

APPLICATION ON NOTIFICATION – Category 2

Applicant:	Citify Pty Ltd & BFC Pty Ltd
Development Number:	020/A097/18
Nature of Development:	Demolition of an existing building and construction of a multi-storey mixed-use building, comprising retail and residential uses and associated basement car park
Development Type:	Merit
Subject Land:	69-71 Melbourne Street, North Adelaide
Development Plan:	Adelaide (City) Development Plan
Zone / Policy Area:	Main Street (Melbourne East) Zone
Contact Officer:	Elysse Kuhar
Phone Number:	7109 7072
Consultation Start Date:	Tuesday 19 February 2019
Consultation Close Date:	5:00 PM Tuesday 5 March 2019
<p>During the notification period, hard copies of the application documentation can be viewed at the Department of Planning, Transport and Infrastructure, Level 5, 50 Flinders St, Adelaide, during normal business hours. Application documentation may also be viewed during normal business hours at the local Council office (if identified on the public notice).</p>	

Written representations must be received by the close date (indicated above) and can either be posted, hand-delivered or emailed to the State Commission Assessment Panel.

Any representations received after the close date will not be considered.

Postal Address:

The Secretary
State Commission Assessment Panel
GPO Box 1815
ADELAIDE SA 5001

Street Address:

Development Division
Department of Planning, Transport and Infrastructure
Level 5, 50 Flinders Street
ADELAIDE

Email Address: scapreps@sa.gov.au

Fax Number: (08) 8303 0753

DEVELOPMENT APPLICATION FORM

AUTHORITY: THE STATE COMMISSION ASSESSMENT PANEL

APPLICANT: CITIFY PTY LTD AND BFC PTY LTD

Postal Address: C / – FUTURE URBAN PTY LTD

GPO BOX 2403, ADELAIDE, SOUTH AUSTRALIA, 5001

OWNER: GAMI FAMILY PTY LTD

Postal Address: PO BOX 971

KENSINGTON GARDENS, SOUTH AUSTRALIA, 5068

BUILDER: TO BE CONFIRMED

Postal Address: _____

Licence No: _____

CONTACT PERSON FOR FURTHER INFORMATION:

Name: MR FABIAN BARONE

Telephone: (08) 8221 5511

Email: FABIAN@FUTUREURBANGROUP.COM

Mobile: 0423 490 724

EXISTING USE:

BOUTIQUE FITNESS AND PILATES STUDIO

FOR OFFICE USE

Development No: _____

Previous Development No: _____

Assessment No: _____

☐ Complying

☐ Non-complying

☐ Notification Cat 2

☐ Notification Cat 3

☐ Referrals/Concurrence

☐ DA Commission

Application forwarded to DA

Commission/Council on:

/ /

Decision:

Type:

Date:

/ /

	Decision	Fees	Receipt No	Date
Planning:	YES			
Building:				
Land Division:				
Additional:				
Dev Approval:				

DESCRIPTION OF PROPOSED DEVELOPMENT:

DEMOLISH THE EXISTING FITNESS AND PILATES STUDIO, AND CONSTRUCT A SEVEN STOREY, MIXED USE BUILDING CONTAINING TWO RETAIL TENANCIES, FIVE, ONE BEDROOM DWELLINGS, 10, TWO BEDROOM DWELLINGS AND 12, THREE BEDROOM DWELLINGS

LOCATION OF PROPOSED DEVELOPMENT:

House No: 69 – 71 Lot No: 92 Road: MELBOURNE STREET Town/Suburb: NORTH ADELAIDE

Section No (full/part): _____ Hundred: YATALA Volume: 5301 Folio: 449

House No: _____ Lot No: 94 Road: MELBOURNE STREET Town/Suburb: NORTH ADELAIDE

Section No (full/part): _____ Hundred: YATALA Volume: 5301 Folio: 200

DOES EITHER SCHEDULE 21 OR 22 OF THE DEVELOPMENT REGULATIONS 2008 APPLY?

YES: ☐

NO: ☒

HAS THE CONSTRUCTION INDUSTRY TRAINING FUND ACT 1993 LEVY BEEN PAID?

YES: ☐

NO: ☒

DEVELOPMENT COST (Do not include any fit-out costs): \$12,000,000

I acknowledge that copies of this development application and any supporting documentation may be provided to interested persons in accordance with the *Development Regulations 2008*.

SIGNATURE:

Dated: 24 NOVEMBER 2018



ON BEHALF OF CITIFY PTY LTD AND BFC PTY LTD

DEVELOPMENT REGULATIONS 2008

**Form of Declaration
(Schedule 5, Clause 2A)**

To: The State Commission Assessment Panel
From: Citify Pty Ltd and BFC Pty Ltd
Date of Application: Saturday, 24 November 2018

Location of Proposed Development:

House Number:	69 - 71	Lot Number:	92
Road:	Melbourne Street	Town/Suburb:	North Adelaide
Section No (full/part):		Hundred:	Yatala
Volume:	5301	Folio:	449

House Number:	69 - 71	Lot Number:	94
Road:	Melbourne Street	Town/Suburb:	North Adelaide
Section No (full/part):		Hundred:	Yatala
Volume:	5301	Folio:	200

Nature of Proposed Development:

Demolish the existing fitness and pilates studio, and construct a seven storey, mixed use building containing two retail tenancies, five, one bedroom dwellings, 10, two bedroom dwellings and 12, three bedroom dwellings.

I, Joel Wilkinson, in my capacity as a representative of the Applicants, declare that the proposed development involves the construction of a building which would, if constructed in accordance with the accompanying drawings, not be contrary to the regulations prescribed for the purposes of Section 86 of the *Electricity Act 1996*.

I make this declaration under Clause 2A(1) of Schedule 5 of the *Development Regulations 2008*.

Saturday, 24 November 2018

Date


Signed



PLANNING REPORT

SEVEN STOREY, MIXED USE BUILDING CONTAINING TWO RETAIL TENANCIES AND 27 DWELLINGS

69 – 71 MELBOURNE STREET, NORTH ADELAIDE

Prepared for:
Citify Pty Ltd and BFC Pty Ltd

Date:
24.11.2018



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Proprietary Information Statement

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Document Control

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1. INTRODUCTION

This planning report relates to a proposal by Citify Pty Ltd ('Citify') and BFC Pty Ltd ('BFC') to demolish the existing fitness and pilates studio at 69 – 71 Melbourne Street, North Adelaide ('the site') and to subsequently construct a seven storey, mixed use building ('the proposed building') on the site.

The proposed building has been designed to accommodate two retail tenancies on the ground floor level and 27 dwellings across the first, second, third, fourth, fifth and sixth floor levels, including five, one bedroom dwellings, 10, two bedroom dwellings and 12, three bedroom dwellings.

In preparing this planning report, we have:

- inspected the site and its immediate surroundings;
- identified and subsequently reviewed what we consider to be the most pertinent provisions of the Adelaide (City) Development Plan ('the Development Plan');
- examined the compendium of drawings at Appendix 1 and the detailed landscaping plans at Appendix 2;
- had regard to the design report at Appendix 3, the feasibility estimate report at Appendix 4, the legal opinion at Appendix 5, the traffic and parking report at Appendix 6, the findings of the preliminary stormwater assessment at Appendix 7 and the waste management plan at Appendix 8; and
- met, and discussed the proposal at considerable length, with Mr Matthew Field, the City of Adelaide's Acting Principal Planner.

This planning report contains, amongst other things, our description of the site, its immediate surroundings and the proposal, as well as our assessment of the proposal.

2. THE SITE

The site is on the south-eastern side of Melbourne Street, between Arthur Street to the north-east and Dunn Street to the south-west.

The site consists of two contiguous allotments which combine to produce a rectangular holding with a frontage of 18.3 metres to Melbourne Street, a uniform depth of 36.3 metres and an area of 664.3 square metres or thereabouts.

The site is presently anchored by a single storey building which extends to all four boundaries of the site and is used to run scheduled pilates classes by a company known as 'Club Rhythm'.

The existing building is not heritage listed.

The informal car park at the south-eastern end of the site is accessible via an existing free and unrestricted right of way over privately owned land which connects into the north-western end of Colley Street.

As an aside, it should be noted that there are no registered easements or encumbrances which could impede or avert the proposal altogether, and that there are no regulated or significant trees on or near the site.

3. THE LOCALITY

Whilst inspecting the site and its immediate surroundings, we noticed, amongst other things, that:

- the site is flanked on its north-eastern side by the Lord Melbourne Hotel;
- the south-eastern (rear) boundary of the site is physically separated from the North Adelaide Historic (Conservation) Zone by two privately owned allotments, and from the nearest residences on Colley Street by a common driveway;
- the site is flanked on its south-western side by the Himalayan Kitchen;
- St Cyprian's Anglican Church is listed as a state heritage place and located directly opposite the site, on the north-western side of Melbourne Street;
- there is a three storey apartment complex approximately 22 metres to the north-east of the site and a four storey apartment complex approximately 90 metres to the north-east of the site;
- there is a three storey mixed use building on the south-western corner of the T – junction between Dunn and Melbourne Streets;
- there is a four storey mixed use building on the north-eastern corner of the T – junction between West Pallant and Melbourne Streets;
- cars are permitted to be parked parallel to the kerb on the south-eastern side of Melbourne Street for up to, but not exceeding, one hour at a time between the hours of 9:00 am and 5:30 pm on weekdays, and between the hours of 9:00 am and 12:00 pm on Saturdays (outside of these times, no further parking restrictions apply); and
- there are two bus stops within 20 metres of the site, one of which is located directly in front (on the north-western side) of the site.

The site, in relation to its immediate surroundings, is captured within Figure 3.1 below.

Figure 3.1: The Locality



4. THE PROPOSAL

Citify and BFC seek development plan consent ('consent') from the State Commission Assessment Panel ('the Panel') to demolish the existing building on the site, and to subsequently replace it with a seven storey, mixed use building.

The proposal is depicted across the compendium of drawings at Appendix 1.

It is also summarised below.

4.1 Design Philosophy

The philosophy behind the design of the proposed building is captured within the report at Appendix 3.

4.2 Demolition

In order for the proposal to progress, the existing building will need to be demolished in its entirety.

Given that this building falls within the boundaries of the Corporation of the City of Adelaide, Citify and BFC require and, therefore, seek consent from the Panel as part of this development application to lawfully undertake this activity.

4.3 Orientation

The proposed building will be orientated to Melbourne Street.

4.4 Siting

The ground floor level of the proposed building will abut all four boundaries of the site.

The first floor level of the proposed building will be set back 3.5 metres from the north-western (front) boundary, between 0.0 and 3.6 metres from the north-eastern (side) boundary, between 0.0 and 2.7 metres from the south-eastern (rear) boundary, and between 0.0 and 2.2 metres from the south-western (side) boundary.

The second, third, fourth and fifth floor levels of the proposed building will be set back between 3.5 and 4.1 metres from the north-western (front) boundary, between 0.0 and 3.6 metres from the north-eastern (side) boundary, between 0.0 and 2.7 metres from the south-eastern (rear) boundary, and between 0.0 and 2.2 metres from the south-western (side) boundary.

The sixth floor level of the proposed building will be set back 3.5 metres from the north-western (front) boundary, between 3.0 and 3.6 metres from the north-eastern (side) boundary, 5.9 metres from the south-eastern (rear) boundary, and between 2.2 and 3.0 metres from the south-western (side) boundary.

4.5 Land Use Mix

The proposed building has been designed to accommodate two retail tenancies and 27 dwellings.

Both of the retail tenancies are properly described, in land use terms, as a 'shop' and will be located on the ground floor level of the proposed building.

The first, second, third, fourth and fifth floor levels of the proposed building will each contain five dwellings, including one, one bedroom dwelling, two, two bedroom dwellings and two, three bedroom dwellings. These floor levels will also have an identical layout.

The sixth floor level of the proposed building will contain two, three bedroom dwellings.

4.6 Basement

The basement within the proposed building will contain:

- 37 car parking spaces which will be line marked and set aside exclusively for the prospective residents of the proposed building;
- an elevator which has been designed to transport cars back and forth between the basement and the ground floor level of the proposed building; and
- a lift shaft, staircase and stairwell.

4.7 Ground Floor Level

The ground floor level of the proposed building will contain:

- two retail tenancies (these Tenancies are depicted as G.01 and G.02 on the ground floor plan at Appendix 1, and will have a gross leasable floor area of 94 square metres and 139 square metres respectively);
- a bin enclosure which has been designed to accommodate two, 1,100 litre bins for putrescibles, two, 1,100 litre bins for recyclables and three, 240 litre bins for organics;
- a secure room which will be available to the prospective residents of the proposed building and capable of accommodating up to, but not exceeding, 32 bicycles at any one time;
- a wall-mounted device which will be available to the prospective tenants and the prospective residents' guests, and capable of accommodating up to, but not exceeding, eight bicycles at any one time;
- five car parking spaces (two of these spaces will be assigned to the three bedroom dwellings on the sixth floor level of the proposed building, and three of these spaces will be shared between the prospective tenants and the prospective residents' guests);
- an elevator which has been designed to transport cars back and forth between the basement and the ground floor level of the proposed building;
- two separate rooms, one for the fire pump and one for the proposed building's services); and
- a lift shaft, staircase and stairwell.

4.8 First Floor Level

The first floor level of the proposed building will contain five dwellings, including one, one bedroom dwelling, two, two bedroom dwellings and two, three bedroom dwellings.

The composition of each dwelling is set out in Table 4.1 overleaf.

Table 4.1: Dwelling Composition on the First Floor Level

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
1 A	Three	135 square metres	25 cubic metres	19 square metres	One space
1 B	Three	121 square metres	29 cubic metres	22 square metres	Two spaces
1 C	Two	88 square metres	20 cubic metres	20 square metres	One space
1 D	Two	78 square metres	17 cubic metres	23 square metres	One space
1 E	One	60 square metres	16 cubic metres	20 square metres	One space

4.9 Second Floor Level

The second floor level of the proposed building will contain five dwellings, including one, one bedroom dwelling, two, two bedroom dwellings and two, three bedroom dwellings.

The composition of each dwelling is set out in Table 4.2 below.

Table 4.2: Dwelling Composition on the Second Floor Level

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
2 A	Three	135 square metres	25 cubic metres	19 square metres	One space
2 B	Three	117 square metres	29 cubic metres	16 square metres	Two spaces
2 C	Two	88 square metres	20 cubic metres	20 square metres	One space

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
2 D	Two	78 square metres	17 cubic metres	14 square metres	One space
2 E	One	60 square metres	16 cubic metres	11 square metres	One space

4.10 Third Floor Level

The third floor level of the proposed building will contain five dwellings, including one, one bedroom dwelling, two, two bedroom dwellings and two, three bedroom dwellings.

The composition of each dwelling is set out in Table 4.3 below.

Table 4.3: Dwelling Composition on the Third Floor Level

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
3 A	Three	135 square metres	25 cubic metres	19 square metres	One space
3 B	Three	117 square metres	29 cubic metres	16 square metres	Two spaces
3 C	Two	88 square metres	20 cubic metres	20 square metres	One space
3 D	Two	78 square metres	17 cubic metres	14 square metres	One space
3 E	One	60 square metres	16 cubic metres	11 square metres	One space

4.11 Fourth Floor Level

The fourth floor level of the proposed building will contain five dwellings, including one, one bedroom dwelling, two, two bedroom dwellings and two, three bedroom dwellings.

The composition of each dwelling is set out in Table 4.4 overleaf.

Table 4.4: Dwelling Composition on the Fourth Floor Level

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
4 A	Three	135 square metres	25 cubic metres	19 square metres	One space
4 B	Three	117 square metres	29 cubic metres	16 square metres	Two spaces
4 C	Two	88 square metres	20 cubic metres	20 square metres	One space
4 D	Two	78 square metres	17 cubic metres	14 square metres	One space
4 E	One	60 square metres	16 cubic metres	11 square metres	One space

4.12 Fifth Floor Level

The fifth floor level of the proposed building will contain five dwellings, including one, one bedroom dwelling, two, two bedroom dwellings and two, three bedroom dwellings.

The composition of each dwelling is set out in Table 4.5 below.

Table 4.5: Dwelling Composition on the Fifth Floor Level

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
5 A	Three	135 square metres	25 cubic metres	19 square metres	One space
5 B	Three	117 square metres	29 cubic metres	16 square metres	Two spaces
5 C	Two	88 square metres	20 cubic metres	20 square metres	One space

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
5 D	Two	78 square metres	17 cubic metres	14 square metres	One space
5 E	One	60 square metres	16 cubic metres	11 square metres	One space

4.13 Sixth Floor Level

The sixth floor level of the proposed building will contain two, three bedroom dwellings.

The composition of both dwellings is set out in Table 4.6 below.

Table 4.6: Dwelling Composition on the Sixth Floor Level

Dwelling	Bedrooms	Internal Floor Area	Domestic Storage Space	Private Open Space	Parking
Penthouse North	Three	146 square metres	44 cubic metres	107 square metres	Two spaces
Penthouse South	Three	152 square metres	35 cubic metres	108 square metres	Two spaces

4.14 Floor to Ceiling Heights

The proposed floor to ceiling heights are captured within Table 4.7 below.

Table 4.7: Floor to Ceiling Heights

Building Level	Floor to Ceiling Height
Basement	2.9 metres
Ground Floor Level	3.5 metres
First Floor Level	2.7 metres

Building Level	Floor to Ceiling Height
Second Floor Level	2.7 metres
Third Floor Level	2.7 metres
Fourth Floor Level	2.7 metres
Fifth Floor Level	2.7 metres
Sixth Floor Level	3.0 metres

4.15 Building Height

The proposed building, when measured from the top of the uppermost parapet to the finished ground level directly below, will be 24.1 metres tall. It will also consist of seven storeys or 'building levels'.

4.16 External Materials

Citify and BFC have put together a contemporary yet durable palette of external materials which are commensurate with, and complementary to, those presently found throughout the locality.

The palette to which we refer presently includes, but is not necessarily limited to, recycled bricks, patterned precast concrete panels, powdercoated aluminium and steel, and clear and obscure glass.

4.17 Access

The foyer, lobby and retail tenancies will be accessible via Melbourne Street, and the car parking spaces within the basement and at the south-eastern end of the ground floor level of the proposed building will be accessible via Colley Street courtesy of the existing free and unrestricted right of way.

4.18 Bicycle Parking

The prospective residents will have access to 32 bicycle parking spaces.

The prospective tenants and the prospective residents' guests will also have access to eight bicycle parking spaces.

As an aside, it should also be noted that the prospective tenants' customers will have access to all three of the stainless steel rails directly in front (on the north-western side) of Tenancy G.02.

4.19 Car Parking

The basement within the proposed building will contain 37 car parking spaces which will be line marked and set aside exclusively for the prospective residents of the proposed building.

The ground floor level of the proposed building will contain another five car parking spaces.

Both of the spaces on the south-western side of the aisle will be line marked and assigned to the three bedroom dwellings on the sixth floor level of the proposed building, and all three of the spaces on the north-eastern (opposite) side of the aisle will be line marked and shared between the prospective tenants and the prospective residents' guests.

4.20 Stormwater

According to the preliminary stormwater assessment at Appendix 7, the proposed development will be designed during the detailed design phase to ensure that the post-development discharge flows do not exceed the pre-development discharge flows, and that runoff from the roof of the proposed building is discharged to the existing side entry pit on Colley Street.

4.21 Waste

All waste generated by the prospective residents of the proposed building will be deposited, and temporarily stored, within the confines of the bin enclosure on the ground floor level.

The bin enclosure has been specifically designed to accommodate two, 1,100 litre bins for putrescibles, two, 1,100 litre bins for recyclables and three, 240 litre bins for organics.

These bins will be collected, emptied and returned by the Council via Colley Street, and in accordance with the schedule which is set out on the eighth page of the waste management plan at Appendix 8.

The bins deployed within the retail tenancies on the ground floor level of the proposed building will also be collected, emptied and returned via Colley Street but by a private contractor due to the likely frequency of collections.

4.22 Landscaping

It is clear from the documentation at Appendix 2 that the balconies, and the north-western and south-eastern façades of the proposed building will be neatly landscaped with a suitable selection of plants.

The plants selected by Citify and BFC's landscape architects:

- are aesthetically pleasing;
- are suited to the local environment;
- do not generate an inordinate amount of leaf litter; and
- require little to no maintenance or supplementary irrigation.

As an aside, it should be noted that Citify and BFC's landscape architects will also be responsible for the implementation of the scheme which they have devised. It is, therefore, in their best interests to select plants which will not only survive but thrive under these conditions.

4.23 Letter Box

A communal letter box will be installed on the north-eastern side of the main entrance to the proposed building.

The communal letter box will be accessible, and highly visible, from Melbourne Street.

4.24 Services

The proposed building's services will be located directly behind (on the south-eastern side of) Tenancy G.01.

4.25 Encroachments

The proposed canopy will sit 3.8 metres above the surface of the footpath on the south-eastern side of Melbourne Street and extend 3.0 metres beyond the confines of the site.

4.26 Environmental Sustainability

Citify and BFC intend to minimise the environmental impact of the proposed development by:

- laying recycled bricks;
- installing double glazing, thickened insulation, water efficient tapware, and energy efficient downlights and air conditioning units;
- facilitating natural ventilation, where possible;
- using paints which contain fewer volatile organic compounds;
- designing and engineering the roof of the proposed building in a manner that will eventually allow for the installation of efficient solar panels; and
- providing secure storage facilities for bicycles which, in turn, will promote a sustainable form of transport and a healthier lifestyle.

4.27 Staging

The proposed development, if consented to by the Panel, will be carried out across two consecutive stages.

The first stage will involve the demolition of the existing building, as well as the preparatory earthworks which are required to facilitate the construction of the proposed building.

The second and final stage will involve the construction of the proposed building.

5. PROCEDURAL MATTERS

5.1 The Relevant Authority

The Panel must assume the role of the relevant authority, as the proposed development will cost more than \$10,000,000 to complete.

The feasibility estimate report at Appendix 4 attests to this.

5.2 The Relevant Development Plan

The relevant version of the Development Plan for procedural and assessment purposes was consolidated on Thursday, 7 June 2018.

The site, under this version of the Development Plan, is in the Main Street (Melbourne East) Zone ('the Zone'). It is also in an area to which the 'Affordable Housing Overlay' applies.

5.3 Form of Development

According to Principles of Development Control ('Principles') 30 and 31 of the Zone, the proposed development is neither complying nor non-complying. It must, therefore, be assessed and subsequently determined on its merits by the Panel in its capacity as the relevant authority.

5.4 Category of Development

According to the legal opinion at Appendix 5, the proposed development falls within the ambit of Category 1 development and is, as a consequence of this, exempt from any form of public notification.

6. ASSESSMENT

Our assessment of the proposal is set out below.

6.1 Land Use Mix

The proposal is considered to be acceptable from a land use perspective for three reasons.

First, both of the proposed uses ('dwellings' and 'shops') are envisaged within the Zone. Principle 1 of the Zone quite clearly attests to this.

Second, the retail tenancies on the ground floor level of the proposed building will *"extend activity into the evening to enhance the vibrancy and safety of the area, and to provide visual interest after hours"*, as sought by the Desired Character Statement ('the DCS') for the Zone.

Third, the spatial arrangement of the proposed uses is also consistent with Principle 4 of the Zone, as all of the dwellings will be located above the ground floor level of the proposed building.

6.2 Affordable Housing

Principle 1 of the 'Affordable Housing Overlay' provides guidance with respect to the provision of affordable housing.

It advises that:

- 1 Development comprising 20 or more dwellings should include a minimum of 15 percent affordable housing.**

Citify and BFC intend to set aside all five of the one bedroom dwellings, which account for approximately 18.5 percent of the overall dwelling mix within the proposed building, for eligible buyers within the affordable housing market for a period of up to, but not exceeding, 30 days.

6.3 Siting

Principle 13 of the Zone provides guidance with respect to the distance between the proposed building and the north-western (front) boundary of the site.

It advises that:

- 13 The street wall height of buildings fronting Melbourne Street or Jerningham Street should be designed to reinforce the prevailing datum heights and parapet levels of the street through incorporating two storey podium elements on the street frontage and with upper storeys setback to provide a clear distinction between the levels below and above the prevailing datum line.**

Whilst Principle 13 of the Zone calls for the incorporation of a two storey podium, the podium belonging to the proposed building has been deliberately capped at one storey and 5.2 metres in height so as to respect and reinforce the prevailing height of those buildings that are nestled in between the site, and the T – junction between Dunn and Melbourne Streets.

The floor levels directly above the podium will also be set back between 3.5 and 4.1 metres from the north-western (front) boundary of the site so as to provide the 'clear distinction' that is sought by Principle 13 of the Zone.

Principle 15, Clause (b) of the Zone provides guidance with respect to the distance between the proposed building and the boundary which separates the Main Street (Melbourne East) Zone to the north from the Adelaide Historic (Conservation) Zone to the south.

It advises that:

15 Development adjacent to the North Adelaide Historic (Conservation) Zone should be consistent with the building envelope as shown in Figures 1 and 2, except where a variation to the building envelope demonstrates minimal impacts upon adjacent housing in terms of massing and overshadowing through alternative design methods:

- (b) to minimise overshadowing of sensitive development outside of the zone, buildings should be constructed within a building envelope provided by a 30 degree plane grading north, measured from a height of 3.0 metres above natural ground level at the southern zone boundary, as illustrated in Figure 2.

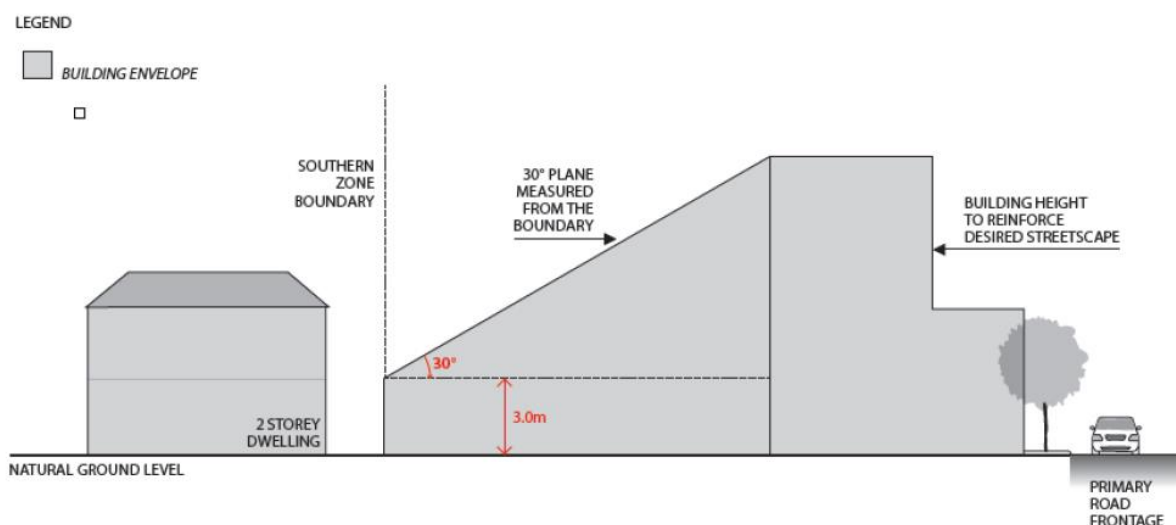


Figure 2 southern boundary

This Clause does not apply to the proposed development, as the south-eastern (rear) boundary of the site is physically separated from the North Adelaide Historic (Conservation) Zone by two privately owned allotments.

The proposed development is not, therefore, adjacent to the North Adelaide Historic (Conservation) Zone.

6.4 Building Height

Principle 18 of the Zone provides guidance with respect to the height of the proposed building.

It advises that:

18 Buildings should have a minimum building height of two storeys.

The proposed building will exceed two storeys in height, as sought by Principle 18 of the Zone.

Principle 14 of the Zone also provides guidance with respect to the height of the proposed building.

It advises that:

- 14 Except on sites greater than 1,500 square metres in area (which may include one or more allotment), development may be built to the following maximum building height:**
- (a) 22 metres on the southern side of Melbourne Street;**
 - (b) 14 metres on the northern side of Melbourne Street.**

The proposed building will exceed the relevant maximum guidelines (six storeys, as depicted on Concept Plan MS(ME)/1, and 22 metres, as prescribed under Principle 14 of the Zone) by one storey and 2.1 metres.

Be that as it may, we do not consider this numerical departure to be insurmountable for several reasons.

First, the sixth floor level will be set back 2.0 metres further from the north-western (front) boundary of the site than the balconies directly beneath it. The sixth floor level will also be set back twice the recommended distance from the south-eastern (rear) boundary of the site and approximately 12 metres from the nearest residences on Colley Street.

Second, the external walls of the sixth floor level will be heavily recessed from all four boundaries of the site and principally composed of clear glass so as to ensure that it remains relatively inconspicuous when viewed from all angles.

Third, the proposed building will still respect its existing low scale context through the provision of an appropriately scaled podium, as sought by Principle 13 of the Zone.

Fourth, the trellised mesh on the north-western side of the proposed building and the precast concrete bands on the south-eastern side of the proposed building have been deliberately incorporated to place a greater degree of emphasis on those floor levels that are situated between the podium and the sixth floor level.

Fifth, none of the adjacent habitable room windows or private open spaces will be overlooked or overshadowed to an unreasonable degree, as outlined in the forthcoming subsections of this planning report.

Sixth, the additional height will allow Citify and BFC to set aside one dwelling on each floor level for eligible buyers within the affordable housing market for a period of up to, but not exceeding, 30 days.

Seventh, part of this numerical departure has been driven by the prospective tenants' demand that the floor to ceiling height of the retail tenancies on the ground floor level be raised from 3.0 to 3.5 metres.

In essence, the external impacts will be negligible and would remain almost identical if the height of the proposed building was to be lowered from seven storeys to six storeys or from 24.1 metres to 22.0 metres.

6.5 Internal Floor Areas

Principle 70 of the 'Medium to High Scale Residential' Module provides guidance with respect to the internal floor area of each dwelling within the proposed building.

It advises that:

- 70** Medium to high scale residential or serviced apartment development should provide a high quality living environment by ensuring the following minimum internal floor areas:

Number of Bedrooms	Minimum Internal Floor Area
One	50 square metres
Two	65 square metres
Three or more	80 square metres (plus an additional 15 square metres for every additional bedroom over three bedrooms)

The internal floor area assigned to the one bedroom dwellings within the proposed building (60 square metres) exceeds the relevant minimum guideline (50 square metres) by 10 square metres.

The internal floor area assigned to the two bedroom dwellings within the proposed building (78 to 88 square metres) exceeds the relevant minimum guideline (65 square metres) by 13 to 23 square metres.

The internal floor area assigned to the three bedroom dwellings within the proposed building (117 to 152 square metres) exceeds the relevant minimum guideline (80 square metres) by 37 to 72 square metres.

6.6 Domestic Storage Spaces

Principle 81 of the 'Medium to High Scale Residential' Module provides guidance with respect to the provision of domestic storage space.

It advises that:

- 81** Medium to high scale residential (other than student accommodation) or serviced apartment development should provide adequate and accessible storage facilities for the occupants at the following minimum rates:

Number of Bedrooms	Minimum Volume of Domestic Storage Space
One	8.0 cubic metres
Two	10 cubic metres

Number of Bedrooms	Minimum Volume of Domestic Storage Space
Three or more	12 cubic metres

The amount of domestic storage space assigned to the one bedroom dwellings within the proposed building (16 cubic metres) exceeds the relevant minimum guideline (8.0 cubic metres) by 8.0 cubic metres.

The amount of domestic storage space assigned to the two bedroom dwellings within the proposed building (17 to 20 cubic metres) exceeds the relevant minimum guideline (10 cubic metres) by 7.0 to 10 cubic metres.

The amount of domestic storage space assigned to the three bedroom dwellings within the proposed building (25 to 44 cubic metres) exceeds the relevant minimum guideline (12 cubic metres) by 13 to 32 cubic metres.

6.7 Private Open Spaces

Principle 59 of the 'Medium to High Scale Residential' Module provides guidance with respect to the provision of private open space.

It advises that:

- 59 Medium to high scale residential development and serviced apartments should provide the following private open space:

Number of Bedrooms	Minimum Area of Private Open Space
One	8.0 square metres
Two	11 square metres
Three or more	15 square metres

The area of private open space assigned to the one bedroom dwellings within the proposed building (11 to 20 square metres) exceeds the relevant minimum guideline (8.0 square metres) by 3.0 to 12 square metres.

The area of private open space assigned to the two bedroom dwellings within the proposed building (14 to 23 square metres) exceeds the relevant minimum guideline (11 square metres) by 3.0 to 12 square metres.

The area of private open space assigned to the three bedroom dwellings within the proposed building (16 to 108 square metres) exceeds the relevant minimum guideline (15 square metres) by 1.0 to 93 square metres.

Principle 60 of the 'Medium to High Scale Residential' Module provides guidance with respect to the location of private open space.

It advises that:

- 60 Medium to high scale residential (other than student accommodation) or serviced apartment development should ensure direct access from living areas to private open space areas, which may take the form of balconies, terraces, decks or other elevated outdoor areas provided the amenity and visual privacy of adjacent properties is protected.**

The balconies will be accessible and visible from the open plan kitchen, dining and living rooms to which they relate.

Principle 61 of the 'Medium to High Scale Residential' Module provides guidance with respect to the dimension of private open space.

It advises that:

- 61 Other than for student accommodation, private open space should have a minimum dimension of 2.0 metres and should be well proportioned to be functional and promote indoor/outdoor living.**

All of the balconies will have a minimum dimension of not less than 2.0 metres.

6.8 Natural Light and Ventilation

Principles 53, 54 and 56 of the 'Medium to High Scale Residential' Module provide guidance with respect to the provision of natural light and ventilation.

They advise that:

- 53 All new medium to high scale residential or serviced apartment development should have direct ventilation and natural light.**
- 54 The maximum distance of a habitable room such as a living, dining, bedroom or kitchen from a window providing natural light and ventilation to that room is 8.0 metres.**
- 56 Medium to high scale residential or serviced apartment development should be designed to ensure living areas, private open space or communal open space, where such communal open space provides the primary area of private open space, are the main recipients of sunlight.**

All of the bedrooms and open plan kitchen, dining and living rooms will be located within 8.0 metres of an openable window. Furthermore, the core living areas (the balconies and the open plan kitchen, dining and living rooms) have been designed and positioned to be the main recipients of natural light.

6.9 External Outlook

Principle 73 of the 'Medium to High Scale Residential' Module provides guidance with respect to the external outlook from each dwelling within the proposed building.

It advises that:

- 73 All medium to high scale residential or serviced apartment development should be designed to ensure the living rooms have a satisfactory external outlook. Living rooms that do not have an outlook or the only source of outlook is through high level windows or a skylight are not considered to provide an appropriate level of amenity for the occupiers.**

All of the open plan kitchen, dining and living rooms associated with those dwellings on the north-western side of the lobby will have an outlook to Melbourne Street courtesy of the glazed sliding doors which provide access to the abutting balconies.

All of the open plan kitchen, dining and living rooms associated with those dwellings on the south-eastern side of the lobby will have an outlook towards Bunday's Paddock courtesy of the glazed sliding doors which provide access to the abutting balconies.

6.10 External Appearance

Principles 10 and 12 of the Zone provide guidance with respect to the external appearance of the proposed building.

Together, they advise that:

- 10 Development should contribute to the creation of an attractive, linear shopping and commercial centre characterised by new buildings which blend with and complement the long-established commercial and residential architecture.**
- 12 Buildings along Melbourne Street should incorporate modelled facades and verandahs or balconies. Blank, unarticulated facades to the street frontage are inappropriate and should be avoided.**

The proposed building will possess unified and meticulously crafted façades which will be visually interesting but not overpowering when viewed within the context of either streetscape.

