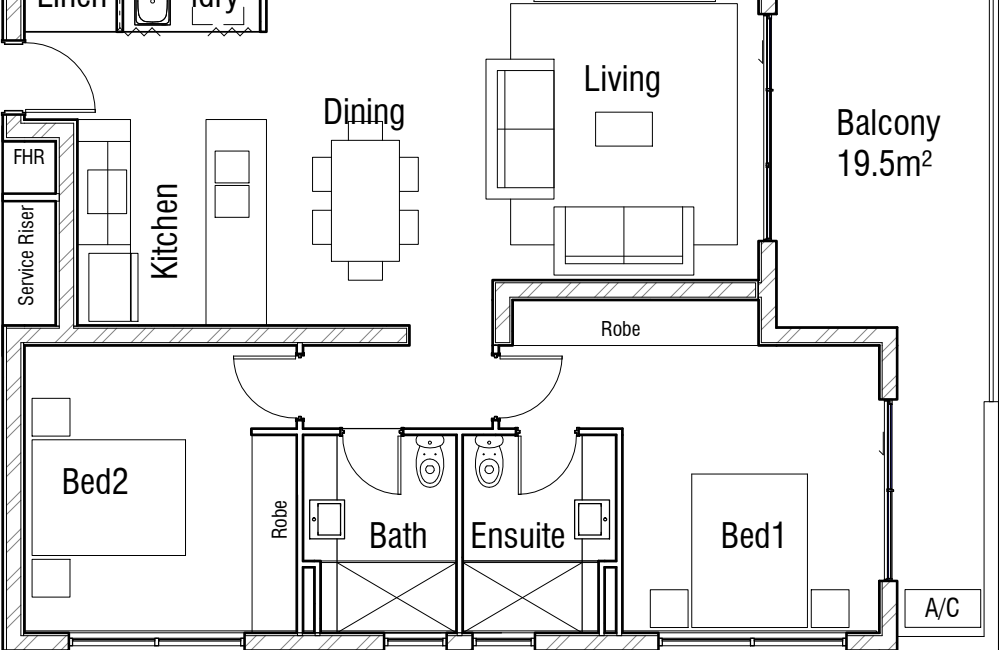
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UNIT TYPE C
62.3m² Internal Plus 13.3m² Balcony



UNIT TYPE B
88.4m² Internal Plus 20.7m² Balcony



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715107

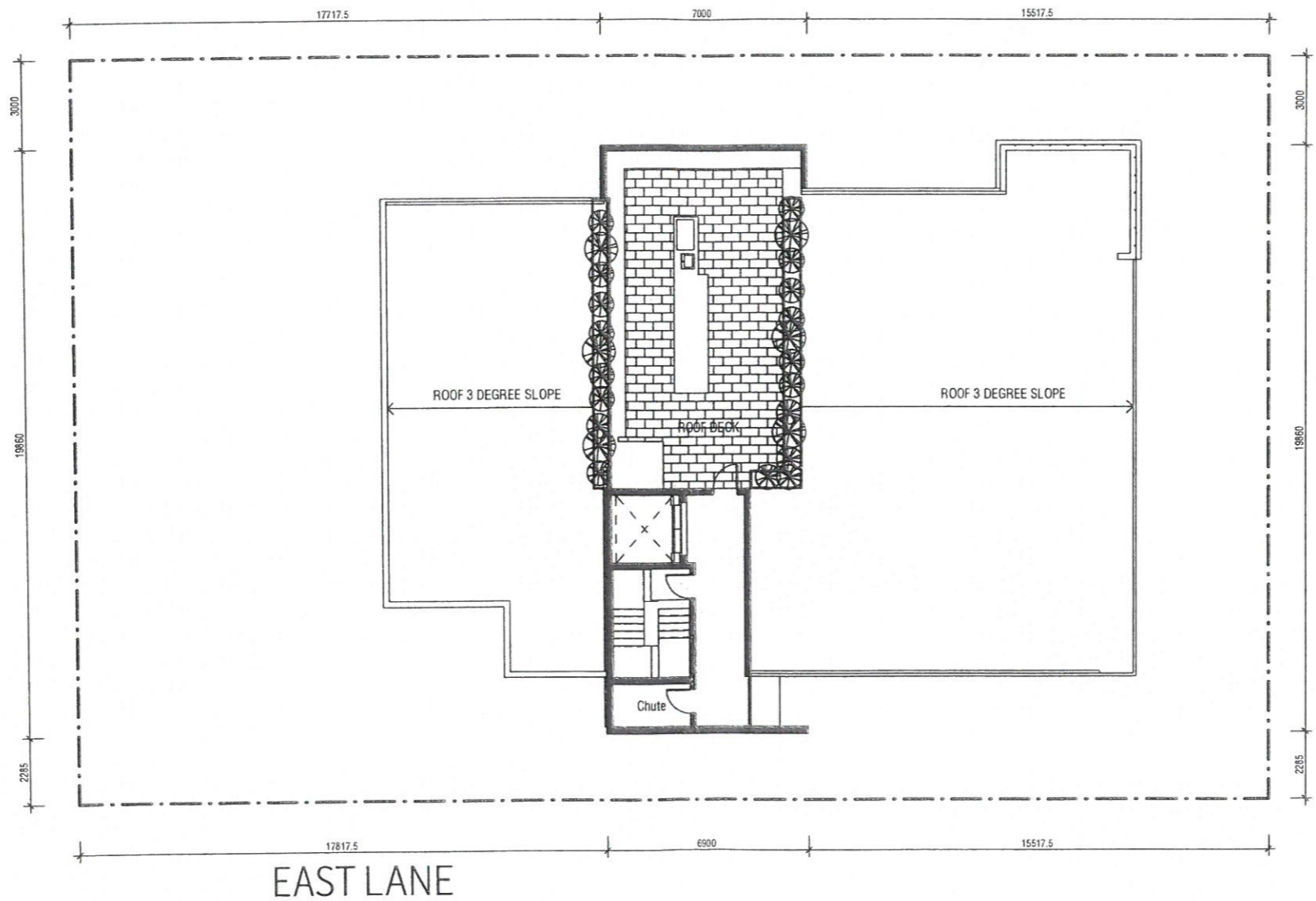
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Drawing Title
TYPICAL LEVEL
Drawing Number
1003

