Stavertis

Address:22 Muriel Ave INNALOO

Apartment Complex

Job Number: 23011

Drawing No	Description
01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section

City of Stirling
19 Jan 2026
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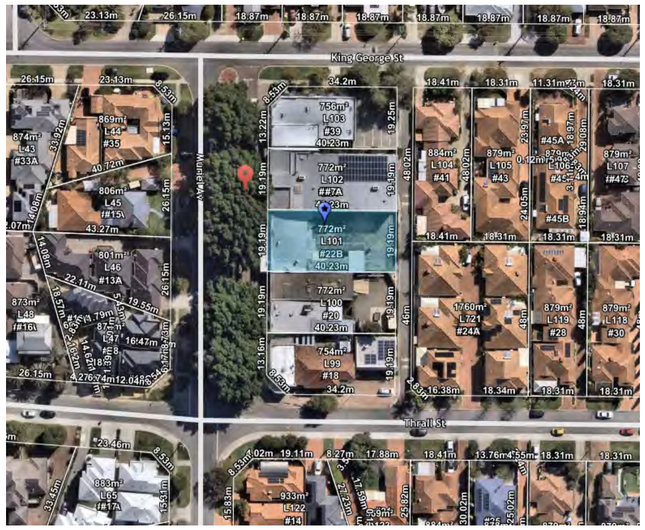
GERMANO DESIGNS

Unit: 3/1 Mulgul Road, Malaga W.A 6090 (08) 9248 8392 germanodesigns.com.au



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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Existing Site Survey

Scale: 1:200
Sheet Size: A2
Project No: 23011
Revision Number: 7.00
Drawing No.: 02 of 13

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

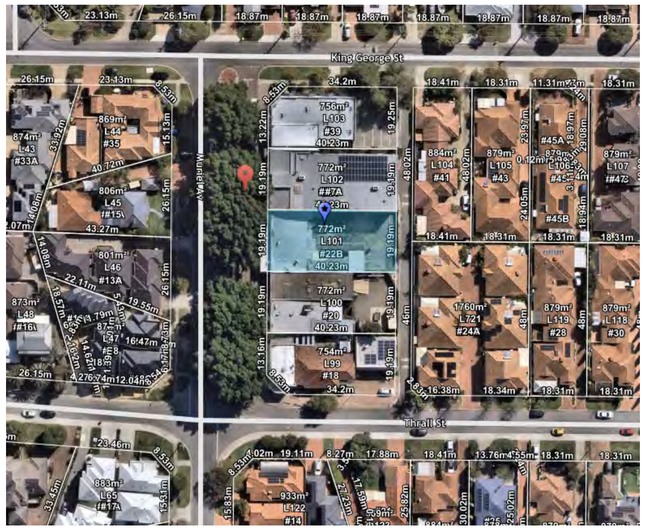
Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
Telecom
Water meter
Power Pole
Power Dome
Sewer M/H

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
(08) 9248 8392 germanodesigns.com.au



City of Stirling
19 Jan 2026
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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
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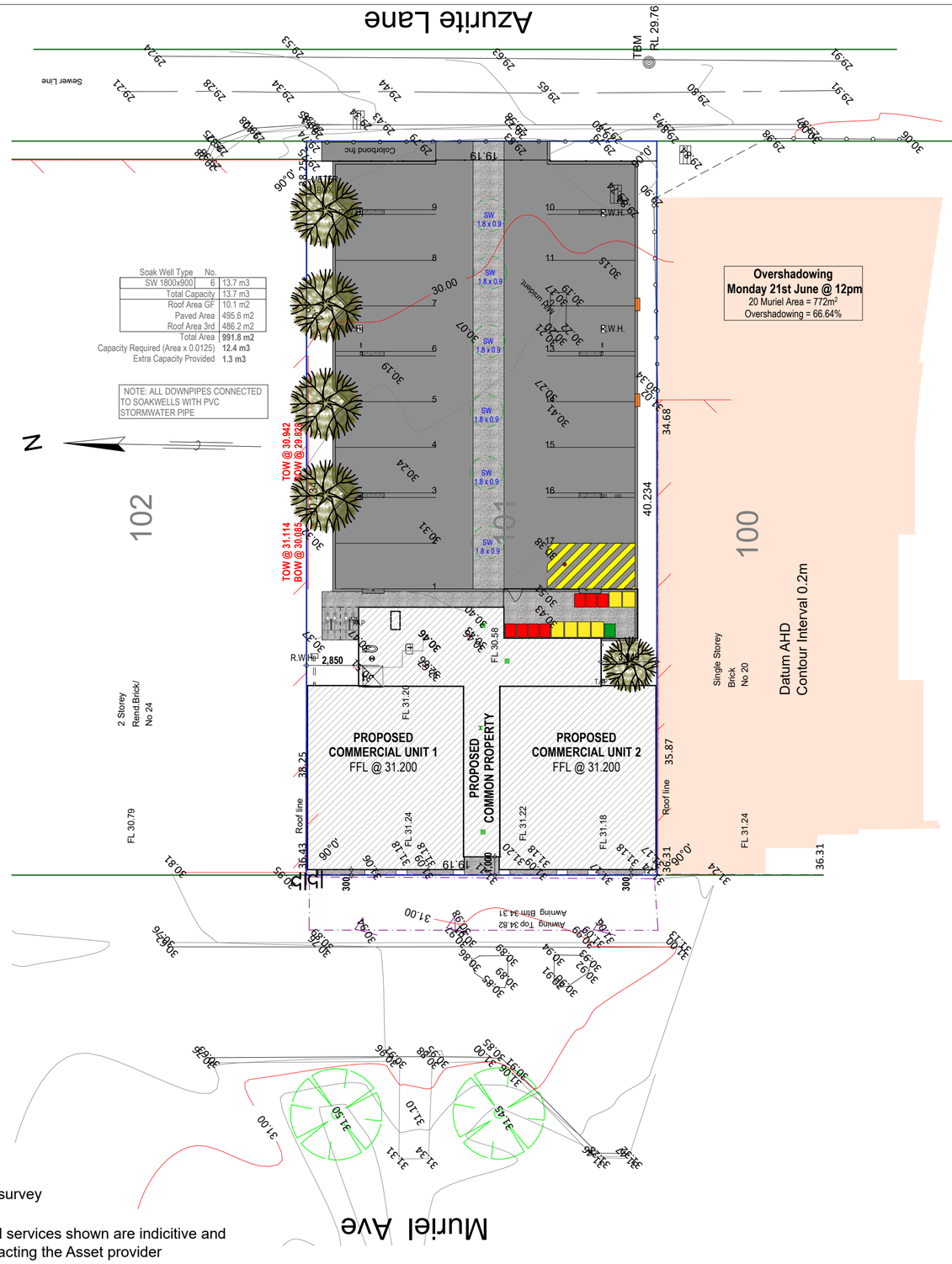

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale:	Sheet Size:
1:200	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
03 of 13

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

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COMMERCIAL DEVELOPMENTS MURIEL ROAD

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RESIDENTIAL DEVELOPMENTS THRALL STREET

COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Context Plan

Scale:	Sheet Size:
	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
04 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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19 Jan 2026
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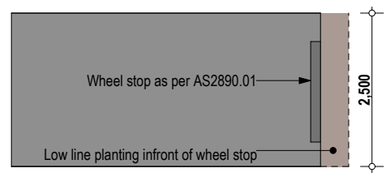
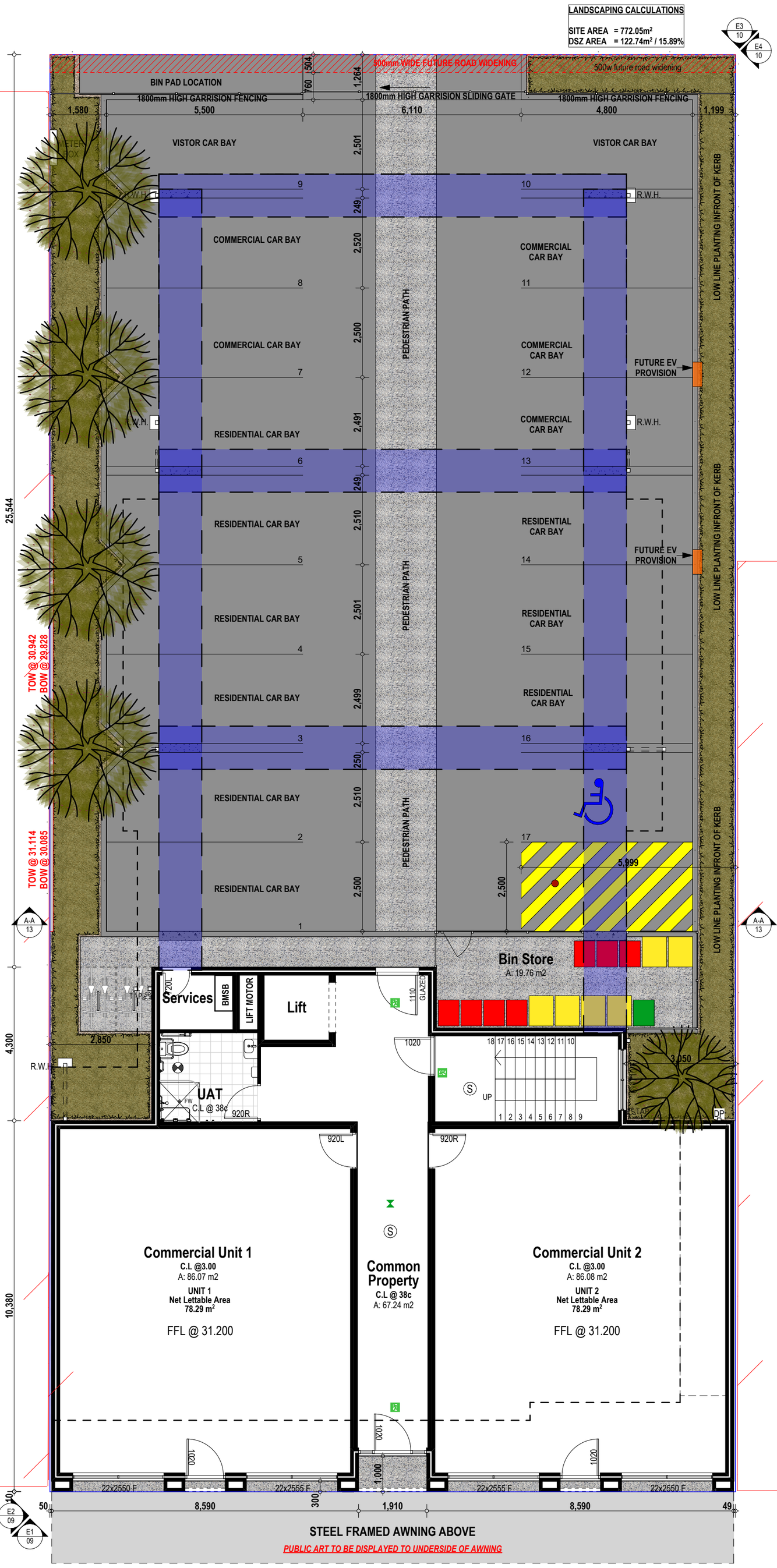


Carbay Detail

LANDSCAPING CALCULATIONS

SITE AREA = 772.05m²
DSZ AREA = 122.74m² / 15.89%



2 Storey
Rend.Brick/
No 24

Single Storey
Brick
No 20

PLOT RATIO

COMMERCIAL
Site Area: 772.05m²
Building Footprint: 172.36m²
22.32%

RESIDENTIAL
Site Area: 772.05m²
Building Footprint: 803.02m²
104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Ground Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
05 of 13

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Muriel Ave

City of Stirling
19 Jan 2026
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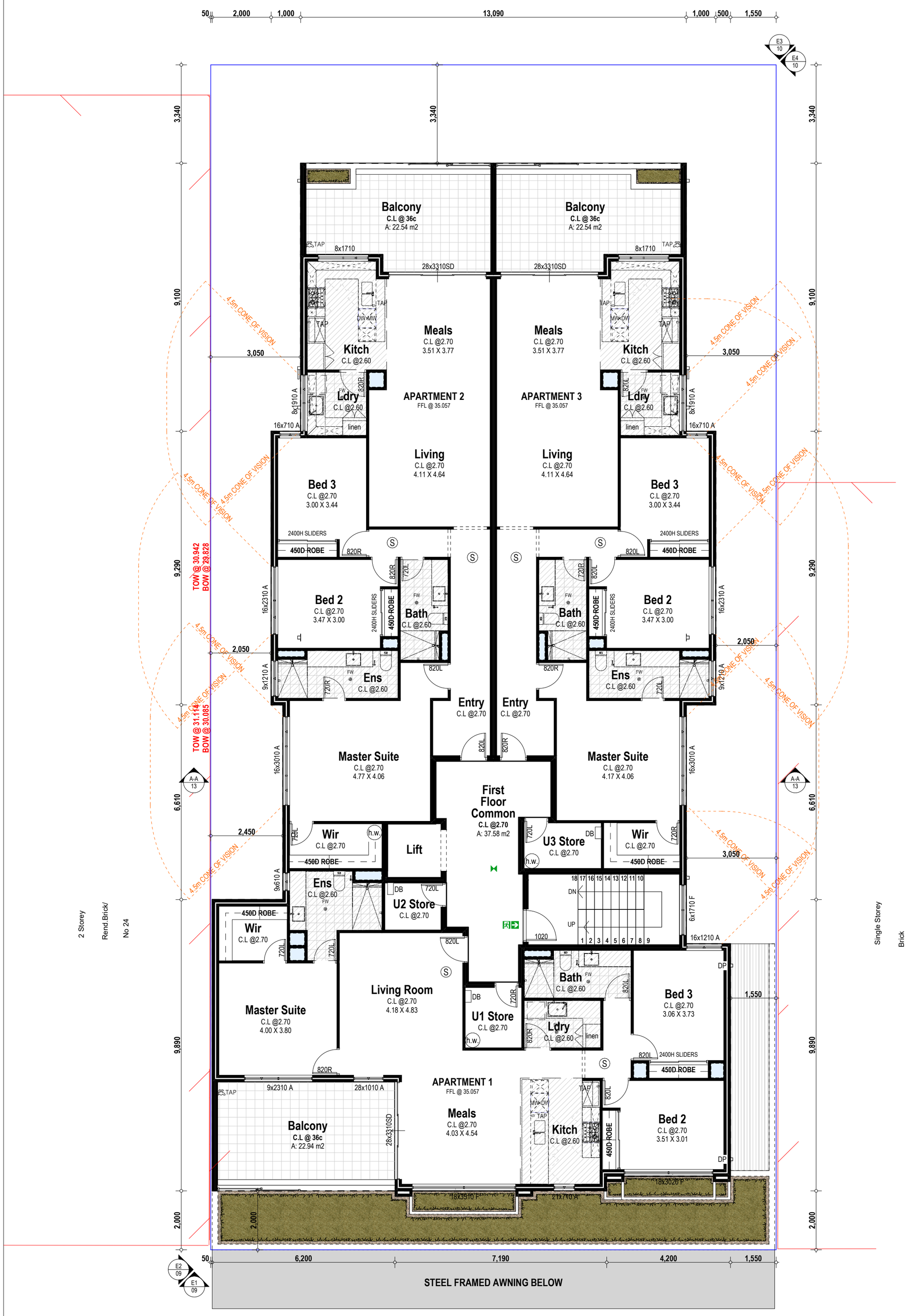

PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
First Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
06 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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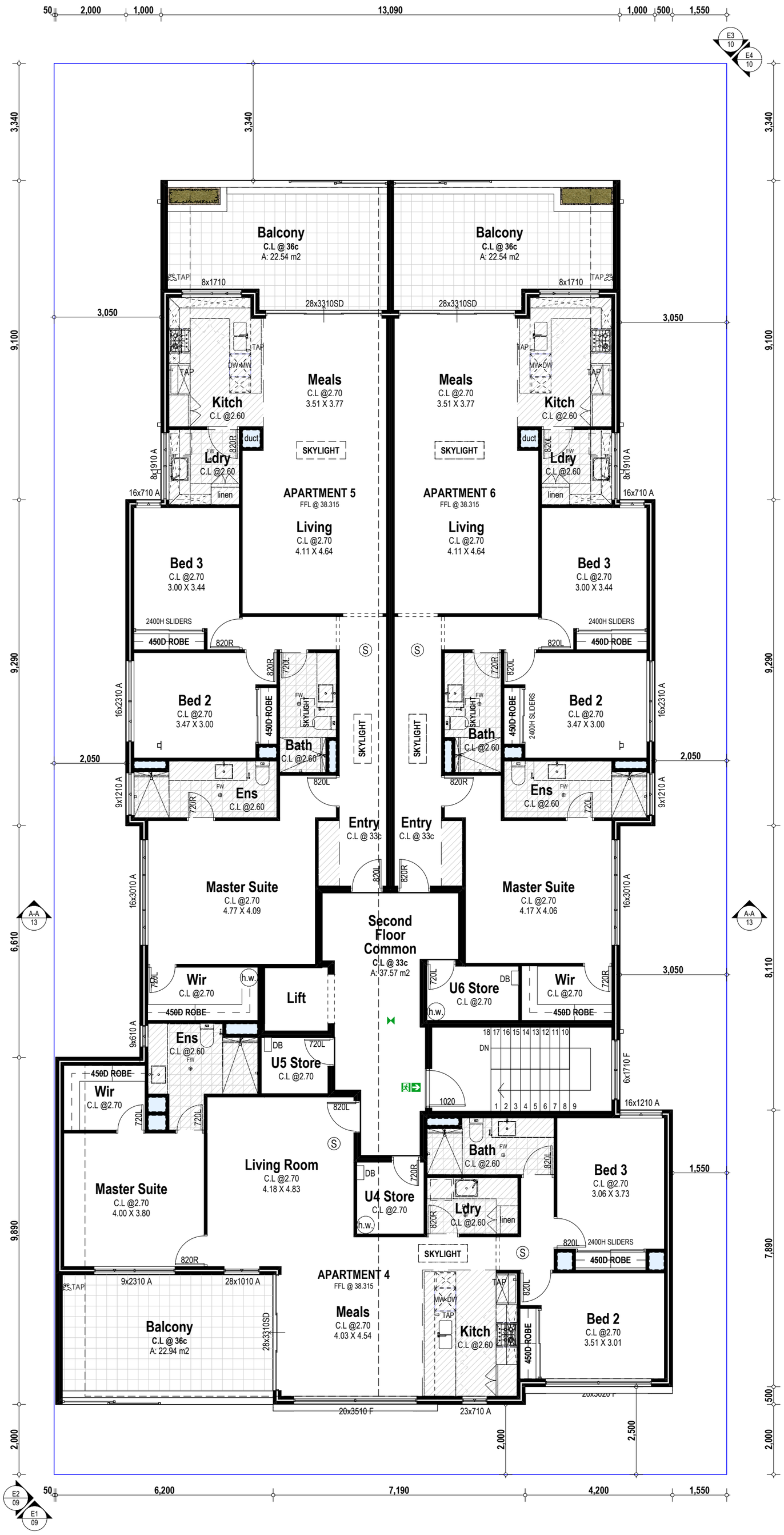

City of Stirling
19 Jan 2026
RECEIVED

PLOT RATIO

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Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
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Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
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Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
07 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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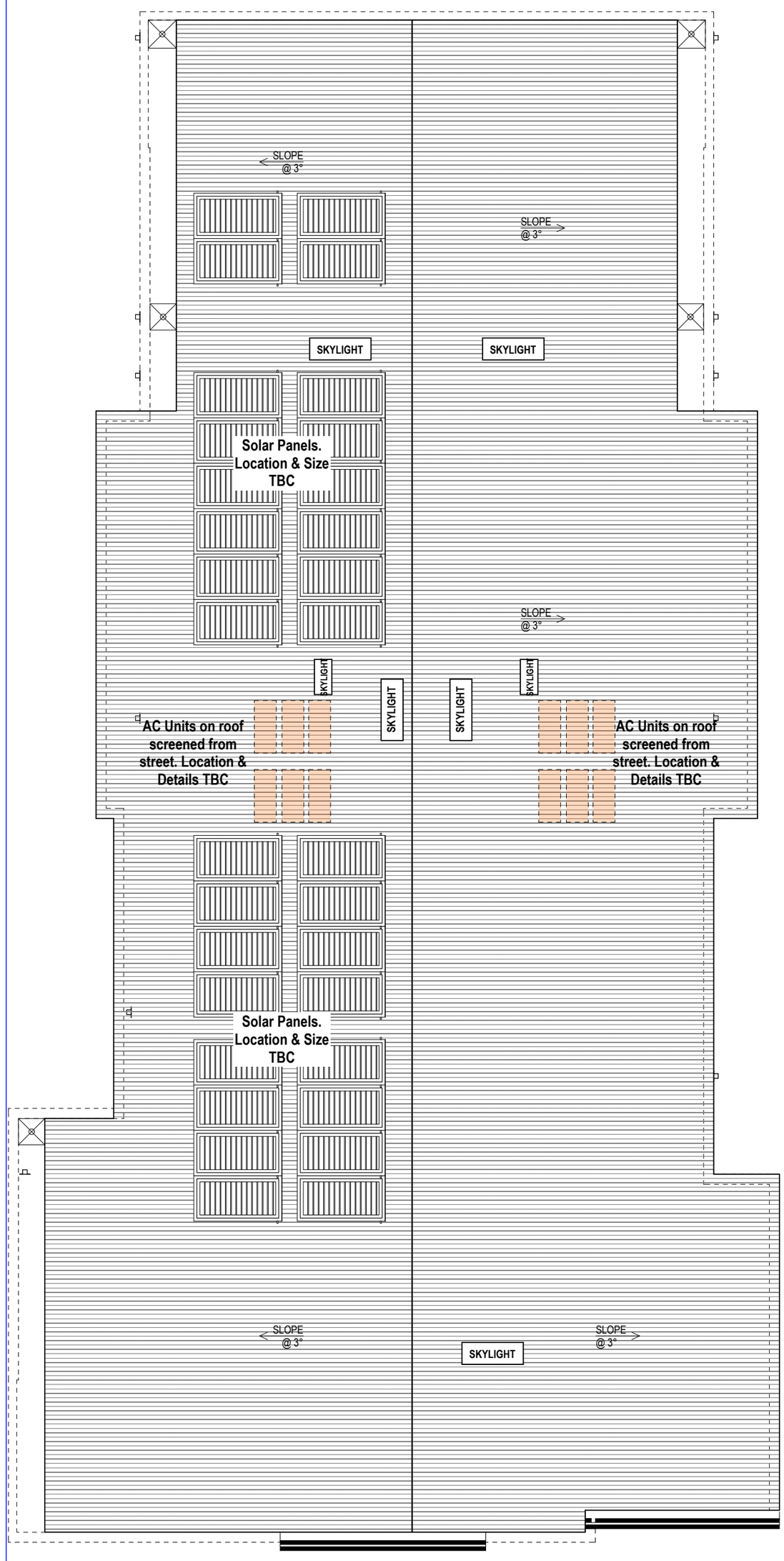

City of Stirling
19 Jan 2026
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Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

Revision	Description	Date
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Roof Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
08 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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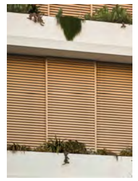
KNOTWOOD ALUMIN SCREENING

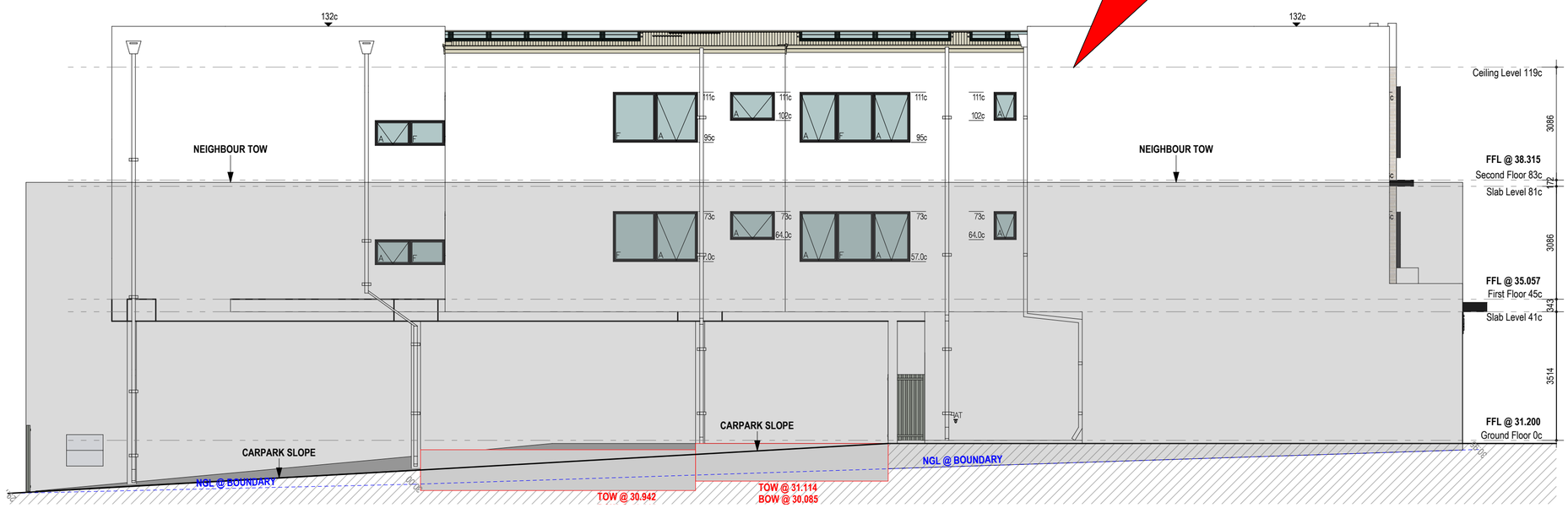


DULUX RENDER MONUMENT

BOWRAL 76 SIMMENTAL SILVER

E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

City of Stirling
19 Jan 2026
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Revision	Description	Date
7.00	Development Approval	11.12.25
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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
09 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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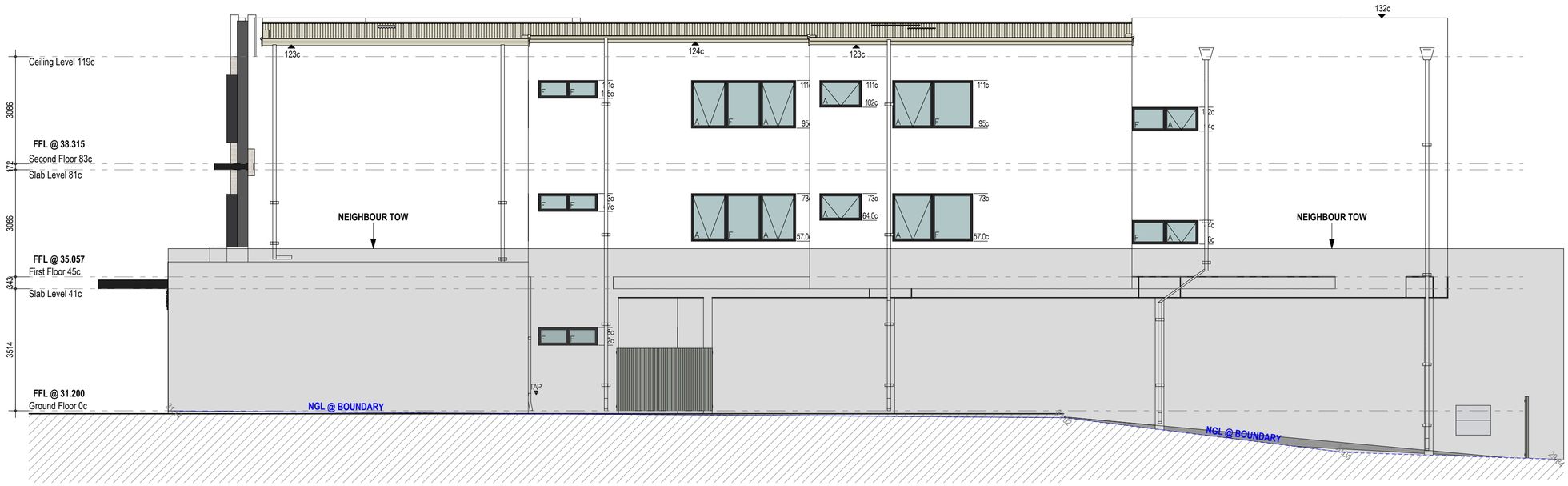
E3 East Elevation
1:100



E4 South Elevation
1:100

Revision	Description	Date
7.00	Development Approval	11.12.25
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
10 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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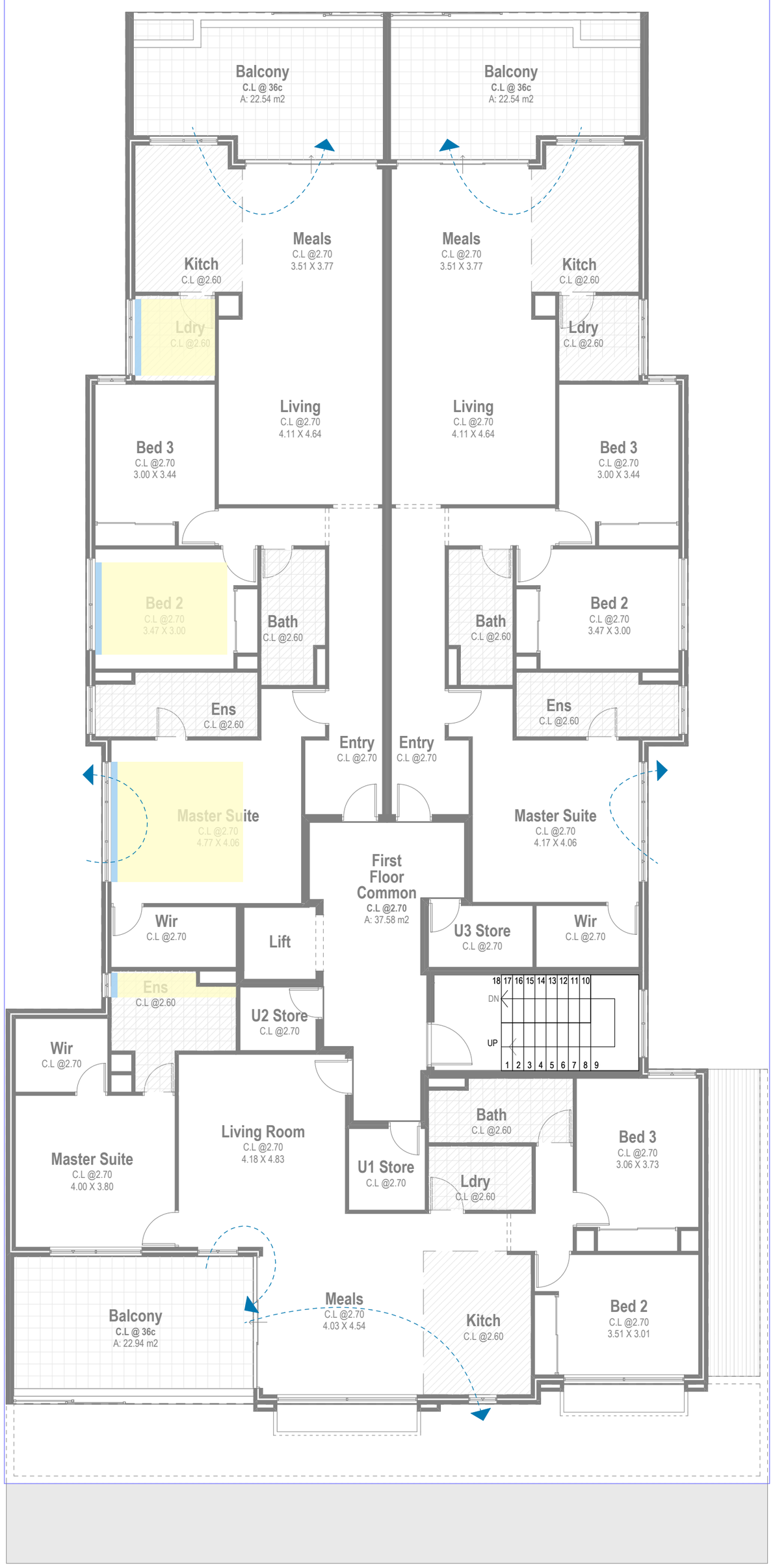

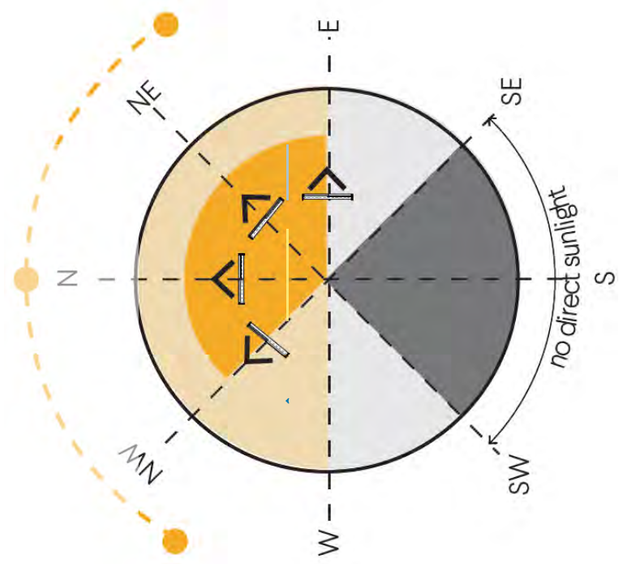

SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

City of Stirling
19 Jan 2026
RECEIVED

Revision	Description	Date
7.00	Development Approval	11.12.25
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
11 of 13

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

GERMANO DESIGNS
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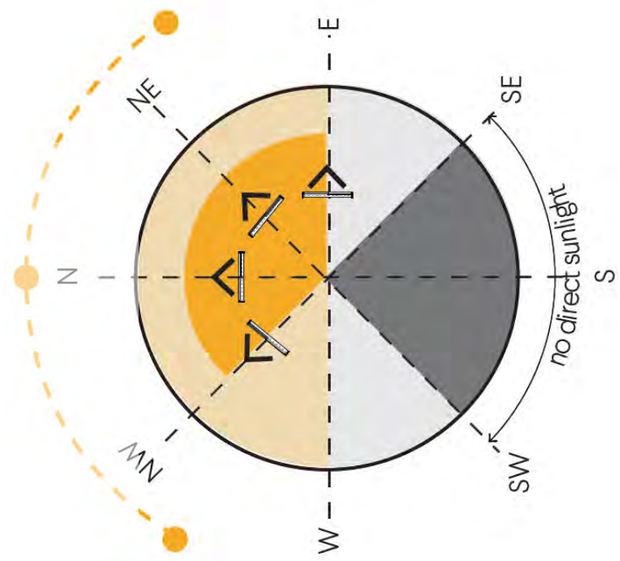

SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

City of Stirling
19 Jan 2026
RECEIVED

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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
SF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	Revision Number:
23011	7.00

Drawing No.:
12 of 13

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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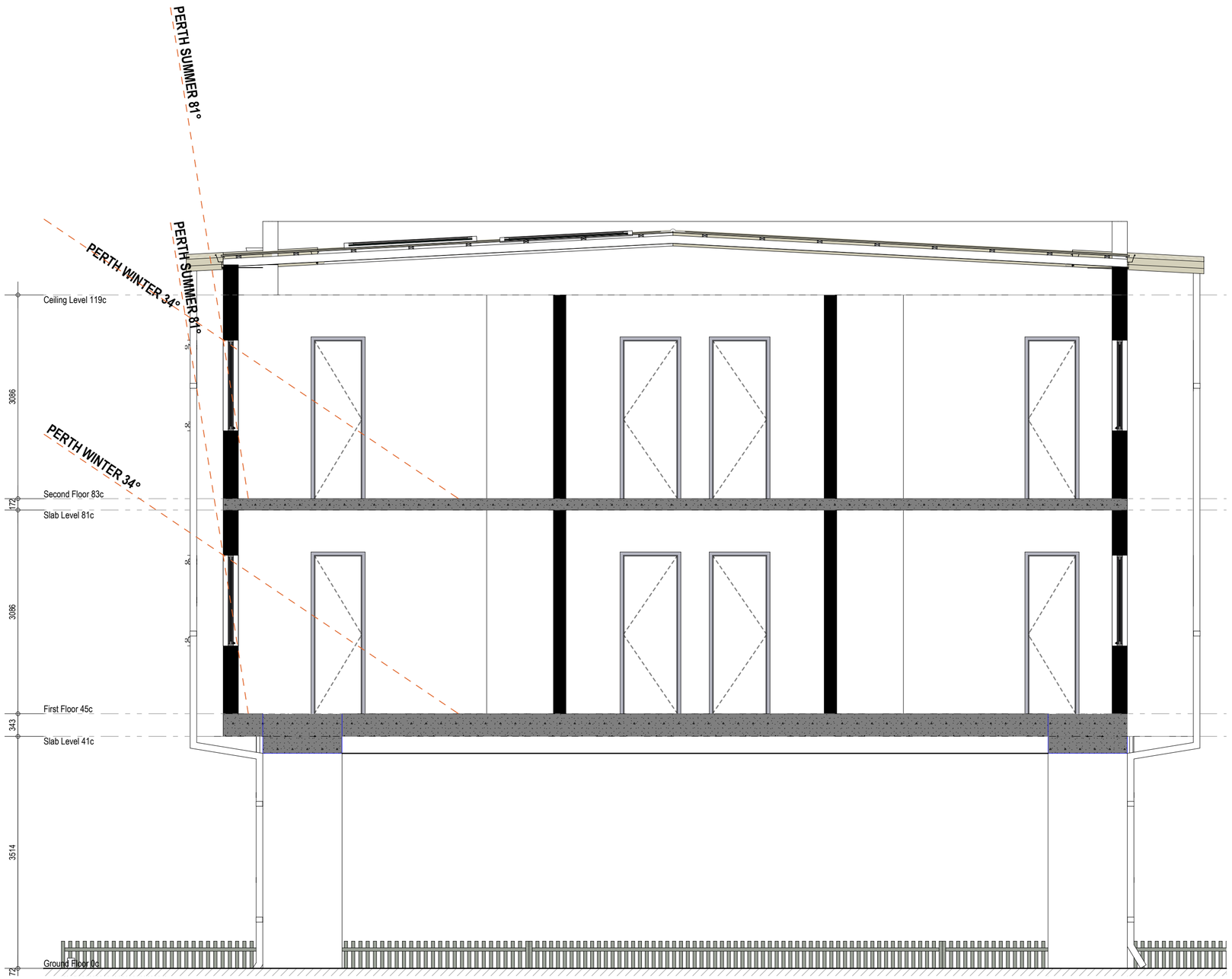

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Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

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Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Section

Scale:	Sheet Size:
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23011	7.00

Drawing No.:
13 of 13

GERMANO DESIGNS
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2026

DEVELOPMENT APPLICATION

LOT 101 (NO.22) MURIEL AVENUE, INNALOO

PROPOSED MIXED USE DEVELOPMENT

(INCLUDING TWO COMMERCIAL TENANCIES & SIX MULTIPLE DWELLINGS)
CITY OF STIRLING

CF Town Planning & Development

Prepared for

Germano Designs and the landowners for the construction of a new mixed use development (including 6 multiple dwellings and two commercial tenancies) on Lot 101 (No.22) Muriel Avenue, Innaloo.

Prepared by

CF Town Planning & Development
Planning & Development Consultants

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City of Stirling
19 Jan 2026
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Carlo Famiano
Director
CF Town Planning & Development

Name	Position	Document Revision	Date
Mr Carlo Famiano	Town Planner	Planning Report	15 December 2025
Mr Carlo Famiano	Town Planner	Planning Report	19 January 2026

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1.0 INTRODUCTION

CF Town Planning & Development acts on behalf Germano Desings and the landowners as their consultant town planners and hereby prepare the following report in support of an Application for Development Approval for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo to provide much additional housing and commercial uses within a well serviced area.

This report provides details regarding the following:

- Site details;
- Proposed development;
- Planning considerations; and
- Provision of justification in support of the proposed development, addressing the relevant planning framework.

In light of the above, we respectfully request the Metro Inner Development Assessment Panel (DAP) and the City of Stirling's favorable consideration and conditional approval of the application at their earliest possible convenience.

Should you have any queries or require any additional information regarding any of the matters raised above please do not hesitate to contact Mr Carlo Famiano on 0407384140 or carlo@cftp.com.au.

1.1 List of Consultant Reports/Consultants

The following consultant reports have been prepared in support of this development application:

i) Landscaping Plan from 'Childscapes';
ii) Transport Impact Statement from 'Premise';
iii) Acoustic report from 'Herring Storer Acoustics'; and
iv) Waste Management Plan from 'CF Town Planning & Development'.

CF Town Planning & Development
Planning & Development Consultants

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2.0 BACKGROUND & PURPOSE

The subject land is situated east of the Innaloo Activity Centre, within a vibrant commercial strip along Muriel Avenue ('Local Centre'). It is noted that the Innaloo area is currently undergoing a transitional period from the older single dwelling type developments to more intense multiple dwelling, grouped dwelling developments. The area is also well serviced with public transport and contains good access to a regional road network.

A review of the immediate locality has identified that the subject land is located within a well-established and well serviced part of the Innaloo area, with convenient access to the following key nodes:

i) Various public open space reserves;

ii) The Osborne Park Industrial areas (i.e. employment nodes);

iii) The Innaloo Activity Centre, which contains a number of retail, entertainment and healthcare uses;

iv) Various bus services within the area, along with the subject land being located with good access to the Stirling Train Station (see Figure 7 – Public transport network), The train service, which provide a service to the Perth Central Business District;

v) A regional road network (including Scarborough beach Road, Cedric Street and the Mitchell Freeway);

vi) The coastal foreshore area and Scarborough Tourism Precinct to the west; and

vii) Various schools (both private and public schools).

Given the above, this application seeks the relevant development approval for the construction of a new mixed use development that includes two (2) commercial tenancies on the ground floor and six (6) multiple dwellings on the upper two floors of the building. The development will provide much needed housing and housing diversity within the Innaloo area, along with providing commercial tenancies that will accommodate small businesses.

3.0 LOCATION

The subject land is located within the southern part of the Innaloo locally, approximately 700 metres north-west of the Innaloo Activity Centre (core area) and approximately 1.2 kilometres south-west of the Stirling Train Station (see Figure 1 – Location Plan).

The subject land is also located within a well serviced area that contains a variety of shopping/retail uses, entertainment venues, civic uses, public open space, medical facilities, recreational facilities, various commercial uses and employment opportunities. As such, the proposed development on the subject land will foster the future growth of the Innaloo locality and will assist with providing much needed housing in a well-established/serviced area.

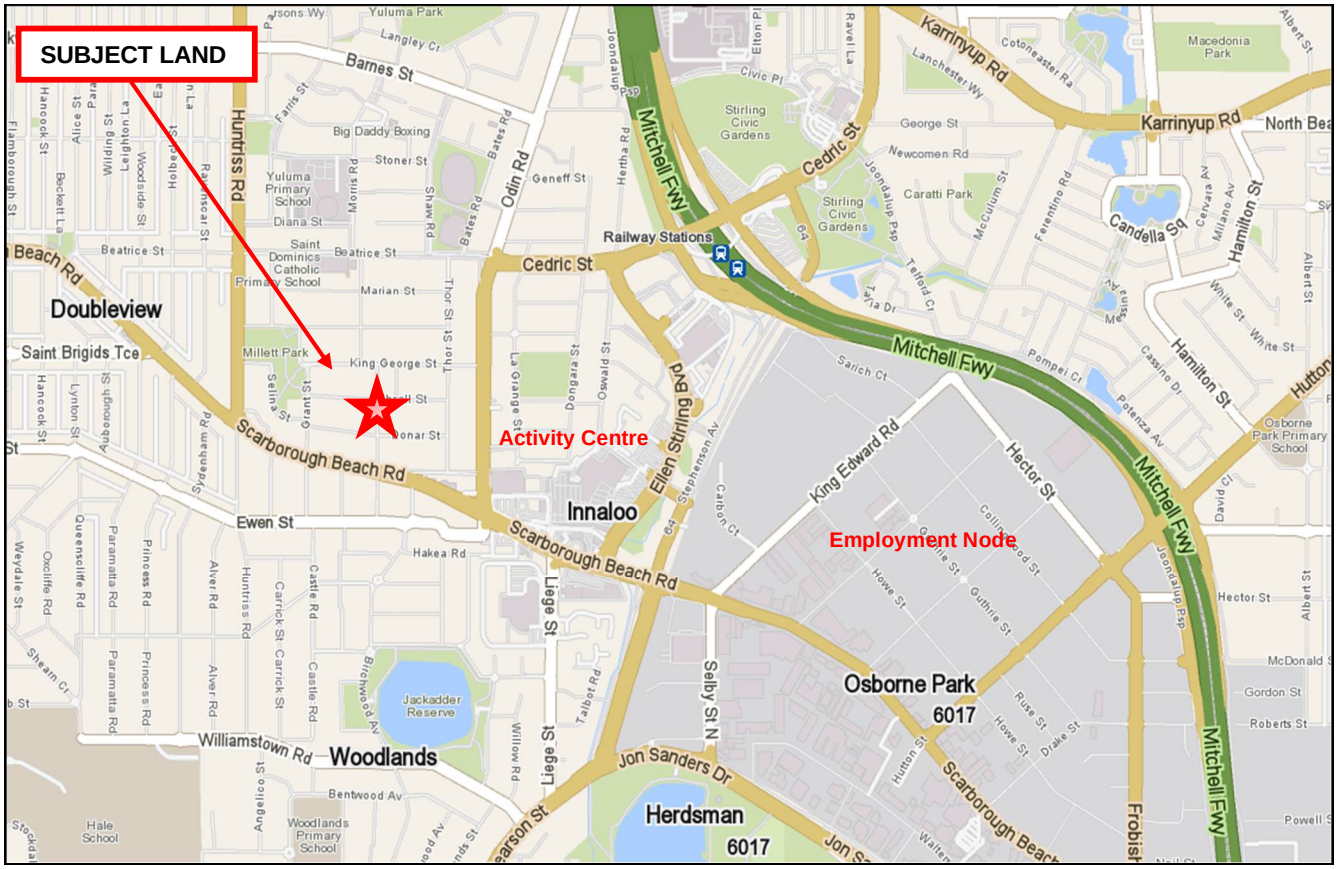

Figure 1 – Location Plan

4.0 PHYSICAL CHARACTERISTICS

4.1 Property Details

The subject land is legally described as Lot 101 on Plan 6290 on Certificate of Title Volume 1157, Folio 302 and is owned by Helen Christou, Victor Jason Christou and Natasha Lee Stavretis (see Appendix 1 - Certificate of Title).

The subject land is irregular in shape, comprises a total combined area of 772m^2 and has frontage to Muriel Avenue along the land's western lot boundary and Azurite Lane along the land's eastern lot boundary.

The subject land is relatively flat with a fall natural ground levels (NGL) from 31.17 metres along the land's front boundary to 29.74 metres along land's rear boundary. This equates to a fall in NGL of 1.43 metres down/across the site (see site development plans).