The recycled brickwork on the north-western and south-eastern sides of the podium will give the proposed building a strong, natural and durable base which will be commensurate, in terms of its scale, with the neighbouring buildings to the north-east and south-west of the site.

The trellised mesh, precast concrete panels, timber battens and clear glazing will then combine to give the upper floor levels a more contemporary look and feel, whilst the patterned precast concrete panels on the north-eastern and south-western sides of the proposed building will ensure that the proposed building remains visually interesting from all angles.

The glazed balustrades and precast concrete bands on the north-western and south-eastern sides of the proposed building will accentuate the width of the proposed building whilst reducing its apparent height, and the 'floating' roof atop the sixth floor level of the proposed building will contribute positively to what is an interesting and varied skyline, as sought by Objective 4 of the Zone.

The provision of a canopy and the installation of trellised creepers is also consistent with the DCS for the Zone, as it advises, in part, that "*development should continue the established identity of the Street through incorporating vines, verandahs and pergolas where appropriate*".

6.11 Noise

Principles 68 and 69 of the 'Medium to High Scale Residential' Module provides guidance with respect to the transmission of noise.

They advise that:

- 68 Medium to high scale residential or serviced apartment development close to high noise sources (i.e. major roads, established places of entertainment and centres of activity) should be designed to locate noise sensitive rooms and private open space away from noise sources, or be protected by appropriate shielding techniques.**
- 69 Attached or abutting dwellings/apartments should be designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.**

Although the site is within a 50 metre radius of the Old Lion Hotel and abutted, on its north-eastern side, by the Lord Melbourne Hotel, the prospective residents of the proposed building should not be adversely affected by way of noise because:

- all of the dwellings will be located above the ground floor level of the proposed building;
- the external walls of the proposed building will be assembled from recycled bricks and precast concrete panels;
- all of the internal wall cavities will be fitted with thickened insulation; and
- all of the window frames and sliding door frames will be fitted with double glazing.

6.12 Overlooking

Principles 66 and 67 of the 'Medium to High Scale Residential' Module provide guidance with respect to overlooking.

They advise that:

- 66 Medium to high scale residential or serviced apartment development should be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.**
- 67 A habitable room window, balcony, roof garden, terrace or deck should be set back from boundaries with adjacent sites at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites.**

In order to minimise direct views from one dwelling to another, Citify and BFC have decided to fit those window frames which are orientated to the internal light wells with obscure glass to a height of 1.8 metres above the finished floor level.

In order to minimise direct views of the adjacent habitable room windows and private open spaces to the north-east of the site, Citify and BFC have also decided to fit those window frames which are orientated in this direction with obscure glass to a height of 1.8 metres above the finished floor level.

In order to minimise direct views of the adjacent habitable room windows and private open spaces to the south-east of the site, Citify and BFC have decided to install a planter box along the south-eastern edge of those balconies which are orientated in this direction.

It is clear from the cross – section at Appendix 1 that these planter boxes will consist of a rendered masonry plinth which will be 1.2 metres in height and a box hedge which should be maintained at approximately 600 millimetres in height.

The sixth floor level of the proposed building will also be set back almost twice the recommended distance from the south-eastern (rear) boundary of the site.

6.13 Overshadowing

Principle 121 of the ‘Environmental’ Module provides guidance with respect to overshadowing.

It advises that:

- 121** Development should not significantly reduce daylight to private open space, communal open space, where such communal open space provides the primary private open space, and habitable rooms in adjacent City Living Zone, Adelaide Historic (Conservation) Zone and North Adelaide Historic (Conservation) Zone.

The extent of shadow that is likely to be cast by the proposed building between the hours of 8:00 am and 4:00 pm on the winter solstice is depicted across the shadow diagrams at Appendix 1.

It is clear from these diagrams that the proposed building will not cast a single shadow over the north facing habitable room windows or private open spaces associated with the nearest residences on Colley or Dunn Streets until midday on the winter solstice.

As such, the proposal is considered to comply with Principle 121 of the ‘Environmental’ Module.

6.14 Access

Principles 25 and 26 of the Zone provide guidance with respect to access.

They advise that:

- 25** Access to sites should preferably be via the minor streets or lanes within or abutting the Zone provided there is no unreasonable impact on residential amenity.
- 26** Development should not result in additional crossovers on Melbourne Street. Access from Melbourne Street should be designed to minimise conflict with pedestrians and to minimise disruption to the continuity of built form.

The basement and the car park at the south-eastern end of the ground floor level of the proposed building will be accessible via Colley Street, as sought by Principle 25 of the Zone. In addition to this, the aisle has been designed, and the elevator has been positioned, to ensure that all expected vehicles will be able to enter and exit the site in a forward direction.

No new crossovers are proposed or required along the south-eastern side of Melbourne Street, as sought by Principle 26 of the Zone.

6.15 Bicycle Parking

Principle 234 of the 'Transport and Access' Module provides guidance with respect to the provision of parking for bicycles.

It advises that:

234 An adequate supply of on-site secure bicycle parking should be provided to meet the demand generated by the development within the site area of the development. Bicycle parking should be provided in accordance with the requirements set out in Table Adel/6.

Based on the relevant rates prescribed under Table Adel/6 of the Development Plan, the proposal generates a theoretical demand for 32 bicycle parking spaces, including 28 spaces for the prospective residents and two spaces for their guests, and one space for the prospective tenants and one space for their customers.

In accordance with Table Adel/6 of the Development Plan:

- the prospective residents will have access to more than 28 spaces, as the secure storage room on the ground floor level of the proposed building has been designed to accommodate up to, but not exceeding, 32 bicycles at any one time;
- the prospective tenants and the prospective residents' guests will have access to more than three spaces, as the device on the south-western side of the bin enclosure has been designed to accommodate up to, but not exceeding, eight bicycles at any one time; and
- the prospective tenants' customers will have access to more than one space courtesy of the existing stainless steel rails directly in front (on the north-western side) of Tenancy G.02 (these rails are capable of accommodating up to, but not exceeding, six bicycles at any one time).

6.16 Car Parking

Mr Thomas Wilson, a qualified and experienced traffic engineer, was commissioned by Citify and BFC to determine whether or not the prospective residents and tenants of the proposed building will have access to an adequate amount of on-site car parking.

Whilst Mr Wilson's findings can be found at Appendix 6, it is important to note that:

- the one bedroom dwellings combine to generate a theoretical demand for five spaces, the two bedroom dwellings combine to generate a theoretical demand for 10 spaces and the three bedroom dwellings combine to generate a theoretical demand for 12 spaces;
- five spaces (one space per dwelling) will be assigned to the one bedroom dwellings, 10 spaces (one space per dwelling) will be assigned to the two bedroom dwellings and 24 spaces (two spaces per dwelling) will be assigned to the three bedroom dwellings;
- there will, therefore, be an oversupply of 12 spaces for the residential component of the proposed building;
- the retail tenancies combine to generate a theoretical demand for seven spaces;
- three spaces will be assigned to the retail tenancies;
- there will, therefore, be a theoretical shortfall of four spaces for the retail component of the proposed building; and

- the aforementioned shortfall of four spaces can be overcome on the basis that:
 - » the Development Plan advises, in part, that the rates prescribed under Table Adel/7 can be reduced in instances, such as this, where buildings contain a mix of uses, including ‘dwellings’ and ‘shops’ (presumably because the peak parking demands rarely coincide with one another);
 - » the majority of the prospective tenants’ customers are expected to park along Melbourne Street or within the City of Adelaide’s car park on the south-western side of Dunn Street, as they will most likely visit other premises within the locality at the same time; and
 - » it is a vast improvement on the existing shortfall which equates to 14 spaces.

As an aside, it is also important to note that the car park at the south-eastern end of the ground floor level of the proposed building complies with Principle 27 of the Zone, as it will not be visible from Melbourne Street.

6.17 Traffic

Mr Wilson was also commissioned by Citify and BFC to determine whether or not the proposed development will have an adverse effect on the surrounding road network.

Whilst Mr Wilson’s findings can be found at Appendix 6, it is important to note that:

- the proposed development is expected to generate approximately 25 movements during the morning peak hour and approximately 30 movements during the evening peak hour;
- the number of expected movements during each peak hour period is considered to be low; and
- the surrounding road network appears to be more than capable of absorbing the expected number of movements.

6.18 Stormwater

Principle 127 of the ‘Environmental’ Module provides guidance with respect to the management of stormwater.

It advises that:

- 127 Development affecting existing stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.**

The carrying capacity of the City of Adelaide’s existing drainage network will not be overloaded by the proposed development for two reasons.

First, the extent of impervious surfaces within the confines of the site will not be increased.

Second, the proposed development will be designed during the detailed design phase to ensure that the post-development discharge flows do not exceed the pre-development discharge flows.

In addition to this, runoff from the roof of the proposed building will be discharged to the existing side entry pit on Colley Street in a clean state, as sought by Principle 127 of the ‘Environmental’ Module.

6.19 Waste

Principle 103, Clause (b) of the ‘Environmental’ Module provides guidance with respect to the management of waste.

It advises that:

103 Development greater than 2,000 square metres of total floor area should manage waste by:

(b) on-site storage and management of waste.

All waste generated by the prospective residents of the proposed building will be deposited, and temporarily stored, within the confines of the bin enclosure on the ground floor level.

The bin enclosure to which we refer has been specifically designed to accommodate the requisite type and number of bins. It will also be completely concealed from the public domain by the perforated metal roller door on the south-eastern side of the proposed building.

The turn path diagram appended to the traffic and parking report at Appendix 6 demonstrates that the waste collection vehicle (an 8.8 metre long, medium rigid vehicle) will continue¹ to be able to reverse into Colley Street from MacKinnon Parade in a safe and convenient manner.

As an aside, it should also be noted that all three forms of waste (putrescibles, recyclables and organics) will be collected outside of peak periods to minimise the impact of the collection process on the surrounding road network.

6.20 Wind

Principle 125 of the ‘Environmental’ Module provides guidance with respect to wind.

It advises that:

125 Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

The canopy which will extend over the south-eastern side of Melbourne Street is expected to provide adequate protection from ‘downwash’ winds.

6.21 Energy Efficiency

Principles 109 and 114 of the ‘Environmental’ Module provide guidance with respect to the energy efficiency of the proposed building.

They advise that:

109 Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.

114 Development is encouraged to avoid heat loss by incorporating treatments, such as double glazing of windows along the southern elevation, or by minimizing the extent of windows facing south.

¹ The waste collection vehicle presently reverses into Colley Street from MacKinnon Parade in order to collect waste from neighbouring premises, such as the Lord Melbourne Hotel at 63 Melbourne Street, North Adelaide. The proposed development is not, therefore, introducing a new or unsafe manoeuvre which is likely to have an adverse effect on the function or safety of the surrounding road network.

The roof atop the proposed building has been designed and engineered in a manner that will eventually allow for the installation of solar panels which should remain concealed from the surrounding road network and be capable of capturing an ample amount of sunlight courtesy of the orientation and slope of the roof.

The installation of double glazing on all four sides of the proposed building should also help the dwellings within the proposed building to remain cool in summer and warm in winter.

6.22 Passive Surveillance

Objective 51 of the 'Built Form and Townscape' Module calls for development *"to promote pedestrian activity and provide a high quality experience for City residents, workers and visitors by improving perceptions of public safety through passive surveillance"*.

In accordance with Objective 51, the balconies on the north-western side of the proposed building will lead to increased passive surveillance as far as Melbourne Street is concerned.

They will also improve the degree of connectivity between Melbourne Street and the site, particularly after hours when most of the surrounding premises are closed.

6.23 Landscaped Open Space

Principle 177 of the 'Built Form and Townscape' Module provides guidance with respect to the provision of landscaped open space.

It advises that:

- 177** Landscaped open space should be provided on the site of a development to at least the extent specified in the Principles of Development Control for the relevant Zone or Policy Area for siting, amenity and screening purposes. Where the existing amount of landscaped open space provided is less than the amount specified in the relevant Zone or Policy Area, development should not further reduce this amount.

Where landscaped open space is not required, the provision of landscaped pedestrian spaces, planter boxes and in ground planting is appropriate.

No landscaped open space is required or proposed, as the site is presently devoid of landscaped open space and there are no provisions within the Zone which call for landscaped open space to be provided as part of this development.

6.24 Letter Boxes

Principle 80, Clause (a) of the 'Medium to High Scale Residential' Module provides guidance with respect to the location of communal letter boxes.

It advises that:

- 80** Site facilities should be readily accessible to each dwelling/serviced apartment, complement the development and relevant desired character and should include:

- (a) a common mail box structure located close to the main pedestrian entrance.

A communal letter box will be installed on the north-eastern side of the main entrance to the proposed building. The communal letter box will be accessible, and highly visible, from Melbourne Street.

7. CONCLUSION

We have concluded from our assessment of the proposal that it is worthy of consent.

In support of our conclusion, we wish to highlight once again that:

- both of the proposed uses ('dwellings' and 'shops') are envisaged within the Zone;
- the retail tenancies on the ground floor level of the proposed building will *"extend activity into the evening to enhance the vibrancy and safety of the area, and to provide visual interest after hours"*, as sought by the DCS for the Zone;
- the spatial arrangement of the proposed uses is consistent with Principle 4 of the Zone, as all of the dwellings will be located above the ground floor level of the proposed building;
- more than 15 percent of the overall dwelling mix will be set aside for eligible buyers within the affordable housing market;
- the podium element will respect and reinforce the prevailing height of those buildings that are nestled in between the site, and the T – junction between Dunn and Melbourne Streets;
- the external walls of the sixth floor level will be heavily recessed from all four boundaries of the site and principally composed of clear glass so as to ensure that it remains relatively inconspicuous when viewed from all angles;
- the floor levels directly above the podium will be set back between 3.5 and 4.1 metres from the north-western (front) boundary of the site and the sixth floor level will be set back more than twice the recommended distance from the south-eastern (rear) boundary of the site;
- the internal floor area of each dwelling will be greater than expected;
- all of the dwellings will come equipped with more than the recommended amount of domestic storage and private open space;
- all of the dwellings will have a satisfactory external outlook and receive direct access to natural light;
- the proposed building will possess unified and meticulously crafted façades which will be visually interesting but not overpowering when viewed within the context of either streetscape;
- the prospective residents of the proposed building should not be adversely affected by way of noise;
- none of the adjacent habitable room windows or private open spaces will be overlooked or overshadowed to an unreasonable degree;
- no new crossovers are proposed or required along the south-eastern side of Melbourne Street;
- more than the recommended amount of bicycle parking will be provided within the confines of the site;
- a sufficient amount of car parking will also be provided within the confines of the site;
- the surrounding road network appears to be more than capable of absorbing the expected number of movements into, and out of, the site;
- the carrying capacity of the City of Adelaide's existing drainage network will not be overloaded by the proposed development;

- the bin enclosure on the ground floor level of the proposed building has been specifically designed to accommodate the requisite type and number of bins, and to remain concealed from the public domain;
- all three forms of waste (putrescibles, recyclables and organics) will be collected outside of peak periods to minimise the impact of the collection process on the surrounding residences and road network;
- the canopy which will extend over the south-eastern side of Melbourne Street is expected to provide adequate protection from 'downwash' winds;
- the proposed building will be energy efficient for years to come; and
- the balconies on the north-western side of the proposed building will lead to increased passive surveillance as far as Melbourne Street is concerned.

PLANNING APPLICATION - 69-71 MELBOURNE STREET, NORTH ADELAIDE SA 5006



SHEET LIST		
NO.	SHEET NAME	REV
PL.01	COVER & DEVELOPMENT SUMMARY	PA1
PL.02	PROPOSED SITE & CONTEXT	PA1
PL.03	FLOOR PLANS 01	PA1
PL.04	FLOOR PLANS 02	PA1
PL.05	FLOOR PLANS 03	PA1
PL.06	ELEVATIONS 01	PA1
PL.07	ELEVATIONS 02	PA1
PL.08	DESIGN SECTION 01	PA1
PL.09	DESIGN SECTION 02	PA1
PL.10	SHADOW DIAGRAMS	PA1

BUILDING AREAS	
DESCRIPTION	AREA
1ST FLOOR	637 m²
2ND FLOOR	605 m²
3RD FLOOR	605 m²
4th FLOOR	605 m²
5TH FLOOR	605 m²
6TH FLOOR	555 m²
BASEMENT	671 m²
GROUND FLOOR	671 m²
	4954 m²

APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
GROUND FLOOR	RETAIL G.01	AREA TBA	94 m²
RETAIL G.01			94 m²
GROUND FLOOR	RETAIL G.02	AREA TBA	139 m²
RETAIL G.02			139 m²
GROUND FLOOR			234 m²

APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
1ST FLOOR	APT TYPE A	3 BED, 2 BATH	135 m²
1ST FLOOR	APT TYPE A	BALCONY	19 m²
APT TYPE A			154 m²
1ST FLOOR	APT TYPE B	3 BED, 2 BATH	121 m²
1ST FLOOR	APT TYPE B	BALCONY	22 m²
APT TYPE B			143 m²
1ST FLOOR	APT TYPE C	2 BED, 2 BATH	88 m²
1ST FLOOR	APT TYPE C	BALCONY	20 m²
APT TYPE C			108 m²
1ST FLOOR	APT TYPE D	2 BED, 1 BATH	78 m²
1ST FLOOR	APT TYPE D	BALCONY	23 m²
APT TYPE D			101 m²
1ST FLOOR	APT TYPE E	1 BED, 1 BATH	60 m²
1ST FLOOR	APT TYPE E	BALCONY	20 m²
APT TYPE E			80 m²
1ST FLOOR			586 m²

APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
2ND FLOOR	APT TYPE A	3 BED, 2 BATH	135 m²
2ND FLOOR	APT TYPE A	BALCONY	19 m²
APT TYPE A			154 m²
2ND FLOOR	APT TYPE B	3 BED, 2 BATH	117 m²
2ND FLOOR	APT TYPE B	BALCONY	16 m²
APT TYPE B			134 m²
2ND FLOOR	APT TYPE C	2 BED, 2 BATH	88 m²
2ND FLOOR	APT TYPE C	BALCONY	20 m²
APT TYPE C			108 m²
2ND FLOOR	APT TYPE D	2 BED, 1 BATH	78 m²
2ND FLOOR	APT TYPE D	BALCONY	14 m²
APT TYPE D			92 m²
2ND FLOOR	APT TYPE E	1 BED, 1 BATH	60 m²
2ND FLOOR	APT TYPE E	BALCONY	11 m²
APT TYPE E			72 m²
2ND FLOOR			559 m²

APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
3RD FLOOR	APT TYPE A	3 BED, 2 BATH	135 m²
3RD FLOOR	APT TYPE A	BALCONY	19 m²
APT TYPE A			154 m²
3RD FLOOR	APT TYPE B	3 BED, 2 BATH	117 m²
3RD FLOOR	APT TYPE B	BALCONY	16 m²
APT TYPE B			134 m²
3RD FLOOR	APT TYPE C	2 BED, 2 BATH	88 m²
3RD FLOOR	APT TYPE C	BALCONY	20 m²
APT TYPE C			108 m²
3RD FLOOR	APT TYPE D	2 BED, 1 BATH	78 m²
3RD FLOOR	APT TYPE D	BALCONY	14 m²
APT TYPE D			92 m²
3RD FLOOR	APT TYPE E	1 BED, 1 BATH	60 m²
3RD FLOOR	APT TYPE E	BALCONY	11 m²
APT TYPE E			72 m²
3RD FLOOR			559 m²

APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
4TH FLOOR	APT TYPE A	3 BED, 2 BATH	135 m²
4TH FLOOR	APT TYPE A	BALCONY	19 m²
APT TYPE A			154 m²
4TH FLOOR	APT TYPE B	3 BED, 2 BATH	117 m²
4TH FLOOR	APT TYPE B	BALCONY	16 m²
APT TYPE B			134 m²
4TH FLOOR	APT TYPE C	2 BED, 2 BATH	88 m²
4TH FLOOR	APT TYPE C	BALCONY	20 m²
APT TYPE C			108 m²
4TH FLOOR	APT TYPE D	2 BED, 1 BATH	78 m²
4TH FLOOR	APT TYPE D	BALCONY	14 m²
APT TYPE D			92 m²
4TH FLOOR	APT TYPE E	1 BED, 1 BATH	60 m²
4TH FLOOR	APT TYPE E	BALCONY	11 m²
APT TYPE E			72 m²
4TH FLOOR			559 m²

APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
5TH FLOOR	APT TYPE A	3 BED, 2 BATH	135 m²
5TH FLOOR	APT TYPE A	BALCONY	19 m²
APT TYPE A			154 m²
5TH FLOOR	APT TYPE B	3 BED, 2 BATH	117 m²
5TH FLOOR	APT TYPE B	BALCONY	16 m²
APT TYPE B			134 m²
5TH FLOOR	APT TYPE C	2 BED, 2 BATH	88 m²
5TH FLOOR	APT TYPE C	BALCONY	20 m²
APT TYPE C			108 m²
5TH FLOOR	APT TYPE D	2 BED, 1 BATH	78 m²
5TH FLOOR	APT TYPE D	BALCONY	14 m²
APT TYPE D			92 m²
5TH FLOOR	APT TYPE E	1 BED, 1 BATH	60 m²
5TH FLOOR	APT TYPE E	BALCONY	11 m²
APT TYPE E			72 m²
5TH FLOOR			559 m²

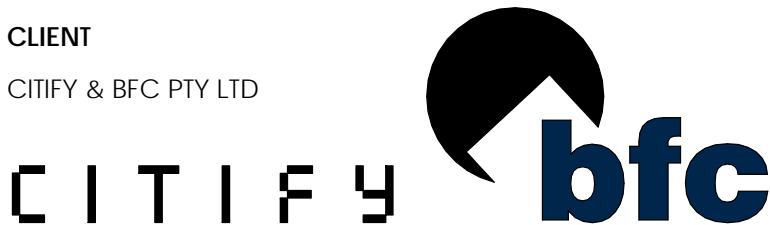
APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
6TH FLOOR	PENTHOUSE NORTH	3 BED, 2 BATH	146 m²
6TH FLOOR	PENTHOUSE NORTH	BALCONY	107 m²
PENTHOUSE NORTH			252 m²
6TH FLOOR	PENTHOUSE SOUTH	3 BED, 2 BATH	152 m²
6TH FLOOR	PENTHOUSE SOUTH	BALCONY	108 m²
PENTHOUSE SOUTH			261 m²
6TH FLOOR			513 m²
			3569 m²

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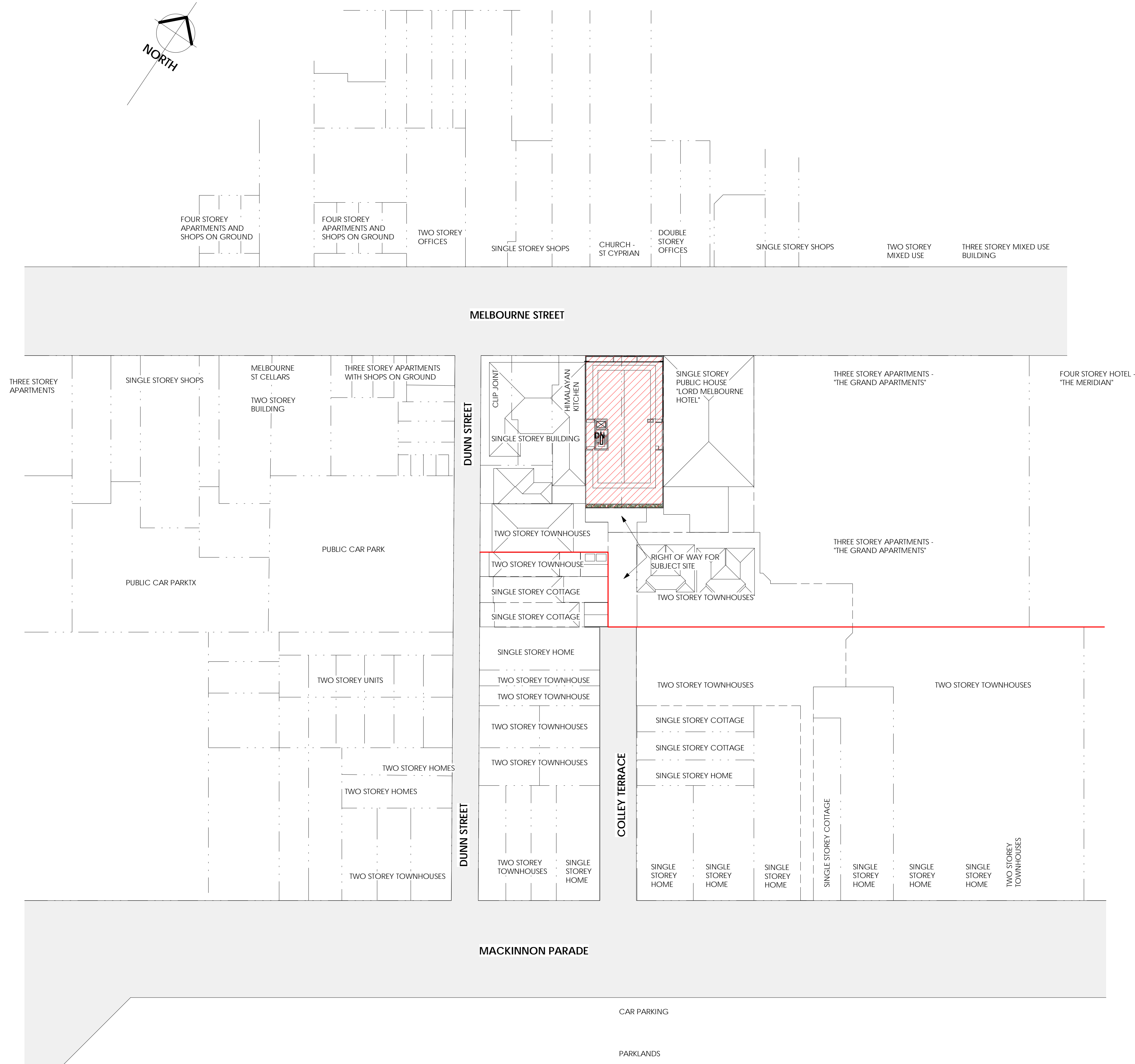


SHEET
COVER & DEVELOPMENT SUMMARY
PL.01

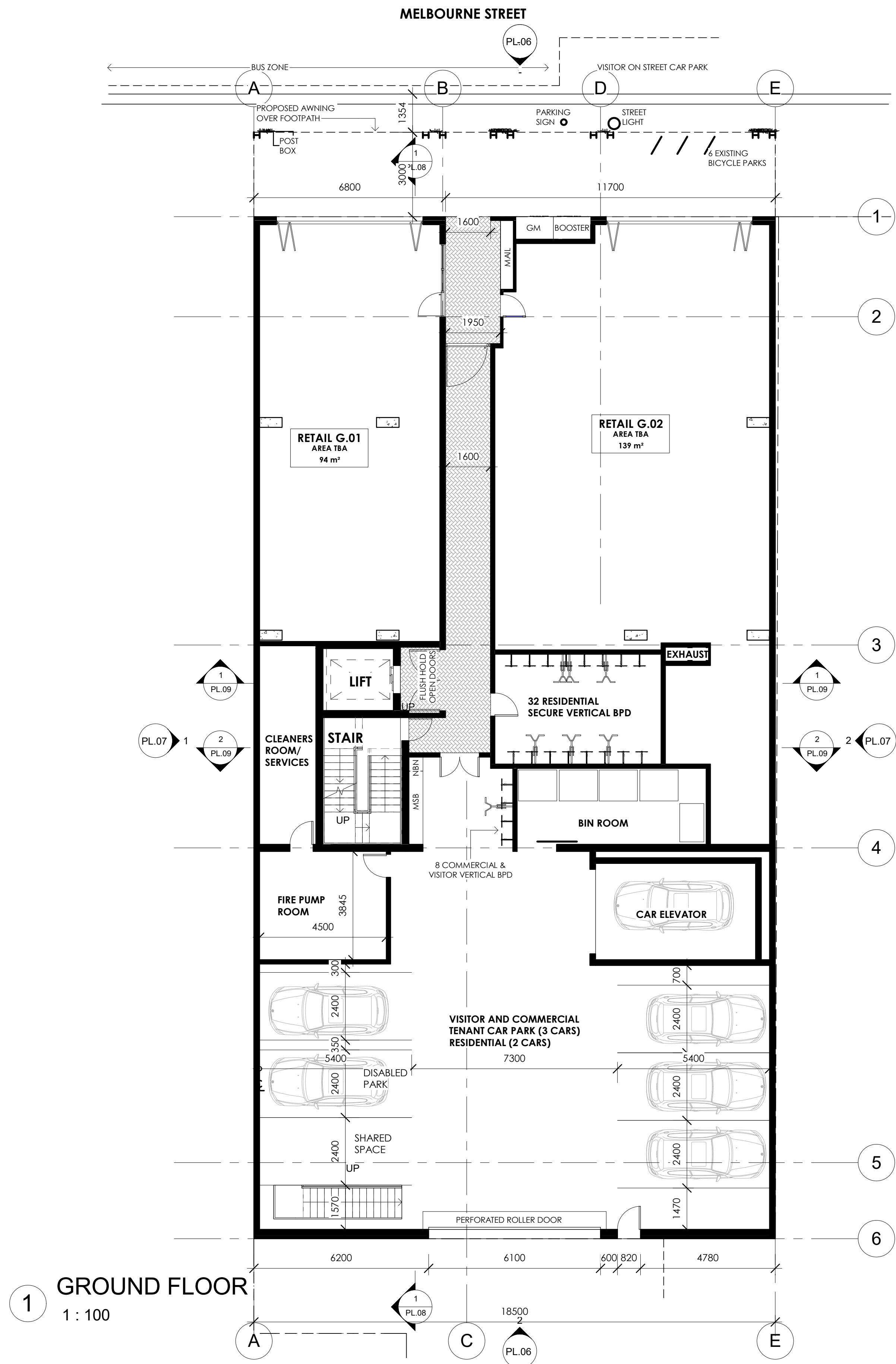
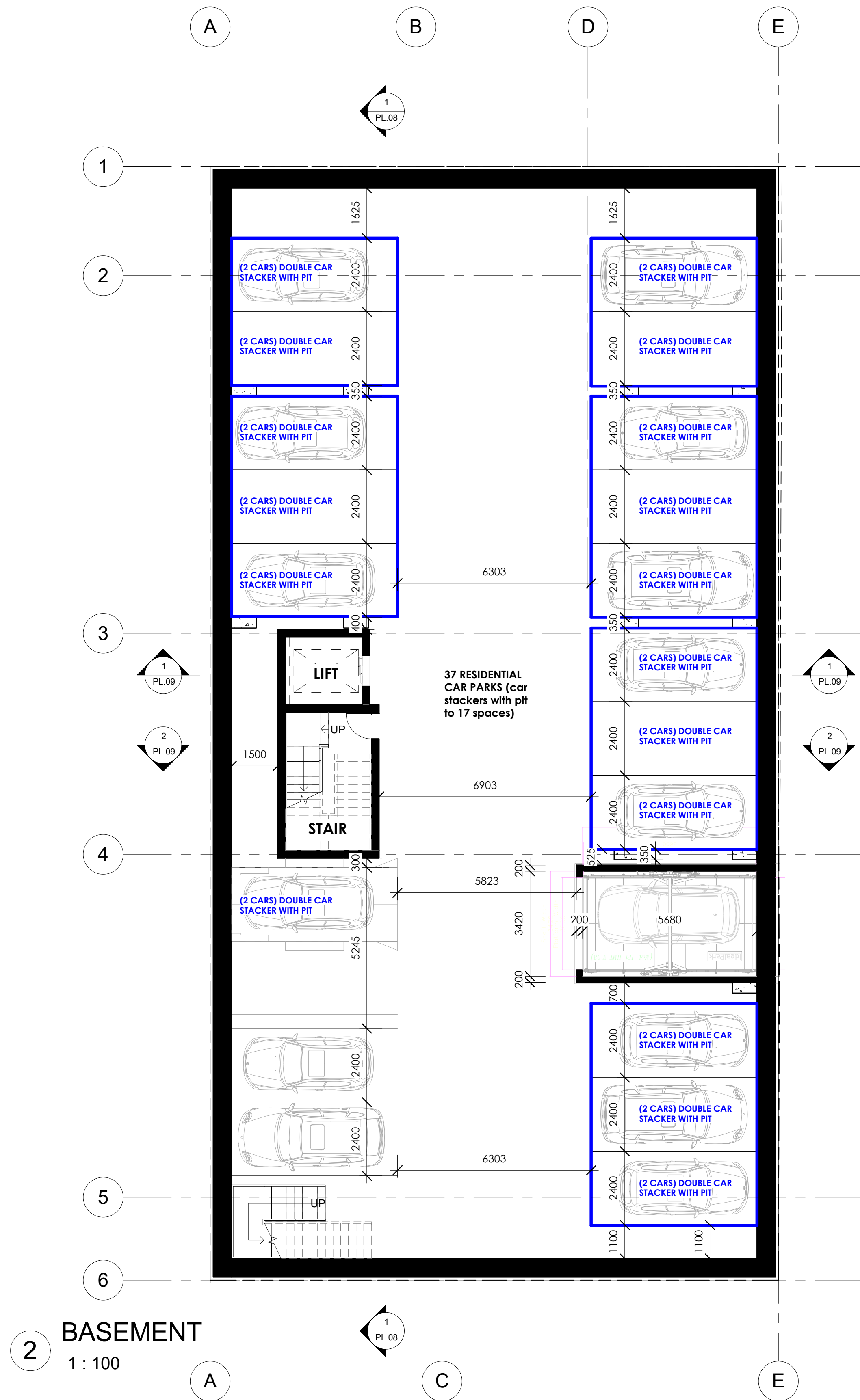
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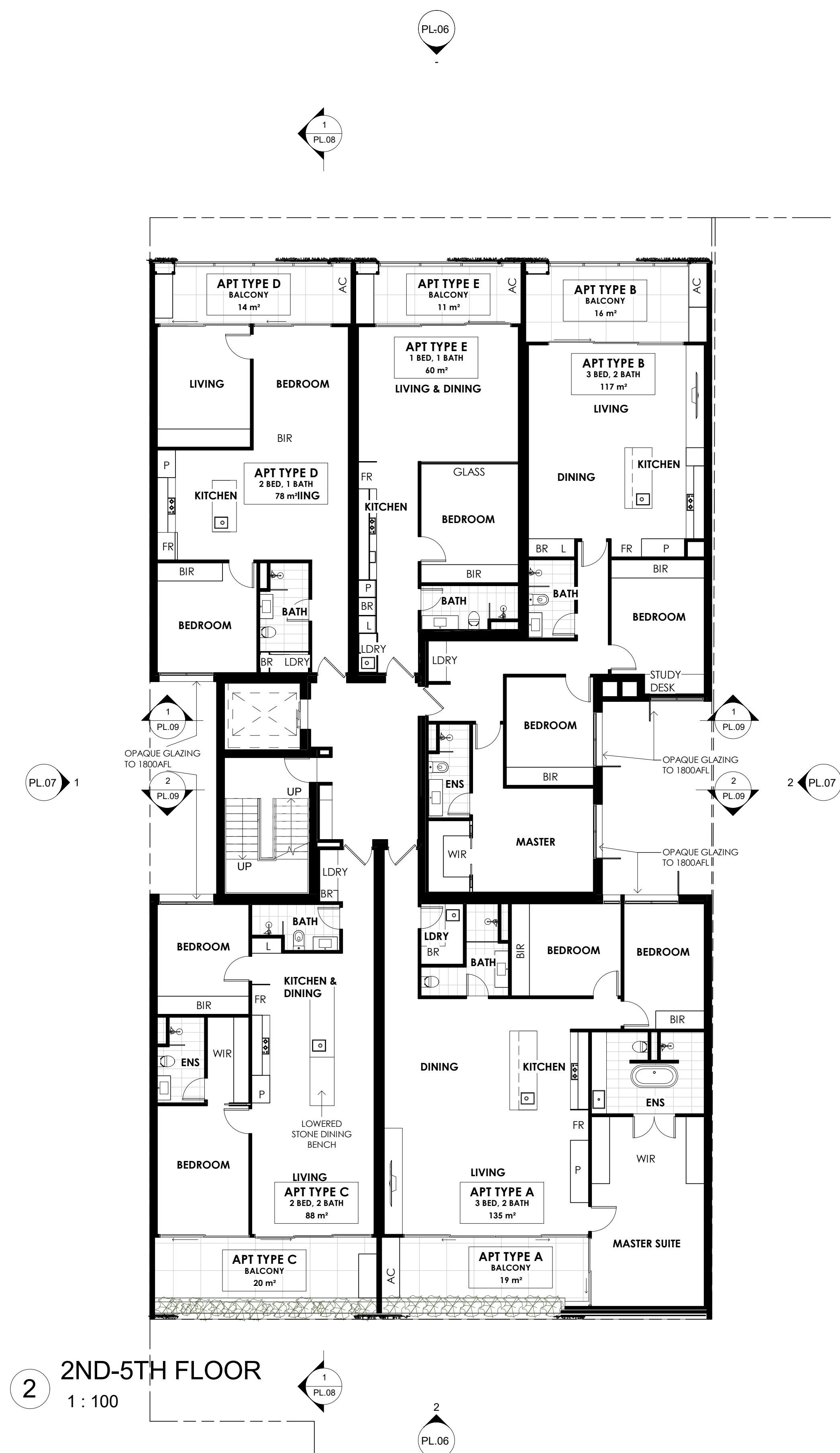
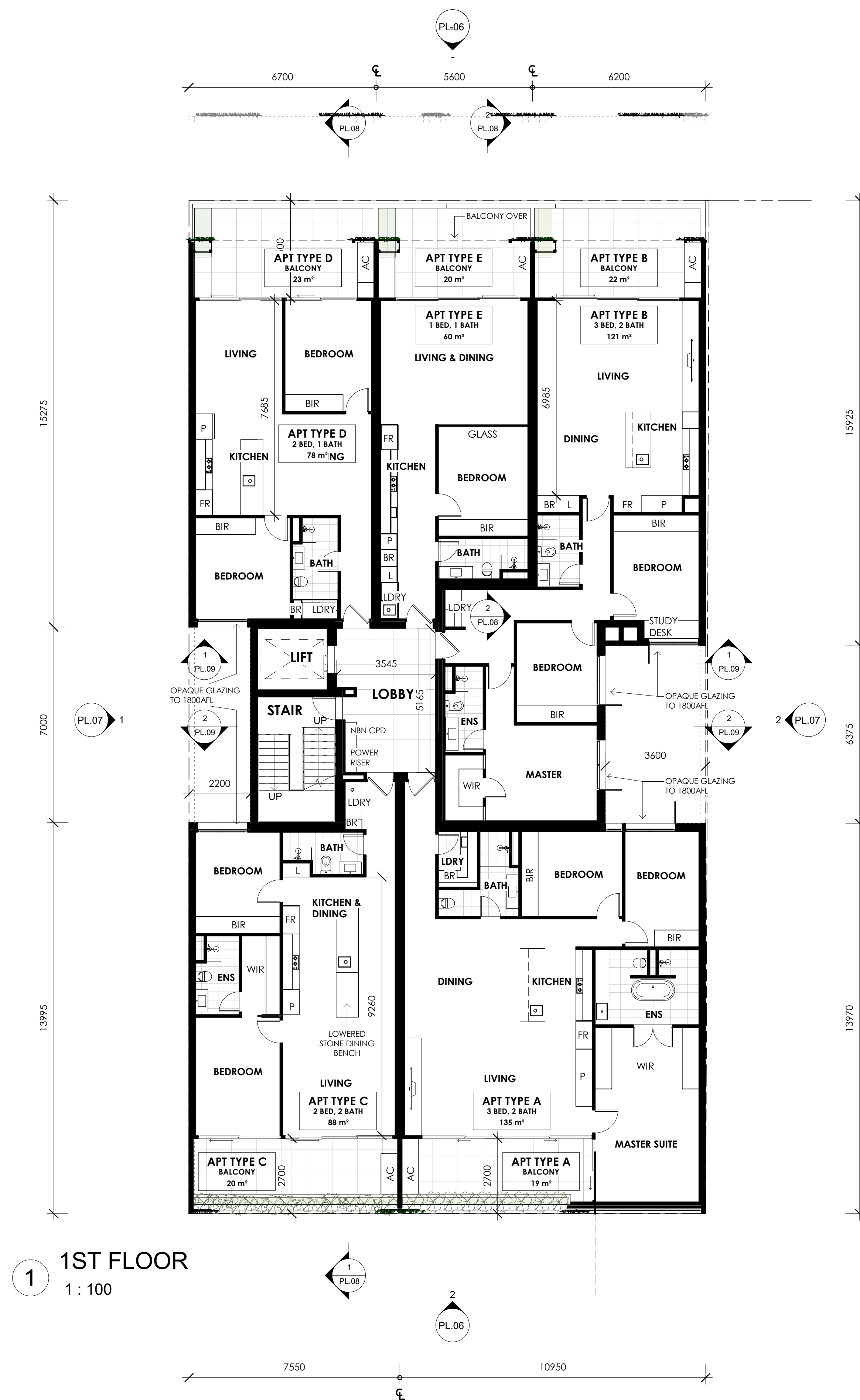