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ROOF PLAN
1:200@A3



ARCHER ST

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A	03.11.16	Plan & Elevation update	LH	PW
B	09.02.17	Plan & Elevation Updates	LH	PW
C	17.03.17	Lift Over-run Level added	PW	PW
D	04.06.20	Basic elevations to match unit plan	PW	PW

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Project

LOFT on the Lane

Archer Street, ROCKHAMPTON
Queensland

Project Number

715107

Status

Date Plotted 04-Jun-20 12:45:32 PM

Date Issued 04.06.20

Scale 1 : 100 @A1

0 10 20 40 60M

Drawing Title

South East Elevation

Drawing Number

3002

Revision

D

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Rev.	Date	Description	Iss.	Appr.
A	03.11.18	Plan & Elevation update	LH	PW
B	09.02.17	Plan & Elevation Updates	LH	PW
C	17.03.17	Lift Over-run Level added	PW	PW
D	04.06.20	Basic elevations to match unit plan	PW	PW

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Project
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Archer Street, ROCKHAMPTON
Queensland

Project Number
715107

Status

Date Plotted 04-Jun-20 12:34:18 PM

Date Issued 04.06.20

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Drawing Title

South West Elevation

Drawing Number
3001

Revision
D

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Archer Street, ROCKHAMPTON
Queensland

Project Number
715107

Status

Date Plotted 04-Jun-20 12:35:33 PM

Date Issued 04.06.20

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Drawing Title

North East Elevation

Drawing Number
3000

Revision
D

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A	03.11.16	Plan & Elevation update	LH	PW
B	09.02.17	Plan & Elevation Updates	LH	PW
C	17.03.17	Lift Over-run Level added	PW	PW
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28 April 2021

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Dated: 12 August 2016

Project
LOFT on the Lane

Archer Street, ROCKHAMPTON
Queensland

Project Number
715107

Status

Date Plotted 04-Jun-20 12:49:26 PM

Date Issued 04.06.20

Scale 1 : 100 @A1

0 10 20 40 60M

Drawing Title

North West Elevation

Drawing Number
3003

Revision

D

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Waste Management Review

Proposed Multiple Dwelling (24 units) and Food & Drink Outlet 12 Archer Street, Rockhampton City (Lot 3 on RP607653)

This waste management review has been undertaken to determine the future waste that will be generated by the proposed development at 12 Archer Street, Rockhampton. This report was undertaken in conjunction with the applicant, Eightco Pty Ltd, to determine the amount of waste to be generated by the proposed development, the type and number of bins to be utilised, collection and washdown methods.

1. Site Description and Local Road Network

The subject site is located at 12 Archer Street, Rockhampton and is legally described as Lot 3 on RP607653. The subject site is bound by Archer Street to the south and Quay Lane to the west. The proposed development includes two (2) separate access points, one off Archer Street and one off Quay Lane.

The *Rockhampton Region Planning Scheme 2015* identifies Archer Street between Bolsover Street and Victoria Parade as a Major Urban Collector and Quay Lane as an Urban Access Street. The existing Council road infrastructure will be able to readily accommodate the proposed development and the proposed waste management strategy.

The site includes an existing single access located off Quay Lane towards the northern property boundary. This existing access will be augmented as part of the proposed development, including a longitudinal shift along Quay Lane (approx. 1.5m) and appropriate provisions to ensure road flow within Quay Lane does not enter the proposed underground car park. Both proposed accesses will be two-way and have security roller-shutters installed.

Figure 1 below illustrates the location of the subject site.



Figure 1 Subject Site

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2. Proposal Characteristics

The proposal involves the construction of a ten (10) storey building to accommodate 24 residential units and small Food and Drink tenancy (40m²) at ground level. The following table illustrates the proposed unit mix within the overall development.

Table 1 Proposed Unit Mix

Level	2 Bed	3 Bed	Total
Basement	-	-	-
Ground	-	-	-
Level 1	2	1	3
Level 2	2	1	3
Level 3	2	1	3
Level 4	2	1	3
Level 5	2	1	3
Level 6	2	1	3
Level 7	2	1	3
Level 8	2	1	3
Total	16	8	24

3. Waste Management

3.1 Anticipated Waste Generation

Table 2 below outlines the overall waste bin requirements for the subject development based on the typical waste and recycling generation rates.

