

DESIGN VERIFICATION STATEMENT & DESIGN REPORT

190 Waterloo Road, Greenacre NSW 2190

Durag Nation

CLIENT: Mohammed Dahar
ISSUED: 28/02/2025
PREPARED BY: Chantel Jurisic



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We confirm that Mr Ghazi Al Ali of Ghazi Al Ali Architect directed the design of the enclosed DA application, which is represented by drawings (indicated below all Issue A dated 28/02/25) and that Mr Ghazi Al Ali is registered as an architect in NSW (registration No. 7542) in accordance with the Architects Act 1921.

DRAWING LIST

A-0000 TITLE PAGE
A-1000 SITE ANALYSIS
A-1010 SITE PLAN
A-1020 OPPORTUNITIES AND CONSTRAINTS
A-1030 UNIT SCHEDULE
A-1100 SURVEY PLAN
A-1101 DEMOLITION PLAN
A-1201 BASEMENT 2 PLAN
A-1202 BASEMENT 1 PLAN
A-1203 GROUND FLOOR PLAN
A-1204 LEVEL 01 FLOOR PLAN
A-1205 LEVEL 02 FLOOR PLAN
A-1206 LEVEL 03 FLOOR PLAN
A-1207 LEVEL 04 FLOOR PLAN
A-1208 LEVEL 05 FLOOR PLAN
A-1209 LEVEL 06 FLOOR PLAN
A-1210 ROOF PLAN
A-1250 TYPICAL GOLD LIVABLE UNITS
A-1251 TYPICAL GOLD LIVABLE UNITS
A-1252 TYPICAL SILVER LIVABLE UNITS
A-1253 TYPICAL SILVER LIVABLE UNITS
A-1301 NORTH ELEVATION
A-1302 EAST ELEVATION
A-1303 SOUTH ELEVATION
A-1304 WEST ELEVATION
A-1401 SECTION AA
A-1402 SECTION BB
A-1403 RAMP SECTION
A-2001 CALCULATIONS - GFA

A-2002 CALCULATIONS – AFFORDABLE UNITS
A-2010 CALCULATIONS – SOLAR ACCESS 2D
DIAGRAMS
A-2011 CALCULATIONS – 3D SUN EYE DIAGRAMS
A-2020 CALCULATIONS – CROSS VENTILATION
A-2030 CALCULATIONS - LANDSCAPE
A-2040 CALCULATIONS - STORAGE
A-2101 SHADOWS - WINTER SOLSTACE – 9AM
A-2102 SHADOWS - WINTER SOLSTACE – 12PM
A-2103 SHADOWS - WINTER SOLSTACE – 3PM
A-2201 MATERIAL SCHEDULE
A-2202 MATERIAL SCHEDULE
A-2220 PERSPECTIVES

We confirm that the enclosed documentation achieves the design principles set out in State Environmental Planning Policy (Housing) 2021 and has been designed with regard to Schedule 9: Design Principles for Residential Apartment Development.

CONTENTS

01 PROJECT CONTEXT	
Urban context	5
Neighborhood Character	6
Existing Structure	7
LEP Controls	8
 02 PROPOSAL FROM & SCALE	
Massing Diagrams	11
Built Form & Scale	12
Building Density	12
 03 PROPOSAL AMENITY	
Internal and External Amenity	14
Sun Eye Diagrams	15
Sustainability	16
Landscape Design	16
Safety and Security	17
Housing Diversity and Social Interaction	17
 04 AESTHETICS	
Design Diagrams	19
Composition of Elements	20
Façade Material Selection	20
Elevations Material Selection	21
 05 PERSPECTIVES	
Perspective of Street Corner	22
Boronia Road Elevation	23
View from Rear Courtyard	24

We confirm that the enclosed DA Application documentation achieves the design principles set out in State *Environmental Planning Policy (Housing) 2021* and has been designed with regard to *Schedule 9: Design Principles for Residential Apartment Development*.

01 PROJECT CONTEXT

01 PROJECT CONTEXT DVS & DESIGN REPORT

The subject site is located at 190 Waterloo Rd, Greenacre, with a total area of 1,782 sqm. It is a corner lot with dual primary frontages along Waterloo Rd (southern boundary) and Boronia Rd (western boundary). Currently, vehicular access is available from both streets; however, it will be modified to a single-entry point along Waterloo Rd.

The immediate area is characterized by 2-3 storey medium-density brick retail stores with shop top housing. The Greenacre Local Centre is undergoing transformation, with the council's Development Control Plan (DCP) encouraging increased high-rise developments and commercial activity to enhance social and economic engagement. This proposal aligns with these objectives, contributing to the area's growth by creating new opportunities for residents and businesses.

The site benefits from excellent connectivity, with multiple nearby bus stops and walkable access to key public amenities, including Greenacre Library, schools, community centres, and various local businesses.

Map Key:

- Subject Site
- Pedestrian Entry
- Vehicular Entry
- Hospital
- Train Station
- Bus Stops
- Local Amenity
- Green Space



Neighborhood Character

01 PROJECT CONTEXT DVS & DESIGN REPORT

The site is located at the heart of **Greenacre's local centre**, where the streetscape is predominantly characterized by **retail and shop top housing**. It is adjacent to:

- A **double-storey brick industrial building at 9 Boronia Road**
- A **double-storey brick retail building at 198 Waterloo Road**

Nearby local businesses, such as **Alaseel** and **Hijab House** on Waterloo Road, present an opportunity for **ground-floor retail spaces** within the proposed development. The design takes inspiration from these commercial precedents, incorporating **masonry materials** that enhance its connection to the surrounding urban fabric.

The **public outdoor space at 12 Boronia Road** and the **Hijab House building** illustrate the treatment of corner lots in the area. Architectural elements such as **curved detailing** at intersections help define the streetscape, a feature that has been integrated into the proposal.