SHEET
FLOOR PLANS 01
PL.03

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SHEET
FLOOR PLANS 02
PL.04

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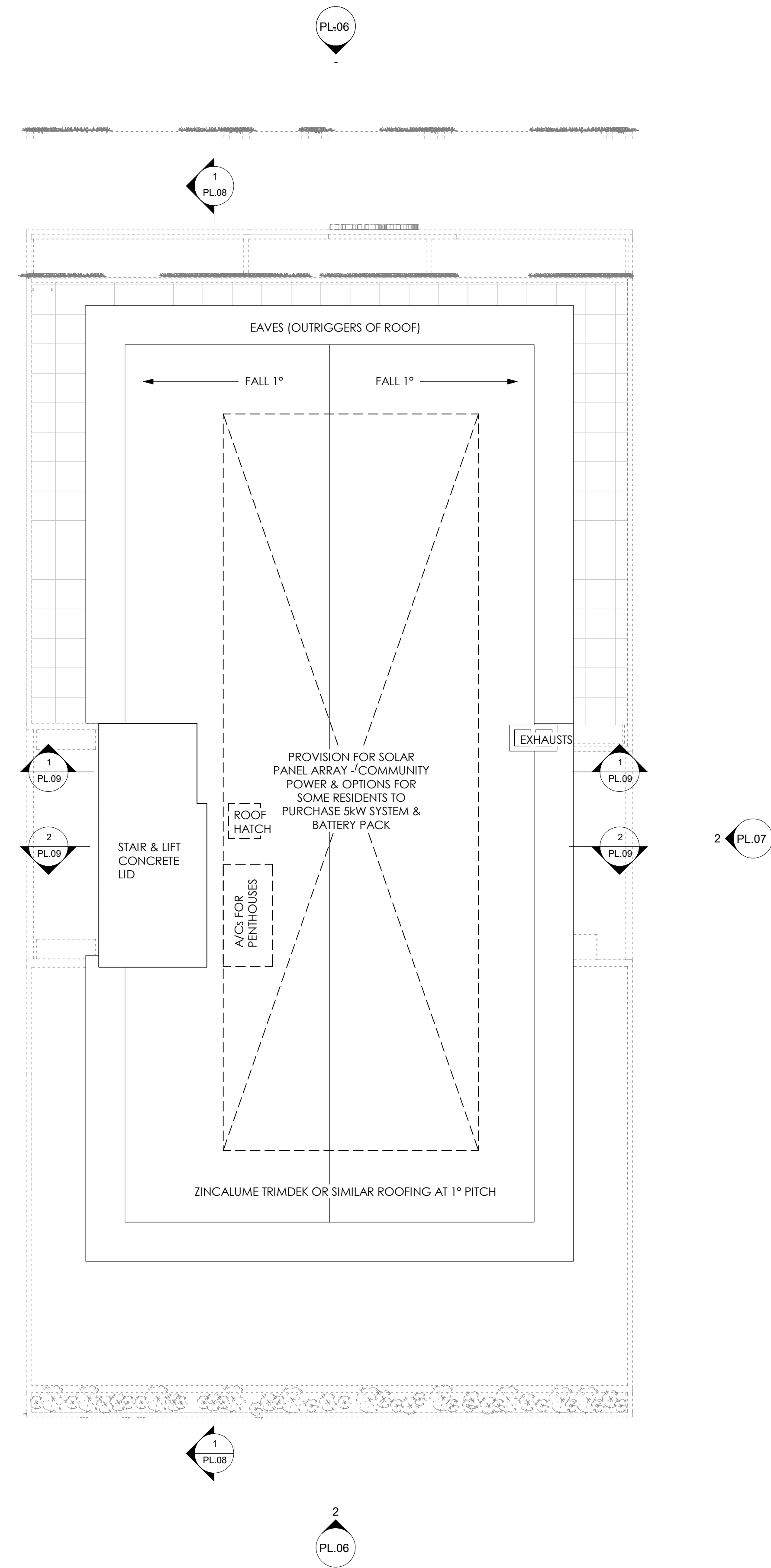
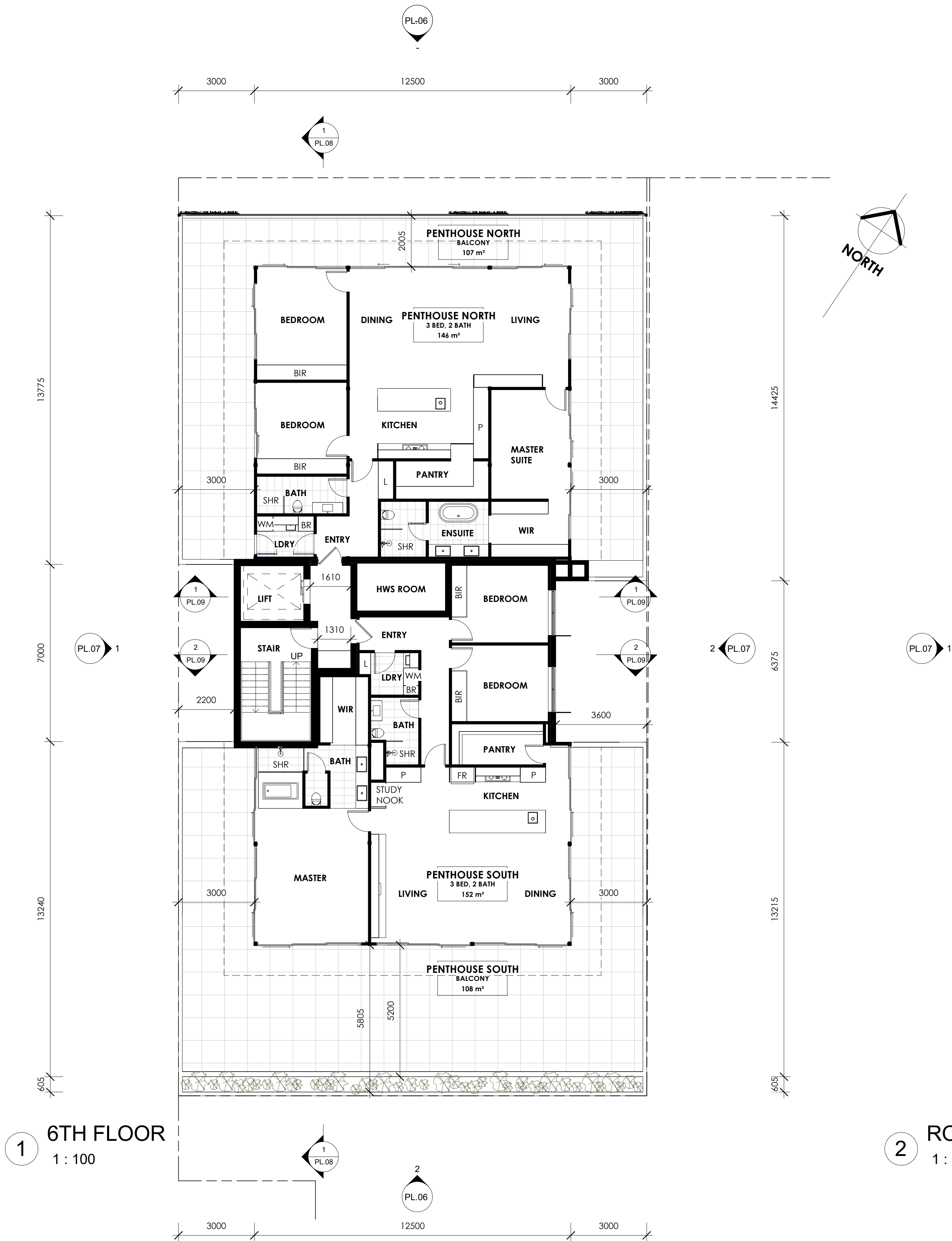
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SHEET
FLOOR PLANS 03

PL.05

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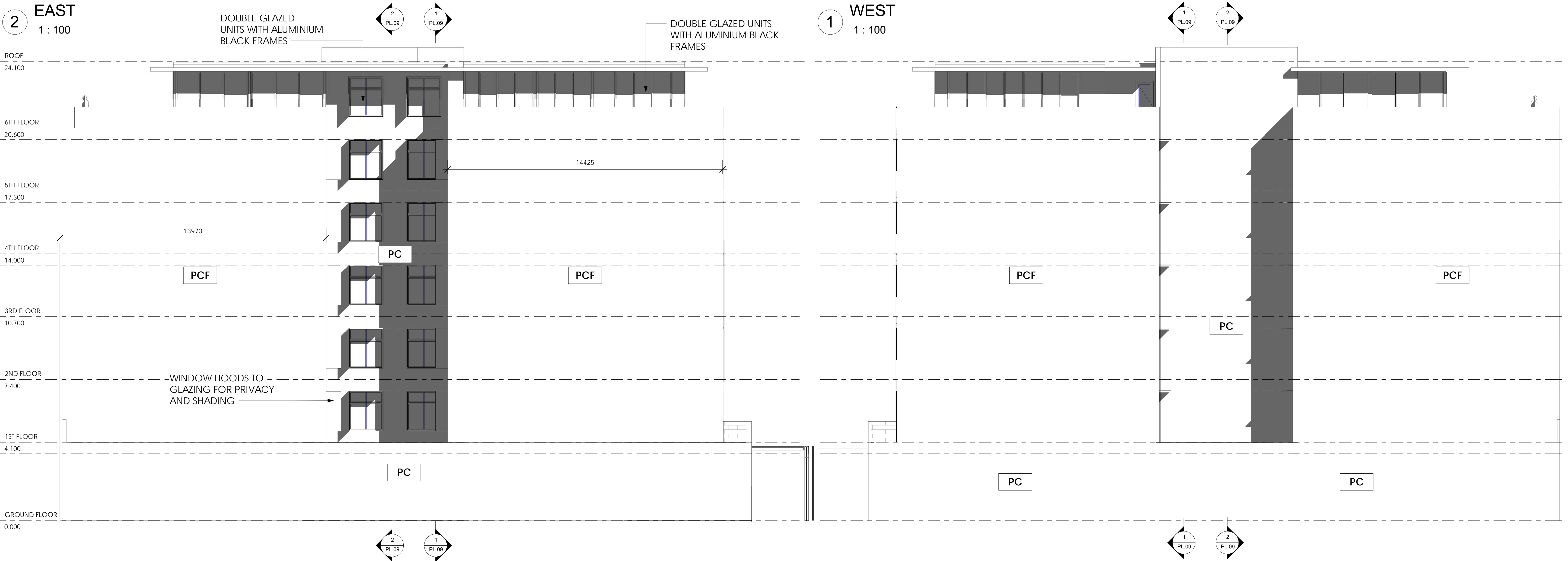


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FEATURE CONCRETE PATTERN EXAMPLE

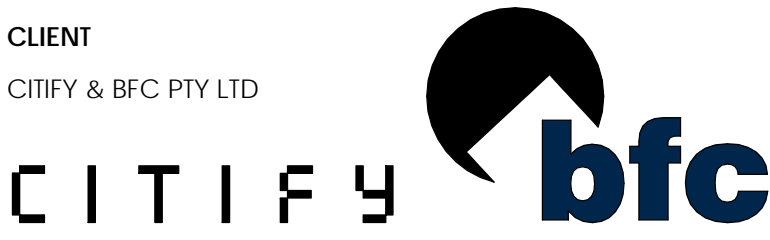
WALL SCHEDULE	
KEYNOTE	DESCRIPTION
BV	Brick veneer podium - bagged recycled brickwork or similar
CM	Chain link mesh cage on steel frame with planting as per LCS Landscapes documentation
GL	Black steel framed glazing - clear glass
PC	Precast concrete
PCF	Precast concrete feature wall with pre-finished pattern moulded into concrete



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ELEVATIONS 02

PL.07

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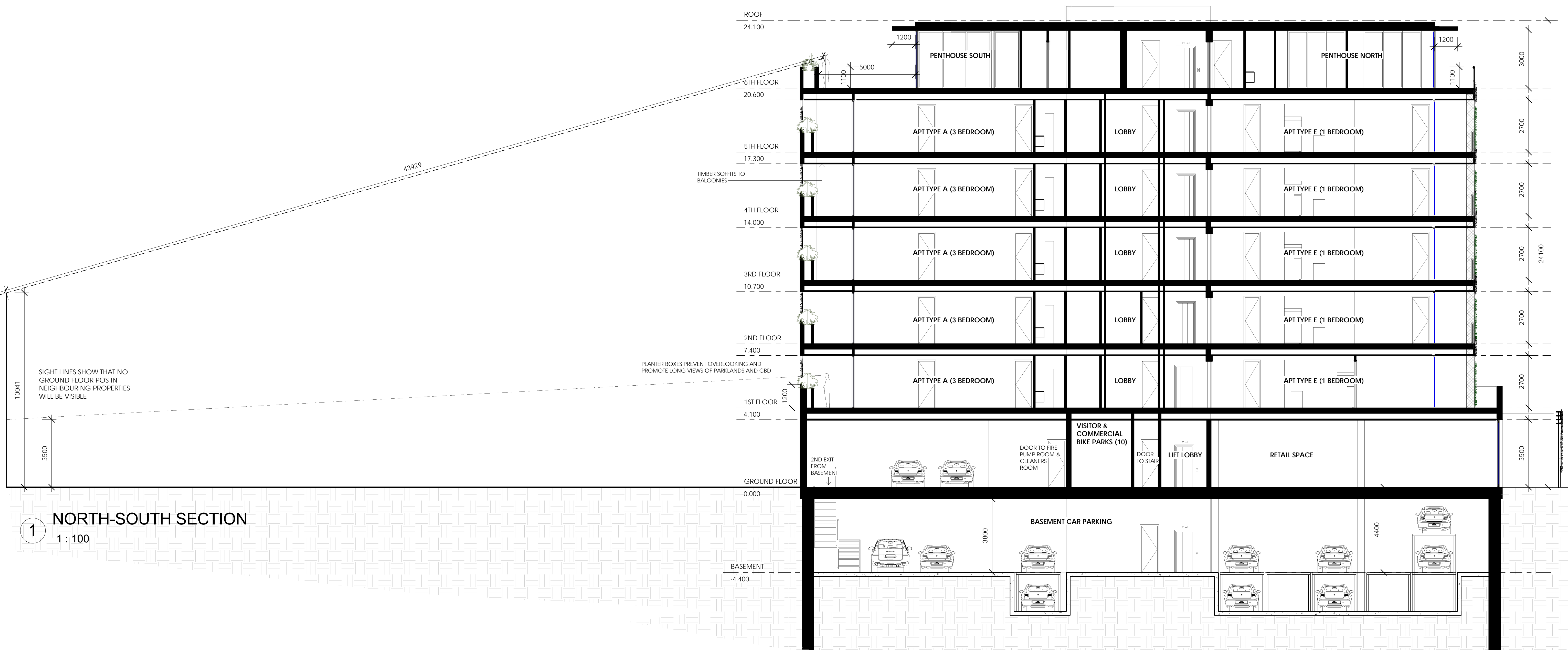


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SECTION THROUGH 1
2 BED APT
1:25



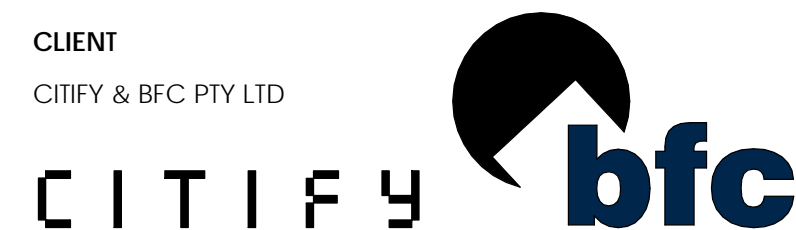
1 NORTH-SOUTH SECTION
1:100



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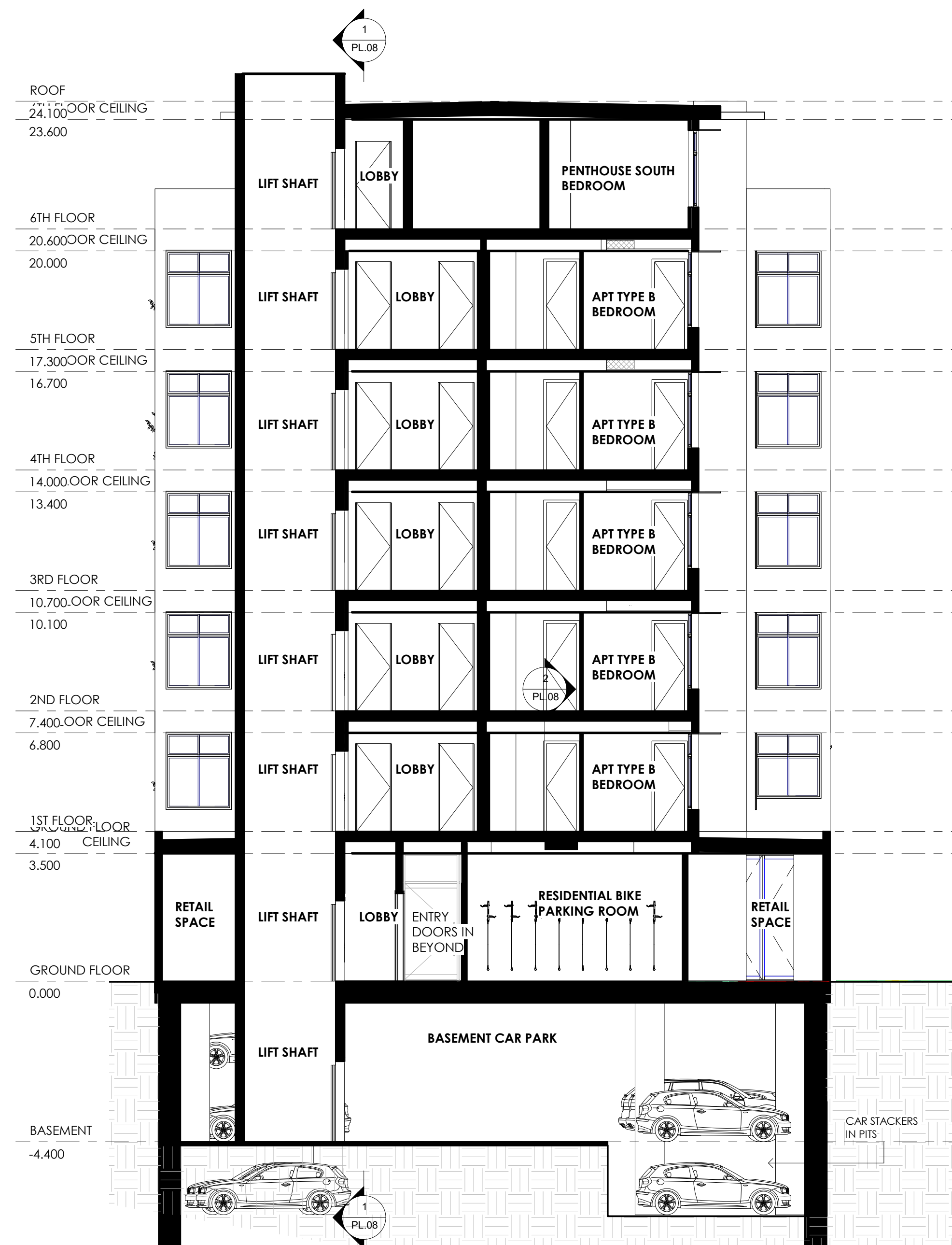
SHEET
DESIGN SECTION 01
PL.08

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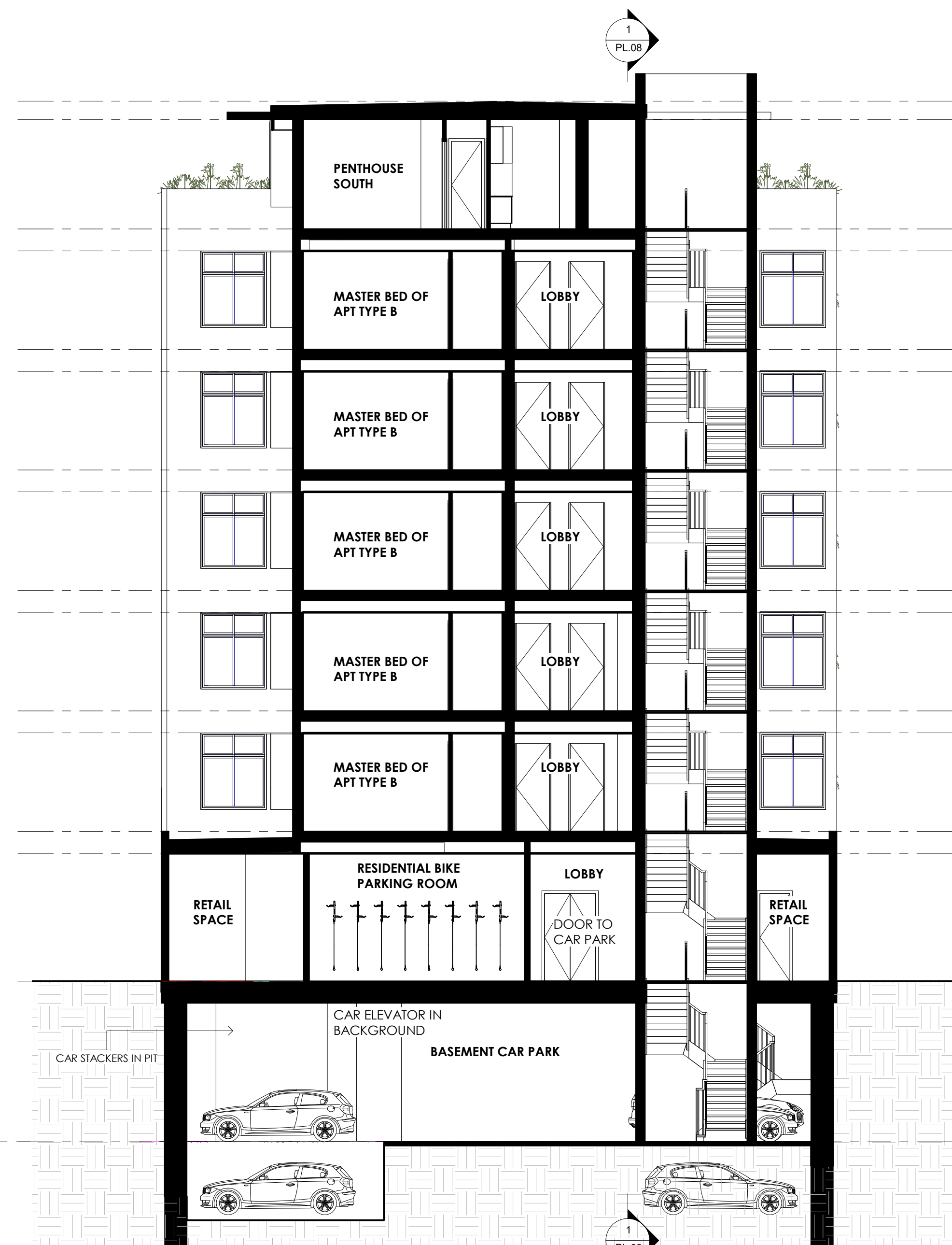
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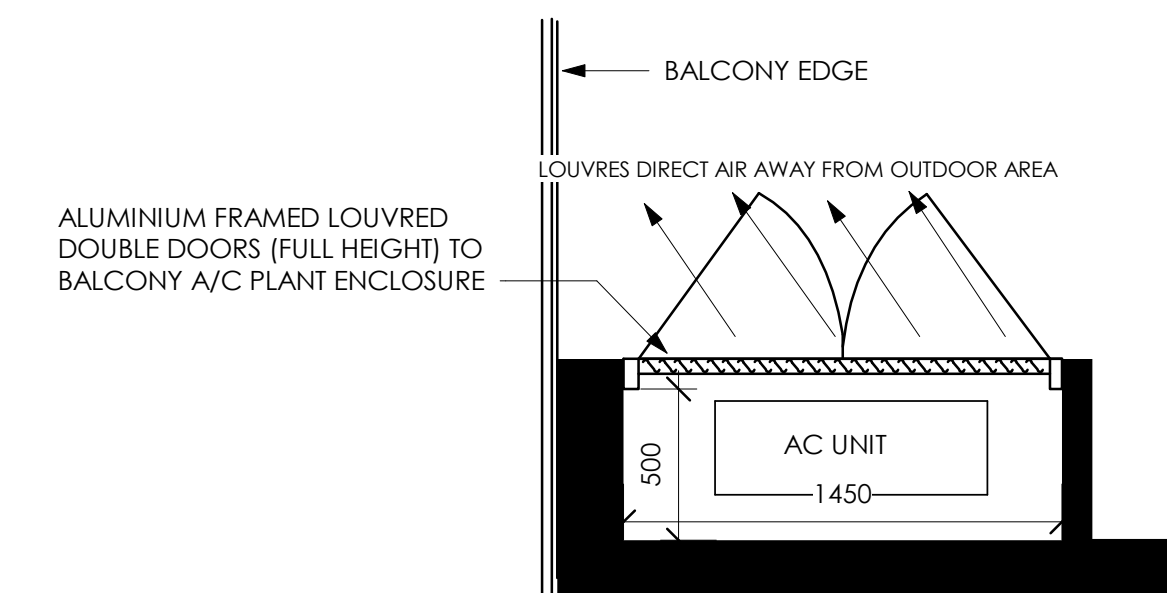
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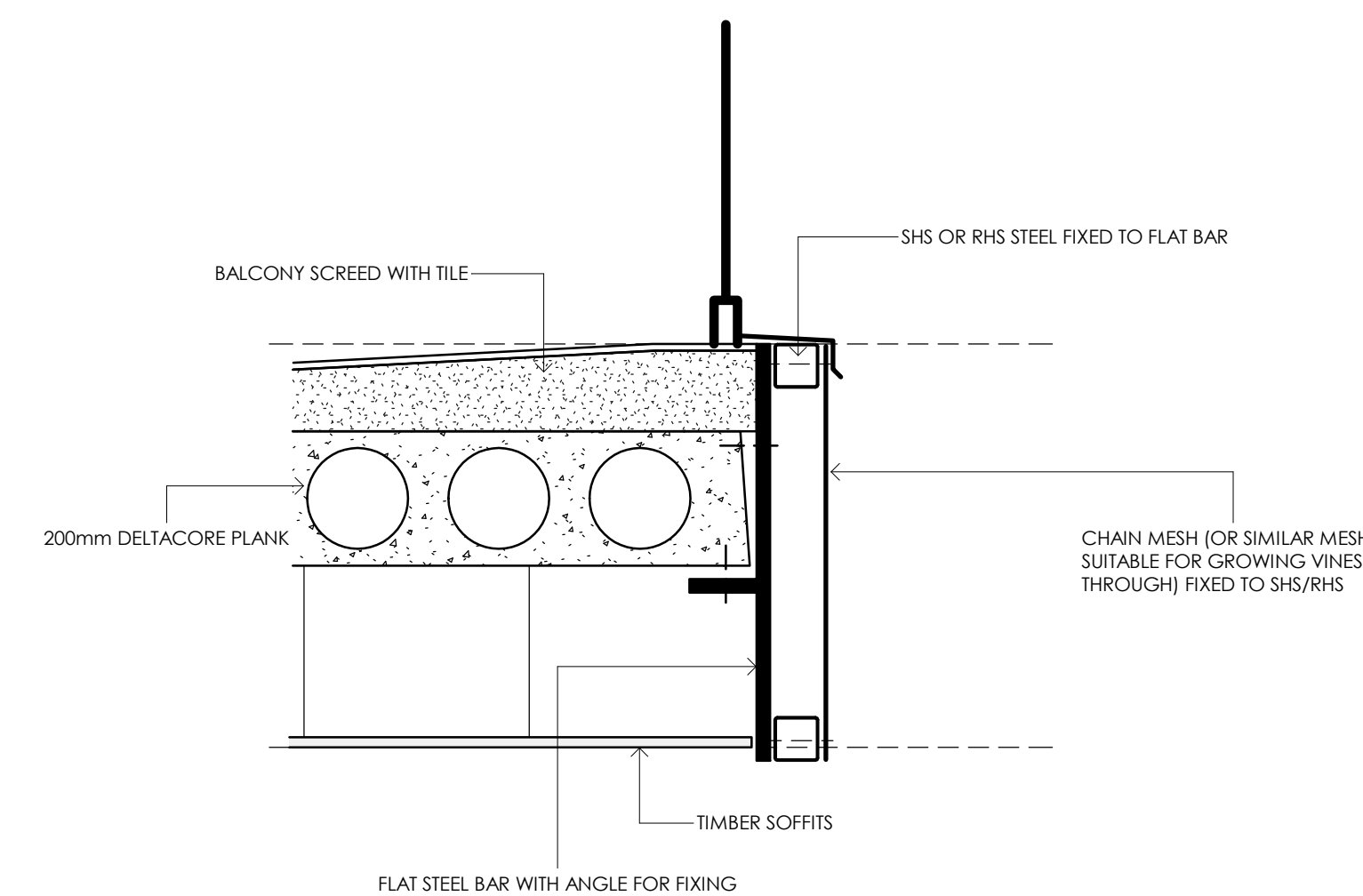
1 WEST-EAST SECTION
(FACING NORTH)
1 : 100