Table 2 Anticipated Waste Generation Levels – Proposed Units

Waste Type	Type of Unit	Generation Rate per Unit (Litres/week/unit)	Overall Development (Litres/week)	Required Bin Provision
				Weekly Collection
General Waste	2 Bed	120	2880	3x 1,100L bins
	3 Bed			
Recycling	2 Bed	60	1440	2x 1,100L bins
	3 Bed			

Table 3 Anticipated Waste Generation Levels – Proposed Food and Drink Outlet (40m²)

Waste Type	Generation Rate (Litres/day/unit)	Overall Development (Litres/week)	Required Bin Provision
			Weekly Collection
General Waste	133 (5L/1.5m ² floor area)	931	1x 1,100L bin
Recycling	53 (2L/1.5m ² floor area)	373	1x 1,100L bin (shared with units)

Based on the above, it is anticipated waste generation will trigger the need for a maximum of 6x 1,100L bins on site.

The anticipated waste movements are as follows:

- Residents from each unit utilise the waste chute for general waste and access the garbage room (via the lift), to place their recycling waste;
- Operators of the Food and Drink Outlet will transfer waste from the tenancy to the refuse storage areas as required; and,
- On collection day, the MGBs will be wheeled to the Quay Lane kerbside for collection.

3.2 Proposed Bin Configuration

The bin configurations proposed involves a trade-off between the allocated bin storage area availability and the required bin collection frequency. The bin storage area allocated can be reduced approximately by half, if the waste is collected twice a week as opposed to weekly collections. However, this gives rise to on-going waste collection and maintenance costs. Conversely, if the waste storage area is increased to involve less frequent collections, valuable space within the ground/basement level parking area is lost.

As per the above, it is considered that provision of 6x 1,100L Mobile Garbage Bins (MGBs), based on collection frequency, would optimise the overall objectives.

Figure 2 below illustrates the typical 1,100L MGB dimensions.

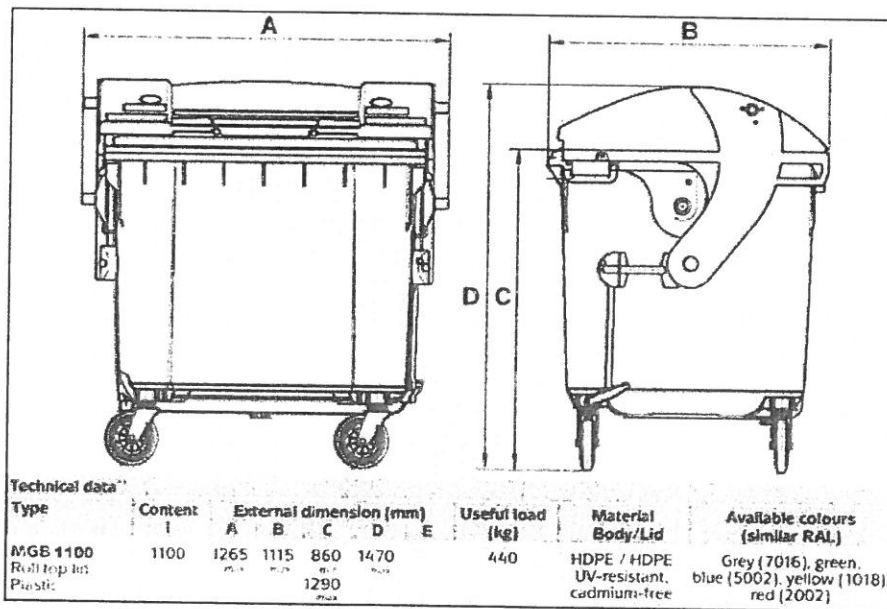


Figure 2 Dimensions of 1,100L

From the above figure, the following storage area requirement can be established:

- For 1,100L Bins – (width of 1,300mm and length of 1,200mm – as indicated by dimensions A and B in Figure 2 (above) respectively. These dimensions have been rounded up to the nearest 10cm for conservative assessment purposes) – Total area of 1.56 square metres per bin is required.

The weekly collection option would require a bin storage area of 9.36 square metres.

3.3 Waste Enclosure

The proposed development includes a permanent refuse storage area (bulk waste storage) on the Ground Level and adjacent to Quay Lane. Roller or panel lift doors will provide access from Quay Lane for collection purposes.

The storage room has a total area of approximately 12 square metres.

The proposed bin numbers can be accommodated within refuse storage room with sufficient space for a person to enter the room and wheel these bins out for collection activities.