Lot 101 is currently developed and used for commercial/retail purposes and contains a number of physical improvements including a single storey commercial building, patio structures, an outbuilding, , sealed car parking and boundary fencing (see Figure 2 – Aerial Site Plan & Figure 3). It is viewed that

the existing development on the subject land is run-down and does not provide any positive contributions to the streetscape and represents the underutilisation of land within a commercial strip and in close proximity to a key Activity Centre. As such, this application proposes that all physical improvements on the subject land will be removed to accommodate the new development.

It is significant to note that the existing dwelling and associated structures on the subject land are not identified on the City of Stirling's Municipal Heritage Inventory (MHI) and can therefore be removed subject to the issuance of a demolition permit by the City.

The subject land does not contain any significant vegetation that is worthy of retention, with the Muriel Avenue road reserve abutting the subject land containing a number of large mature street trees that will be retained as part of this application.

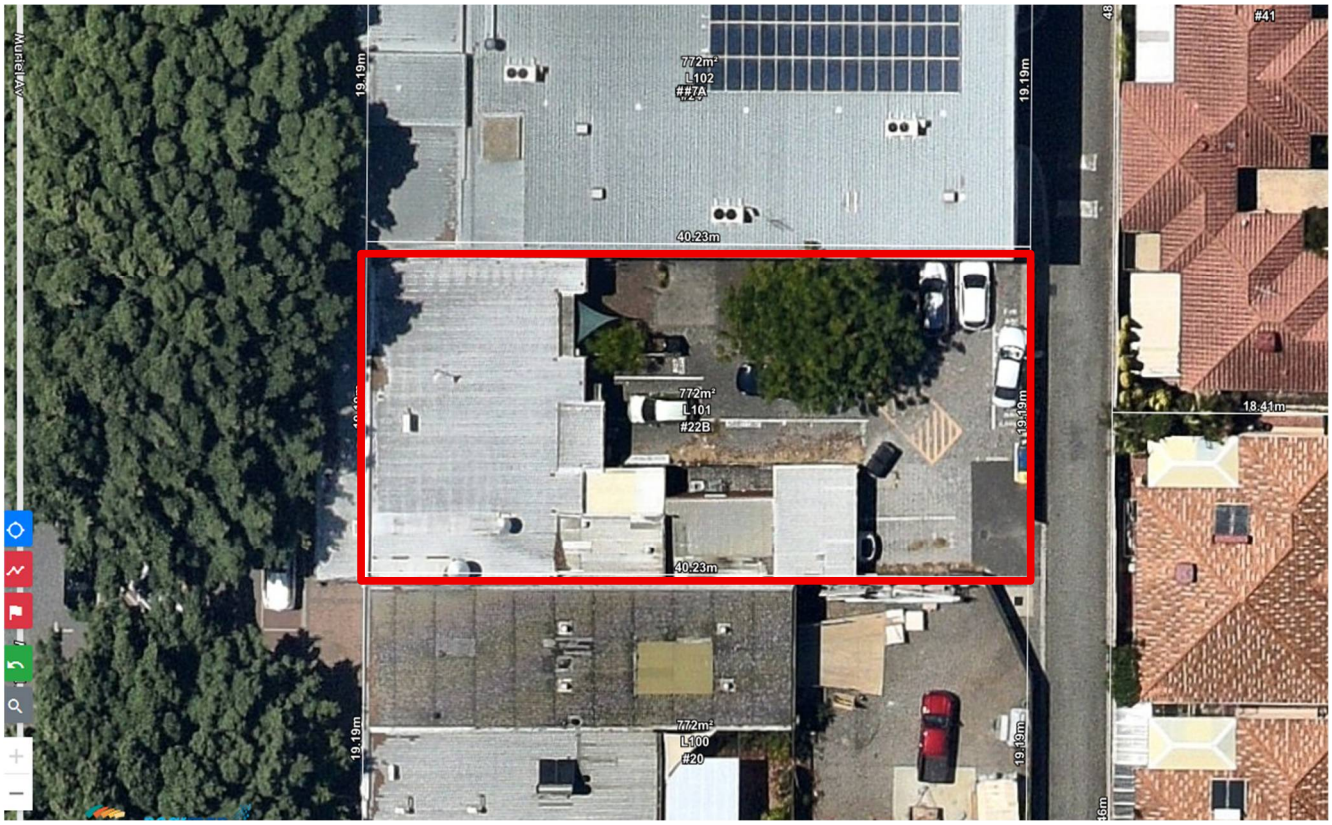

Figure 2 - Aerial Site Plan (Nearmap). The subject land contains various structures, which will be removed as part of this application.

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Figure 3 -The existing development on the subject land. The top photo is along the land's Muriel Avenue frontage and the bottom photo is from the Azurite Lane.

4.2 Character of Locality

A review of the existing and future character of the immediate locality has concluded that there is no defined or heritage character worthy of retention. The subject and forms part of an existing commercial strip along Muriel Avenue, which comprises both single and two storey buildings (see Figure 4). It is viewed that the current commercial development on the subject land is low scale and represents under development within the Murial Avenue commercial precinct.

The surrounding has been experiencing a transition from the older housing stock to more grouped dwelling type development. The current housing stock within the includes single and two storey developments of single and two storey built form (predominantly pitched roof structures) (see Figure 5).

Figure 4 – Examples of existing developments within the Muriel Avenue commercial strip. The current development on the subject and comprises a poor built form character and represents under development of land within an established local centre.

Figure 5 – Examples of residential developments within the immediate area.

In addition to the above, the subject land is located in close proximity to the Innaloo Activity Centre which comprises greater intensification of developments. As such, the proposed development on the subject land is considered to be appropriate in terms of orderly and proper planning.

It is considered reasonable to conclude that the character of the locality and the local streetscapes are not uniform, is varied in terms of the current built form, does not reflect any specific character or form and is currently in a transitional period of re-development to reflect the medium density coding of the immediate area.

In light of the above, it is contended that the proposed construction of a mixed use development on the subject land is unlikely to have a negative impact on the existing character and amenity of the local streetscape or within the Muriel Avenue commercial strip and that the development reflects the intended

character and built form anticipated within the commercial areas. As such, it is contended that the proposed development will provide a positive contribution to the immediate locality, whilst providing a diversity of housing types and deliver employment opportunities within close proximity to various services and infrastructure.

4.3 Essential Services

The subject land is served by an extensive range of essential service infrastructure including power, water, reticulated sewerage, stormwater drainage, gas and telecommunications (see Figure 6).

Figure 6 – The existing services in and around the subject land. Services include water, sewerage, electricity and telecommunications (MNG Mapping).

The subject land is also served by an efficient local and district road network with convenient access to Scarborough Beach Road, Cedric Street and the Mitchell Freeway. The area is well serviced by public transport, including bus routes along various nearby roads and easy access to the Stirling Trains Station (see Figure 7 – Public Transport Network).

The subject land is also well served by a pedestrian path network along the local road network (including along Muriel Avenue). It is contended that the subject land's good access to public transport and a pedestrian path network will provide an alternative form of transport for the future occupants and visitors to the development.

Figure 7 – Public Transport Network ('Premise')

5.0 DEVELOPMENT PROPOSAL

This application proposes to construct a three (3) storey building to accommodate a mixed use development comprising six (6) multiple dwellings to provide much needed housing within the Innaloo locality and the provision of two (2) commercial tenancies on the ground floor.

The key details of the proposed development on the subject land includes the following:

i) The development will include the following dwelling configurations:

- Six (6) three bedroom/two bathroom dwellings; and
- Two (2) commercial tenancies comprising an area of 78.29m^2 each (i.e. 'Shop') on the ground/street level of the development with frontage to Muriel Avenue;

ii) The development will have a central foyer area than will provide access to both the residential and commercial components of the development;

iii) Construction of seven (17) on-site car parking bays at ground level, including one (1) ACROD bay. All vehicular access will be from the rear right of way;

iv) Each dwelling will be provided with a storeroom with easy access;

v) Provision of four (4) on-site bicycle parking bays to service the development;

vi) Energy initiative to be incorporated within the development to satisfy the provisions of Element 4.15 ('Energy efficiency') of Volume 2 of the R-Codes include the installation of instantaneous constant flow hot water units to service the multiple dwellings in lieu electric storage system, installation of solar panels to provide an energy innovative solution, roof structures will provide shading for windows to reduce internal temperatures, installation of high-quality insulation, installation of LED lighting throughout the facility and installation of waterwise fixtures;

vii) Construction of bin storage area located to the rear of the building, with all bins being services from the right of way (refer to the waste management plan); and

viii) Installation of landscaping throughout the development, including the planting of new mature trees and associated deep soil zones. A landscaping plan has been prepared in support of the application.

The external facades of the proposed new development will be constructed using high quality finishes that will complement and enhance the local streetscape, with all on-site car parking being screened from the public realm (i.e. access located along the right of way frontage of the site). All street/laneway frontages of the development will include balconies and/or major openings to habitable rooms to assist with providing an active frontage and improved passive surveillance of the public realm (see Figure 8 – Front Facade).

Copies of the proposed site development plans and building elevation drawings are provided herewith for review and consideration (see Appendix 2 – Site Development Plans).

Figure 8 – The proposed facades of the development.

Anticipated Operations - Non-Residential Uses

At this stage tenants for the ground floor commercial tenancies have yet to be established. As such, the following details are provided as an indication of the operation of the various non-residential ('Shop') uses:

- Each shop would have one to two staff (maximum total of 4 staff for both tenancies) at any one given time; and
- The hour/days of operation of the shop would reflect other similar uses along the commercial strip. As such, the anticipated operating hours would 8.30am to 5pm Mondy to Saturday and closed on Sundays.

Landscaping Plan

A landscaping plan has been prepared by 'Childscapes' in support of the proposed development on the land (see Figure 9). The plan illustrates the planting of various tree/shrubs throughout the development, including within the car parking area and along the front façade of the building on the upper floor.

The proposed landscaping will enhance the development when viewed from the public realm and will provide for sufficient protection from the elements (in particular during the hot summer months).

As outlined previously within the report, the Muriel Avenue road reserve comprises large mature street trees that will not be impacted by the proposed development on the subject land (see Figure 2 – Aerial

Site Plan). The street trees provide shade (protection from the western summer sun) for the building and provide a impressive streetscape.

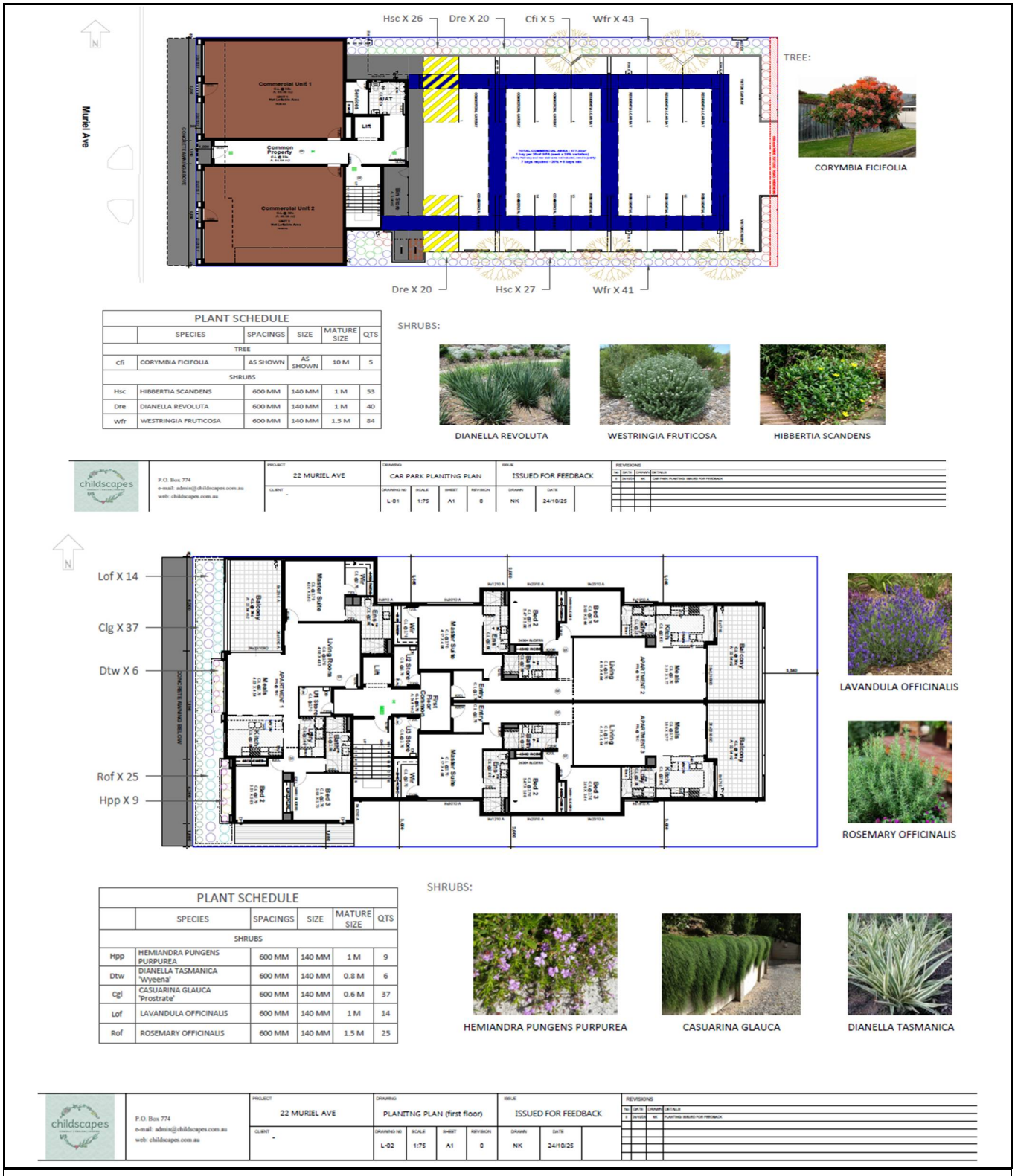


Figure 9 – Landscaping plan prepared in support of the proposed development of the subject land.

6.0 STATUTORY CONSIDERATIONS

6.1 Metropolitan Region Scheme

The subject land is currently classified 'Urban' zone under the Metropolitan Region Scheme (MRS) (see Figure 10 – MRS Map).

It should be noted that the zones and reservations prescribed by the MRS are broad categories only that are intentionally not precisely defined or limited in order to enable a flexible approach to town planning. The following definition is provided as a guide to its stated purpose/s in the MRS:

*"**Urban Zone** - Areas in which a range of activities are undertaken, including residential, commercial recreational and light industry."*

The proposed development (i.e. mixed use, including multiple dwellings) is considered to be consistent with the defined intent of the land's current 'Urban' zoning classification under the MRS, as the development will allow for increased housing and housing diversity within a well serviced area. Given this, the proposed development may therefore be approved.

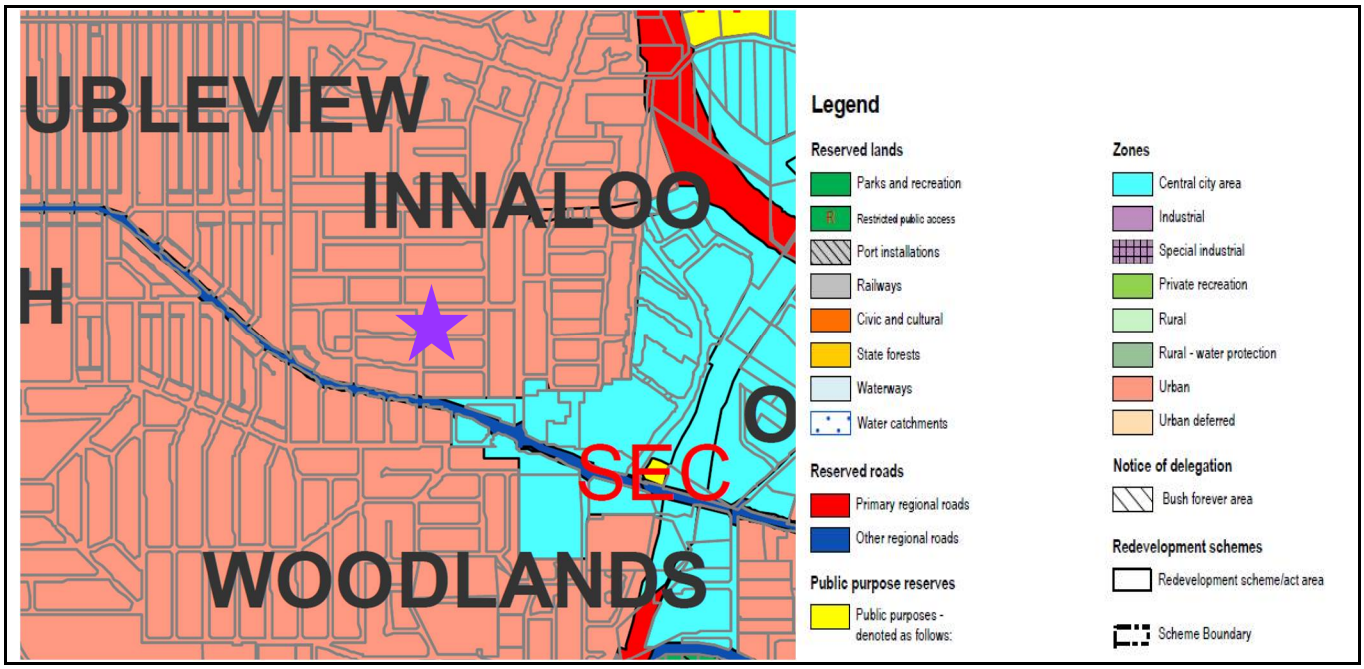


Figure 10 – MRS Map

6.2 City of Stirling Local Planning Scheme No.3

Lot 101 is classified 'Local Centre' zone under the City of Stirling's current operative Local Planning Scheme No.3 (LPS No.3 (see Figure 11).

Clause 5.3.2 of the City's LPS No.3 prescribes that any residential developments not within 'Residential' zone (such as the subject land) is to comply with the relevant requirements under the R80 density coding.

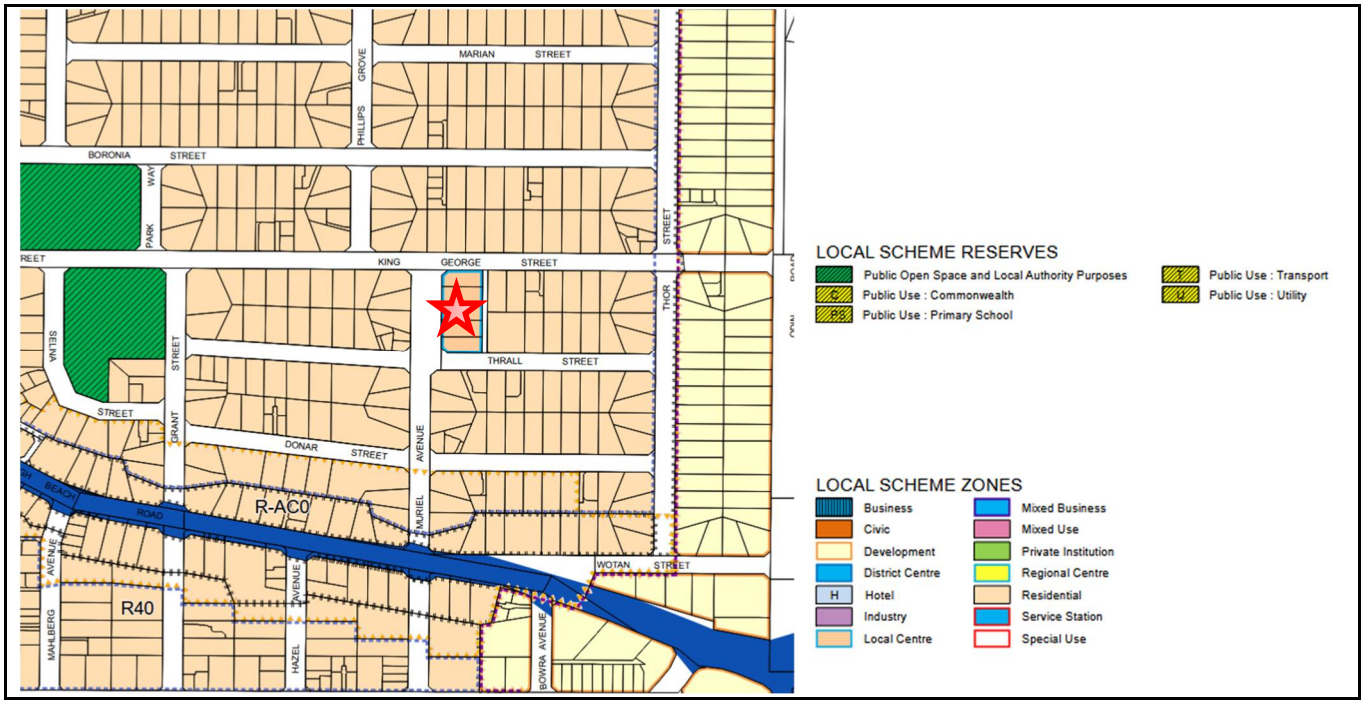


Figure 11 – Zoning Map (LPS No.2)

Schedule 1 of LPS No.3 provides the definitions for the various uses that would apply to this application. Table 1 below provides an overview of the land use definitions and permissibility within the zone:

Table 1– Land Use & Permissibility

LAND USE	DEFINITION	USE PERMISSIBILITY
Shop	*Means premises used to sell goods by retail, or hire goods, but does not include a showroom or fast food outlet.*	*Permitted ("P") use meaning that the use is permitted by the Scheme providing the use complies with the relevant development standards and the requirements of the Scheme.*
Multiple Dwelling	*Means a dwelling in a group of more than one dwelling on a lot where any part of the plot ratio area of a dwelling is vertically above any part of the plot ratio area of any other but:* • *does not include a grouped dwelling; and* • *includes any dwellings above the ground floor in a mixed*	*Discretionary ("D") use meaning that the use is not permitted unless the Council has exercised its discretion by granting planning approval.*

In addition to the above, LPS No.3 provides a note under the Table 1 ('Zoning Table') that 'Multiple Dwellings' are not permitted at ground level on land classified 'Local Centre' zone.

It is contended the proposed development and use of the land as depicted in this application falls comfortably within the aforementioned land use definitions prescribed in the relevant planning document and in Table 1 above.

Council's stated objectives for all land classified 'Local Centre' zone under LPS No.3 are:

a) To provide for a limited range of small-scale retail, commercial and community facilities to meet the day-to-day needs of the immediate neighbourhood.

b) To ensure safe and convenient access to facilities, in an environment which is conducive to pedestrian movement.

c) To ensure development is sited and designed so as to reinforce a sense of place and attractive streetscapes

It is contended that the proposed mixed use development on the subject and is consistent with the stated objectives of the 'Local Centre' zone for the following reasons:

- It will provide for a range of housing choice/diversity and allows for an increase in density to service the needs of the community;
- It will provide for active uses at ground level including small retail tenancies that could accommodate business that offer day-today needs for the immediate neighbourhood;
- It will provide for a development that contains a high density and creation of employment opportunities in close proximity to various key nodes, including a key public transport hub;
- It will assist with providing a wide range of housing types and densities within the immediate locality, which will cater for varying household structures and demographics;
- It will foster the re-development of the land to provide for significant improvements to the current levels of passive surveillance of the local streetscape, will add to the diversity of housing stock within the immediate locality and provide a development that will include good connectivity between both the public and private realms;
- It will provide for increased usage of the nearby public transport network, reduced the dependency of motor vehicle usage and support the nearby activity centres; and
- It will provide for greater usage of the commercial strip and reinforce a sense of place and enhance the streetscape.

6.3 City of Stirling Local Planning Policy No.6.12 - 'Public Art on Private Land'

The City of Stirling's Local Planning policy No.6.12 entitled 'Public Art on Private Land' seeks to improve the appearance and amenity of places and improve the vibrancy and character of an area. The proposed development intends to local/place the artwork along the land's Muriel Avenue frontage (i.e. underside of the awning of the development) (see Figure 12).

Preliminary discussions have been held with the appointed artist, more details of the artwork being provided to the City of Stirling once a development approval has been issued. As such, it is requested that an appropriately worded condition be imposed on any development approval granted that the details, approval and installation of the public artwork be obtained prior to the completion/occupancy of the development.

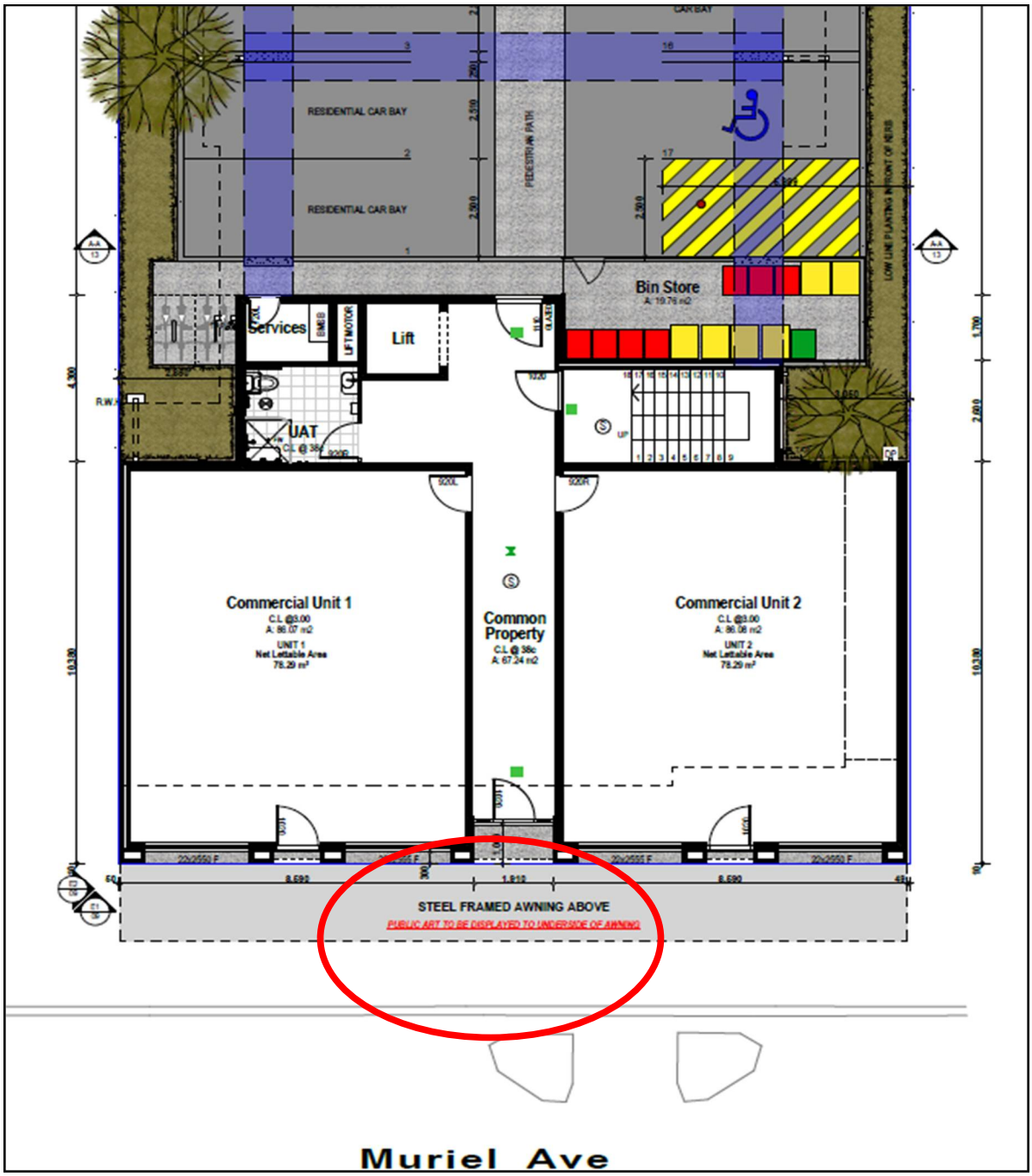


Figure 12 – Location of public artwork (marked in red)

6.4 Directions 2031 and Beyond

'*Directions 2031 and Beyond*' is the Western Australian Planning Commission's (WAPC) strategic framework for guiding development of the Perth Metropolitan Region to a sustainable future. At the centre of '*Directions 2031*' is an enhanced emphasis on growth management in a bid to accommodate future anticipated population growth within Perth, obtain better use of existing infrastructure and provide for a sustainable city including improved housing affordability. This philosophy is also being depicted in the Commission's recent document entitled *'Perth and Peel 3.5 million'*.

The future development of the subject land to accommodate a mixed use development, including six (6) multiple dwellings will facilitate the provision of additional housing within an established commercial area and in close proximity to a key Activity Centre within the Perth Metropolitan Region that contains a wide range of existing infrastructure (including public transport, commercial use, public open space reserves and a comprehensive cycle network). Overall, the development will provide for additional housing, housing diversity and promote the consolidation of urban growth within an existing urban area in a manner consistent with the strategic framework outlined in 'Directions 2031 and Beyond'.

As such it is contended that the proposed development on the subject land is consistent with the aims and objectives of '*Directions 2031 and Beyond*' and will make a beneficial contribution to the future development and sustainable growth of the Perth Metropolitan Region in general.

6.5 Perth & Peel @ 3.5 Million

'Perth & Peel @ 3.5 Million' is the State Government's high-level vision for the growth of the Perth and Peel region to accommodate the future anticipated population growth, which is predicated to be 2.9 million people before 2031 and 3.5 million people before 2050.

In order to accommodate the aforementioned population growth, the document aims at the creation of a more consolidated urban form that includes 53% of future development within the greenfield area and 47% of future development in the current urban area (i.e. infill development). The proposed development will allow for the provision of increased housing availability within the Innaloo area. As such, the development will assist with the City of Stirling meeting the targets set by the State Government for the delivery of additional housing within the existing urban area, within a commercial strip and in close proximity to a key Activity Centre.

In light of the above, the proposed multiple dwelling development on the subject land accords with the aims of '*Perth & Peel @ 3.5 Million'*.

6.6 Bushfire Prone Areas

The subject land has not been identified by the Department of Fire & Emergency Services (DFES) as being located within a designated 'bushfire prone area' (see Figure 13).

In light of the above, this application does not require the preparation of a BAL report to address any bushfire matters.

Figure 13 – DFES Bushfire Mapping

6.7 State Planning Policy No.5.4 – 'Road & Rail Noise'

The subject land is not located within close proximity to a regional road and/or railway network (see Figure 14 - PlanWA). As such, this development application is not required to address the provisions of State Planning Policy No. 5.4 entitled *'Road and Rail Noise' (SPP 5.4) in terms of road and/or railway noise.*

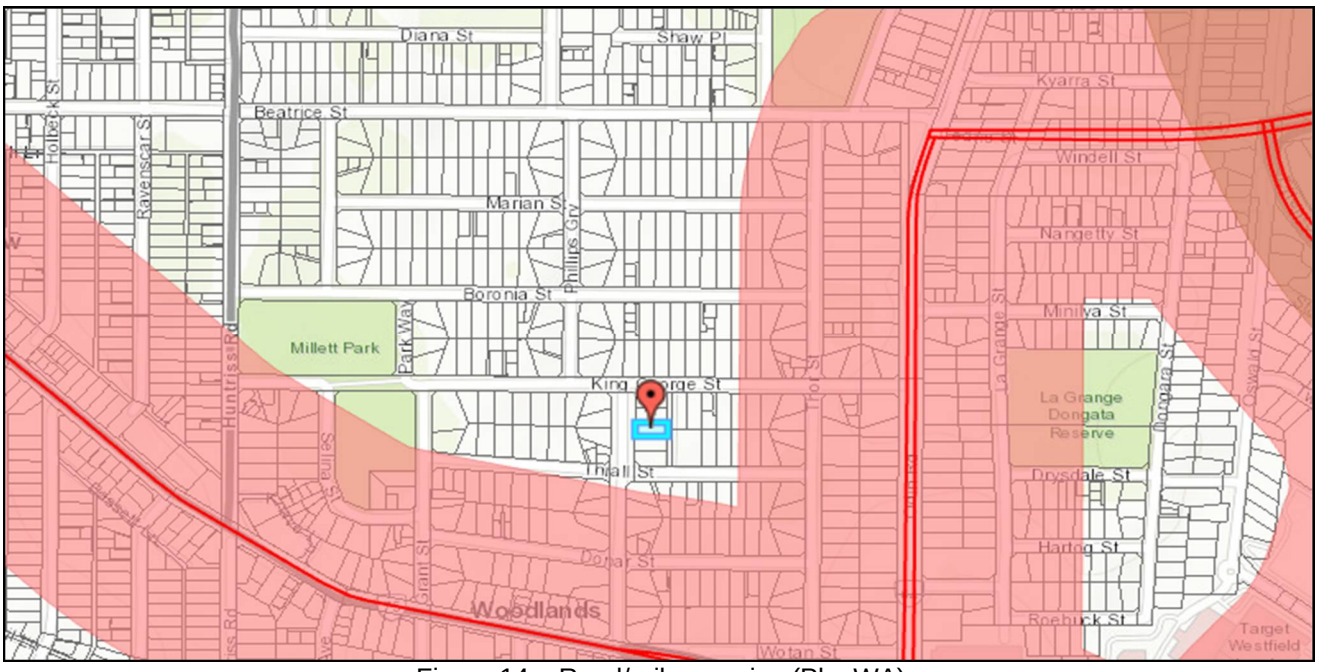


Figure 14 – Road/railway noise (PlanWA)

6.8 Contaminated Site Investigation

A search of the site under the contaminated sites register has revealed that the land does not have any contamination (see Figure 15). In addition, the subject land is not impacted by floods plains, Bush Forever site and/or acid sulphate soils.

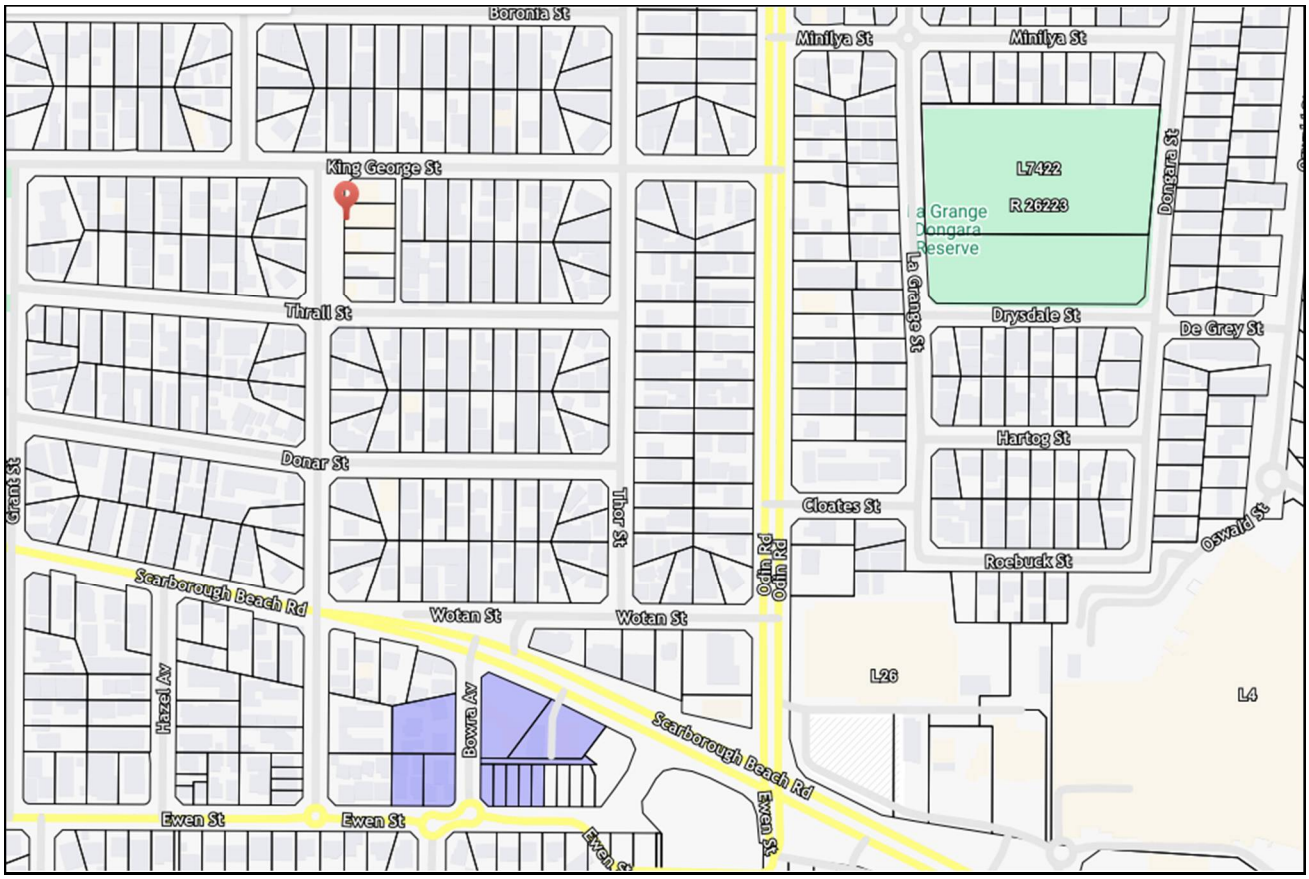


Figure 15 – The subject land is not identified as a contaminated site (MNG Mapping). Contaminated sites are identified in purple.

7.0 STATE PLANNING POLICY NO.7.0 – DESIGN OF BUILT FORM ENVIRONMENT

State Planning Policy No.7.0 entitled 'Design of Built Environment' (SPP No.7.0) addresses the design quality of the built environment across all planning and development types in order to deliver broad economic, environmental, affordable and cultural benefit. The aim is to provide for improved development outcomes throughout the State and is a key consideration when assessing developments.

The following table provides responses to the 'design principles' outlined with the Western Australian Planning Commission's State Planning Policy No.7.0 for consideration by the City of Stirling and the DAP:

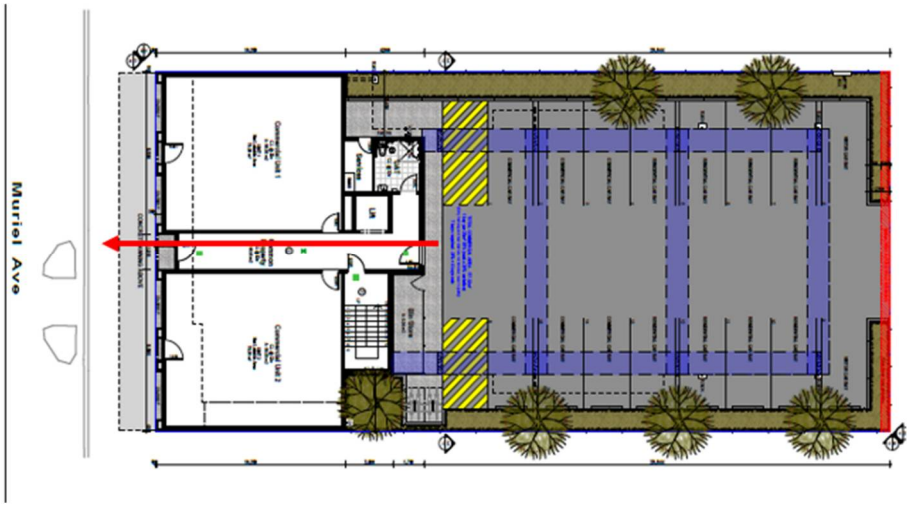
Table 2 – Design Principles

DESIGN PRINCIPLE	RESPONSE
Context and character *"Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place."*	• A review of the immediate locality has identified that there is no distinct character or heritage value within the area. The current built form varies from the older single dwellings which reflects the historical low density development of the area, to large grouped and multiple dwelling developments emerging in the recent years. • The subject land is located within the Muriel Avenue commercial strip that services the local community/catchment. • The commercial strip include a number of older (run-down) buildings ranging from single storey to two storey. • The proposed development will include commercial use on the ground floor (activation of the street) and six (6) multiple dwellings to provide housing diversity. • The proposed mixed use development on the subject land has been designed to reflect a modern built form and an active frontage. It is viewed that the proposed development will enhance the streetscape by removing/replacing the existing run-down building on the land. • Vehicle parking will be from the rear right of way and screened from the public realm. • The new development on the subject land will provide distinguishable architectural features and high level of passive surveillance of the public realm. The articulated front façade of the development is distinctive and will provide a sense of place for the future occupants of the development. • It is concluded that the proposed development reflects upon the anticipated development within a commercial centre encouraged by the City's planning framework. As such, the proposed built form on the new development on the subject land reflects the current planning framework and is mindful of the anticipated built form for the locality.  
Landscape quality *"Good design recognises that together landscape and buildings operate as an*	• A review of the subject land has revealed that there is no significant vegetation on the subject land. As such, there is no opportunity to retain existing vegetation and that the proposed development will be an improvement on the current situation on the land, including increasing the canopy coverage over the land.

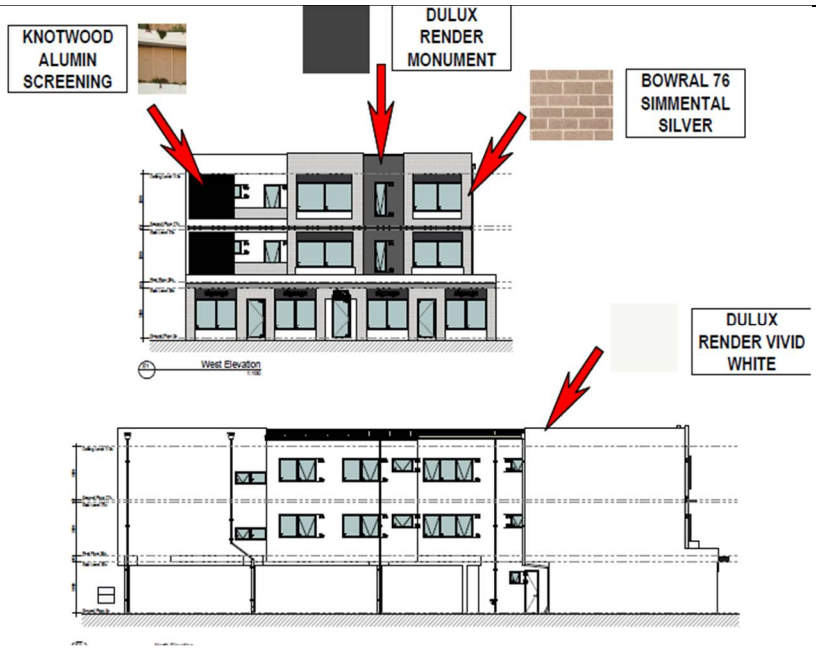
integrated and sustainable system, within a broader ecological context."	• The Muriel Avenue road reserve contains large mature trees that provides protection from the western summer sun and enhances the streetscape. The proposed development on the land will not impact the existing tree canopy. • Given the 'city centre' type development proposed for the land, the development will include some landscaping at ground level and landscaping along the façade of the first floor. • All car parking areas will be covered to reduce hardstand exposure to the sun. • A landscaping plan has been prepared by a consultant. 
<u>Built Form and scale</u> *"Good design provides development with massing and height that is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area."*	• The proposed development features good massing as the façade is broken up by multiple elements and articulation, including the use of varying materials (i.e. render, glass, landscaping planters and feature panelling) and the inclusion of open balconies along the street façades. Given these key elements, it is contended that the future development on the land will contribute to the desired built form character of the streetscape and the commercial centre in general. • The ground floor will include commercial tenancies to provide activation at street level. • The development includes an entry corridor from the street to the lift or foyer area for the residential component. • The development reflects a modern built form/style that will enhance the existing commercial strip and reflects the current planning framework. • The proposed development will be three (3) storeys and is reflective of a 'city centre' type development anticipated within a commercial centre. • The development will also provide activation of the rear right of way and include improved passive surveillance. • The bulk and scale of the development reflects similar built form expected and encouraged within a commercial centre. In addition, the proposed built form is consistent with the emerging bulk and scale anticipated within the area. • The development will include the concealment of the resident car parking area behind the front setback area and screened from view from the public realm.

Functionality & build quality *"Good design meets the needs of users efficiently and effectively, balancing functional requirements to deliver optimum benefit and performing well over the full life-cycle."*	• The development will have good activation of the street, with balconies and major openings overlooking both Muriel Avenue and the rear right of way. • Good access to the building will be provided from both the street and the car parking area. • The design of each dwelling within the development is considered to be functional, with the internal living area for each dwelling being designed to be utilised in conjunction with the external living areas to create large entertainment areas. • The development has been designed to conceal the car parking area on the ground floor. Sufficient parking will be provided for the occupants and visitors. • The internal living area will have good access to outdoor space to provide for a large usable space of entertainment. • The commercial tenancies will have good exposure to the street and allow for activation of the street. • The development will include the use of robust materials and construction methods that will comprise a long life cycle. Furthermore, the proposed development will be constructed to comply with the National Construction Codes and appropriately engineered. • The good access to natural light and ventilation for each dwelling will allow for reduced usage of artificial lighting and ventilation of the dwellings and reduce long term running cost of the dwellings (reduce electrical use). • The bin storage area is enclosed and located so that is will not be visible from the public realm and will not impact the amenity of any dwellings in terms of appearance and/or odours. • Each dwelling has been provided with sufficient storage, on-site car parking and an outdoor living area of sufficient dimension and width to meet the needs of the future occupants. This will provide for usable internal and external areas.
Sustainability *"Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes."*	• The proposed development has been designed to access natural light where possible (given the orientation of the lot), It is contended that the design of the proposed development will assist with reduced running costs of each dwelling. • Some energy initiative that could be applied include instantaneous hot water systems, installation of waterwise fittings and solar panels. • The new building has been provided with good cross ventilation and an open outlook to adjoining street/ROW. • The existing trees within the Muriel Avenue road reserve will provide adequate shading during the hot summer months. • The design of the development has allowed for the car parking area to be under the building and therefore providing protection of the hardstand area from the sun (reduce heat generated by the hardstand). • The proposed development will assist with the provision of a diversity of housing stock within an existing commercial centre, in close proximity to a key transport node and an Activity Centre. The close proximity to public transport will assist with reducing motor vehicle dependency and assist with reducing pollution generated by car usage. In addition, the proposed development will assist with

	the provision of additional housing within a well services area which is consistent with the State Government's aim to increase the use of the existing infrastructure and creating vibrant community hubs. • The development will include bicycle parking bays to encourage bike usage and limit motor vehicle usage.
Amenity *"Good design optimises internal and external amenity for occupants, visitors and neighbours, contributing to living and working environments that are comfortable and productive."*	• Each dwelling features a living area which can be used in conjunction with the external living area. This creates a usable internal and external area that is functional and will accommodate the needs of the future occupants of the development, which provides sufficient area to entertain visitors to each dwelling. • The outdoor living areas are considered to be well designed, with all dwellings containing an outlook over the street or ROW to provide a view, promote passive surveillance of the street and allows for effective connectivity with the public realm. This includes providing passive surveillance over street. • Adequate boundary setbacks have been provided for adequate separation between the building on the subject land and the adjoining properties, therefore limiting any potential impacts associated with bulk, scale, visual privacy, noise etc. • Given that the subject land is located within an existing commercial centre, there are opportunities for the future residents of the development to live and work locally. As such reducing travel time and improving the living quality for the occupants. • Adequate storage and bicycle parking is also provided within the development, along with a bin storage area located in a position to minimise any impact on the future occupants of the development and allow for easy access. • The development has been designed to allow for easy access for both the occupants and visitors to the development. • The car parking area will be concealed within the development and will not have an adverse impact on the streetscape. • The development, including various openings and balconies orientated towards Muriel Avenue and the rear right of way to provide an outlook and provide for improved passive surveillance. • Good pedestrian paths are provided for the occupant and visitors. • The commercial tenancy on the ground floor will have good exposure to the public realm and provide activation of the development at street level.
Legibility *"Good design results in buildings and places that are legible, with clear connections and memorable elements to help people find their way around."*	• The development is legible in that it provides pedestrian access along Muriel Avenue (easy & safe access). • The vehicular access driveway and pedestrian entry are well separated (i.e. provides safe access). • The development provides screening of the car parking area to reduce the overall impact on the streetscape. • The upper floor frontage of the development will include large windows and balconies that will provide an active frontage along the street.