2 EAST-WEST SECTION
(FACING SOUTH)
1 : 100



3 TYPICAL AC ENCLOSURE
1 : 25



4 MESH BALCONY FRONT
1 : 10

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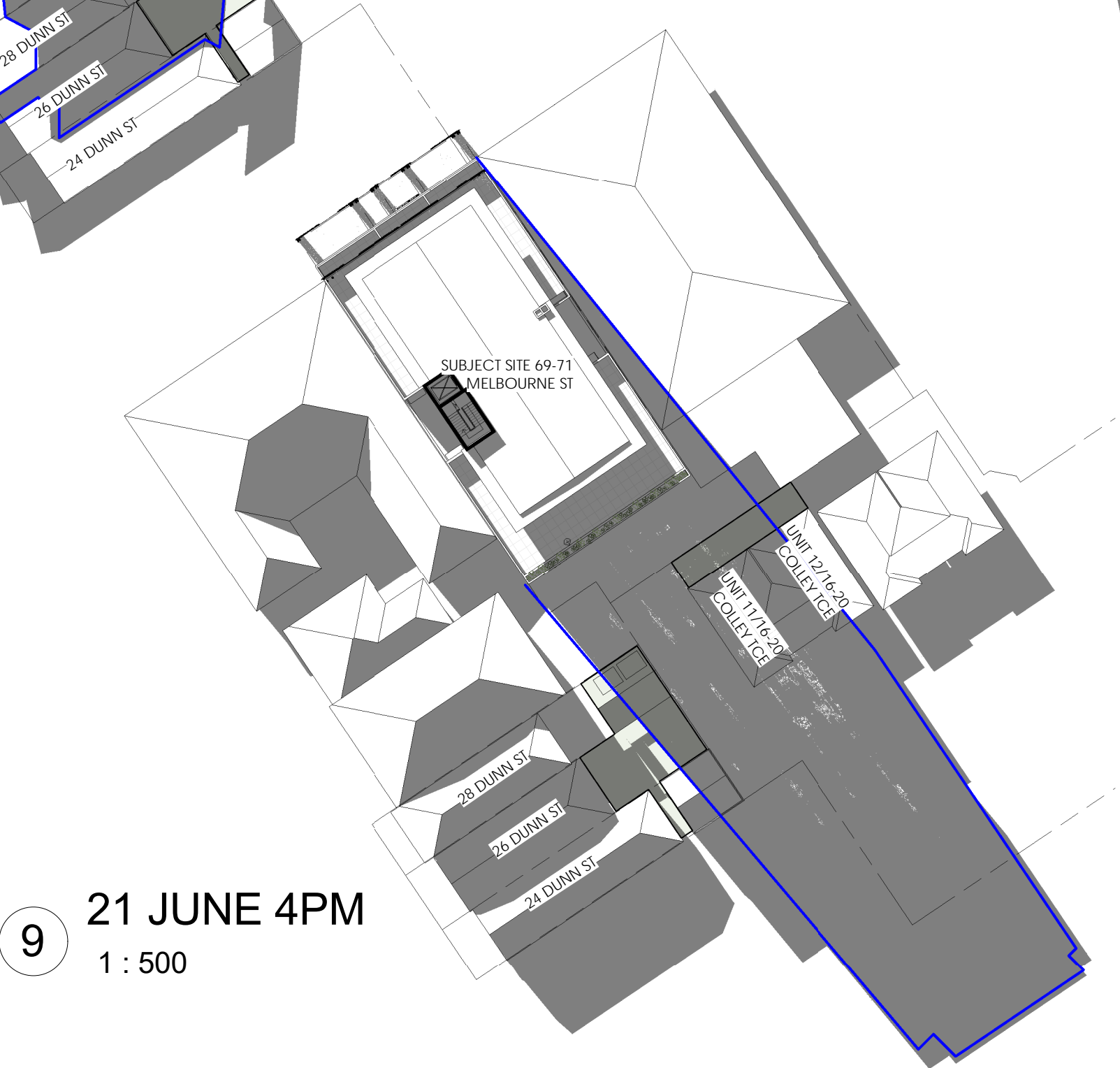
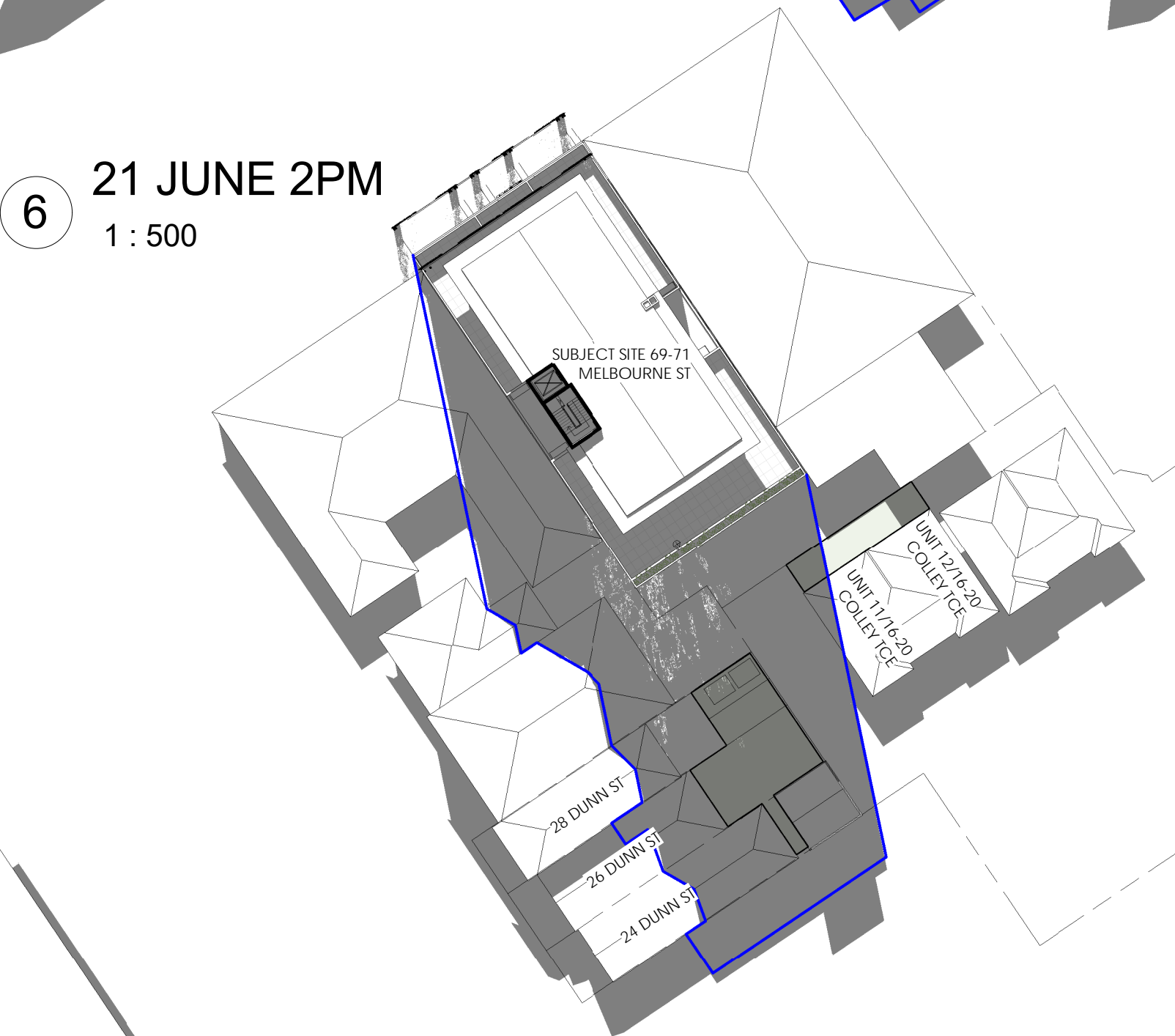
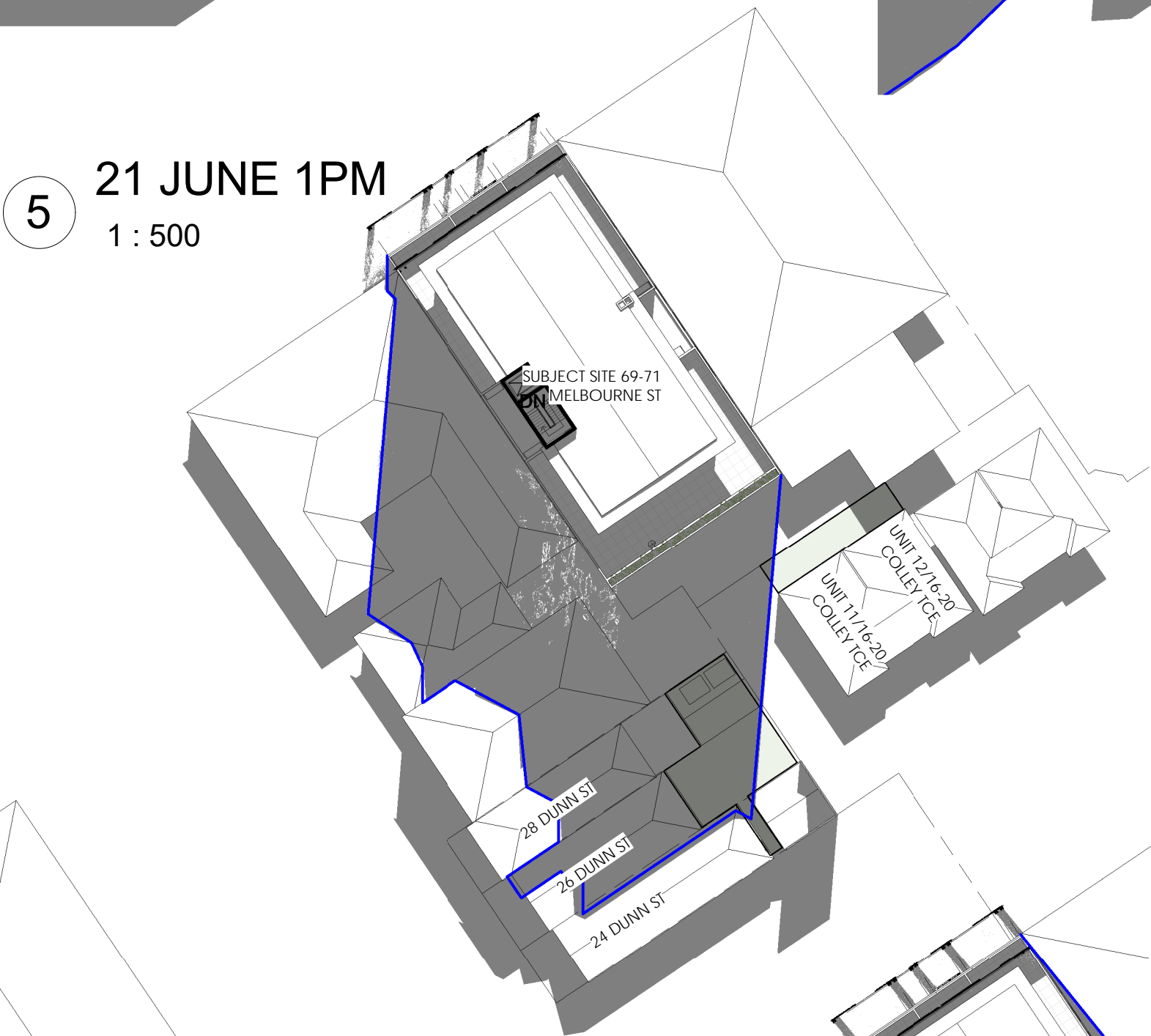
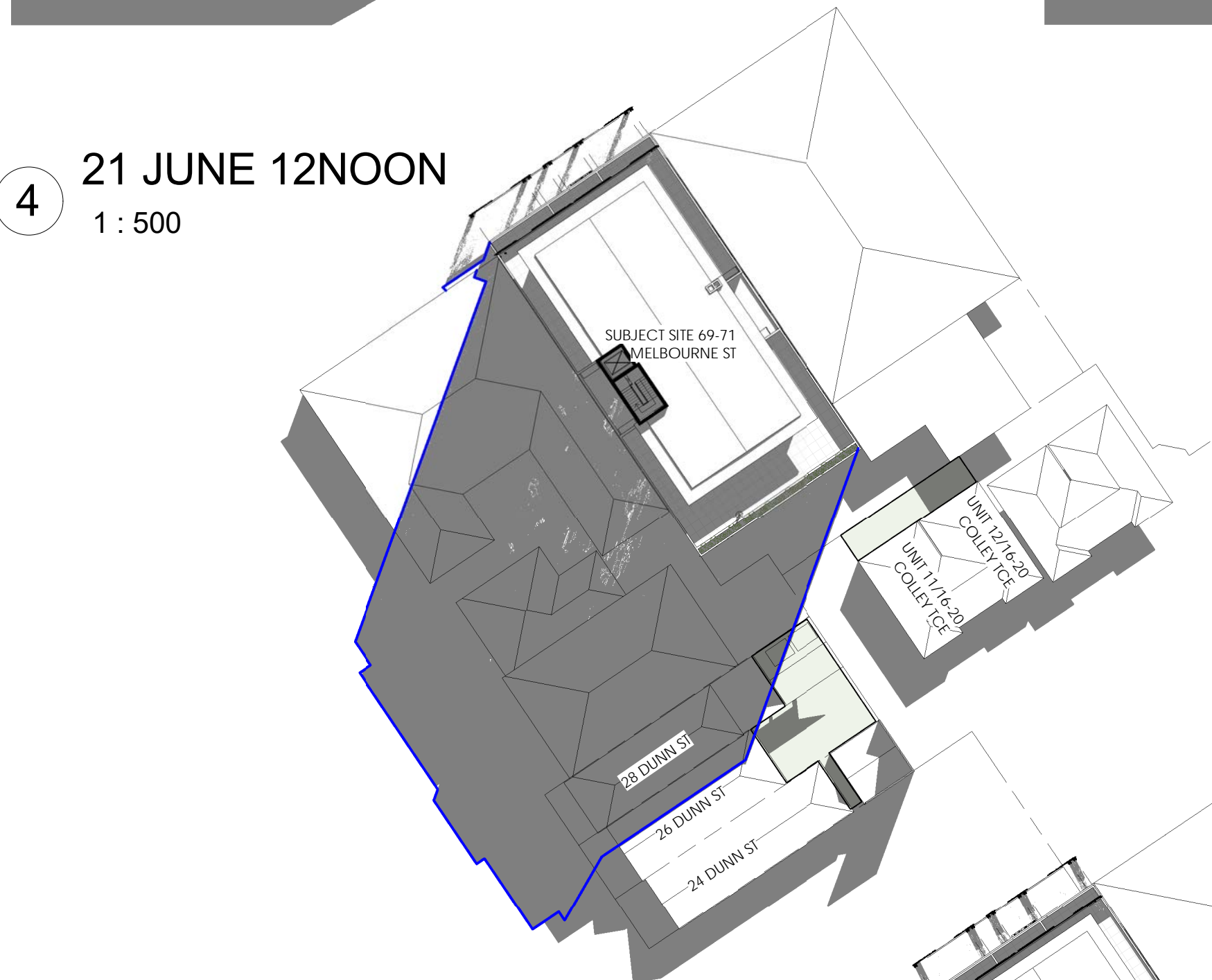
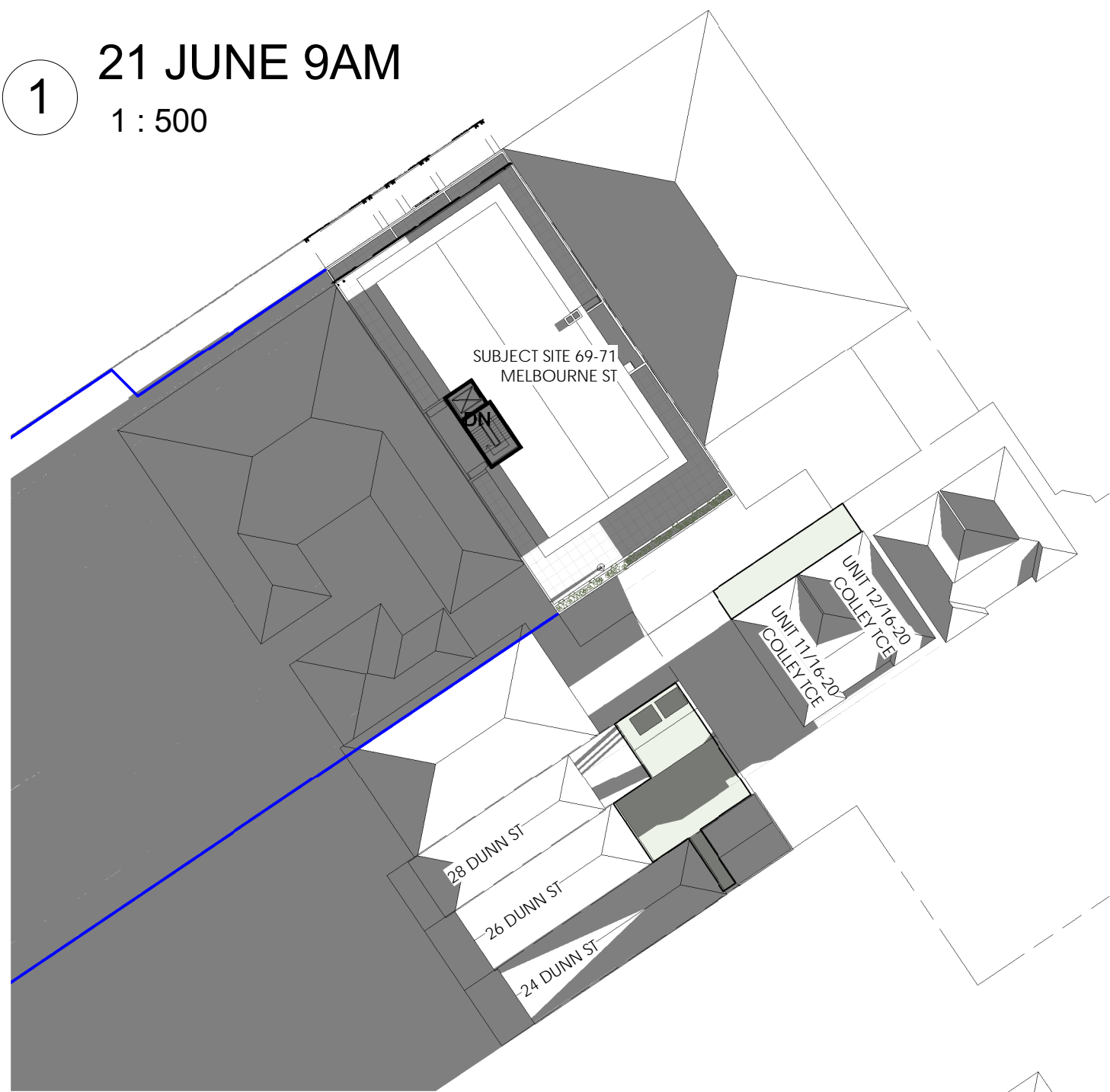
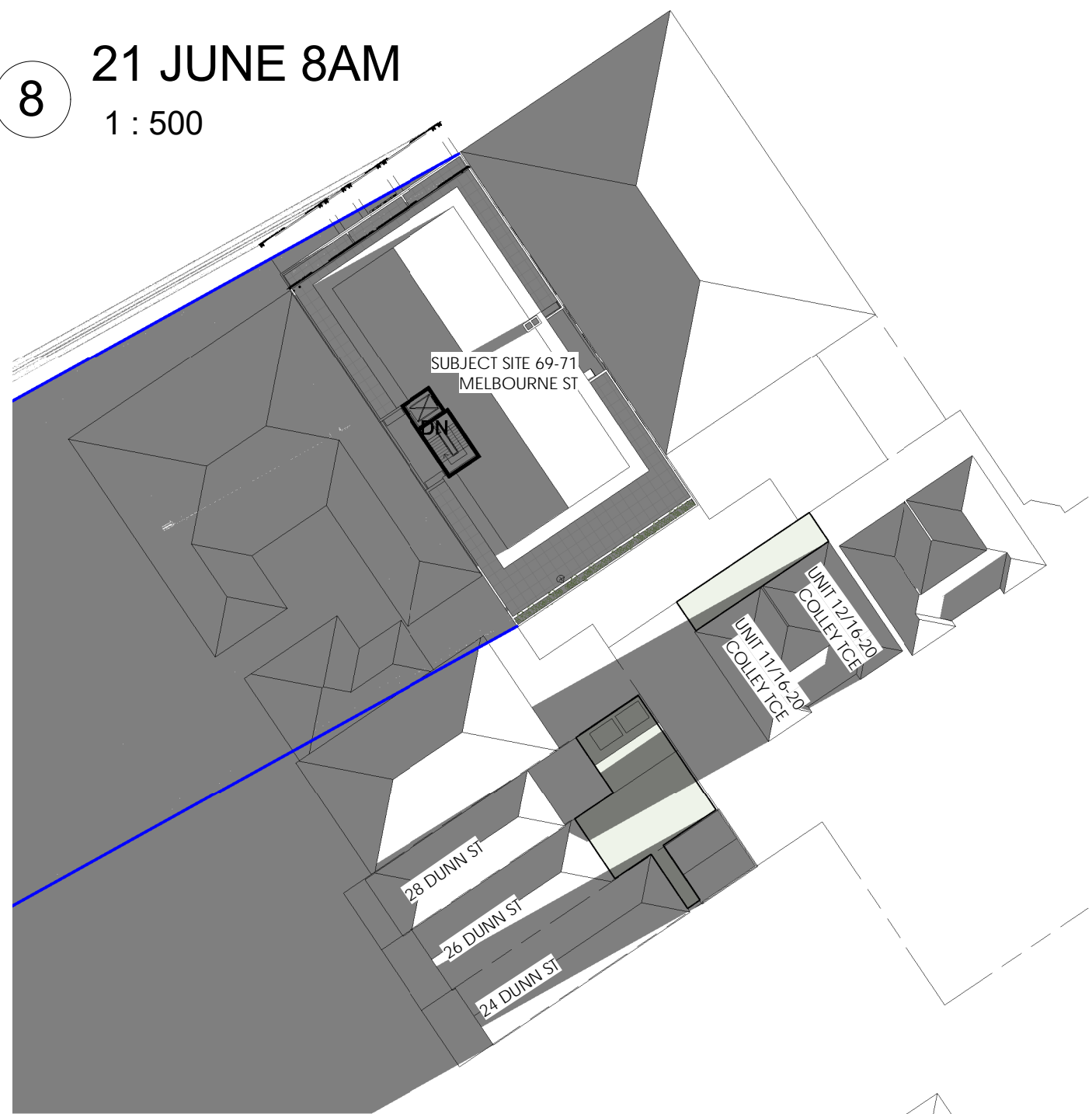


SHEET
DESIGN SECTION 02
PL.09

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ALL SHADOWS COMPLIANT WITH ACC DEVELOPMENT PLAN

WINTER SOLSTICE - HOURS PROPOSED DEVELOPMENT DOES NOT OVERSHADOW NEIGHBOURING PROPERTIES

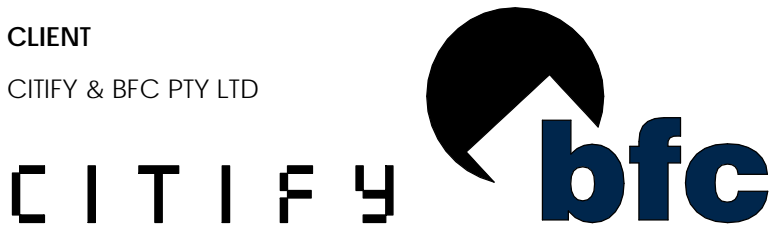
	8am	9am	10am	11am	12noon	1pm	2pm	3pm	4pm	TOTAL	
28 Dunn Street	NS	NS	NS	NS	PS	OS	OS	OS	PS	4-5 HOURS NS	3-4 HOURS OS
26 Dunn Street	NS	NS	NS	NS	NS	PS	OS	OS	PS	5-6 HOURS NS	2-3 HOURS OS
24 Dunn Street	NS	NS	NS	NS	NS	NS	OS	OS	PS	6 HOURS NS	2-3 HOURS OS
11/16-20 Colley Street	NS	NS	NS	NS	NS	NS	PS	OS	OS	6 HOURS NS	2-3 HOURS OS
12/16-20 Colley Street	NS	NS	NS	NS	NS	NS	NS	NS	OS	8 HOURS NS	1 HOUR OS

NS PROPOSED DEVELOPMENT DOES NOT PUT POS IN SHADOW
PS PROPOSED DEVELOPMENT PARTIALLY PUTS POS IN SHADOW
OS PROPOSED DEVELOPMENT PUTS POS IN SHADOW

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SHEET
SHADOW DIAGRAMS

PL.10

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CITIFY : 69-71 MELBOURNE STREET, ADELAIDE

PROJECT : MELBOURNE STREET DEVELOPMENT
CLIENT : CITIFY
DATE : 07.11.2018
REVISION : A



LOCATION PLAN

NOT TO SCALE

DRAWING LIST

LS.007.18.001 - LEVEL 1 & LEVEL 6 - BALCONY LANDSCAPE PLAN
LS.007.18.002 - ELEVATIONS & ELEMENTS



PLANTING SCHEDULE				
CODE	SPECIES	COMMON NAME	POT SIZE	INDICATIVE SIZE (Height x Spread)
LOW/ MEDIUM SHRUBS + STRAPPYS				
Ag	Anigozanthos 'Gold Velvet'	Kangaroo Paw	140mm	600mm x 500mm
Dc	Dianella caerulea 'Silver Streak'	Silver Streak	140mm	500mm x 900mm
Dr	Dianella Revoluta	Flax Lily	140mm	500mm x 500mm
Dt	Dianella tasmanica 'Tas red'	Flax Lily	140mm	500mm x 500mm
Ls	Lomandra 'Seascape'	Matt rush	140mm	600mm x 700mm
Lp	Limonium perezii	Sea lavender	140mm	600mm x 600mm
Nm	Nandina Domestica 'Moonbay'	Heavenly Bamboo	140mm	600mmx 700mm
Wa	Westringia 'Aussie Box'	Coastal Rosemary	140mm	600mm x 900mm
Ws	Westringia fruticosa 'Smokie'	Coastal Rosemary	140mm	500mm x 900mm
FEATURE PLANT				
Zf	Zamia Furfuracea	Cardboard Palm	140mm	700mm x 900mm
CLIMBER/GROUNDCOVER				
Ad	Alternanthera dentata	Little Ruby	140mm	300mm x 600mm
Hs	Hibbertia scandens	Snake Vine	140mm	1.5m x 3m
Tj	Trachelospermum jasminoides	Star Jasmine	140mm	500mm x 2m
TREES				
La	Lagerstromia indica 'Sioux'	Crepe Myrtle	45L	4.5m x 3m

2X CUSTOM RAISED GRC PLANTERS.
APPROX 1100MM (H) X 1100MM (L) X
1100MM (W) WITH FEATURE PLANT
ZAMIA FURFURACEA

CUSTOM RAISED GRC PLANTERS.
APPROX 1100MM (H) 1200MM (L) X
600MM (W) PLANTED WITH LOW-
MEDIUM HEDGE (CODE Wa)

CUSTOM RAISED GRC PLANTERS.
APPROX 800MM (H) X 600MM (L)
X 600MM (W) WITH EVERGREEN
CLIMBER: TRACHELOSPERMUM
JASMINOIDES TO SIT BEHIND
STRUCTURAL PILLARS ON LEVELS 1-5.

PILLARS SECURED WITH TENSILE
WEBNET MESH TO TRAIN CLIMBERS UP
THE NORTHERN BUILDING FACADE .

INBUILT CONCRETE BALCONY
PLANTER WITH HARDY, SHADE
TOLERANT SHRUBS AND STRAPPYS .
PLANT SPECIES ALTERNATE AT EACH
LEVEL BETWEEN SPECIES
CODE Dr, Dt, Nm & Ws,

TENSILE WEBNET MESH SECURED TO
BUILDING PILLAR WITH CLIMBER:
HIBBERTIA SCANDENS. PLANTED
AND IRRIGATED FROM ADJACENT
BALCONY PLANTER

2X CUSTOM RAISED GRC
PLANTERS. APPROX 1100MM (H) X
3000MM (L) X 600MM (W) PLANTED
WITH LOW-MEDIUM SHRUBS AND
STRAPPYS (CODE Dc & Lp)

TYPICAL APARTMENT BALCONIES
FINISHED WITH GREY TEXTURED
TILES AND INDICATIVE OUTDOOR
APPROPRIATE FURNITURE

TENSILE WEBNET MESH SECURED
TO BUILDING FACADE WITH
CLIMBER: HIBBERTIA SCANDENS

LEVEL 1 TYPICAL BALCONY LANDSCAPE PLAN

SCALE 1:100 AT A1

PLANTING SCHEDULE

CODE	SPECIES	COMMON NAME	POT SIZE	INDICATIVE SIZE (Height x Spread)
LOW/ MEDIUM SHRUBS + STRAPPYS				
Dc	Dianella caerulea 'Silver Streak'	Silver Streak	140mm	500mm x 900mm
Dt	Dianella tasmanica 'Tas red'	Flax Lily	140mm	500mm x 500mm
Lp	Limonium perezii	Sea lavender	140mm	600mm x 600mm
Wa	Westringia 'Aussie Box'	Coastal Rosemary	140mm	600mm x 900mm
Ws	Westringia fruticosa 'Smokie'	Coastal Rosemary	140mm	500mm x 900mm
FEATURE PLANT				
ZF	Zamia Furfuracea	Cardboard Palm	140mm	700mm x 900mm
CLIMBER/GROUNDCOVER				
Hs	Hibbertia scandens	Snake Vine	140mm	1.5m x 3m
Tj	Trachelospermum jasminoides	Star Jasmine	140mm	500mm x 2m

GLASS BALUSTRADE

3X CUSTOM RAISED GRC
PLANTERS. APPROX 1100MM (H)
X 3000MM (L) X 600MM (W) TO
PREVENT OVERLOOKING ISSUES
WITH STRAPPYS (CODE Ag & Ls)

CUSTOM RAISED GRC PLANTER.
APPROX 1100MM (H) X 2000MM (L)
X 1000MM (W) WITH LOW-MEDIUM
HEDGE (CODE Wa)

CUSTOM RAISED GRC PLANTER.
APPROX 1100MM (H) X 1200MM (L)
X 1200MM (W) WITH FEATURE TREE:
LAGERSTROMIA INDICA 'SIOUX'

4X CUSTOM RAISED GRC PLANTER.
APPROX 1100MM (H) X 3000MM
(L) X 600MM (W) TO PREVENT
OVERLOOKING ISSUES WITH
GROUNDCOVER (CODE Ad) AND LOW-
MEDIUM HEDGE (CODE Wa)

CUSTOM RAISED GRC PLANTER.
APPROX 1100MM (H) X 4000MM (L)
X 1200MM (W) WITH FEATURE
PLANT ZAMIA FURFURACEA

CUSTOM RAISED GRC PLANTER.
APPROX 1100MM (H) X 1200MM (L)
X 1200MM (W) WITH FEATURE TREE:
LAGERSTROMIA INDICA 'SIOUX'

CUSTOM RAISED GRC PLANTER.
APPROX 1100MM (H) X 2000MM (L)
X 1000MM (W) WITH LOW-MEDIUM
HEDGE (CODE Wa)

PENTHOUSE BALCONIES
FINISHED WITH GREY TEXTURED
TILES AND INDICATIVE OUTDOOR
APPROPRIATE FURNITURE

2X CUSTOM RAISED GRC
PLANTER. APPROX 1100MM (H)
X 2500MM (L) X 1000MM (W)
WITH FEATURE PLANT ZAMIA
FURFURACEA

LEVEL 6 PENTHOUSE BALCONY LANDSCAPE PLAN

SCALE 1:100 AT A1

PLANTING SCHEDULE

CODE	SPECIES	COMMON NAME	POT SIZE	INDICATIVE SIZE (Height x Spread)
LOW/ MEDIUM SHRUBS + STRAPPYS				
Ag	Anigozanthos 'Gold Velvet'	Kangaroo Paw	140mm	600mm x 500mm
Ls	Lomandra 'Seascape'	Matt rush	140mm	600mm x 700mm
Wa	Westringia 'Aussie Box'	Coastal Rosemary	140mm	600mm x 900mm
FEATURE PLANT				
Zf	Zamia Furfuracea	Cardboard Palm	140mm	700mm x 900mm
CLIMBER/GROUNDCOVER				
Ad	Alternanthera dentata	Little Ruby	140mm	300mm x 600mm
TREES				
La	Lagerstromia indica 'Sioux'	Crepe Myrtle	45L	4.5m x 3m



LCS LANDSCAPES
Defining Spaces

Project:
69-71 MELBOURNE STREET
ADELAIDE

Client:
JOEL WILKINSON
CITIFY GROUP
PO BOX 576 WELLAND SA 5007

Drawing:
LEVEL 1 & LEVEL 6
BALCONY LANDSCAPE PLAN

Scale: 1:100@ A1

Drawn: KE

Checked: SK

Date: 07/11/2018

Dwg no: LS 07718.001

Sheet: 2 OF 3

Rev: A

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Landscape Construction Services Pty
Builders Licence: BL0175870 / ABN: 68 102 505 180



NORTHERN ELEVATION (MELBOURNE STREET)

SCALE 1:100 AT A1

PLANTING SCHEDULE

CODE	SPECIES	COMMON NAME	POT SIZE	INDICATIVE SIZE (Height x Spread)
LOW/ MEDIUM SHRUBS + STRAPPYS				
Ag	Anigozanthos 'Gold Velvet'	Kangaroo Paw	140mm	600mm x 500mm
Dc	Dianella caerulea 'Silver Streak'	Silver Streak	140mm	500mm x 900mm
Dr	Dianella Revoluta	Flax Lily	140mm	500mm x 500mm
Dt	Dianella tasmanica 'Tas red'	Flax Lily	140mm	500mm x 500mm
Ls	Lomandra 'Seascape'	Matt rush	140mm	600mm x 700mm
Lp	Limonium perezii	Sea lavender	140mm	600mm x 600mm
Nm	Nandina Domestica 'Moonbay'	Heavenly Bamboo	140mm	600mm x 700mm
Wa	Westringia 'Aussie Box'	Coastal Rosemary	140mm	600mm x 900mm
Ws	Westringia fruticosa 'Smoke'	Coastal Rosemary	140mm	500mm x 900mm
FEATURE PLANT				
Zf	Zamia Furfuracea	Cardboard Palm	140mm	700mm x 900mm
CLIMBER/GROUNDCOVER				
Ad	Alternanthera dentata	Little Ruby	140mm	300mm x 600mm
Hs	Hibbertia scandens	Snake Vine	140mm	1.5m x 3m
Tj	Trachelospermum jasminoides	Star Jasmine	140mm	500mm x 2m
TREES				
La	Lagerstromia indica 'Sioux'	Crepe Myrtle	45L	4.5m x 3m



ANIGOZANTHOS 'GOLD VELVET'



DIANELLA CAERULEA



DIANELLA TASMANICA 'TAS RED'



LOMANDRA 'SEASCAPE'



TEXTURED TILES
COLOUR: GREY



TENSILE WEBNET MESH SECURED TO BUILDING FACADE WITH HIBBERTIA SCANDENS



FEATURE CLIMBER
TRACHELOSPERMUM JASMINOIDES



WESTRINGIA 'AUSSIE BOX'



FEATURE TREE
LAGERSTROMIA INDICA 'SIOUX'

SOUTHERN ELEVATION

SCALE 1:100 AT A1



PRIVATE PARKING ENTRANCE



ZAMIA FURFURACEA



DIANELLA REVOLUTA



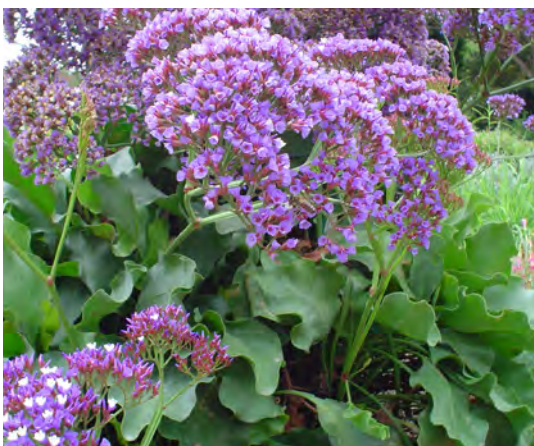
WESTRINGIA FRUTICOSA 'SMOKE'



ALTERNANTHERA DENTATA



NANDINA DOMESTICA



LIMONIUM PEREZII



GRC PLANTERS

ELEMENTS



Our Ref: Q1808091_L1 ASM
12 September 2018

Citify Group
Po Box 576
WELLAND SA 5007

ATTENTION: GEMMA BROOMFIELD/JOEL WILKINSON

Email: gemma@citifygroup.com.au

Dear Gemma & Joel,

**RE: PROPOSED APARTMENT DEVELOPMENT
69-71 MELBOURNE ST, NORTH ADELAIDE SA**

As requested TMK have undertaken an initial assessment of the above mentioned development with regards to stormwater design. A complete assessment and full design would be undertaken in the detailed design phase, however, in the interim the following items will be included into our design;

1. The proposed storm water discharge from the developed site will be designed not to exceed the discharge flows from the pre-developed (existing) site, any additional volumes will be detained on site by means of above ground or below ground detention tanks/basins, to be confirmed at final design stage and in consultation with Citify and Bert Farina Constructions.
2. There is an existing pit located in Colley St laneway to the rear of the site along with an existing 450 diameter pipe at the front of the site, southern side of Melbourne St.
3. The existing site appears to be more or less flat, however stormwater could either be discharged into pipe located in southern end of Melbourne St or to the rear laneway at Colley St. This will be confirmed at final design stage.
4. If the site is located with a known flood prone area, the finished floor level to habitable areas (FFL) will be set at a minimum of 150mm above the noted flood level, if the site is located outside of a flood zone, the finished floor level to habitable areas (FFL) will be a minimum of 300mm above the top of kerb levels. The FFL levels would need to suit the existing neighbouring site levels.
5. All finished levels and drainage will be designed such that during a major storm event all stormwater flows will be directed overland and out to the street without impacting on any of the proposed buildings on this site, nor will they discharge onto neighbouring properties.
6. All other storm water /drainage issues will be dealt with in accordance with the National Plumbing and Drainage Code, AS3500 and normal engineering practice.