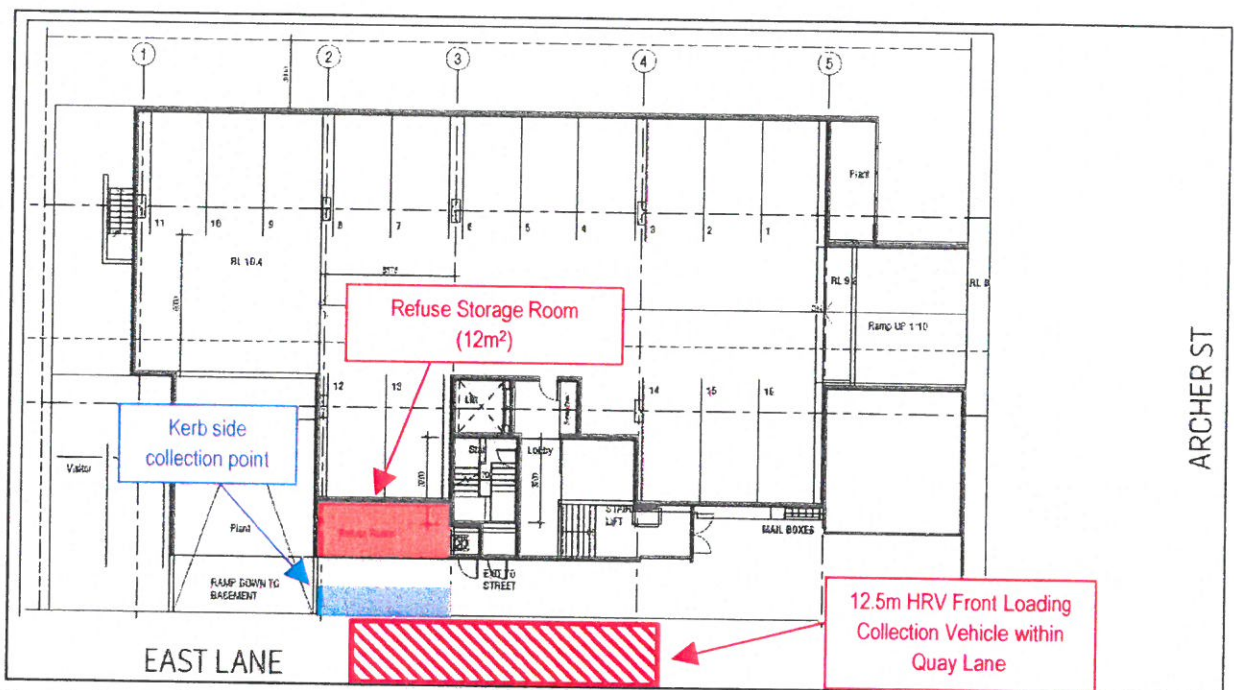


Figure 3 Proposed Refuse Storage Area and Kerbside Waste Collection Location

3.4 Collection Frequency

Based on the anticipated waste generation, weekly collection it is anticipated to be appropriate. However, based on recently approved and similar type developments, it is possible that collection will occur three (3) times per week, with 1 to 2, 1100 litre bins to be emptied on each collection. Should these arrangement be adopted by the Body Corporate, then the total number of bins required will be reduced accordingly.

3.5 Collection Method

The collection services will be undertaken by Council through a waste contractor's service fleet. Given the basement level car parking area of the site does not have sufficient space and headroom for a truck to enter in forward gear and manoeuvre itself within the site in order to exit in a forward gear, the waste collection is proposed to be undertaken at the kerbside on Quay Lane, as shown in Figure 3 above.

It is noted that the proposed kerbside space is currently operating as a time unrestricted kerbside car parking area. As such, this kerbside, space anticipated to be occupied by the waste collection vehicle on collection day, must be sign controlled by nominating the space as a loading zone during the anticipated collection dates and times.

3.6 Noise

Being located within the covered, enclosed ground level car park, noise associated with the waste disposal process (wheeling out bin to kerb side) shall be minimal.

3.7 Cleaning Facilities

A bin wash area is to be also provided within the permanent refuse storage room. The area shall be appropriately drained, and completely isolated from stormwater – to be drained directly to the sewer system.

3.8 Management and Responsibility

The development's body corporate shall be responsible for cleaning and maintaining the bin storage area. This will involve using the provided facilities to clean the enclosure and bins. Management shall also be responsible for:

- Ordering initial bins;
- Ordering replacements or additional bins; and
- Organising any required clean-ups or other special services.

Prior to moving in, management shall provide residents with information regarding the adopted waste management system.

PROPOSED MULTI-LEVEL
RESIDENTIAL APARTMENTS
12 ARCHER STREET,
ROCKHAMPTON

ENGINEERING INFRASTRUCTURE REPORT

PREPARED FOR EIGHTCO INVESTMENTS PTY LTD
JULY 2016
15-004139
REVISION B
CIVIL

ROCKHAMPTON REGIONAL COUNCIL

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Dated: 12 August 2016

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238 Quay Street
ROCKHAMPTON QLD 4700

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DOCUMENT CONTROL

15-004139

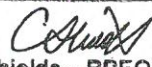
Issue	Date	Issue Details	Author	Checked	Approved
Revision A	December 2015	Original Issue	LM	CS	CS
Revision B	July 2016	Building Footprint Amendment	LM	CS	 Chris Shields - RPEQ 9347

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APPENDIX B	RRC PLANNING SCHEME OVERLAY MAPS
APPENDIX C	RRC GIS ADVANCED FEATURE MAP
APPENDIX D	PRE-LODGEEMENT MEETING MINUTES
APPENDIX E	STORMWATER CALCULATIONS
APPENDIX F	CAPRICORN SURVEY GROUP DETAILED SURVEY

1 INTRODUCTION

Calibre Consulting (Qld) Pty Ltd has prepared the following report to address relevant civil engineering related aspects of a Development Application for multi-level residential apartments, located at 12 Archer Street, Rockhampton (Lot 3 on RP607653). The proposed development is situated on the corner of Archer Street and Quay Lane, as shown in **Figure 1-1** below. The construction of the proposed development will include:

- Demolition of the existing buildings;
- Earthworks;
- Building works (including water, sewer and stormwater connections, underground car parking and on-street access works); and
- Landscaping.



Figure 1-1: Locality Plan

2 PROPOSED DEVELOPMENT

The proposed development includes:

- Eight (8) levels of residential apartments (31 units);
- Two (2) levels of car parking; and
- One (1) 63m² retail space (e.g. coffee shop or similar).

The proposed architectural drawings are attached in **Appendix A**.

3 SITE WORKS AND EROSION CONTROL

Site works for the development will generally consist of the following stages:

- Demolition of existing building;
- Clearing and grubbing;
- Earthworks;
- Underground services installation;
- Building works;
- Access works;
- Final detailed works; and
- Landscaping.