The neighbourhood exhibits a mix of **medium-density commercial buildings** and **lower-density residential areas**. Commercial activity begins at Boronia Road, while **lower-density housing starts from 20 Boronia Road**, reflecting the area's dual nature as both a **residential and commercial hub**. To ensure a seamless integration with its surroundings, the proposed development:

- **Incorporates a plinth** that aligns with the height of adjacent lower-storey buildings
- **Maintains a compatible height and scale** with surrounding residential developments, accommodating the varying densities within the area

By respecting the existing urban character, the proposal strengthens the cohesion between the commercial and residential elements of the neighbourhood.



13-9 Boronia Road



192-198 Waterloo Road



173 Waterloo Road



16-18, 20 Boronia Road



12 Boronia Rd



189-187 Waterloo Rd

Existing Structure

01 PROJECT CONTEXT DVS & DESIGN REPORT

The site is currently a *Temco* Petroleum and carwash, with site access from both Boronia Road and Waterloo Road. The dual street frontages defines the site as a prominent corner lot, with opportunity to interact with the neighborhood in a way that increases social and economical activity for the locality. In proposing a housing development, the opportunity for further development in Greenacre’s center is possible, and a sense of community greatedened.

There has been a lack of recent developments on the streetscape, despite councils DCP goals. The introduction of street landscaping in 2024, already improves the aesthetic of the streetscape in front of the site and can be enhanced upon in the development.



Existing street view from Waterloo Road (Google Maps,2024)



New shrub planting
(Google maps, 2024)



Street tree addition
(Google maps, 2024)



Existing street view from Boronia Road (Google Maps,2024)

Land Zoning

Height of Buildings



Key

- B2 – Local Centre
- R2 – Low Density Residential
- R3 – Medium Density Residential
- R4- High Density Residential
- SP2 – Infrastructure (Educational Est and Community Facilities)

Key

- 9m Building Height Limit
- 10m Building Height Limit
- 13m Building Height Limit
- 14m Building Height Limit
- 20m Building height Limit