If you have any questions in regards to the above or require any further details, please contact the undersigned.

For and on behalf of
TMK Consulting Engineers

ANDREW MARTIN
Senior Associate



Civil - Structural - Environmental - Geotechnical - Mechanical - Electrical - Fire - Hydraulics - Lifts - Green ESD
Level 6, 100 Pirie Street, Adelaide SA 5000 Telephone (08) 8238 4100 Facsimile (08) 8410 1405
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MIXED-USE DEVELOPMENT
69-71 MELBOURNE ST, NORTH ADELAIDE
TRAFFIC AND PARKING REPORT



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DOCUMENT CONTROL

Report title:	Mixed-Use Development, 69-71 Melbourne Street, North Adelaide			
Project number:	18223			
Client:	Citify Pty Ltd			
Client contact:	Joel Wilkinson			
Version	Date	Details/status	Prepared by	Approved by
Draft	11 Oct 18	For review	TAW	BNW
V1	12 Oct 18	For submission	TAW	BNW
V2	08 Nov 18	Updated plans	TAW	BNW

CIRQA Pty Ltd

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1. INTRODUCTION

CIRQA has been engaged by Citify Pty Ltd to provide design and assessment advice for a mixed-use development at 69-71 Melbourne Street, North Adelaide. Specifically, CIRQA has provided advice in respect to traffic and parking aspects of the proposal.

This report provides a review of the subject site, the proposed development, its access and parking provisions and the associated traffic impact on the adjacent road network. The traffic and parking assessments have been based upon plans prepared by Gemma Lea Design Studio (drawing no. PL.00 to PL.10, dated 04 November 2018, refer Appendix A).

2. BACKGROUND

2.1 SUBJECT SITE

The subject site is located on the south-eastern side of Melbourne Street, North Adelaide. The site is bound by a hotel (the Lord Melbourne Hotel) to the north-east, Colley Street to the south-east, a restaurant (The Himalayan Kitchen) to the south-west and Melbourne Street to the north-west. The City of Adelaide's Development Plan identifies that the site is located within a Main Street (Melbourne East) Zone.

The site is currently occupied by a Pilates Studio (Club Rhythm). Vehicle access to the site is provided via a 'right-of-way' from Colley Terrace, albeit no formal on-site vehicle parking is currently provided. Pedestrian and cyclist access is currently provided via the site's frontage to Melbourne Street and via the rear 'right-of-way' (from Colley Street).

Figure 1 illustrates the location of the subject site with regard to the adjacent road network.

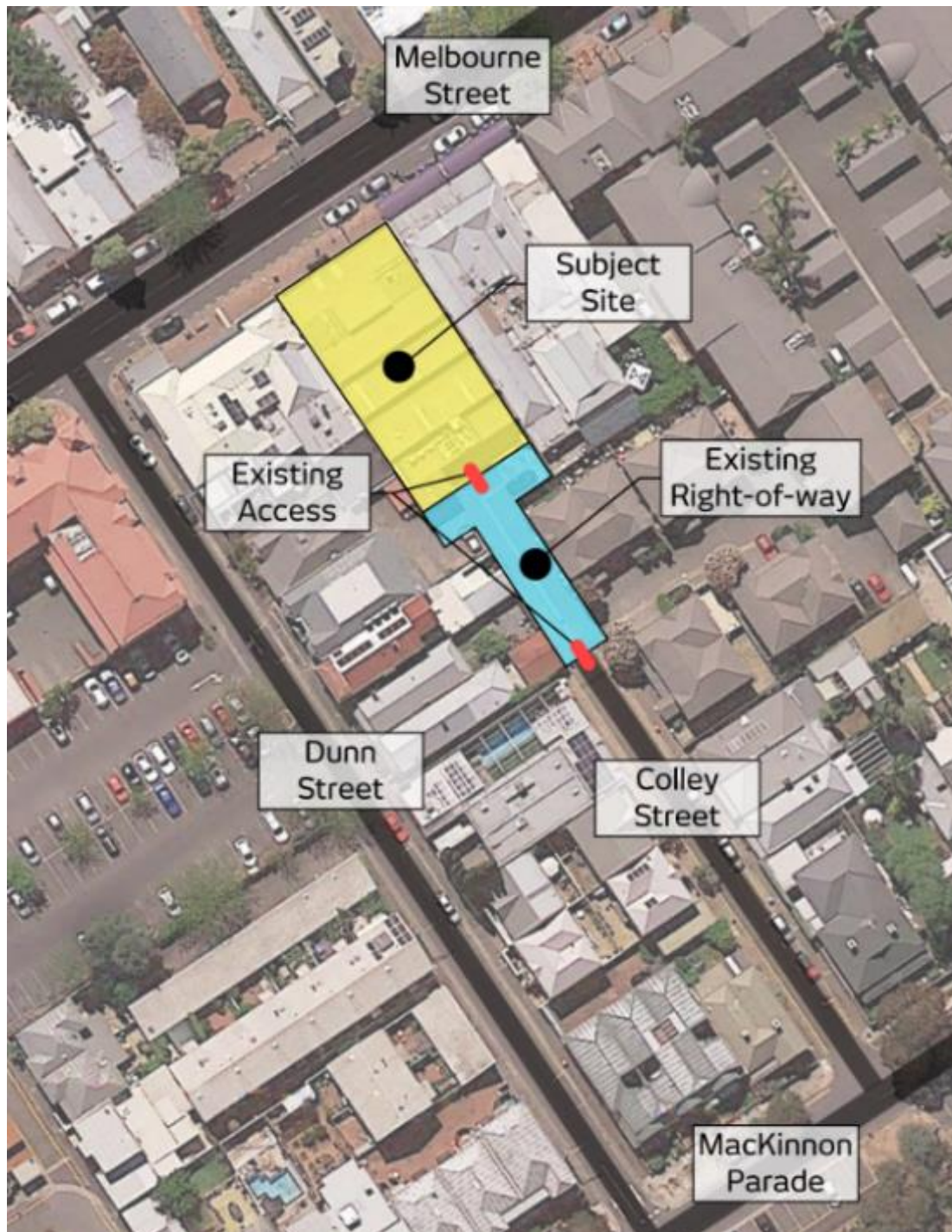


Figure 1 – Location of the subject site with regard to the adjacent road network

2.2 ADJACENT TRANSPORT NETWORKS

2.2.1 ROAD NETWORK

Melbourne Street is under the care and control of the City of Adelaide and is identified as a 'primary city access' in Council's Development Plan. In the vicinity of the site, Melbourne Street comprises a single traffic lane in each direction, with

on-street (parallel) vehicle parking and full-time bicycle lanes on both sides. Adjacent the site, on-street parking is subject to a one-hour time limit between 9:00 am and 5:30 pm (Monday to Friday) and 9:00 am to 12:00 pm (Saturday). Traffic data obtained from the Department of Planning, Transport and Infrastructure (DPTI) indicates that Melbourne Street has an Annual Average Daily Traffic (AADT) volume in the order of 16,000 vehicles per day, of which approximately 3.5% are commercial vehicles. Melbourne Street is subject to a default urban speed limit of 50 km/h.

Colley Street is a local no-through road under the care and control of the City of Adelaide. Colley Street comprises a 5.5 m wide carriageway (approximate) and facilitates two-way traffic movements. On-street parking is provided on the north-eastern side of Colley Street, albeit is subject to a one-hour time restriction from 9:00 am to 5:30 pm, Monday to Friday, and a permit zone at all other times. Given that Colley Street services only a small number of residential and commercial premises (i.e. resident and staff movements), it is anticipated that Colley Street would have an AADT of less than 500 vpd. Colley Street is subject to a 50 km/h urban speed limit (albeit such speeds would unlikely to be reached on Colley Street given its short length and urban nature).

2.2.2 ACTIVE TRANSPORT

The subject site has a high level of connectivity to the adjacent pedestrian (footpath) network. Footpaths are provided immediately adjacent the site's frontage on Melbourne Street, linking the site to the broader pedestrian network. Footpaths are also provided on both sides of Colley Street, providing a connection to the nearby parklands and associated off-street shared path network.

Bicycle movements are accommodated on Melbourne Street within designated full-time bicycle lanes. Bicycle movements are also accommodated on Colley Street under a standard shared arrangement as well as on the nearby footpath and off-road shared path networks.

2.2.3 PUBLIC TRANSPORT

High-frequency public transport bus routes are located along Melbourne Street, with 'Go-Zone' bus stops located immediately in front of the site on both sides of the road. Bus services operating from these stops include:

- Route 202, 202F, 203B – Ingle Farm to City;
- Route 203, 203F, 271 – Tea Tree Plaza Interchange to City;
- Route 206, 208N – Northgate to City;
- Route 208, 273 – Paradise Interchange to City;

- Route 208B – City to Broadview;
- Route 975 – Roma Mitchell Secondary College to City (school service); and
- Route N202 – Ingle Farm to City (night service).

3. PROPOSED DEVELOPMENT

3.1 LAND USE AND YIELD

The proposal comprises the demolition of the existing building and the construction of a multi-storey mixed-use building on the subject site. Specifically, the multi-storey building will comprise the following key components:

- 233 m² of commercial/retail floor area;
- 5x one-bedroom apartments;
- 10x two-bedroom apartments; and
- 12x three-bedroom apartments.

3.2 ACCESS AND PARKING DESIGN

The proposal will be serviced by a total of 42 vehicle parking spaces and 40 bicycle parking spaces. Of the 42 parking spaces, 37 spaces will be provided within a basement parking area, with the remaining five spaces located at-grade (one of which will be reserved exclusively for use by people with disabilities).

It should be noted that the 37 parking spaces will be achieved within the basement parking area via the use of an automated Hercules car stacking system. The parking system will allow all parking spaces to be accessed independently of one another (i.e. without a vehicle having to be removed from its parking space in order to access another). It is understood that Hercules are in discussion with Citify (directly) in order to ensure an appropriate parking system is installed. Based upon this, CIRQA is of the understanding that the system will permit appropriate access to/from all parking spaces and that the system will comply with the requirements of the relevant Australian Standards.

The basement parking area will be accessed via an Ideal Park IP1-HMT V08 car elevator. The elevator has been specified such that vehicles (up to 2.6 tonnes) can be transported between the ground and basement floor levels whilst a driver (and passengers) is inside the vehicle. The elevator will provide a 5.6 m deep by 3.0 m wide platform for drivers to position their vehicle whilst using the elevator. Given that the elevator will only be used by residents of the site, this is considered to be an appropriate solution to provide transport between the ground and basement floor areas within a space-constrained site.

In order to determine appropriate access can be achieved to/from the car elevator in both the at-grade and basement parking areas, a turn path assessment has been undertaken using AutoCAD Vehicle Tracking software and an Australian Standard B85 (domestic) design vehicle. The turn path assessment is attached in Appendix B.

The ground and basement parking area will comply with the requirements of the Australian/New Zealand Standard for *"Parking Facilities – Part 1: Off-street car parking"* (AS/NZS 2890.1:2004) in that:

- parking spaces will be 2.4 m wide and 5.4 m long;
- disabled parking spaces will 2.4 m wide and 5.4 m long with an adjacent shared space of the same dimension;
- parking aisles will be at least 5.8 m wide;
- columns will be located outside of the car clearance envelope;
- a 1.0 m end-of-aisle extension will be provided beyond the last parking space in a blind aisle; and
- a head-height of 2.2 m will be provided throughout the parking area.

Vehicle access to the site will be provided over the existing 'right-of-way' at the rear of the site, connecting to Colley Street immediately south of the subject site (as per the existing situation). Pedestrian and cyclist access will be provided via the site's frontage to Melbourne Street as well as the site's rear access to Colley Street.

3.3 REFUSE COLLECTION

Refuse collection will be undertaken by an 8.8 m Medium Rigid Vehicle (MRV) at the rear of the site (within the existing 'right-of-way'). Refuse collection vehicles will be required to be reversed down Colley Street (from MacKinnon Parade) as per the existing situation. It should be noted that such arrangements (reversing down Colley Street) are also required for the collection of waste from adjacent Melbourne Street properties (such as the Lord Melbourne Hotel) and a residential property fronting Colley Street. As such, residents and staff of nearby properties would be familiar with such arrangements.

CIRQA and Colby Industries (waste consultants engaged on this project) have liaised with the traffic and waste representatives from the City of Adelaide in respect to various waste collection solutions for the proposed development. Council representatives advised that while the reversing of waste collection vehicles is not desired, such an arrangement will retain the status-quo and would not result in a 'worse' situation occurring.

Refuse collection movements would be undertaken outside of peak periods to minimise any potential impact on the operation of the adjacent road network and surrounding properties. Based upon the above, the proposed refuse collection arrangements are considered appropriate for the subject development. A turn path of an 8.8 m MRV accessing the subject site is attached in Appendix C.

4. PARKING ASSESSMENT

4.1 CAR PARKING

The City of Adelaide's Development Plan (Table Adel/7) identifies parking requirements for land uses within 'Mixed Use Zones' (as is the subject site) relevant to the proposed development. Specifically, Council's Development Plan identifies the following parking requirements relevant to the proposed development:

- **Medium to high-scale residential** – one space per dwelling up to 200 square metres; and
- **Non-residential development** – three spaces per 100 square metres of gross leasable floor area.

It should also be noted that Council's Development Plan (Table Adel/7) states that "In mixed-use buildings [within Mixed Use Zones such as the subject site], where there is a combination of more than one of the following land uses, the provision of vehicle parking at the following rates may be reduced in number...". As such, Council's Development Plan allows for some flexibility in on-site parking provision for site's located within the subject site (as is the proposed development).

Nonetheless, Table 1 illustrates a breakdown of the theoretical parking requirement of each component within the proposal (based upon the above 'raw' parking provisions), as well as the number of parking spaces allocated to each use.

Table 1 – Breakdown of the theoretical parking requirement associated with each use based upon the applicable parking provisions from Council's Development Plan

Use	Theoretical req. (based on Council's Dev. Plan)	No. of allocated parking spaces	Comment
One-bed Apartments	5	5	No shortfall
Two-bed Apartments	10	10	No shortfall
Three-bed Apartments	12	24	No shortfall
Commercial/Retail	7	3	4-space shortfall

As illustrated in Table 1, five parking spaces will be allocated to the one-bedroom apartments, ten spaces will be allocated to the two-bedroom apartments and 24 spaces will be allocated to the three-bedroom apartments. Such provisions will satisfy the parking requirements of Council's Development Plan.

With regard to the retail/commercial tenancies, a total of three spaces will be allocated. As such, a small parking shortfall in the order of four spaces will be associated with these tenancies. However, given staff will park for a longer duration (i.e. medium to long-term), the three retail/commercial parking spaces are recommended to be allocated as staff parking spaces (in order to minimise longer duration on-street parking impacts). As such, the small theoretical shortfall of four spaces is expected to be associated with short-term customer/visitor parking.

Furthermore, due to the site's location on Melbourne Street, it is expected that the majority of customers/visitors to the tenancies will be associated with shared trips with nearby premises (i.e. passing foot traffic). This is reflective in Council's Development Plan (Table Adel/7) as consideration is given to a reduction in parking provision due to shared-trip opportunities. As such, the parking demand associated with the retail/commercial tenancies is expected to be lower than that typically associated with such uses.

In the event that customers/visitors were to drive to the site (i.e. solely to access the site), it is highly likely that drivers would utilise on-street parking on Melbourne Street and/or the Council-owned parking area on the south-western side of Dunn Street (less than 75 m from the subject site). Such a scenario would have negligible impact on parking availability within the vicinity of the subject site.

The above assessment has also not taken into consideration the theoretical parking requirement associated with the existing site. Based upon a floor area of approximately 600 m², the existing site would have a theoretical requirement in the order of 18 parking spaces (based upon a parking requirement of three spaces per 100 m² for non-residential land uses). Given that (at most) four parking spaces are provided at the rear of the site, there would be a theoretical shortfall in the order of 14 parking spaces (required to be accommodated on the adjacent road network). Taking this into consideration, there would be a lesser shortfall associated with the proposed development than that of the existing site (i.e. a theoretical improvement in parking availability within the vicinity of the subject site).

It should also be noted that the City of Adelaide's Development Plan (Table Adel/7) identifies that *"1 car parking space in every 15 spaces provided with [sic] any form of development should function as a car parking space suitable for use by people with disabilities..."*. Council's Development Plan also stated that *"Every*

second parking space provided for people with special needs shall be reserved exclusively for the use of people with disabilities...". As such, one parking space has been reserved within the at-grade parking for the exclusive use by people with disabilities, with the opportunity for the adjoining space (i.e. adjacent the required shared area) to also be used for people with disabilities.

4.2 BICYCLE PARKING

The City of Adelaide's Development Plan identifies the following bicycle parking requirements relevant to the proposed development:

- **All low, medium and high-scale residential** – one space per dwelling up to 150 square metres OR two spaces per dwelling greater than 150 square metres PLUS one space per 10 dwellings for visitors; and
- **Retail** – one space per 200 square metres of gross leasable floor area for staff PLUS one space per 600 square metres of gross leasable floor area for visitors.

Based upon these rates, the site would have a theoretical parking requirement for 28 resident parking spaces, one staff parking space and three visitor/customer parking spaces (a total of 32 bicycle parking spaces). Given that 32 resident and 8 regular bicycle parking spaces will be provided on-site, the bicycle parking requirements of Council's Development Plan are satisfied.

In addition to the above, it is not uncommon for residents to store bicycles within their apartment (particularly with more expensive road bikes). As such, the requirements of Council's Development Plan are exceeded.

5. TRAFFIC ASSESSMENT

The NSW Roads and Maritime Services' "Guide to Traffic Generating Developments" (the RMS Guide), and its subsequent updates, is a document commonly used by traffic engineers in order to determine the forecast traffic generation of a variety of land uses. The RMS Guide identifies the following traffic generation rates relevant to the proposed development:

- **High-density residential flat dwellings** (apartments) - 0.53 am and 0.32 pm peak hour trips per dwelling; and
- **Shopping centres** (retail) – 12.5 (Thursday) peak hour trips per 100 m².

However, with regard to retail traffic generation rates identified above, such a rate is not considered to be appropriate for application to the subject proposal. This is due to the large-scale nature and variety of offerings of a shopping centre compared to that of the proposal. In reality, it would be expected that the retail

(commercial) component would generate in the order of 7.5 to 9.0 peak hour trips per 100 m² of floor area. Such rates have recently been adopted (and accepted) for small retail shops throughout metropolitan Adelaide.

It should also be noted that the am peak hour generation of 'shops' is typically 50% of that associated with the pm peak hour. As such, rates of 4.5 am and 9.0 pm trips per 100 m² have conservatively been adopted for this assessment.

Based upon the above traffic generation rates, it is forecast that the proposed development will generate in the order of 25 am and 30 pm peak hour trips.

However, it is considered that a portion of trips to/from the site would be shared with trips to nearby premises. Similarly, a portion of movements to/from the site would also be associated with foot traffic on the adjacent footpath network (along Melbourne Street). As such, it is envisaged that the site's traffic generation would be lower than that identified above.

Nonetheless, the forecast traffic generation identified above is low and would be readily accommodated on the adjacent road network with minimal impact. Furthermore, the assessment does not include consideration of the site's existing traffic generation and the actual number of additional movements will be lower than forecast.

6. SUMMARY

The proposal comprises the construction of a multi-storey mixed-use (residential and commercial/retail) building on the subject site. The development will be serviced by 42 parking spaces, located within an at-grade and basement parking area. A further 40 bicycle parking spaces will be provided within the subject site.

Vehicle access to the site is proposed via two-way access at the rear of the site, over an existing 'right-of-way' connecting to Colley Street (as per the existing situation). Pedestrian and cyclist access will be provided via the site's frontage to Melbourne Street and via the existing rear 'right-of-way'.

Based upon Council's Development Plan, the proposal has a theoretical requirement for 34 parking spaces to be provided on-site. Of the 42 spaces proposed on the subject site, 39 will be allocated to residents. As such, it is considered that the site will have a theoretical shortfall of four spaces associated with visitors/customers of the commercial retail tenancies. However, it is highly likely that such users will be associated with passing 'foot traffic' and/or shared trips with nearby premises. Furthermore, given that numerous parking opportunities are provided within close proximity to the subject site, the small

parking shortfall is considered to have minimal impact on parking availability within the vicinity of the site.

With regard to traffic, it is forecast that the site will generate in the order of 25 am and 30 pm peak hour trips. However, a portion of trips would 'shared' with nearby premises and would also be associated with 'foot traffic' on Melbourne Street. Nonetheless, the forecast traffic generation is low and would be readily accommodated on the adjacent road network.

APPENDIX A

GEMMA LEA DESIGN STUDIO PLANS

DATED 04 NOVEMBER 2018

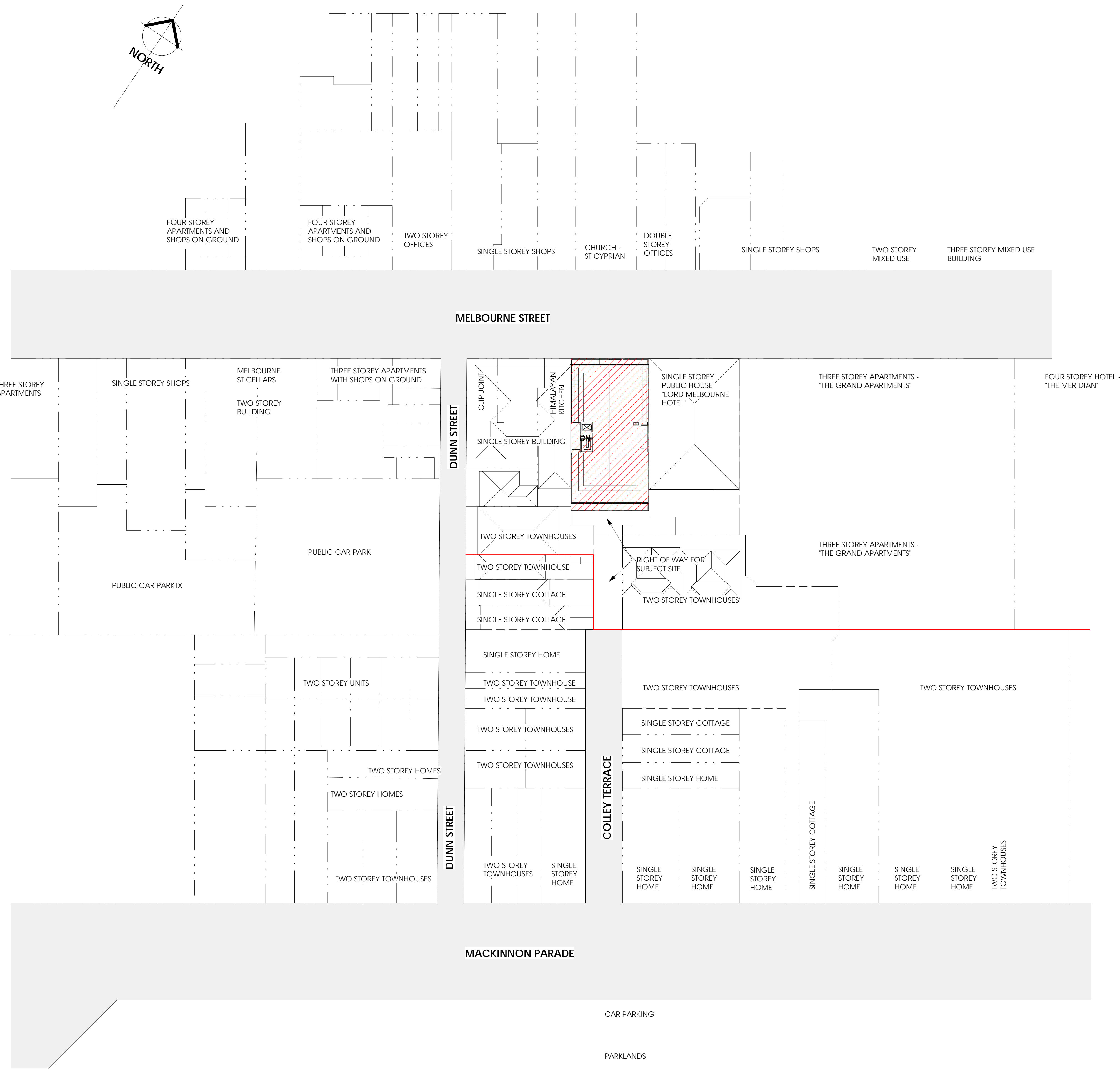
A night-time photograph of a modern, multi-story residential building. The building features a brick ground floor and a glass upper floor. The ground floor has large glass windows and doors, with a sign above the entrance that reads "SIX NINE MELBOURNE STREET". To the right of the entrance, there is a red "POST" box. The upper floor is illuminated from within, showing balconies and interior spaces. The building is set against a dark blue sky.

APT AREAS			
LEVEL	NAME	DESCRIPTION	AREA
6TH FLOOR	PENTHOUSE NORTH	3 BED, 2 BATH	146 m ²
6TH FLOOR	PENTHOUSE NORTH	BALCONY	107 m ²
PENTHOUSE NORTH			252 m ²
6TH FLOOR	PENTHOUSE SOUTH	3 BED, 2 BATH	152 m ²
6TH FLOOR	PENTHOUSE SOUTH	BALCONY	108 m ²
PENTHOUSE SOUTH			261 m ²
6TH FLOOR			513 m ²
			3569 m ²

GEMMA | LEA

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ABN: 39 882 991 838

DESIGN STUDIO

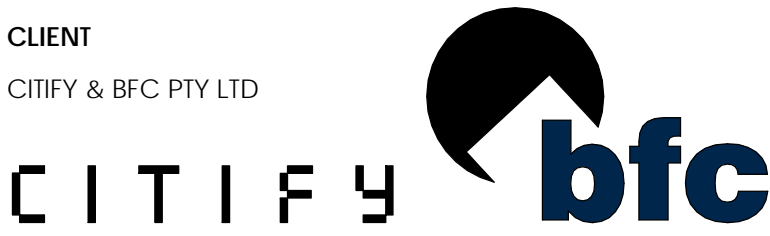


This drawing shows the proposed building and site layout. It is a preliminary design and is not to be used for construction purposes. It is intended to provide a visual representation of the proposed development and to assist in the planning process. It is not a final design and is subject to change without notice. It is not to be used for any other purpose without the written consent of the designer.

REVISIONS		
ISSUE #	DATE	DESCRIPTION
PA1	04/11/2018	ISSUE FOR PLANNING APPROVAL

PROJECT ADDRESS
69-71 MELBOURNE STREET, NORTH
ADELAIDE
TBA

CLIENT
CITYFY & BFC PTY LTD



SHEET
PROPOSED SITE &
CONTEXT
PL.02

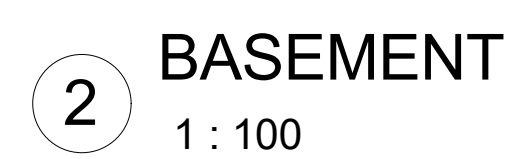
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APPROVAL

04/11/2018
1808A16 69MS

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CONSTRUCTION





REVISIONS		
ISSUE #	DATE	DESCRIPTION
PA1	04/11/2018	ISSUE FOR PLANNING APPROVAL

CLIENT
CITIFY & BFC PTY LTD

CITIFY



SHEET
FLOOR PLANS 01
PL.03

AUTHOR
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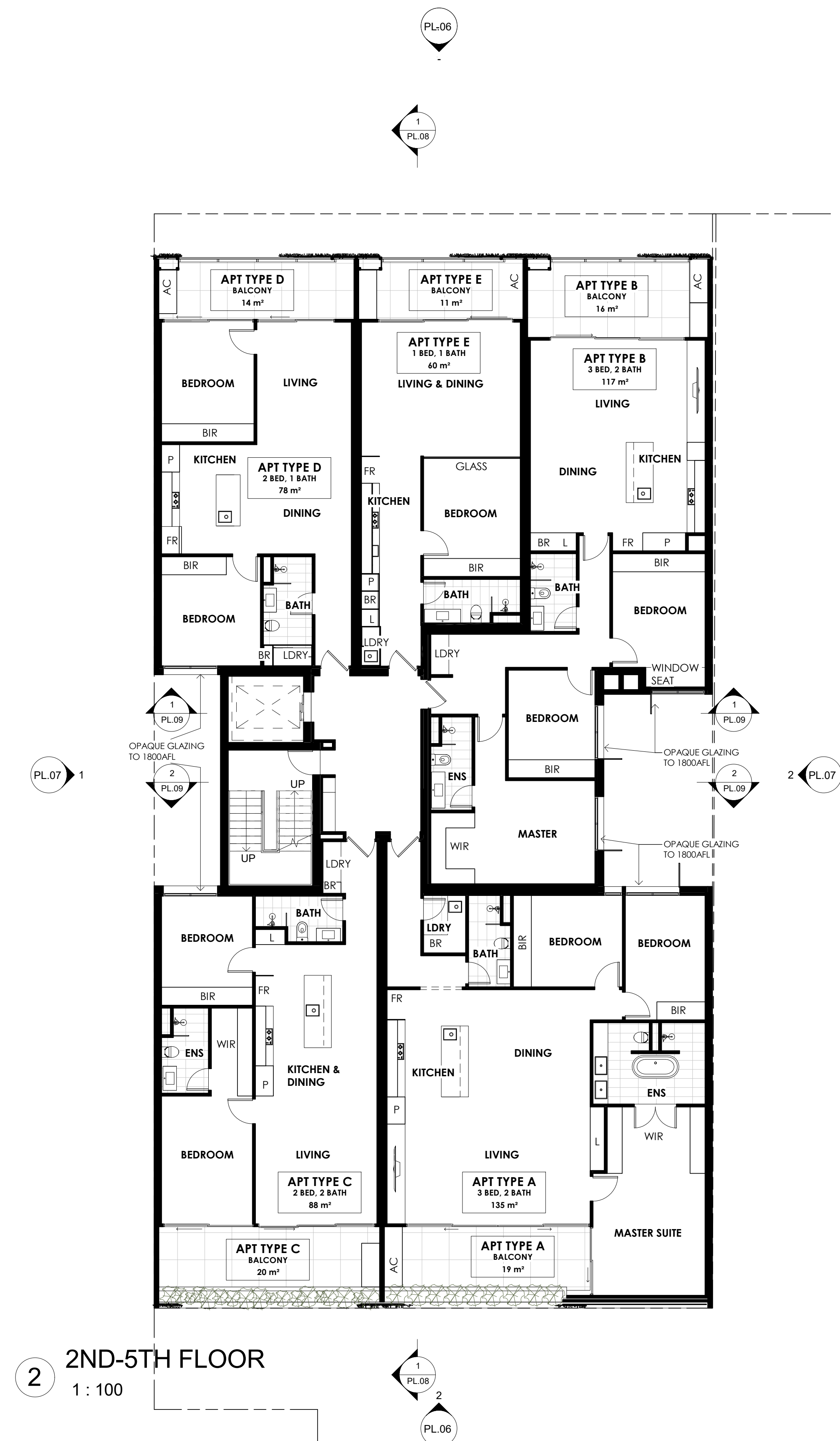
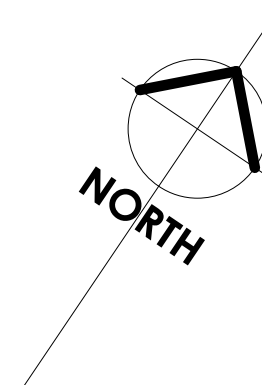
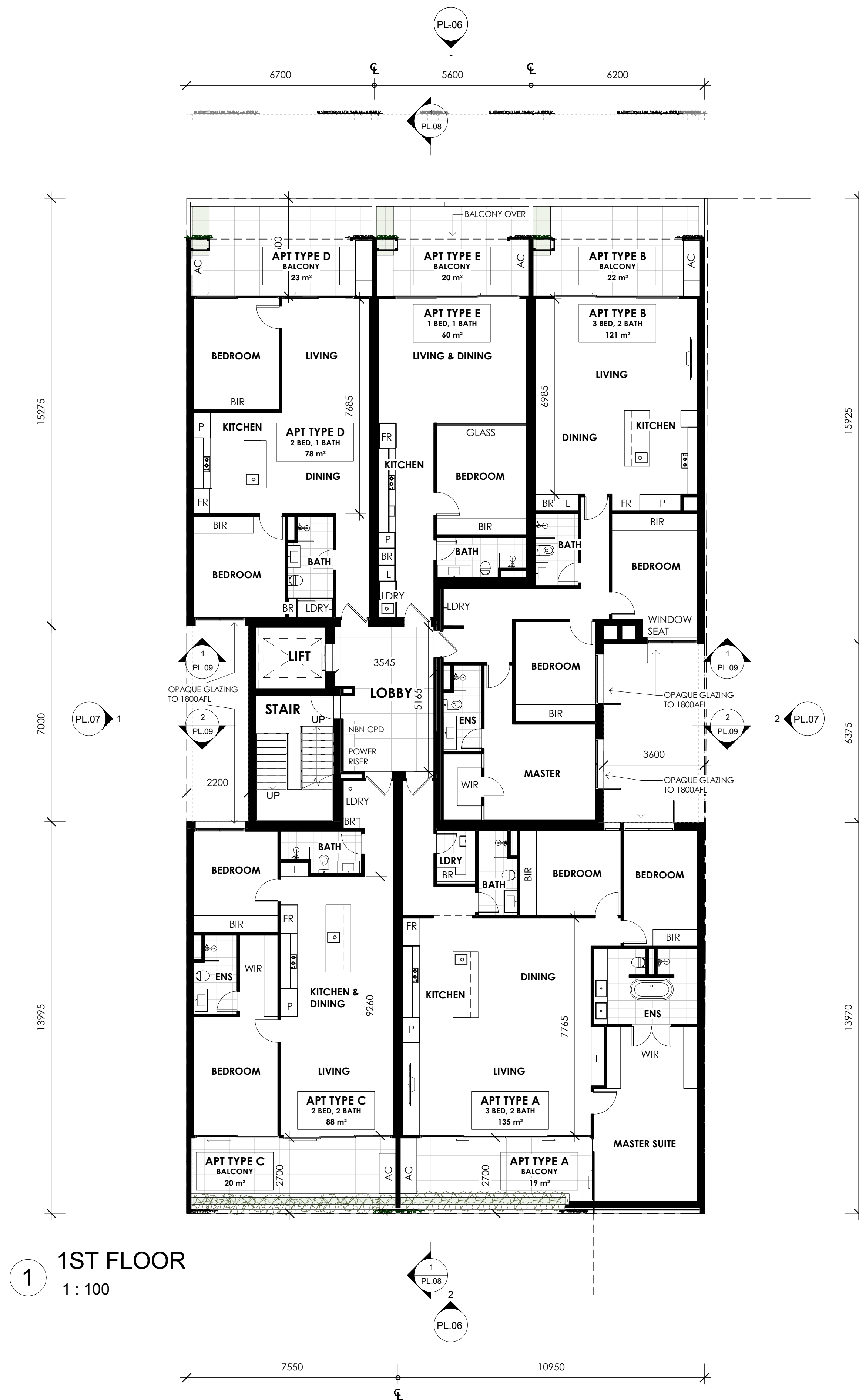
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04/11/2018
1808A16 69MS
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CONSTRUCTION**