Appropriate erosion control measures are to be implemented during construction in accordance with Rockhampton Regional Council requirements. All erosion control measures are to be closely monitored by the Principal Contractor and re-established after all rain events or vandalism.

3.1 PLANNING ASSESSMENT

A desktop assessment has been carried out to investigate the proposed development against the Rockhampton Region Planning Scheme. A summary of the assessment is provided below with Rock-e-plan overlay maps provided in **Appendix B**:

3.1.1 ACID SULFATE SOILS

The proposed site is identified to be above 5m and below 20m AHD. This indicates a potential risk of encountering acid sulfate soils during construction, and should be considered as part of the site geotechnical investigation prior to detailed design.

3.1.2 ZONING

The proposed site is zoned to be 'High Density Residential'. This zoning is consistent with the proposed use, therefore no action required in this regard.

3.1.3 FLOOD HAZARD

The proposed site has been included within the 'Fitzroy River Flood Study Extent' and has not been identified to be at risk from flooding by the Fitzroy River. Therefore, no action required.

3.1.4 ROAD HIERARCHY

The two roads fronting the proposed site are Archer Street (Major Urban Collector) and Quay Lane (Urban Access Street). The adjacent road hierarchy is discussed further in Section 7.0.

3.1.5 PRIORITY INFRASTRUCTURE AREA (PIA)

The proposed area is identified as being within the PIA. Existing sewer and water trunk infrastructure is identified within close proximity to the proposed site (see Appendix B). These services will be utilised by the proposed development, see Sections 4.0 and 5.0.

3.1.6 AIRPORT

The site is also identified as being within the 6km airport light restriction zone, airport obstacle height limit of 20m and 8km airport wildlife hazard buffer area. A further planning assessment may be required to satisfy Council's requirements on these matters. However, given the surrounding land use (Urban CBD) and close proximity to taller buildings such as The Edge and Empire Apartments, acceptable outcomes appear to be readily achievable.

4 SEWERAGE RETICULATION

As assessment of the existing RRC sewer infrastructure has been undertaken to identify all nearby mains and connection points. RRC's GIS advanced feature map (attached in Appendix C) identifies a 150mm diameter earthenware sewer being located at the rear of the property. An extract of this map is provided below in Figure 4-1. This branch main drains to the 300mm diameter earthenware trunk main located within the Quay Lane road reserve. RRC Pre-Lodgement Meeting Minutes, dated 3 December 2015, (attached in Appendix D) state that the proposed development shall connect into the 150mm diameter main located in the lot to the north of the subject site.