01 PROJECT CONTEXT DVS & DESIGN REPORT

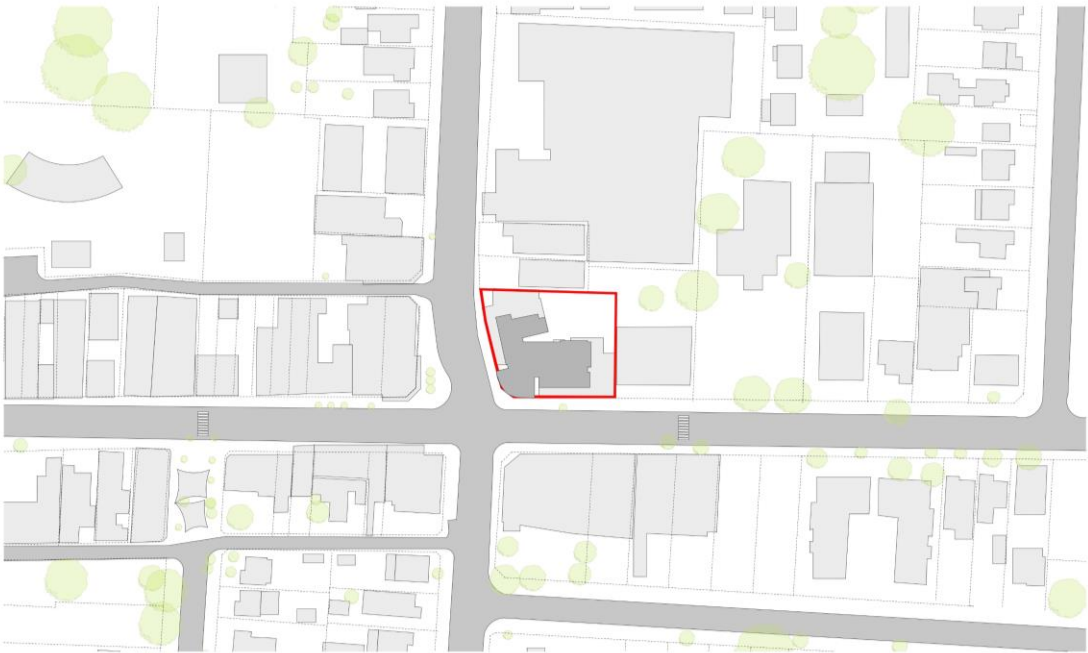
Floor Space Ratio



Key

	2.5:1
	2:1
	1:1
	0.75:1
	0.5:1

Heritage



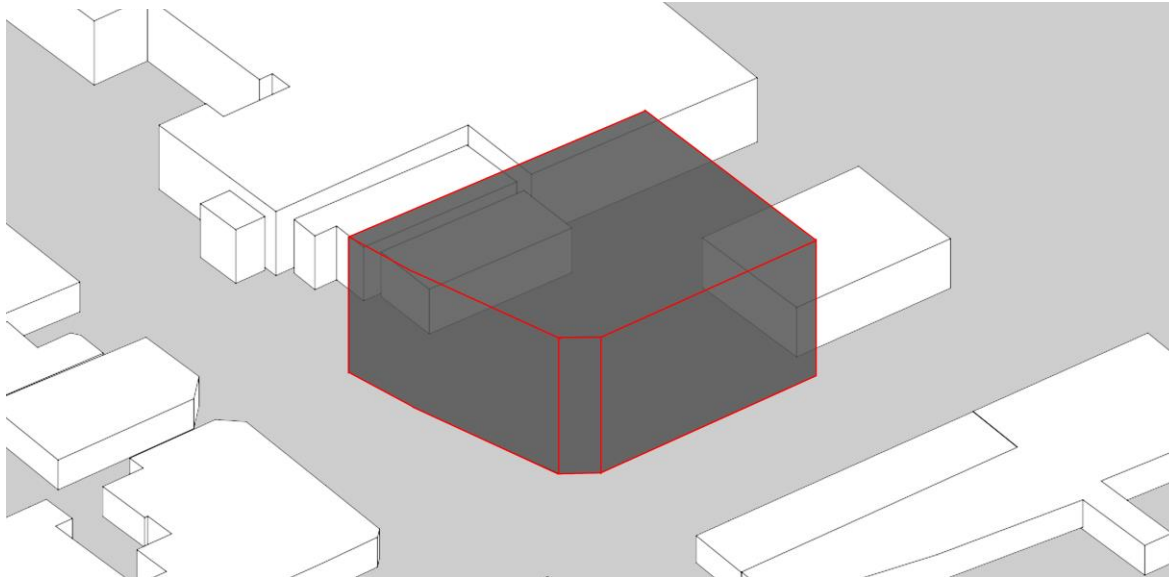
Key

	Heritage Site
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There is no Heritage Listed site in the immediate vicinity of the site. The closest Heritage site is Greenacre Public School at 105 Waterloo Rd, Greenacre. This protected site is located 550 m South of the subject site. The proposal poses no negative impact on this listing.

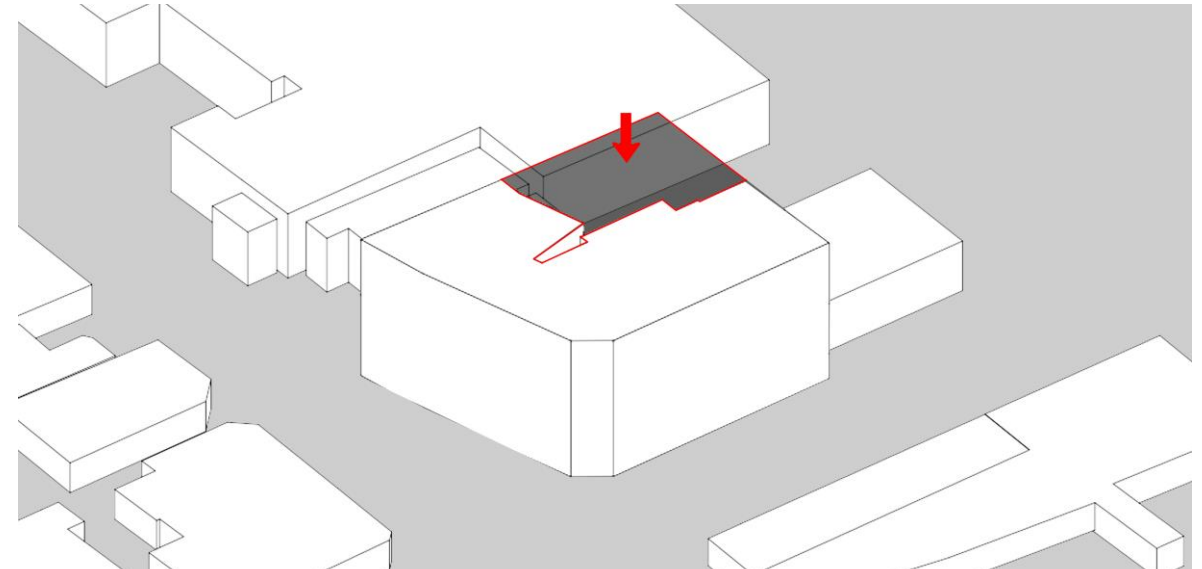
02 PROPOSAL FORM & SCALE

01 – SITE MASS



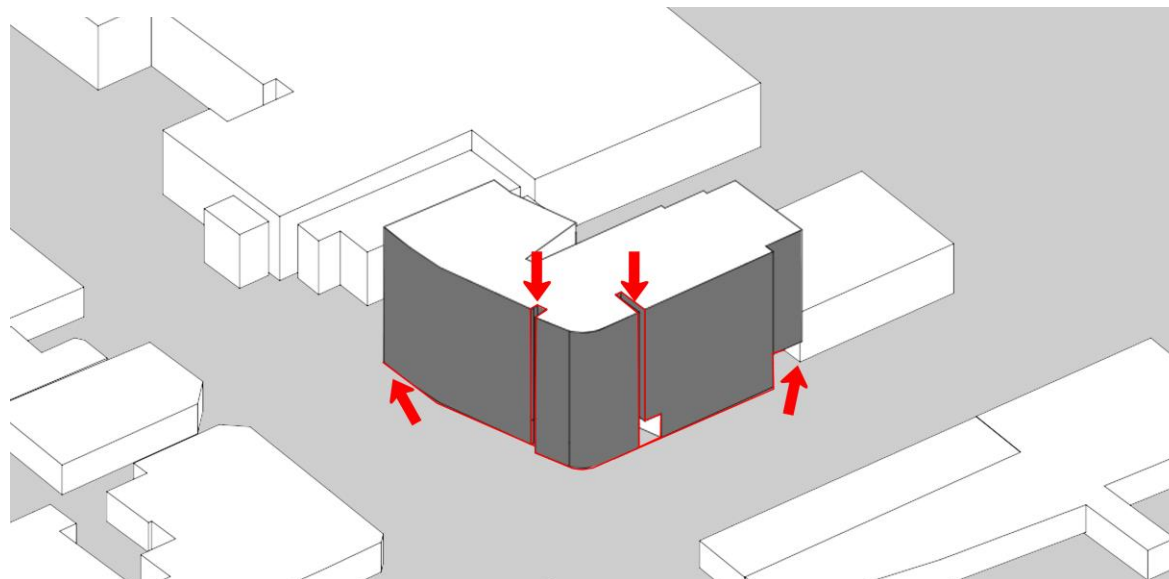
Site noted to be a prominent corner site, LEP and DCP allow for on boundary frontage and allowance for 5 storeys above ground. Additional 2 storeys are due to affordable housing provisions, allowing an increased height of 30% addition. The building reaches up to 22.6m high.