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DESIGN STUDIO

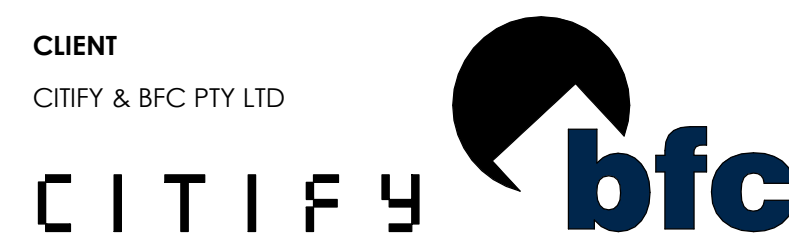


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ADELAIDE
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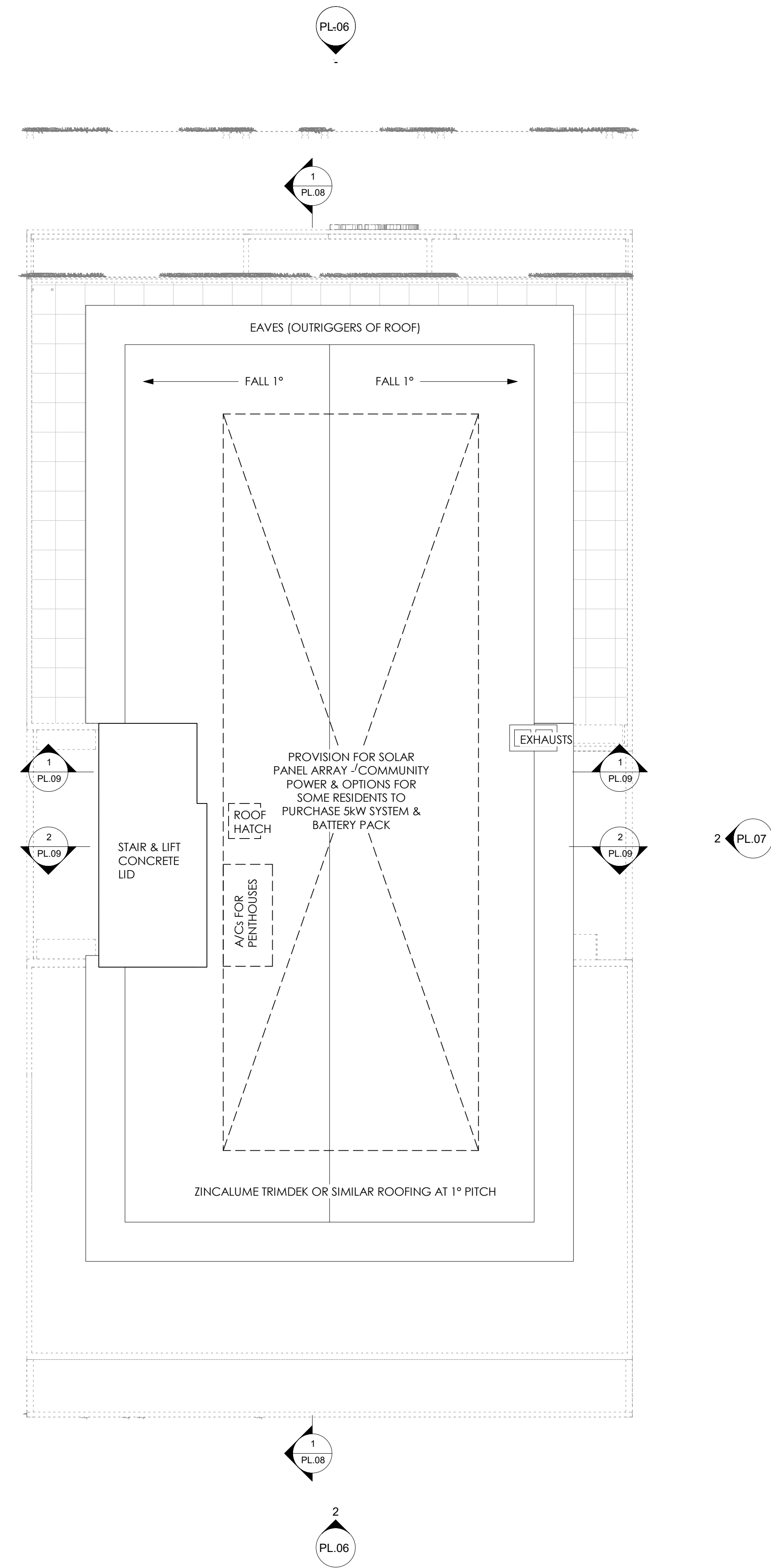
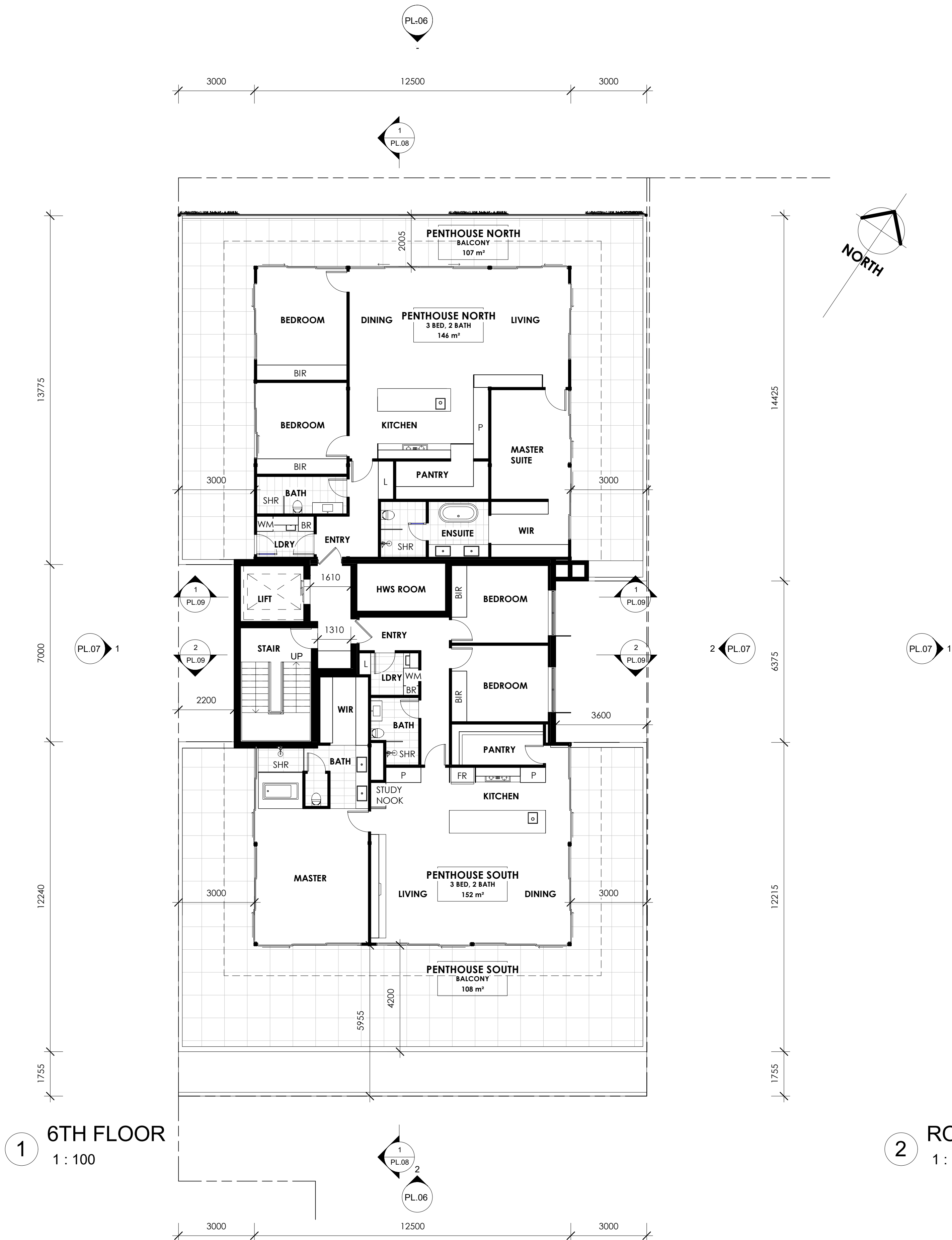


SHEET
FLOOR PLANS 02
PL.04

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APPROVAL

04/11/2018
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CONSTRUCTION**





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69-71 MELBOURNE STREET, NORTH
ADELAIDE
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SHEET
FLOOR PLANS 03

PL.05

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1808A16 69MS

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AS/NZS 39:652:2011:538

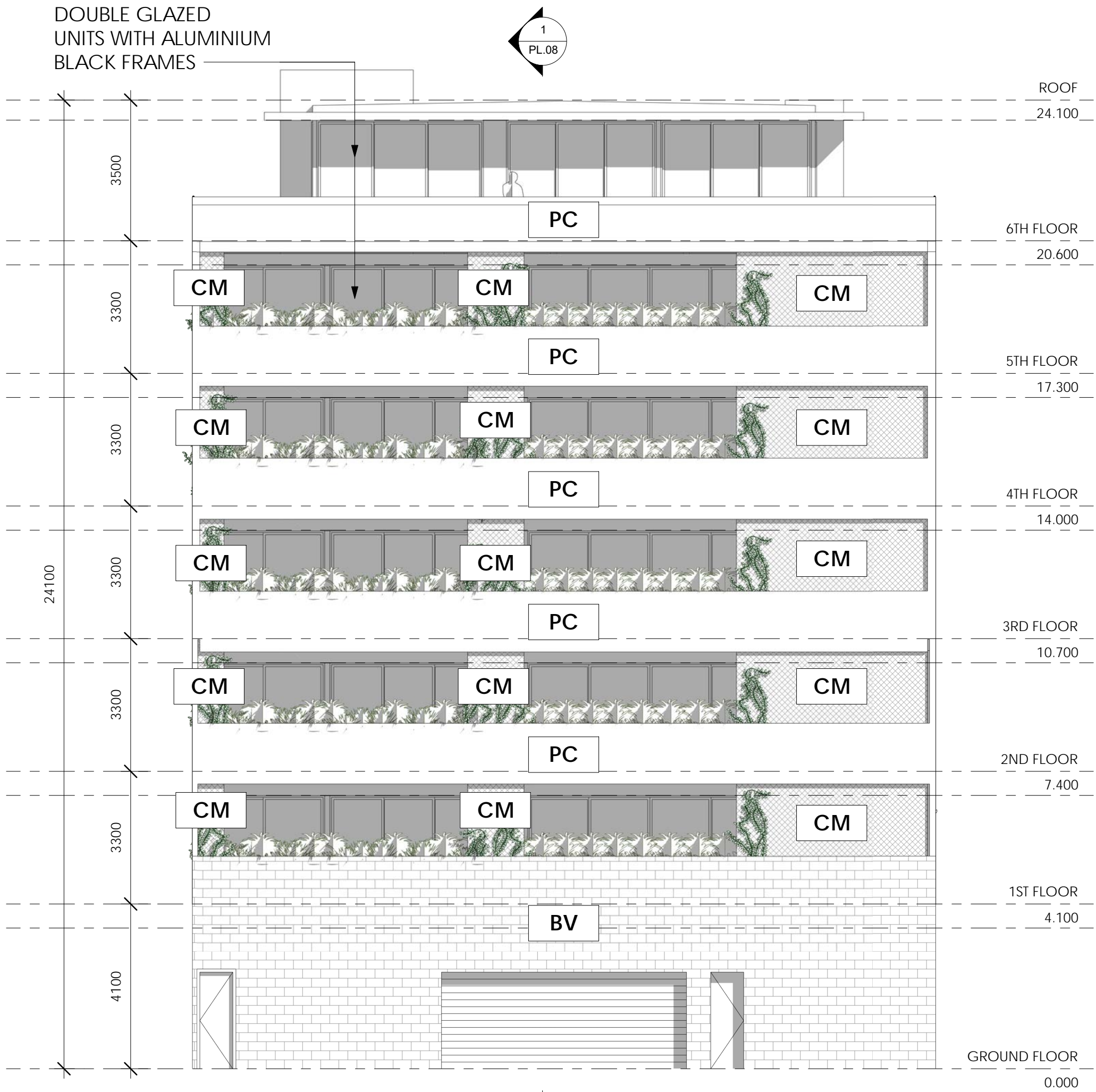
WALL SCHEDULE	
KEYNOTE	DESCRIPTION
BV	Brick veneer podium - bagged recycled brickwork or similar
CM	Chain link mesh cage on steel frame with planting as per LCS Landscapes documentation
GL	Black steel framed glazing - clear glass
PC	Precast concrete
PCF	Precast concrete feature wall with pre-finished pattern moulded into concrete

DOUBLE GLAZED
UNITS WITH ALUMINIUM
BLACK FRAMES



1 NORTH
1 : 100

DOUBLE GLAZED
UNITS WITH ALUMINIUM
BLACK FRAMES



2 SOUTH
1 : 100

This drawing shows design proposals and is intended for planning approval only. It is not to be used for construction purposes. Any changes to the design must be approved by the design team. This drawing is not to be used for any other building purposes. Any changes to the design must be approved by the design team. This drawing is not to be used for any other building purposes.

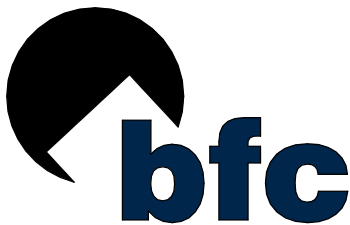
REVISIONS

ISSUE #	DATE	DESCRIPTION
PA1	04/11/2018	ISSUE FOR PLANNING APPROVAL

PROJECT ADDRESS
69-71 MELBOURNE STREET, NORTH
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CLIENT
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CITYFY



SHEET
ELEVATIONS 01

PL.06

AUTHOR
GB

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ISSUE FOR PLANNING
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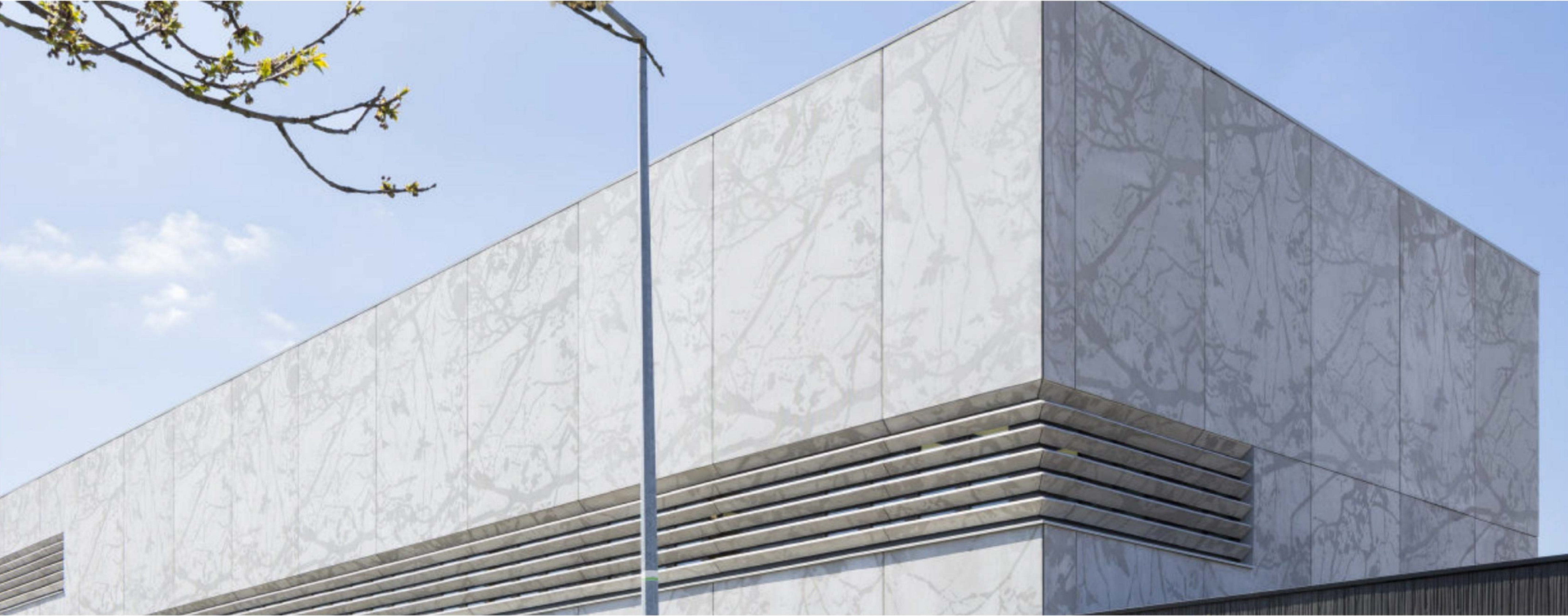
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1808A16 69MS

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CONSTRUCTION

GEMMA

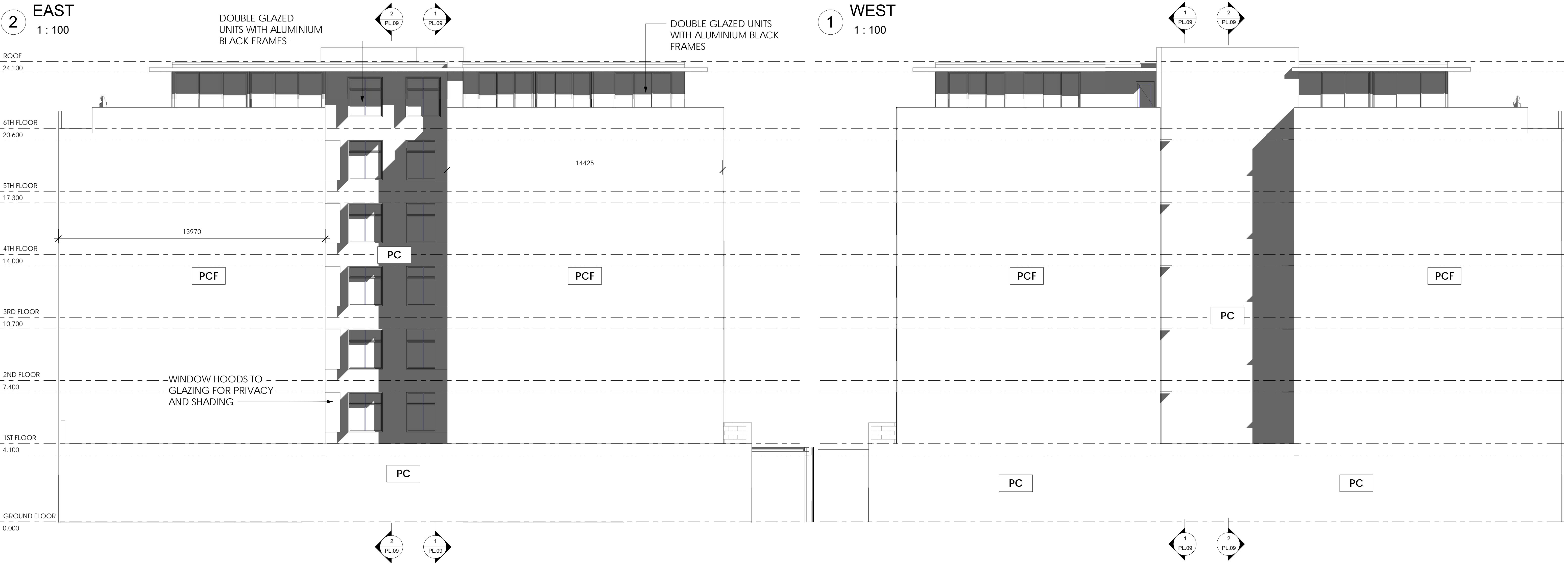
www.gemma.com.au
gemma@gemma.com.au
AS/NZS 3952:2011 S38

LEA
DESIGN STUDIO



FEATURE CONCRETE PATTERN EXAMPLE

WALL SCHEDULE	
KEYNOTE	DESCRIPTION
BV	Brick veneer podium - bagged recycled brickwork or similar
CM	Chain link mesh cage on steel frame with planting as per LCS Landscapes documentation
GL	Black steel framed glazing - clear glass
PC	Precast concrete
PCF	Precast concrete feature wall with pre-finished pattern moulded into concrete



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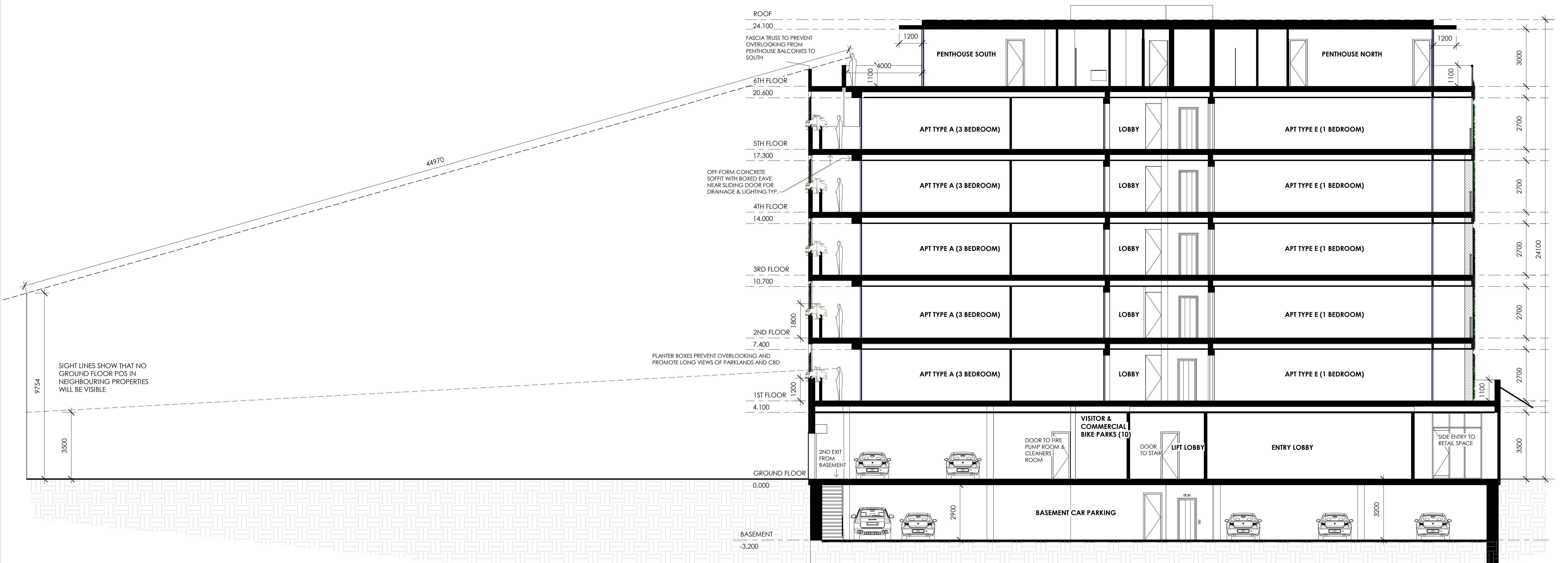
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SHEET
ELEVATIONS 02
PL.07

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1 NORTH-SOUTH SECTION
1 : 100

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DESIGN SECTION 01
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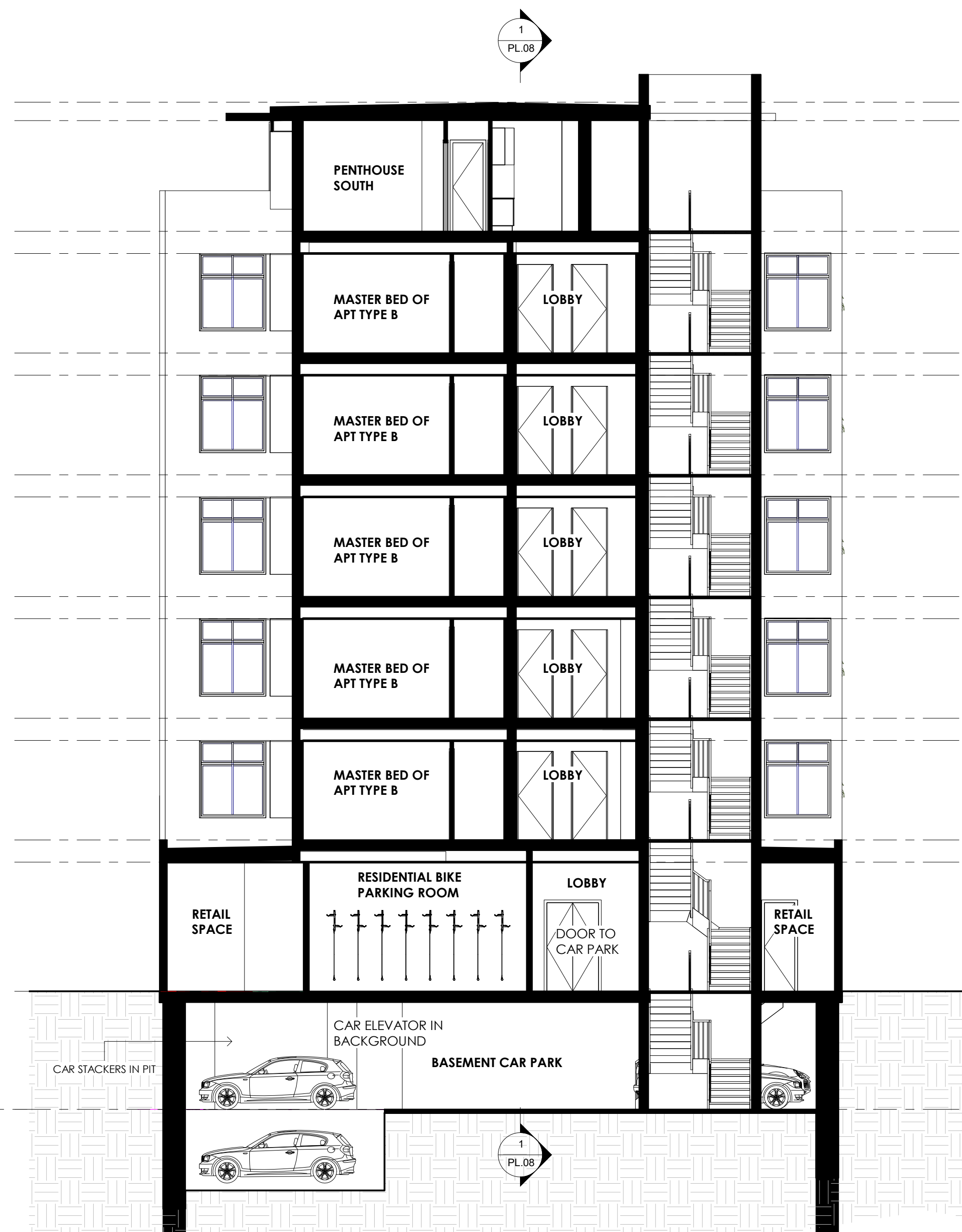
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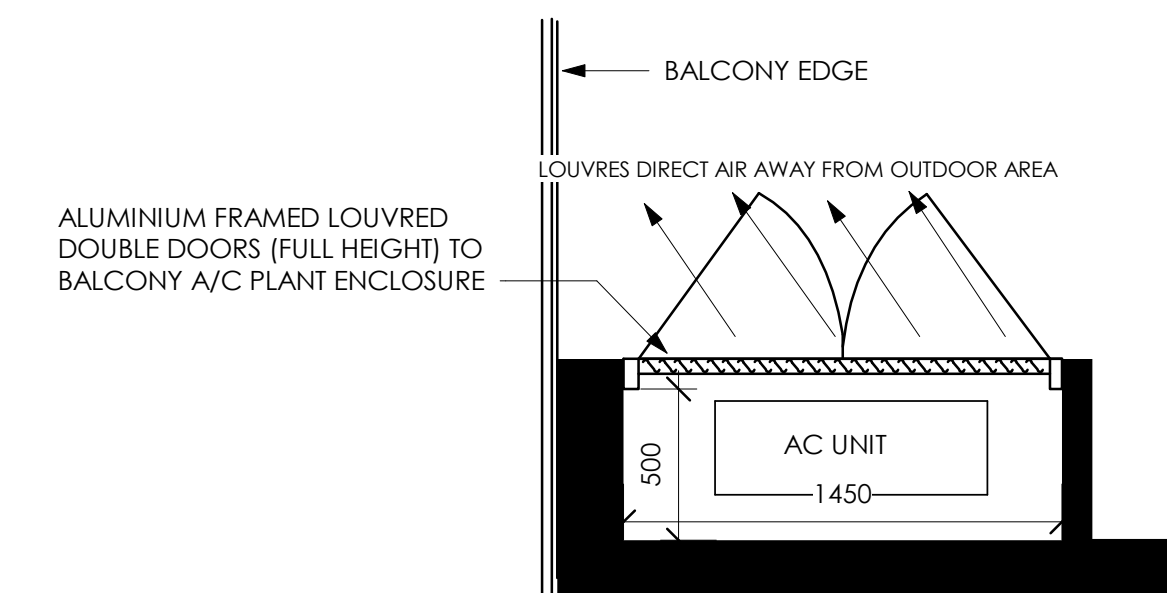
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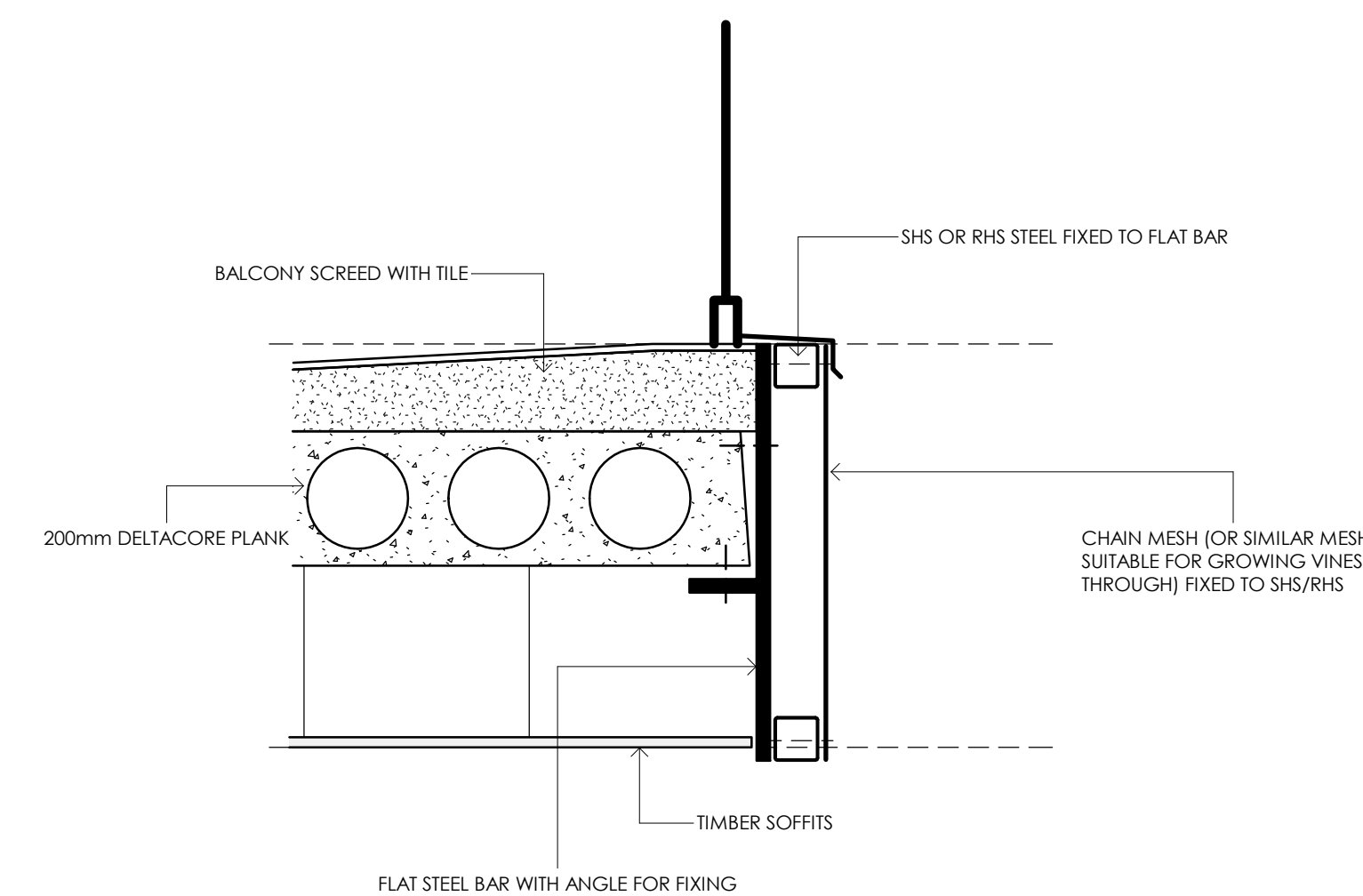
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2 EAST-WEST SECTION
(FACING SOUTH)
1 : 100