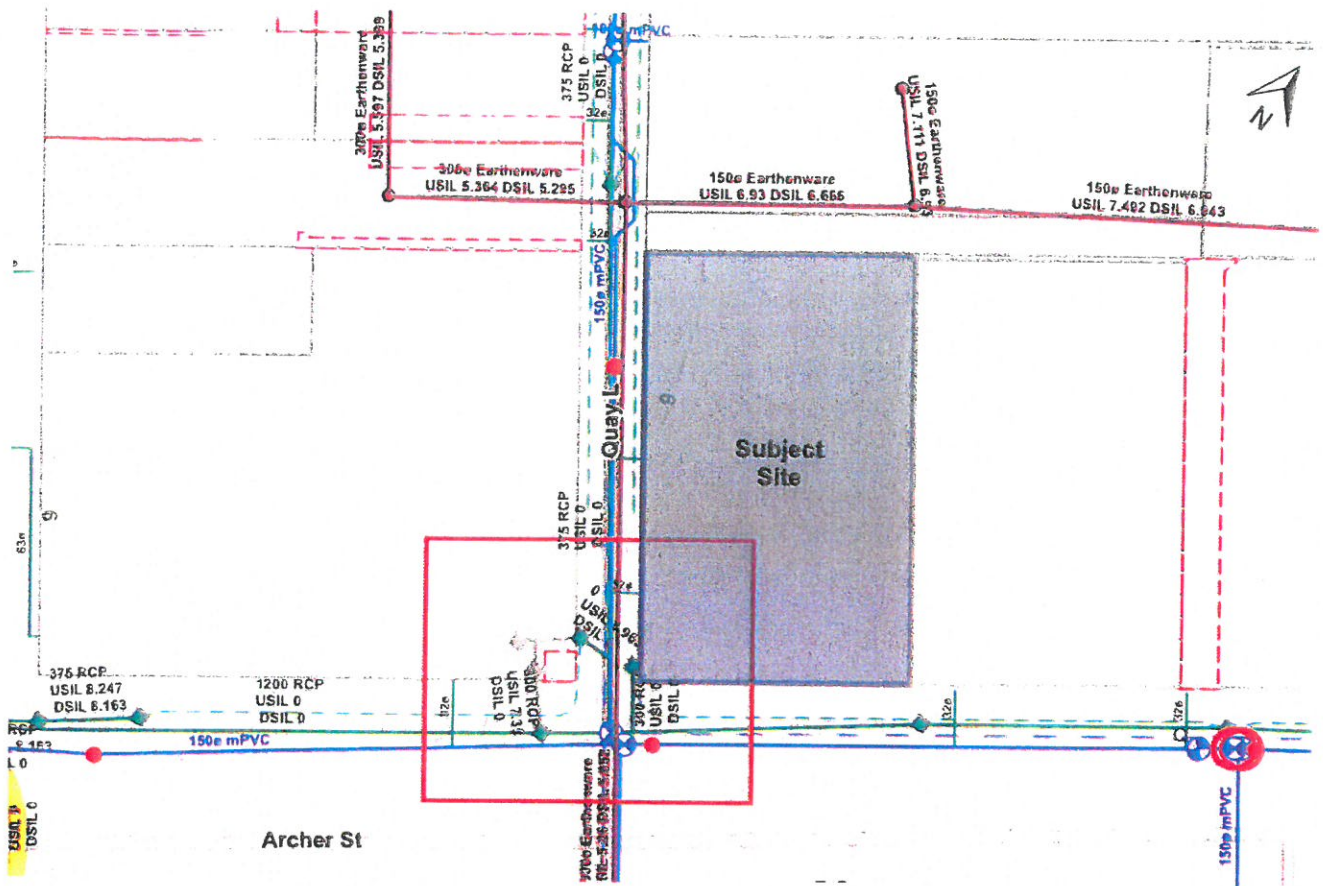


Figure 4-1: RRC Enhanced Feature Map Extract.

Due to the close proximity of sewer trunk infrastructure, it is expected that sufficient capacity will be available within the network to accommodate the increased demand generated by the proposed development. Therefore, a network analysis is not required.

4.1 SEWER CONNECTION LOCATION

In order to confirm the proposed development is in accordance with Queensland Development Code MP1.4, the existing connection location was potholed and surveyed. This location is included within the below Figure 4-2. As shown below, the distance between the proposed building footprint and the sewer connection point is approximately 3.36m at the closest point. Furthermore, the proposed building is approximately 8.38m from the building to the centreline of the adjacent 150mm dia. sewer main.

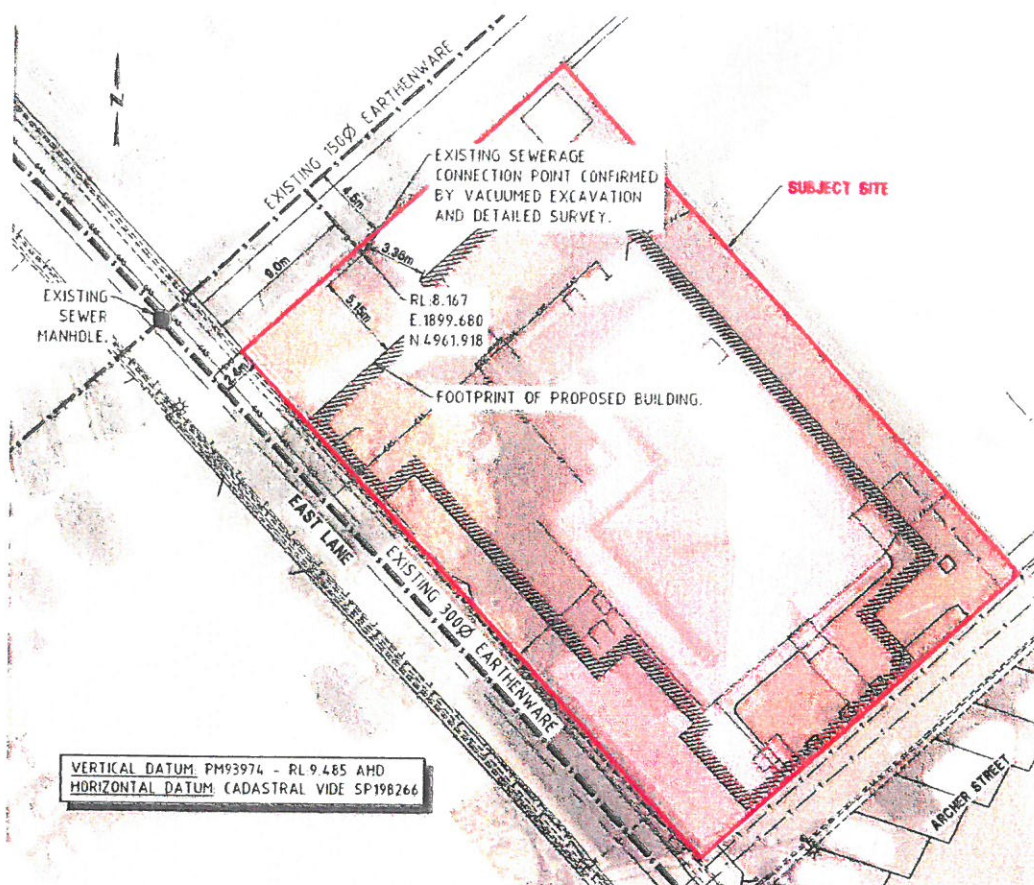


Figure 4-2 - Sewer Connection Location.

4.2 ACCORDANCE TO QUEENSLAND DEVELOPMENT CODE MP1.4

Rockhampton Regional Council's (RRC) Request for Information (RFI) dated 11 January 2016 has requested this proposal 'demonstrate compliance to the Queensland Development Code (QDC) MP1.4 for building over or near relevant infrastructure'. Acceptable Outcomes identified within MP1.4 are not relevant to this class of building and can therefore only be achieved by formulating an alternative solution.