02 – COURTYARD ALLOCATION



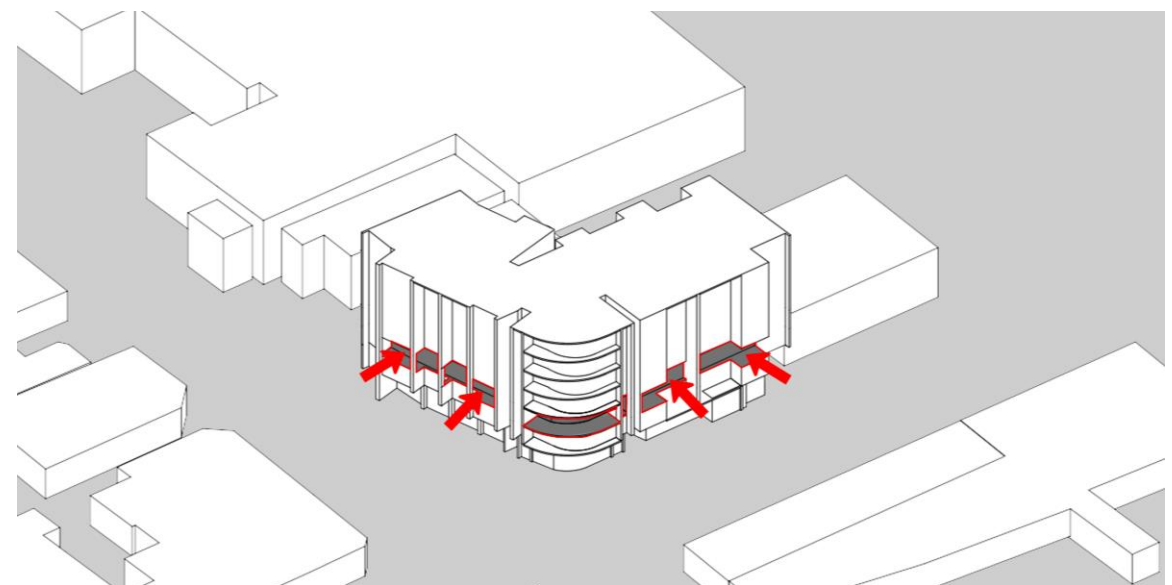
A private external courtyard is allocated in the back corner of the site, providing recreational privacy from the street and biophilic experiences. This layout maximizes solar amenity to all residents through private and communal open spaces.

03 – ELEMENTS SUBTRACTED



The prominent corner presence is addressed and highlighted through vertical incisions, that break the facade into three distinct sides that address Boronia Road, the corner intersection and Waterloo Road, respectfully. The design is sensitive to the front setbacks of the adjoining properties, by tapering the SE and NW corners of the form.

04 – LEVEL 2 SETBACK



As per the council DCP, level 2 of the proposal is setback 3m, allowing residents privacy from the public sphere. All other levels allow a 2m articulation zone from the boundary

Built Form and Scale

02 PROPOSAL FORM & SCALE DVS & DESIGN REPORT

The **bulk and height** of the proposed building are considered appropriate within its **current and future context**, establishing a balanced relationship with **existing and upcoming** neighbouring developments.

The development comprises:

- **62 residential units** spanning from the **ground floor to Level 6**
- **A basement car park**
- **Outdoor communal open space**
- **Four retail spaces** along the street frontage

The **Southwest corner** of the site, positioned at the intersection of **Waterloo Road and Boronia Road**, holds **strategic significance** within the existing streetscape and surrounding buildings. This corner treatment enhances the architectural presence of the proposal.

The development **fully complies** with the **maximum permissible height of 22.6 meters**, including provisions for **affordable housing**. In terms of **form and scale**, the proposal aligns with both **current and future residential and retail developments**, which vary in size and density throughout **Greenacre**.

Building Density

02 PROPOSAL FORM & SCALE DVS & DESIGN REPORT

The proposal effectively responds to the **street alignment**, achieving a **reasonable and appropriate density** in relation to the site and its surroundings. The development maintains a **balanced composition of built structures and open spaces**, with **tapered setbacks at the southeast (SE) and northwest (NW) corners**, minimizing the impact on adjacent **low-rise buildings**.

Architectural elements have been strategically **subtracted from the façade** to lighten the overall **visual massing** of the building. The proposed **seven-storey height** aligns with the **Development Control Plan (DCP) requirements** for affordable housing while prioritizing **neighbouring amenity** by preventing **overshadowing of surrounding properties**. The height also anticipates future **adjoining developments of at least five storeys**, ensuring long-term compatibility within the evolving urban context.

The site spans **1,782 sqm**, with a **Floor Space Ratio (FSR) of 3.24:1**, which is **fully compliant** with the **maximum permissible FSR of 3.25:1**, including the **Affordable Rental Housing (ARH) Bonus**. This ensures a **comfortable residential density** while maintaining high-quality living conditions.

03 PROPOSAL AMENITY

Internal and External Amenity

03 PROPOSAL AMENITY DVS & DESIGN REPORT

The design features a high abundance of solar access, natural ventilation and natural day lighting through private open space areas, to all units in the form of balconies. Balconies are provided on all orientations, for maximum sunlight throughout all hours of the day. Vertical blade screening has been applied on sides of rear balconies, and balconies with a street frontage, to avoid impeding privacy from neighbours and the public.

By orienting the building to the street frontage and clearing a rear communal courtyard, all residents can experience exemplar solar access in the afternoons. The use of planting in the common open space enables the occupants to seek connections with the natural environment through both direct and indirect experiences, prompting biophilia. This will be conducive to many benefits including health benefits, environmental benefits and sustainable benefits. Additionally, both the private open spaces and generous communal open space, offers a variety of passive and active recreational opportunities.