	• The main pedestrian entrance to the building is clear and secure. This will include signage. • The development comprises good connectivity for both the commercial and residential uses. 
Safety *"Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use."*	• The development proposal provides multiple major openings for various dwellings facing the street to avoid enticing criminal activity and intrusion. The development will have sufficient surveillance over both the public and private realms. • The resident car parking area and associated facilitated such as the stores and bin storage are appropriately located within the development to avoid enticing criminal activity and intrusion. • The development will include security card access (and intercoms) to restrict access to lifts and the internal foyer areas. This will provide an element of security for the future occupants. • The inclusion of major openings and balconies overlooking Muriel Avenue and the rear right of way will provide a sense of security for local residents. • The vehicle access point comprises adequate visual sightlines to provided a safe pedestrian environment and adeaute two-way vehicle movemnts to allow for safe access and egress for the vehicles associated with the development. • The develoment has been designed to allow for all vehicles to entry the street in a forward gear. The vehicle access point comprises adeqaute visual sighlines to provided a safe pedstrian envionment.
Community *"Good design responds to local community needs as well as the wider social context, providing buildings and spaces that support a*	• The proposed development will include open balconies facing the adjoining street and right of way to provide activation of the street and an element of community interaction between the public and private realms (improved passive surveillance of the public realm). • The development will assist with urban consolidation and assist with slowing down urban sprawl.

diverse range of people and facilitate social interaction."	• The smaller dwelling size (as opposed to a single detached dwelling) will provide an opportunity for residents within the locality to downsize and remain within the suburb with easy access to public open space and the various nodes/services offered by the commercial centre. The proposed dwelling types also cater for a variety of demographics such as first homebuyers, singles and couples without children. • The development provides affordable housing to the community, whilst increasing the housing density within the Muriel Avenue commercial centre. In addition, the development will provide small housing typology to accommodate occupants working within the centre. • The proposed development has easy access to large public open space reserve and recreational facilities that provide a recreational space for the future occupants of the development. • The proposed development accords with the State Government's directive to increase residential densities within an existing commercial centre, in close proximity to a key Activity Centres and in close proximity to public transport network to provide affordable housing within these important nodes. • The increase of densities and the provision of additional housing within close proximity to public transport will assist with reducing motor vehicle usage and reduce the extent of the Perth Metropolitan area expanding into the rural and bushland areas along the City's urban fringe. This will assist with providing a positive outcome for the environment and the community in general. • In addition to the above point, the increase in densities and housing within the existing urban fabric will limit the extension of the Perth urban area outwards (i.e. reduce the impacts of 'Urban Sprawl', which results in high costs to the community in terms of infrastructure costs).
<u>Aesthetics</u> *"Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses."*	• Aesthetics of the proposed street facing facades is highly demonstrated by the use of a variety of materials and renders, inclusion of balconies/terrace and major openings of varying sizes. • The proposed façade provides visual interest and an active frontage that provides a connection between the public and private realms within the residential complex. This includes providing an articulated front facade. • The design of the proposed development incorporates sufficient and safe pedestrian movements, whilst allowing for ease of access to various on-site facilities such as bin storage areas, storerooms and car parking. • The proposed development allows for good massing and bulk and the street, which is expected within a commercial centre environment. • The proposed development has been designed to include active spaces (i.e. balconies, outdoor living area) and landscaping, which will provide an attractive and articulated front façades. The impressive façade designs will appeal to all passers-by and engage interest from the public realm.



8.0 DEVELOPMENT STANDARDS

8.1 General Development Standards

The City of Stirling have adopted Local Planning Policy No.4.2 entitled 'Mixed Use Design Guidelines' that will apply to this application, along with any other relevant Local Planning Policy. Where a development standard is not prescribed within the Local Planning Policies, the standards prescribed within Volume 2 of the Residential Design Codes (R-Codes) will apply. As previously mentioned, the R80 density coding will apply to the subject and.

Table 3 below provides an assessment of the proposed development to assist with the consideration of the application against the applied development standards:

Table 3 – Assessment Table

DEVELOPMENT COMPONENT	PRESCRIBED DEVELOPMENT STANDARDS	PROPOSED	COMPLIANCE
SETBACKS			
Primary street	Nil setback	Nil setback proposed	Yes
Secondary street (right of way)	Nil setback	Min setback – 3.34 metres	Yes
North side setback (commercial)	Nil setback	Min – Nil setback	Yes
South side setback (commercial)	Nil setback	Min – Nil setback	Yes

GENERAL/OTHER			
Building height	Maximum 3 storey (Max – 18 metres)	Maximum 12.4 metres & three (3) storeys	Yes
Ground Floor Use	Commercial use (i.e. café & shops)	Proposed commercial uses (i.e. shop tenancies)	Yes
Ground floor glazing	Minimum 50% glazing		
Awning over verge	• A depth of 2.0 metres • Minimum2.7 metre clearance to signage/lights	• Minimum clearance of 3.514 metres • A depth of 2.0 metres	Yes
Articulation along street frontages	Primary street facade to include an active frontage varying use of materials/colours, balconies & openings	Proposed development include varying setback, use of materials and colours to provide articulation and visual interest. The façade will include balconies and major openings	Yes
Storage/refuse areas	One bin store required, screened from the street.	Screened bin store provided.	Yes
Vehicle access/egress	Vehicle access from ROW, setback from corner truncation and vehicles to return to street in a forward gear.	Access from ROW, not a corner lot and all vehicles to return to local street network in a forward gear	Yes
Pedestrian access	Definable entry point from street, universal access.	The building comprises a definable entry point, provides pedestrian connection with foot path network along the street. In addition, universal access is provided.	Yes
KEY R-CODE PROVISIONS			
Element 2.4 – Side & rear setbacks	Min - 3 metres (parapet wall allowed to side boundaries as per Local Planning Policy 4.2)	Parapet wall to residential level is nil to the northern boundary (allowed) North- 2.05 metres South – 1.55 metres	No (Refer to justification)
Element 2.5 - Plot Ratio	Min – 1.0 (772m^2)	Proposed – 944.35m^2 or 1.22	No (Refer to justification)
Element 3.5 - Visual privacy (R50)	• Bedroom/study – 3.0m • Other habitable rooms – 4.5m • Balcony – 6.0m	• Bedroom/study – Bedroom 2 on each level comprises a setback of 2.05 metres • Other habitable rooms – Complies • Balcony – Complies	No (Refer to justification)
Element 4.1 – Solar & daylight access	70% of dwellings providing solar access	Greater than 70% of dwellings provided with solar access	Yes
Element 4.2 – Natural ventilation	60% of dwelling comprising natural ventilation	Greaer 60% of dwellings provide with natural ventilation.	Yes

Element 4.3 – Size & layout of dwellings	**Table 4.3a Minimum floor areas for dwelling types** Dwelling type: Minimum internal floor area Studio: 37m² 1 bed: 47m² 2 bed × 1 bath[1]: 67m² 3 bed × 1 bath[1]: 90m² [1]An additional 3m² shall be provided for designs that include a second or separate toilet, and 5m² for designs that include a second bathroom. **Table 4.3b Minimum floor areas and dimensions for habitable rooms** Habitable room type: Minimum internal floor area: Minimum internal dimension Master bedroom: 10m²: 3m[1] Other bedrooms: 9m²: 3m[1] Living room – studio and 1 bed apartments: N/A: 3.6m Living room – other dwelling types: N/A: 4m [1]Excluding robes	• Dwelling sizes comply • Bedroom dimensions greater than 3 metres. • Bedroom area greater than 9m² • Living area dimensions min 4 metres	Yes
R-Code Element 4.4 – Private open space & balconies	• Single bed – 8m² • Two bed 12m² • Minim dimension of 2.4 metres.	Required areas and dimensions provided as pert R-Codes	Yes
R-Code Element 4.6 – 'Storage'	Each dwelling requires a 5m² storeroom, Min dimension of 1.5 metres	Sufficient storage is provided for each dwelling	Yes
Element 4.8 – Dwelling Mix	20% of apartments have different bedrooms for developments comprising 10 or more dwellings	Development comprises less than 10 dwellings	N/A

The following table provides justification for those aspects of the proposed development on the subject land seeking a variation to the 'deemed to comply requirements' of the relevant planning framework.

Table 4 – Justification

DEVELOPMENT STANDARD & 'ELEMENT OBJECTIVES'	PROPOSED VARIATION TO 'DEEMED TO COMPLY REQUIREMENTS'	JUSTIFICATION
R-Code Element 2.4 – 'Side and rear setbacks' *O 2.4.1 Building boundary setbacks provide for adequate separation between neighbouring properties.*	The application proposes that the following aspects of the proposed development on the subject land do not meet the 'acceptable outcomes' of Element 2.4 of the R-Codes (Vol 2): i) First floor comprises a minimum setback	1. The City's Local Planning Policy No.2.4 allows for a nil setback to the side boundaries for a mixed use development. As such, the proposed variation to the side lot boundaries when considering the R-Code provisions is deemed to be minor and will not have an adverse impact on the adjoining properties and/or the streetscape in terms of bulk and scale. 2. The building comprises varying setbacks from the side boundary to provide articulation when viewed from the adjoining properties, which is considered to be a better planning outcome than a façade comprising a flat 3 metre

O 2.4.2 Building boundary setbacks are consistent with the existing streetscape pattern or the desired streetscape character. *O 2.4.3 The setback of development from side and rear boundaries enables retention of existing trees and provision of deep soil areas that reinforce the landscape character of the area, support tree canopy and assist with stormwater management.* *O 2.4.4 The setback of development from side and rear boundaries provides a transition between sites with different land uses or intensity of development.*	of 2.05 metres from the northern side boundary in lieu of 3 metres; ii) Second floor comprises a minimum setback of 2.05 metres from the northern side boundary in lieu of 3 metres; iii) Second floor comprises a minimum setback of 1.55 metres from the southern side boundary in lieu of 3 metres; and iv) Second floor comprises a minimum setback of 1.55 metres from the southern side boundary in lieu of 3 metres.	setback or a parapet wall along the boundary. 3. The proposed development has avoided the use of parapet walls to limit the overall impact on the adjoining properties in terms of bulk and scale. 4. Further to the above points, the bulk/scale and lot boundary setbacks of the proposed development reflects the anticipated built form within the 'Local Centre' zone. 5. The development provides a compliant rear setback to allow for a sense of separation, natural light to penetrate into the adjoining lots and allow for good levels of passive surveillance over the adjoining right of way. 6. Sufficient landscaping is provided throughout the development. 7. Sufficient separation is provided between the existing buildings on the adjoining lots and the proposed new building on the subject land. 8. The proposed development makes effective use of all available space and provides for the creation of adequate internal and external living areas for each dwelling which will benefit all future occupants. 9. The proposed development will provide an attractive and safe residential environment comprising modern, affordable, high quality housing within a well-established urban area within close proximity to public transport route (i.e. Stirling train station) and the Stirling City Centre ('Activity Centre'). 10. Given that the property is located within a commercial strip/centre and given the development potential, it is contended that overtime all adjoining properties will be developed in a similar manner and may include such minor setback variations. 11. The proposed development is located within a commercial centre which allows for a greater extent of shadow to be cast over the adjoining properties. The shadow cast over the adjoining lots will not have an adverse impact on access to light and ventilation for those developments on the adjoining properties. 12. Those portions of the proposed development comprising a reduced setback from the northern and southern side boundaries will abut existing commercial developments on the adjoining properties (see Figure 2 – Aerial Site Plan). As such, the proposed development on the subject and will not have an adverse impact on any sensitive habitable spaces on the adjoining properties. Having regard for all of the above it is contended that the portion of the new mixed use development on the subject land comprising reduced setbacks from the side lot boundaries satisfies the Objectives of Element 2.4 of the R-Codes, will not have an adverse impact on the local streetscape or the adjoining properties and may therefore be approved.

R-Code Element 2.5 – 'Plot ratio' *O 2.5.1 The overall bulk and scale of development is appropriate for the existing or planned character of the area*	The application proposes that the new mixed use development on the subject and will comprise a plait ratio of 1.22 (i.e. 944.35m^2) in lieu of 1.0 (i.e. 770m^2) permitted by the 'acceptable outcomes' of Element 2.5 of the R-Codes (Vol 2).	1. The proposed development has been designed to include open balconies and major openings orientated towards both the street and the right of way to assist with improved connectivity and passive surveillance of the public realm. 2. The proposed development comprises a commercial component (i.e. shops) and a residential component on the upper floors that will contribute to consolidating the Muriel Avenue commercial centre as an employment and key commercial hub/destination. 3. The proposed mix of residential and commercial plot ratio areas for the new development on the land is consistent with the land use mixes of similar developments within the nearby Stirling Citty Centre area. Furthermore, the development is consistent with the type and scale of development commonly found within an Activity Centre or commercial strip. 4. The proposed variation to the maximum allowable plot ratio for the new mixed use development on the subject land will not have any adverse impacts on the adjoining properties and will in fact enhance development within the Muriel Avenue commercial centre. 5. The proposed development will provide an attractive and safe residential environment comprising modern, affordable, high quality housing within a well-established commercial centre. It is contended that the design of the proposed development, including the use of varying materials, colours and architectural features, will make a positive contribution to the local streetscapes. 6. The proposed development will provide a diversity of housing stock and therefore greater choice for future potential residents in the Innaloo locality. It is significant to note that the proposed development will have access to a variety of amenities including public open space, public transport and other keys activities/uses commonly found within a commercial centre or in close proximity to a key Activity Centre. 7. The extent of variation being sought for this application is consistent with other mixed-use developments approved within the locality and commonly found within key commercial area and/or an Activity Centre throughout the Perth Metropolitan Area. 8. The overall development will comprise a bulk and scale that is reflective of the anticipated built form within a commercial strip and/or within close proximity to a key Activity Centre. 9. The subject land is ideally located within close proximity to the 'Stirling City Centre' and the proposed development will assist with providing increased population within the locality. The strict compliance with the development provisions of the City's local planning policy and Element 2.5 of the R-Codes will result in the loss of dwelling yield within a well serviced area and therefore be contrary State Governments strategic

		direction on increasing housing numbers within the existing metropolitan area. 10. The dwelling within the development have been designed to comprise good internal living areas that will meet the moderns needs of the future occupants. 11. The proposed development will enhance the Muriel Avenue commercial strip by replacing a run-down development with a more modern development. Having regard for all of the above it is contended that the proposed variation to the maximum allowable plot ratio for the overall development on the subject land will not have an adverse impact on the streetscape, reflects the future anticipated development within an existing commercial centre and in close proximity to the Stirling City Centre, will enhance the streetscape, it satisfies the 'objectives' of Element 2.5 of the R-Codes and may therefore be supported and approved.
R-Code Element 3.5 – 'Visual privacy' *O 3.5.1 The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms*	The application proposes that the 3 metre 'cone of vision' from the bedroom 2 windows of each dwelling within the new development on the subject and will extend over the adjoining northern and southern lots contrary to the 'acceptable outcomes' prescribed within Element 3.5 of the R-Codes (Vol 2).	1. The proposed development has been designed to effectively locate all major openings to habitable rooms and the balcony in a manner which avoids direct overlooking of the adjoining properties. It should be noted that the adjoining properties are commercial development and do not have any sensitive habitable spaces they require protecting. In fact, the overlooking from the bedroom windows over the adjoining properties will provide an element of passive surveillance and added security for the commercial uses on the adjoining properties. 2. In addition to the above point, the development on the adjoining northern property compromises a nil setback along the side lot boundaries. As such, any overlooking from the bedroom 2 windows from those dwellings on the northern side of the development will be into a blank wall or roof structure. 3. The extent of the intrusion from the bedroom 2 windows over the adjoining properties (i.e. 950mm) is considered to be minor in nature. 4. The overlooking from the bedroom windows can be attributed to the City's DRP requiring that no highlight windows be provided to enable an outlook from the bedrooms. Any changes to the bedroom 2 windows (i.e. highlight of obscure glazing) would be contrary to the advice received from the City's DRP. 5. It should be noted that a most cases, the area being overlooked on the adjoining properties can be seen from the right of way by the general public. Having regard for the above it is contended that those portions of the 'cone of vision' extending from the bedroom 2 windows of all dwellings within the new mixed use development on the subject and extending over the adjoining properties are minor in nature, do not impact any sensitive habitable spaces associate with the

		existing developments on the adjoining properties, it satisfies the 'objectives' of Element 3.5 of the R-Codes and may therefore be approved.

8.2 On-site Car Parking & Access

The proposed development on the subject land has been designed to provide a total of seventeen (17) on-site car parking bays (including visitor parking and ACROD bays) with vehicular access via the rear right of way known as Azurite Lane (see Site Development Plans). It should be noted that Location B provision of the R-Codes apply due to the land's not being in close proximity to a high frequency public transport network.

Figure 1 of the City's Local Planning Policy (LPP) No.6.7 entitled 'Parking & Access' identified that the subject and is located within 'Local Centre 35 – Muriel Avenue'(LC35). In addition, the Table 1 of the Policy outlines the on-site car parking standards for land within LC35 (i.e. 1 bay per 25m^2 GFA).

The following car parking calculations are provided to assist the City of Stirling and the DAP's assessment of the application and have been formulated with due regard for the parking standards prescribed within the City's Local Planning Policy No.6.7 entitled 'Parking and Access' and Volume 2 of the Residential Design Codes (R-Codes):

Table 5 – Car Parking Calculations

LAND USE	PRESCRIBED PARKING STANDARD	FLOOR AREA OR DWELLING NO.	PARKING BAYS REQUIRED
Multiple Dwelling (3 bedroom)	1.25 bays per dwelling	6 dwellings	7.5 bays
Residential Visitor Parking	1 bay per four dwellings up to 12 dwellings	6 dwellings	1.5 bays
Local Centre (LC35)	1 bays per 25m^2 GFA	156.58m^2 GFA	6.34 bays
Total number of on-site parking bays required for the multiple dwellings			**16 bays**
Total number of on-site parking bays provided			**17 bays**
Total on-site car parking surplus			**1 bay**

As demonstrated by the above table, the proposed mixed use development on the subject land complies with the on-site car parking requirements prescribed within the City's Local Planning Policy No.6.7. in fact, the proposed development will result in an on-site car parking surplus of one (1) bay.

9.0 CONSULTANT REPORTS

9.1 Traffic Impact Statement

A Traffic Impact Statement has been prepared by 'Premise' (Consulting Engineers) in support of this application (see copy attached herewith). The Traffic Impact Statement (TIS) comprises the following conclusions in terms of the proposed development on the subject land:

i) The expected traffic of the proposed subject site is expected to be a 103 vehicular trips per day, 7 vehicular trips in the AM peak hour and 11 vehicular trips in the PM peak hour respectively.

ii) In summary Premise believe that the proposed development will not have a negative impact on the surrounding road network.

In light of the above, it is concluded that the design and location of the proposed development on the land is suitable in terms of traffic movement and generation. Furthermore, it is concluded that the local road network is more than capable of accommodating the traffic movements generated by the proposed development on the subject land.

9.2 Acoustics Report

An acoustic report has been prepared in support of the application by 'Herring Storer Acoustics' (see copy attached herewith). The report has undertaken an assessment of the noise emissions generated by the proposed mixed use development and the potential impact that noise may have on the adjoining and surrounding residential properties.

In light of the above, the acoustic report provide the following conclusion/recommendations:

i) The main source of noise from the proposed development will be from mechanical services consisting of air-conditioning plant. Noise received at neighbouring premises, and premises within the development, from these items need to comply with the assigned noise levels as determined under the *Environmental Protection (Noise) Regulations 1997*.

ii) As the mechanical services could operate during the night, noise emissions from the development needs to comply with the assigned LA10 night period noise level of 43 dB(A) at residential premises. Potentially, noise emissions from mechanical services could be tonal, in which case an +5 dB(A) penalty for a tonal component could be applied to the resultant noise levels. Therefore, the design level at the neighbouring residential premises would be 38 LA10 dB.

iii) The air conditioning for the units is not yet known. Once the design of the system is finalised, an acoustic assessment will be carried out of noise emissions from the mechanical plant and any noise amelioration required will be incorporated into the design to ensure compliance with the *Environmental Protection (Noise) Regulations 1997*.

iv) From experience, we believe that compliance with the above criteria for the night period would be achievable, however, some noise mitigation is likely to be required.

9.3 Waste Management

A waste management plan (WMP) has been prepared by 'CF Town Planning & Development' in support of this application (see copy attached herewith). The proposed waste collection for the development will be undertaken along rear right of way (i.e. Azurite Lane) using a range of bin sizes to address the needs of the various uses proposed within the development.

The WMP concludes that sufficient measures are proposed to ensure that the development can adequately be serviced in terms of waste disposal & collection.

10.0 DESIGN REVIEW PANEL (DRP)

The application has been referred to the Design Review Panel (DRP) at the City of Stirling on 20 November 2025 for consideration and comment. It is noted that the proposed use and development on the land is encouraged by the Panel, with the panel raising a number of design concerns and providing a number of recommendations to assist with improving the functionality/appearance of the development.

Following a review of the comments, the plans prepared in support of this application were significantly amended and has resulted in vast improvements to the design layout of the development. The key changes undertaken include the following:

i) The foyer area on the ground floor has been reconfigured to provide a greater space and an open aspect. This include amend the front door along the building's Muriel Avenue frontage to allow for more glazing to provide improved passive surveillance;

ii) A defined pathway (use of an alternative material) has been illustrated through the car parking area;

iii) Wheel stops have been introduced within the car parking area to allow for more landscaping, along with more trees. This has introduced more deep soil zones for the site;

iv) The concreate awning over the Muriel Avenue footpath has been removed and replaced with the conventional light weight awning;

v) Additional landscaping has been provided to those balconies orientated towards the right of way to enhance the appearance of the building;

vi) The ceiling height for the ground floor has been increased to 3.5 metres;

vii) The bicycle and bin storage areas have been redesigned;

viii) Windows have been included to the stairwell to allow for natural light to penetrate into the area;

ix) The storage room and foyer for the upper floors has been amended to create a large more spacious area;

x) The bedroom 3 window has been reorientated to face east and not to the side boundaries;

xi) Location of the air-conditioning units on the roof, which will be screened;

xii) Security gates have been included along the rear of the property (along the right of way to provide security to the parking area; and

xiii) Skylights added to the upper floor to allow for the penetration of natural light into the buildings.

11.0 SUMMARY OF JUSTIFICATIONS

Having regard for all of the above, it is contended the proposed mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo is suitable and capable of being approved for the following reasons:

- It is consistent with the general objectives of the land's current 'Urban' zoning classification under the Metropolitan Region Scheme.
- The proposed development and use on the subject land are identified as either permitted or discretionary under the City's Local Planning Scheme No.3 and reflects the current planning framework.
- The proposed development on the subject land will complement other similar land use activities that will be developed within this part of the Innaloo and within an existing commercial centre.
- The proposed development will assist with the provision of housing variety within the Innaloo locality within close proximity to various nodes and infrastructure (such as public transport). The development will also assist with providing increased densities within a well-established/serviced area.
- The proposed development will include commercial tenancies at ground level to provide activation of the street, along with providing employment opportunities for residents within the building and immediate locality.
- The proposed development has been designed to have due regard for the development standards prescribed within the relevant planning framework.
- The proposed development will improve the streetscape and levels of passive surveillance along Muriel Avenue.
- The development has been designed to incorporate design features, an active frontage and improved passive surveillance of the adjoining street (i.e. it will oversee the public realm).
- The proposed development will provide opportunity for the development of an attractive and safe residential environment comprising affordable, modern and high quality housing within a well-established urban area.
- The proposed development is unlikely to compromise the existing character, amenity or compatibility of land usage in the immediate locality and is consistent with the future anticipated development for the area.
- The proposal development for the land of 'multiple dwelling' purposes is consistent with the aims and objectives of '*Directions 2031*' and '*Perth & Peel @ 3.5 Million'* and will make a beneficial contribution to the future development and sustainable growth of the Perth Metropolitan Region generally.
- The proposal will assist with the City of Stirling meeting the target set by the State Government for the delivery of additional housing within the existing metropolitan area and will assist with fostering the sustainable growth of the Innaloo area and nearby Activity Centres.
- The proposed development will add to the diversity of housing stock and provide a variety of choice for future potential residents in the Innaloo locality and will help to accommodate the increased demand for housing within a well-developed residential area. Specifically, the development will provide much needed housing for members of the community.

12.0 CONCLUSION

The Innaloo area in and around the Activity Centres is currently experiencing a transitional phase, wherein the older low density housing stock is being replaced by new higher density developments that reflects the City of Stirling's vision for area and accords with the strategic planning framework adopted by the State Government to achieve infill development within the existing metropolitan area and in close proximity to key nodes, whilst providing for commercial activity at ground level. The proposed development has been designed to reflect the scale, built form and character expected within a key centre.

The proposed development has been designed to reflect the scale, built form and character expected within a commercial centre and in close proximity to public transport. Furthermore, the proposed development and location of the property provides a perfect environment to deliver much needed high quality accommodation with premium access to various key nodes.

Whilst the proposed development does seek some variations to the prescribed development standards, it is viewed that this has merit in delivering additional housing densities within a strategic area. As such, the proposed variations comprises sound planning merit and reflects proper and orderly planning for the area.

In light of the above information and justifications, we respectfully request the Metro Inner Development Assessment Panel and the City of Stirling's favorable consideration and conditional approval for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo at their earliest possible convenience.

CF Town Planning & Development
Planning & Development Consultants

APPENDIX 1 – CERTIFICATES OF TITLE

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1157	302

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts
REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 101 ON PLAN 6290

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

HELEN CHRISTOU OF 45 FLOYD STREET TRIGG WA 6029
VICTOR JASON CHRISTOU OF 13 TROY AVENUE MARMION WA 6020
NATASHA LEE STAVRETIS OF 18 SHOLL AVENUE NORTH BEACH WA 6020
AS JOINT TENANTS

(T O457891) REGISTERED 28/7/2020

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. M743027 LEASE TO MARIOS THEODOSIADES, PHYLLIS THEODOSIADES, BOTH OF 3 GREENBUSHES PLACE, DIANELLA EXPIRES: SEE LEASE. AS TO PORTION ONLY. REGISTERED 20/8/2014.
   O275610 EXTENSION OF LEASE M743027. REGISTERED 7/11/2019.
2. O503252 CAVEAT BY THE REGISTRAR OF TITLES LODGED 22/9/2020.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1157-302 (101/P6290)
PREVIOUS TITLE: 1144-985
PROPERTY STREET ADDRESS: 22 MURIEL AV, INNALOO.
LOCAL GOVERNMENT AUTHORITY: CITY OF STIRLING

NOTE 1: M253673 SECTION 138D TLA APPLIES TO CAVEAT C3290/1968
NOTE 2: M253674 SECTION 138D TLA APPLIES TO CAVEAT A352199
NOTE 3: M253675 SECTION 138D TLA APPLIES TO CAVEAT A438676
NOTE 4: M253676 SECTION 138D TLA APPLIES TO CAVEAT B188622
NOTE 5: M253677 SECTION 138D TLA APPLIES TO CAVEAT B380965

END OF PAGE 1 - CONTINUED OVER

APPENDIX 2 – – SITE DEVELOPMENT PLAN

Stavertis

Address:22 Muriel Ave INNALOO

Apartment Complex

Job Number: 23011

Drawing No	Description
01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section

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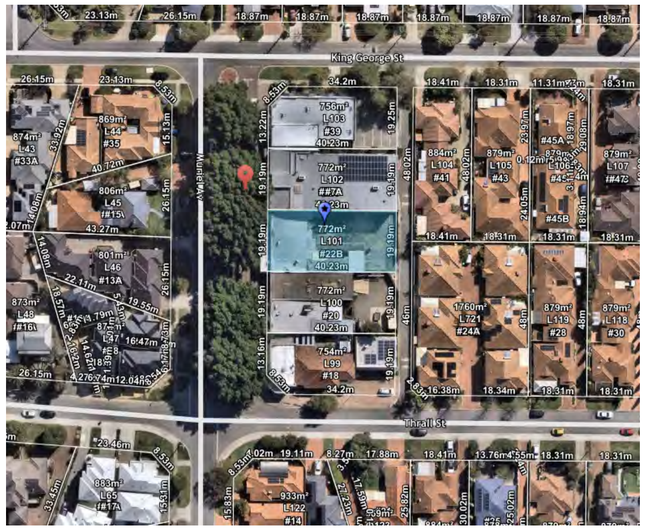
GERMANO DESIGNS

Unit: 3/1 Mulgul Road, Malaga W.A 6090 (08) 9248 8392 germanodesigns.com.au



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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Existing Site Survey

Scale: 1:200
Sheet Size: A2
Project No: 23011
Revision Number: 7.00
Drawing No.: 02 of 13

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

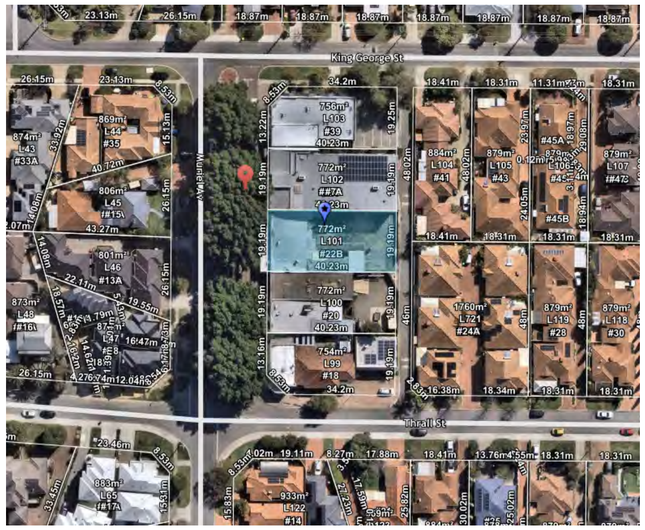
Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
Telecom
Water meter
Power Pole
Power Dome
Sewer M/H

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
(08) 9248 8392 germanodesigns.com.au



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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
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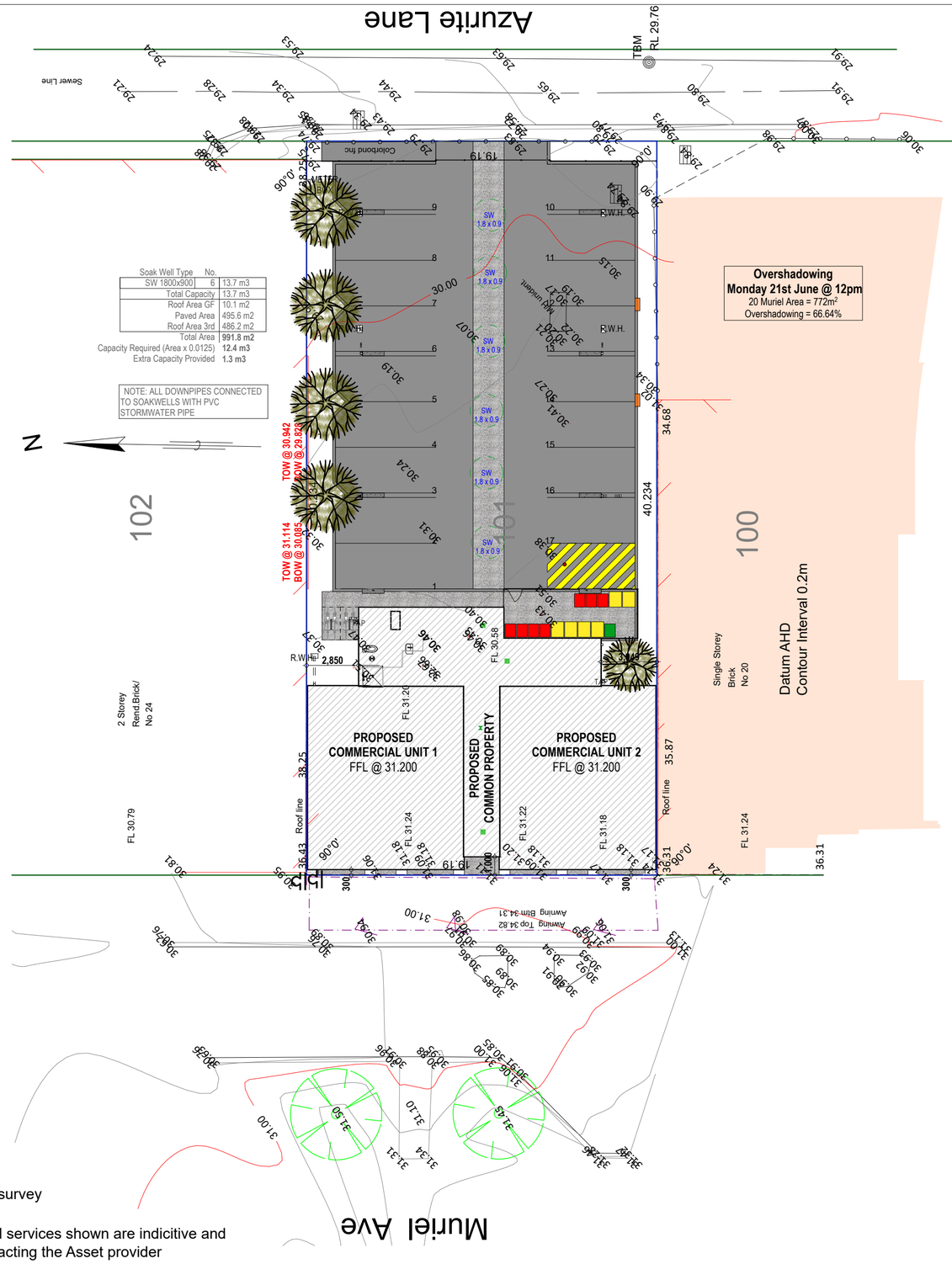

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
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3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale:	Sheet Size:
1:200	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
03 of 13

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

GERMANO DESIGNS
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COMMERCIAL DEVELOPMENTS MURIEL ROAD

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RESIDENTIAL DEVELOPMENTS THRALL STREET

COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Context Plan

Scale:	Sheet Size:
	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
04 of 13

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19 Jan 2026
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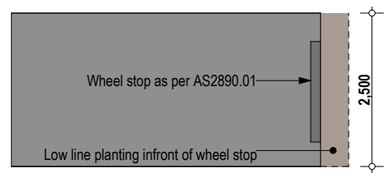
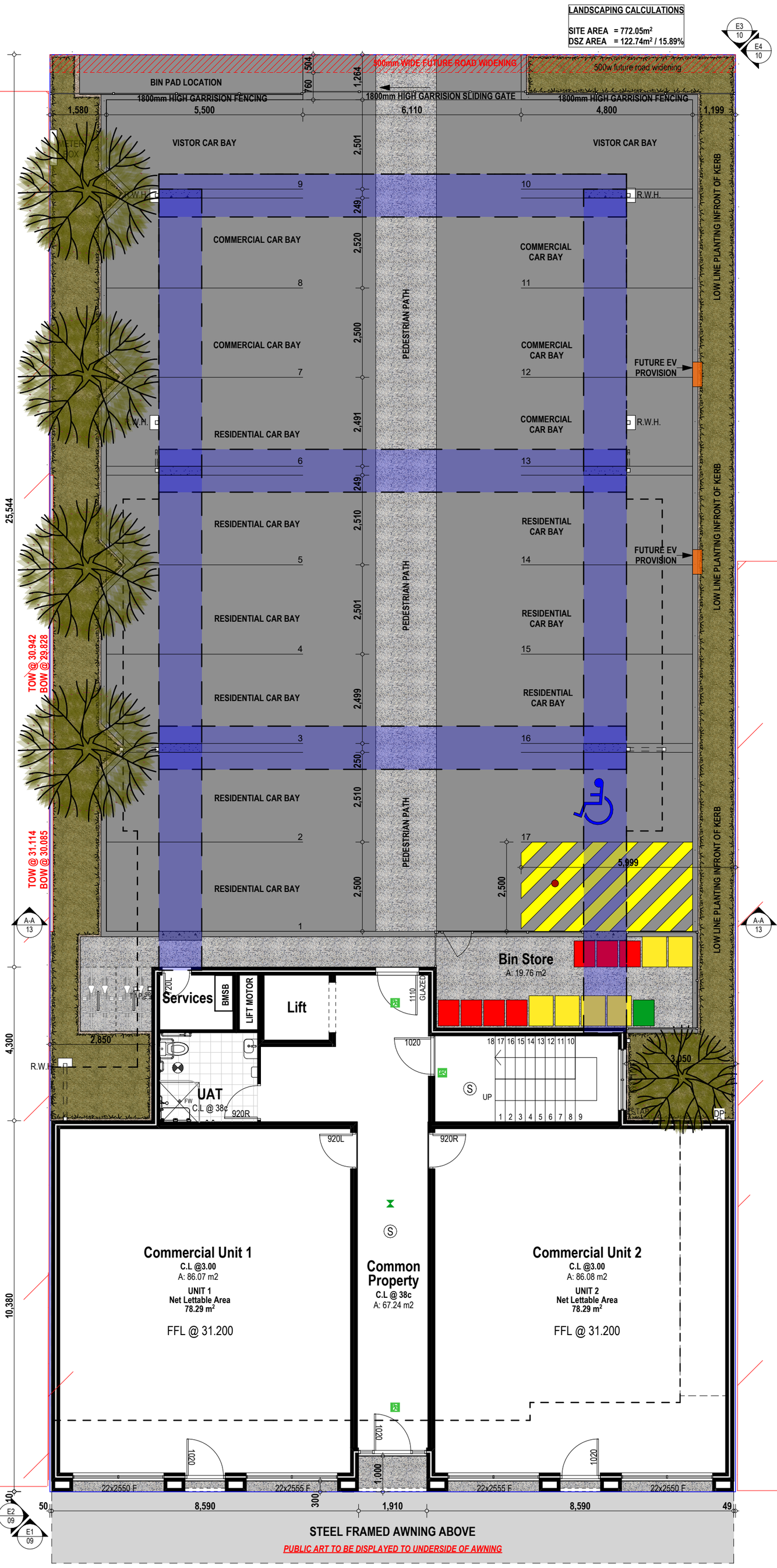


Carbay Detail

LANDSCAPING CALCULATIONS

SITE AREA = 772.05m²
DSZ AREA = 122.74m² / 15.89%



PLOT RATIO

COMMERCIAL
Site Area: 772.05m²
Building Footprint: 172.36m²
22.32%

RESIDENTIAL
Site Area: 772.05m²
Building Footprint: 803.02m²
104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Ground Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
05 of 13

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Muriel Ave

City of Stirling
19 Jan 2026
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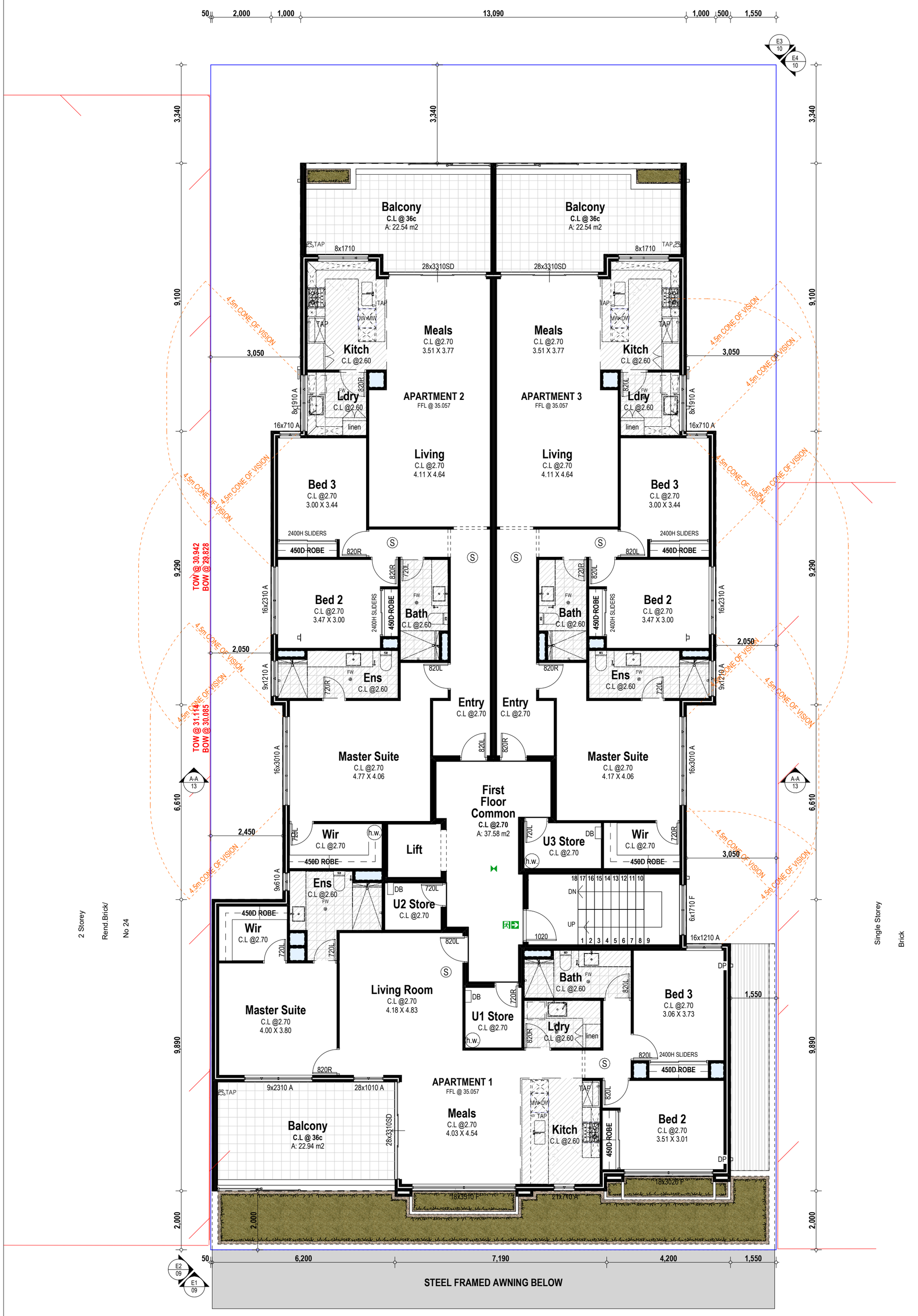

PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
First Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
06 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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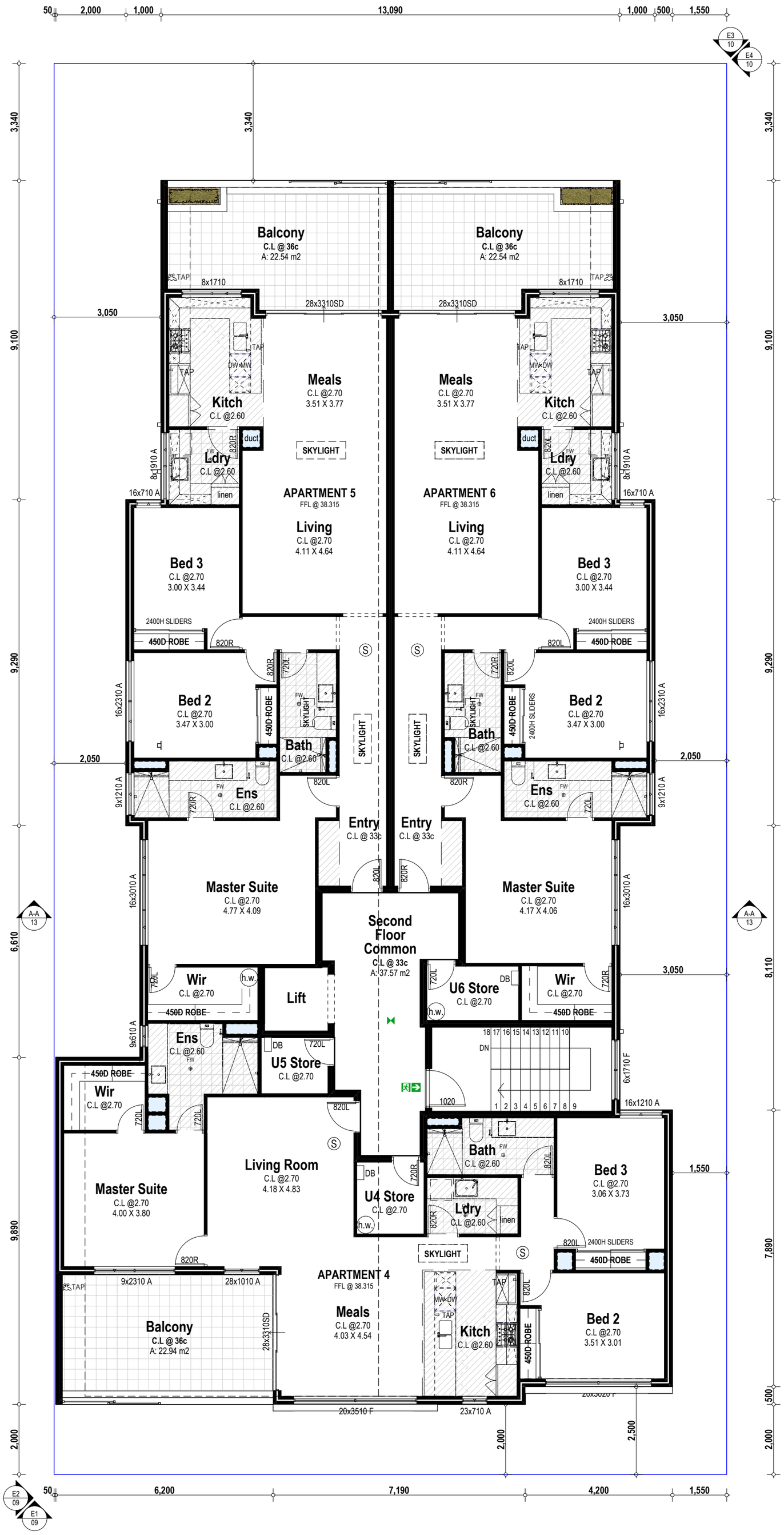