Calibre Consulting believes the below alternative solution presented captures and adequately provides for all structural, operational, maintenance, health and safety concerns indicated within QDC MP1.4. The proposed solution includes:

- The anticipated footing for the building is a bored end bearing pier system. From prior engineering activities adjacent to the site (Grand Hotel, corner of Bolsover Street and Archer Street) it is expected the bedrock will be approximately 8m deep under the site. Therefore, the zone of influence of the piles is expected to be situated much greater than 300mm below the bottom of the existing sewerage infrastructure;
- The sewer connection point is greater than 1m away from the proposed building (approximately 3.36m);
- The building is greater than 1.5m away from the 150mm dia. sewer main (approximately 8.38m);
- No significant filling will take place over or immediately adjacent to the proposed connection location;
- The proposed works will be free draining and will not cause ponding over the sewerage infrastructure;
- There is no awning proposed over the sewerage infrastructure;

5 WATER RETICULATION

An assessment of the existing council water infrastructure has been carried out to assess the ability of the network to accept further demands associated with the proposed development. As shown in Figure 4-1, the subject site has two 150mm diameter mPVC water mains located along the frontages of Archer Street and Quay Lane. In addition, GIS data shows a 300mm diameter mPVC and 600mm diameter MSCL water main located in the Archer Street road reserve on the southern side (see Appendix C).

Given the considerable water infrastructure installed within the area it is expected that the proposed increase in demand will be readily accommodated by Council's existing infrastructure network. Therefore, a network analysis is not required, as agreed in RRC pre-lodgement meeting minutes dated 3 December 2015.

The two (2) existing domestic service connections for the subject site are to be disconnected and replaced with a single metered connection point. The location of this connection will be determined during the detailed design phase. All internal water reticulation and connection sizing will be detailed by a suitably qualified person (Hydraulic Engineer) during the detailed design phase.

6 STORMWATER MANAGEMENT

The design objectives utilised for all stormwater quantity and quality assessments have been developed in consideration with the following standards/guidelines:

- Capricorn Municipal Development Guidelines (CMDG);
- Queensland Urban Drainage Manual (QUDM); and
- Queensland Government State Planning Policy.

6.1 STORMWATER QUANTITY

A stormwater runoff assessment has been carried out to assess the impacts of the proposed development upon the surrounding infrastructure.

Suitable Legal Points of Discharge (LPoD) for the proposed development are identified as being either the Quay Lane or Archer Street road reserves. RRC Pre-Lodgement advice (dated 3 December 2015) has stated a preference for site stormwater to be discharged to the existing 1200mm diameter stormwater pipe located within the Archer Street road reserve. Confirmed levels of the stormwater pipe at the site frontage were unavailable for this assessment, however upstream invert levels suggest invert of the pipe will be around 5.5m AHD. Therefore, the lowest level of the underground car park will be approximately 200mm above the invert of the existing pipe. A manhole will be required to be constructed over the existing 1200mm diameter pipe to allow for a connection point. A backflow prevention device is anticipated to be incorporated into the drainage system to ensure stormwater does not flow back into the underground car park during times of flood. There are no apparent civil engineering difficulties in adopting this proposed manhole as the LPoD for the proposed development.

For completeness, an assessment of the potential detention requirements has been completed utilising the Preliminary Sizing Method. Given the relatively small lot size and existing development on the lot, a maximum volume of 4.9m³ was calculated (see Appendix E) to be required in order for site flows to not increase at the property boundary. However, as the proposed site is at the very bottom reaches of a much greater catchment which utilises the 1200mm diameter pipe, this negligible increase in flow from the proposed development will not coincide with the peak flow of the greater catchment. Therefore, no detention is required for the proposed development. This strategy has been agreed to in principle by RRC and included within the pre-lodgement meeting minutes dated 3 December 2015.

6.2 STORMWATER QUALITY

Given the size of the proposed allotment (1,012m²), no assessment for water quality is required under the 2014 Queensland State Planning Policy due to the site being under the 2,500m² threshold.

Furthermore, the existing site (surface area) is already highly developed, meaning any further development would have a negligible increase to the potential export of pollutants in any case.

7 MISCELLANEOUS UNDERGROUND SERVICES

7.1 GAS

Capricorn Survey Group's (CSG) detailed survey attached in Appendix F, identifies an existing gas main installed down Quay Lane with an existing service connection to the subject site. This connection will be required to be removed by the service provider at the developer's expense.

7.2 ELECTRICAL

Significant electrical supply is available to the site frontage, including a distribution cabinet at the Quay Lane frontage and a 500kVA pad mount transformer on the opposite corner of Quay Lane and Archer Street (situated within The Grand car park). These assets are shown in the below Figure 7-1 with further detail provided in Appendix F.

Internal electrical reticulation for the proposed development will be completed by a suitably qualified person (Electrical Engineer) during the detailed design phase. The proposed building will be connected into Ergon Energy's electrical reticulation network at the Developer's expense.