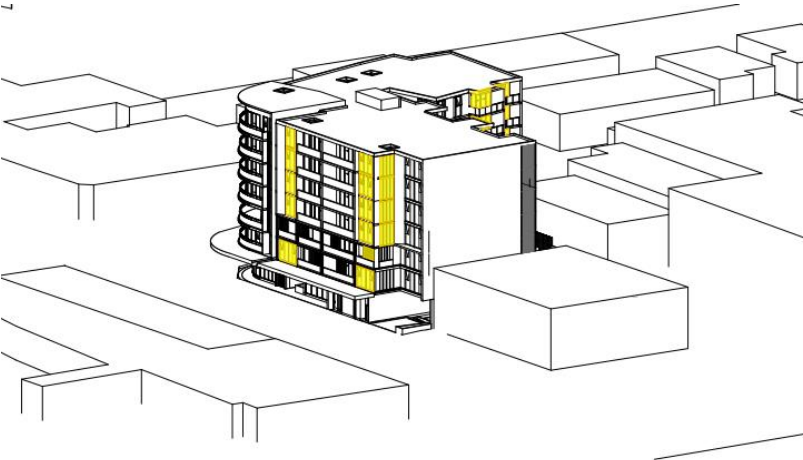
The design provides opportunity for the Private Retreat of residents in balcony open spaces.

The proposal provides exemplar solar access, with 83.87% of units receiving the required minimum 2 hours of direct sunlight. 72.6% of units are cross-ventilated, adding to the overall amenity of the development. Thus, natural ventilation and natural day lighting exceed the required minimum, add to the amenity and reduce reliance upon mechanical equipment.

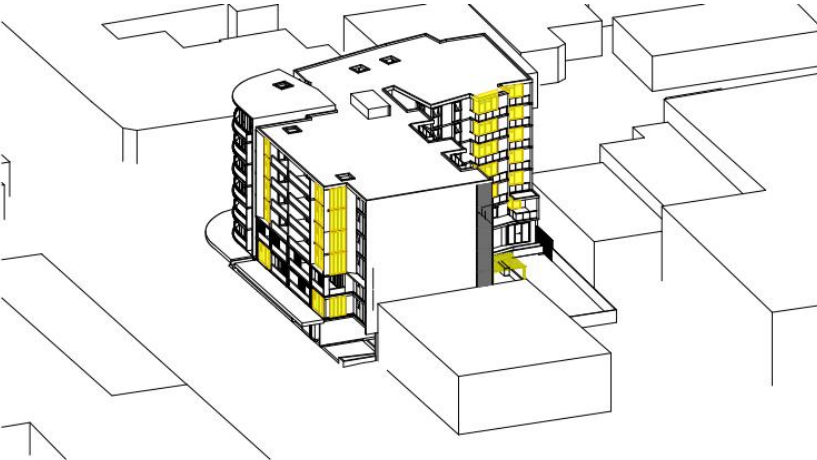
Planning within the apartments achieves separation of the more active living spaces from the passive and active use room. Private open spaces combine with generous communal open spaces to offer a variety of passive and active recreational opportunities. Walls between apartments and those enclosing common and service areas shall meet the Building Code of Australia requirements as delivered in Basix certificate and acoustic report.

Sun Eye Diagrams

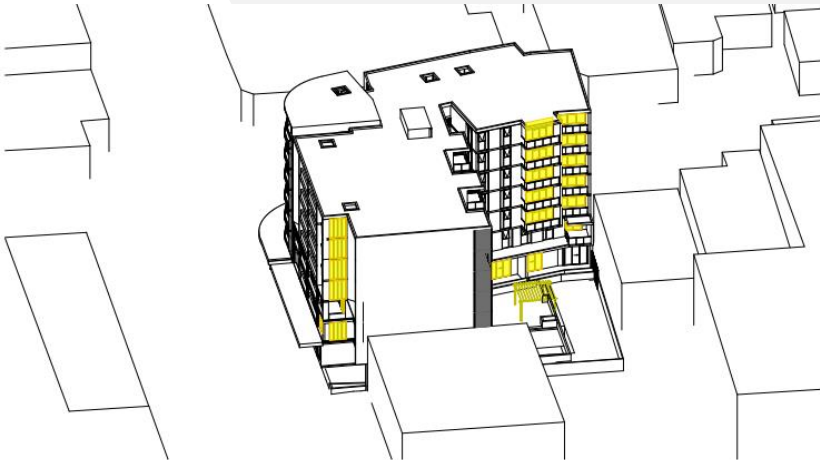
03 PROPOSAL AMENITY DVS & DESIGN REPORT



8:30 AM



9:30 AM



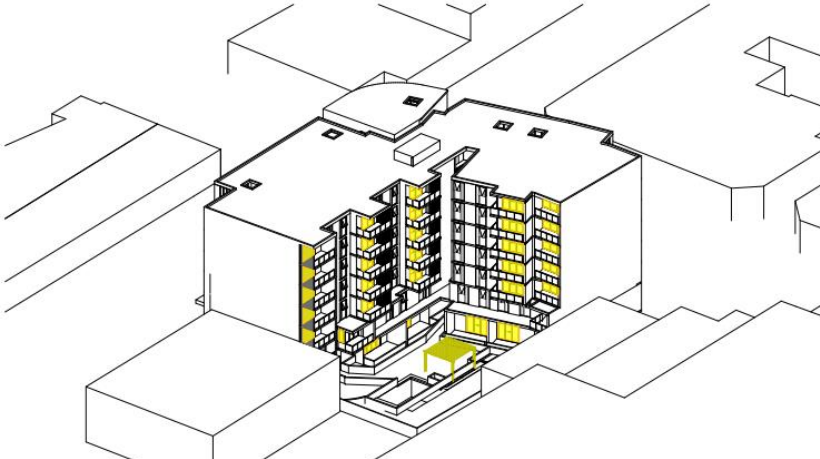
10:30 AM



11:30 AM



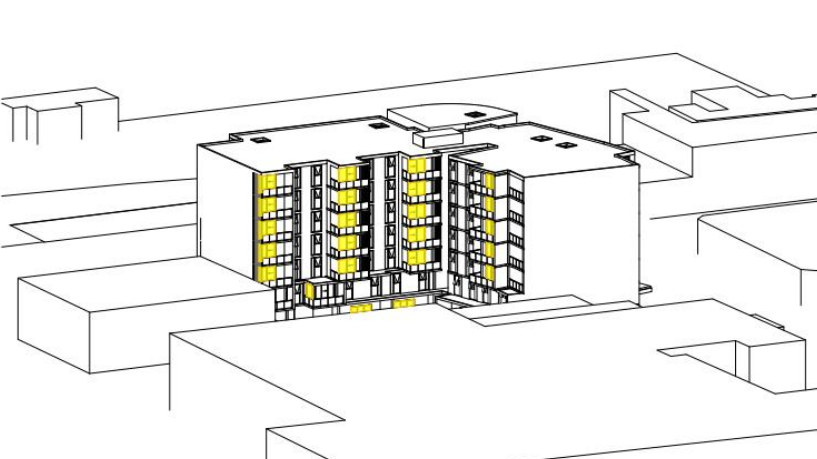
12:30 PM



1:30 PM



2:30 PM



3:30 PM

SOLAR ACCESS STUDY

 SOLAR ACCESS TO LIVING ROOMS AND PRIVATE OPEN SPACES

SOLAR ACCESS ≥ 2 HRS: 52 (83.87%)
NO DIRECT SUNLIGHT: 10 (16.13%)
TOTAL NUMBER OF RESIDENTIAL UNITS: 62

Sustainability

03 PROPOSAL AMENITY DVS & DESIGN REPORT

The proposal aims to use renewable energy where possible and provide an environmentally friendly development. Materials have been selected for their low embodied energy and low maintenance characteristics. Further, designed landscape areas are featured at Ground floor and the rooftop common area, with 269.86sqm of deep soil planting provided on Ground floor. This enables for greater water retention in large, landscaped areas and minimises the need for watering in hot weather. Energy efficient appliances have been selected, along with low water use fixtures and appliances.

In addition to the above, the entire development has been thoroughly assessed by an independent thermal energy assessor to achieve the highest possible rating for the entire building as mentioned in the approved BASIX. Hence, the development can be considered contributory to the society by minimising the trace on the natural environment.

Landscape Design

03 PROPOSAL AMENITY DVS & DESIGN REPORT

The landscape design has been prepared to achieve an integrated and sustainable system for the amenity of residents and public domain. The landscape design features comprehensive new plantings and vegetation implemented at Ground Level in the common open space. Providing outdoor Communal Spaces for residents to engage in social and biophilic experiences, enhances a sense of community in the development.



Communal spaces designed with integrated landscaping and BBQ area

Smaller planting areas are implemented on the street façade in landscape planters. The proposal incorporates landscaping to improve the experience of residents in communal spaces and reintroduce planting to the streetscape, as per councils recent additions of a street tree and shrubs.

Safety and Security

03 PROPOSAL AMENITY DVS & DESIGN REPORT

The proposal incorporates suitable definition of the public, communal and private domains. Entry to the communal space is accessible by residents only from the interior. Ground Floor entrances are controlled by keycard access at both the front entry door and garage door. Communal spaces are well lit and benefit from passive surveillance. Basement car parking is also secured.

The communal open space creates a pleasant domain for all the family activities and minimises the safety and security issues as it is protected by an intercom security system that allows only pass holders to access. The public areas are all equitably accessible to all residents with full compliance with the BCA and Australian Standards to ensure occupant safety. Additionally, the public areas are well lit with artificial outdoor lighting to optimise visibility at night and minimise potential hazards.

Housing Diversity and Social Interaction

03 PROPOSAL AMENITY DVS & DESIGN REPORT

The proposal features a variety of 9 x 1 bedroom, 47 x 2 bedroom and 6 x 3-bedroom apartments. This mix of apartments offers accommodation to meet the demands of many different occupants and is appropriate to the area demographic, where the average household includes 2-3 people. The proposal is considered to offer an appropriate mix of accommodation that shall translate to an equally represented group of residents which will result into an outcome of high desirability.

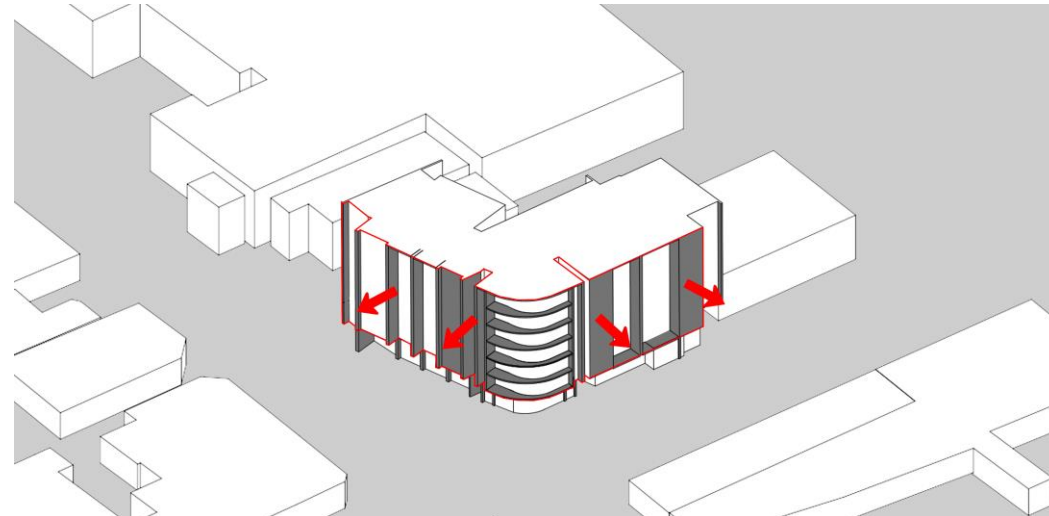
The proposal also includes outdoor communal open spaces which may host a variety of activities to cater for small groups of people or individuals. These landscaped breakout areas may encourage social interactions through incidental contact and thus foster a sense of community amongst residents. 4 Retail spaces along the street facing facades, will prompt for further social interaction, by an increase of public activity in the area.



An active street frontage achieved on Boronia Ave, Waterloo Rd and the street corner will increase local economy, and social interactions.

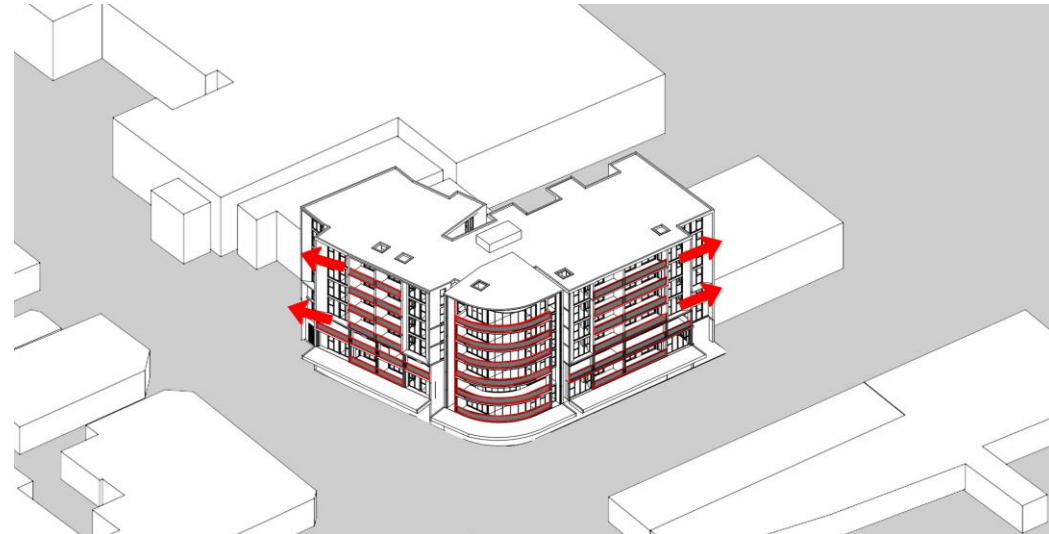
01 – VERTICAL PROJECTIONS

The projection of vertical architectural elements is a design strategy that adds dynamism to the architectural facade. The 2D plan projects toward the boundary, adding a sense of depth and contributing to the architectural language and overall aesthetic of the proposal.



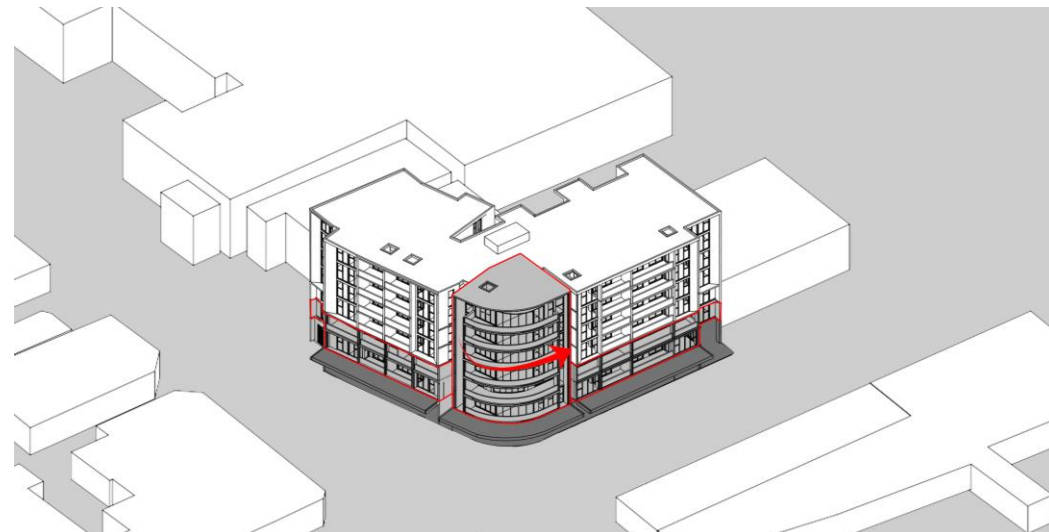
02 – HORIZONTAL BANDING

The use of solid balustrades on the facades, emphasizes the horizontality of the building, dividing the massing of vertical projections. The illusion of a continuous band wraps around the three facades, again emphasizing the corner prominence.



03 – PODIUMS

Through an expression of materiality, a hierarchy of podiums alludes to a smaller built form when viewed in context. The projected corner continues the materiality of the podium, placing emphasis on the corner presence again.



Composition of Elements

04 AESTEHTCIS DVS & DESIGN REPORT

The proposed **built form** is a **thoughtful response** to both the **existing context** and the **desired future character** of the area. The **linear structure** is visually broken down through **horizontal banding** on the **balcony balustrades** and **strategic façade setbacks** on **Level 2**, creating a **rhythmic and cohesive design** while further **reducing the perception of massing**.

The use of **masonry materials** on the frontage from the **ground floor to Level 2** establishes a **strong podium**, visually referencing a **three-storey scale** in consideration of **adjoining properties**. This material treatment extends along the **corner**, effectively dividing the building's **continuous façade** into **three distinct segments**, reinforcing a **strong corner presence**.

Additionally, **vertical incisions** on the **corner façade** enhance **visual interest**, strengthening the building's **architectural expression**. These design elements contribute to a **well-balanced façade**, creating a **prominent and refined architectural landmark** within the streetscape.

Façade Material Selection

04 AESTEHTCIS DVS & DESIGN REPORT

The proposed **materials, finishes, and architectural features** contribute to a **visually engaging and high-quality design**, enhancing the **Greenacre locality**. The **selection of materials, colors, and forms** not only complements the **overall aesthetic appeal** but also integrates seamlessly with the **existing streetscape**. Additionally, the design reflects the **emerging residential character** of the area, offering a **contemporary vision** that aligns with future urban development.



SOUTH ELEVATION- WATERLOO ROAD
1:300



WEST ELEVATION- BORONIA ROAD
1:300

MATERIAL SCHEDULE



A
PGH BRICKS SEA FOSSIL OR SIMILAR



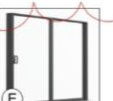
B
STRIATED CONCRETE FINISH LIGHT GREY OR SIMILAR



C
PGH BRICKS METALLIC NICKLE FLASH OR SIMILAR



D
GLASS BALUSTRADES



E
ALUMINIUM FRAME DARK GREY OR SIMILAR



G
GLASS BLOCKS

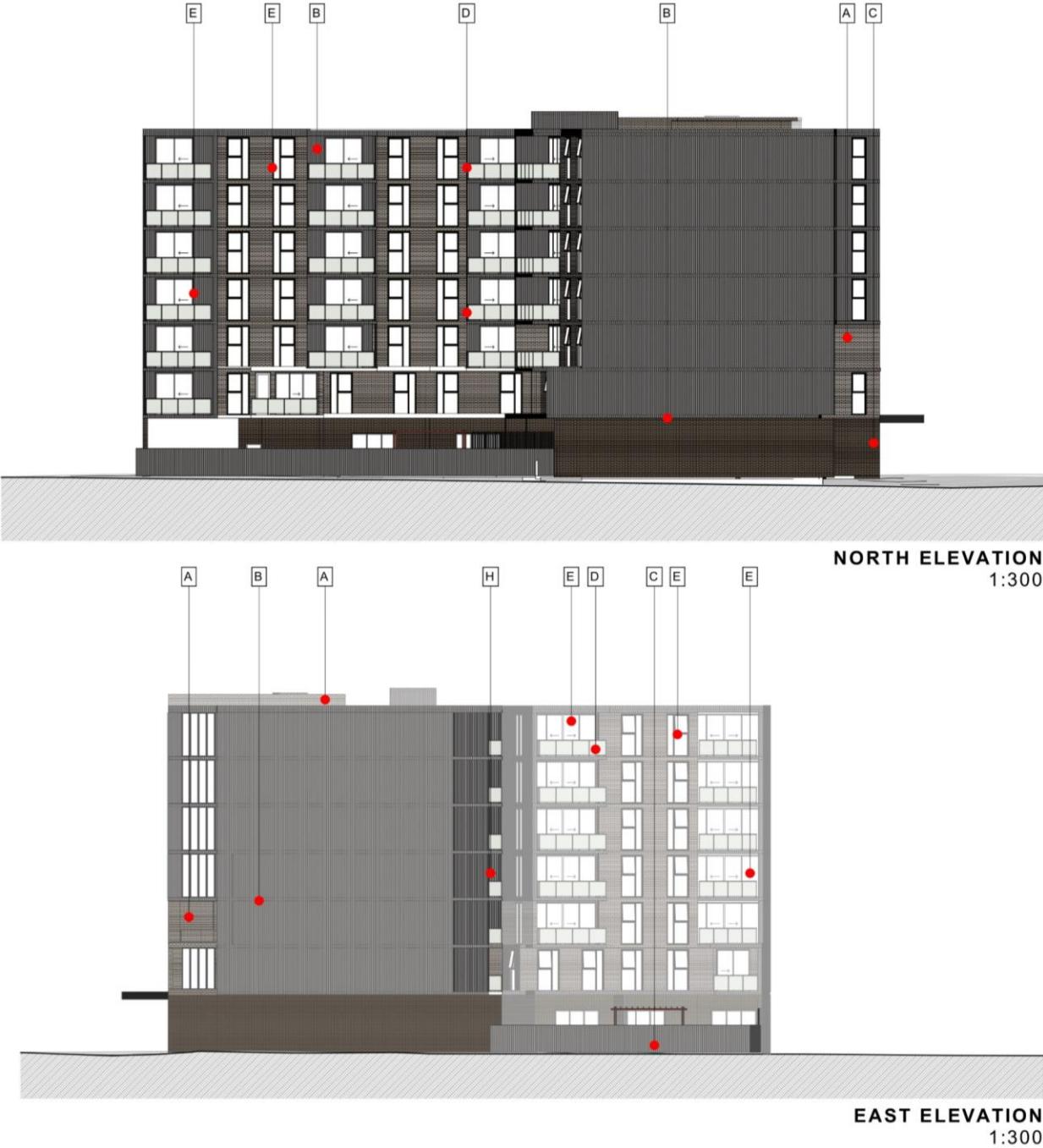


H
ALUMINIUM SCREENS DARK GREY OR SIMILAR

Elevations Material Selection

04 AESTEHTCIS DVS & DESIGN REPORT

The materials at the rear of the building continue the architectural language of the façade, and the addition of glazed balustrades improves solar amenity of residents. The design is not considerate only to the street appearance, but to the comfort and amenity of its residents.



MATERIAL SCHEDULE

A

PGH BRICKS SEA FOSSIL OR SIMILAR

B

STRIATED CONCRETE FINISH LIGHT GREY OR SIMILAR

C

PGH BRICKS METALLIC NICKLE FLASH OR SIMILAR

D

GLASS BALUSTRADES

E

ALUMINIUM FRAME DARK GREY OR SIMILAR

G

GLASS BLOCKS

H

ALUMINIUM SCREENS DARK GREY OR SIMILAR

05

PERSPECTIVES



GHAZI AL ALI
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PVT LTD

Perspective of Street Corner

05 PERSPECTIVES DVS & DESIGN REPORT



Boronia Road Elevation

05 PERSPECTIVES DVS & DESIGN REPORT



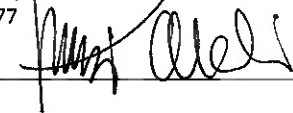
View from Rear Courtyard

05 PERSPECTIVES DVS & DESIGN REPORT



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Date _____



DVS & Design Report by Chantel Jurisic
for development at 190 Waterloo Road, Greenacre NSW 2190



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