City of Stirling
19 Jan 2026
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PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
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Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
07 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
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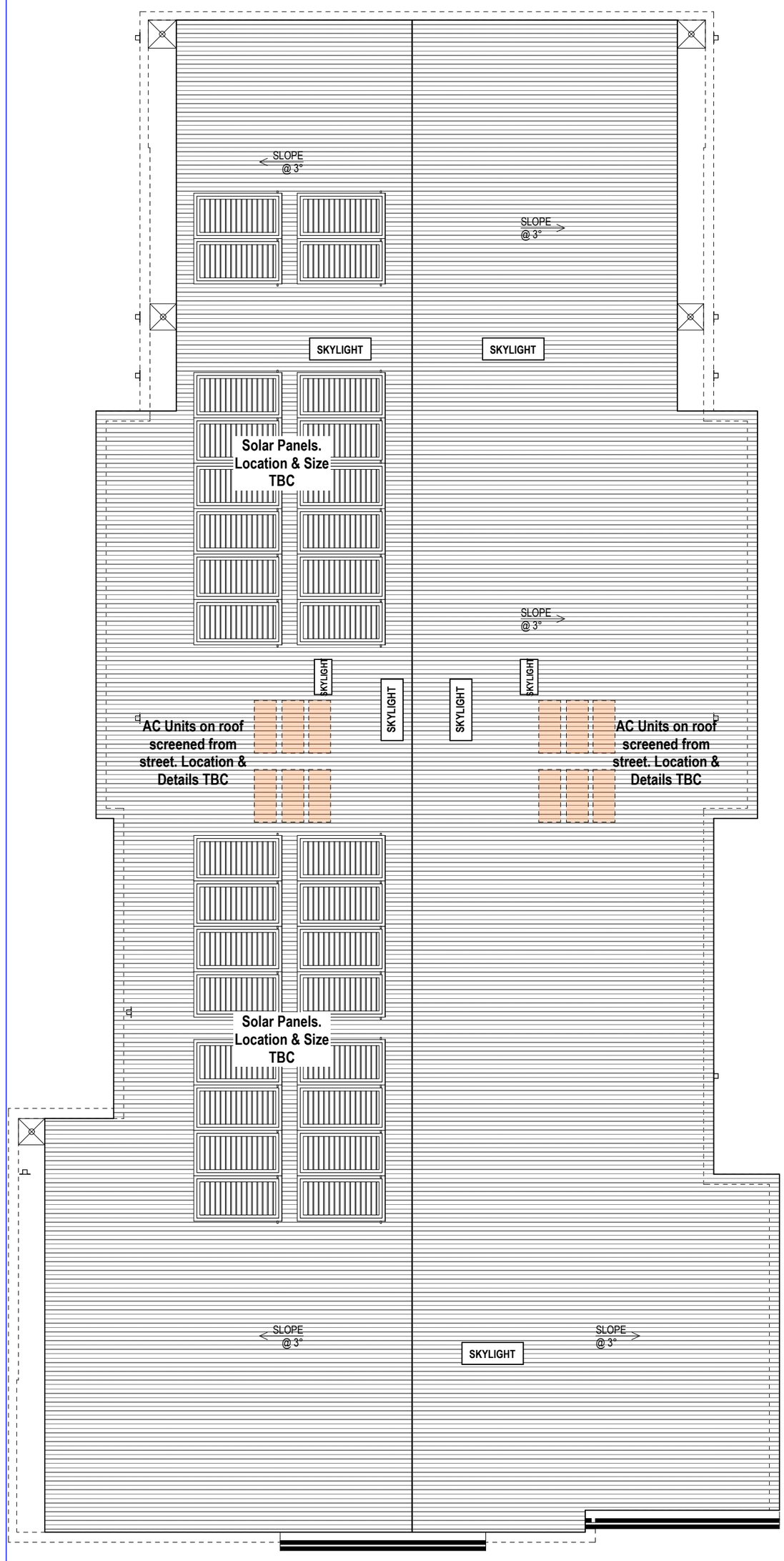

City of Stirling
19 Jan 2026
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Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

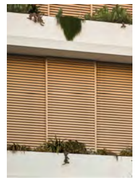
Drawing Title:
Roof Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
08 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
(08) 9248 8392 germanodesigns.com.au

KNOTWOOD ALUMIN SCREENING

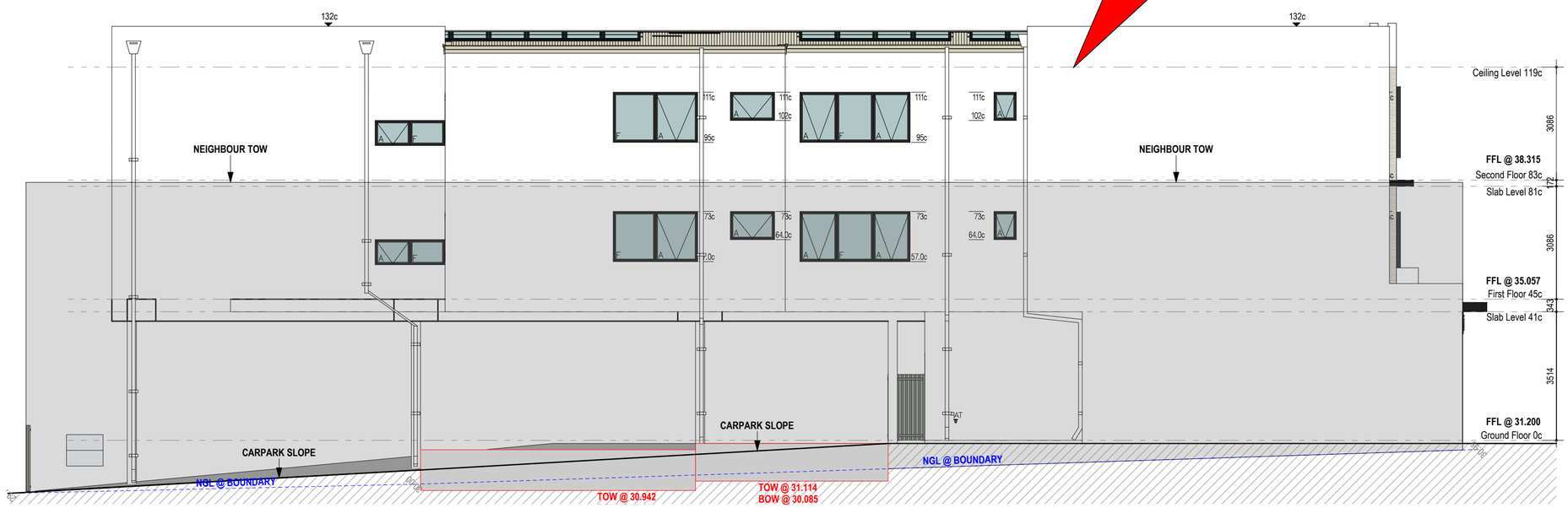


DULUX RENDER MONUMENT

BOWRAL 76 SIMMENTAL SILVER

E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

City of Stirling
19 Jan 2026
RECEIVED

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

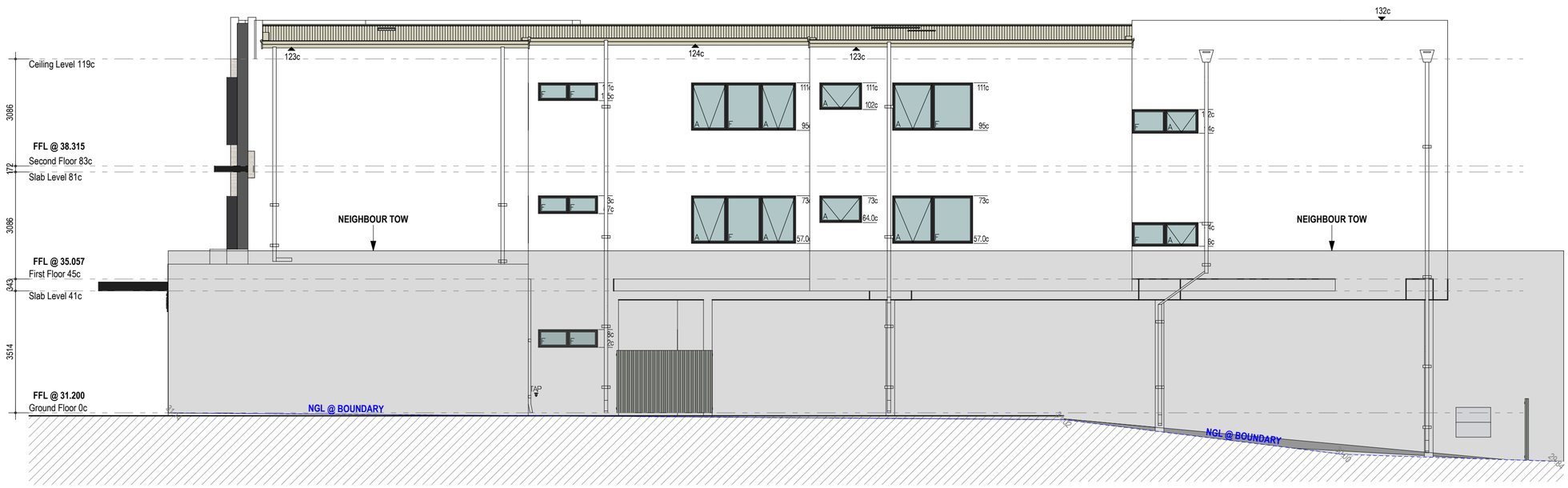
Drawing Title:
Elevations

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
09 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
(08) 9248 8392 germanodesigns.com.au

E3 East Elevation
1:100



E4 South Elevation
1:100

City of Stirling
19 Jan 2026
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Revision	Description	Date
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Project North:

Client
Stavertis

Project Name
Apartment Complex

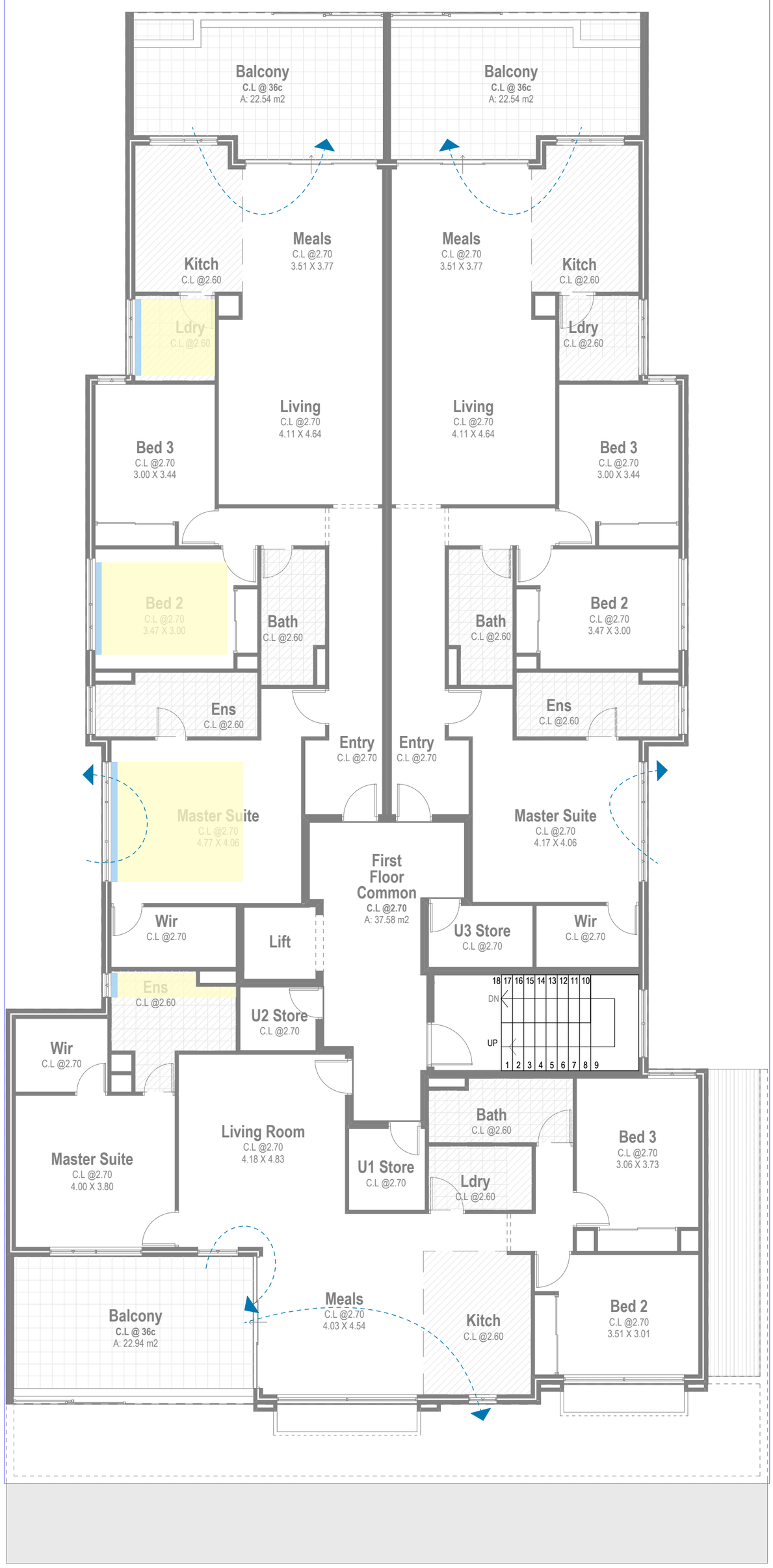
Project Address
22 Muriel Ave INNALOO

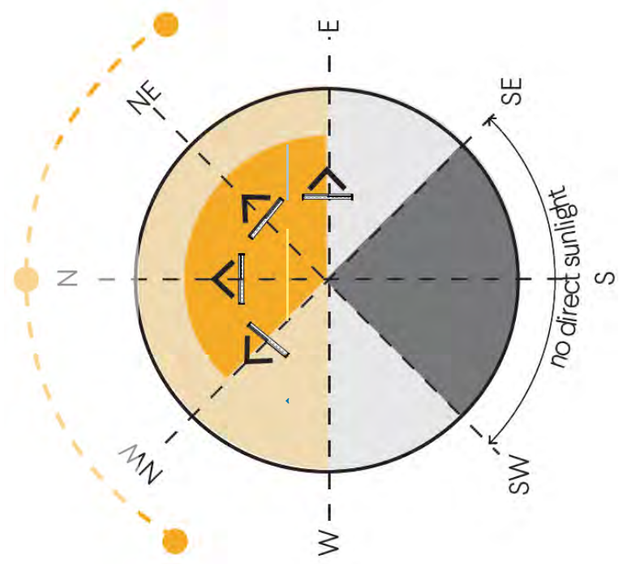
Drawing Title:
Elevations

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
10 of 13

GERMANO DESIGNS
Unit: 3/1 Mulgul Road, Malaga W.A 6090
(08) 9248 8392 germanodesigns.com.au





SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

City of Stirling
19 Jan 2026
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Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
11 of 13

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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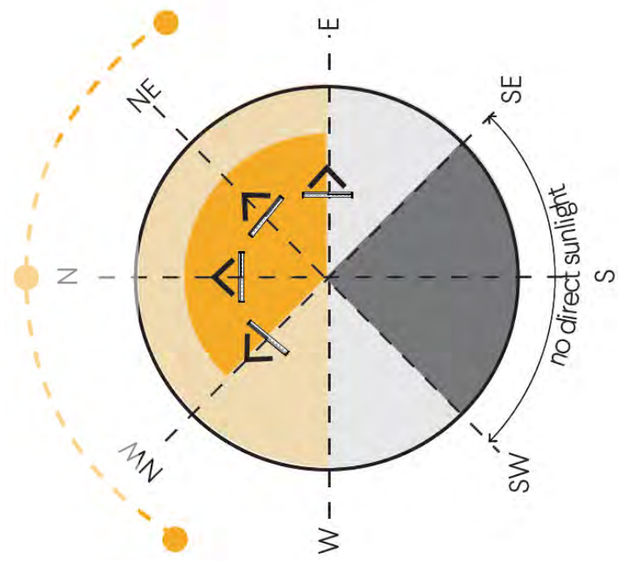

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BREEZE PATH

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Project North:

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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
SF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	Revision Number:
23011	7.00

Drawing No.:
12 of 13

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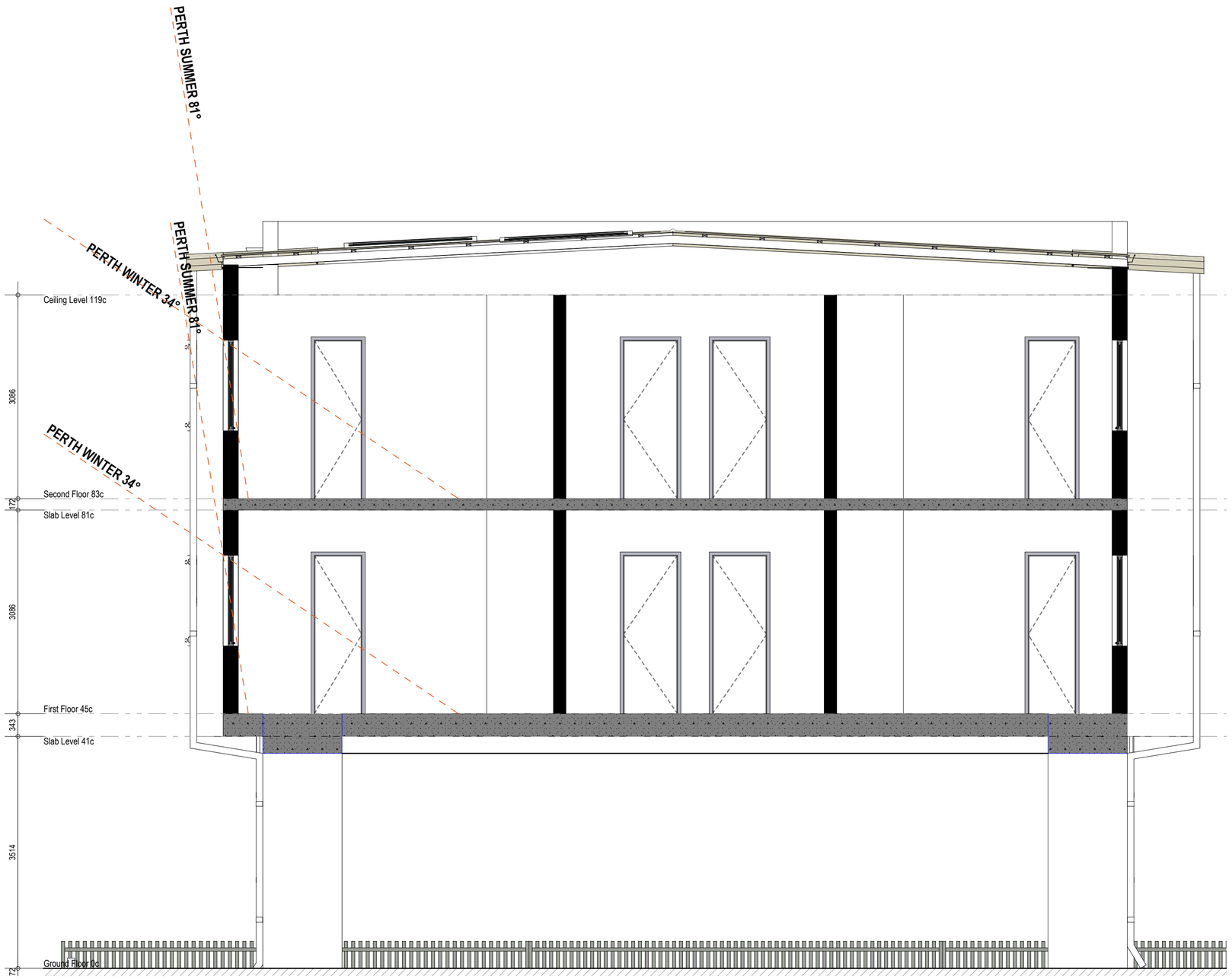

City of Stirling
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Section

Scale:	Sheet Size:
1:50	A2
Project No:	**Revision Number:**
23011	7.00

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13 of 13

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GERMANO DESIGNS

22 MURIEL AVENUE
INNALOO

DEVELOPMENT APPLICATION - ACOUSTICS

OCTOBER 2025

OUR REFERENCE: 35486-2-25413

Rochdale Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:
HERRING STORER ACOUSTICS
P.O. Box 219, Como, W.A. 6952
(08) 9367 6200
hsa@hsacoustics.com.au

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DEVELOPMENT APPLICATION - ACOUSTICS

22 MURIEL AVENUE
INNALOO

Job No: 25413
Document Reference: 35486-2-25413

FOR

GERMANO DESIGNS

DOCUMENT INFORMATION			
Author:	Geoff Harris	**Checked By:**	George Watts
Date of Issue:	23 October 2025		

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Revision	**Description**	**Date**	**Author**	**Checked**
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2	Updated Plans	18/12/25	GH	GW

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CONTENTS

APPENDICIES

1.0 INTRODUCTION

Herring Storer Acoustics was commissioned to undertake a review of the proposed development of 22 Muriel Avenue, Innaloo with regards to compliance with Part F7 of the NCC.

Part F7 of the NCC details the requirements for sound transmission and insulation of residential type buildings.

2.0 CRITERIA

2.1 BCA PROVISIONS

For Class 1 buildings, the appropriate sections of Part F7 "Sound transmission and insulation" relating to the acoustic criteria are attached in Appendix B for information. Table 2.1 summarises the deemed to satisfy requirements of Part F7.

TABLE 2.1 – SUMMARY OF NCC REQUIREMENTS

Space of separation	Acoustic Rating	Discontinuous Construction Required
WALLS		
Wet to wet	$R_W + C_{tr}$ not less than 50 dB	NO
Living to living	$R_W + C_{tr}$ not less than 50 dB	NO
Wet to living	$R_W + C_{tr}$ not less than 50 dB	YES
Kitchens to living	$R_W + C_{tr}$ not less than 50 dB	YES
Unit to plantroom, stairway Public corridor / lobby or alike	R_W not less than 50 dB.	NO
Unit to Lift shaft	R_W not less than 50 dB.	YES
FLOORS		
Between Sole Occupancy Units	$R_W + C_{tr}$ not less than 50 dB.	N/A
	$L_{n,w}$ not more than 55 dB is recommended	N/A
SERVICE RISERS / STORM WATER DOWN PIPES		
to Habitable Rooms	$R_W + C_{tr}$ not less than 40 dB.	NO
to Non-Habitable Rooms	$R_W + C_{tr}$ not less than 25 dB	NO

Notes:

1 Where kitchens are part of an open living area, kitchens are considered to be part of the living area and in these cases discontinuous construction is required. This also includes cases where kitchens are back-to-back, however, discontinuous construction is only required on one side.

2 Wet area include bathrooms, ensuites, sanitary compartments/powder rooms, laundries and kitchens.

3 For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and—

(a) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and
(b) for other than masonry, there is no mechanical linkage between leaves except at the periphery.

2.2 ENVIRONMENTAL PROTECTION (NOISE) REGULATIONS 1997

The *Environmental Protection (Noise) Regulations 1997* stipulate the allowable noise levels at any noise sensitive premises from other premises. The allowable or assigned noise levels for noise sensitive premises are determined by the calculation of an influencing factor, which is added to the baseline criteria set out in Table 1 of the Regulations. The baseline assigned noise levels are listed in Table 3.1. For commercial premises, the allowable or assigned noise levels are the same for all hours of the day. Table 3.1 also lists the assigned noise levels for commercial premises.

TABLE 3.1 – ASSIGNED NOISE LEVELS

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		$L_{A\ 10}$	$L_{A\ 1}$	$L_{A\ max}$
Noise sensitive premises within 15 metres of a dwelling	0700 - 1900 hours Monday to Saturday	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	35 + IF	45 + IF	55 + IF

Note: The L_{A10} noise level is the noise that is exceeded for 10% of the time.
The L_{A1} noise level is the noise that is exceeded for 1% of the time.
The L_{Amax} noise level is the maximum noise level recorded.

It is a requirement that noise from the site be free of annoying characteristics (tonality, modulation and impulsiveness) at other premises, defined below as per Regulation 9.

"impulsiveness" means a variation in the emission of a noise where the difference between L_{Apeak} and $L_{Amax\ Slow}$ is more than 15dB when determined for a single representative event;

"modulation" means a variation in the emission of noise that –

(a) is more than 3dB $L_{A\ Fast}$ or is more than 3dB $L_{A\ Fast}$ in any one-third octave band;
(b) is present for more at least 10% of the representative assessment period; and
(c) is regular, cyclic and audible;

"tonality" means the presence in the noise emission of tonal characteristics where the difference between –

(a) the A-weighted sound pressure level in any one-third octave band; and
(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A\ Slow}$ levels.

Where the above characteristics are present and cannot be practicably removed, the following adjustments are made to the measured or predicted level at other premises.

TABLE 3.2 – ADJUSTMENTS FOR ANNOYING CHARACTERISTICS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+ 5 dB	+ 5 dB	+ 10 dB

Figure 1 shows the development location and surrounds.

FIGURE 1 – AERIAL OF DEVELOPMENT LOCATION AND SURROUNDS

From a review of the development, the influencing factor for the premises identified in proximity to the development would be 4 dB, based on the following :

Minor Roads within inner circle;	
Odin Road	+ 2 dB
Scarborough Beach	+ 2 dB
Total IF	**+ 4 dB**

Hence the influencing factor would be + 4 dB and the assigned noise levels would be as listed in Table 3.3.

TABLE 3.3 - ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises within 15 metres of a dwelling	0700 - 1900 hours Monday to Saturday	49	59	69
	0900 - 1900 hours Sunday and Public Holidays	44	54	69
	1900 - 2200 hours all days	44	54	59
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	39	49	59

Note: L_{A10} is the noise level exceeded for 10% of the time.
L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.

We note that noise emissions from the premises need to comply with the requirements of the *Environmental Protection (Noise) Regulations 1997*. This includes noise associated with mechanical services (ie air conditioning and ventilation systems).

2.3 NOISE INGRESS

Due to the location, the development does not fall under the trigger distance for State Planning Policy 5.4. Similarly, the surrounds are limited to small commercial tenancies and residential developments with minimal noise emissions.

3.0 WALL CONSTRUCTIONS

3.1 PARTY WALLS

Walls separating sole-occupancy units are required to provide an $R_w + C_{tr}$ rating of not less than 50 dB. In some areas, a discontinuous construction is required.

These walls are marked up on plans in Appendix A.

3.2 LIFT SHAFTS

Lift shafts walls are required to provide an R_w rating of not less than 50 dB and provide a discontinuous construction.

3.3 LOBBY, STAIRWELL AND STORE WALLS

Walls separating sole occupancy units from stairwells, lobbys/corridors and stores are required to provide an R_w rating of at least 50 dB.

3.4 RISER SHAFTS

Riser shafts are required to provide an R_w C_{tr} rating of not less than 40 dB if the adjacent room is a habitable room, or an R_w C_{tr} of not less than 25 dB if the adjacent room is a non-habitable area.

The riser shaft constructions are understood to be proposed to consist of 13mm thick plasterboard.

Where shafts are separated from wet areas, internally lined with 50mm thick 11kg/m^3 insulation (i.e. between the studs) - the construction is sufficient.

Where the riser shaft abuts habitable areas (including kitchens), to comply, the pipework located within the riser (assuming PVC piping) is to be wrapped with 25mm foam backed 5kg/m^2 loaded vinyl.

If quiet type pipe is used (e.g. Gerberit, Silenta or Raupiano Pipe), the wrapping detailed to habitable areas is not required.

Note: Access panels are not permitted in risers abutting habitable areas (including kitchens).

4.0 PROPOSED FLOOR CONSTRUCTION

Based on the information provided, it is understood that the floor construction would be a minimum of 200mm thick concrete, which complies with the airborne requirements of the NCC. This is sufficient for all vertical separation areas (i.e. apartment to apartment and apartment to commercial areas).

The NCC also calls for impact isolation and as previously discussed, it is recommended the $L_{n,w}$ of 55 be adopted. This can be achieved by either using:

- Carpet with underlay; or
- Install impact isolation layer under hard flooring.

Tiled / hard finished areas require additional treatment to meet the impact isolation requirement. This can be achieved with the use of impact isolation matting between the floor and tile / floorboard. There are several products available on the market. Evidence of acceptability should be provided, with testing in accordance with ISO 717.2.

The proposed construction is understood to consist of suspended ceiling.

Areas with a suspended ceiling below are likely to require a 5mm thick mat for hard floor finished areas.

It is noted that typically balconies do not require impact isolation treatment where they are not located above internal areas of apartments below. However, if located partially above internal areas of SOU's below, the criteria is required to be met. This includes the trafficable areas of the rooftop communal areas.

It is noted that the impact isolation criteria are not required to be met for apartments located above carparks, development facilities or commercial tenancies.

Note: To achieve compliance, it is important that the flooring does not breech the acoustic underlay and should not be installed up to and in contact with the walls and is to be installed as per the manufacture's recommendations / details.

4.1 TYPICAL FLOORING CONSTRUCTS

The following summarises the typical flooring constructs that would be considered to be required for the project. It is noted that the following is a general guide only, with the final selection dependent on the exact floor finish selection.

At the stage of final selection of matting/flooring finish, it is recommended that either data from the intended product manufacturer is attained confirming the level of isolation expected to be achieved, or testing be carried out on samples during construction to confirm the effectiveness.

It is noted that carpet has been removed from the summary as, with underlay, carpet will typically provide an $L_{n,W}$ rating in the order of 20 – 35 dB, hence, complying with all potential criteria for impact isolation. This is also applicable to carpet in corridors.

5.0 PROPOSED SOIL & WASTE PIPES CONSTRUCTION

No details regarding the proposed treatment of the pipes have been provided for apartment services at this preliminary stage, hence, the following is provided as a guide for acceptable constructions.

5.1 PIPEWORK ABOVE HABITABLE ROOMS

Quiet Type Pipe

No Penetrations in Ceiling

If the pipes used are "quiet type" pipe (e.g. Silenta or Raupiano Plus Pipe) and there are no penetrations in the ceilings/bulkheads for exhaust fans, down lights etc. and 50mm thick insulation is laid over the ceiling then only single wrapping of pipes using a minimum 12mm foam backed 4kg/m^2 loaded vinyl wrap is required.

Penetrations in Ceiling

If the ceiling contains penetrations, but with 50mm thick insulation laid over the ceiling, then pipes require to be wrapped with a minimum 25mm foam backed 5kg/m^2 loaded vinyl.

PVC Pipe

No Penetrations in Ceiling

If the pipes used are PVC and there are no penetrations in the ceilings/bulkheads for exhaust fans, down lights etc. and 50mm thick insulation is laid over the ceiling then wrapping of pipes using minimum 12mm foam backed 4kg/m^2 loaded vinyl wrap and an additional layer of 25mm foam backed 5kg/m^2 loaded vinyl is required.

Penetrations in Ceiling

If the ceiling contains penetrations, but with 50mm thick insulation laid over the ceiling, then pipes require to be wrapped with a minimum of two layers of 25mm foam backed 5kg/m^2 loaded vinyl.

5.2 PIPEWORK ABOVE WET AREAS

Quiet Type Pipe

No Penetrations In Ceiling

If the pipes used are quiet type pipe (e.g. Silenta or Raupiano Plus Pipe) and there are no penetrations in the bulkheads for exhaust fans, down lights etc. and 50mm thick insulation is laid over the ceiling then no further treatment is required.

Penetrations in Ceiling

If the ceiling contains penetrations and with 50mm thick insulation, pipes require minimum 12mm foam backed 4kg/m^2 loaded vinyl wrap.

PVC Pipe

No Penetrations in Ceiling

If PVC pipe is to be used and there are no penetrations, then compliance can be achieved using 75mm thick insulation laid over a 13mm thick plasterboard ceiling. If 50mm thick insulation is laid over a 10mm thick plasterboard ceiling, then pipework needs to be wrapped in 12mm foam backed 4kg/m2 loaded vinyl.

Penetrations in Ceiling

If the ceiling contains penetrations, then compliance can be achieved by laying 50mm thick insulation over a 10mm plasterboard ceiling and wrapping the pipework in 25mm foam backed 5kg/m^2 loaded vinyl.

6.0 GENERAL CONSTRUCTION COMMENTS

The following general construction comments are provided :

6.1 ELECTRICAL OUTLETS IN PARTY WALLS

The wall types proposed to be used are masonry and therefore where electrical outlets are located in party walls, they are not to be located back-to-back, but rather offset by a minimum of :

- 100mm from each other for masonry walls.

7.0 NOISE FROM DEVELOPMENT

The main source of noise from the proposed development will be from mechanical services consisting of air-conditioning plant. Noise received at neighbouring premises, and premises within the development, from these items need to comply with the assigned noise levels as determined under the *Environmental Protection (Noise) Regulations 1997*.

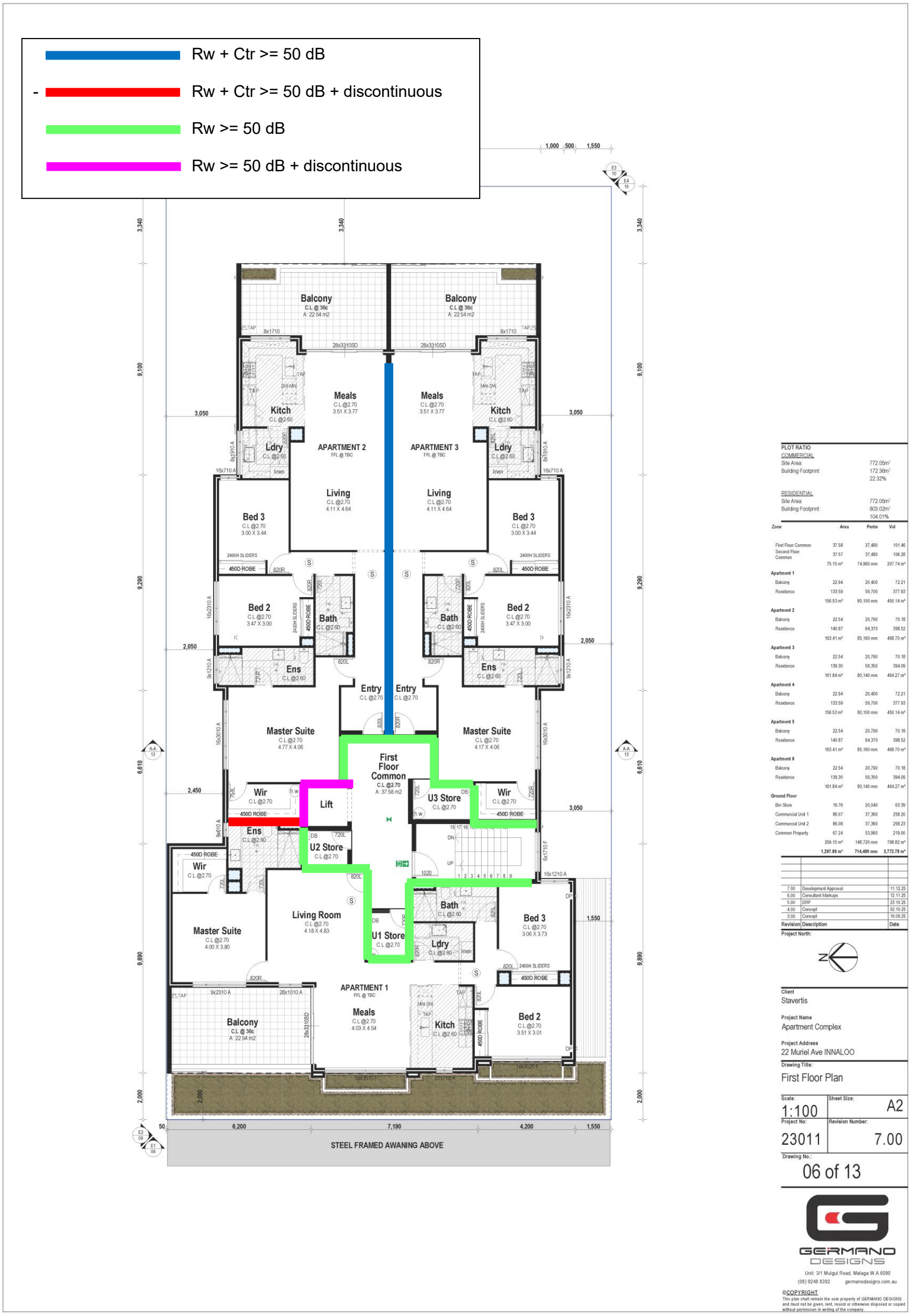
As the mechanical services could operate during the night, noise emissions from the development needs to comply with the assigned L_{A10} night period noise level of 43 dB(A) at residential premises. Potentially, noise emissions from mechanical services could be tonal, in which case an +5 dB(A) penalty for a tonal component could be applied to the resultant noise levels. Therefore, the design level at the neighbouring residential premises would be 38 L_{A10} dB.

The air conditioning for the units is not yet known. Once the design of the system is finalised, an acoustic assessment will be carried out of noise emissions from the mechanical plant and any noise amelioration required will be incorporated into the design to ensure compliance with the *Environmental Protection (Noise) Regulations 1997*.

From experience, we believe that compliance with the above criteria for the night period would be achievable, however, some noise mitigation is likely to be required.

APPENDIX A

Drawings



PLOT RATIO

COMMERCIAL
Site Area: 772.05m²
Building Footprint: 172.36m²
22.32%

RESIDENTIAL
Site Area: 772.05m²
Building Footprint: 803.02m²
104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.67	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
First Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
06 of 13

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Unit: 3/1 Mulgul Road, Malaga W.A 6090
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PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
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Residence	139.30	59,350	394.09
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Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	Revision Number:
23011	7.00

Drawing No.:
07 of 13

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APPENDIX B

Extract of NCC

WALLS

F7D6 Sound insulation rating of walls

(1) A wall in a Class 2 or 3 building must—(a)have an $R_w + C_{tr}$ (airborne) not less than 50, if it separates sole-occupancy units; and

(b) have an R_w (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and

(c) comply with F7D4(2) if it separates—

(i) a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit; or

(ii) a sole-occupancy unit from a plant room or lift shaft.

(2) A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole-occupancy unit from a stairway,public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30.

(3) A wall in a Class 9c building must have an R_w not less than 45 if it separates—

(a) sole-occupancy units; or
(b) a sole-occupancy unit from a kitchen, bathroom, sanitary compartment (not being an associated ensuite), laundry, plant room or utilities room.

(4) In addition to (3), a wall separating a sole-occupancy unit in a Class 9c building from a kitchen or laundry must comply with F7D4(2).

(5) Where a wall required to have sound insulation has a floor above, the wall must continue to—

(a) the underside of the floor above; or
(b) a ceiling that provides the sound insulation required for the wall.

(6) Where a wall required to have sound insulation has a roof above, the wall must continue to—

(a) the underside of the roof above; or
(b) a ceiling that provides the sound insulation required for the wall.

F7D4 Determination of impact sound insulation ratings

(1) A floor in a building required to have an impact sound insulation rating must—

(a) have the required value for weighted normalised impact sound pressure level ($L_{n,w}$) determined in accordance with AS ISO 717.2 using results from laboratory measurements; or
(b) comply with Specification 28.

(2) A wall in a building required to have an impact sound insulation rating must—

(a) for a Class 2 or 3 building be of discontinuous construction and
(b) for a Class 9c building, must—
(i) for other than masonry, be two or more separate leaves without rigid mechanical connection except at the periphery; or
(ii) be identical with a prototype that is no less resistant to the transmission of impact sound when tested in accordance with Specification 29 than a wall listed in S28C4 to S28C7.

(3) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2separate leaves, and—

(a) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and
(b) for other than masonry, there is no mechanical linkage between leaves except at the periphery.

FLOORS

F7D5 Sound insulation rating of floors

(1) A floor in a Class 2 or 3 building must have an $R_w + C_{tr}$ (airborne) not less than 50 and an $L_{n,w}$ (impact) not more than62 if it separates—

(a) sole-occupancy units; or
(b) a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.

As recommended by the Association of Australian Acoustical Consultants, the design objective of an $L_{n,w}$ of 55 is recommended to be utilised for impact isolation between floors of apartments.

SOIL & WASTE PIPES

F7D7 Sound insulation rating of internal services

(1) If a duct or soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an R_w + Ctr (airborne) not less than—

(a) 40 if the adjacent room is a habitable room (other than a kitchen); or
(b) 25 if the adjacent room is a kitchen or non-habitable room.

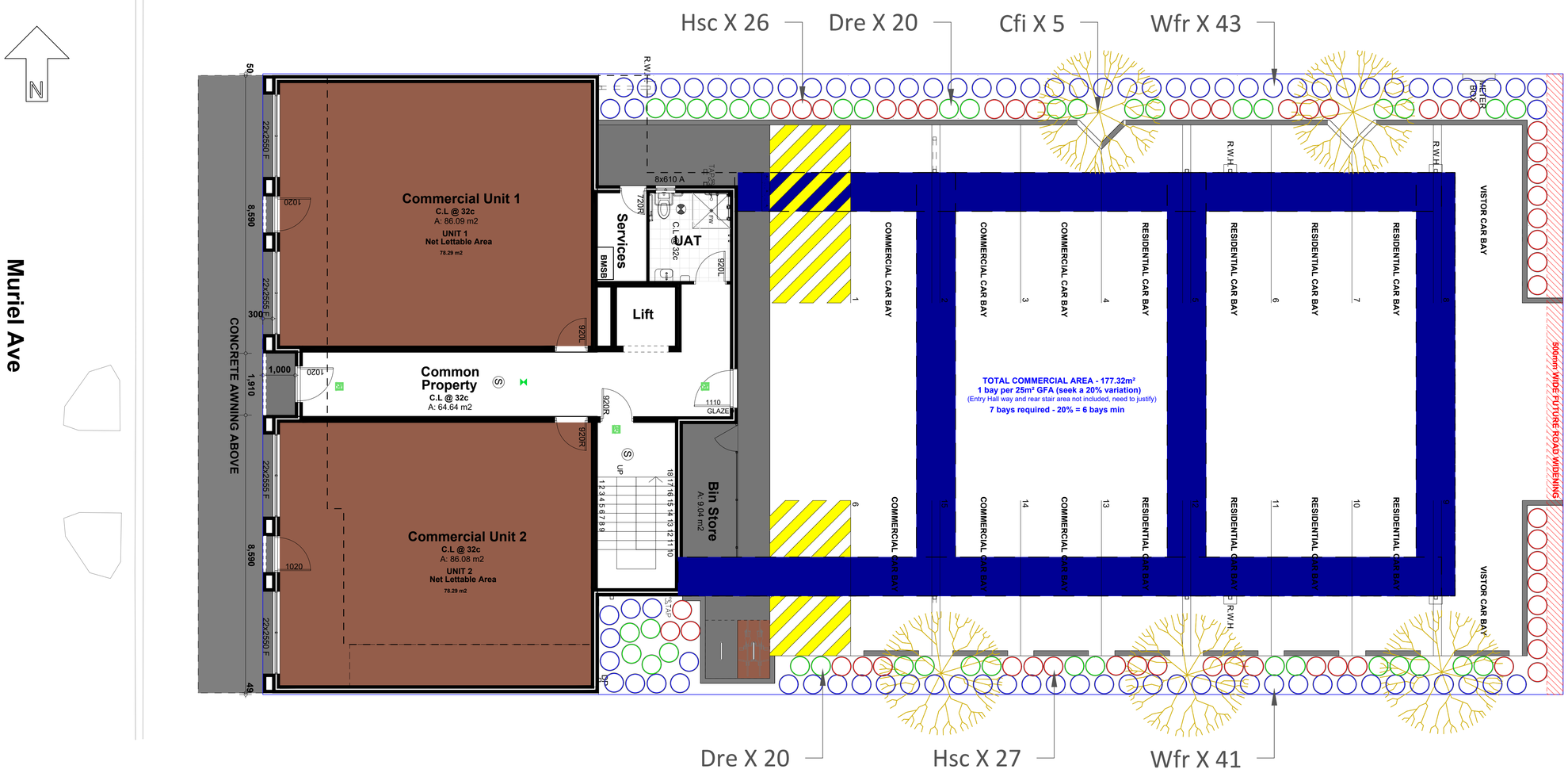
(2) If a stormwater pipe passes through a sole-occupancy unit, it must be separated in accordance with (1)(a) and (b).

PUMPS

F7D8 Sound isolation of pumps

A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.

DOCUMENT END



TREE:

CORYMBIA FICIFOLIA

PLANT SCHEDULE					
	SPECIES	SPACINGS	SIZE	MATURE SIZE	QTS
TREE					
Cfi	CORYMBIA FICIFOLIA	AS SHOWN	AS SHOWN	10 M	5
SHRUBS					
Hsc	HIBBERTIA SCANDENS	600 MM	140 MM	1 M	53
Dre	DIANELLA REVOLUTA	600 MM	140 MM	1 M	40
Wfr	WESTRINGIA FRUTICOSA	600 MM	140 MM	1.5 M	84

SHRUBS:

DIANELLA REVOLUTA

WESTRINGIA FRUTICOSA

HIBBERTIA SCANDENS

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e-mail: admin@childscapes.com.au
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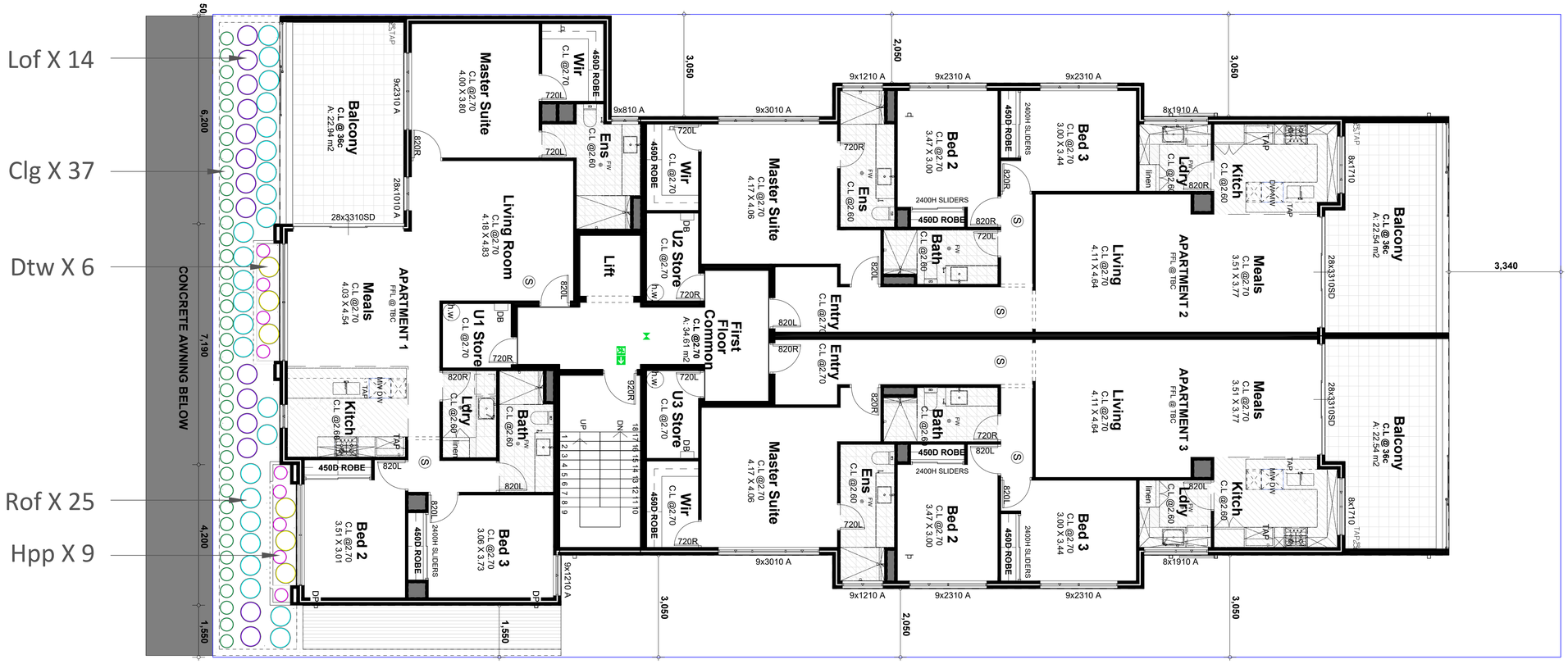
PROJECT	DRAWING	ISSUE
22 MURIEL AVE	CAR PARK PLANITNG PLAN	ISSUED FOR FEEDBACK

CLIENT	DRAWING N0	SCALE	SHEET	REVISION	DRAWN	DATE
-	L-01	1:75	A1	0	NK	24/10/25

REVISIONS

No	DATE	DRAWN	DETAILS
0	24/10/25	NK	CAR PARK PLANTING- ISSUED FOR FEEDBACK



LAVANDULA OFFICINALIS

ROSEMARY OFFICINALIS

PLANT SCHEDULE

	SPECIES	SPACINGS	SIZE	MATURE SIZE	QTS
SHRUBS					
Hpp	HEMIANDRA PUNGENS PURPUREA	600 MM	140 MM	1 M	9
Dtw	DIANELLA TASMANICA 'Wyeena'	600 MM	140 MM	0.8 M	6
Cgl	CASUARINA GLAUCA 'Prostrate'	600 MM	140 MM	0.6 M	37
Lof	LAVANDULA OFFICINALIS	600 MM	140 MM	1 M	14
Rof	ROSEMARY OFFICINALIS	600 MM	140 MM	1.5 M	25

SHRUBS:

HEMIANDRA PUNGENS PURPUREA

CASUARINA GLAUCA

DIANELLA TASMANICA

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web: childscapes.com.au

PROJECT	DRAWING	ISSUE
22 MURIEL AVE	PLANITNG PLAN (first floor)	ISSUED FOR FEEDBACK

CLIENT	DRAWING N0	SCALE	SHEET	REVISION	DRAWN	DATE
-	L-02	1:75	A1	0	NK	24/10/25

REVISIONS

No	DATE	DRAWN	DETAILS
0	24/10/25	NK	PLANTING- ISSUED FOR FEEDBACK

GERMANO DESIGNS

22 Muriel Avenue, Innaloo

TRANSPORT IMPACT STATEMENT

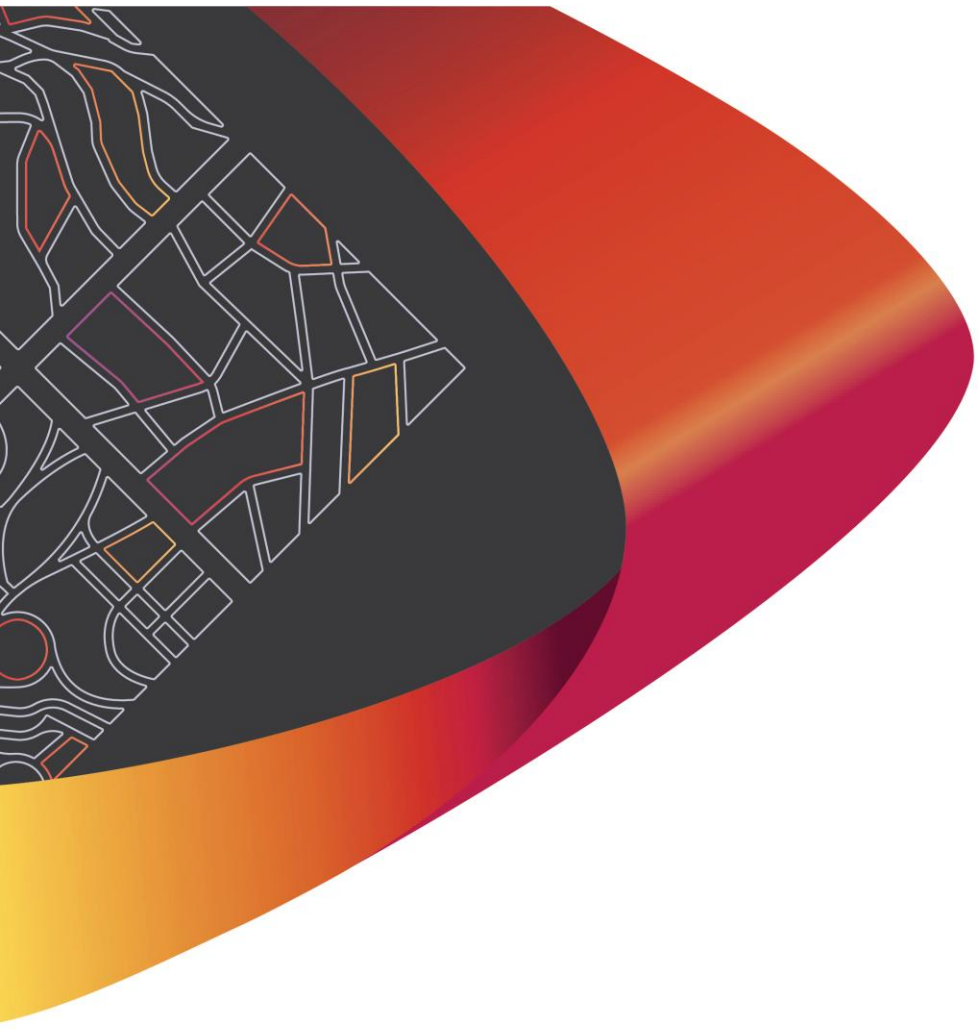
Job No: P004157

Rev B

16 December 2025

Premise

PART OF THE Amey GROUP



Premise

PART OF THE Amey GROUP

DOCUMENT AUTHORISATION					
Revision	**Revision Date**	**Proposal Details**			
Rev A Draft	11/11/25	Issued for Review			
Rev A	18/11/25	Updated plans			
Rev B	16/12/25	Updated plans			
Prepared By		**Reviewed By**		**Authorised By**	
Abel Tan Jelena Simic		Jelena Simic		Marina Kleyweg	

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1. EXECUTIVE SUMMARY

Site Context

- The project location is 22 Muriel Avenue, Innaloo on previously developed land.
- The proposed development consists of two commercial developments and 6 residential dwellings as part of a mixed-use development.
- The site is fronted by Muriel Avenue to the west and Azurite Lane to the east.
- The proposed access point to the site is on the Azurite Lane.

Technical Findings

- The proposed development will generate up to 103 vehicular trips per day; 7 vehicular trips per hour in AM and 11 vehicular trips per hour in PM peak.
- According to the WAPC Guidelines, this is a medium impact on the surrounding road network.
- The surrounding road network is expected to successfully absorb the additional traffic.

Relationship with Policies

- The City of Stirling's Local Planning Policy (LPP) 6.7 requires a total of 18 parking spaces for the proposed development, including 11 bays for the residential component and 7 bays for the commercial component. The development proposal has a statutory shortfall of one bay for both the residential dwellings and the commercial component. This shortfall has been justified within this report, and Premise considers that it will have no negative impact on the overall functioning of the development.
- The parking and access facilities align with the requirements set in AS 2890.1 with the exception of driveway access width, however this width is in accordance with the City of Stirling's crossover policy.
- The proposed development is required to have one accessible parking space and provides two accessible parking spaces.

Conclusion

- As stated above the expected traffic of the proposed subject site is expected to be a 103 vehicular trips per day, 7 vehicular trips in the AM peak hour and 11 vehicular trips in the PM peak hour respectively.
- In summary Premise believe that the proposed development will not have a negative impact on the surrounding road network.

2. INTRODUCTION

2.1 Background

Premise Australia Pty Ltd **(Premise)** has been engaged by Germano Designs to prepare a Transport Impact Statement (TIS) for the proposed mixed-use development at 22 Muriel Avenue, Innaloo within the City of Stirling.

The proposed development will comprise commercial premises on ground level and residential dwellings above.

2.2 Scope and Study Area

This report outlines the traffic impact statement for the proposed mixed-use development.

The purpose of this assessment is to evaluate the suitability of the site for the intended land use from a traffic impact perspective, taking into account local transport networks, safety concerns, and relevant regulatory requirements.

The scope of work for the Traffic Impact Statement is as follows:

- Collate all existing traffic data for relevant traffic networks in the vicinity of the subject site.
- Undertake a detailed review of crash data between in the last five (5) year reporting period and provide commentary on the road safety aspects of the data and potential reasons for the number and type of incidents.
- Provide an assessment of the likely additional traffic impact of the proposed development.
- Review all existing public transport routes, pedestrian and cyclist infrastructure, and show graphical images overlaid on aerial imagery within 400-metre radius of the subject site.
- Calculate trip generation for AM / PM peak and daily traffic based on the proposed yield and land use.
- Provide a report according to the set-out requirements as nominated in the WAPC Transport Impact Assessment Guidelines: Individual Developments.
- Provide further analysis of any site-specific issues that may be encountered during the assessment.

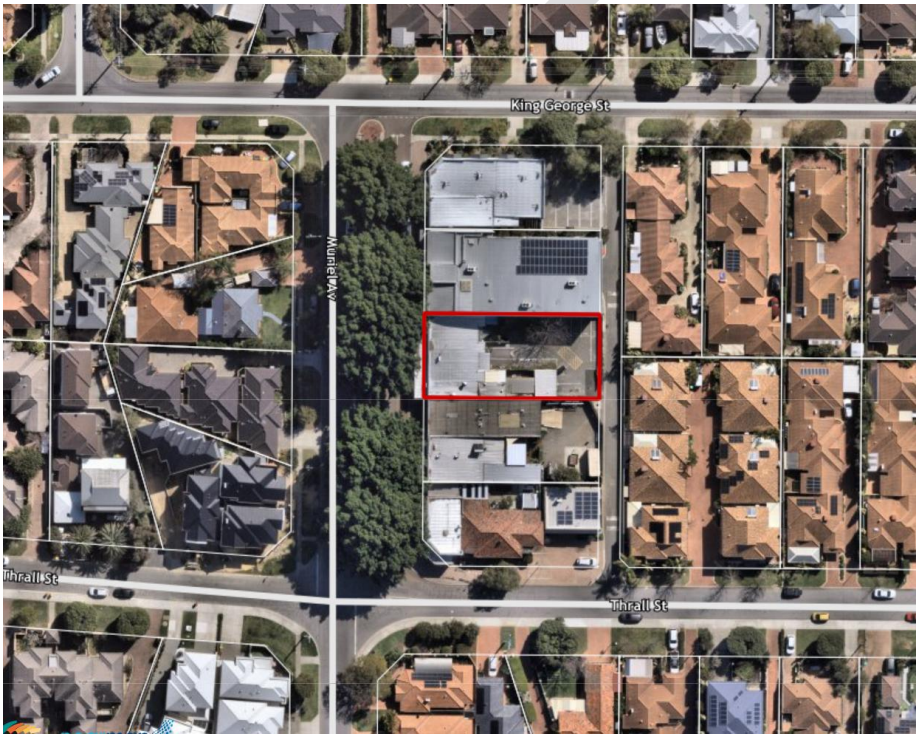
3. EXISTING CONDITIONS

3.1 Site Location and Description

The proposed mixed-use development is located at Lot 101, No 22 Muriel Avenue, Innaloo. The site is situated within the local government area of the City of Stirling.

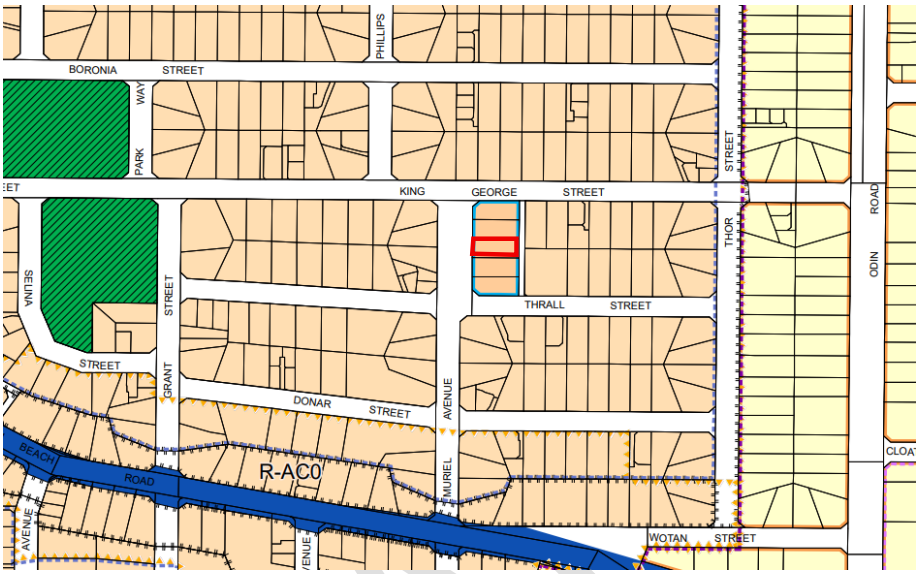
The development site is a rectangular-shaped lot with an area of 772m². It has direct frontage to Muriel Avenue along its western boundary and Azurite Lane on its eastern boundary. The site is currently occupied by a commercial hair dressing salon.

Figure 1 - Site Location



Under the City of Stirling's Local Planning Scheme, the site is designated as a 'Local Centre', reflecting its strategic location for integrated commercial and residential development. The immediate vicinity of the site is characterized by a mixture of land uses. The area is predominantly low to medium-density residential, comprising single dwellings, duplexes, and villas. Muriel Avenue and surrounding local streets also contain a number of small-scale local businesses and home occupations.

Figure 2 - Zoning Map of Area



3.2 Existing Road Conditions

Table 1 – Road Classification and Description

Road Name	Muriel Avenue
Number of Lanes	Two-way, one lane in each direction, divided near the lot
Road Reservation Width	approximately 30m
Road Pavement Width	varies between 12m to 16m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	YES
On-street parking	YES

Road Name	Thrall Street
Number of Lanes	two-way, one lane in each direction (no line marking), undivided
Road Reservation Width	approximately 20m
Road Pavement Width	approximately 7.5m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	NO
On-street parking	YES

Road Name	Scarborough Beach Road
Number of Lanes	two-way, two lanes per direction, undivided
Road Reservation Width	approximately 20m to 25m
Road Pavement Width	approximately 13.5m
Classification	Distributor A
Speed Limit	60kph
Bus Route	YES
If YES Nominate Bus Routes	410 and 990
On-street parking	NO

Road Name	King George Street
Number of Lanes	two-way, one lane in each direction (no line marking), undivided
Road Reservation Width	approximately 20m
Road Pavement Width	approximately 7.2m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	YES
If YES Nominate Bus Routes	422
On-street parking	NO

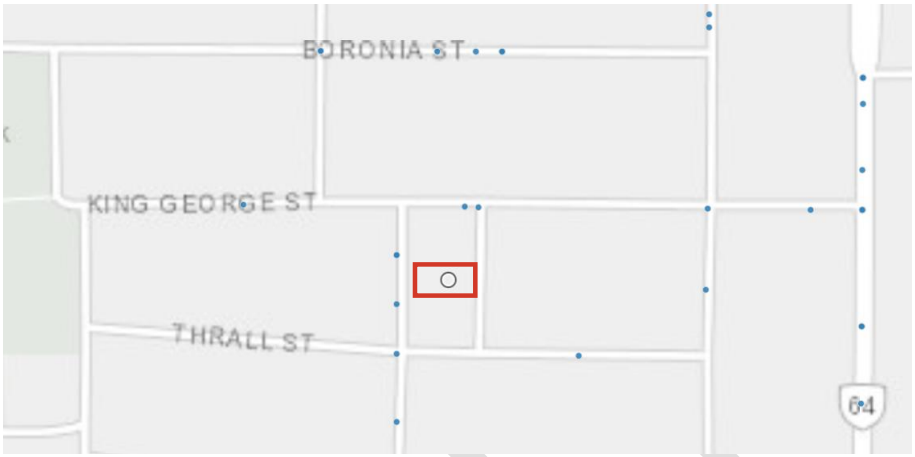
Road Name	Azurite Lane
Number of Lanes	One-way, one lane
Road Reservation Width	approximately 5m
Road Pavement Width	approximately 5m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	NO
On-street parking	NO

3.3 Traffic Safety

A review of the MRWA crash database for the five-year period from 2020 to 2024 has been undertaken for the road network in the vicinity of the subject site. The database includes the location and severity of all recorded crashes.

The subject site is accessed via Azurite Lane, and no crashes have been identified along this laneway. The closest recorded incident occurred at the intersection of Azurite Lane and King George Street in October 2023, classified as a PDO Minor (hit object) at approximately 07:00. Another PDO Minor crash involving two vehicles was recorded nearby on King George Street in September 2020 at approximately 13:00. Overall, the crash history indicates a very low level of safety concerns in the immediate surroundings of the site. Given the class of road and crash types, it is concluded that the road network is currently operating in a manner consistent with access roads.

Figure 3 - Crash Map - Subject Area



3.4 Existing Traffic Flow

The following table provides an overview of traffic count data for roads in the vicinity of the subject site. Refer to Appendix B for graphical representation of this data.

Table 2 – Traffic counts data

Road Name	Location of Traffic Count	Vehicles Per Day (VPD)	Vehicles per Peak Hour (VPH) Peak Time - Peak VPH		Heavy Vehicle %	Date
			AM	PM		
Scarborough Beach Road	East of Odin Road (SLK 4.11)	31,336	08:00 – 2,504	16:30 – 2,760	6%	2020/ 2021
	West of Huntriss Road (SLK 2.87)	23,947	08:00 – 1,780	16:45 – 1,860	7.4%	2021/ 2022
	West of King Edward Street (SLK 4.7)	30,014	11:30 – 2,433	12:00 – 2,452	6.8%	2024/ 2025

Note – These traffic counts were collected from the Main Roads Western Australia Traffic Map.

3.5 Public Transport

The development site at 22 Muriel Avenue, Innaloo, is well-serviced by a robust public transport network. Several high-frequency and standard bus routes operate within a convenient walking distance of the site, primarily along the major thoroughfares of Scarborough Beach Road, Odin Road and King George Street. The key routes serving the development are detailed in the following table.

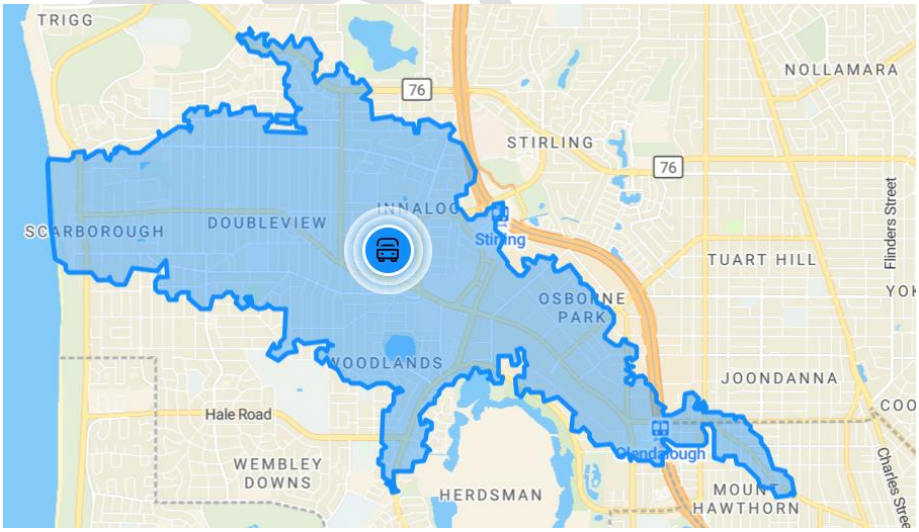
Table 3 - Bus routes and frequencies

Bus / Rail Route	Description	Peak Frequency	Off-Peak Frequency
410	Stirling Station - Scarborough Beach Bus Station	Every 60 minutes	Every 60 minutes on weekends
422	Stirling Station - Scarborough Beach Bus Station	Every 60 minutes	No service on Sunday
990	Perth - Scarborough Beach Bus Station	Every 10 minutes	Every 15 minutes
Yanchep Line	Perth Underground Station Platform 2 to Mandurah Station Platform 2	Every 5 minutes	Every 30 minutes

Walk Score Rating for Accessibility to Public Transport	
59	Good Transit. Many nearby public transportation options.

The combination of the high-frequency Route 990 on Scarborough Beach Road and the standard hourly services of Routes 410 and 422 provides comprehensive bus coverage. This level of service offers future residents, employees, and visitors a viable and convenient alternative to private vehicle use for trips to the Perth CBD, local shopping centres and other key destinations. Furthermore, the strong bus and active transport connections to the nearby Stirling Train Station integrate the site with the broader metropolitan rail network.

Figure 4 - 30min public transport catchment (app.traveltime.com)



3.6 Pedestrian and Cyclist Infrastructure

Premise have done a desktop review of the pedestrian and shared paths surrounding the subject lot. Refer to Appendix B for graphical representation of the below table.

Table 4 - PBN routes in the vicinity of the subject site

Classification	Road Name
"Other Shared Path (Shared by Pedestrians and Cyclists)"	Scarborough Beach Road (east of Bowra Avenue), Bowra Avenue
"Good Road Riding Environment"	Grant Street, Park Way, Boronia Street (west of Park Way)
"Perth Bicycle Network - Continuous Signed Routes"	Thor Street, Wotan Street, Bowra Avenue

What is the Walk Score Rating?	
69	Somewhat Walkable. Some errands can be accomplished on foot.

Figure 5 - 10min walking catchment (app.traveltime.com)

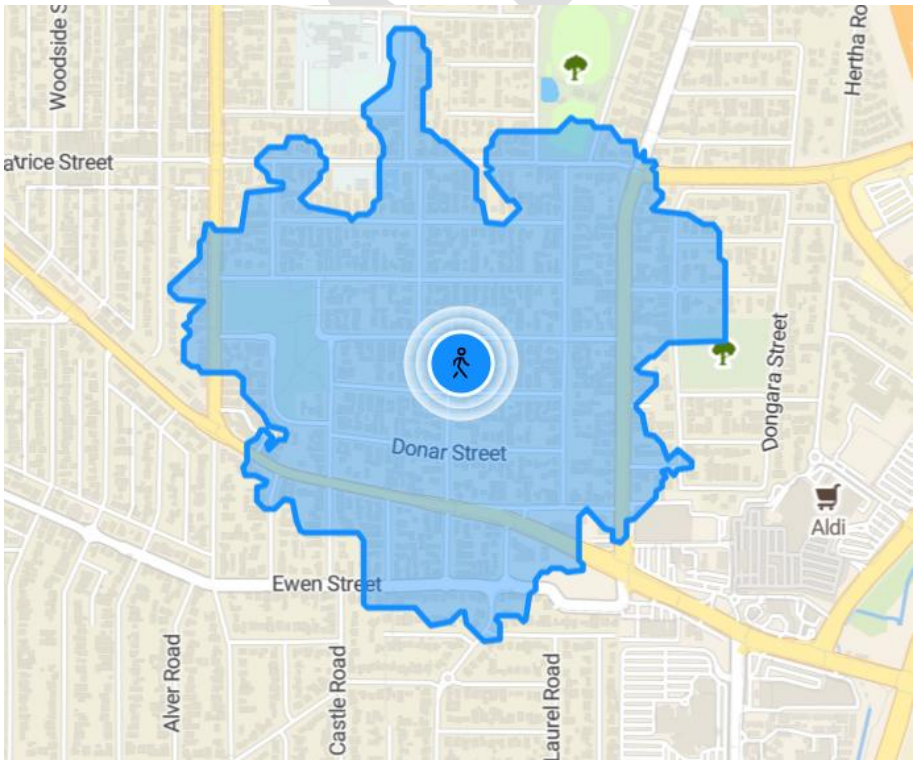
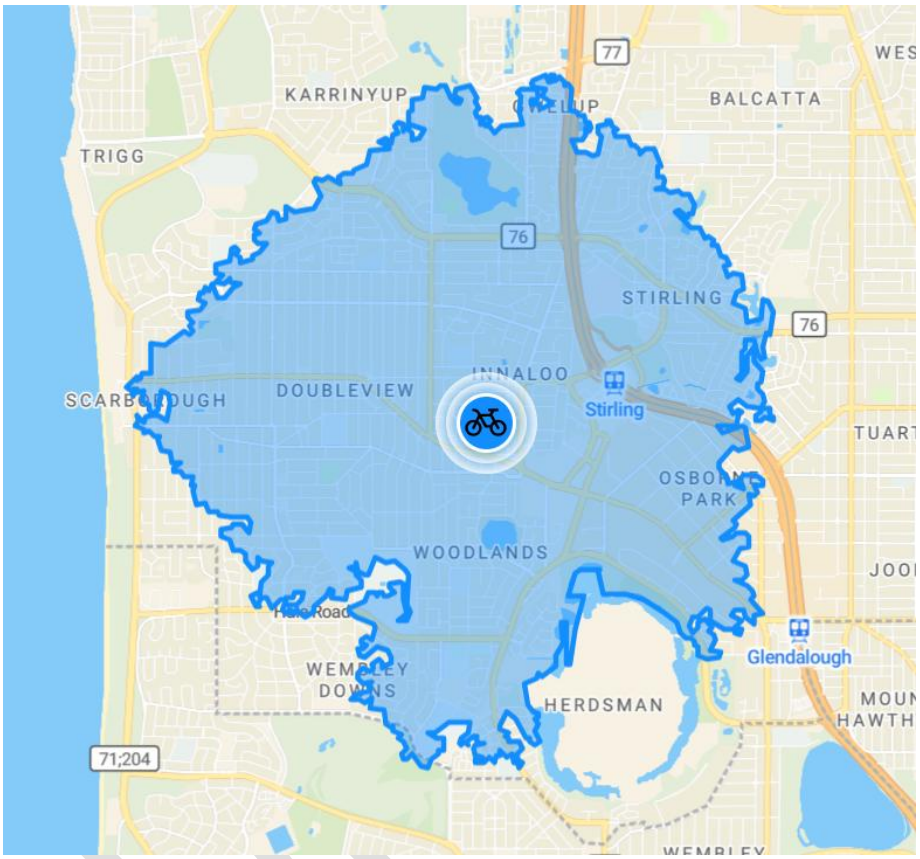


Figure 6 - 15min cycling catchment (app.traveltime.com)



4. PROPOSED DEVELOPMENT

4.1 Overview of Proposed Development

The proposal involves the construction of a three-storey mixed-use development at Lot 101, No 22 Muriel Avenue, Innaloo. The development is designed to align with the site's 'Local Centre' zoning under the City of Stirling Local Planning Scheme, introducing a blend of commercial and residential uses to enhance the local streetscape and community amenity.

The ground floor is dedicated to commercial activity and will feature two individual commercial units. These tenancies are intended to accommodate local businesses such as retail shops, cafes or professional offices, contributing to the activation of Muriel Avenue at street level. The upper two levels of the development will comprise a total of 6 residential apartments.

Table 5 - Proposed land uses and yields

Proposed Land Use	Yield
2 Commercial Units	Total Commercial area – 172.15m^2 GFA / 156.58 m^2 GLFA 86.08m^2 GFA / 78.29 m^2 NLA each Commercial Unit
Three Bedroom Residential Unit	6 apartments

4.2 Vehicular Parking

The provision of parking has been determined in accordance with the City of Stirling's Local Planning Policy 6.7 - Parking and Access (LPP 6.7). As per LPP 6.7 (Clause 5.3, Table 2), the car parking requirements for all residential development are governed by State Planning Policy 7.3 - Residential Design Codes (R-Codes).

Table 6 - Car parking provision rates

Guideline document	Car parking requirement		
City of Stirling's LPP 6.7	Activity Centre (Local Centre LC35) - 1 bay per 25m^2 GFA		
State Planning Policy 7.3 - Residential Design Codes (R-Codes) – C3.3 Multiple Dwelling		**Location A**	**Location B**
	Less than 110m^2 and or 1 or 2 bedrooms	1 bay / dwelling	1.25 bay / dwelling
	110m^2 or greater and or 3 or more bedrooms	1.25 bay / dwelling	1.5 bays / dwelling
	Visitors	0.25 bays / dwelling	0.25 bays /dwelling

Definitions:
Location A: includes all land located within:

- 800m walkable catchment of a train station on a high frequency rail route
- 250m walkable catchment of a transit stop:
  - On a high frequency transit route; or
  - That has multiple transit routes, that when combined stop every 15 minutes during weekday peak periods (7am – 9am and 5pm – 7pm)

Location B: not within Location A (***Note – Location B will be used to calculate parking rates)***

Table 7 – Car parking requirement calculations

Land Use / Type	Yield	Required Parking
Activity Centres	172.15m^2	7 bays
2+ Bedroom Dwelling	6 Dwellings	9 bays
Residential Visitors		2 bays
Total Parking Required:		**18 Bays**
Total Parking Provided:		**17 bays**

The proposed development provides a total of 17 on-site parking bays, allocated as follows:

- 9 bays for residents,
- 2 bays for residential visitors and
- 6 bays for commercial staff members, including the potential provision of 1 accessible bay.

This results in a shortfall of 1 bay when compared with the calculated parking requirement.

4.2.1 JUSTIFICATION FOR PARKING SHORTFALL

The 1-bay commercial shortfall can easily be managed given there is common on-street and lane access parking intended to service all of the visitors' parking in the centre. Furthermore, if the parking requirement was assessed under Table 2 of the LPP 6.7, the parking requirement for commercial component of the development would be 5.7 bays. This requirement is subject to percentage-based reduction criteria outlined in Table 3 of the City's Local Planning Policy 6.7:

- Proximity to High-Frequency Public Transport (10% Reduction): The site's location within 400m of Route 990 qualifies the development for a 10% reduction in the commercial parking requirement.
- Location within a Designated Activity Centre (10% Reduction): The site is located within the Muriel Avenue Local Centre (LC35), making it eligible for a further 10% reduction.

This would bring the parking requirement down to 4.6 parking bays for the commercial component. Given that an alternative assessment route would result in surplus parking (1 parking bay) and the fact that the LC35 has centralised reciprocal parking for visitors, we believe that the shortfall can be easily managed and will not cause any unacceptable impact on the operations of the centre.

4.2.2 OVERVIEW OF COMPLIANCE WITH AS2890 PARKING FACILITIES

The proposed development should adhere to the Australian/New Zealand Standard for parking facilities (AS 2890.01), which prescribes geometric and design requirements for off-street car parking facilities; and Part 6: Off-street parking for people with disabilities – AS2890.06.

The site will provide 17 parking bays.

Parking areas are designed to accommodate User Class 1 - Employee and commuter parking (generally, all-day parking) , User Class 2 - Long-term city and town centre parking, sport facilites, entertainment centres, hotels, motels (generally medium-term parking) and User Class 4 - Parking for people with disabilities

The access driveway is classified as Category 1, allowing direct access to the parking bays from Azurite Lane.

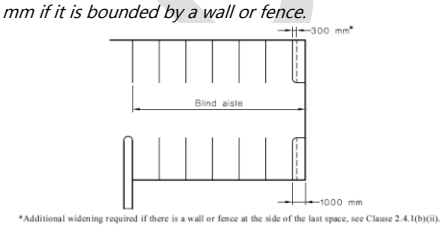
4.2.2.1 Comparison of proposed layout to AS2890.01 requirements

Table 8 - Parking dimensions comparisons

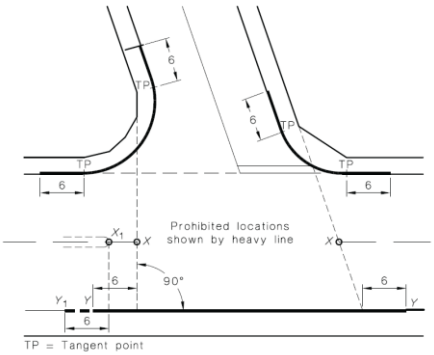
Parking Bay Type	AS2890.1:2004 Off-street car parking					
	Parking Bay Length		Parking Bay Width		Aisle Width	
	Required	Proposed	Required	Proposed	Required	Proposed
All bays at 90° (User Class 1A) Residents/Staff	5.4m	5.5m / 4.8m+0.6m*	2.4m	2.5m	5.8m	6.1m
All bays at 90° (User Class 2) Visitors	5.4m	5.5m / 4.8m+0.6m*	2.5m	2.5m	5.8m	6.1m
ACROD Parking	5.4m	5.5m / 4.8m+0.6m*	2.4m–ACROD 2.4m–shared space	2.5m 2.5m	5.8m	6.1m

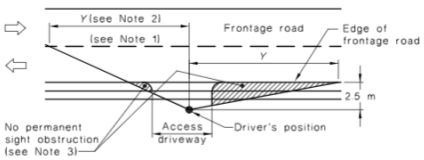
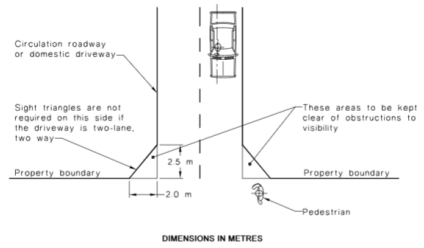
Note * - Parking bays on the northern side of the aisle are 5.5 m long, while the bays on the southern side are 4.8m long and terminate with a wheelstop, behind which is a landscaped strip. In accordance with AS 2890.1:2004, parking bays controlled by wheelstops should have a length of 5.4 m. Alternatively, low kerbs could be provided for the 4.8 m bays, together with an additional 0.6 m allowance for vehicle overhang. If this option is adopted, the kerb and the 0.6 m landscaped strip must be kept low, which precludes planting trees within that 0.6 m zone.

Table 9 – Parking design and layout comparison

REQUIREMENT	COMPLIANCE
"2.4.2 Angle parking aisle *(c) Blind aisles* *At blind aisles, the aisle shall be extended a minimum of 1 m beyond the last parking space, as shown in Figure 2.3, and the last parking space widened by at least 300 mm if it is bounded by a wall or fence.* 	• Blind aisles are extended by 1 meter beyond the last parking space • There are no parking spaces that are bounded by a wall or fence
"3.2.1 Access Driveway widths	• The proposed access driveway is 6m in width, higher than the typical maximum for category 1 access driveways. However, the requirements for a standard non-residential crossover according to the

Commented [AT1]: tbc

REQUIREMENT	COMPLIANCE
TABLE 3.2 **ACCESS DRIVEWAY WIDTHS** metres Category | Entry width | Exit width | Separation of driveways 1 | 3.0 to 5.5 | (Combined) (see Note) | N/A 2 | 6.0 to 9.0 | (Combined) (see Note) | N/A 3 | 6.0 | 4.0 to 6.0 | 1 to 3 4 | 6.0 to 8.0 | 6.0 to 8.0 | 1 to 3 5 | To be provided as an intersection, not an access driveway, see Clause 3.1.1. | NOTE: Driveways are normally combined, but if separate, both entry and exit widths should be 3.0 m min.	City of Stirling's Crossover Policy requires crossover width in range of 6-10m supporting this layout.
"3.2.3 Access Driveway Location *Driveway Categories 1 and 2* *At unsignalized intersections of sub-arterial, collector or local streets with each other or with an arterial road, access driveways in Categories 1 and 2 (see Table 3.1) shall not be located in the sections of kerb shown by heavy lines in Figure 3.1. This requirement shall not apply to accesses to domestic driveways in the kerb section opposite the entering road at any intersection including signalized intersections. Furthermore, it shall not apply to any access driveway serving a property which would otherwise be denied access due to the physical impossibility of meeting the requirement."*  	• The proposed driveway is located outside the restricted 6m zone from the tangent point of the Azurite Lane / King George Street and the Azurite Lane / Thrall Street Intersections.
"3.2.4 Sight distance at access driveway exits *Entering sight distance* *Unsignalized access driveways shall be located so that the intersection sight distance along the frontage road is available to drivers leaving the car park or domestic driveway is at least shown in Figure 3.2*	• There are no obstructions within the required sight distance area preventing vision to the point of the minimum SSD.

REQUIREMENT	COMPLIANCE
 **Distance (Y) along frontage road m** **Frontage road speed (Note 4) km/h** / **Access driveways other than domestic (Note 5)** / **Domestic property access (Note 6)** **Desirable 5 s gap** / **Minimum SSD** 40: 55 / 35 / 30 50: 69 / 45 / 40 60: 83 / 65 / 55 70: 97 / 85 / 70 80: 111 / 105 / 95 90: 125 / 130 / Use values from 2nd and 3rd columns 100: 139 / 160 110: 153 / 190	
Sight distance to pedestrians *Clear sight lines as shown in Figure 3.3 shall be provided at the property line to ensure adequate visibility between vehicles leaving the car park or domestic driveway and pedestrians on the frontage road footpath."*  FIGURE 3.3 MINIMUM SIGHT LINES FOR PEDESTRIAN SAFETY	• Plans show no obstructions potentially preventing sight distance to pedestrians

Commented [AT2]: tbc

4.3 Vehicle Swept Paths

The proposed parking area has been tested using a B99 Passenger Vehicle (5.2m). No navigability issues were found. For further details, please refer to the swept path analysis plans in Appendix C.

4.4 ACROD Parking

Table 10 - Accessible car parking provision rates

Guideline document	Building class	Car parking provision
	• Class 6 — (a) Up to 1000 carparking spaces - 1 space for every 50 carparking	1 space

	spaces or part thereof. (b) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces. - 1 space.	
NCC 2022 Building Code of Australia - Volume One	• Class 2 – Not required unless dwelling is set as accessible	N/A

In addition to the general parking supply, the proposal provides for the potential inclusion of one dedicated accessible parking bay, which is compliant to the requirements for one ACROD bay as set out in the NCC 2022 Building Code of Australia – Volume One.

4.5 Bicycle Parking

Bicycle parking requirements are to be in line with City of Melville's LPP 1.6 provisions as outlined in the **Table 11**:

Table 11 – Bicycle parking provision rates and calculation

Guideline document	Bicycle parking requirement	Yield	Calculation
City of Stirling's LPP 6.7 (Section 7.1)	• the requirement for bicycle parking is triggered for non-residential developments of 400m² GFA or more	172.15m²	0 bays
State Planning Policy 7.3 - Residential Design Codes (R-Codes) – Table 2.3b	• Resident: 0.5 x the total number of dwellings	6 dwellings	3 Bays
	• Visitor: No visitor bicycle parking required	6 dwellings	0 Bay
	Total Bicycle parking Required:		**3 bays**
	Total Bicycle parking Provided:		**4 bays**

The development proposes to provide 4 dedicated bicycle bays, which represents a surplus of 1 bay against the policy requirement.

4.6 Delivery and Service

All delivery and servicing activities are proposed to be managed in a way that minimises disruption to the surrounding road network and ensures safety for pedestrians and other road users. It is expected that the proposed development will be included in the regular waste collection along with other developments in LC35. Waste collection vehicle and delivery vehicles will service the site from the unnamed laneway connecting King George St and Thrall St.

Based on the requirements of LPP 6.7, the proposed development does not require a dedicated delivery/service bay on-site.

Table 12 – Delivery/service parking provision rates and calculation

Guideline document	Delivery/service parking requirement	Yield	Calculation
City of Stirling's LPP 6.7 (Section 5.1.1)	In non-residential developments with over 500m² of GFA, a minimum of one bay shall be permanently set aside and marked for the exclusive use of delivery, service, and courier vehicles.	172.15m²	0 bays required
		Total Required:	0 bays

4.7 Traffic Impact of the Proposed Development

The NSW Guide to Transport Impact Assessment (GTIA) was updated and published in 2024 following extensive consultation with industry professionals, and these new rates are generally adopted where available.

The proposed development plans indicate commercial units at the ground floor level, which include a wide spectrum of uses such as café, hair salon, office, retail and takeaway food, each generating different traffic patterns. The site is part of LC35, and as part of a Local Centre, a variety of these uses are permitted and may change during the operation of the development. The rate for a shopping centre has been adopted because it generally accounts for all of the above-mentioned uses, providing a valid and conservative estimate of traffic generation.

Table 13 - Trip generation rates

Guideline document	Trip generation rates
NSW Guide to Transport Impact Assessment (GTIA)	**Shopping Centres** (Regional) • AM peak hour = 3.34 trips / 100m² GLFA • PM peak hour = 4.67 trips / 100m² GLFA • Daily = 51.53 trips / 100m² GLFA
	Medium Density Residential (Regional) • AM peak hour = 0.41 trips / dwelling • PM peak hour = 0.60 trips / dwelling • Daily = 3.67 trips / dwelling

Table 14 - Calculation of vehicular trips

Land Use Type	Yield	Daily Traffic Generation (VPD)	Peak Hour Traffic Generation (VPH)	
			AM	PM
Shopping Centres	156.58 m^2 GLFA	81	5	7
Medium Density Residential	6 apartments	22	2	4
	Total	**103**	**7**	**11**

According to WAPC guidelines, developments generating fewer than 10 vehicular trips during peak hours are considered to have a low impact on the road network, while those generating between 10 and 100 peak-hour trips are considered to have a moderate impact.

The proposed development is expected to generate 103 daily vehicular trips, 7 vehicular trips in the AM peak and 11 vehicular trips in the PM peak. The surrounding road network is expected to successfully absorb the additional traffic.

4.8 Trip Distribution

The distribution of trips is based on the site's location relative to major employment centres, residential catchments and the arterial road network. As shown in the proposed development plans in Appendix A, the facility fronts Muriel Avenue, while vehicle access to the parking area is taken from the rear via Azurite Lane.

Azurite Lane currently operates as a one-way street, carrying traffic from south to north (from Thrall Street toward King George Street). A future 0.5 m widening is anticipated to allow two-way operation. For the purpose of this assessment, the existing one-way arrangement has been considered, with the note that traffic patterns may change once the planned upgrade is implemented. **Table 15** summarises the expected main trip distribution routes.

Table 15 - Trip Distribution Routes

Route	Percentage	
	INbound	OUTbound
> From the south along Muriel Avenue >> Thrall Street >> Azurite Lane >> subject development site and	**23%**	
> From subject development site via Azurite Lane >> King George Street >> Muriel Avenue to the south		**23%**
> From the east along King George Street >> Muriel Avenue >> Thrall Street >> Azurite Lane >> subject development site and	**15%**	
> From subject development site via Azurite Lane >> King George Street to the east		**15%**
> From the east along Thrall Street >> Azurite Lane >> subject development site and	**2%**	
> From subject development site via Azurite Lane:		**1%**

	• >> King George Street to the east and • >> King George Street >> Muriel Avenue >> Thrall Street to the east		**1%**
>	From the west along King George Street >> Muriel Avenue >> Thrall Street >> Azurite Lane >> subject development site and	**6%**	
>	From subject development site via Azurite Lane >> King George Street to the west		**6%**
>	From the west along Thrall Street >> Azurite Lane >> subject development site and	**4%**	
>	From subject development site via Azurite Lane: • >> King George Street to the west and • >> King George Street >> Muriel Avenue >> Thrall Street to the west		**2%** **2%**
	Total generated traffic	**50%**	**50%**

For a graphical presentation of these volumes, please refer to Plans S06–S08 in Appendix B.

4.9 Review of Available Planning Information

4.9.1 CITY OF STIRLING LOCAL PLANNING SCHEME NO 4 DRAFT

The City of Stirling is currently in the process of replacing LPS3 with the new draft Local Planning Scheme No. 4 (LPS4). A review of the draft scheme maps and text confirms that the 'Local Centre' zoning for the site at 22 Muriel Avenue is proposed to be carried over into the new scheme.

The draft LPS4 reinforces the planning direction established in the Local Planning Strategy and LPS3. The proposed development is therefore considered to be consistent with both the current and emerging statutory planning framework for the site.

4.10 Site-Specific Issues and Proposed Remedial Measures

Site-specific issues identified during the assessment, along with corresponding remedial measures, are summarised in **Table 16** below.

Table 16 – Analysed Site-Specific Issues and Proposed Remedial Measures

How many site-specific issues need to be discussed?	
Site-Specific Issue No 1	> Parking provision
Remedial Measure / Response	The proposed parking provision results in a shortfall of one car bays when assessed against the relevant requirement. However, this matter has been elaborated within the report, and the proposed provision can be considered adequate given the specific characteristics of the site and the nature of the proposed development.