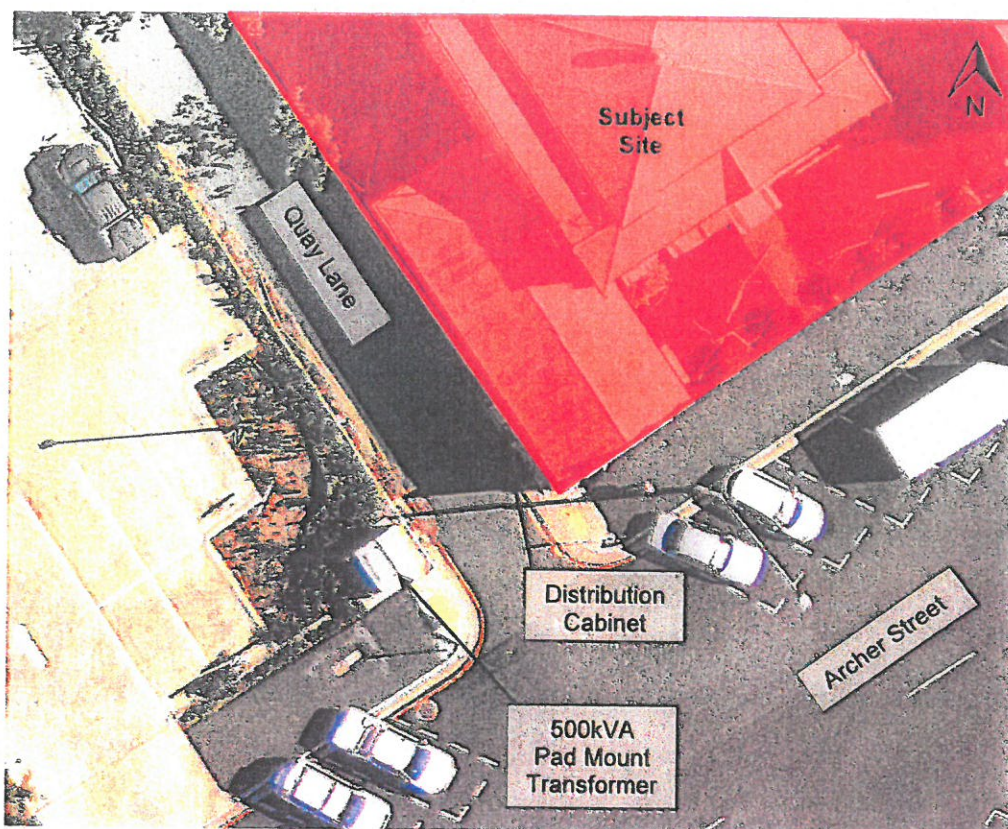


Figure 7-1: Aerial Image Indicating Electrical Assets.

7.3 TELECOMMUNICATIONS

The site currently has a telecommunication connection located at the north eastern corner of the site. Internal telecommunication reticulation for the proposed development will be completed by a suitably qualified person (Electrical Engineer) during the detailed design phase. A telecommunications provider will be engaged to supply a telecommunications Offer of Supply, ensuring the most up to date services are available for this development.

8 TRAFFIC ASSESSMENT

The proposed development includes approximately 31 units and a single small retail area (approximately 63m² in total). Traffic generation rates for these developments are detailed below.

8.1 TRAFFIC GENERATION

Traffic generation rates have been extracted from the Queensland Department of Transport and Main Roads (DTMR) Road Planning and Design Manual (RPDM) (1st edition). The following rates have been adopted:

High Density Residential (31 Dwellings)

- 0.4 Peak hour movements per dwelling.
- 3-6 Daily Movements per dwelling (assume 4.5 average).

Coffee Shop (Small Fast Food Outlet) (Approx. 40m² 'Front of House' GFA)

- 12 Peak hour movements per 100m² GFA.
- No daily generation rates were available for this assessment. Therefore, an assumption that the daily traffic is approximate to five (5) times the peak hour movement has been adopted, resulting in 60 daily movements per 100m² GFA. This assumption is considered appropriate given that coffee shops are generally unaffected by a PM peak hour. Also, given its proximity to nearby office buildings it's likely the majority of customers will be pedestrians which do not generate vehicle movements.

Based on the above, the proposed development is estimated to generate approximately 163.5 daily movements (4.5 x 31 + 60 x 0.4).

8.2 ROAD HIERARCHY

The 2015 Rockhampton Region Planning Scheme identifies the portion of Archer Street between Bolsover Street and Victoria Parade as a Major Urban Collector. In accordance with CMDG's Geometric Road Design Guideline (D1), the maximum AADT for a Major Urban Collector is 6,000 vehicles per day. Adopting the above traffic generation rates, the proposed development is expected to utilise 2.73% of the existing road's capacity. Therefore, the existing Council road infrastructure will be able to readily accommodate the proposed development in this regard, and no Traffic Impact Assessment is required.

8.3 SITE ACCESS

The proposed development includes two (2) separate access points, one on Quay Lane and another off of Archer Street as shown in Appendix A. The site includes an existing single access located off of Quay Lane towards the northern property boundary. This existing access will be augmented as part of the proposed works, including a longitudinal shift along Quay Lane.

Calibre Consulting believes there is sufficient queuing space available on Quay Lane to service the proposed development. The proposed carpark is not expected to have queuing beyond the property boundary which will extend into Quay Lane. Queuing length of one to two car lengths is available within the property which under general use is expected to be sufficient. In the unlikely event queuing for the car park does extend into Quay Lane, more than 40m of queue length is available between the proposed crossover and the through lane of Archer Street. Therefore, sufficient queue length is deemed available for the development, especially considering the negligible volume of opposing traffic on Quay Lane.

Both proposed accesses will be two-way and have security roller-shutters installed. The second access located on Archer Street is expected to include the removal of four (4) to five (5) on-street angle car parks (refer Appendix D). The removal of these parks has been considered acceptable to RRC, stated within the pre-lodgement meeting minutes dated 3 December 2015.

A refuse room has been provided which is accessed from Quay Lane. Therefore, it is proposed all refuse collection is from Quay Lane.

9 CONCLUSION

In conclusion, there are no insurmountable engineering issues associated with the proposed development, located at 12 Archer Street, Rockhampton City.

There is presently an acceptable design strategy for traffic and access, stormwater drainage, sewerage and water reticulation. Alterations during detailed design may eventuate from further detailed analysis, however the fundamentals of the design strategy ensure that service provisions can be readily achieved for the proposed development.

All of these required engineering elements can be practically provided to the proposed development.

If you should have any further questions regarding this report, please don't hesitate to contact out Calibre Consulting Office in Rockhampton.