3 TYPICAL AC ENCLOSURE
1 : 25



4 MESH BALCONY FRONT
1 : 10

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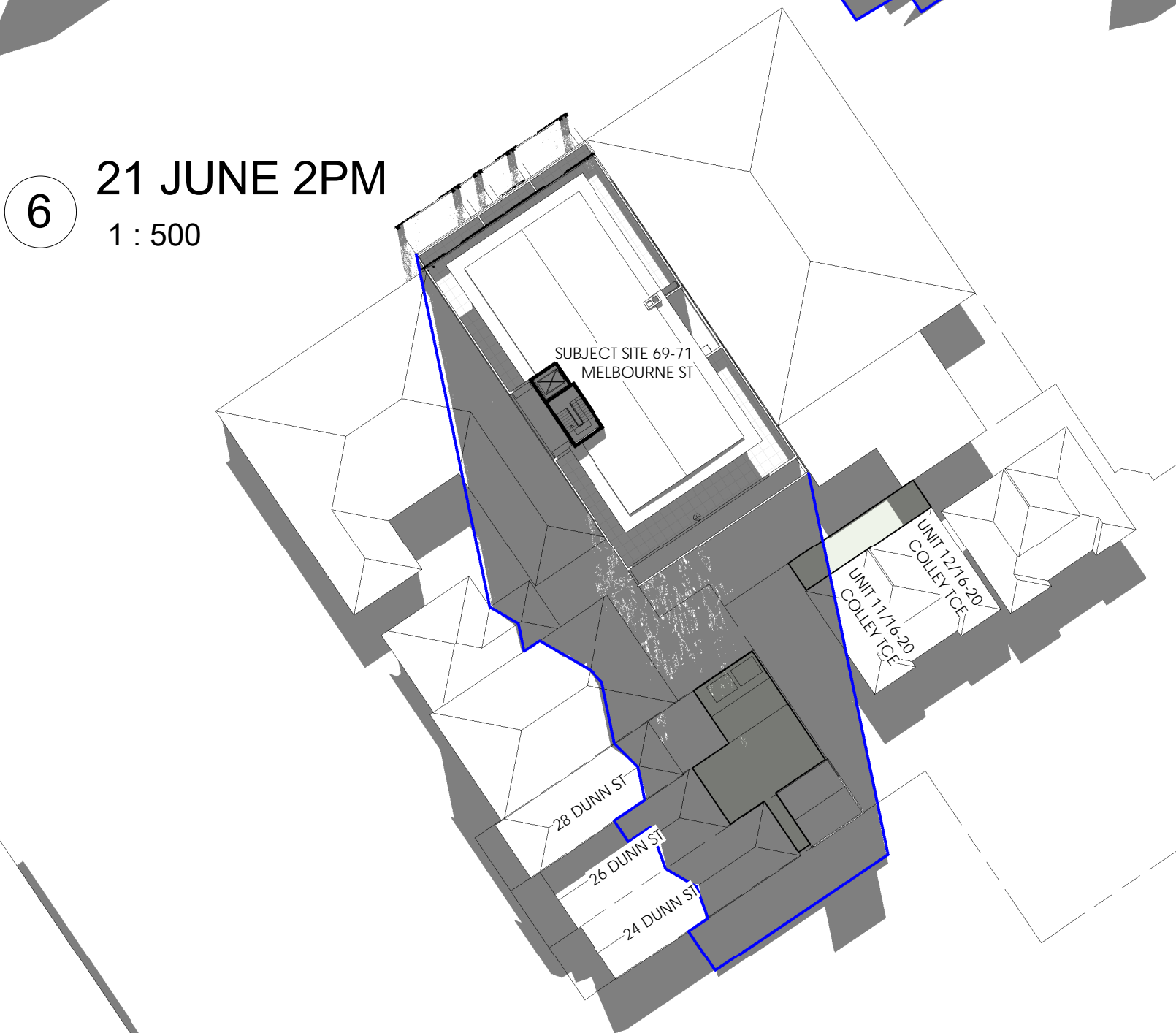
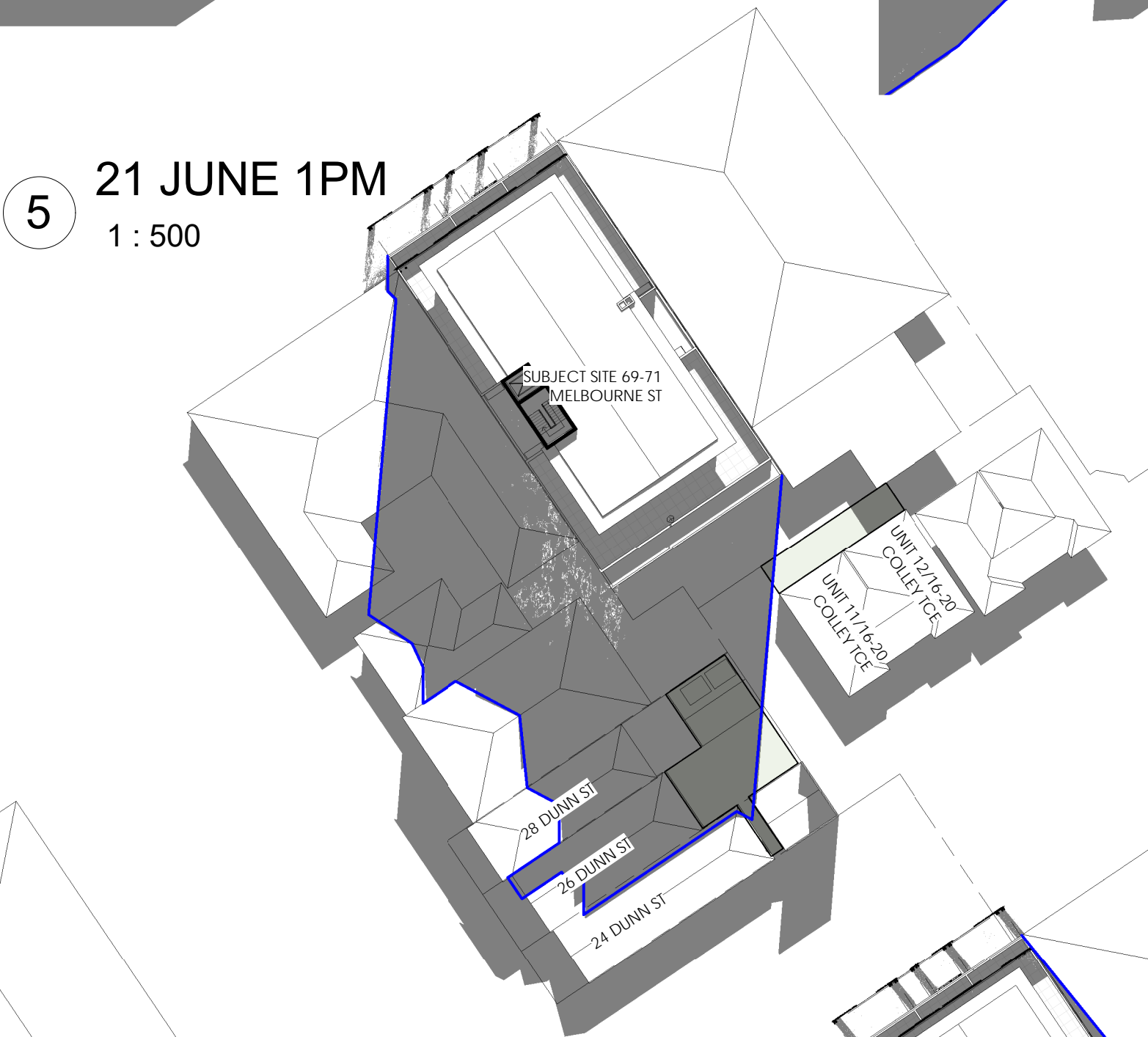
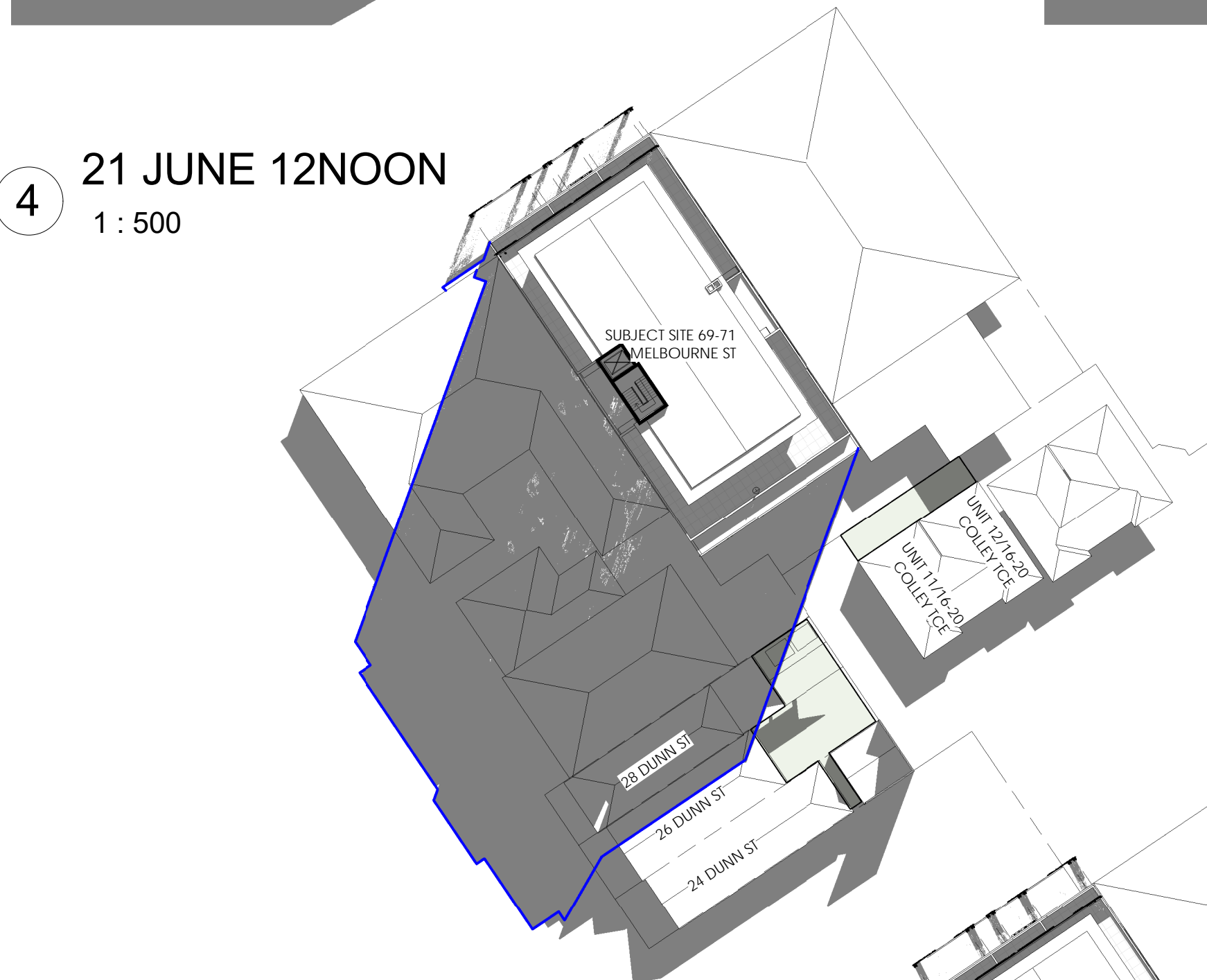
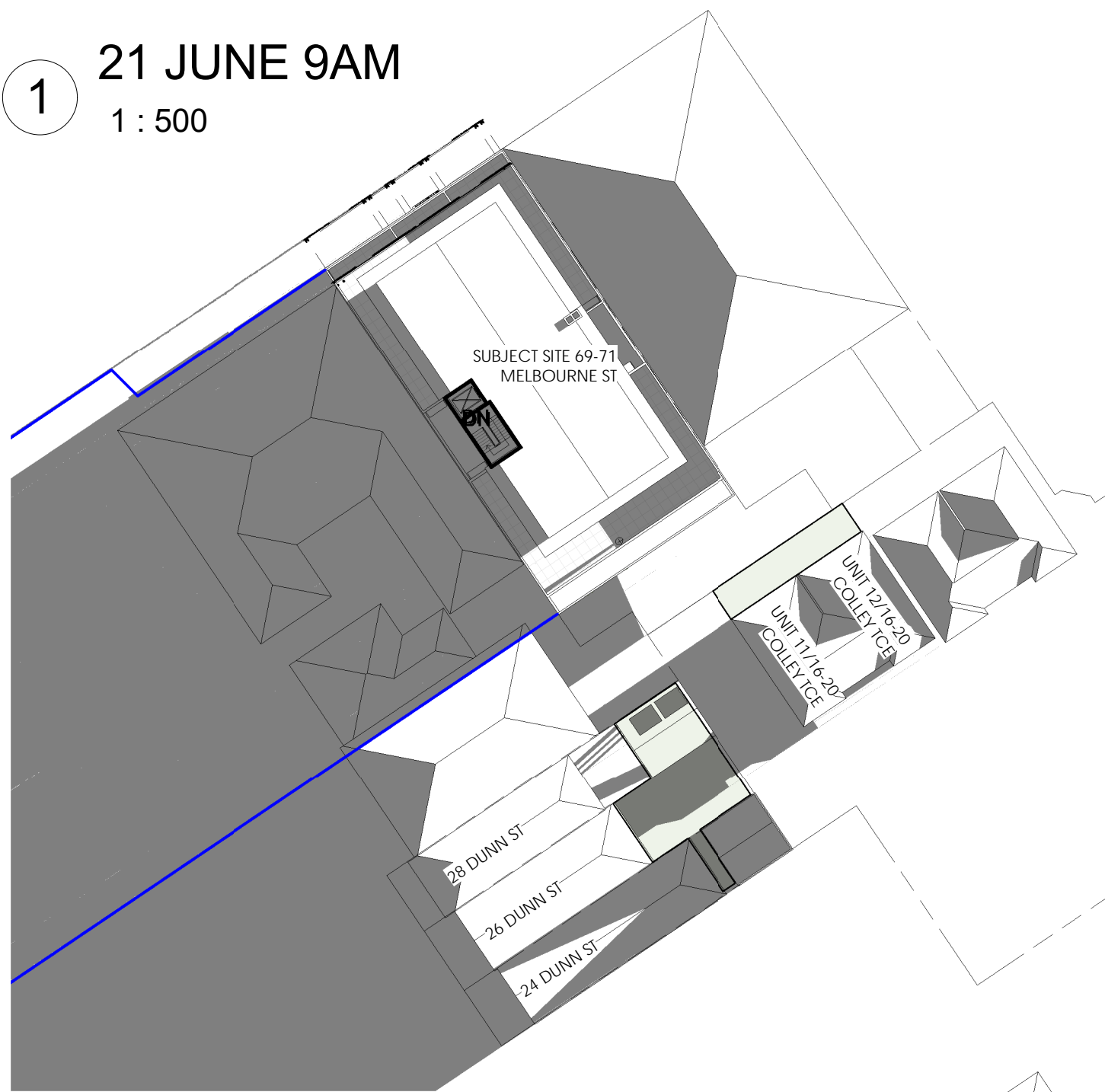
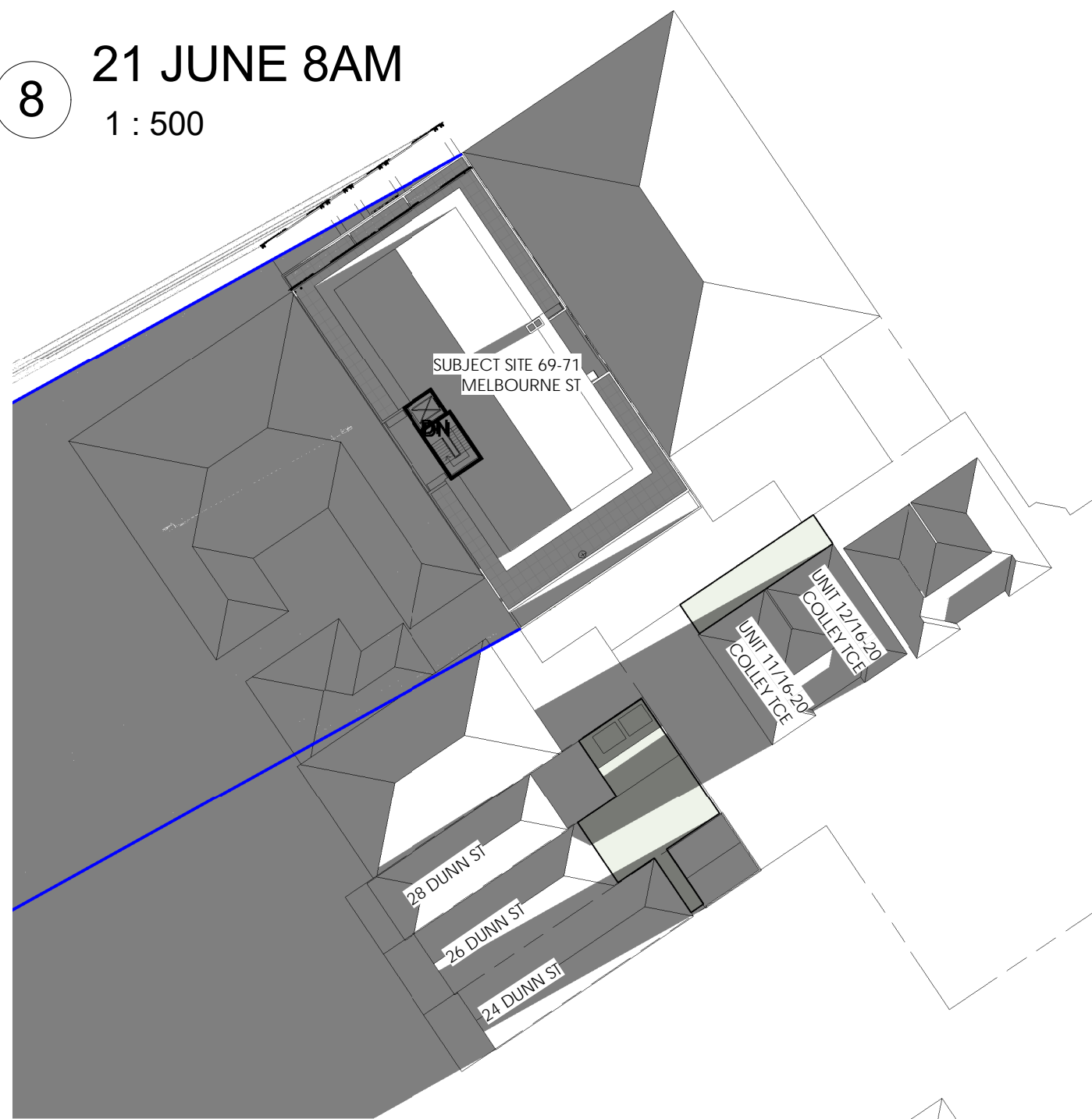


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DESIGN SECTION 02
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ALL SHADOWS COMPLIANT WITH ACC DEVELOPMENT PLAN

WINTER SOLSTICE - HOURS PROPOSED DEVELOPMENT DOES NOT OVERSHADOW NEIGHBOURING PROPERTIES

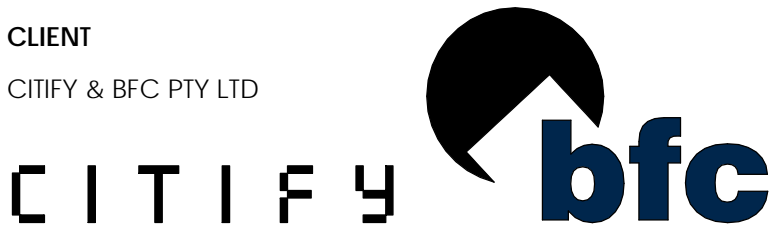
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26 Dunn Street	NS	NS	NS	NS	NS	PS	OS	OS	PS	5-6 HOURS NS	2-3 HOURS OS
24 Dunn Street	NS	NS	NS	NS	NS	NS	OS	OS	PS	6 HOURS NS	2-3 HOURS OS
11/16-20 Colley Street	NS	NS	NS	NS	NS	NS	PS	OS	OS	6 HOURS NS	2-3 HOURS OS
12/16-20 Colley Street	NS	NS	NS	NS	NS	NS	NS	NS	OS	8 HOURS NS	1 HOUR OS

NS PROPOSED DEVELOPMENT DOES NOT PUT POS IN SHADOW
PS PROPOSED DEVELOPMENT PARTIALLY PUTS POS IN SHADOW
OS PROPOSED DEVELOPMENT PUTS POS IN SHADOW

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SHEET
SHADOW DIAGRAMS
PL.10

AUTHOR
GB

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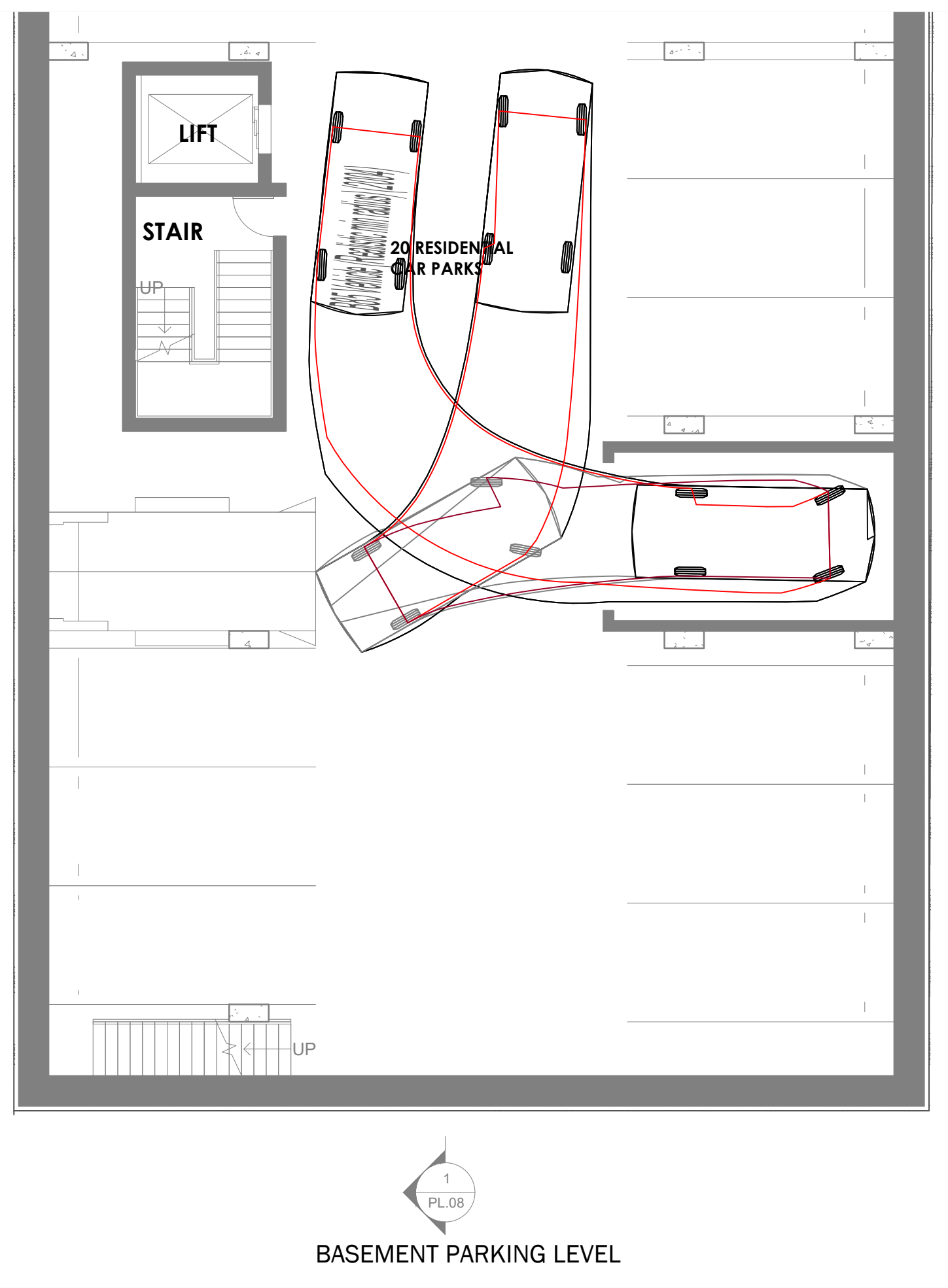
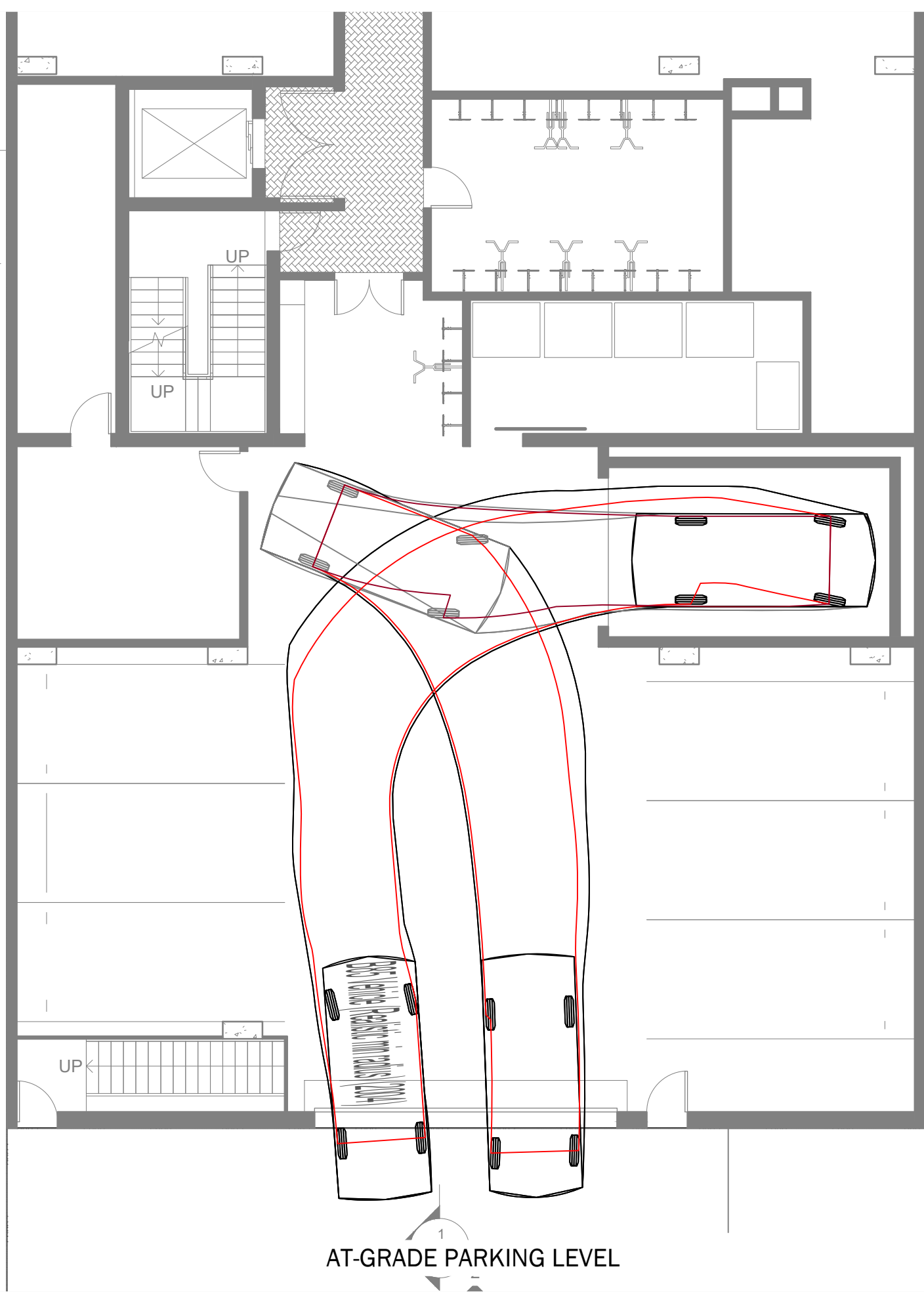
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APPENDIX B

TURN PATH OF B85 DOMESTIC VEHICLE ACCESSING THE CAR ELEVATOR

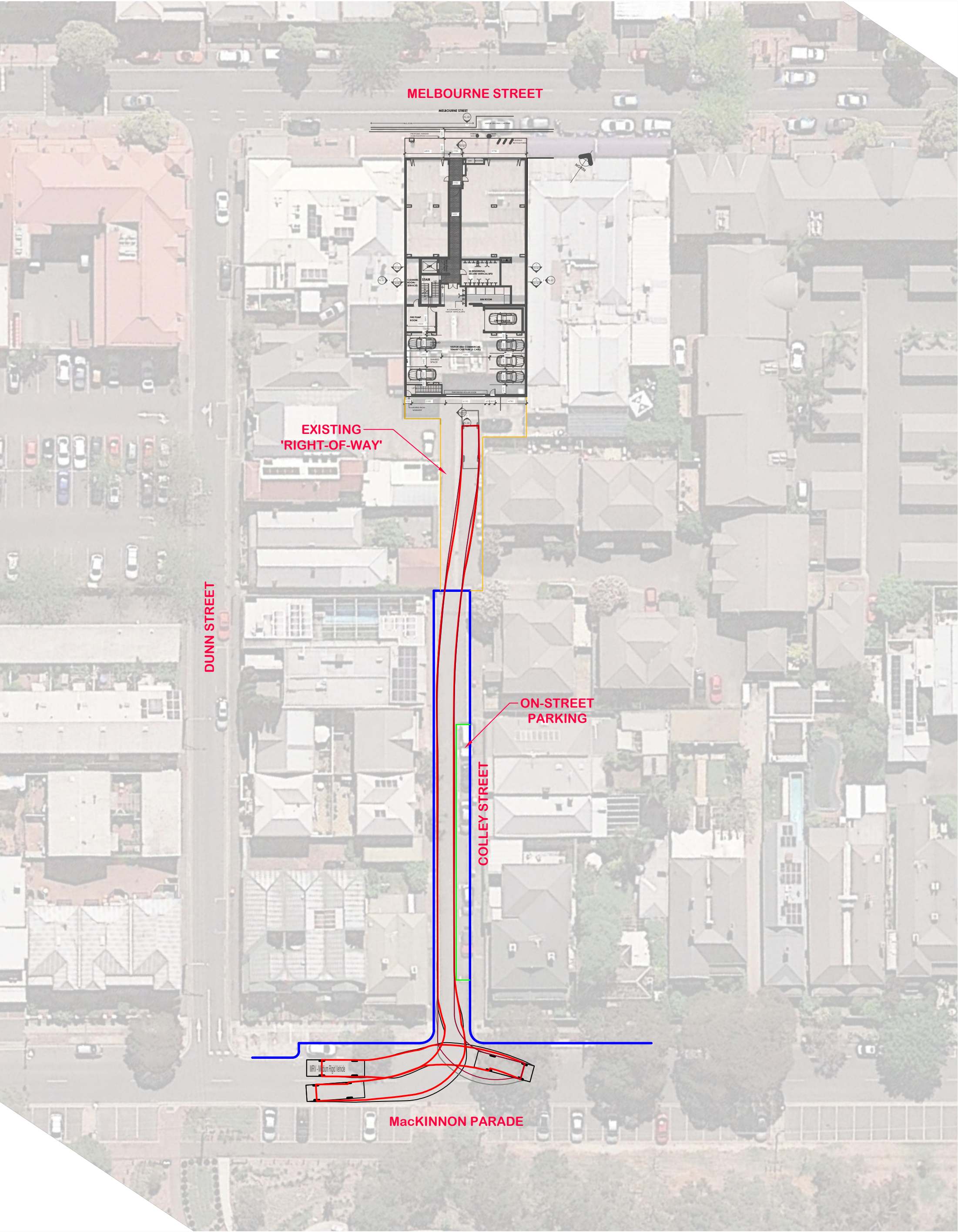


DRAWING AMENDMENTS				
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APPENDIX C

TURN PATH OF AN 8.8 m REFUSE COLLECTION VEHICLE ACCESSING THE SUBJECT SITE



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PROPOSED MIXED-USE
69-71 MELBOURNE ST, NORTH ADELAIDE
8.8 m REFUSE VEHICLE TURN PATH

PROJECT # 18223 SHEET # 03_SH01



ABN 34 122 507 920

24 Anstey Crescent,

Marleston, SA 5033

p +61 8 8297 2385

www.colbyindustries.com.au

69-71 Melbourne St Mixed Use Building

(Residential High-density Mixed-Use Development)

Waste Management Plan

Prepared for: Citify

October 2018

- IMPORTANT NOTES -

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Document verification

Description	69-71 Melbourne St Mixed Use Building WMP		
Version	FINAL		
Issued	12/10/2018		
Verification	Prepared by	Checked by	Approved by
Name	C. Colby		C Colby
Signature			

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1 Introduction

This document presents a waste management plan (WMP) for the 69-71 Melbourne St Mixed Use Building (Residential High-density Mixed Use) Development (the “Development”). The Developer is Citify, Project Designer is Gemma Lea Design Studio, and Traffic Engineer is CIRQA.

The WMP explains how the Development can manage waste effectively to achieve regulatory requirements and desired design and operating objectives, including those recommended by the South Australian Better Practice Guide (State Guideline) (Zero Waste SA, 2014) and Council expectations for waste management in these types of development. The WMP should be read in conjunction with other planning approval documentation for the Development referenced herein.

2 Development Description

The Development is at 69-71 Melbourne St, North Adelaide, in the City of Adelaide (Council). Per plans provided (Draft Planning Set, issued 9 September 2018), the Development is a seven-storey building + basement on a ca. 650m² site, with ca. 18.5m frontage onto Melbourne St and rear access to the site via Colley St – see Figure 2-1 overleaf which reproduces the Ground Level plan for the site. *[This figure illustrates proposed waste system features for the Development which will be discussed later in this WMP.]* Table 1 below gives the Development’s land use metrics (used for waste system design). In summary, the Development comprises:

- *Apartment building:*
 - *Levels 1 to 6 – Twenty-seven (27) 1, 2 or 3-bedroom apartments;*
 - *Ground Level –*
 - *Two small (94 and 139m² GFA) commercial tenancies – One of these tenancies is expected to be a light café, the other a small retail tenant;*
 - *Visitor car parking with rear access from Colley St;*
 - *Car lift to Basement level; and*
 - *Basement level – Resident car parking*

Table 1 below includes the recommended Waste Resource Generation Rate (WRGR) classification (for each land use) based on the State Guideline (Zero Waste SA, 2014), which are used for estimation of waste and recycling volumes to assess waste storage required for the site.