APPENDICES

APPENDIX A

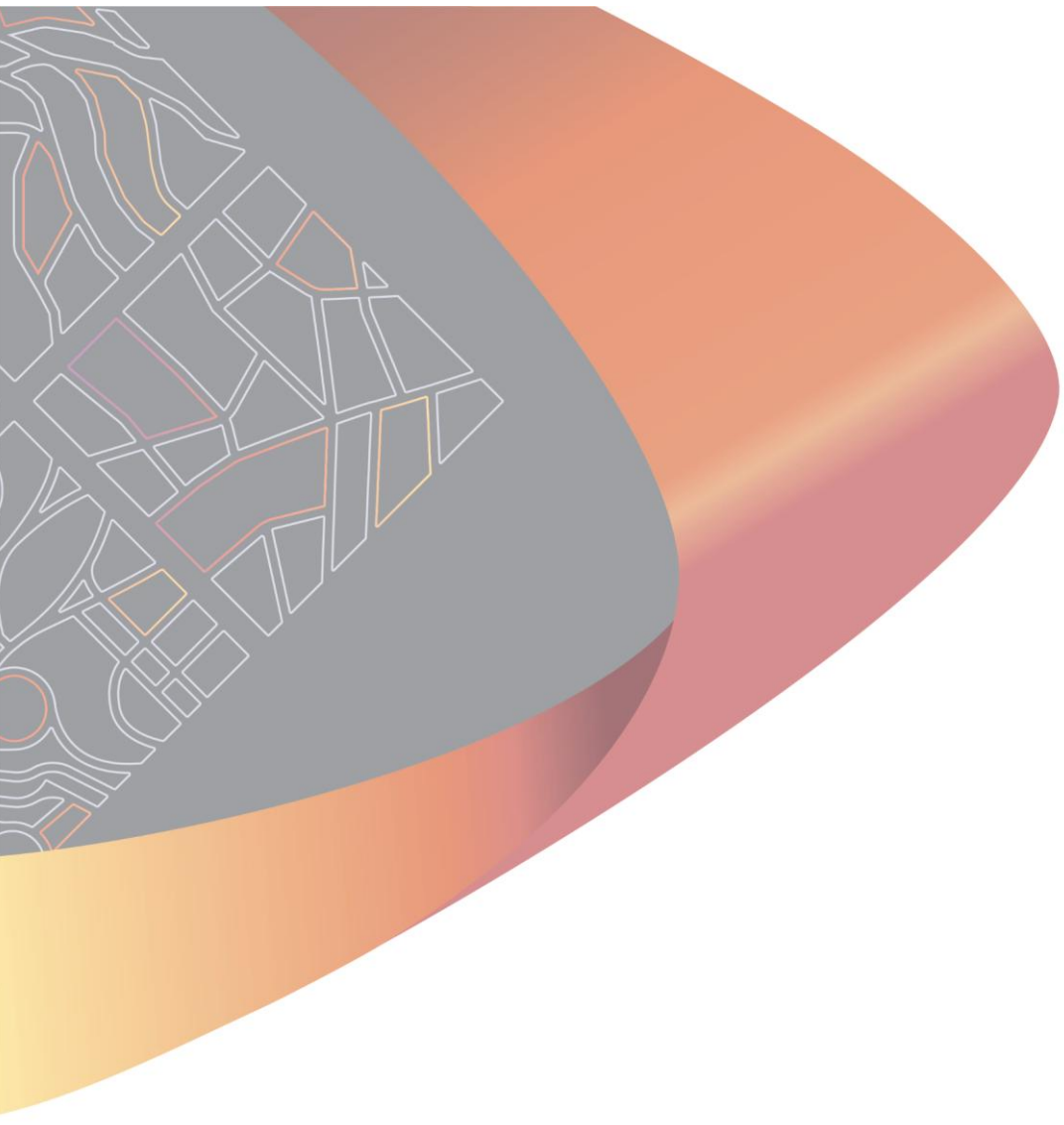
DEVELOPMENT SITE PLAN

APPENDIX B

TRANSPORT PLANNING AND TRAFFIC PLANS

APPENDIX C

VEHICLE SWEPT PATH ANALYSIS



Premise

Stavertis

Address:22 Muriel Ave INNALOO

Apartment Complex

Job Number: 23011

Drawing No	Description
01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section

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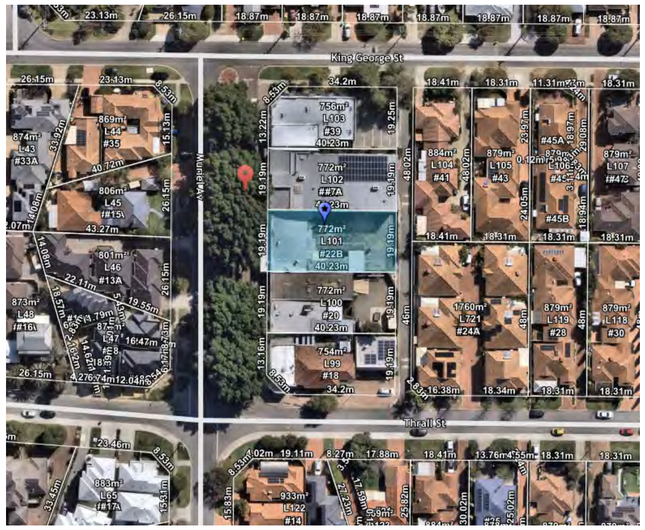

Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Existing Site Survey

Scale:	Sheet Size:
1:200	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
02 of 13

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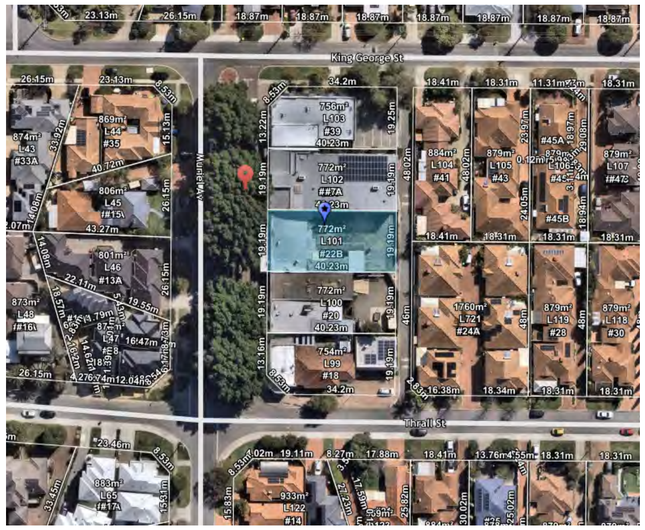

Soak Well Type	No.	
SW 1800x900	6	13.7 m3
Total Capacity		13.7 m3
Roof Area GF		10.1 m2
Paved Area		495.6 m2
Roof Area 3rd		486.2 m2
Total Area		**991.8 m2**
Capacity Required (Area x 0.0125)		**12.4 m3**
Extra Capacity Provided		**1.3 m3**

NOTE: ALL DOWNPIPES CONNECTED TO SOAKWELLS WITH PVC STORMWATER PIPE

Overshadowing
Monday 21st June @ 12pm
20 Muriel Area = 772m²
Overshadowing = 66.64%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
03 of 13

Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
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Scale 1:200 @ A3

Dwg:FS386-01

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- Power Pole
- Power Dome
- Sewer M/H

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COMMERCIAL DEVELOPMENTS MURIEL ROAD

RESIDENTIAL DEVELOPMENTS THRALL STREET

COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Context Plan

Scale:	Sheet Size:
	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
04 of 13

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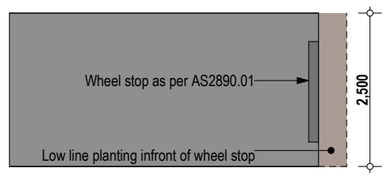
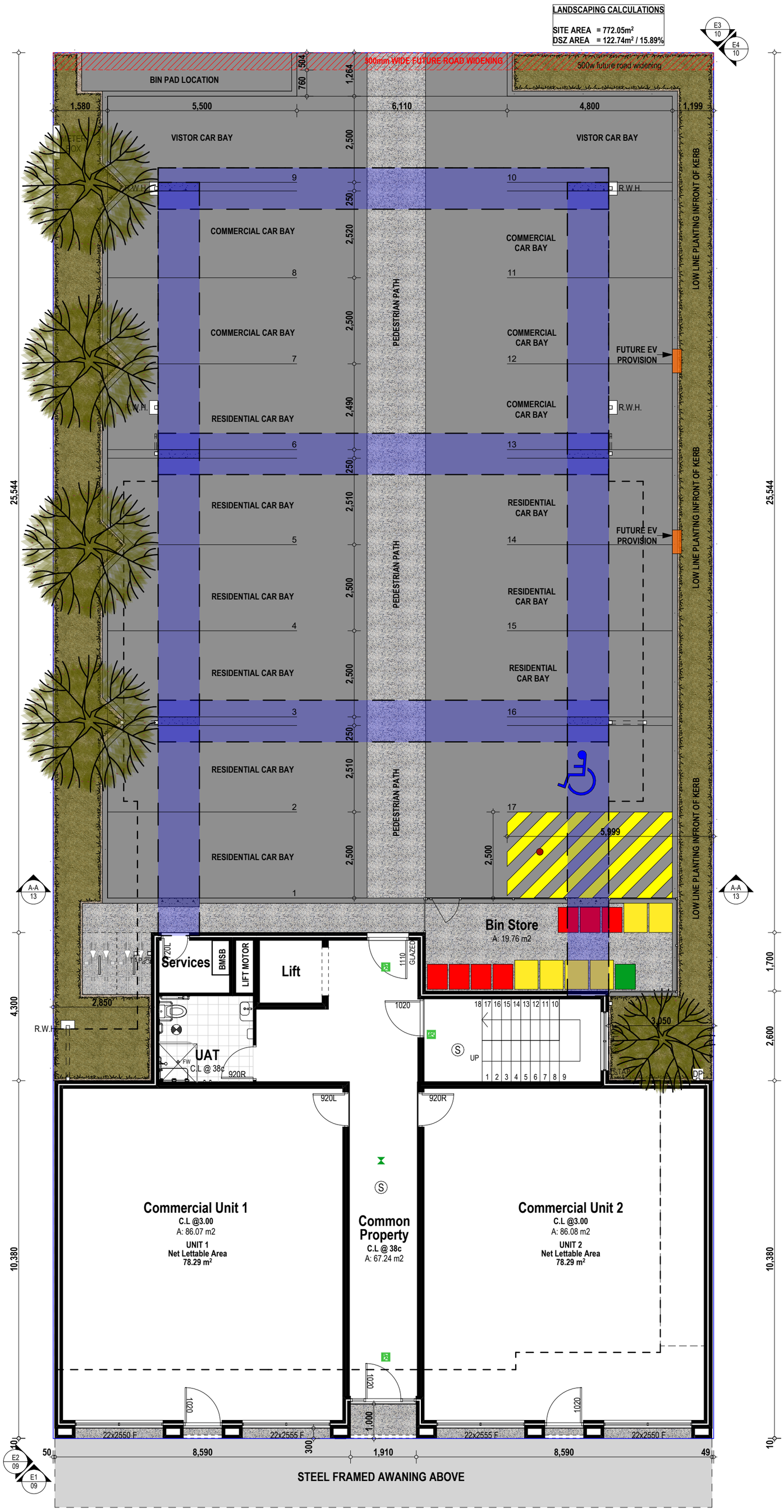


Carbay Detail

LANDSCAPING CALCULATIONS

SITE AREA = 772.05m²
DSZ AREA = 122.74m² / 15.89%



PLOT RATIO

COMMERCIAL
Site Area: 772.05m²
Building Footprint: 172.36m²
22.32%

RESIDENTIAL
Site Area: 772.05m²
Building Footprint: 803.02m²
104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
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Apartment 5			
Balcony	22.54	20,790	70.18
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Residence	139.30	59,350	394.09
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Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

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3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Ground Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

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05 of 13

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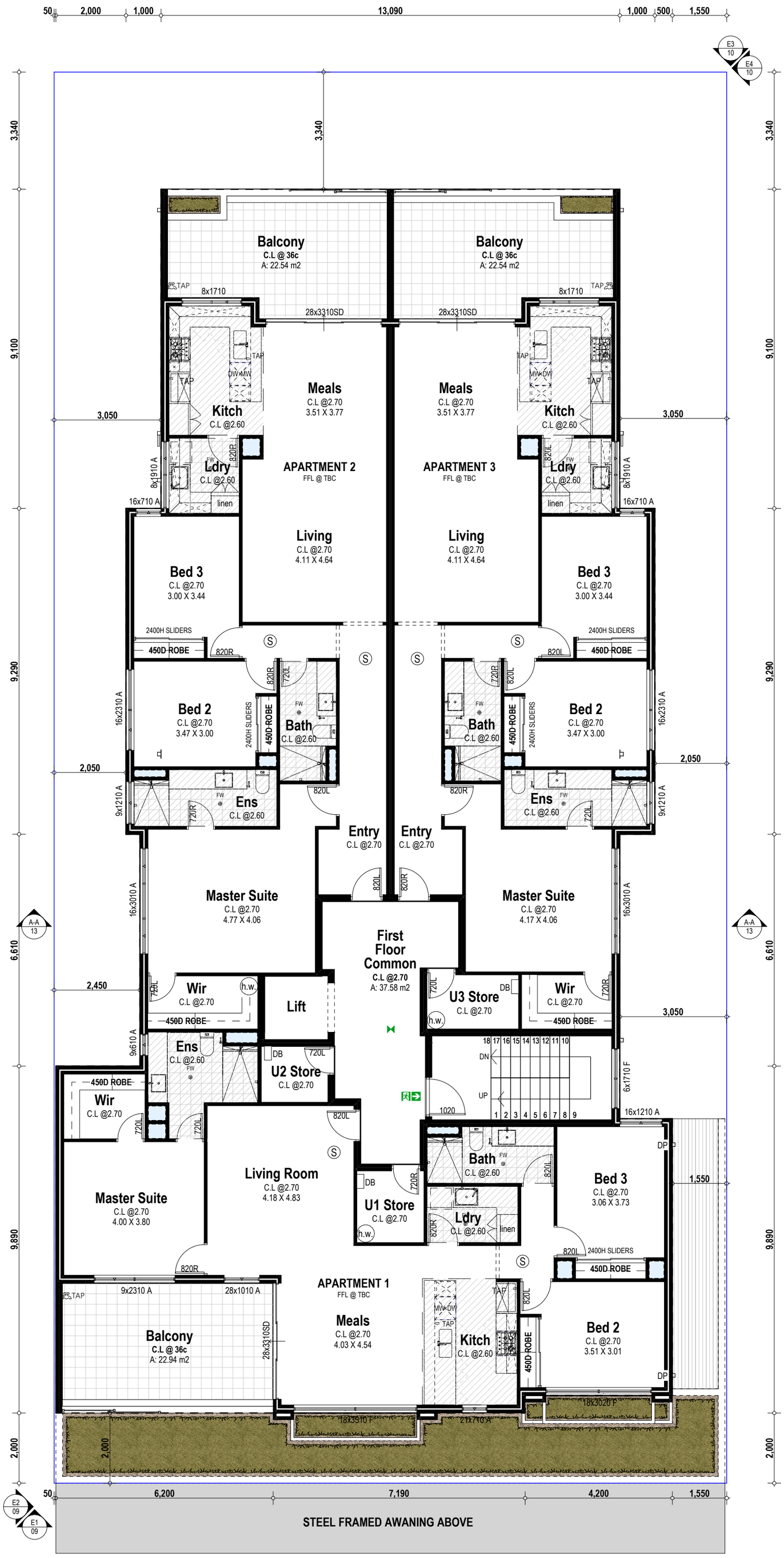
Muriel Ave



PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
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Drawing Title:
First Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
06 of 13

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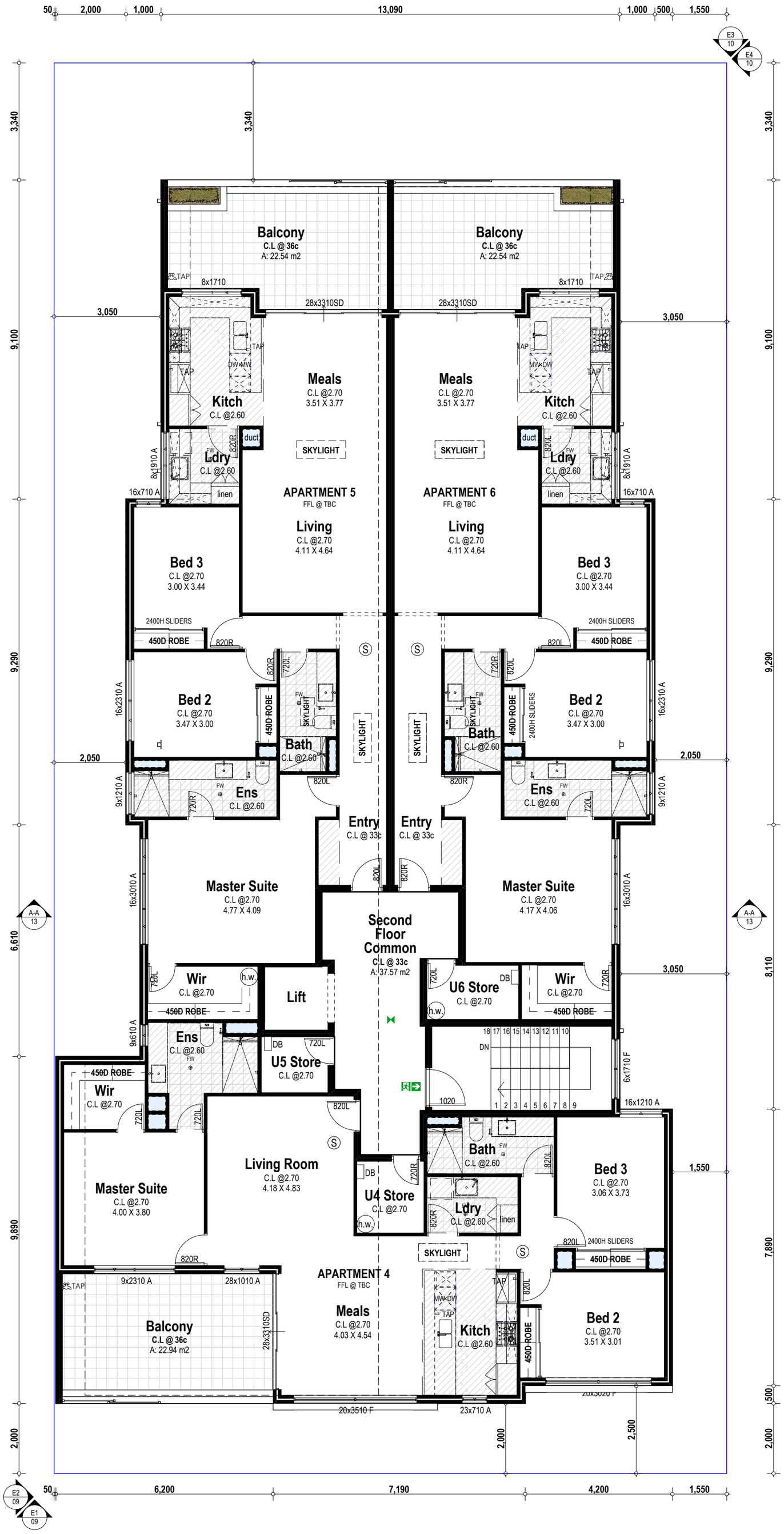

PLOT RATIO

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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
07 of 13

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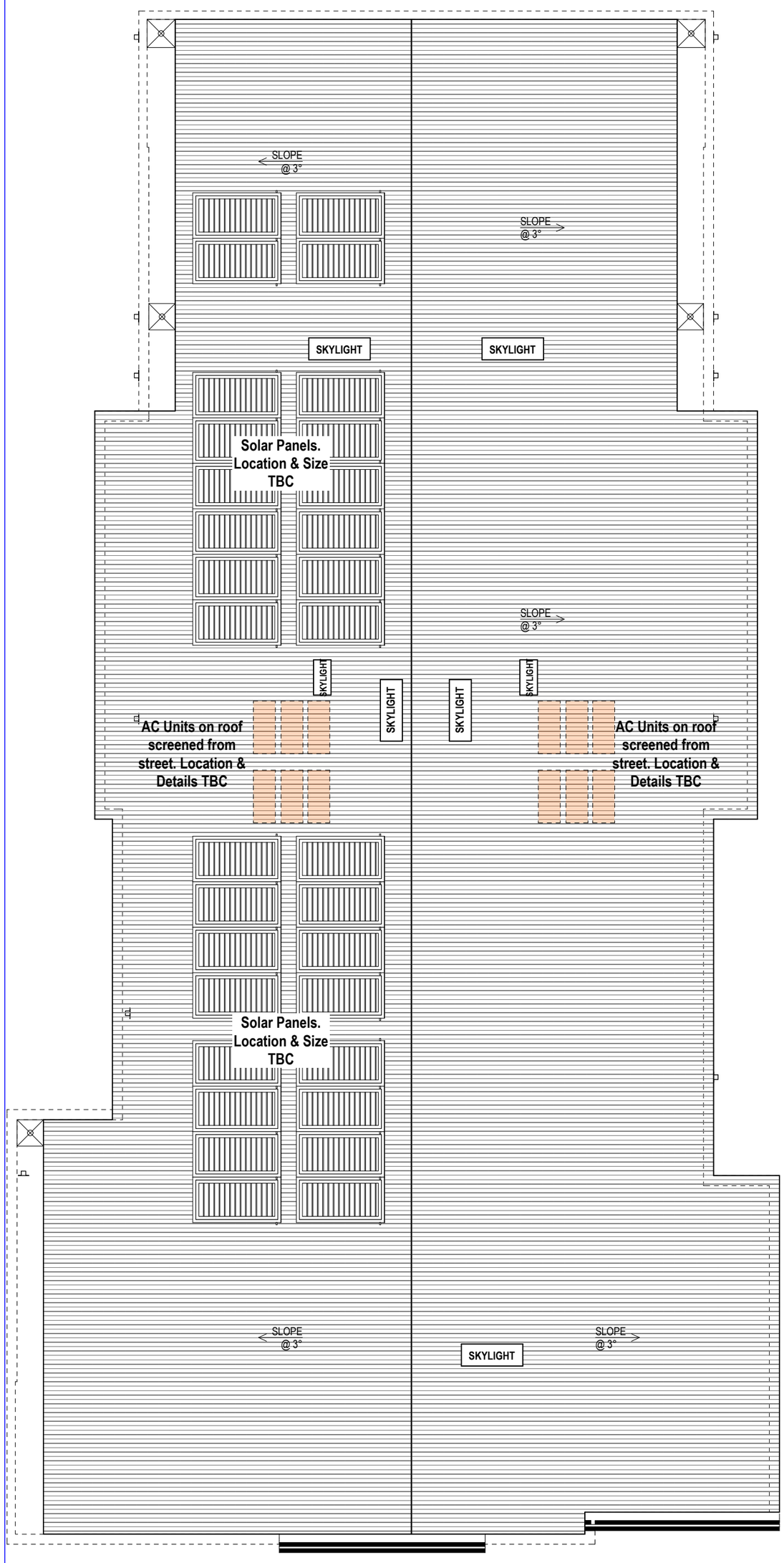

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6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Roof Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
08 of 13

GERMANO DESIGNS
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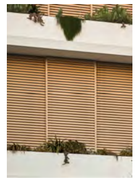
KNOTWOOD ALUMIN SCREENING

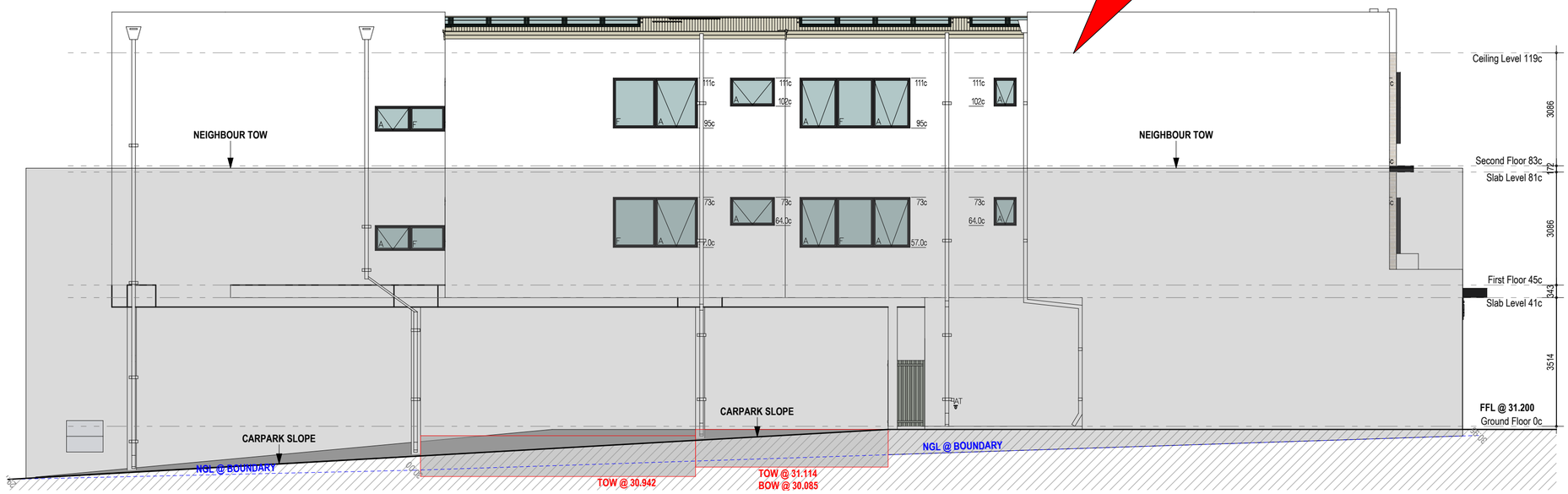


DULUX RENDER MONUMENT

BOWRAL 76 SIMMENTAL SILVER

E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

Revision	Description	Date
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale: 1:100
Sheet Size: A2
Project No: 23011
Revision Number: 7.00
Drawing No.: 09 of 13

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E3 East Elevation
1:100

E4 South Elevation
1:100

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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
10 of 13

GERMANO DESIGNS
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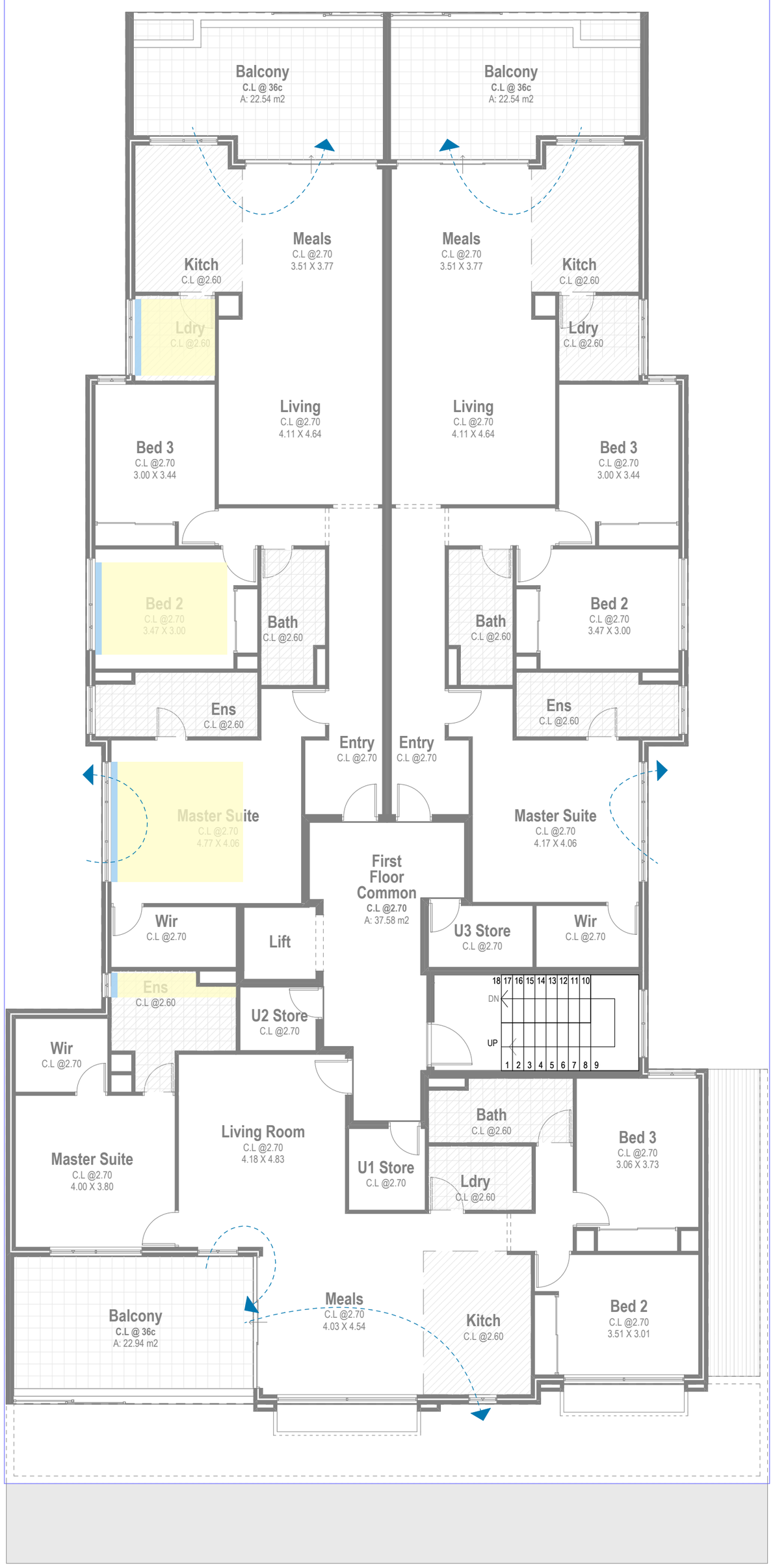

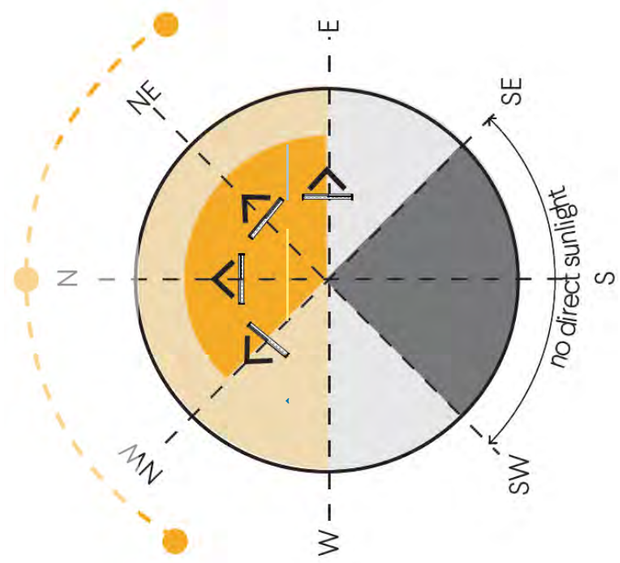

SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

Revision	Description	Date
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
11 of 13

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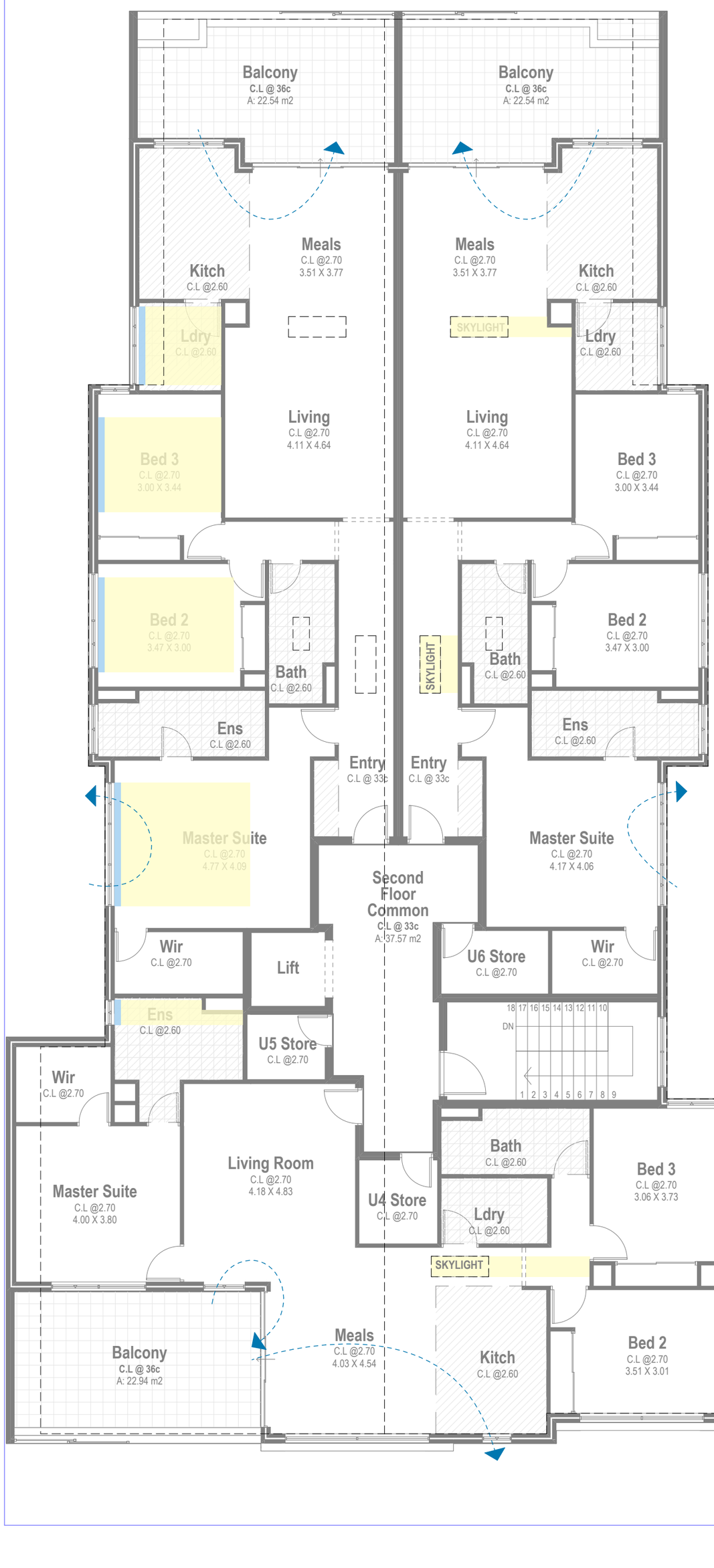

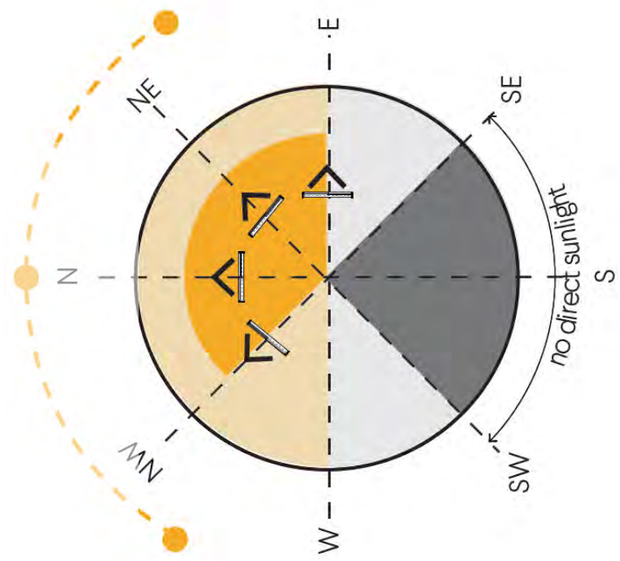

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Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
SF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
12 of 13

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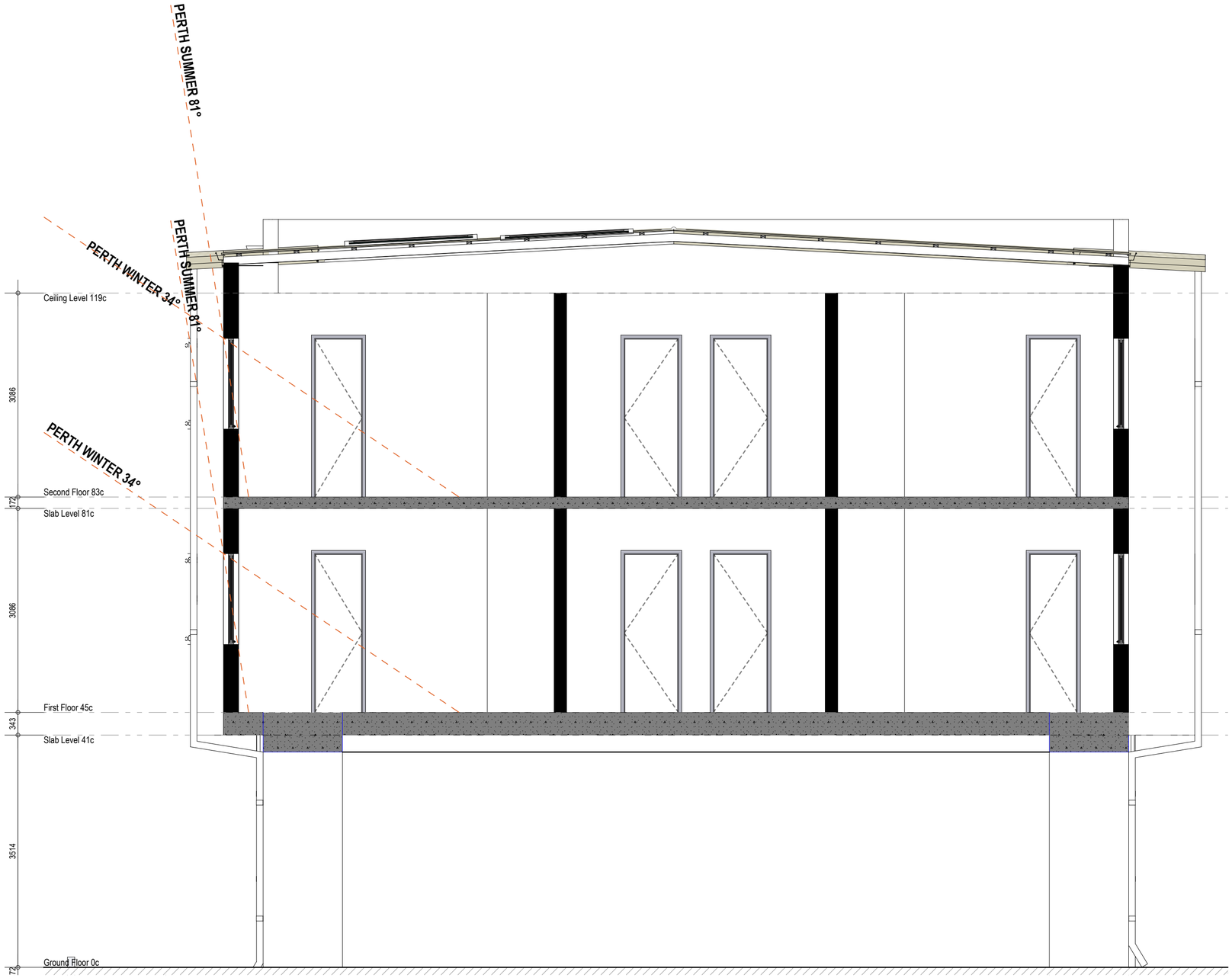

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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Section

Scale:	Sheet Size:
1:50	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
13 of 13

GERMANO DESIGNS
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PARKS AND RECREATION	LOCATION BOUNDARY
WATERWAYS	DISTANCE FROM LOCATION
PUBLIC PURPOSE	CITY OF STIRLING — LOCAL GOVERNMENT NAME
SHOPPING AREA	INNALOO — SUBURB NAME

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

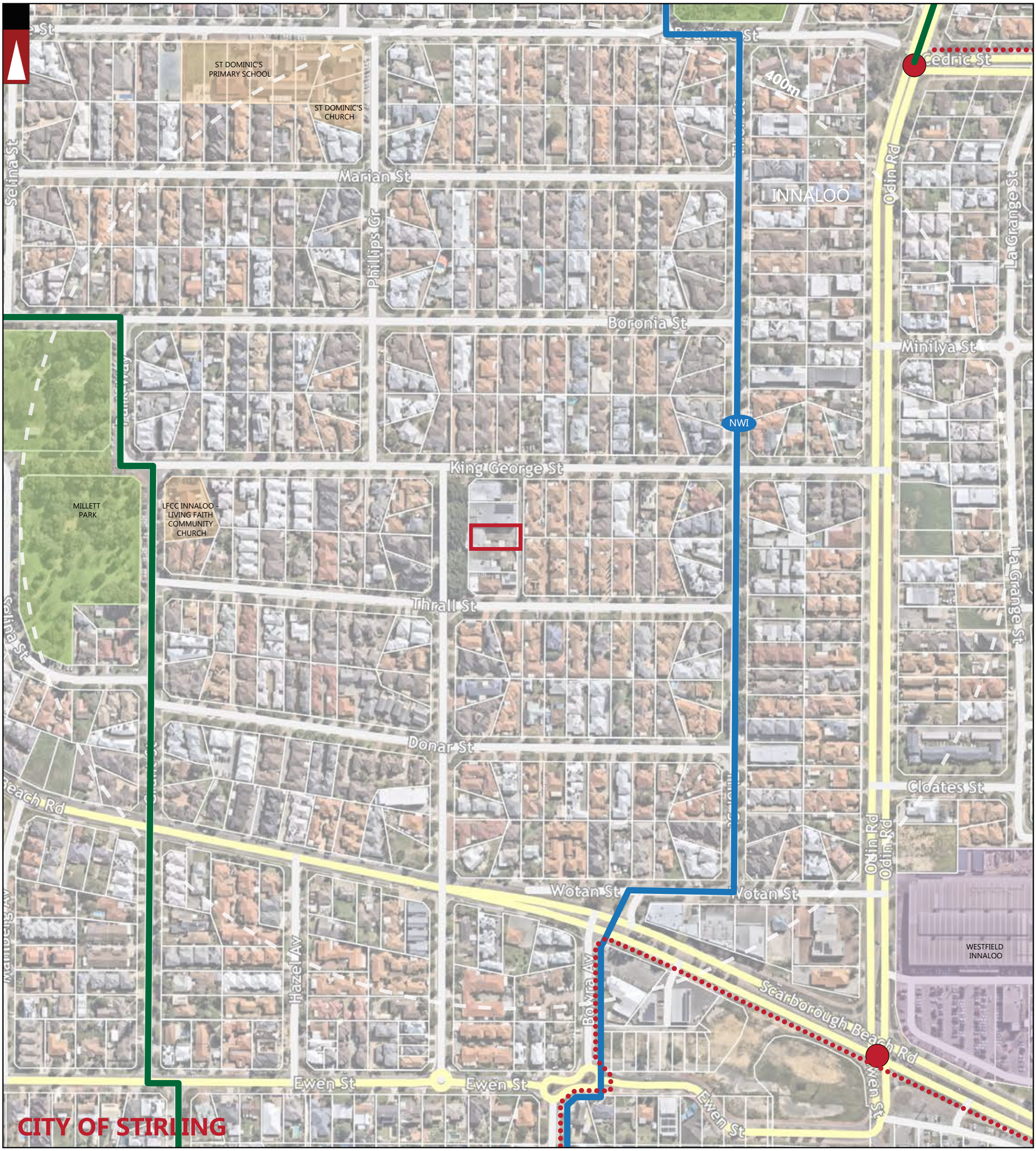
PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: LOCALITY PLAN - 400M RADIUS

DRAWING NUMBER: P004157_ S01

DRAWN BY: J.S.

Premise — PART OF THE Amey GROUP



PARKS AND RECREATION
WATERWAYS
PUBLIC PURPOSE
SHOPPING AREA

LOCATION BOUNDARY
DISTANCE FROM LOCATION
CITY OF STIRLING — LOCAL GOVERNMENT NAME
INNALOO — SUBURB NAME

OTHER SHARED PATH (SHARED BY PEDESTRIANS & CYCLISTS)
GOOD ROAD RIDING ENVIRONMENT
NW12 — PERTH BICYCLE NETWORK (PBN) - CONTINUOUS SIGNED ROUTES
TRAFFIC LIGHT

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

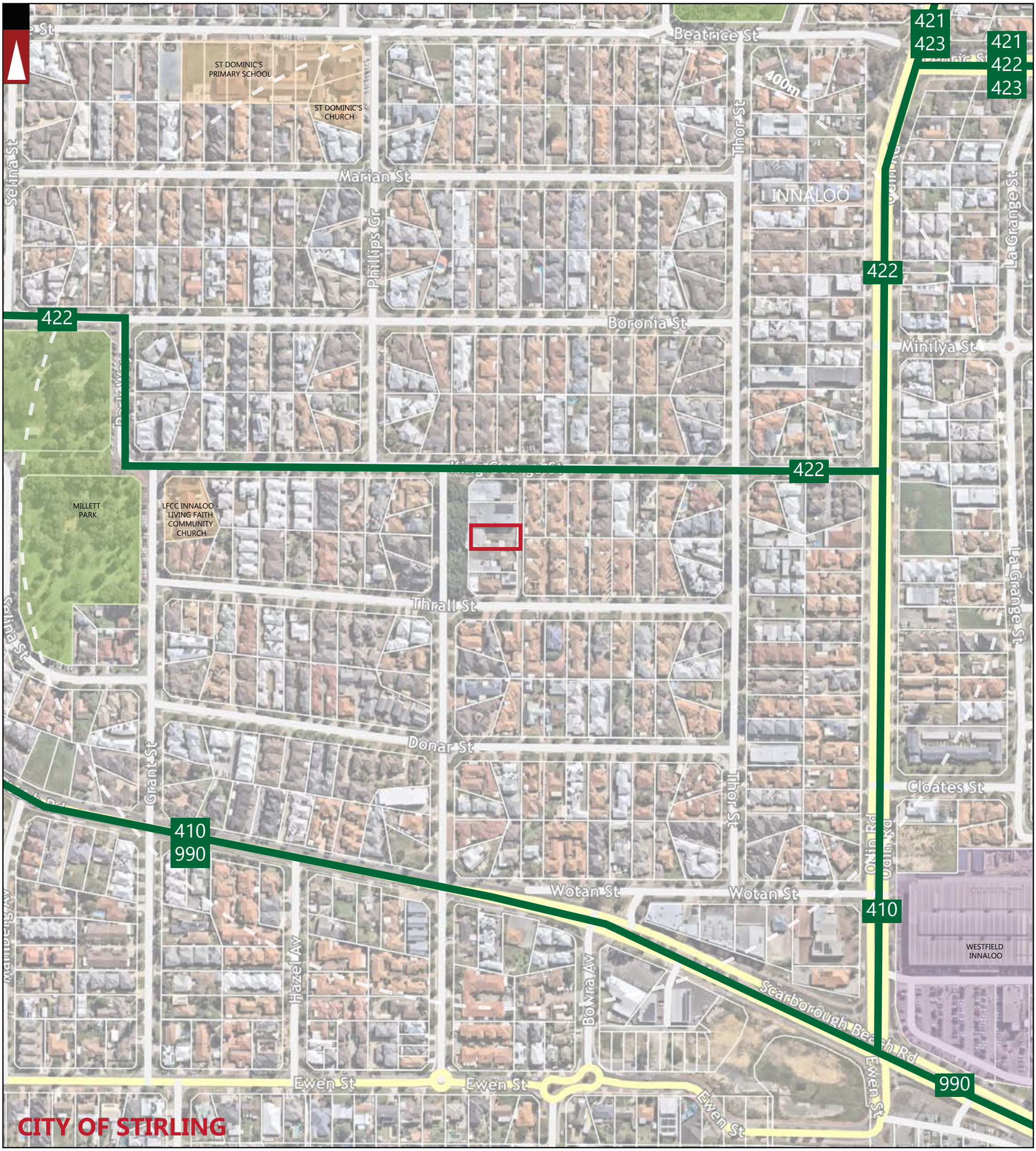
PROJECT:
22 MURIEL AVENUE, INNALOO

TITLE:
BICYCLE NETWORK PLAN - 400M RADIUS

DRAWING NUMBER:
P004157_ S02

DRAWN BY:
J.S.

Premise
PART OF THE Amey GROUP



PARKS AND RECREATION

WATERWAYS

PUBLIC PURPOSE

SHOPPING AREA

LOCATION BOUNDARY

DISTANCE FROM LOCATION

CITY OF STIRLING — LOCAL GOVERNMENT NAME

INNALOO — SUBURB NAME

BUS ROUTES

103 — BUS ROUTE NUMBER

NOTE : FOR MORE INFORMATION REGARDING THE DESCRIPTION OF BUS ROUTES AND THEIR INDICATIVE PEAK AND OFF-PEAK FREQUENCIES REFER TO THE REPORT.

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT:
22 MURIEL AVENUE, INNALOO

TITLE:
PUBLIC TRANSPORT PLAN - 400M RADIUS

DRAWING NUMBER:
P004157_ S03

DRAWN BY:
J.S.

Premise
PART OF THE Arney GROUP

PARKS AND RECREATION

WATERWAYS

PUBLIC PURPOSE

SHOPPING AREA

LOCATION BOUNDARY

DISTANCE FROM LOCATION

CITY OF STIRLING — LOCAL GOVERNMENT NAME

INNALOO — SUBURB NAME

PEDESTRIAN PATH WITHIN 400M RADIOUS FROM THE SUBJECT SITE

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: PEDESTRIAN PATHS PLAN - 400M RADIUS

DRAWING NUMBER: P004157_ S04

DRAWN BY: J.S.

Premise — PART OF THE Amey GROUP

PARKS AND RECREATION

WATERWAYS

PUBLIC PURPOSE

SHOPPING AREA

LOCATION BOUNDARY

DISTANCE FROM LOCATION

CITY OF STIRLING — LOCAL GOVERNMENT NAME

INNALOO — SUBURB NAME

5,512 — NUMBER OF VEHICLES PER DAY

AM 1145 – 381
PM 1630 – 480
NUMBER OF VEHICLES PER AM PEAK HOUR
NUMBER OF VEHICLES PER PM PEAK HOUR

2014 — YEAR

EAST OF HARLOW ROAD — LOCATION

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT:
22 MURIEL AVENUE, INNALOO

TITLE:
EXISTING TRAFFIC COUNTS - 400M RADIUS

DRAWING NUMBER:
P004157_ S05

DRAWN BY:
J.S.

Premise
PART OF THE Arney GROUP

LOCATION BOUNDARY

Lewis Road ROAD NAME

103 — Total Expected Traffic Generation from the proposed development

503 — Total Expected Traffic Generation from Subject Site on the specific section of road - **IN and OUT direction**

Traffic Flow IN Direction

Traffic Flow OUT Direction

NOTE: THE PLAN IS COURTEOUSY OF GERMANO DESIGN

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: TRAFFIC FLOW DIAGRAM - DAILY

DRAWING NUMBER: P004157_ S06

DRAWN BY: J.S.

Premise
PART OF THE Arney GROUP

LOCATION BOUNDARY

Lewis Road ROAD NAME

103 Total Expected Traffic Generation from the proposed development

503 Total Expected Traffic Generation from Subject Site on the specific section of road - **IN and OUT direction**

Traffic Flow IN Direction

Traffic Flow OUT Direction

NOTE: THE PLAN IS COURTEOUSY OF GERMANO DESIGN

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: TRAFFIC FLOW DIAGRAM - AM PEAK

DRAWING NUMBER: P004157_ S07

DRAWN BY: J.S.

Premise
PART OF THE Arney GROUP

LOCATION BOUNDARY

Lewis Road ROAD NAME

103 Total Expected Traffic Generation from the proposed development

503 Total Expected Traffic Generation from Subject Site on the specific section of road - **IN and OUT direction**

Traffic Flow IN Direction

Traffic Flow OUT Direction

NOTE: THE PLAN IS COURTEOUSY OF GERMANO DESIGN

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

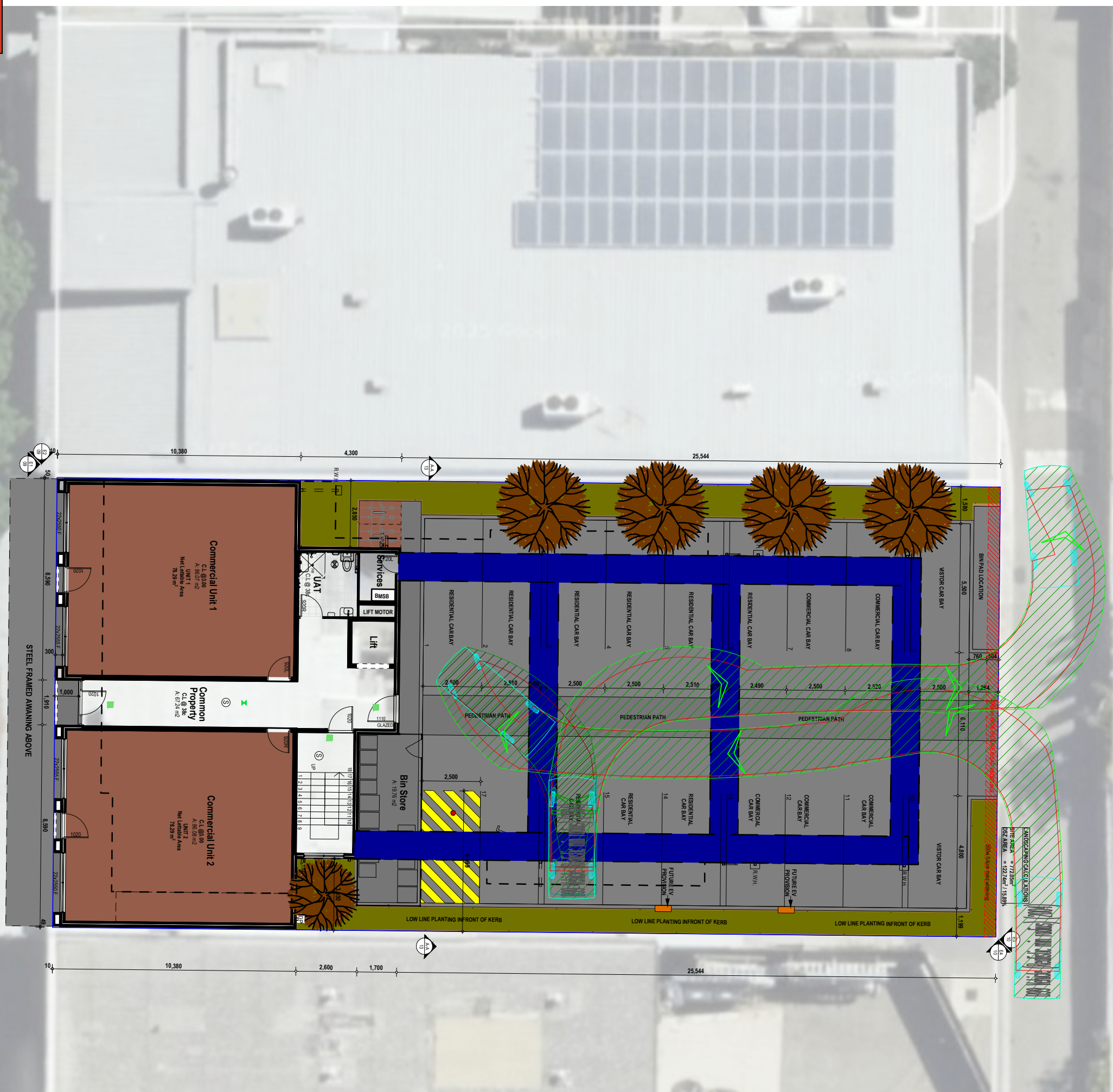
PROJECT: 22 MURIEL AVENUE, INNALOO

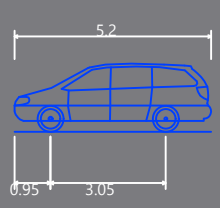
TITLE: TRAFFIC FLOW DIAGRAM - PM PEAK

DRAWING NUMBER: P004157_ S08

DRAWN BY: J.S.

Premise
PART OF THE Arney GROUP





Passenger vehicle (5.2 m)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.804m
Min Body Ground Clearance	0.295m
Track Width	1.840m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	6.300m

- Lot boundary
- Wheel Path (Forward Vehicle Motion)
- Vehicle Chasis Envelope (Forward Vehicle Motion)
- Wheel Path (Reverse Vehicle Motion)
- Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

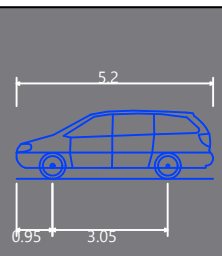
PROJECT: 22 Muriel Avenue, Innaloo

TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER: P004157_S20

DRAWN BY: A.T.

Premise
PART OF THE Amey GROUP



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Overall Width	1.940m
Overall Body Height	1.804m
Min Body Ground Clearance	0.295m
Track Width	1.840m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	6.300m

- Lot boundary
- Wheel Path (Forward Vehicle Motion)
- Vehicle Chasis Envelope (Forward Vehicle Motion)
- Wheel Path (Reverse Vehicle Motion)
- Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

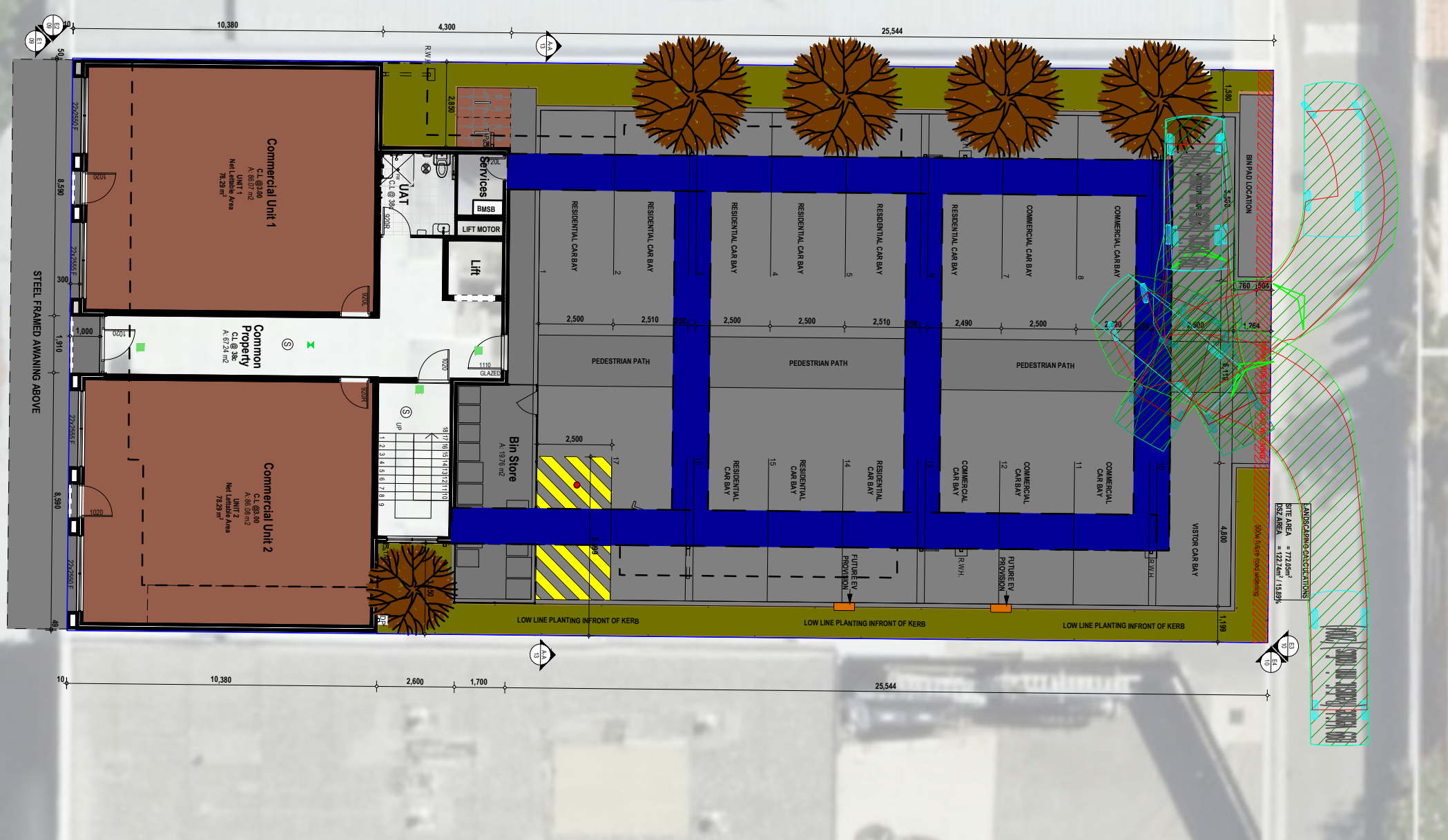
PROJECT: 22 Muriel Avenue, Innaloo

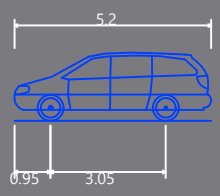
TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER: P004157_S21

DRAWN BY: A.T.

Premise
PART OF THE Amey GROUP





Passenger vehicle (5.2 m)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.804m
Min Body Ground Clearance	0.295m
Track Width	1.840m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	6.300m

Lot boundary

Wheel Path (Forward Vehicle Motion)

Vehicle Chasis Envelope (Forward Vehicle Motion)

Wheel Path (Reverse Vehicle Motion)

Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

PROJECT: 22 Muriel Avenue, Innaloo

TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER: P004157_S22

DRAWN BY: A.T.

Premise
PART OF THE Amey GROUP

5.2	Passenger vehicle (5.2 m)	
	Overall Length	5.200m
	Overall Width	1.940m
	Overall Body Height	1.804m
	Min Body Ground Clearance	0.295m
	Track Width	1.840m
	Lock to Lock Time	4.00s
	Kerb to Kerb Turning Radius	6.300m

0.95 3.05

- Lot boundary
- Wheel Path (Forward Vehicle Motion)
- Vehicle Chasis Envelope (Forward Vehicle Motion)
- Wheel Path (Reverse Vehicle Motion)
- Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

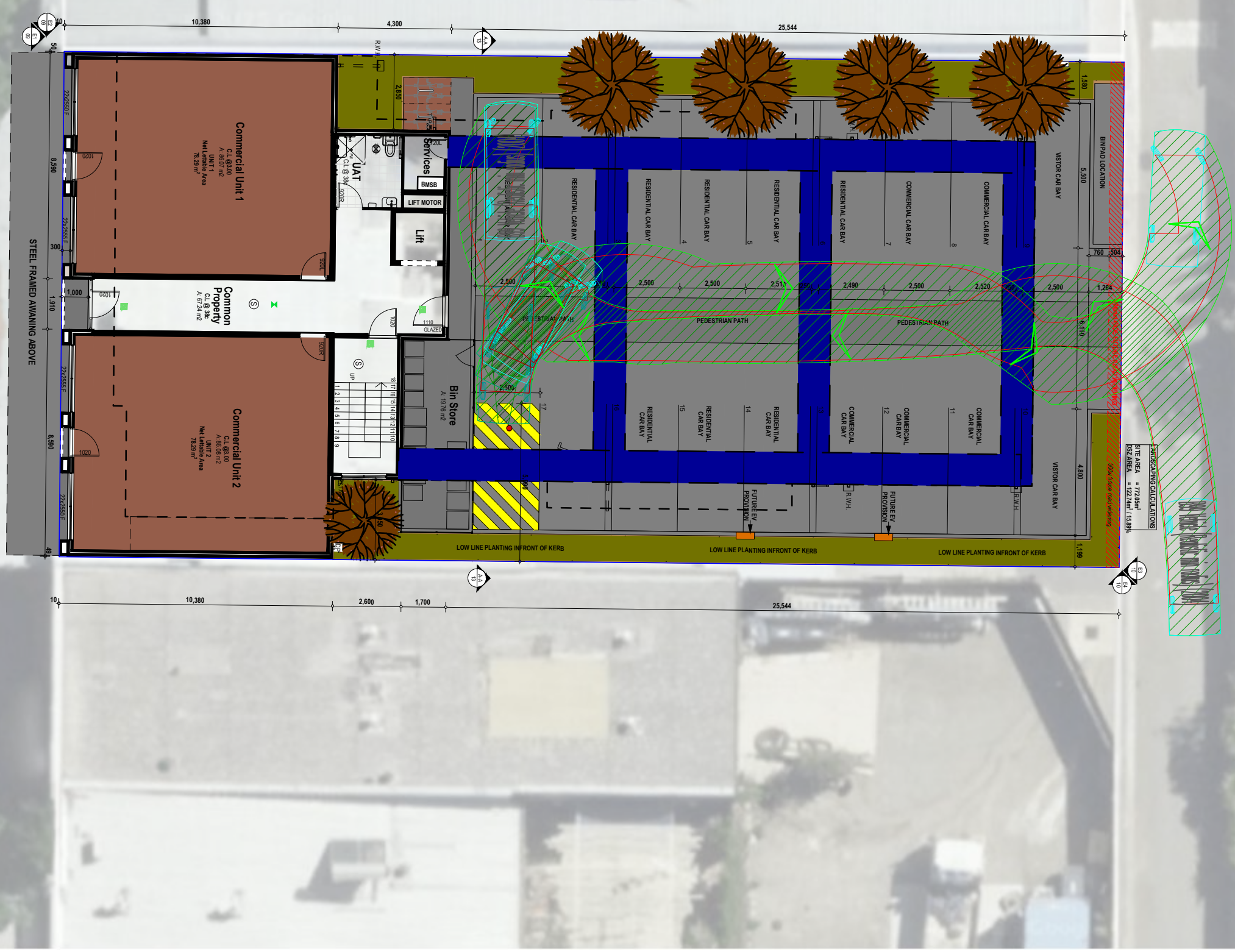
PROJECT:
22 Muriel Avenue, Innaloo

TITLE:
Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER:
P004157_S23

DRAWN BY:
A.T.

Premise
PART OF THE Amey GROUP



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- Lot boundary
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- Wheel Path (Reverse Vehicle Motion)
- Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

PROJECT: 22 Muriel Avenue, Innaloo

TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER: P004157_S24

DRAWN BY: A.T.

Premise
PART OF THE Amey GROUP

2025

WASTE MANAGEMENT PLAN

LOT 101 (NO.22) MURIEL AVENUE, INNALOO

PROPOSED MIXED USE DEVELOPMENT
(TWO COMMERCIAL UNITS AND SIX MULTIPLE DWELLINGS)

CITY OF STIRLING

CF Town Planning & Development

This Waste Management Plan has been prepared by CF Town Planning & Development on behalf of Germano Designs and the landowners for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo.

Carlo Famiano
Director
CF Town Planning & Development

carlo@cftp.com.au
3/1 Mulgul Road
Malaga WA 6090

Name	Position	Document Revision	Date
Mr Carlo Famiano	Town Planner	Waste Management Plan	16 December 2025

Table of Contents

List of Appendices

1.0 BACKGROUND & DESCRIPTION

CF Town Planning & Development have been commissioned by Germano Designs and the landowners to prepare a Waste Management Plan (WMP) in support of the development application being considered by the Metro Inner Development Assessment Panel (DAP) and the City of Stirling for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo ('Subject Land').

The development application for Subject Land proposes the construction of a three (3) storey building comprising two (2) commercial units ('Shop') and six (6) new multiple dwellings. The multiple dwellings will comprise three (3) bedrooms and two bathrooms.

According to the City of Stirling's current operative Local Planning Scheme No.3 (LPS No.3), the Subject Land is classified 'Local Centre' zone and is located within a commercial strip along Muriel Avenue.

The following table outlines the use permissibility for land classified 'Local Centre' zone for the proposed development/uses on the subject land:

Table 1– Land Use & Permissibility

LAND USE	USE PERMISSIBILITY
Multiple Dwelling	Discretionary ("D") use meaning that the use is not permitted unless the Council has exercised its discretion by granting planning approval.
Shop	Permitted ("P") use meaning that the use is permitted by the Scheme providing the use complies with the relevant development standards and the requirements of the Scheme.

A copy of the site development plans are provided in Appendix 2 (Site Development Plans).

2.0 PURPOSE OF WASTE MANAGEMENT PLAN

This Waste Management Plan has been prepared and submitted with the City of Stirling in support of the development application lodged with the DAP and the City for the construction of a new mixed use development on the Subject Land.

The aim of this Waste Management Plan is to:

1. Identify the indicative volume of waste.
2. Ensure adequate facilities are provided to serve the future occupants of the proposed mixed use development on the Subject Land.
3. Demonstrate the proposed design meets industry best practice.
4. Provide for an adequate on-street bin pick-up location (i.e. pick-up within the rear laneway).
5. Identify methods available for the future occupants of the development to minimize waste generation and reduce potential landfill.

3.0 KEY REFERENCE MATERIAL

- *WALGA Multiple Dwelling Waste Management Plan Guidelines;*
- *WALGA Commercial and Industrial Waste Management Plan Guidelines;*
- *Sustainability Victoria (Victorian State Government);*
- New South Wales (NSW) Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities; and
- Discussions with the City of Stirling Waste Management Division.

4.0 ESTIMATED VOLUMES & BIN TYPE

4.1 Types of Waste Generated

Commercial and industrial operations can generate a wide variety of the waste types. Table 2 below lists the types of waste typically generated for commercial/industrial developments (Table from WALGA *'Commercial and Industrial Waste Management Plan Guidelines'*). It is recognised that the waste type generated will vary between different business operations.

Table 2 – Waste Types

WASTE STREAM	COMMENT
General Waste	The quantity and composition of general waste generated by a commercial or industrial operation can vary significantly. General waste includes non-recyclable plastics, food waste, recyclable packaging which is contaminated with food waste and other non-recyclable materials, as well as recyclables which have not been placed in the correct bin.
Recyclables	Workers frequently consume beverages packaged in recyclable containers, such as aluminium cans and polyethylene terephthalate (PET) bottles and milk is often provided by organisations in liquid paperboard or high density polyethylene (HDPE) containers. These materials can form a significant proportion of the waste stream in commercial and industrial buildings. Occasional company events can also generate irregular but significant quantities of glass and other containers.
Glass	Glass bottles are a primary component of the waste streams generated within licensed venues such as pubs and clubs, as well as food retailers such as cafes and some take-away shops. Glass is very dense which makes it difficult to store and move efficiently
Office Paper	Waste audits have shown that by quantity, paper is by far the largest waste stream generated from offices. Office paper is generally white, A4-size and 80 grams per square metre (gsm, g/m2), although many other combinations of colour, size and grade are also generated. Office paper is a higher grade paper and as it is usually generated in large quantities it is generally collected separately and recycled.
Cardboard and Bulk Packaging	Most waste generated from non-food retail facilities is bulk packaging material that protects goods delivered to the facility for sale or distribution.
Plastic Film	Plastic film, such as shrink pallet wrap, is another major component of non-food retail building waste. This material is very bulky, but very light weight and compacts well.

Food Waste	Most commercial and industrial developments generate some quantities of food waste. The volumes of food waste generated within a development can vary significantly depending on the type and scale of the business; ranging from uneaten employee/staff meals within office buildings through to food outlets, which can produce large quantities of food waste on a daily basis.
Cooking Oil & Grease	Used cooking oil is produced in large volumes by food retailers such as fish and chips shops and fried chicken stores. Waste oil can cause significant issues if improperly disposed of to the sewage system.
Controlled Waste	The Environmental Protection (Controlled Waste) Regulations 2004 apply to a controlled waste that is produced by, or as a result of: • An industrial or commercial activity • A medical, nursing, dental, veterinary, pharmaceutical or other related activity • Activities carried out on or at a laboratory • An apparatus for the treatment of sewage. An apparatus for the treatment of sewage. Controlled Waste is defined as all liquid waste, and any waste that cannot be disposed at a Class I, II or III landfill site.
Other Wastes	These can include printers, copies, and toner cartridges, IT equipment, batteries, mobile phones, furniture, florescent lights, paint, pallets and mattresses, timber, ferrous and non-ferrous metal

All occupants and staff of the commercial tenancies and residents will be responsible to sort the waste through the provision of labeled bins throughout the buildings/site. The waste and recyclable streams that would apply to the proposed workers village on the Subject Land would be as following:

- General waste;
- Greens waste; and
- Co-mingled recycling, which includes all paper, cardboard, plastic, glass, aluminum and steel cans.

4.2 Waste Generation Volume

The proposed mixed use development on the Subject Land consists of the following configuration:

i) Six (6) three bedroom/two bathroom dwellings; and

ii) Two (2) commercial tenancies comprising an area 78.29m^2 each.

In order to provide the necessary service, this Waste Management Plan estimates the volume of waste generated by the use. The waste generation rates prescribed by 'Sustainability Victoria', *WALGA Commercial and Industrial Waste Management Plan Guidelines* and the *WALGA 'Multiple Dwelling Waste Management Plan Guidelines'* has been adopted for the proposed development.

In light of the above, the following weekly waste generations rates associated for each stream of waste (i.e. general waste and recycling) are provided:

Table 3: Waste Generation Rates

USE TYPE	GENERAL WASTE	RECYCLE WASTE
Shop	50L/100m^2 per day	25L/100m^2 floor area/day
Multiple Dwelling (3 bedroom)	240L/week	240L/fortnight

Note - The shop use has been calculated for seven (7) days, assuming that the "Shop' use has the potential to operate everyday.

The following equation was used to calculate the anticipated weekly general waste and recycling generation:

- Waste, recycle generation calculations (commercial component)

  Total Amount of Waste Type = (Floor Area/100m^2) x Waste Rate

- Waste & recycle generation calculations (domestic dwelling)

  Total amount of Waste Type = Dwelling Number/Type x Waste Rate (weekly or fortnightly)

The following weekly waste generation calculations are provided in support of the development for the purpose of establishing the number of bins required in support of each component:

Table 4 – Waste Generation (Commercial Component)

USE TYPE	AREA OF BUILDING	GENERAL WASTE	RECYCLE WASTE
Shop	156.58m^2	548.03 litres/per week	274 litres/per week
	Total Waste	**548.03 litres**	**274 litres**

Table 5 – Waste Generation (Multiple Dwellings – Three Bed Rooms)

Dwelling Type	Dwellings	General Waste	Recycle Waste
Multiple Dwelling	6 dwellings	1,440 litres/per week	1,440 litres/per fortnight
	Total Waste	1,440 litres (weekly)	1,440 litres (fortnightly)

4.3 Bin Type

The City of Stirling have advised that all domestic waste collection will be undertaken by the City, with collection being preferably along the rear laneway (Azurite Lane). The commercial waste collection can be undertaken by a private contract or part of a service offered by the City of Stirling and will be collected along Azurite Lane.

In addition to the above point, the City of Stirling have advised that the following bin type can be used to service the development and is offered as part of the City's waste collection service for multiple dwellings:

Multiple Dwellings

- General Waste (red lid bins) - 240 litre
- Recycle Waste (yellow lid bins) - 360 litre
- Green Waste (green lid bins) 240 litre

Shop

- General Waste (red lid bins) - 240 litre
- Recycle Waste (yellow lid bins) - 360 litre

Figure 1 below illustrates the dimensions and details of both the 240 litre and 360 litre bins that will be adopted as part of this development.

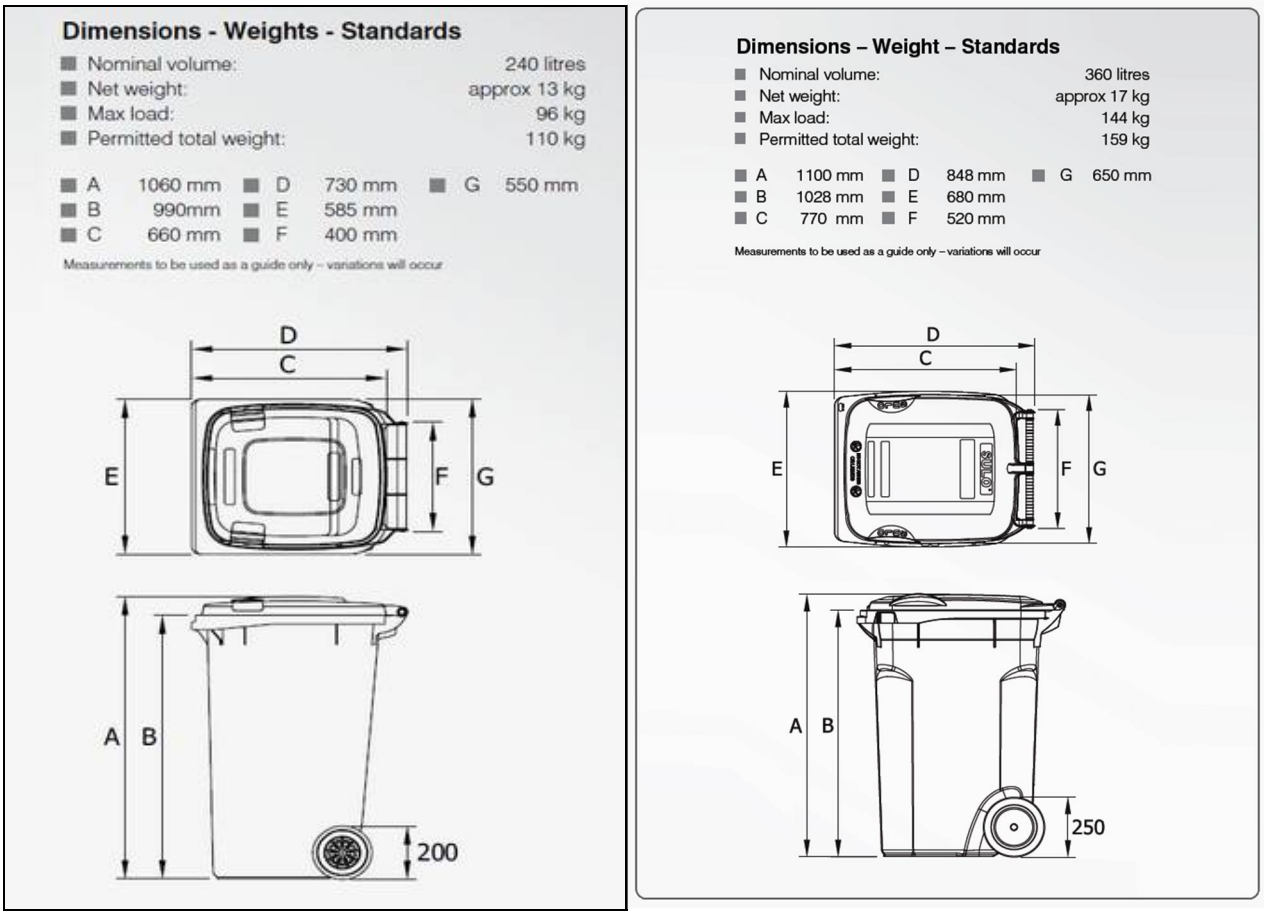


Figure 1 – Bin types & dimensions

Through discussions with the City of Stirling, the following bin requirements are to be applied to the proposed development on the land:

Multiple Dwellings

- General waste bins - 4 x 240 litre
- Recycle waste bins - 4x 360 litre
- Green waste bins - 1x 240 litre

Shop

- General waste bins - 2 x 240 litre
- Recycle waste bins - 3 x 360 litre

The following equation has been used to calculate the number of bins required to service the development and the capacity of the bins for each waste stream:

- Total bins required for general/recycle waste

  Total number of bins required = Total waste generation/bin size (i.e. 240L or 360L)

The following calculation (i.e. Table 6) is provided in support of the waste generation and the number of bins required and the bin capacity to service the proposed multiple dwelling development on the land:

Table 6 – Bin Capacity (Commercial Component)

WASTE TYPE	BIN SIZE	NUMBER OF BINS	COLLECTION INTERVALS	BIN CAPACITY	ACTUAL WASTE COLLECTION
General Waste	240L	3	1 per week	720L per week	548.03 litres
Recycle Waste	360L	2	Fortnightly	720L fortnightly	548 litres (fortnightly)

Whilst the bin capacity being provided for the commercial component is in excess of the minimum requirements, it will allow for the following:

- Convenient access for each of the commercial uses on the land.
- Allows for additional waste to be collect from bins located throughout the site and within the communal area.
- Caters for any additional waste generated by the uses or any potential change of use in the future.
- Remove the potential of odours.
- Allows for perk periods for the shop uses, where greater waste maybe generated.

In light of the above, it is recommended that the additional bin capacity be adopted.

Table 7 – Bin Capacity (Residential Component)

WASTE TYPE	BIN SIZE	NUMBER OF BINS	PROPOSED BIN CAPACITY	ACTUAL WASTE GENERATION
General Waste	240L	4	960L per week	1,440L per week
Recycle Waste	360L	4	1,440L per fortnight	1,440L per fortnight

It should be noted that one (1) green bin has been provided to collect any waste from the landscaping area (as recommended by the City of Stirling).

In light of the above bin capacity calculations, it is contended that the provision of the bin numbers and pick up intervals listed in Tables 6 & 7, including associated storage facilities, is sufficient to accommodate the needs of the future occupants of the development. It is noted the general waste bin provision is, but this reflects the City's advice based on a communal bin store.

In addition to the bin provision for the development, there is sufficient space along the rear portion of the Subject Land (along the laneway) to accommodate waste collection..

All bins will comprise appropriate colour coding (i.e. red & yellow, with green in the future) and signage to clearly indicate the types of waste to be placed in the relevant bins. This will assist with ensuring that cross contamination of waste is avoided by the future occupants of the development. This will also allow for the reduction of landfill and potentially increase recycling.

5.0 COLLECTION FREQUENCY & PROVIDER

The City of Stirling is the rubbish collection service provider, with the following collection services being provided to residential within the new development on the Subject Land:

- Domestic dwellings - Weekly general waste mobile bin collection (Monday).
- Domestic dwellings - Fortnightly recycle mobile bin collection (Monday).
- Commercial component – Weekly (suggested Friday)
- Fortnightly green waste mobile bin collection (every second Monday alternative to the recycle waste collection).

In addition to the above services, the City provides collection points for the general public (i.e. library/civic centres) for mobile phone, globes & battery collection.

The City of Stirling have advised that all waste collection should be undertaken from Azurite Lane abutting the Subject Land (not on-site pick-up) and will be collected using a standard truck that forms part of the City of Stirling's conventional waste service (see Figure 2).

The collection service will be undertaken on a weekly basis for general waste and fortnightly for recycling waste and green waste. It is recognized that the bins will need to be transferred to the rear of Subject Land along the laneway for collection and returned once serviced.

Adequate space has been provided along the rear of the Subject Land along Azurite Lane to accommodate the rubbish bins (see Figure 3). It should be noted that a total of eight (8) bins will be situated along the laneway at any one given time.

Figure 2 – Rubbish truck & specifications to be adopted for the development.

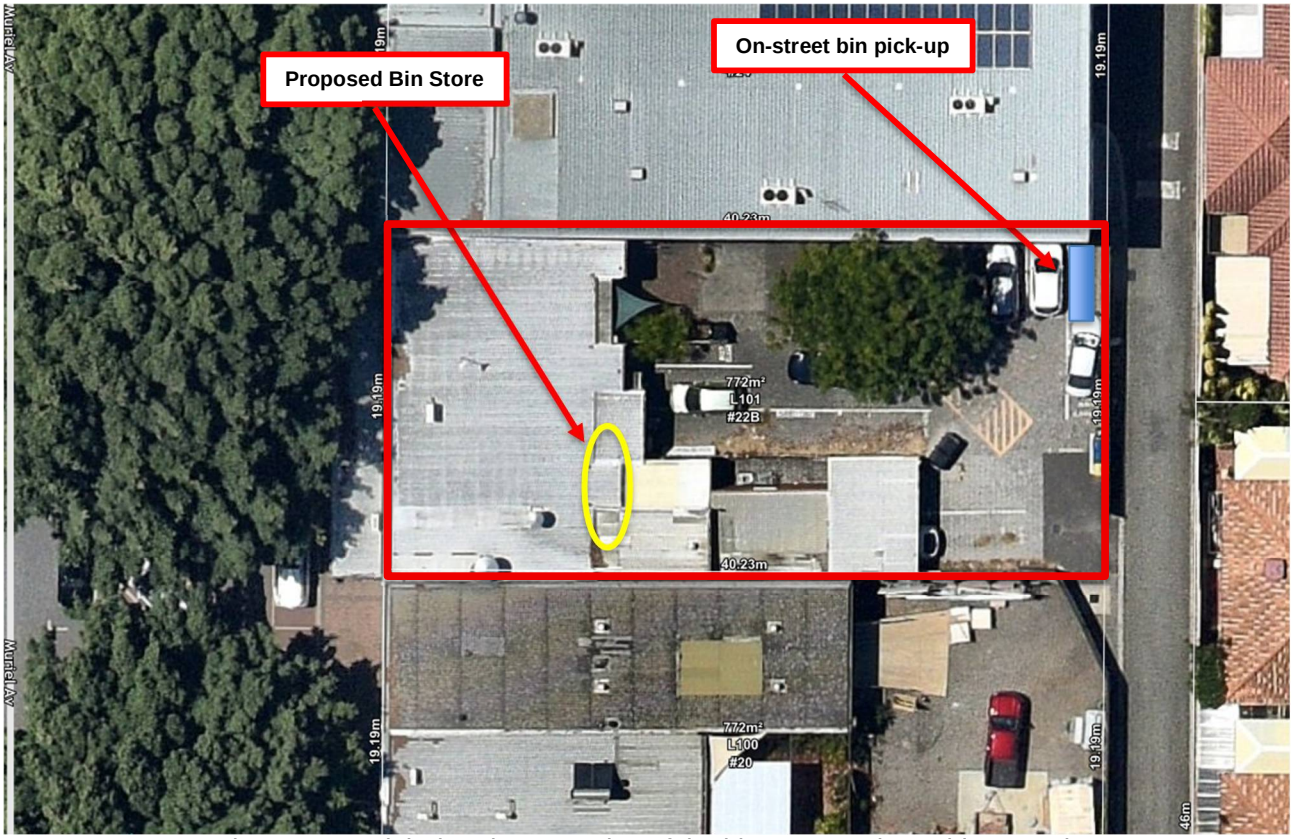


Figure 3 – Aerial Site Plan. Location of the bin store on the Subject Land.

6.0 LOCATION, SIZE & FEATURES OF BIN STORAGE AREA

6.1 Bin Store Area & layout

As previously mentioned, the proposed mixed use development on the Subject Land will include a total of eight (8) 240 litre mobile garbage bins and six (6) 360 litre mobile garbage bins.

The following table provides a breakdown of the required area for the bin storage area to accommodate the required bins (the required areas have been adopted using the New South Wales Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities):

Table 8 – Bin Storage Area

BIN SIZE	BIN AREA ALLOWANCE	QUANTITY	MANOEURING SPACE ALLOWANCE	AREA REQUIRED
240L MGB	0.43m^2	8 bins	X 2 (shared access)	6.88m^2
360L MGB	0.55m^2	6 bins	X 2 (shared access)	6.6m^2
			Total Area Required	**13.48m^2**
			Total Area provided	**19.76m^2**

As outlined above, the bin storage area proposed for the development is adequate to accommodate the needs of the development. Furthermore, the bin store area proposed for the development will comprise gates to allow for easy access and storage of the bins. The store has been designed to provide easy removal of the bins for servicing and cleaning (see Appendix 1 – Bin Store Location).

6.2 Bin Store Location & Features

Bin storage area will be located within the property boundaries, along the land's southern side boundary and abutting the car parking area (behind the building line). The bin store will be enclosed and not visible from the street and/or the adjoining properties. The bins will be moved from the bin store to the laneway for collection and returned once serviced (see Appendix 1 – Bin Store Location).

The location of the bin store on the Subject Land will be well clear of any major openings for the existing dwelling or commercial developments on the surrounding properties (the adjoining southern property is commercial and comprises a parapet wall). Given these facts, the bin store will not have an adverse impacts on the occupants/visitors of any developments on the adjoining properties (see Figure 3). Furthermore, the bin storage area will also be located away from any major openings for the dwellings or commercial tenancies within the new development on the Subject Land.

The proposed location of the bin storage area will:

i) Minimise odour levels impacting on the occupants of the development;
ii) The bin store is located abutting the parapet wall of the existing development on the adjoining southern property;
iii) Provide easy access to all future occupants of the development; and
iv) Allow for easy transfer of the bins between the storage area and the rear of the Subject Land, along the laneway.

Key design points of the common bin storage area are as follows:

- The bin storage area will comprise a tap and connection to sewer for wash-down purposes.

- The bin storage area will comprise a 100mm concrete floor.
- The bin store area will be screened and gated to hide its view from the street, common property area and provide security.
- A galvanized pipe will be installed along the walls to prevent the bins from hitting and damaging the walls of the bin store.
- The bin storage area will be secure and screened from the future occupants of the development. The screen will include a masonry wall and landscaping along the frontage of the bin store to provide additional screening from being viewed from the public realm.
- The bin store will be enclosed.
- Allow for easy transfer of the bins to the verge area for collection (see Appendix 1 – Bin Store location).

7.0 NOISE, ODOUR & MINIMIZING LANDFILL

It is anticipated that the location of the bin storage area for new multiple dwelling development on the Subject Land will provide easy access by the occupants of each individual dwelling or the commercial tenancies and minimize disruption to neighbors and residents to the rear of the Subject Land.

Noise

The bin storage area will be screened and located within the Subject Land, away from any dwellings and will be enclosed. The adjoining southern property comprises a parapet wall for a commercial development adjacent to the bin store on the Subject Land. Furthermore, the bin storage area will comprise a masonry wall around the perimeter of the compound to reduce any impact on the surrounding properties/dwellings.

It is expected that the bin storage area will generate minimal vertical and horizontal noise transfer during use. As such, it is contended that the noise generated from the bin storage area will not result in any undue noise that would not be consistent with that generated by the adjoining properties.

In light of the above, it is contended that there will be no notable impacts on the residential dwellings on the surrounding properties from the development on the Subject Land in terms of waste management.

Odour

Strategies to minimize odour are:

- Locating the common bin storage area along the side of the development, the facility being enclosed.
- The bin storage area will not abut any habitable space for the existing dwellings on any surrounding property.
- Construction of a masonry wall around the perimeter of the bin storage area.
- Screening the bin storage area.
- Allowing for natural ventilation of the bin storage area.

- Regular washing of the bins and storage area.

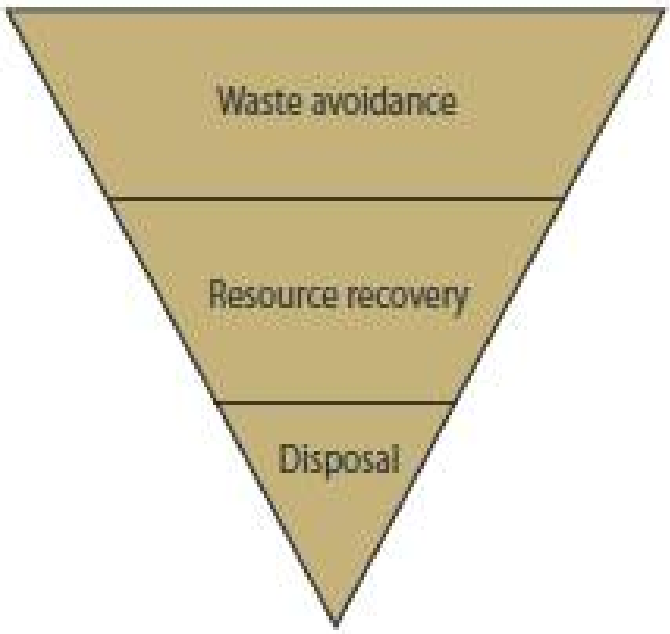
Minimising landfill

Given that the City of Stirling provide three (3) separate bins (i.e. general waste, recycling & greens), it allows occupants of the development to sort rubbish accordingly. The provision of recycling bins will enable occupants of the development to place the following items for recycle collection:

- Glass bottles and jars (excluding broken glass, plates, pottery etc.).
- All plastic bottles.
- Newspapers and glossy magazines, paper, envelopes
- Cardboard boxes, cereal boxes, pizza boxes, egg cartons etc.
- Cans - steel and aluminum, including aerosols cans.
- Milk and juice cartons.

Furthermore, the City of Stirling provides annual bulk waste, greens pickup and white goods pickup to reduce the amount of waste being placed within the general waste bin.

In light of the above services, it is contended that adequate measures are available for the future occupants of the development to minimize disposal of rubbish within the general waste bin resulting in long term reduction of landfill.



In light of the above services, it is contended that adequate measures are available for the future occupants of the development to minimize disposal of rubbish within the general waste bin resulting in long term reduction of landfill.

Vermin

The bin lids will remain closed at all times to reduce access by vermin. The use of bait stations could be implemented/considered by the occupier of each dwelling in instances of vermin appearing.

8.0 SCREENING OF BIN STORARE AREAS

The bin storage area will be a purpose built compound specifically designed, located and screened from the public realm (i.e. screened from any adjoining roads). The bin storage area will be located within the rear car parking area of the development and will not be visible from the street and/or any adjoining properties.

9.0 IMPACT ON ADJOINING/ADJACENT PROPERTIES

The proposed mixed use development on the Subject Land and associated bin store has been designed to be relatively small and comprises a masonry wall where it abuts the adjoining property. Furthermore, the bin store area will abut a parapet wall for a commercial development on the adjoining southern property. Given this separation, it is concluded that an adequate buffer is provided between the bin store and any potential sensitive spaces on the adjoining property.

It is contended that the bin storage area for the proposed development on the Subject Land is well located and will be constructed to minimize any adverse impacts on the adjoining properties.

In light of the above, it is contended that any potential impacts on the adjoining properties from the proposed bin storage area on the Subject Land is expected to be minimal and would be consistent with the waste disposal activities of a typical mixed use or multiple dwelling development within the immediate locality.

10.0 STRATA MANAGEMENT COMPANY REQUIREMENTS

The appointed Strata Management Company contracted to manage the multiple dwellings on the Subject Land will be responsible to:

i) Appoint a site manager (i.e. a resident) to be responsible for coordinating the occupants of the complex to arrange cleaning of the bins and bin storage areas every two (2) to three (3) weeks;

ii) The site manager will be responsible to transferring the bins from the bin store area to the verge area the night prior to pick up (before 7pm) and returning the bins to the store area on the evening of collection day (before 6pm);

iii) Ensure litter is cleaned up through regular landscape maintenance;

iv) Deal promptly with any issues or complaints relating to hygiene, noise, odour or other inconvenience; and

v) Arrange for a private contractor to collect and disposal of green waste (i.e. small garden prunings etc.) as part of maintaining the landscaping areas for the development (i.e. private gardener).

The abovementioned procedure will also be implemented if a sole landowner has control of the development (i.e. appoint a tenant to undertake the aforementioned tasks).

The future prospective purchases/occupants of the complex will be provided with a copy of the approved Waste Management Plan on occupancy of a dwelling. The Waste Management Plan will also be incorporated or referred to in any Strata Management Plan or Strata By-Laws or any rental agreements prepared for the development.

11.0 CONSTRUCTION WASTE

During construction, a waste compound will be provided on-site to store any waste produced during the construction process and will be serviced regularly (when required) by a private contractor. The contractor will provide off-site sorting of the waste to ensure that waste is recycled where possible to minimize landfill waste.

Sub-contractors will be responsible for pre-sorting of waste products into appropriate areas within the waste compound as much as possible to reduce overall construction costs. The site manager will monitor the disposal of waste and sorting of recycle material.

No waste compounds or rubbish will be placed or stored on the street verge area or footpaths surrounding the project boundaries. All pedestrian and vehicle access areas will remain clear from construction debris at all times.

More details regarding on-site management during the construction phase of the development will be provided as part of a Construction Management Plan to be prepared by the builder prior to the commencement of construction.

12.0 CONCLUSION

The proposed mixed use development on the Subject Land is small in nature, does not generate high quantities of waste and is consistent with other similar multiple dwelling or mixed use developments approved by the City of Stirling within the Innaloo locality. As demonstrated within this Waste Management Plan, the proposed mixed use development on Subject Land provides sufficient bin storage and adequate bins to service the needs of the occupants for each individual dwelling or the commercial tenancies for all waste streams provided by the City of Stirling, with this project reflecting the recommendation provided by the City's Waste Management team.

Furthermore the servicing of the bins by the City of Stirling along the rear of the Subject Land along Azurite Lane can adequately be achieved without having an adverse impact on the local residents and the local street network.

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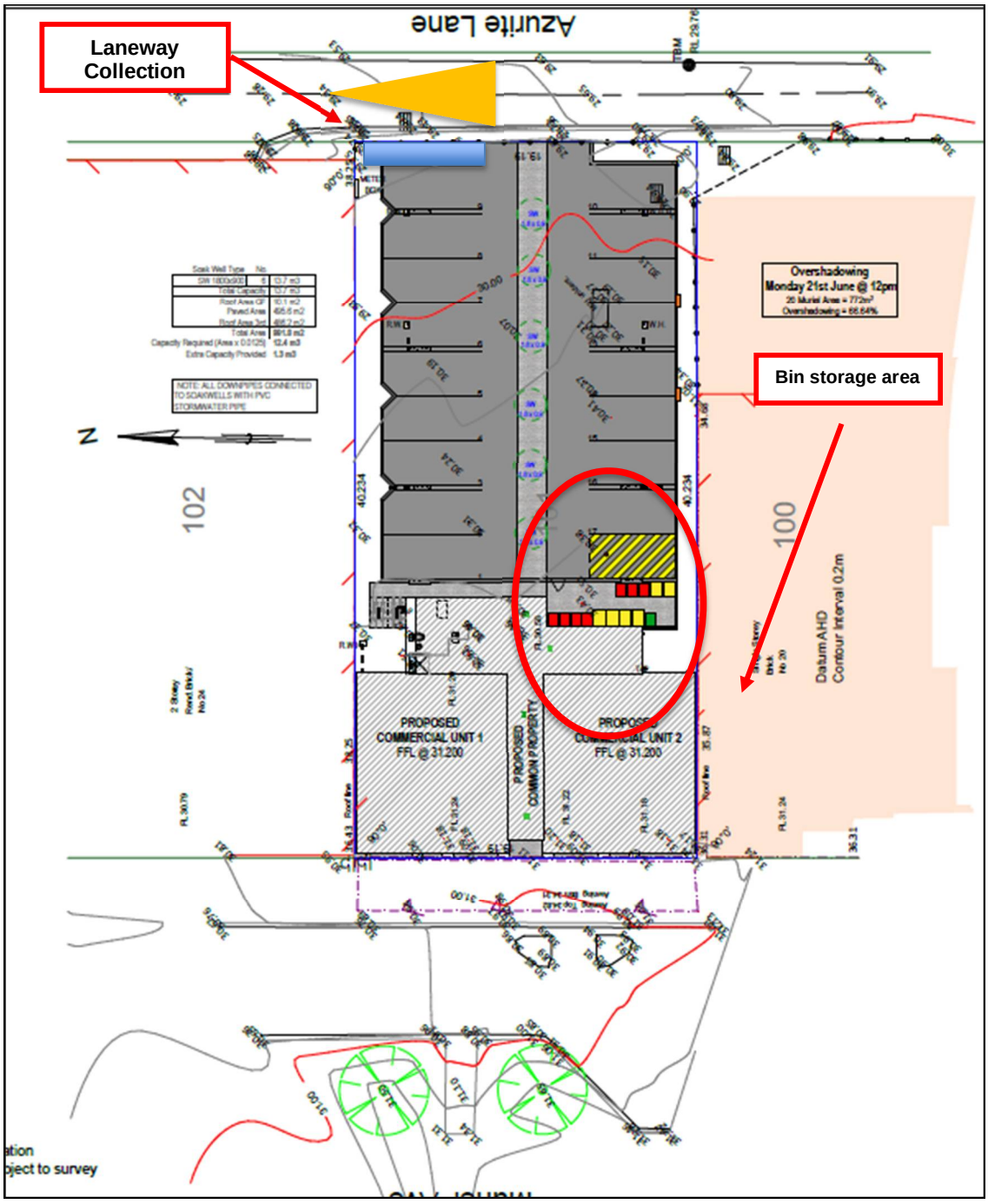
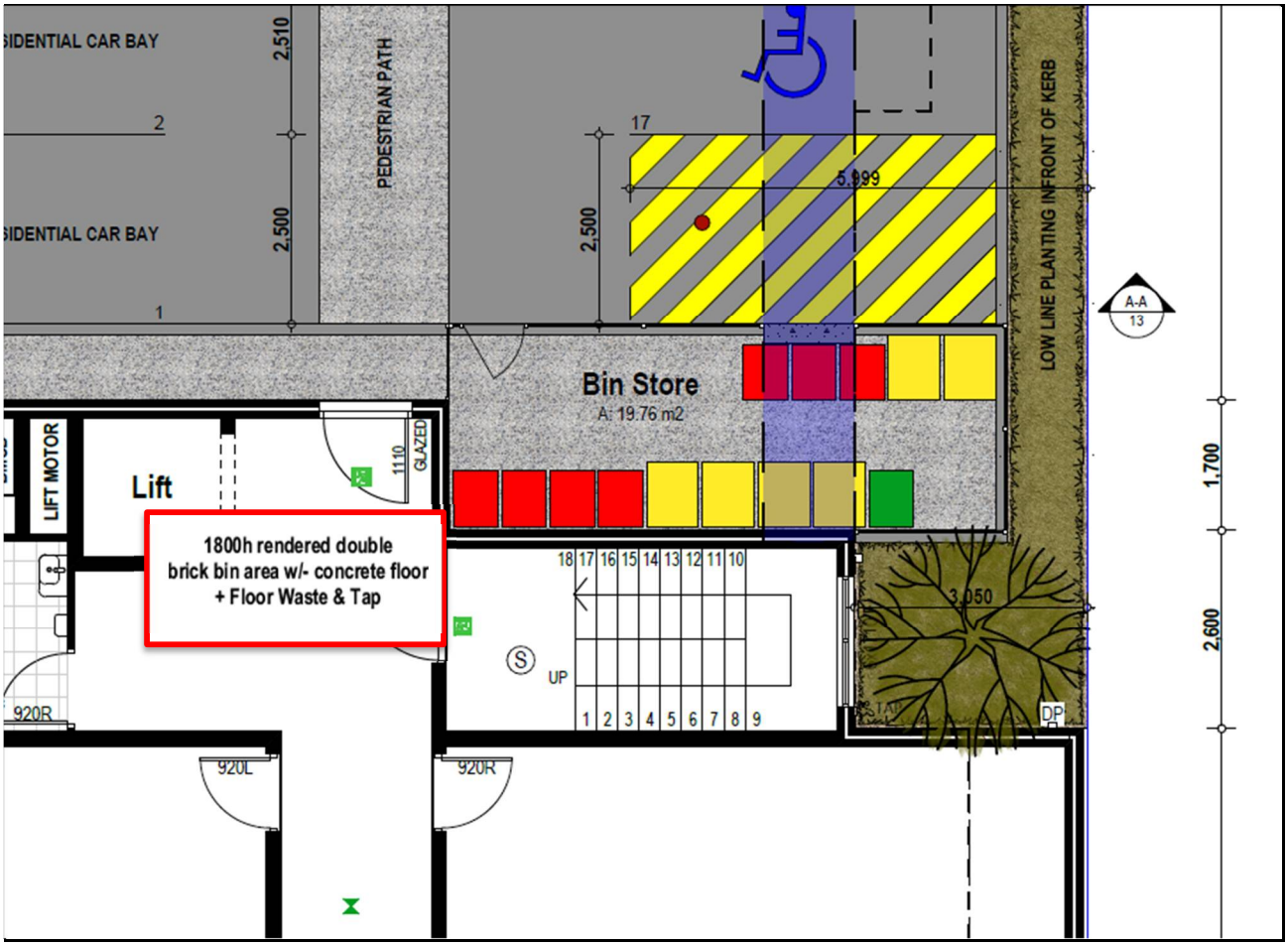
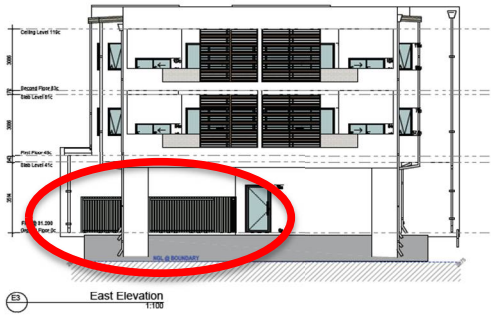
APPENDIX 1 – BIN STORE LOCATION

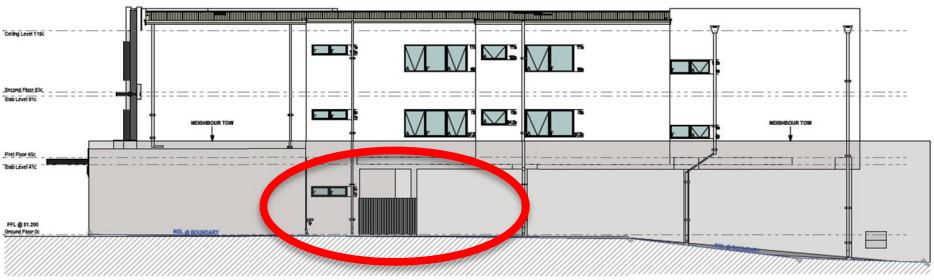


Above - Site Plan



Bin Storage Area





Planning & Development Consultants
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Tel: 9249 2158 Mb: 0407384140 Email: carlo@cftp.com.au
CVF Nominees Pty Ltd ABN: 86 110 067 395

APPENDIX 2 – SITE DEVELOPMENT PLANS

Planning & Development Consultants
Address: 3/1 Mulgul Road, Malaga WA 6090
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CVF Nominees Pty Ltd ABN: 86 110 067 395

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Address:22 Muriel Ave INNALOO

Apartment Complex

Job Number: 23011

Drawing No	Description
01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section

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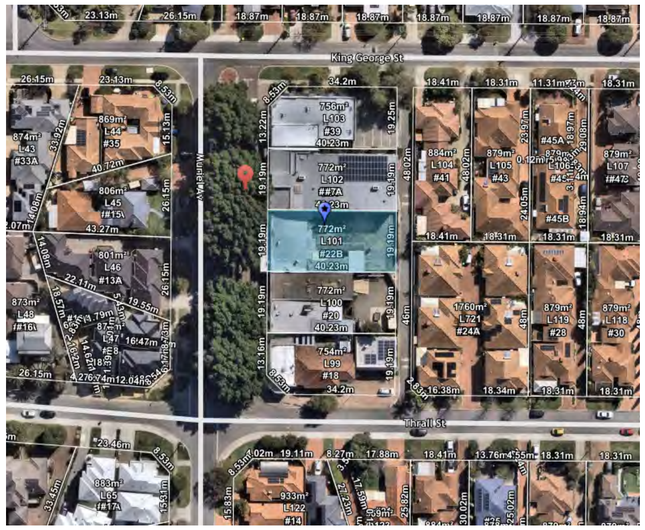

Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Existing Site Survey

Scale:	Sheet Size:
1:200	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
02 of 13

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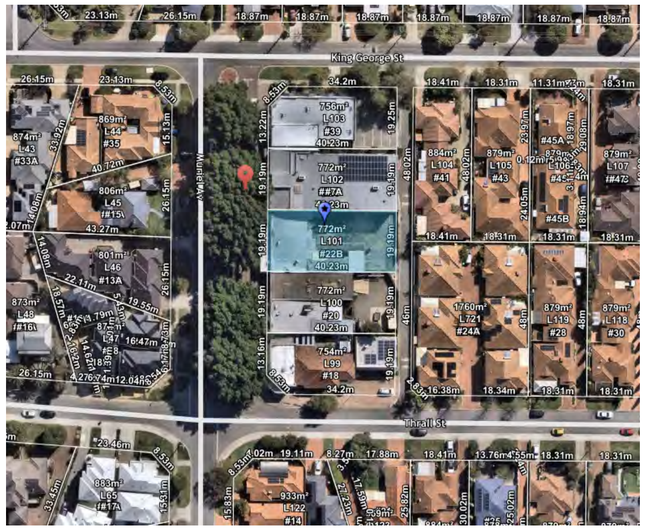

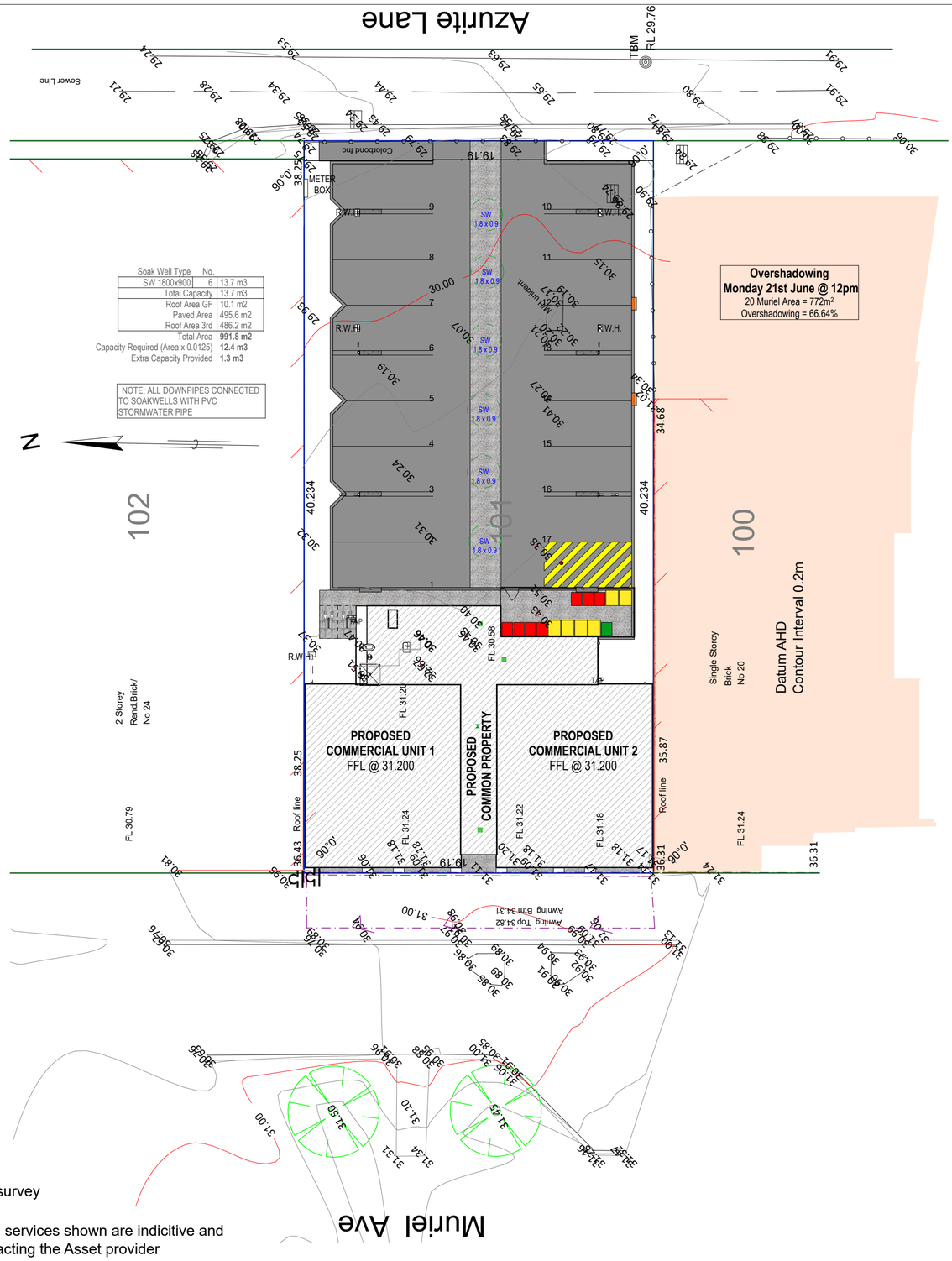

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale:	Sheet Size:
1:200	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
03 of 13

Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
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Scale 1:200 @ A3

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LICENSED LAND and ENGINEERING SURVEYORS

Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

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COMMERCIAL DEVELOPMENTS MURIEL ROAD

RESIDENTIAL DEVELOPMENTS THRALL STREET

COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Context Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
04 of 13

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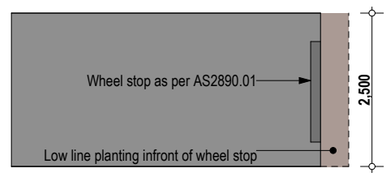
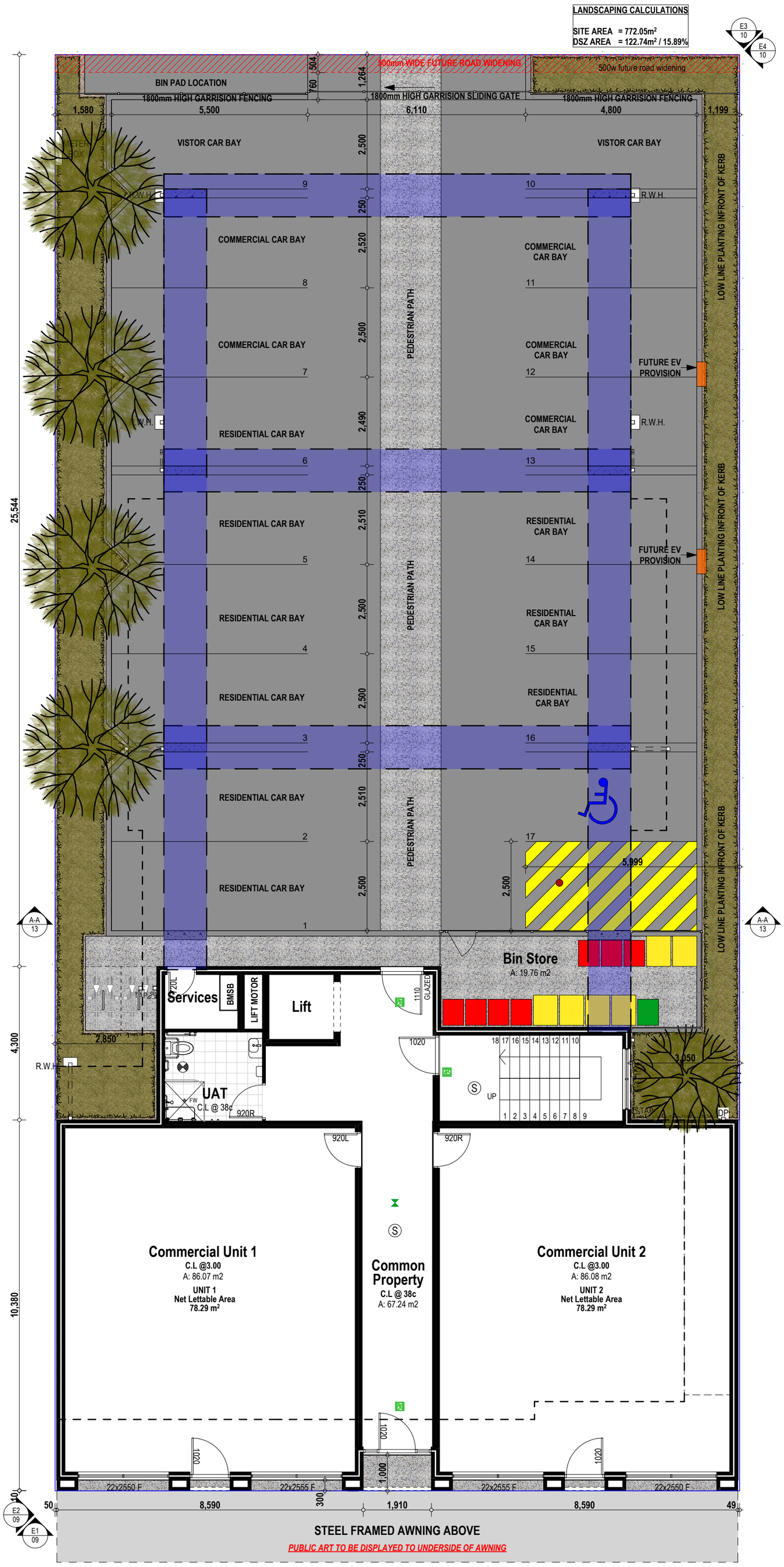


Carbay Detail

LANDSCAPING CALCULATIONS

SITE AREA = 772.05m²
DSZ AREA = 122.74m² / 15.89%



PLOT RATIO

COMMERCIAL
Site Area: 772.05m²
Building Footprint: 172.36m²
22.32%

RESIDENTIAL
Site Area: 772.05m²
Building Footprint: 803.02m²
104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Ground Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
05 of 13

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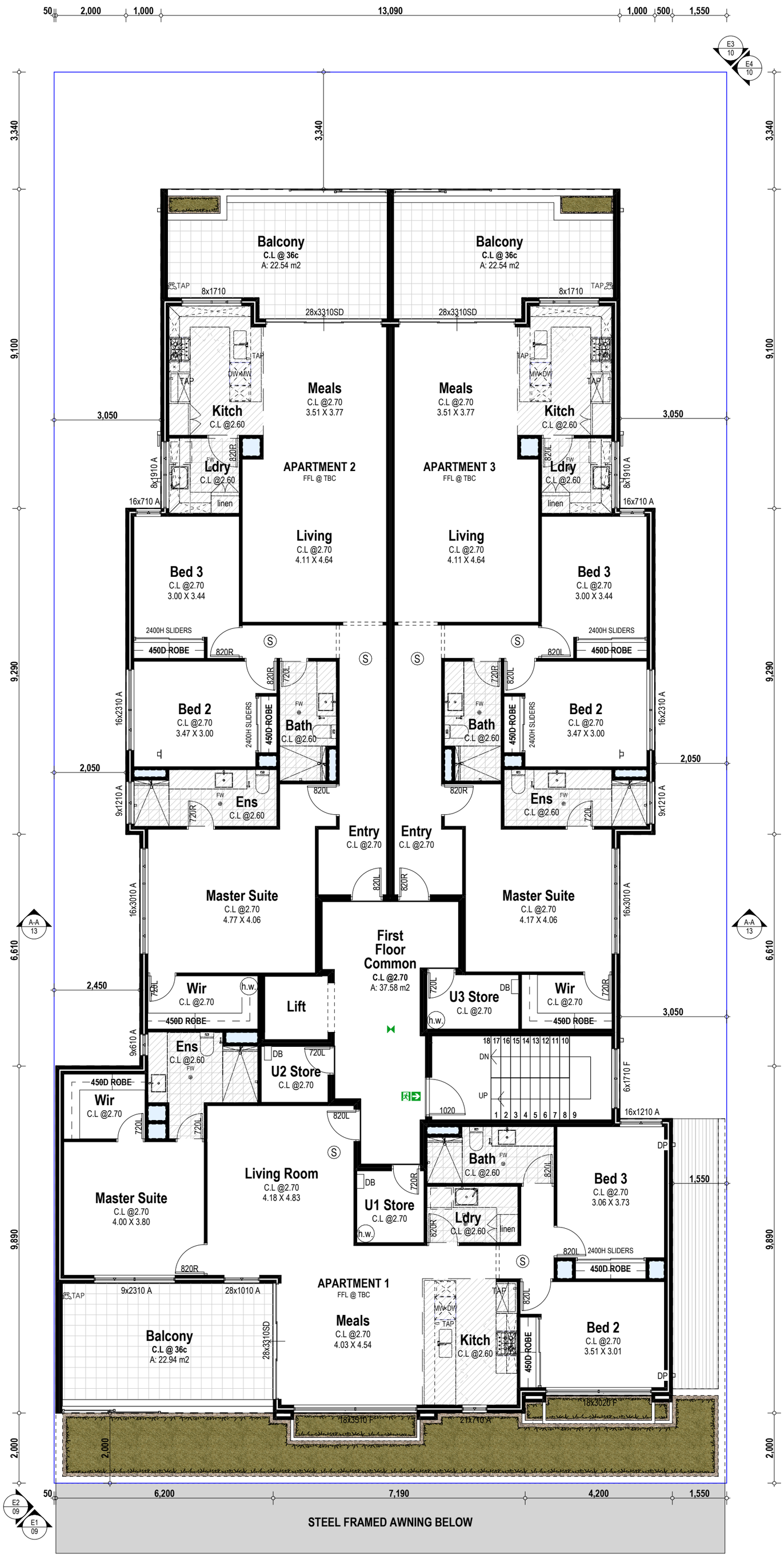
Muriel Ave



PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
First Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
06 of 13

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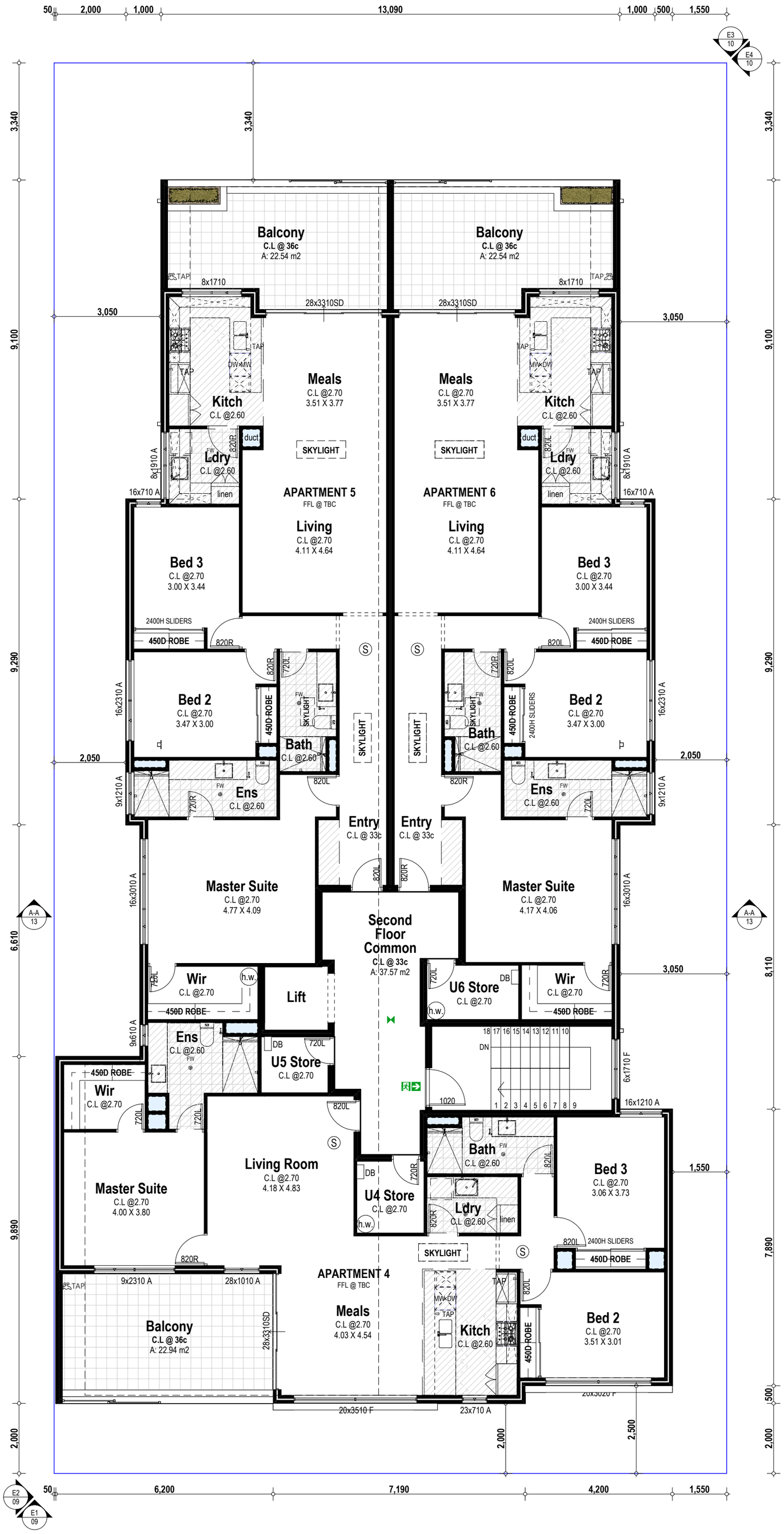

PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
07 of 13

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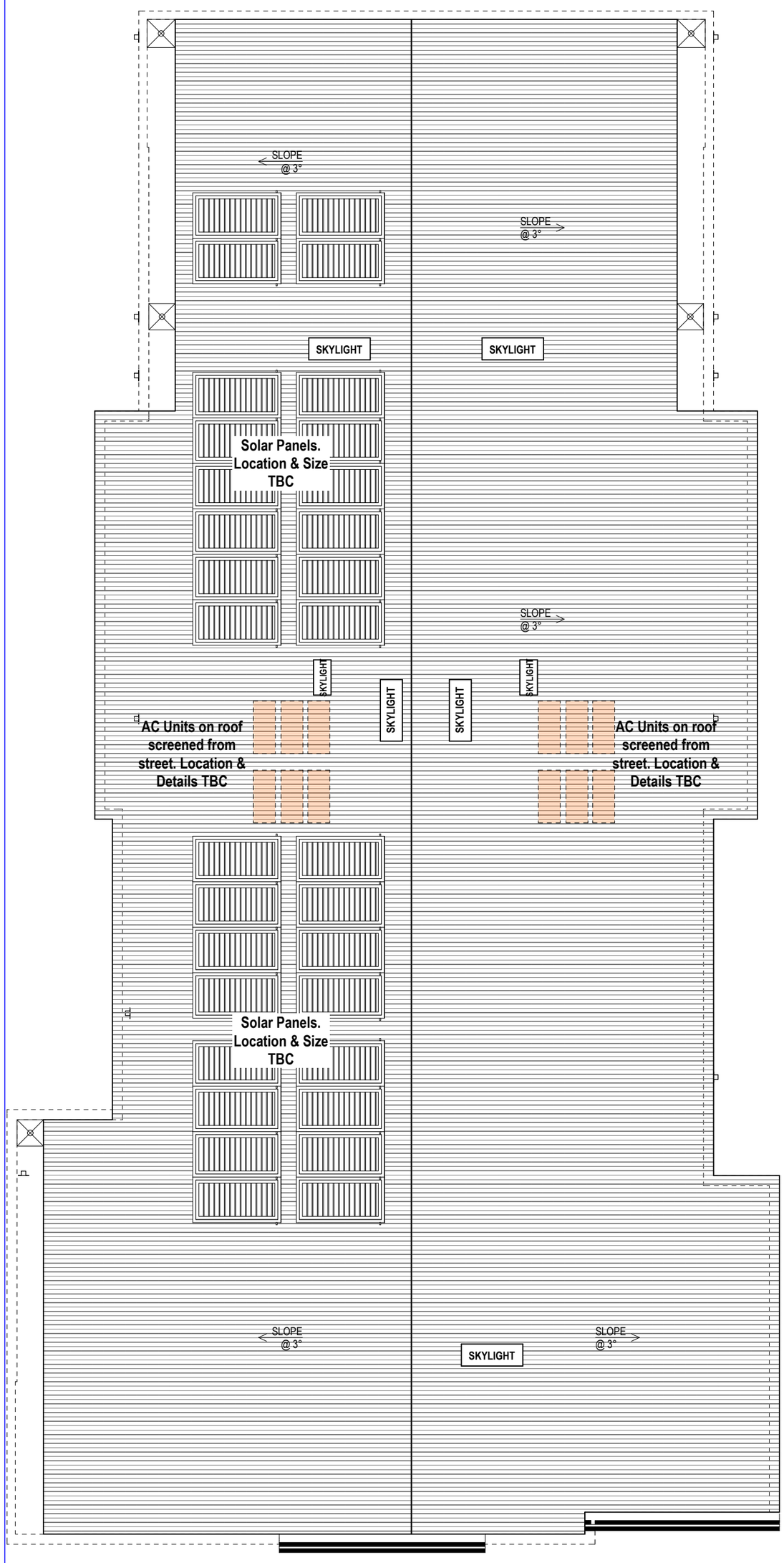

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

Revision	Description	Date
7.00	Development Approval	11.12.25
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Roof Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
08 of 13

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Unit: 3/1 Mulgul Road, Malaga W.A 6090
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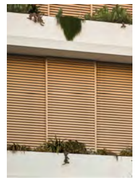
KNOTWOOD ALUMIN SCREENING

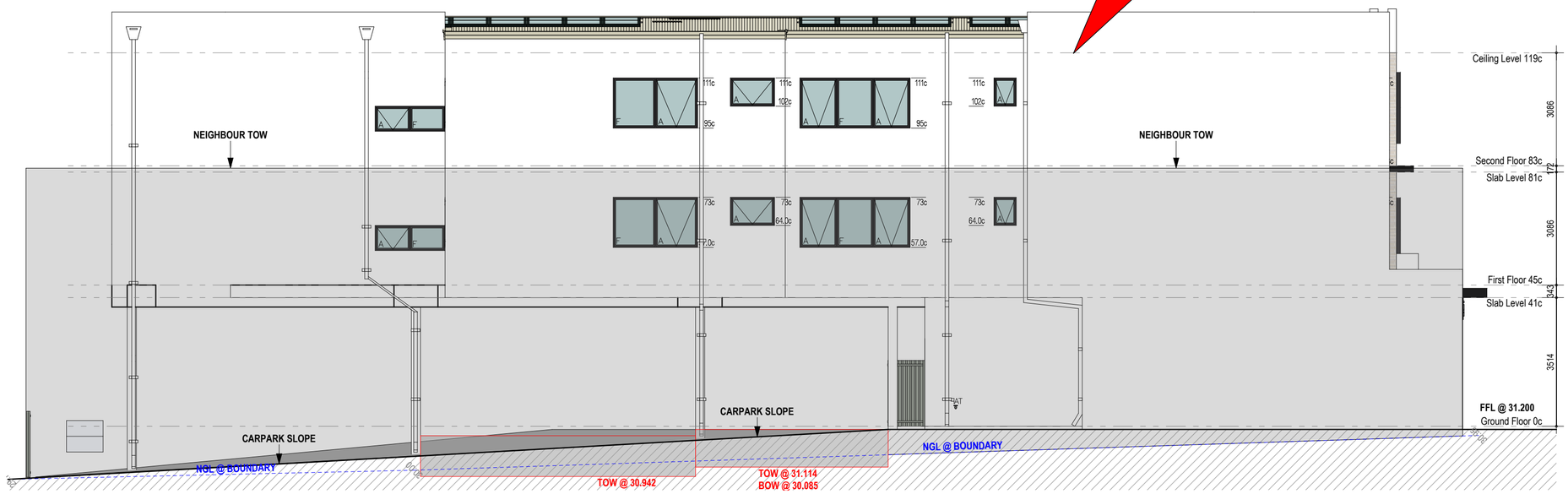


DULUX RENDER MONUMENT

BOWRAL 76 SIMMENTAL SILVER

E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale: 1:100
Sheet Size: A2
Project No: 23011
Revision Number: 7.00
Drawing No.: 09 of 13

GERMANO DESIGNS
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E3 East Elevation
1:100

E4 South Elevation
1:100

Revision	Description	Date
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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
10 of 13

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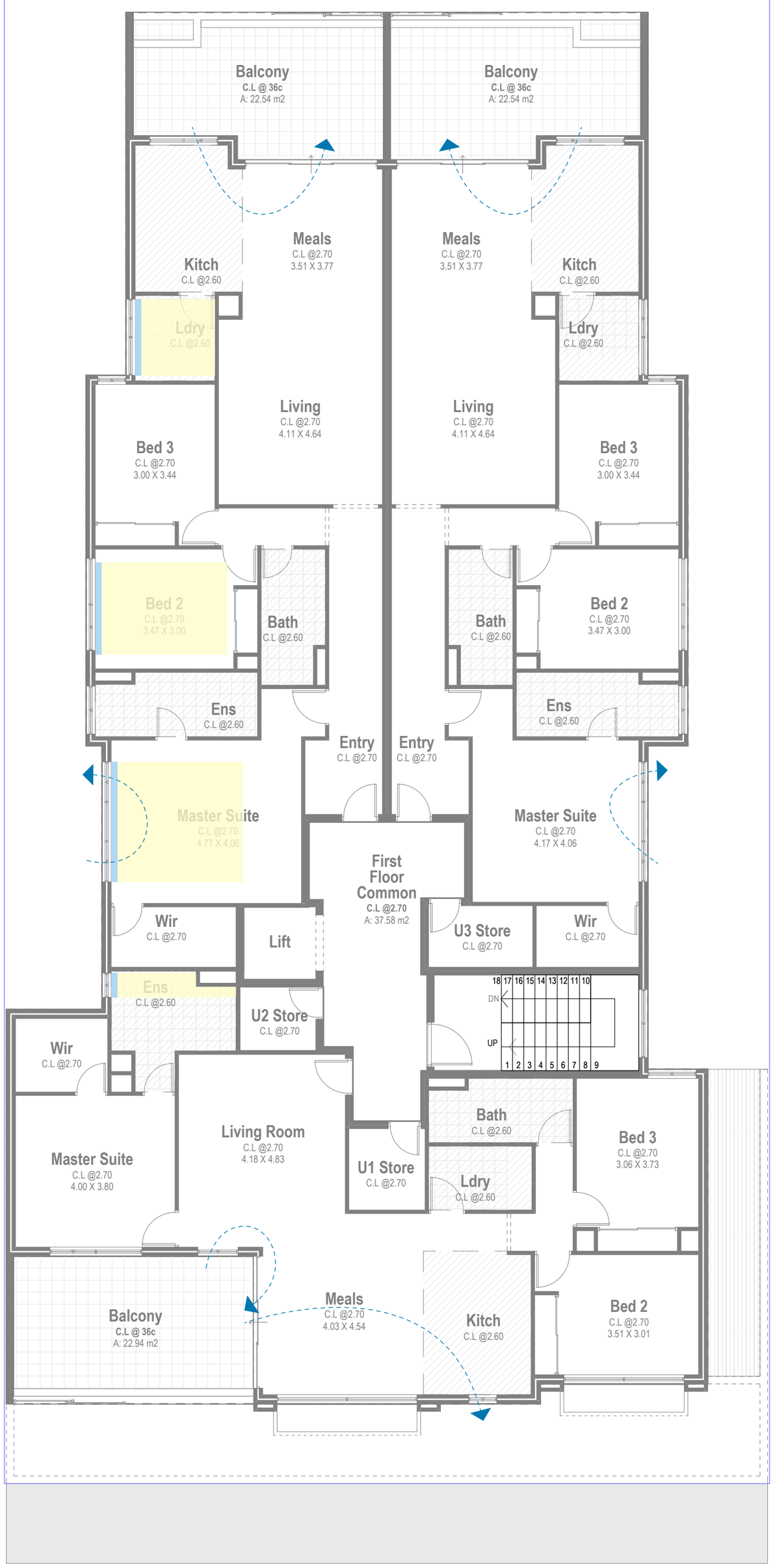

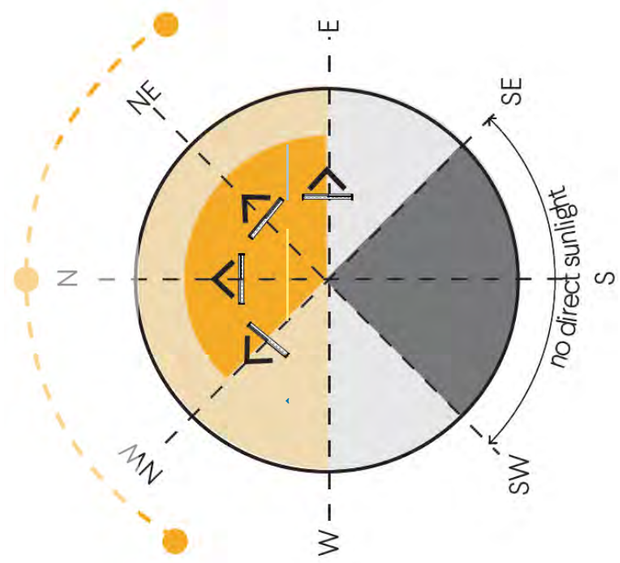

SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
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4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
11 of 13

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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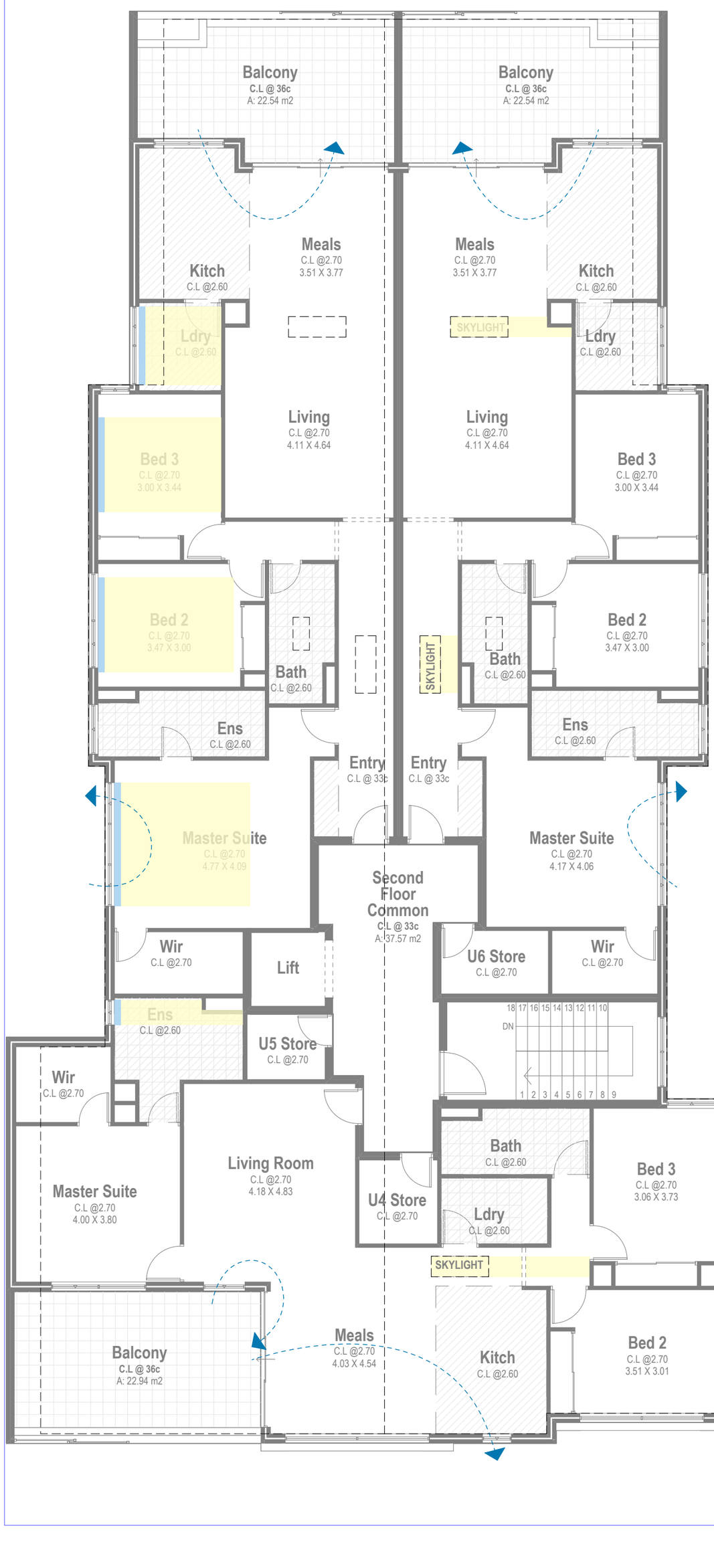

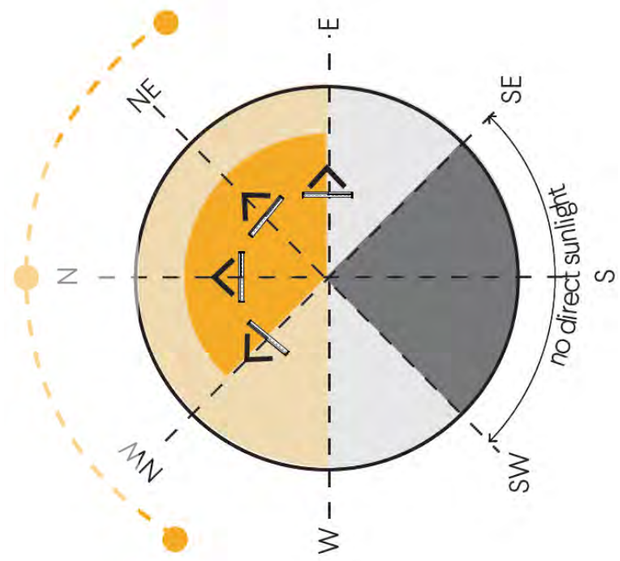

SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

Revision	Description	Date
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
SF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
12 of 13

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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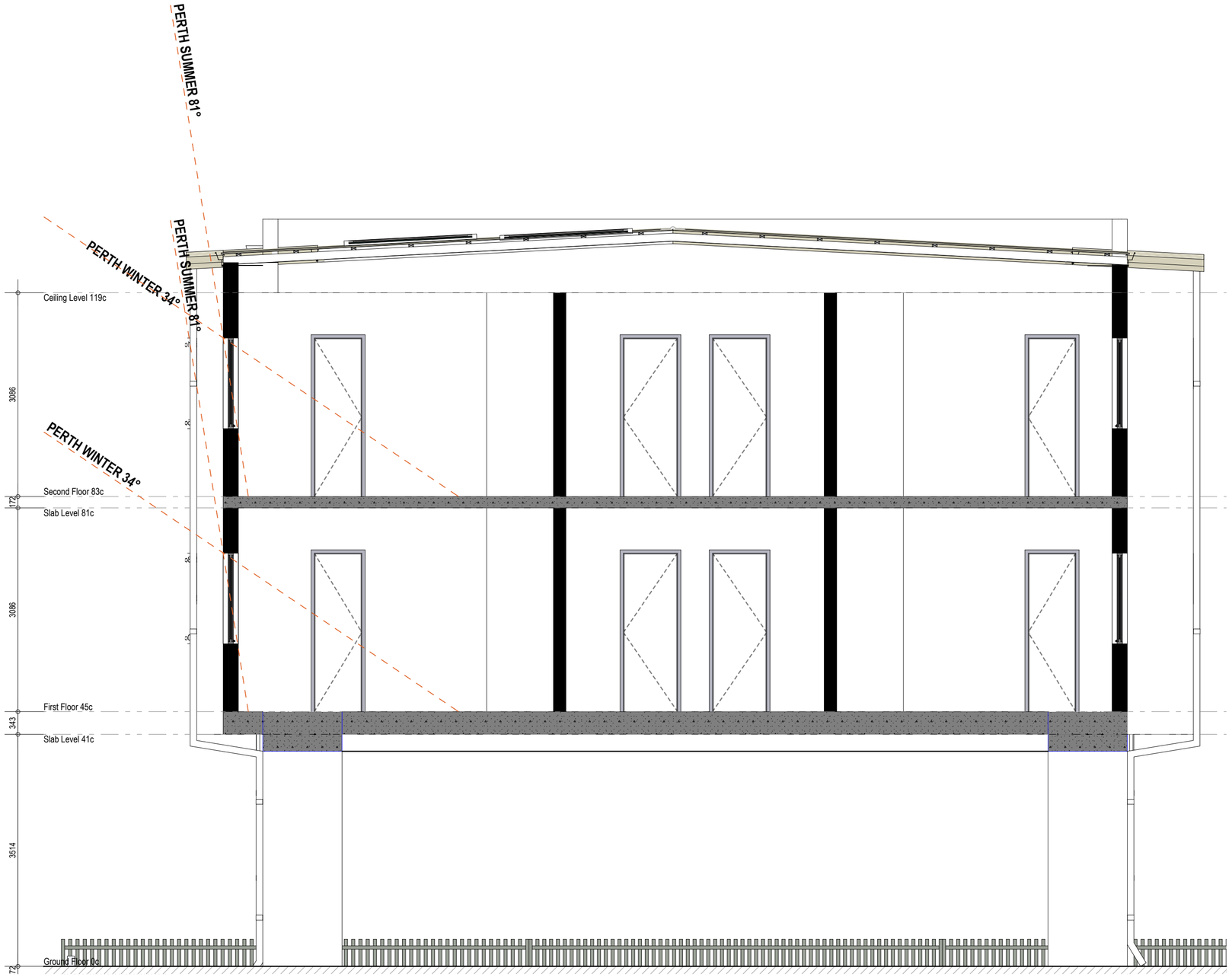

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3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Section

Scale:	Sheet Size:
1:50	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
13 of 13

GERMANO DESIGNS
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