Table 1 – Summary of land uses for the Development, their WRGR Description(s) and relevant Development Metric(s)

Land Use	Description	Location	Land Use Type*	Development Metric(s)	
Residential	Apartment Building	Levels 1-6	High Density Residential Dwelling	27	Apartments
				61	Bedrooms
Commercial	Retail Tenancy G.01	Ground Level	Retail < 100m ²	94	m ² GFA, 85% Active Space**, 6-day operation
	Retail Tenancy G.02		Light Café*	139	m ² GFA, 70% Active Space**, 6-day operation

* Derated Café/Restaurants WRGR used to reflect Light Café scenario: General Waste - 40% discount; Recycling - 25% discount; Food waste - 50% discount

** Active space estimate used to estimate NFA for waste volume calculations

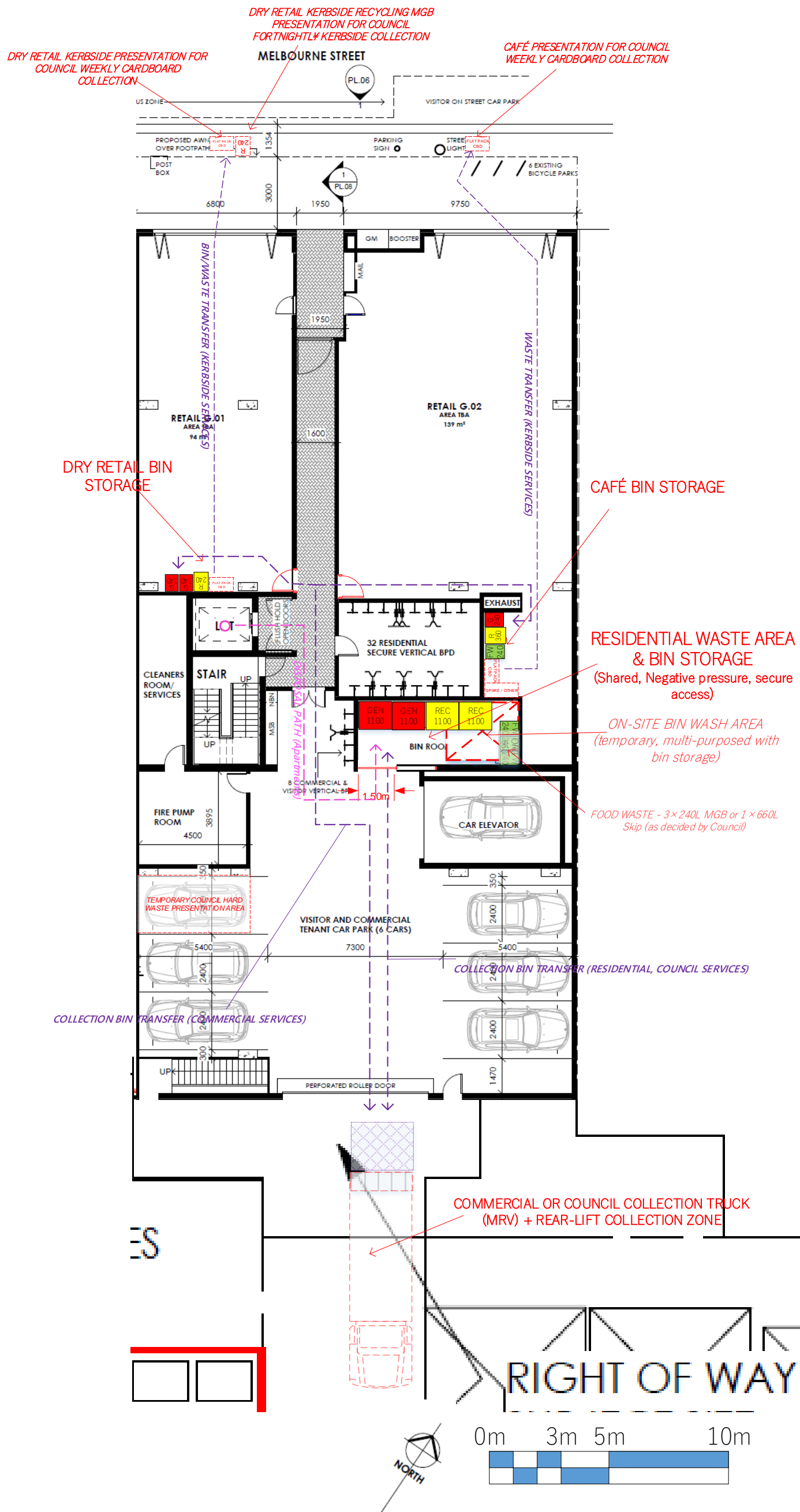


Figure 2-1 – Ground Level plan and site boundary for Development, reproduced from the Drawings. This figure illustrates proposed waste system features which will be discussed later in this WMP.

3 Design Assumptions

3.1 Stakeholder Engagement (Council)

Discussions were held with the Architect and Traffic Consultant to confirm most appropriate types of waste storage, the location and space available for this storage, and how waste and recycling bins could be collected.

A meeting was held on 25 September 2018 with Council (David Bland, Waste Management & Operational Support, and Julia Bellwood, Transport Designer, from Council attended). The objectives of the meeting were to:

- Confirm collection access arrangements for: Council residential collection of waste and recycling; and commercial services to retail and café tenancies; and
- Other Council requirements or expectations for design and operation of the waste management systems at the site.

The following Council preferences and/or requirements were identified.

- Collection access – Council was comfortable with collection access from rear of the property via Colley St.
 - *This was preferred over organising collection access from Melbourne St, where there was an existing bus stop (unless Council could in the future arrange for relocation of this bus stop, establish a loading zone, and change relevant parking controls, including approval from Adelaide Metro for the bus stop relocation).*
 - *It would require that collection trucks reverse into and down Colley St from MacKinnon Parade to the rear of the property, park, lift bins, then exit back to MacKinnon Parade in forward direction.*
 - *Current Council kerbside collection services to residents in Colley St already empty bins in this manner, as well as commercial services to rear of existing commercial properties.*
 - *Commercial collections to the Development should be scheduled 7am-7pm weekdays and Saturdays and 9am-7pm Sundays to avoid potential noise nuisances (for neighbouring residents) in line with the South Australian Environment Protection Policy (Noise) Policy 2007.*
- Collection trucks –
 - Council services for residential collection –
 - *General waste & recycling – A rear-lift MRV (8.8m length, 3.5m operating/travel clearance) was required to accommodate Council collection of skip bins.*
 - *Food waste – Council is presently using 240L MGBs and kerbside collection trucks to provide this service but may swap to 660L bins and rear-lift in the future.*
 - *Commercial trucks – Design provision for a rear-lift MRV (8.8m length, 3.5m operating/travel clearance) should be adequate to accommodate waste collection requirements to commercial tenancies.*
- Council services available commercial properties –
 - *Businesses can access the Council kerbside collection service and a Council provided weekly cardboard collection service, if these can meet (some or all) their waste management requirements (see: <https://www.cityofadelaide.com.au/city-business/business-responsibilities/waste-recycling/>)*
- For the waste system servicing the residential apartments:
 - Design should align to:
 - *South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments (Zero Waste SA, 2014).*

- Council's Waste and Recycling Services Policy and Operating Guideline (see: <https://www.cityofadelaide.com.au/city-living/home-property-management/waste-recycling/waste-and-recycling-policy-and-operating-guidelines/>).
- Residents should have access to a 3-bin equivalent service (in line with Waste Hierarchy expectation, Council recycling objectives, and to exempt waste collected from a further resource recovery requirement¹):
 - General waste;
 - Dry recycling; and
 - Food waste.
- Access to waste disposal should be convenient and accessible to residents including mobility impaired residents.
- Waste disposal and bin storage areas should be designed where possible to be unobtrusive and minimise visual detracting and nuisances, including screening from public view and neighbours.
- Bin storage should provide for weekly collection frequency (per Council services that would be provided to the Development).
- The waste system should provide convenient access for bin collection from waste storages for Council waste collection (i.e. the collection point should be within 30m of the bin storage area).
- Hard waste – Council can provide residents with access to its at-call hard waste collection (<https://www.cityofadelaide.com.au/city-living/home-property-management/waste-recycling/hard-refuse>) if site provision can be made and agreed with Council for suitable presentation and collection arrangements.
 - This should include temporary on-site storage with presentation at suitable on-site or kerbside location within agreed time window (e.g. 2 hour) on nominated collection day for Council's waste contractor to pick-up.

3.2 Waste & Recycling Service Provision

Table 2 overleaf outlines the recommended waste services by land use per Table 1. The different waste service classifications listed in Table 2 are explained below.

- **Routine Services** – These require on-site waste storage and routine and regular collections, and would include services for general waste, dry (comingled) recyclables and food waste.
- **At-call services** – These involve non-frequent collections, such as Hard waste and are organised and provided on an as-needed basis.
- **Maintenance services** – Some waste items (e.g. lighting in common areas or commercial tenancies) would be removed and disposed of (off-site) by the contractor providing the related maintenance service (and hence on-site waste storage is not usually needed or provided).
- **External Services** – These are where waste items (e.g. printer cartridges, lighting) that can be dropped off by tenants/residents at external locations (e.g. Officeworks, waste depot) (and thus, separate on-site waste storage is not usually needed or provided).

{Cont. overleaf below Table 2}

¹ Per the South Australian Environment Protection Policy (Waste-to-Resources) Policy 2010

Table 2 – Expected or recommended waste & recycling services for the Development

Service Type	Apartment Buildings	Commercial	
	<i>Residential</i>	<i>Retail</i>	<i>Light Café*</i>
Routine (regularly scheduled)	<ul style="list-style-type: none"> General Waste Recycling Food Organics 	<ul style="list-style-type: none"> General Waste Recycling Cardboard (Flatpack, Council collection) 	<ul style="list-style-type: none"> General Waste Recycling Cardboard (Flatpack, Council collection) Food Waste Recycle Deposit Containers (OPTIONAL)
At-call (as needed)	<ul style="list-style-type: none"> Hard/E-waste (Council) 	<ul style="list-style-type: none"> Hard/E-waste (Private) 	<ul style="list-style-type: none"> Cooking Oil (OPTIONAL)
Maintenance (waste removed by contractor)	<ul style="list-style-type: none"> Lighting (where applicable) 		
External (by tenant off-site)	<ul style="list-style-type: none"> Lighting Printer Cartridges Batteries 		

3.3 Waste & Recycling Volumes

Table 3 below estimates expected waste and recycling volumes for the Development (in Litres/week).

- WRGRs (in the State Guideline) do not exist for sanitary, lighting, printer cartridge or battery waste.
 - Volumes of these waste items, however, are relatively small, and thus, have not been estimated.
- The Light Café tenancy WRGRs are derated Café / Restaurant WRGRs (to reflect the fact a Light Café is not a full-service restaurant, which the WRGRs in the State Guidelines are based on – refer to Table note).

Table 3 – Estimated waste & recycling volumes (Litres/week) for Development. N/A – Not Applicable; NE – Not estimated

Waste/Recycling Service	Apartments	Commercial	
	<i>Residential</i>	<i>Retail</i>	<i>Light Café#</i>
	<i>L/week</i>	<i>L/week</i>	<i>L/week</i>
General Waste	1,830	252	1,226
Dry Comingled Recycling	1,525	60	328
Cardboard (Loose)		60	547
Food Waste	610		1,168
Hard waste	427	14	21
E-waste	76	1	2
Lighting waste	Not Estimated (Minimal Volumes)		
Printer Cartridges/Batteries	Not Estimated (Minimal Volumes)		
TOTAL	4,468	387	3,292

Modified Café / Restaurant WRGR to reflect Light Café tenant: General waste WRGR derated by 30%, recycling/cardboard by 25%, and food waste by 50%.

4 Waste Management System

4.1 Waste Storage Area(s)

There would be the following different types or areas of waste bin storage (Waste Storage Areas) at the Development, which are illustrated in Figure 2-1.

1) Apartment (Residential) Waste Area & Bin Storage

- *This shared waste storage would be a separate room in the Apartment Building Ground Level car park.*
- *Residents would access the room from their apartments via Lift to Lobby then through Car Park area.*
- *Collection access would be via the Garage door at rear of property (where Council collection truck could access the site and park during collection events).*

2) Commercial Dry Retail Tenancy Waste Area & Bin Storage

- *This waste storage would be an in-tenancy area.*
- *For commercial collections, the commercial waste contractor would park at rear-of-property in Colley St and pull-in pull-out bins via the Garage door, car park area and Lobby.*
- *For Council collections (fortnightly kerbside Recycling MGB, weekly flat pack cardboard), the tenant would present bin/waste at kerbside on Melbourne St on the Council designated collection days.*

3) Commercial Light Cafe Tenancy Waste Area & Bin Storage

- *Like the Dry Retail tenancy:*
 - *This waste storage would be an in-tenancy area.*
 - *Commercial collections would be pull-in pull-out services from Colley St.*
 - *Council collections (weekly flat pack cardboard) would be from kerbside on Melbourne St on Council designated collection days.*

Table 4 overleaf gives a schedule of recommended bin storage in each of these Waste Storage Areas for Routine Services. This Table includes for each land use and service:

- *Number and type of bins;*
- *Collection frequency (expected or proposed); and*
- *Service provider.*

Potential bin configurations in these Waste Storage Areas for the recommended bin storage (per Table 4) are shown in Figure 2-1.

- *These illustrations demonstrate that adequate space is or can be provided in these Waste Storage Areas to meet the site's waste management requirements.*

Table 4 – Waste storage and bin schedule for Routine Services, including collection frequency and collection service provider

Waste Storage Area(s)	Location	Routine Service	Estimated Waste / Recycling Volumes (L/week)	Provider	Collection Frequency (Up to Events/week)	Max. Bins/Items Stored & Collected (per Event)		
						No.	Size (L)	Type
1. Apartments	Ground Level	General Waste	1830	Council kerbside	Weekly	2	1,100	Skip
		Dry Comingled Recycling	1525		Fortnightly	2	1,100	Skip
		Food Waste	610		Fortnightly	3	240	MGB
2. Retail Tenancy G.01 (Dry Retail)	In-tenancy, back-of-house/storage area	General Waste	252	Private**	2	1	140	MGB
		Dry Comingled Recycling	60	Council kerbside	Fortnightly	1	240	MGB
		Cardboard	24	Council Business Cardboard	1	1	24	Flat-packed Cardboard
3. Retail Tenancy G.02 (Light Cafe)	In-tenancy, back-of-house/storage area	General Waste	1226	Private***	Daily	2	240	MGB
		Dry Comingled Recycling	328		2	1	360	MGB
		Cardboard (Flat-packed)	219	Council Business Cardboard	1	1	219	Flat-packed Cardboard
		Food Waste	1168	Private***	Daily	1	240	MGB

* If volumes less than projected, this tenant may have less bins and/or could access Council kerbside collection for businesses (e.g. weekly collection of 140L general waste MGB) and fortnightly collection of 240/360L recycling MGB)

** Larger 240L general waste MGB (i.e. larger storage) could be used in place of 140L MGBs if private collection to reduce bin numbers

*** Larger 660L skip could be used to reduce collection frequency if desired by the tenant

4.2 System Operation

4.2.1 Routine Services

The following summarise how the waste systems would operate for each land use at the Development.

4.2.1.1 Residential Apartments

User Storage – Residents would be provided with suitable kitchen bins with handles to enable easy carriage from their dwellings to their Local Disposal Area, e.g. Figure 4-1 overleaf:

- General waste bin – at least 20L in size (bag lined)
- Commingled recycling waste bin - at least 20L in size
- Food organics bin (as specified or otherwise agreed with Council) (compostable bag lined)

Note: City of Adelaide residents who receive the Green Organics collection can pick-up a free Kitchen Organics Basket and ongoing supply of compostable bags from Council's Community centres, libraries or Colonel Light Customer Centre. See: <https://www.cityofadelaide.com.au/city-living/home-property-management/waste-recycling/food-waste/>



Figure 4-1 – Examples of suitable waste and recycling kitchen bins: (a) General waste & recycling - 2x20L Buckets with carry-handles in pull-out draw (Adelaide City Council, 2016); and (b): Bench-top food waste kitchen caddy with handles (Source: <https://www.cityofadelaide.com.au/city-living/home-property-management/waste-recycling/food-waste/>)

Local Disposal – The residents would carry waste in their kitchen bins via corridors and Lift to the Ground Level Waste Room – see Figure 2-1– and empty it into the skip bins and/or MGBs provided.

Waste Storage – These would be skip bins and/or MGBs, size and number per Table 4 and illustrated in Figure 2-1.

Presentation/Collection Transfer –

- This Waste Storage Area would be the presentation area for collection.
- The Council waste contractor would open (using key or secure access code) the rear garage access door from Colley St to Ground level car park area and pull bins out from the Waste Storage Area, empty them, then return empty bins back to this waste room.

Collection –

- Would be the Council contractor (rear-lift and/or kerbside), parking in Colley St (per Figure 2-1)
- The Council contractor would access this Loading Area from MacKinnon Parade by reversing into Colley St, and after collection, exit in a forward direction back onto MacKinnon Parade.
 - *Note: Further information about access to the Development via Colley St for waste collection is provided by the Traffic Engineer in their Traffic Report accompanying the planning application for the Development.*
- Collections would be weekly, and the time required for collection events should be less than 5-10min (per service) to park, collect and empty bins.

4.2.1.2 Commercial tenancies – Dry Retail & Light Cafe

User Storage – These tenancies would have bins located in-tenancy for disposal of their waste and recycling. The types and size of bins would be decided during tenancy fit-out as they depend on type of commercial activity.

Local Disposal – Tenancy staff and/or cleaners would transfer waste & recycling and/or bins via corridor, Lobby and car park area to the Ground Level waste storage area – per Figure 2-1 – and empty it into the MGBs (or skips) provided.

Waste Storage area –

- The Waste Storage areas would be in-tenancy as illustrated in Figure 2-1.

- Table 4 gives a list of bin types and numbers to service the assumed tenancy configurations in Table 1, and Figure 2-1 illustrates that these bins can be accommodated in the proposed in-tenancy waste storage areas.
 - *In addition to those services listed in Table 4, the Light Café tenancy may elect to have other waste/recycling bins, e.g. recycled deposit containers and/or cooking oil.*
 - *Likewise, the retail tenancy may elect to have other waste/recycling bins if preferred or required.*

Presentation/Collection Transfer –

- For commercial services collected from Colley St, the Waste Storage Area would be the presentation area for collection.
 - *The waste contractor would use the Lobby and Ground Level car park area to transfer bins/items to the Colley St collection point.*
- For Council services that tenancies are able and elect to access, i.e. kerbside recycling and/or weekly cardboard collection, the bins(s) and/or waste items would be presented for collection at the kerbside on Melbourne St in line with Council requirements (per <https://www.cityofadelaide.com.au/city-business/business-responsibilities/waste-recycling/>).

Collection –

- For commercial services, these would be by a commercial (private) contractor, using the Colley St collection point.
 - *We recommend that the Body Corporate engage a common waste contractor for all commercial tenancies at the site (to minimise collection events at the Development).*
- For available and elected Council waste and recycling business collection services, the collection point would be kerbside on Melbourne St (as illustrated in Figure 1).

4.2.2 At-call services

4.2.2.1 Hard/E-waste – Apartment Building residents

- Residents can use the Council's at-call hard waste collection, where residential sites with 7 or more dwellings an access up to 12 collections per site per calendar year (see: <https://www.cityofadelaide.com.au/city-living/home-property-management/waste-recycling/hard-refuse/>).
 - *The Body Corporate or Building/Facilities Manager (on residents' behalf) should inquire with Council regarding how these residents can access the Council hard waste collection when the Development becomes operational, including establishing suitable arrangements and (kerbside and/or on-site) presentation location(s) for the service.*
- For Apartment Building residents (subject to above review and confirmation with Council) the temporary hard waste presentation area(s) could be set up:
 - *In spare space or visitor car park in the Ground Level car park – as illustrated in Figure 2-1; and/or*
 - *In event that a Council service is not available (or feasible), the Body Corporate or Building/Facilities Manager would facilitate private hard waste collection services for these residents.*
 - *This would involve at-call hard waste collection by a private contractor organised by residents direct from their dwellings (or using a temporary on-site presentation area, e.g. cordoned -off visitor car park).*
- The waste contractor(s) delivering hard waste collection services:
 - *Would use the Colley St collection point at rear or property (in the same way as proposed for rear-lift collection trucks used for Routine Services).*

The Building User Manual(s) for residents at the Development would advise on availability and/or organizing Hard /E-waste collection services, which would be coordinated and organised on their behalf with Council and/or private contractor by the Body Corporate.

4.2.2.2 Hard/E-waste – Commercial Tenancies

- Would organise for private hard/e-waste collection direct from their tenancies as needed.
- The waste contractor delivering the services would use the Colley St collection point(s) as proposed above for hard waste collection services to Apartment Building residents.

The Building User Manual(s) for commercial tenants at the Development would advise on availability and/or organizing Hard /E-waste collection services.

4.2.3 Maintenance Services

Waste would be generated by some maintenance services or activities in the apartment building and commercial tenancies at the site (e.g. lighting, repair work, cleaning of commercial toilets, etc.).

These maintenance-generated waste materials would be handled and disposed of by the contractor undertaking these services. [Dedicated on-site storage for these waste materials is therefore not needed.]

4.2.4 External

Residents and commercial tenants would be able to dispose of smaller waste items, such as printer cartridges, batteries and lighting, to publicly available external drop off points (e.g. supermarkets, Office works, telco retail stores, etc.), which accept these materials.

The Building User Manual(s) for residents and commercial tenants at the Development will include advice on external drop-off points for these waste items, which may include reference to Council advice available at their Web site.

4.2.5 Bin cleaning (& On-site Bin Wash Area)

A dedicated on-site bin cleaning area would be provided and multi-purposed with the bin storage area in the Apartment (Residential) Waste Area at Ground Level – see Figure 2-1.

- *This bin wash area would require grading to a sewer drain with basket screen to remove gross solids, tiles or epoxy coating to water-proof adjacent walls and flooring, standard cold-water supply faucet and commercial-grade electrical power supply (if pressure washer system is to be used), plus bunds and screens for use during bin wash events.*
- *Bin washing activity for residential bins and access by commercial tenants would be managed by the Body Corporate.*
- *Bin washing would be timed to occur immediately after bins are emptied.*

Alternatively, bin cleaning at the Development could be outsourced to an external contractor (e.g. <http://binforce.com.au/>).

- *These external contractors generally have self-contained bin washing systems on back of ute or truck that enable them to clean bins on site – Figure 4-2 overleaf.*
 - *Or some will remove bins from site, replacing them with an empty spare, clean the bins, then return them to site.*
- *Their vehicles can usually access on-site areas (where min. clearance is $\geq 2.5\text{m}$).*
 - *They could therefore temporarily park in a visitor car parking space at Ground Level.*



Figure 4-2 – On-site bin wash system for rear-lift trucks on back of ute. Source: <http://binforce.com.au/>

4.2.6 Transfer pathways

There are range of transfer pathways for the waste systems at the Development, which were described in Sections 4.2.1 and 4.2.2. The following is provided as a guide for sizing and designing these transfer pathways.

- *Transfer pathways –*
 - *User disposal – less than 30m and free of steps, no grades greater than 1:15, and cater for mobility impaired users.*
 - *Local disposal points to central storage – enough width to accommodate relevant bins or waste loads being transferred, free of steps, no grades greater than 1:12*
 - *Collection – less than 30m with no steps or grades greater than 1:10*
- *Corridor widths –*
 - *240L MGBs or smaller bins / loads – min. 1,000 mm (1,200mm preferred)*
 - *660L skip bins – min. 1,200mm (1,400mm preferred)*
 - *1,100L skip skips and/or other waste loads – min. 1,500mm (1,600mm preferred)*
- *Doors –*
 - *Local disposal access – 800mm*
 - *Transfer pathways– Appropriate to the size of bin to be transported, e.g.*
 - *240L MGB (or smaller) – min. 800mm*
 - *660L skip – min. 1,200mm*
 - *1,100L skip – min 1,500mm*
- *Floors – Hard surfaces where bins and skips are to be carted*
- *Lifts – All lifts should be sized to allow for bulky hard waste items.*

Based on current plans, these requirements for transfer pathways in the Development appear to be generally satisfied. All relevant transfer pathways should be reviewed and confirmed at detailed design stage to ensure they are appropriate.

4.3 Collection & Traffic Issues

4.3.1.1 Collection Point & Events

The waste collection point for the Development introduced above is reiterated below.

- The collection point would be in Colley St at rear of building – per Figure 2-1.
- The collection frequency and times at this location would be as follows.
 - **Residential / Apartment Building –**
 - *Weekly per Routine service or 3 collection events per week.*
 - *5-10 min per building per collection event.*
 - *Collections scheduled by Council.*
 - **Commercial (tenancy) waste**
 - *Collection frequency dependant on the service and type of tenancy and could be up to daily (but probably less frequent) for some services provided to the Light Cafe tenant – see Table 4.*
 - *We recommend the Body Corporate engage a common waste contractor across both commercial tenancies to minimise collection events.*
 - *Assuming a common waste contractor, services there could be between 8 and 14 collection events per week across all services to both commercial tenancies depending on services elected and collection frequencies required at the site.*
 - *Each collection event could be 5-10 min depending on number of bins emptied or collected.*
 - *The collections should be scheduled during daytime hours (7am-7pm) on weekdays and Saturdays (and on 9am-7pm Sundays if required) to minimise impacts on residents, neighbours, site car parking access, and traffic in Colley St.*

4.3.1.2 Vehicles & Access

- **Rear-lift collections for Apartment Building –**
 - Council has indicated that the minimum size truck to be accommodated must be an 8.8m MRV with 3.5m minimum clearance.
 - There should be no issues with these trucks accessing Colley St by reverse entry and forward exist as this is the current practice for Council kerbside collection for existing residents in Colley St and for some commercial (waste) services to neighbouring commercial premises.
 - *Refer to Traffic Report by Traffic Engineer for additional discussion of collection truck access to the Colley St collection point proposed for the Development.*
 - *Figure 4-3 overleaf reproduces modelling analysis of collection truck access to collection point in Colley St from MacKinnon Parade as presented by the Traffic Engineer in their report.*
- **Commercial collections –**
 - Collections from Colley St –
 - *Collection trucks for services to commercial tenancies would be like those proposed for residential collections, which as described above should be accommodated by existing collection access available at the site.*
 - Kerbside collections from Melbourne St –
 - *Council already provides these services (kerbside pick-up, weekly cardboard collection) to other businesses along Melbourne St, and thus there should be no issues with the same services being provided for the commercial tenancies in this Development.*

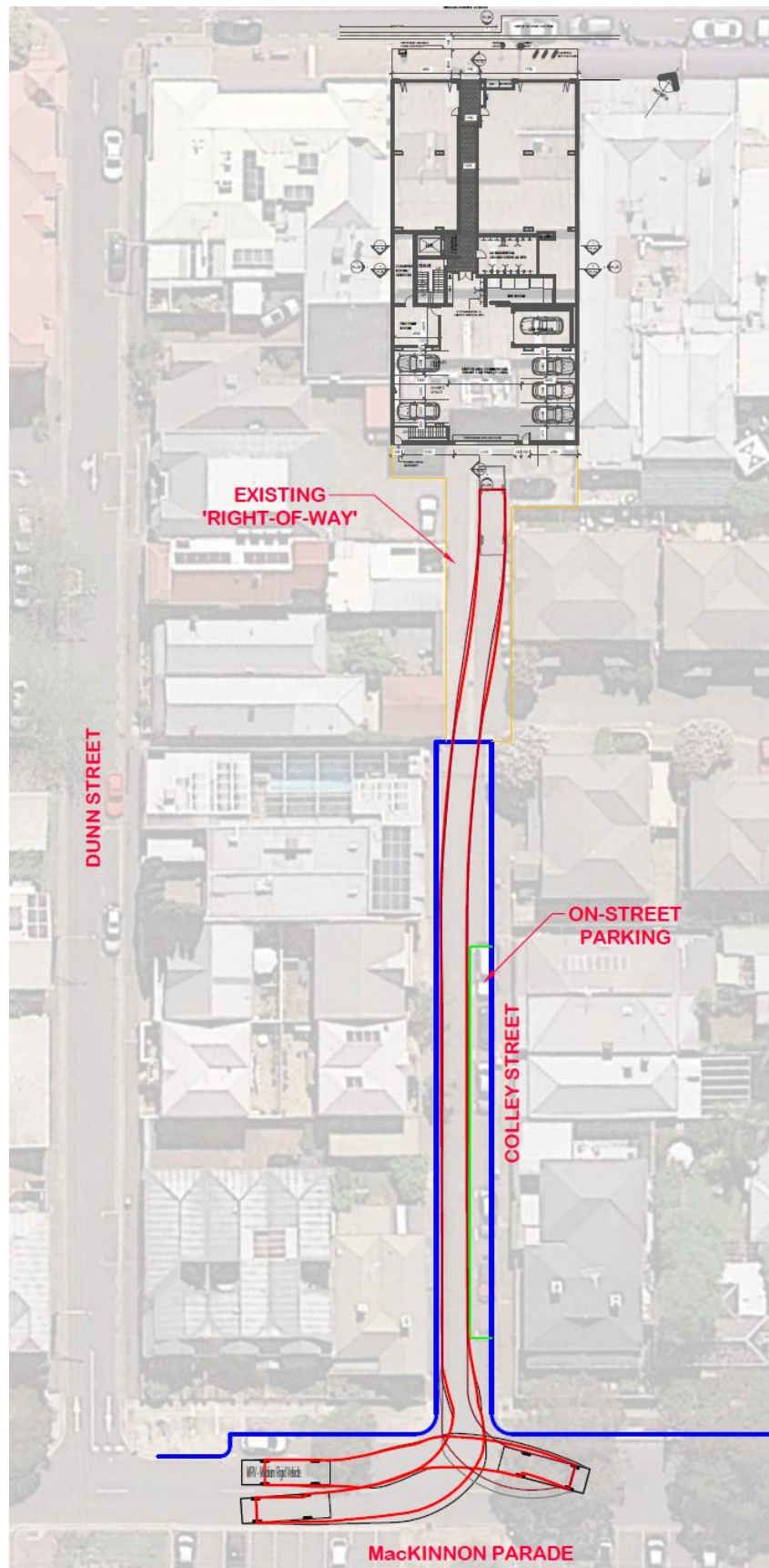


Figure 4-3 – Collection truck access to collection point from MacKinnon Parade. Reproduced from Traffic Report by Traffic Engineer

4.3.1.3 Traffic Issues

As described above, the main collection point would be at rear of property in Colley St. The collection trucks would access the collection point by reversing into Colley St from MacKinnon Parade, then exit in forward direction back onto MacKinnon Parade (per Figure 4-3). This access arrangement is already practiced by Council's existing kerbside collection services to residents in Colley St and by commercial services to neighbouring commercial properties.

For Council services, there would be 3 collections per week.

For commercial services there could be between 8 and 14 collection events per week. These collections would be scheduled at non-peak traffic times along Colley St, and between 7am-7pm on weekdays and Saturdays (and 9am-7pm Sundays if required).

Under these proposed collection and site access arrangements, we do not anticipate that the waste and recycling collection services proposed for the Development should prove problematic for local traffic or cause any other significant traffic issues for Colley St or on neighbouring streets. Refer to Traffic Report by Traffic Engineer for additional discussion of collection truck access to the Development via Colley St.

4.4 Management & Communication

4.4.1 Responsibilities

Table 5 below summarises the responsibilities of different parties / stakeholders for proposed waste management and operational activities at the Development. In summary:

- **Apartment Building Residential** – The Body Corporate would be responsible for managing the waste system, but residents would play an important role in managing their local disposal activities, and Council (at its discretion) may support the Body Corporate with resident engagement and education to help drive good waste management outcomes; and
- **Commercial tenancies** – The Body Corporate would manage the waste system, including ensuring that good waste management outcomes by tenants were achieved.

Table 5 – Management & operational responsibilities for the waste systems at the Development

Waste System	Activity	Responsible party
Apartment Building residential	<i>Local Disposal & External Disposal</i>	Residents
	<i>Waste Storage Areas, Hygiene, Odour Management & Cleaning</i>	Body Corporate & their property management staff
	<i>Collection services – Standard Waste & Recycling</i>	Council
	<i>Collection services – Hard Waste by Council</i>	Council with Body Corporate (Coordination)
	<i>Collection services – Hard Waste by Private Contractor</i>	Private Contractor with Body Corporate (Coordination)
	<i>Management</i>	Body Corporate
	<i>Education, Training & Engagement (Residents)</i>	Body Corporate & Council
Commercial tenancies	<i>Local Disposal, Hard Waste & External Disposal</i>	Tenants
	<i>Waste Storage Areas, Hygiene, Odour Management & Cleaning</i>	Tenants
	<i>Collection services</i>	Commercial / Private Contractor(s)
	<i>Management</i>	Body Corporate
	<i>Education, Training & Engagement (tenants)</i>	Body Corporate

4.4.2 Implementation & Communication

4.4.2.1 Apartment Building residential

To successfully implement this WMP, the following may need to be considered or should be put in place.

- **Mandated responsibilities for apartment residents** – Obligations for residents to properly access, operate and use the waste systems provided should be written into any tenancy residency agreement and/or incorporated into the Community/Strata plan lodged with the Lands Titles Office.
- **Resident Induction** – Should include first-day guidance on how to correctly use the waste systems.
- **Council engagement and involvement** – Council should be engaged on waste system operation, management and performance and to provide on-going advice, review and support to the Body Corporate and residents.
- **Building User Manual** – Advice and instructions on waste management and using the waste systems should be included in the Building User Manual(s) developed for residents, including contact information for further information, questions and issues.
 - *Council should be consulted on this advice and instructions and may provide relevant information to include in the Building User Manual(s).*
 - *This may include advice to residents on how to properly dispose of other waste / recycling items including lighting, batteries and hazardous household waste*
- **Emergency Response &/or Property Management Plan(s)** – Should include response measures (or contingencies) for:
 - *Council collection services suspended or not available;*
 - *Incorrect use by residents of the waste systems; and*
 - *Illegal dumping on-site.*

4.4.2.2 Commercial tenants

Like the Apartment Building residential system above, the following should be put in place

- **Community/Strata title arrangements for commercial property owners** – Obligations for the commercial tenants and/or property owners to properly access, operate and use the waste systems would be written into any tenancy agreement and the Community/Strata plan lodged with the Lands Titles Office.
- **Site Management System / Manual** – Advice and instructions on waste management and using the waste systems should be provided for tenants, including contact information for further information, questions and issues.
- **Tenant Induction** – Should include guidance on how to correctly use waste /recycling bins as well as the site approach to waste and recycling.
- **Car park Response or Site Management Plan(s)** – Should include response measures (or contingencies) for:
 - *Waste collection services suspended or not available;*
 - *Incorrect use by tenants of the waste systems;*
 - *Illegal dumping on-site; and*
 - *Poor waste management outcomes (including cleanliness, odour and/or low diversion).*

4.5 Other Waste System Design or Management Issues

The following would be considered and/or implemented for waste systems at the Development. More details for some of these items can be resolved at detailed design stage with the waste contractor and/or Council.

- 1) **Bins** – These would align to Council bin colours or otherwise comply with Australian Standard for Mobile Waste Containers (AS 4213).
 - *For the Apartment Building residential system, Council would provide these bins.*

2) **Signage –**

- Appropriate signage in all Local Disposal and Waste Storage Areas should be used to ensure correct disposal of waste and recycling.
- This signage should conform to the signage requirements of Council and/or the State Guideline (Zero Waste SA, 2014).
 - *Council should be consulted on signage for Apartment Building residential system and may supply signage to the Development for this purpose.*

3) **Vermin, hygiene & odour management (inc. ventilation)**

- **Inspection & Cleaning –**
 - An inspection and cleaning regime would be developed and implemented by Body Corporate for waste systems at the Development, including ensuring that surfaces and floors around disposal areas, transfer pathways and waste storage areas are kept clean and hygienic and free of loose waste and recycling materials.
 - *Where putrescible general waste or food waste is being stored, Local Disposal and Waste Storage areas should be graded to a sewer drain with tiling or epoxy coating to floors and adjacent walls to waterproof the area and for cleaning.*
- **Odour Control –**
 - All Local Disposal and Waste Storage Areas –
 - *Where putrescible general waste or food waste is being stored, these areas would be mechanically ventilated for control of odours.*
 - *The ventilation would extract to atmosphere, to prevent odour build up.*
 - *The extraction vent discharge location would be selected to avoid impact on residents, tenants and/or neighbours.*
 - *It should be a requirement for food waste bins in Local Disposal and the Waste Storage areas that lids are closed after use.*

4) **Access & security –**

- All Local Disposal and Waste Storage Areas (residential and commercial) in the Building should be secure and only accessible by key or fob or access code.
 - *This key or fob or access codes would be provided to residents, tenants, property management staff and/or waste contractor(s) collecting from these areas.*
 - *CCTV is recommended to monitor waste disposal practices in all Local Disposal and Waste Storage Areas.*

5 References

Adelaide City Council. (2016). *Guide to waste & recycling bins.*

Zero Waste SA. (2014). South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments.