

The Design Partnership

CRIME PREVENTION THROUGH
ENVIRONMENTAL DESIGN (CPTED) REPORT

MIXED USE DEVELOPMENT

**93-107 CECIL AVENUE &
9-10 ROGER AVENUE CASTLE HILL NSW**

DECEMBER 2024

aplus Design Group

**Crime Prevention Through Environmental Design (CPTED) Report
93-107 Cecil Avenue & 9-10 Roger Avenue Castle Hill NSW**

PROJECT NUMBER: 24.017

PREPARED BY



Kristine (Kristy) Cianci | Managing Director, Architect & CPTED consultant.

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Report prepared by:

THE DESIGN PARTNERSHIP
TDP2 Pty Ltd ATF The Design Unit Trust T/A The Design Partnership
Central Coast – PO Box 6110 Long Jetty NSW 2261
T 02 4324 8554
E info@thedesignpartnership.com.au
W www.thedesignpartnership.com.au

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1 Introduction

The Design Partnership has been engaged by Alton Property Group to prepare a Crime Prevention Through Environmental Design (CPTED) Report for a mixed use development comprising retail, commercial and residential units.

This report provides an assessment, analysis and recommendations for the design produced for the development.

1.1 What is CPTED?

Crime Prevention Through Environmental Design (CPTED) is a strategy that aims to reduce crime by designing the built environment according to a set of guidelines.

CPTED is based on the principle that many offenders are guided by rational thought and make a cost/benefit analysis of their actions prior to committing a crime. Applying CPTED methods aims to discourage offenders by maximising the risk and effort of committing a crime, while minimising the benefits and opportunities of committing that crime. CPTED also identifies ways to create a feeling of safety, leading to increased use of an area, which in turn improves natural surveillance and deters offenders.

In NSW, CPTED is largely administered by Safer By Design, a co-operative made up of NSW Police, local councils, government departments and private sector organisations. The Design Partnership structures its CPTED reports according to Safer By Design guidelines.

Safer By Design identifies seven key areas where CPTED principles can be applied: surveillance; lighting and technical supervision; territorial reinforcement; environmental maintenance; activity and space management; access control; design/definition/designation.

1.2 Scope & Methodology

This report is authored by Kristy Cianci (Ryan) of The Design Partnership who undertook CPTED training with the NSW Police. Kristy is a registered architect (ARB NSW No. 9254) and specialises in the preparation of CPTED assessments, studies and reports.

The following Methodology was used to prepare the CPTED report:

1. Desktop review of the design.
2. Review of crime data available through the Bureau of Crime Statistics & Research (BOCSAR).
3. Review of media and similar publications.
4. Review of the architectural and landscape documentation.
5. Preparation of draft CPTED Report for review.
6. Preparation of final CPTED Report.

1.3 Structure Of The Report

The basis of this report is a Crime Risk Assessment (CRA), which is used to identify overall crime risk for the project and the appropriate level of CPTED treatments. A summary of the Crime Risk Assessment has been provided as diagrams in Section 4.

Using the CRA as a template, this report assesses the design and provides recommendations under the seven CPTED design principles.

2 The Wider Context

2.1 The Context of Castle Hill

Castle Hill is a suburb located in Sydney's north-west, approximately 30 kilometres from the Sydney CBD. It is part of the Hills Shire Council area, known for its family-friendly atmosphere and established residential communities.

Castle Towers, one of the largest shopping centres in the region, is the focal point of the suburb's commercial precinct. It offers retail, dining, and entertainment options. Surrounding the shopping centre, the town centre includes offices, medical facilities, and other businesses. The nearby Castle Hill Homemaker Centre provides retail options focused on furniture, appliances, and home improvement.

The suburb features a mix of low-density residential housing, including freestanding homes on generous blocks, alongside contemporary apartment developments concentrated near the town centre and transport hubs. Commercial and light industrial buildings are primarily situated near the Castle Hill town centre and along Victoria Avenue.

Castle Hill is well-serviced by public transport, particularly since the introduction of the Sydney Metro Northwest. The Castle Hill metro station connects the suburb to key locations, including Chatswood and Sydney CBD. A bus network also operates throughout the suburb, providing connections to nearby areas.

The suburb is home to several parks and recreational spaces, such as Fred Caterson Reserve, which features sports facilities, bushwalking trails, and open spaces. Castle Hill Heritage Park is another key green space, offering picnic areas, walking tracks, and historical significance tied to early settlement. Smaller parks and playgrounds are scattered across the suburb, catering to families.



Figure 1 : Castle Hill, situated northwest of the Sydney CBD (ArcGIS 2024 /TDP 2024)

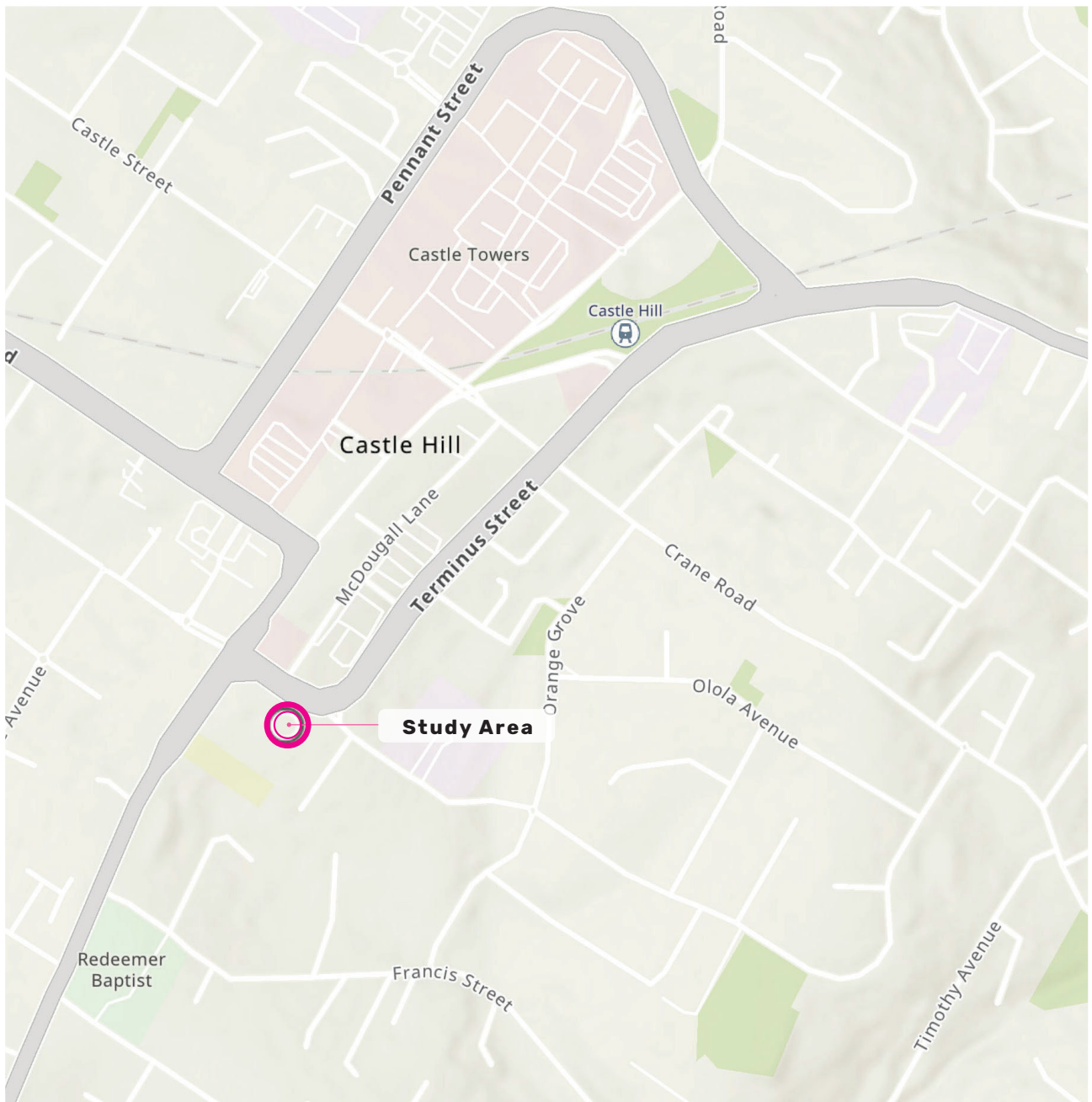


Figure 2 : Subject site situated south of the town centre and the shopping centre Castle Towers (ArcGIS 2024 / TDP 2024)

2.2 Social Analysis of Castle Hill

Data from Profile.Id.com.au identifies Castle Hill as part of the broader Hills Shire catchment. This catchment is bordered by the suburbs of Kellyville to the north, Baulkham Hills to the east, North Rocks and Carlingford to the south, and Glenhaven and Dural to the west (refer Figure 4). The Castle Hill catchment covers an area of 16.68 square kilometres, with a population of 35,728 residents as of 2023, resulting in a population density of 2141 people per square kilometre.

Castle Hill has a diverse population and housing mix, with a blend of detached houses, townhouses, and medium - to high-density developments. Compared to its neighbouring suburbs, Castle Hill is undergoing significant transformation with recent high-rise developments around the Castle Towers precinct and Castle Hill Metro Station. These developments include multi-storey buildings along Old Northern Road and adjacent streets. While detached houses remain prominent in many areas, medium - to high-density housing is increasingly being developed, particularly near the Metro corridor. Townhouse developments are expected to persist in specific pockets due to their alignment with existing zoning and market demand. However, this rapid growth is leading to "transition stress," characterised by ongoing construction, reduced privacy, and potential conflicts arising from the mix of new high-density developments alongside established residential areas. These conditions may create opportunities for confusion and potentially be exploited by opportunistic criminals.

Table 1 highlights the prevalence of higher-density developments within the catchment, which can contribute to increased social isolation. Of particular concern are vulnerable residents, including those with long-term illnesses or requiring assistance, who may be at heightened risk. To address this, the inclusion of accessible and well-designed communal spaces is essential. These spaces should be strategically located to foster social interaction among residents, particularly in high-density environments. Communal spaces are crucial in reducing social isolation and promoting a sense of community, especially for vulnerable groups.

Castle Hill can generally be divided into two distinct areas: a commercial, retail, and entertainment precinct centred around Castle Towers and the Metro station, and residential precincts extending outward. The retail precinct acts as a focal point for the suburb, but the surrounding topography and arterial roads have created some challenges for connectivity between commercial and residential areas. The proposed development seeks to improve connectivity by developing a pedestrian through-site link. It will be necessary to clearly distinguish between the public and private areas between the through-site link and adjacent residential units along this link. This distinction is not just a design consideration but also a critical aspect of ensuring privacy and security for residents, thereby contributing to a cohesive and harmonious living environment.

Table 1			
Item	Castle Hill Catchment	Hills Shire LGA	Notes
Household Types (top 3)			
Couples with Children	47.9%	52.1%	Castle Hill's dominant household type reflects its family-oriented nature.
Couples without Children	24.9%	23.4%	A significant proportion aligns with downsizing trends in medium-to high-density developments.
Lone Person Households	13.5%	11.9%	Lone-person households reflect the increasing presence of smaller housing typologies.
Age Groups (top 3)			
Parents/Homebuilders (35-49)	22.9% (+625)	23.6%	The catchment's population has grown due to high-density living.
Older Workers (50-59)	13% (-13)	12.4%	
Empty Nesters & Retirees (60-69)	11.4% (+11)	9.8%	
Building Typology			
Separate House	73.5% (+128)	79.6%	High density living has a high reliance on secure building systems and safe communal spaces.
High Density	13.3% (+374)	9.3%	
Medium Density	13.2% (+34)	10.8%	
Dwelling Occupancy			
Occupied Dwellings	95.1% (+561)	95.2%	Higher occupancy rates contribute to natural surveillance and community security. However, acknowledged the census was held during a COVID lockdown.
Car Ownership			
2 Car	40.9% (-106)	42.7%	High car ownership influences local engagement.
1 Cars	32% (+794)	28%	
3 or more Cars	21.1% (-89)	24.4%	
Method of Travel to Work			
Worked at Home	32% (-4906)	34%	The Metro was not opened until 2019 during the pandemic. Therefore, data does not demonstrate changes to car usage. The Metro is likely to improve public transport usage.
Car as Driver	47 (+7025)	45.3%	
Did Not Go to Work	12.2% (+817)	12.3%	
Train	2.4% (-114)	1.9%	
			Increased remote work during the COVID-19 pandemic shaped travel patterns.

Employment Status			
Labour Force Participation	63.6%	66.5%	Castle Hill’s slightly lower participation rate compared to the LGA may reflect its mix of retirees and family-oriented households.
Employment Status - Employed	95.5%	95.9%	High employment rates align with the professional nature of the population and the region’s economic stability.
Unemployment Status	4.5%	4.1%	Unemployment in Castle Hill is slightly above the broader LGA average.
Industries			
Health Care and Social Assistance	13.3%	13.2%	The dominant industry highlights the presence of healthcare professionals and facilities, a critical component of the local workforce.
Professional, Scientific and Technical Services	12.9%	11.6%	
Education and Training	9.9%	9.3%	
Occupations			
Professionals	34.6%	32.5%	Professionals constitute a significant portion of the workforce, with flexible work-from-home options contributing to community engagement during the day.
Managers	19.3%	18.9%	
Clerical and Administrative Workers	14.5%	15	
Sales Workers	8.3%	8%	
English Literacy			
Speaks English Only	54.5%	58.6%	A significant proportion speaks only English, which supports the effectiveness of CPTED measures like signage, though non-English speakers should still be considered.
Speaks English Well/Very Well	37.1%	34.3%	
Speaks English Not Well/Not at All	6%	4.6%	
Long Term Health Condition			
At Least One Condition	26.9%	26.1%	Mental health conditions are common, emphasising the need for accessible communal spaces to foster inclusivity and reduce social isolation.

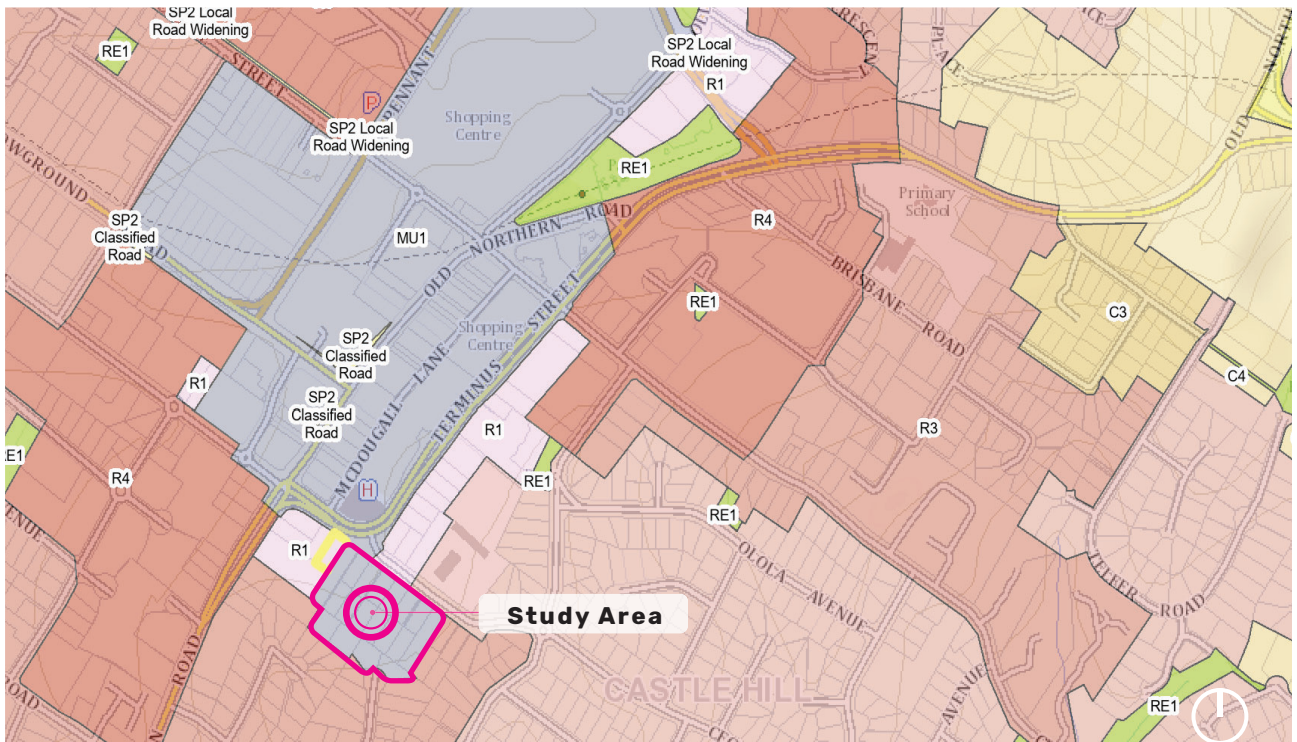


Figure 3: Castle Hill Land Zoning Map (Spatialviewer 2024)

The subject site is zoned MU1 Mixed Use. The Mixed Use town centre is situated to the north and northwest of the site.

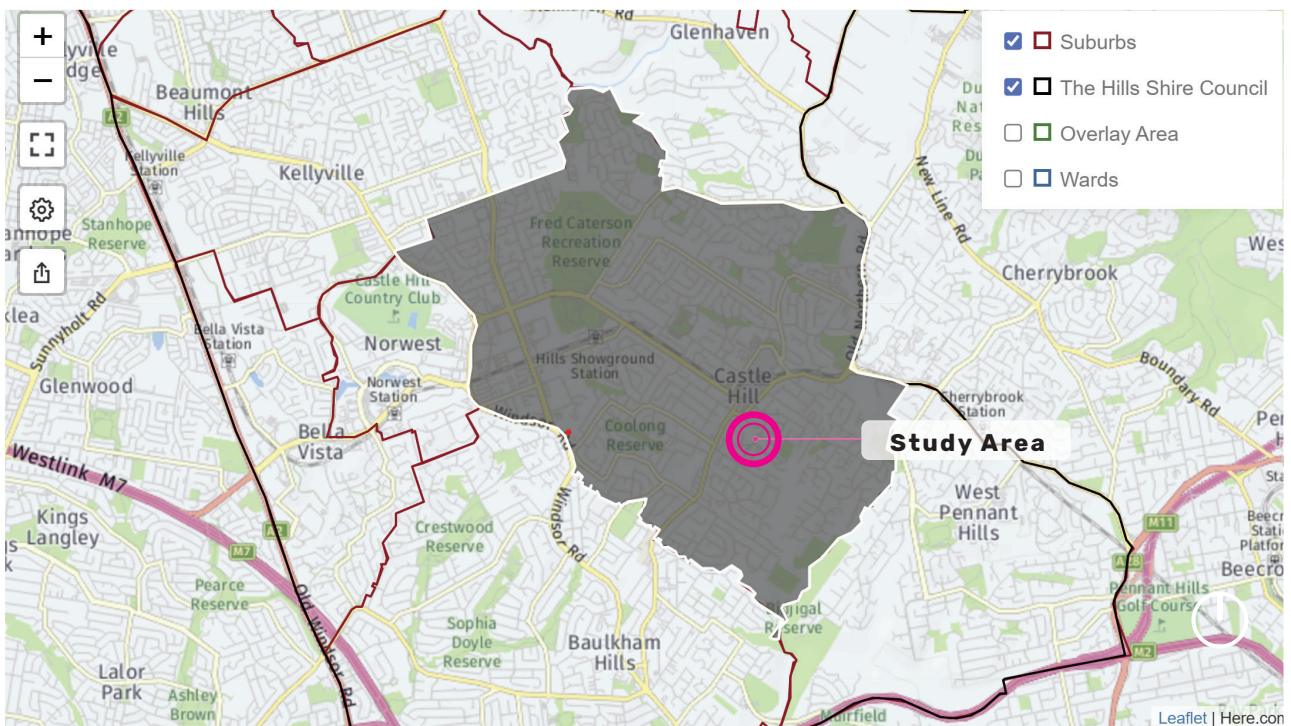


Figure 4: Profile Id catchment (ProfileID 2024)

Castle Hill catchment (dark grey) within the Hills Shire Council LGA.

3 The Proposed Development

The proposed development is a staged project comprising four buildings – A, B, C, and D. The project is proposed in three stages: Stage 1 includes Buildings A and B, Stage 2 is Building C and Stage 3 is Building D.

The retail entry to the development will be from Cecil Avenue, including access to the basement carpark. A landscaped through-site link will connect Cecil Avenue and Roger Avenue, providing a pedestrian movement corridor. Due to the topography, the through-site link steps down from Cecil Avenue to Roger Avenue, which is a cul-de-sac. Residential lobbies are accessed from this through-site link. There is also access to residential lobbies between Buildings A and B from Cecil Avenue.

Building A will comprise 9 units, and Building B will accommodate 255 units, making Stage 1 a substantial portion of the development. These two buildings combined will provide 241 residential parking spaces and 53 visitor spaces. Building C, one of the central buildings and the largest stage, will comprise 340 units with 272 residential and 68 visitor parking spaces. Building D, with 11 units, is one of the smallest buildings, and will provide 11 residential and 2 visitor parking spaces. Across the development, there will be a total of 615 parking spaces, comprising 524 residential and 123 visitor spaces. Additionally, 332 commercial parking spaces will cater to this development's retail and commercial components.

Communal open spaces are proposed for resident amenity at multiple levels, including the upper ground level and levels 4, 10, 11, 12, 15, 16, 19, 20 and 26. These areas are intended to foster community interaction and provide high-quality recreational opportunities for residents. The buildings vary in height, stepping back from Roger Avenue and increasing towards Cecil Avenue, reflecting the site's proximity to the town centre and its emerging higher-density character.

Table 2 – Summary of Uses

Staging and Buildings	
Buildings	Four buildings: A, B, C, D 15% of total gross floor area are affordable (169 units)
Stage 1	Buildings A (9 units) and B (255 units); 241 residential parking spaces, 53 visitor parking spaces
Stage 2	Building C (340 units); 272 residential parking spaces, 68 visitor parking spaces
Stage 3	Building D (11 units); 11 residential parking spaces, 2 visitor parking spaces
Total Units	615 Units
Parking	
Residential Parking Spaces	524 spaces
Visitor Parking Spaces	123 spaces
Total Residential Parking Spaces	647 spaces total (residential and visitor)
Commercial Parking Spaces	332 spaces
Total Parking for all uses	979 spaces
Communal Space	
Resident Communal Spaces	Communal Open Spaces Located on upper ground, and levels 4, 10, 11, 12, 15, 16, 19, 20 and 26



Figure 5: Cecil Avenue Elevation - Northern (aplus Design Group 2024).



Figure 6: Roger Avenue Elevation - Southern (aplus Design Group 2024).



Figure 7: Western Internal Through Site Link Elevation (aplus Design Group 2024).



Figure 8: Eastern Internal Through Site Link Elevation (aplus Design Group 2024).

4 Crime Risk Assessment Summary

4.1 Crime Prevention Assessment Site & Building Analysis

Site analysis helps in the understanding of a place – how the built form, landform and local user groups can increase or decrease criminal activity.

The following diagrams are a visual representation of the Crime Risk Assessment (CRA) undertaken for this project. The outcomes of this analysis are incorporated into the Assessments and Recommendations provided in Sections 5 and 6.

4.1.1 Context Analysis - Castle Hill



Figure 9: Summary Context Analysis (Google Earth/ TDP 2024).

Castle Hill is a suburb with a strong retail presence centred around Castle Towers and Castle Hill Shopping Mall. These hubs, combined with the Castle Hill Metro Station, which is part of the North West and Bankstown Line, provide a highly accessible urban environment. This blend of retail and transportation infrastructure supports urban intensification, reducing the need for car ownership and fostering an active walking culture. This activity promotes natural surveillance and territorial reinforcement, improving the area’s safety.

However, the presence of transport hubs like the Metro and the bus interchange poses challenges, as these uses are known to attract higher levels of crime. Retail precincts, particularly during the current climate, are experiencing elevated crime rates, including assaults, theft, and malicious damage. These crimes have the potential to spill over into surrounding areas, particularly through movement predictors like the proposed through-site link connecting Cecil Avenue and Roger Avenue. This link could serve as a direct pathway between the Metro station and neighbouring suburbs, increasing foot traffic and potentially creating vulnerabilities.

To mitigate these risks, ground floor and accessible areas must be designed with safety in mind. Areas not intended for public use must be delineated through design, signage and management as private and secured with appropriate access control measures. The design should also prioritise active frontages and maximise opportunities for natural surveillance, particularly along the through-site link, to discourage opportunistic crime.

- 1 Castle Towers Shopping Mall
- 2 Castle Hill Shopping Mall
- 3 Commercial Business in area zoned for R1 Residential
- 4 Low density residential
- 5 Arthur Whiting Park
- 6 Hills Adventist College
- 7 Castle Hill Police Station
- 8 Castle Hill Library
- Subject site.
- Primary Movement network
- Castle Hill Metro
- Bus Interchange.

4.1.1 Building Analysis

note: not all levels are included for analysis in this section.

Commercial carpark is separated from the residential carpark. Access via the ramp can be well signmarked to assist with wayfinding.

Residential lobbies will benefit from being glazed where available.



Figure 10.1 : Basement 1 Floor Plan (aplus Design Group / TDP 2024).

Lower levels of the carpark are generally residential with some pockets of commercial parking associated with Building D. The commercial parking area is segregated and capable of being secured.

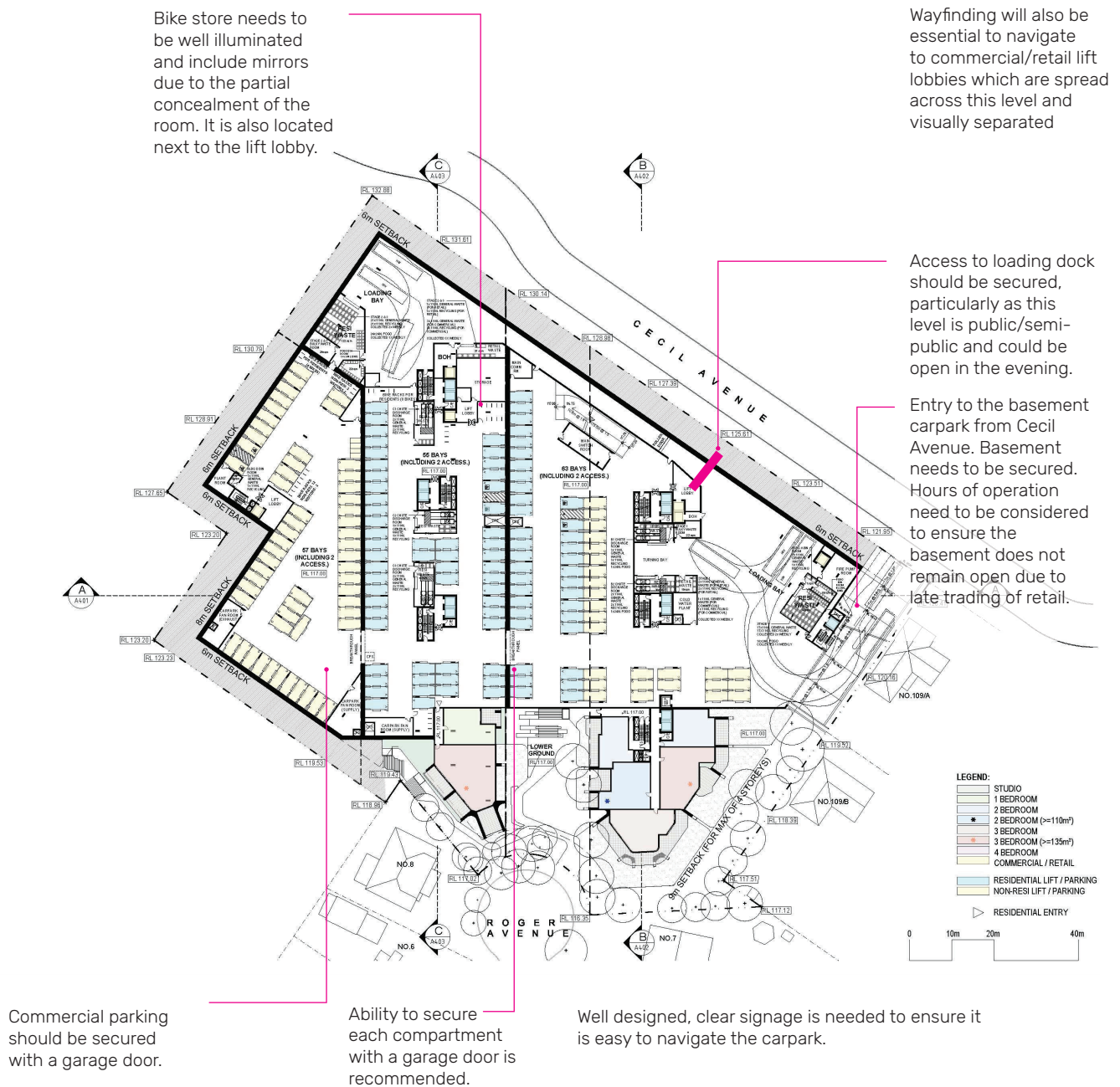


Figure 10.2 : Lower Ground Floor Plan (aplus Design Group / TDP 2024).

This level is primarily designated for residential visitor parking and commercial parking, representing a well-considered separation of uses.

Communal open space is private and will be separated from the retail space by a fence. The retail space on this level is part of the level above.

Residential lobbies are secured which separates commercial from residential.

Retail activates the street and access point to residential lobby.

As the design is developed in the future it will be important that it is clear that this path is not a through-site link so as not to create confusion. The landscape design and built form should continue to clearly show the space as a dead end from the street. This enables people to make the decision not to walk down this path. Lighting cues (that do not direct people this way at night) and signage will also be important during future design stages.

Communal space should be secured from the adjoining cemetery which could be used as loitering / anti social space.

Access to communal open space and Building D lobby via the lobby for residents in other buildings (blue dash).

Access to the communal space should be private from the through link.

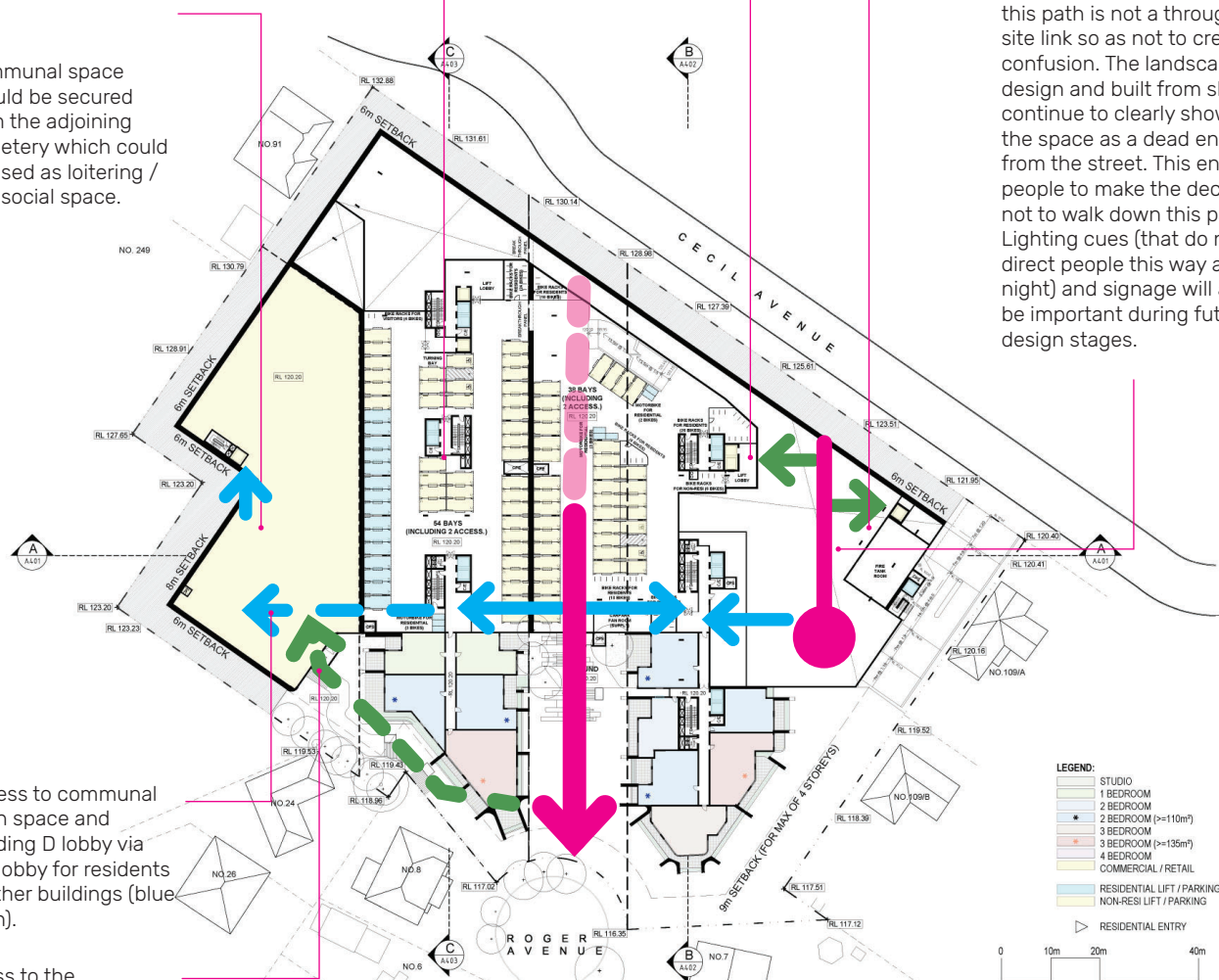


Figure 10.3 : Upper Ground Floor Plan (aplus Design Group / TDP 2024).

This level includes residential units and a portion of the pedestrian through-site link, which is the access point to two residential lobbies. The eastern pathway/dead end provides access to another residential entry in Building A, distinct from the pedestrian through-site link. Commercial activity also addresses this corner and overlooks the residential entry. The parking on this level is designated for commercial use only, demonstrating good separation of uses.

It is crucial that the built form, lighting, and landscaping are carefully designed to avoid confusion between the pedestrian through-site link and the pathway between Buildings A and B. The pathway should be 'read' as a dead end from the street so that people have sufficient information to decide before entering the path. These treatments should reinforce the intended uses of each pathway, ensuring intuitive navigation and reducing the risk of misuse or confusion.

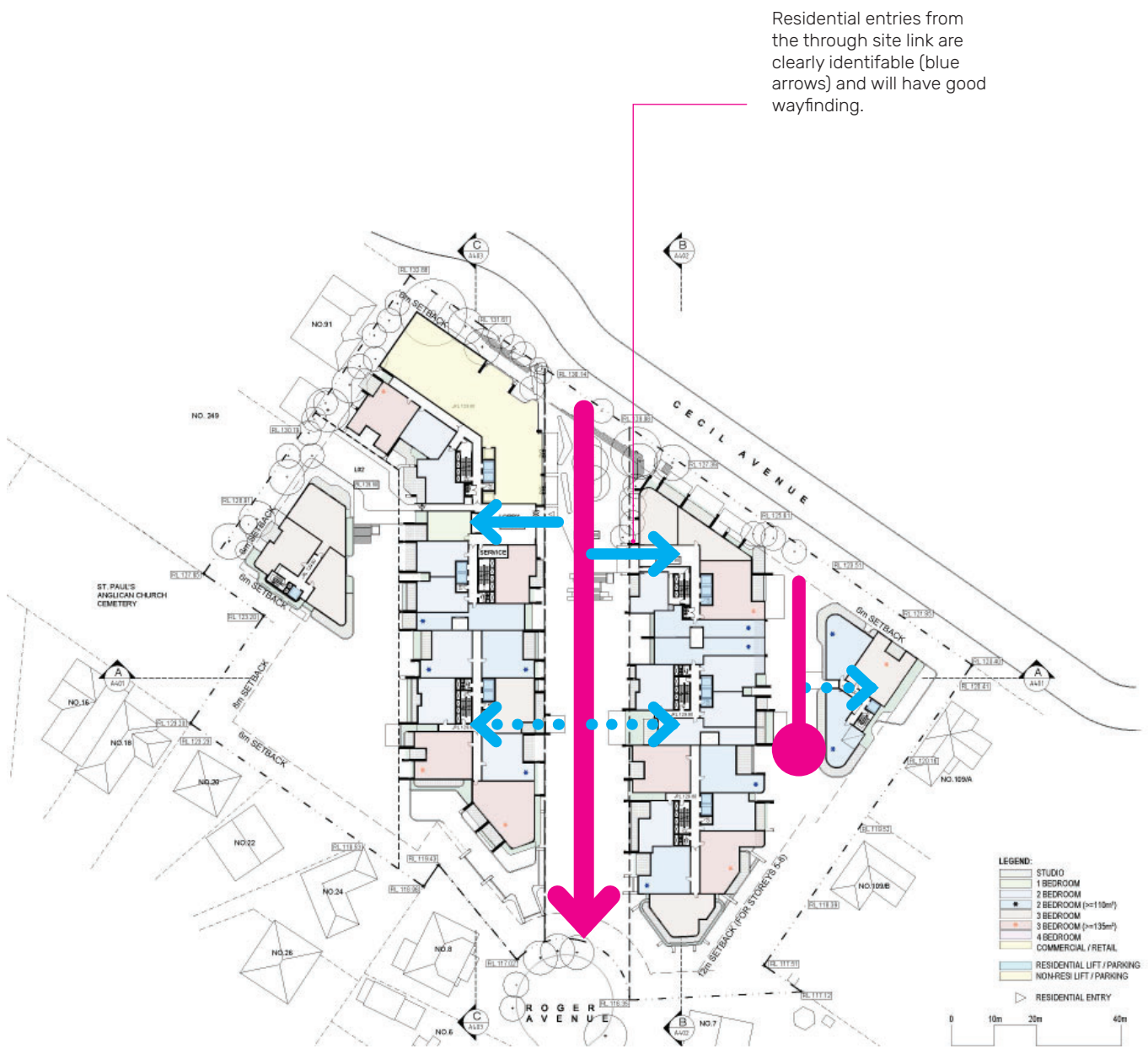


Figure 10.4 : Level 2 Floor Plan (aplus Design Group / TDP 2024).

4.2 Crime Prevention Assessment: Crime Data

Analysis of Crime Data has limitations that are important to consider when undertaking an assessment of a place and its proposed development.

The crime data that is available for the suburb will not specify if it relates specifically to the study area. However, the hotspots can play a role to help identify areas which are currently experiencing higher levels of crime.

It is also important to note additional limitations with regard to the reporting of crime, that 'the reporting of crime is influenced by a number of factors, including public understanding of what constitutes a crime and the public's willingness to report crime.' (Weatherburn 2011).

Data used for the crime assessments are from NSW Bureau of Crime Statistics (BOCSAR).

4.2.1 Crime Data Summary

The assessment of crime data was focused on activities that relate to the future operations. For this development it includes, crimes relating to private residential and retail/commercial developments.

Table 3 - BOCSAR data for Castle Hill		Year to June 2023		Year to June 2024		Hotspot
Offence	Castle Hill Count (Rate per 100,000)	NSW Rate per 100,000	Castle Hill (Rate per 100,000)	NSW Rate per 100,000	yes/no n.c not counted	
Assault: Non-Domestic Assault	62 (152.7)	403.2	64 (157.6)	427.6	Yes	
Assault: Domestic Assault	80 (197)	429.4	55 (135.5)	458.9	No	
Sexual Offences	52 (128.1)	214	58 (142.8)	230.4	n/a	
Theft: Steal from Retail Store	164 (403.9)	313.5	249 (613.2)	344	n/a	
Theft: Steal from Person	10 (24.6)	25.4	4 (9.9)	26.1	No	
Theft: Motor Vehicle Theft	29 (71.4)	162.1	22 (54.2)	182.4	No	
Theft: Steal from Motor Vehicle	65 (160.1)	345.2	40 (98.5)	349.3	No - edge	
Theft: Break and Enter Dwelling	27 (66.5)	234.3	39 (96)	249.5	No	
Theft: Steal From Dwelling	43 (105.9)	188.1	52 (128.1)	200.1	No - edge	
Malicious Damage	158 (389.1)	597	105 (258.6)	613	Yes	

Table 3 : Crime data snapshot

Data for Rates per 100,000 over a two year period for Castle Hill - June 2023 and June 2024.

4.2.3 Summary of Hotspots

A hotspot identifies crime density and is assigned a colour (red, orange or yellow) to reflect the strength of the hotspot. Hotspots are not adjusted to reflect the number of people living or visiting the location. This means they do not necessarily reflect areas with a higher than average risk of victimisation. This is why its important to refer to the actual counts of crimes in Table 1. However, hotspots can identify patterns, building or spatial typologies which are more affected.

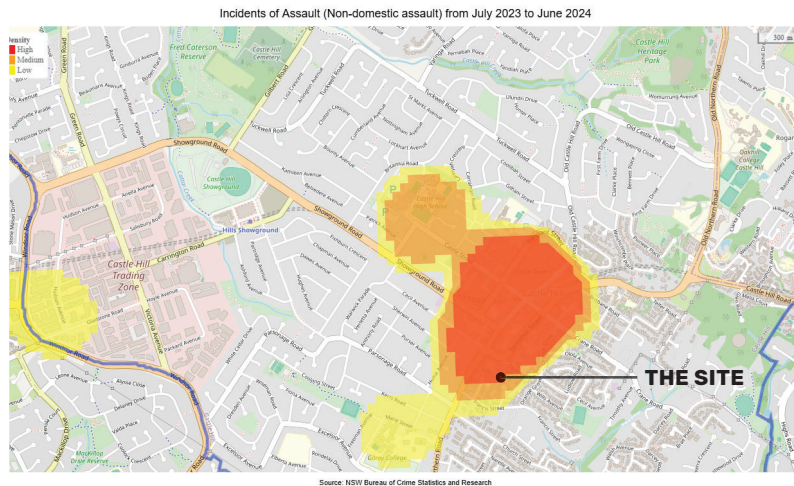


Figure 11: Hotspot - Non-Domestic Assault (BOCSAR2024).

The Development IS within a Non-Domestic Assault hotspot.

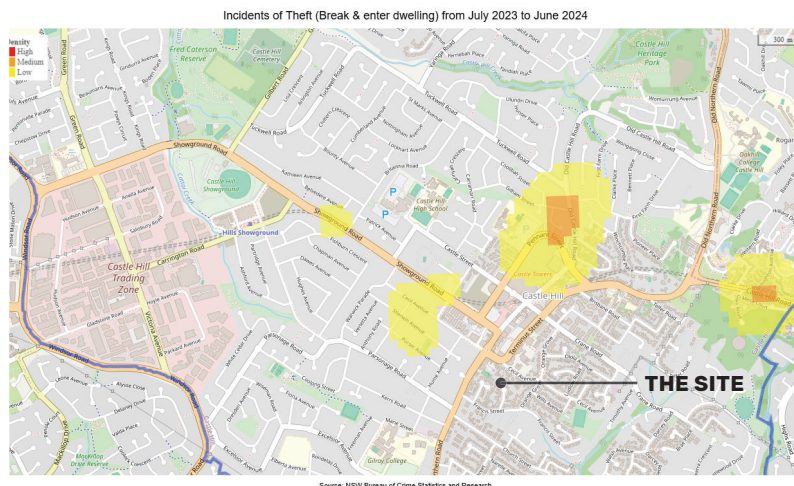


Figure 12: Hotspot - Break & Enter Dwelling (BOCSAR2024).

The Development is NOT within a Break and Enter Dwelling hotspot.

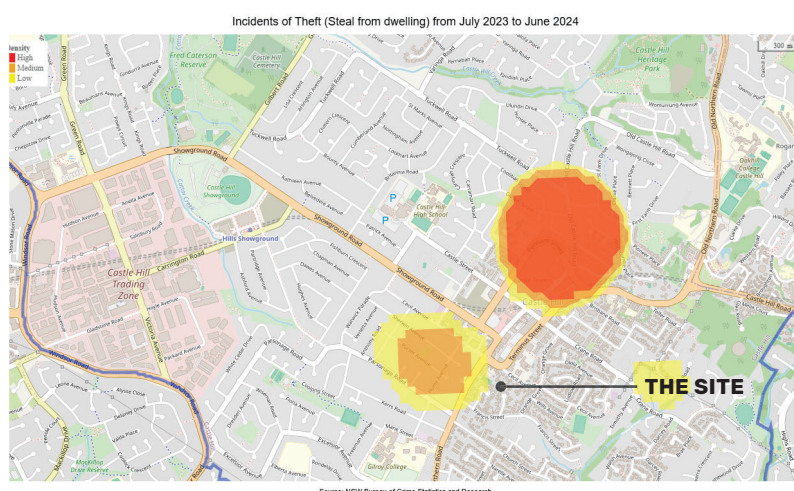


Figure 13: Hotspot - Steal from Dwelling (BOCSAR2024).

The Development is NOT within a Steal from Dwelling hotspot. However, the site is on the edge of a hotspot to the west and another to the north which could be interpreted as the residential component of Castle Hill Towers.

Incidents of Theft (Motor vehicle theft) from July 2023 to June 2024



Figure 14: Hotspot - Motor Vehicle Theft (BOCSAR2024).

The Development is NOT within a Motor Vehicle Theft hotspot.

Incidents of Theft (Steal from motor vehicle) from July 2023 to June 2024

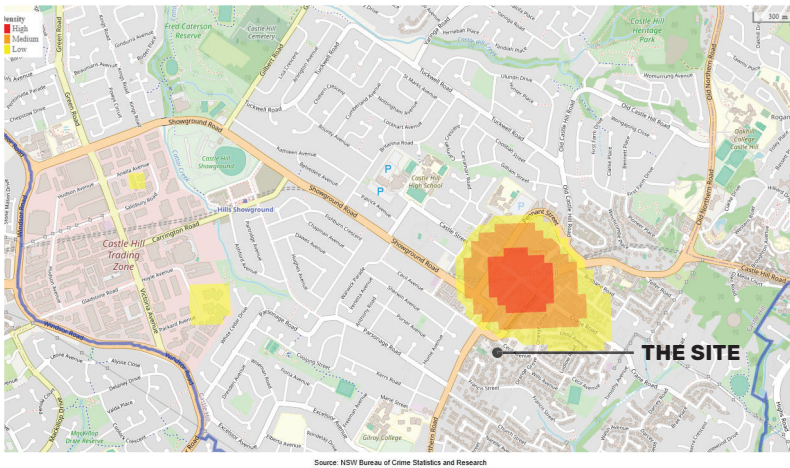


Figure 15: Hotspot - Steal from Motor Vehicle (BOCSAR2024).

The Development is NOT within a Steal from Motor Vehicle hotspot. However, the site is on the edge of a hotspot clustered over the shopping precinct and the Metro.

Incidents of Malicious damage to property from July 2023 to June 2024

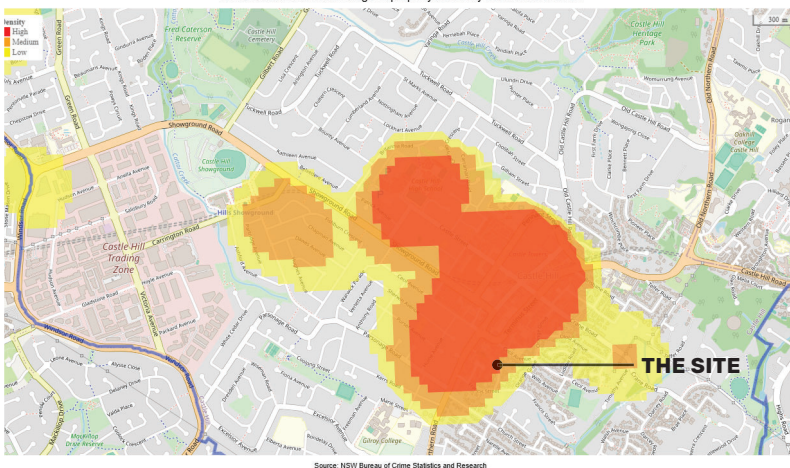


Figure 16: Hotspot - Malicious Damage (BOCSAR2024).

The Development is within a Malicious Damage hotspot.

5 CPTED Principles & Assessment

Crime Prevention Through Environmental Design (CPTED) consists of seven overlapping principles, showing the strong connection between design and management. This is especially evident in the Three D's. For example, Natural Surveillance and Territorial Reinforcement emphasise visibility and community ownership, while Maintenance ensures these spaces remain clean and well-kept. Activity and Space Management aligns with Natural Access Control by guiding the proper use of areas. Community Engagement ties all these principles together by encouraging collaboration among residents and stakeholders to maintain safety. This interconnectedness highlights the importance of integrating design and management to create secure environments.

The development has been assessed against the seven CPTED (Crime Prevention Through Environmental Design) principles, with each principle explained as it relates to a mixed use development. Due to overlaps between principles, recommendations have been consolidated in Section 6: CPTED Recommendations.



Figure 17: The seven CPTED principles (TDP 2024).



Surveillance

In mixed-use developments that include both residential and retail spaces, surveillance plays a crucial role in Crime Prevention Through Environmental Design (CPTED), particularly for ensuring the safety of residents. Effective surveillance is essential for creating environments where residents can maintain clear visibility over private property, communal spaces and adjacent public areas. By designing spaces that facilitate easy observation, we are deterring antisocial behaviour and enhancing the safety of residents, making them feel secure and protected. Strategic design that maximises visibility and fosters interaction within these developments can reduce the likelihood of crime.

Surveillance in CPTED is divided into three key types:

- **Natural Surveillance:** involves design elements that enhance visibility, such as the strategic placement of fixtures, vegetation, walls, and windows, allowing for unobstructed views of the surroundings.
 - **Technical Surveillance:** includes technological solutions like CCTV cameras and security systems that constantly monitor and record activities within the development.
 - **Formal Surveillance** involves employing security personnel or staff to actively monitor and manage spaces and activities, ensuring a consistent and reliable presence.
- Incorporating these types of surveillance into the design of mixed-use developments is not just about safety and security. It's about supporting residents' daily lives, making them feel reassured and confident.

Assessment

The proposed development includes active frontages along Cecil Avenue and Roger Avenue, each responding to its context. Cecil Avenue will feature a mix of retail and residential units, providing activation day and night, enhancing vibrancy and safety. Roger Avenue, by contrast, will be solely residential, which aligns appropriately with the quieter nature of its surrounding area.

A pedestrian through-site link is proposed to connect Cecil and Roger Avenues between Buildings B and C, benefiting from surveillance provided by residential units at both ground and upper levels. The well-proportioned lift lobbies opening onto the through site link will provide good sightlines, contributing to overall safety. However, the deep blades integrated into the lower-level facades may restrict sightlines, except directly toward the through-site link. To address this, it's critical that landscaping between the units and the facade is CPTED-safe, ensuring it doesn't further obstruct visibility.

A secondary access point, though not a through-site link, leads to the retail areas and the lift lobby of Building A, and is located between Buildings A and B. While some units overlook this space, it is not a designated through-site link. Good sightlines from the street to the end of this area is vital to prevent confusion among pedestrians who might mistake it as the pedestrian link and become confused. Eliminating spaces of concealment here will be important.

Sightlines in the communal open space between Buildings C and D will also be necessary. However, the degree to which this occurs will also be dependent on how it will be intended to be used. This is addressed under the section on Territorial Reinforcement.

The basement carpark spans multiple levels beneath all four buildings and is connected. However, its structure is segmented into a series of compartments under the buildings above. This arrangement limits sightlines across the carpark, making it essential to eliminate alcoves and concealment spaces, particularly along travel paths from parking spaces to lifts. Effective wayfinding will be crucial in this carpark layout, with clear signage, unobstructed pathways, and adequate lighting playing key roles.

Securing basement lobbies for residential units is vital for restricting unauthorised access which is proposed in this design. Incorporating glazed lobbies where possible will improve natural surveillance and enhance safety. However, to maintain visibility, glazing should remain unobstructed by signage, decals, frosting, or other coverings.

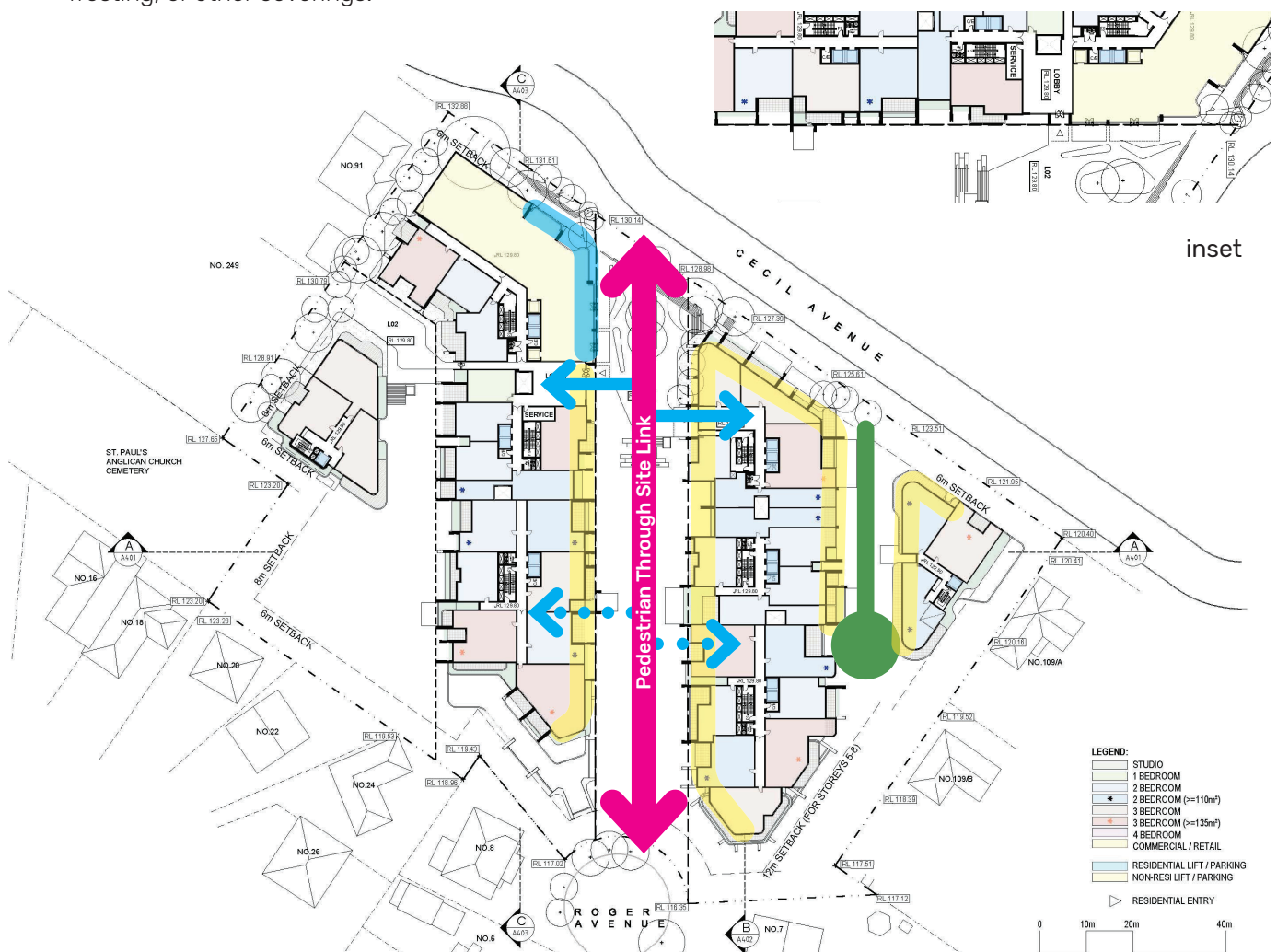


Figure 18 : Pedestrian Through-Site Link (aplus Design Group / TDP 2024).

The pink arrow highlights the location of the pedestrian through-site link, connecting Cecil and Roger Avenues. Along this link, four residential lobbies are proposed, and residential units (indicated in yellow) provide overlooking opportunities for surveillance. However, as shown in the inset, the blades integrated into the design could obstruct sightlines, potentially limiting visibility across the link. The green line/circle marks the second access point, which is not a through-site link. Ensuring this space benefits from strong surveillance is critical to reducing risks for residents and preventing confusion among pedestrians seeking the primary through-site link.



Lighting & Technical Solutions

Lighting and technical supervision, such as CCTV, are critical components in enhancing safety within mixed-use developments, where the interaction between public and private user groups—such as commercial customers, delivery personnel, and residents—is frequent. However, the effectiveness of these safety measures depends heavily on their proper implementation.

Inadequate lighting can lead to unintended shadows that increase safety risks, contribute to a sense of unease, and heighten perceptions of fear among users. Similarly, poorly positioned CCTV cameras, low-quality footage, or insufficient monitoring can severely undermine the effectiveness of these systems, leaving areas vulnerable to crime.

This assessment provides recommendations for optimising lighting and technical surveillance solutions to ensure the highest level of safety for all users, including residents, delivery personnel, and customers.

Assessment

The development has yet to finalise its lighting design, presenting a valuable opportunity to enhance both wayfinding and safety across the site, with a particular focus on the pedestrian through-site link. Effective lighting is critical for visibility and fostering a secure and welcoming environment, reinforcing perceptions of safety. The pedestrian through-site link will benefit from strategic lighting that highlights residential entries, making them easily identifiable, especially at night. Residential lobbies should feature bright, well-distributed lighting to provide a welcoming atmosphere while avoiding glare, mirror effects, or night blindness as residents transition from indoor to outdoor spaces.

Proper lighting will also enhance surveillance from residential units, reduce opportunities for concealment and entrapment, and improve wayfinding throughout the link. To achieve these objectives, the design must ensure that landscaping and building lighting avoid creating multiple shadows, which can reduce visibility and heighten insecurity. Additionally, lighting throughout the remainder of the development, including non-public areas, is equally important for wayfinding and fostering a sense of safety. The relationship between public and private spaces and the role of lighting in reinforcing territorial boundaries and access control is further discussed under Territorial Reinforcement and Access Control and recommendations are provided in Section 6.

The driveway from Cecil Avenue, which is long and slopes down to the basement, must also be well-lit to ensure safe navigation without causing intrusive light spill into residential units. The goal is to avoid shadows where people can hide and break into the building or graffiti walls. In the car park, good even lighting is critical, particularly in visitor and commercial parking areas. As a general principle, lighting should enable a person to clearly see someone sitting inside a parked car. This level of illumination not only enhances safety and visibility but also deters criminal activity by ensuring all areas are well-monitored and free of shadows. Through careful design, lighting can significantly contribute to the safety, functionality, and overall experience of the development.



Territorial Reinforcement

Territorial Reinforcement in mixed-use developments emphasises the importance of establishing a strong sense of ownership over both public and private spaces and the clear delineation of the spaces in between. When well-used and well-maintained areas, they are less likely to attract crime or antisocial behaviour.

This principle focuses on eliminating ambiguity by clearly defining the purpose and function of each space within the development. For instance, it should be immediately apparent when someone is in a private or restricted area where they do not belong. By setting clear boundaries and specifying the roles of different spaces, Territorial Reinforcement fosters a sense of ownership and responsibility among residents, retail staff, and other users. This, in turn, contributes to a safer and more welcoming environment for everyone.

Assessment

Territorial reinforcement is essential for clearly defining the development's public, semi-public, semi-private, and private spaces. In this case, the pedestrian through-site link connecting Cecil Avenue to Roger Avenue is a public space. Its design – including built form, landscaping, lighting, and signage – should strongly convey this function. For instance, appropriate lighting can signal to the public that this is a legitimate and safe path. Conversely, the route between Buildings A and B, which serve only private purposes, must be clearly delineated as inaccessible to the public. This distinction is critical for maintaining both security and privacy, particularly in residential spaces. The landscape design at the southern end of the path must reinforce this.

The design separates residential lobbies from commercial spaces and their associated lifts, which is a positive step. Across the development, it is crucial that commercial and residential lifts are fully separated, including access to those lifts. Similarly, the communal open space at the Upper Ground level should be clearly identified as private and exclusively for residents. Access control between the commercial space at this level and the residents' area is vital to prevent confusion and "excuse-making" by unauthorised users.

Carparks often present challenges in balancing the separation of resident, visitor, and commercial parking spaces. In this development, there is no intention for public parking in the carpark which is positive. Parking will be limited to retail and commercial staff, residential visitors, and residents. The design makes commendable efforts to separate uses in such a complicated development – for example, co-locating visitor and commercial parking on the Lower Ground level.

Finally, the pedestrian entry from Cecil Avenue to Building A must be clearly designed to signal that it is not part of the pedestrian through-site link. Clear wayfinding and territorial reinforcement in this area are essential to avoid confusion and unauthorised access.



Environmental Maintenance

Environmental Maintenance in mixed use developments involves the ongoing upkeep and management of physical spaces. Proper maintenance is essential, as neglected areas—whether damaged, vandalised, or littered—can deter residents and attract antisocial behaviour. Such neglect can signal weak management, increasing the risk of crime. Conversely, well-maintained spaces demonstrate care and attention, creating a safer environment and deterring potential offenders. This is important not only in public areas but also in private or less visible spaces, where neglect could compromise safety. Thoughtful design is crucial in ensuring these spaces are both accessible and easy to maintain, contributing to a secure and supportive living environment.

Assessment

Environmental maintenance is essential during the operational phase of a mixed-use development, but proactive design-phase solutions can significantly aid in managing the space and reducing long-term maintenance costs. The objective is to create a space that is easy to maintain, visually appealing, and resilient to potential damage.

One primary concern in urban settings is the risk of malicious damage, such as vandalism and graffiti, especially on walls, fences, and street furniture. Porous materials like sandstone should be avoided in high-risk areas, and anti-graffiti coatings should be applied to facilitate easy removal if graffiti occurs. The areas most at risk in this development are the pedestrian through-site link, the path between Buildings A and B, and other areas accessible from the street, which may have reduced sightlines.

Green walls with low-maintenance plants, such as *Hedera helix* (English ivy), offer a sustainable solution for graffiti prevention. These dense-growing plants cover walls, reducing available surfaces for tagging while providing additional environmental benefits, such as improved air quality, building insulation, and reduced urban heat effects. Research by Thomsit-Ireland (2019) indicates that green walls also reduce the need for energy-intensive maintenance.

Consistent landscaping maintenance, managed by the body-corporate, is critical, particularly for parts of the building visible from the public domain. This ensures plants remain healthy and are not replaced with inappropriate species, which could create entrapment and concealment locations in the public domain.

Incorporating murals or public art is another approach to deter graffiti, enhancing the visual appeal and fostering community respect. Strategic landscaping around vulnerable walls can further obstruct access and visibility, preventing graffiti.



Space and Activity Management

Activity and Space Management, essential for mixed use environments, focuses on strategies that create natural control over shared spaces and private spaces. These strategies are implemented through the collective efforts of management and residents, ranging from formal supervision and regulating space usage to more subtle methods that promote order without direct oversight.

Ongoing maintenance is critical to this approach. Neglecting upkeep can lead to a decline in the environment, creating a negative impression that compromises the perceived safety and security of the space. In contrast, a well-maintained area enhances its appearance and communicates a strong commitment to care and protection. It signals that the space is actively managed and monitored, deterring potential offenders and fostering a safer, more supportive environment for residents.

Assessment

Managing the separation between public and private spaces is a key challenge in mixed-use developments. In this project, balancing private residential areas with public access to retail and the through-site link is crucial. Effective management of space and activities is necessary to maintain security, accessibility, and functionality.

Space separation in mixed-use buildings allows for better surveillance, enabling targeted security measures. Studies indicate that zoning strategies contribute to lower crime rates by reducing the opportunities for exploitation found in open, poorly managed spaces. Clearly defined boundaries between public and private zones help limit unauthorised access and criminal activity. The proposed private residential entrances, dedicated lifts, and secure basement parking facilities create a controlled environment that deters potential offenders.

Determining the hours of operation and understanding their uses will also be important for design development. Understanding how the car park is secured at night will be important in the easy management of this development and in reducing the risk to residents.



Access Control

Access Control strategies in mixed use developments focus on managing access and movement within the living environment. These methods include restricting entry to key areas and ensuring safe exit routes.

Three primary approaches are commonly used:

Natural Control: This method uses environmental design to guide and restrict movement to specific areas. Features such as doors, gates, fencing, paths, and strategic vegetation help direct movement and deter unauthorised access by increasing the perceived risk of detection.

Technical or Mechanical Control: This approach involves using technology like Closed Circuit Television (CCTV) to monitor access points, serving as both a deterrent and a means of observing activities. Additional tools like card readers and pin pads provide controlled access to restricted areas.

Formal Access Control: This method includes the deployment of staff or security personnel who actively manage and enforce access policies. Their presence enhances security by offering a visible deterrent and a quick response to potential threats.

Effective access control in residential environments integrates all three methods, ensuring a secure and well-managed living space.

Assessment

Access control within the development is well-considered. Access to residential lobbies from the pedestrian through-site link is clear and visible and can be effectively managed through fobs or equivalent secure systems. Access control is recommended to ensure secure and separate access for residential and commercial users.

The communal open spaces on upper levels are well-controlled through the residential lobbies, making their private nature clear. A fence controlling that boundary will separate the Upper Ground communal space from the adjoining commercial. Access control to the adjacent cemetery is necessary to prevent loitering or concealment and respect the cemetery's status as private property.

The basement carpark is accessed via a single ramp from Cecil Avenue, leading to a level primarily comprising visitor and commercial parking, with further parking levels above and below. Public access for retail or commercial users to the carpark is not recommended due to its compartmentalised layout, which reduces sightlines and makes management challenging. This is particularly concerning if the retail premises include licensed venues that operate into the evening. Should licensed premises require accommodation for patrons' vehicles, parking should be restricted to the entry level (Lower Ground), with the remainder of the carpark secured to prevent unauthorised access.



Three D's

It is crucial for the design, purpose, and definition of spaces to be aligned. Conflicting uses within a space can lead to dangerous situations, as offenders often take advantage of confusion. This concept is encapsulated in the three D's:

Designation: The intended purpose of the space, its original use, and how well it currently supports its intended function. It also considers whether there is any conflict between its current and intended use.

Definition: How the space is defined, including ownership, borders, and whether it is influenced by social or cultural factors. It also examines whether legal or administrative rules are clear and enforced, and whether signage is present. Potential conflicts between designation and definition are also considered.

Design: Whether the physical design of the space supports its intended function and desired behaviours, or if it conflicts with the proper use of the space, leading to confusion or misuse.

Assessment

Aligning the Three D's—Designation, Design, and Definition—is essential when developing a mixed-use project that incorporates various functions, such as residential apartments, retail, commercial and associated parking.

Designation clarifies the intended use of each space, and ensuring the design aligns with these uses is key to creating a cohesive, functional, and secure environment. For example, residential apartments are designated for living, they are private and must be designed to provide privacy and comfort for residents. There should not be confusion or opportunities for excuse making that impact that **Designation**. In contrast the retail and commercial uses will invite public and semi-public users and is more complicated at this design stage as their uses are unknown. A level of prediction is needed.

Balancing the different purposes and requirements of these spaces is a primary challenge in this development. For instance, while the retail should be easily accessible to patrons, it is essential to maintain a clear separation from residential areas to prevent public intrusion into private spaces. This distinction upholds the **Definition** principle of the Three D's, ensuring the space remains an interactive semi-public space while residential units stay exclusive and secure.

The current **Design** manages these separation requirements across the development.

5.1 Crime Risk Assessment

The Crime Risk Assessment is undertaken following a review of the seven CPTED principles and consideration if the design results in a good outcome or if it either needs more work or perhaps cannot be resolved. The full assessment is provided in Appendix B. A summary of the outcomes of the review is summarised below:

Table 5: Summary of CPTED Principles assessment				
		Good	Bad	N/A
1	Surveillance	20	4	8
2	Lighting	0	0	12
3	Territorial Reinforcement	9	1	2
4	Environmental Maintenance	8	1	1
5	Space and Activity Management	9	1	0
6	Access Control	17	3	5
7	The Three D's	5	0	0
	Total	68	10	28

Table 6: Summary of CPTED Principles assessment						
	Total Applicable Questions		78			
1	Good	68	/	78	=	87
2	Bad	10	/	78	=	12.8

Table 7: 'Good' Rating	
Total number of 'Good' features/conditions	Risk Rating
0-50%	High
51-79%	Medium
80 - 100%	Low

Table 8: 'Bad' Rating	
Total number of 'Bad' features/conditions	Risk Rating
0-50%	Low
51-79%	Medium
80 - 100%	High

Table 9: CPTED Rating			
Good Rating > Bad Rating	Low	Medium	High
Low	LOW	MEDIUM	HIGH
Medium	MEDIUM	MEDIUM	MEDIUM
High	MEDIUM	HIGH	HIGH

Rating is LOW

6 CPTED Recommendations

The proposed development will transform existing low density residential into a mixed-use development comprising residential units, retail, commercial, and parking for both residents and commercial/retail uses.

Crime data indicates that Castle Hill's crimes include theft from vehicles, vehicle theft, break-ins, and malicious damage.

The CPTED recommendations in this section have been carefully grouped to minimise duplication where possible. Reading these recommendations in conjunction with the entire report is important, as they are interlinked and should not be considered in isolation. A comprehensive understanding of the report will provide the necessary context for effectively implementing these recommendations.

Key strategies that are consistent across mixed use developments include:

- **Separation of Uses and Access Control:** this is the separation between residents and staff/visitors to the commercial/retail premises. Separation includes the parking areas. The goal is to avoid excuse making which occurs when criminals can claim to be in an area where they shouldn't be. This occurs when there are unclear boundaries and areas that can be accessed.
- **Sightlines and Landscape:** this is about seeing and being seen. How residents can be aware of their surroundings, create the perceptions that there are people watching and observing the development and the public domain. The recommendations provided for this strategy consider how the design of the building and landscape can either help or hinder good sightlines.
- **Management and Maintenance:** this is about how the design and maintenance of the building can increase or decrease crime risk. It is important to note that there are strong correlations between design and how easy it is to manage a place.

6.1 Separation of Uses and Access Control

These recommendations address the importance of separating different uses across the entire development, with a particular focus on the retail/commercial spaces and the private residential uses. Effective separation is crucial for areas such as the carpark, residential lobbies, and the management of back-of-house operations. The goal is to prevent “excuse making,” where the design and management of the space inadvertently allow individuals to access areas they shouldn’t, using confusion or overlapping functions as justification. By clearly delineating and managing the boundaries between residential, commercial, and shared spaces, we can minimise the risk of unauthorised access, enhance security, and ensure a safer, more organised environment for all users.

Table 10: Separation of Uses and Access Control Recommendations	
No.	Recommendation
1.	Maintain the physical separation between public/semi public and private uses within the development. In this development, <u>public/semi-public/semi-private</u> uses include customers and visitors to the retail/commercial spaces and visitors to the residential units. This includes the parking areas designated for commercial and visitors. <u>Private</u> uses are residential units, residential lobbies and corridors and residential communal open spaces, and residential parking areas.
Carpark	
2.	Public use of the commercial/retail carpark by customers and visitors to the retail or commercial premises is not recommended for the following reasons: - Operational Challenges: The carpark would need to remain open during the operating hours of the retail and commercial businesses, including evenings if there are late-night trading activities such as licensed premises or restaurants. Businesses are not equipped to manage or restrict entry to unknown customers, making the carpark difficult to control and keep safe. - Safety Risks: An open carpark increases the risk of malicious damage to vehicles and property, as well as the potential for assault or theft, putting both residents and their visitors at risk. - Unauthorised Use: An open carpark may attract surrounding residents and businesses to use it, as it will become known to be accessible during the day or night. With Castle Hill experiencing increasing density and pressure for parking, this could lead to unauthorised use. Allowing unknown individuals to park in the carpark creates opportunities for excuse-making and makes the space harder to manage. If it is determined that public use of the carpark is necessary, it is strongly recommended that public access be restricted to the Lower Ground level only. Access to other levels, as well as loading and waste areas, must be secured to maintain safety and minimise risks.
3.	It is crucial to secure the corridor leading to the northern loading bay by installing access controls at the entry point to the corridor. These access controls should not be limited to a boom gate which will still permit access to a pedestrian. This measure will prevent unauthorised access to the service space, which is especially important if this level is accessible to public customers.
4.	The commercial parking area on Basement Level 1 is recommended to be limited to staff due to its deep location within the building.
5.	Provide a secure garage door to control vehicular and pedestrian access to the residential basement levels and the commercial levels above from the Upper Ground level. The secure door should not permit pedestrians to reduce risk of vehicle theft, theft from vehicles and storage cages and concealment for assault and malicious damage.
6.	Secure bike parking in transparent cages as bike parts are also stolen along with bikes themselves.

Residential Entries and Communal Open Space	
7.	Secure all residential lobby doors, from the pedestrian through-site link and the carpark, with secure locks accessed with a fob card or equivalent. Avoid pins as they can be observed. If swipe cards or remote controllers for doors go missing, they are recommended to be immediately bumped from the system so they cannot be used.
8.	Retain the visually distinct entries to residential lobbies to prevent confusion.
9.	Secure residential mailboxes and ensure they remain locked to reduce risk of identity theft. Preferable if mailboxes are located within the site's boundary and within each residential lobby. Designated mail rooms for parcel delivery can be helpful in securing large items.
10.	Establish how food deliveries, such as those from the supermarket or part of the 'Uber Eats' economy, are undertaken. Ensure there is adequate parking and that access does not compromise the buildings.
Development Edges and Boundaries	
11.	Secure the boundary between the site and the adjoining cemetery.
12.	Provide a 1.8 metre high boundary fence that is of solid construction and does not permit views through to ensure privacy and reduce acoustic transference. Fence should not be climbable or have elements such as screens that make it climbable. There should be a fence controlling the boundary with the adjoining cemetery.
Back of House	
13.	Back of house, fire doors, storage, waste room doors should be secured so they cannot be used for concealment or to break into other parts of the building.
14.	Warn residents and visitors of the risks of propping open doors such as fire stairs as these can leave the entire building vulnerable. Provide self closing doors and signs identifying the penalties of leaving doors unsecured.
15.	Secure each units powerboard in a locked cabinet. Lock to be approved by electricity company.
General	
16.	Avoid elements on the facade that facilitate climbing from balcony to balcony or up walls known as the 'Spiderman' effect.
17.	Provide window locks that can be secured when partially open to allow for ventilation but prevent access. Do not leave keys in locks as windows may be smashed to obtain keys.
18.	Create a cohesive wayfinding strategy that complements access control and management strategies, it is essential to understand how visitors, staff, and delivery personnel will navigate the building from the street and carpark. This strategy should ensure seamless movement while maintaining the security and privacy of residents and commercial spaces.

6.2 Sightlines and Landscaping Recommendations

Sightline considerations are multi-directional. They are important for the public looking into the development and for those within the development looking out into the public domain. Natural surveillance and sight lines can be impacted by landscaping treatments, topography and structures and requires long term management. Effective lighting plays a crucial role in influencing how safe people feel in a space. Well-designed lighting should integrate with the buildings and landscape to eliminate unnecessary shadows and avoid creating blind spots. Additionally, CCTV systems and lighting work together to ensure clear and reliable footage.

Table 11: Sight lines and Landscape Recommendations

No.	General Landscape Recommendations
1.	Landscaping throughout the development is recommended to be limited to ground covers, shrubs and taller trees. Lower tree limbs should be above average head height and shrubs should not provide concealment opportunities. Refer to Figure 20.
2.	Step landscaping down to paths of travel to broaden sightlines. This approach is particularly important along the edges of the pedestrian through-site link and the path between Building's A and B. Figure 20.
3.	The creation of pockets which facilitate concealment should also be avoided by consistent planting and replacing dead plants which can result in gaps. This approach is particularly important along the edges of the pedestrian through-site link and the path between Building's A and B. Refer to Figure 20.
4.	Select plant species that do not require high levels of maintenance in order to maintain sight lines and minimise risk of concealment and entrapment pockets. Undertake a regular review of the vegetation and landscaping to ensure that it has not grown to create new or re-establish former spaces of concealment and entrapment. Refer Figure 20.
5.	Shadowy spaces are created where the trees obscure light fall from light poles and internal lighting. Consider the location of lighting and trees so as not to block the fall of light.
6.	Future advice on lighting design, in conjunction with the landscape design (during the construction documentation and construction phase) is recommended. This may include modelling of proposed lighting in conjunction with landscaping which is recommended to test light spill and shadows.
Pedestrian Through-Site Link and other paths	
7.	The pedestrian through-site link is likely to become a movement predictor. A movement predictor is a path of travel that connects key destinations. In this case, connecting residential areas to the shopping and public transport precinct. It is important that pedestrians are safe and feel safe along this route. Select and arrange plant species, within the through site link, to meet the CPTED objectives 1 - 6 listed above.
8.	Sightlines from the lower level residential units will be important along the pedestrian through-site link. The vertical blades are proposed to be cut back at lower levels but could reduce some views to the link. Plant species positioned in front of the units should maximise sightlines and minimise obstructions. Plants should not provide hiding spaces from which to observe the private units. Check for blindspots regularly and adjust landscaping.
9.	The access path from the pedestrian through-site link to the communal open space on Upper Ground is proposed to be gated and should be locked. There should be signage making it clear the space is private and not accessible by the public. The access path should not be confused with a public space.
10.	The pathway between Buildings A and B must be designed to avoid confusing the public into mistaking it for the through-site link, as it ends in a dead end. It should be evident from the street that it is a dead end. This should be reinforced through the landscape, built form, and clear and effective wayfinding signage to guide pedestrians. Additionally, the design of this pathway should appear secondary to the primary through-site link, ensuring its function and purpose are immediately understood. The landscaping at the southern end of this path should be fenced to prevent access and designed so as not to create spaces of concealment and entrapment.

No.	Lighting Design
General	
11.	Lighting strategy and design is recommended to be undertaken by a qualified lighting engineer for the development to test light spill and identify any spaces of shadow and concealment.
12.	Future advice on lighting design, during the construction documentation and construction phase is recommended. This may include modelling of proposed lighting in conjunction with landscaping is recommended to test light spill and shadows.
13.	Landscaping is recommended to be limited to ground covers, shrubs and taller trees. The landscaping should not provide concealment opportunities created by shadows. Trees and landscaping can block street and park lighting, forming shadows. Ensure no shadowy spaces are created by existing and proposed buildings, landscaping and trees.
14.	Lighting should be directed away from observers and vantage points. Do not illuminate the resident in a unit looking out to the public domain.
15.	Bollard lighting is discouraged as it is prone to vandalism and is not particularly effective at illuminating pedestrians and their faces.
16.	Lighting recommendations • All lighting should comply with relevant Australian Standards, particularly AS 1158. • Avoid using low-pressure sodium lamps. • Vandal-resistant lamps are recommended. • Avoid the use of low pressure sodium lamps /lighting as it makes it difficult to identify crime scene characteristics, victims or offenders e.g. drains colour from people and objects. • Lighting can lose up to 20% capacity within 12 months, resulting in inadequate light levels. This should be considered when selected lighting type and brightness.
17.	Any signage should be as legible at night as it is during the day.
18.	Design lighting to allow a pedestrian to recognise a face from 10-15 metres away.
CCTV and associated lighting	
19.	CCTV is encouraged for the development as it can discourage anti-social behaviour, break-ins or malicious damage. Consider the following: • CCTV and lighting should be considered in tandem to ensure the lighting outputs are adequate for usable footage. • CCTV should not be accessible by a pedestrian to avoid vandalism e.g. positioned high or not near other climbable elements. • To reduce the risk of CCTV vandalism, point cameras to other cameras – providing camera to camera protection.
Carpark Lighting Recommendations	
20.	Ensure that the carpark is well lit and allows for a person to see someone inside a parked car.
21.	Paint the carpark columns, walls and ceiling white to boost lighting outputs.
22.	Position lighting so that signage does not block lighting outputs creating shadows.
23.	Ensure all alcoves and recesses are avoided and if not practical, then good even lighting is necessary. The bike storage space on the lower ground level needs particular attention.
24.	Provide good even lighting for the driveway entry from Cecil Avenue.

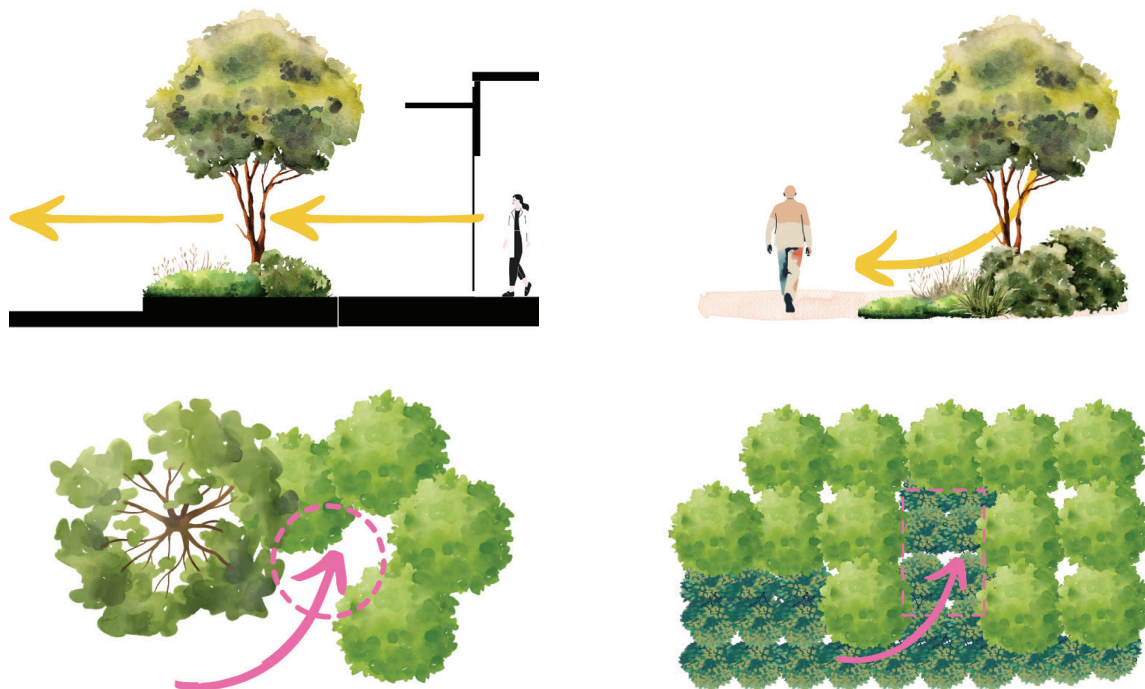


Figure 20: Sight lines and landscaping

(top left) Sight lines can be achieved by keeping shrubs low and ensuring the lower limbs of trees are above head height. (top right) Where landscaping is proposed adjacent to a path, the vegetation is recommended to step down to the path to broaden the view corridor. (bottom left and right) Concealment spaces can be the result of plant die off and needs to be monitored and dead plants replaced. They can also be created by inconsistent planting by placing smaller groundcovers between taller shrubs.

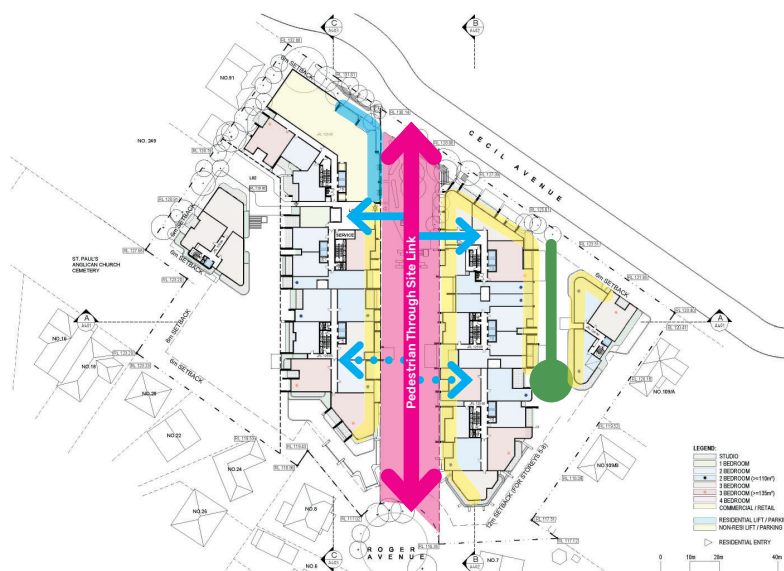


Figure 21: Protecting movement predictors and those live along it

The pedestrian through-site link will be a movement predictor, connecting people from residential areas to the shopping and public transport precinct to the north. Movement predictors are more likely to experience crime. The corridor, highlighted in pink, must be thoughtfully designed and well-maintained to minimise risks to pedestrians. For example, care should be taken to avoid creating potential ambush spaces through concealment or entrapment pockets in the landscape and shadows caused by the interplay between buildings, landscaping (particularly trees), and lighting. Additionally, the landscape should not be so dense that it allows individuals to observe the units unnoticed. The dead-end lane to the east (green) must not be confused with the through-site link and must have a different character and design, and will be heavily reliant on signage.

6.3 Management and Maintenance

There is a strong correlation between the design of a place and how it is managed. The objective is to ensure that the design facilitates rather than hinders effective management, as poor design can compromise safety and lead to higher maintenance costs.

Table 12 is a guide to assist in improving management and maintenance through design.

Table 12: Management and Maintenance	
No.	General
1.	The grounds should be regularly maintained, with all contributory landscaping managed by the body corporate. This includes any landscaping integral to the building's character and aesthetics, such as green walls, planters, and green roofs. Larger landscaped areas should also be overseen by the body corporate, rather than left to individual residents. At a minimum, all visible spaces, particularly the pedestrian through-site link, should be well maintained to ensure consistency. Regular upkeep will address issues such as plant die-off or overgrowth that may create concealment risks, entrapment areas, or block natural light, ensuring the space remains both safe and visually appealing.
2.	The street number must be prominently displayed at the entry to the development to comply with Local Government Act, 1973, Section 124, Order 8. The number should be a minimum height of 120 mm and be visible at night. This assists emergency services identify the building. Residential entries should be clear and have signage to identify entry points.
3.	Warning signs can be displayed at the entry to the development to warn intruders of what security treatments have been implemented to reduce opportunities for crime. However, do not exaggerate systems that are not in use. Intruders can look for signs of these devices and will exploit the situation if not in use.
4.	Check vantage points to see if a person could be seen hiding in the front setback or in the deep soil at the rear of the property. Identify blind spots.
5.	Establish a Maintenance Plan, forming part of the Plan of Management, that ensures the study area remains clean and well maintained. The Maintenance Plan should include routines for rubbish removal and actions when rubbish accumulation exceeds the norm.
6.	Specify low-maintenance, drought-resistant plant species to prevent plant die-off, which can create concealment and entrapment areas and contribute to a neglected appearance of the development.
7.	Walls, fences, and street furniture are vulnerable to malicious damage, including vandalism and graffiti. To mitigate this risk, avoid using porous materials in high-risk areas such as on the boundary. Applying anti-graffiti coatings is recommended to facilitate the removal of graffiti if it occurs.
8.	Provide a map of the development within the residential lobbies to assist with wayfinding for invited visitors and to make clear areas where access is not permitted.
9.	Develop a wayfinding strategy and signage for the development that meets the objectives of Table 10 Access Control.

7 CPTED References

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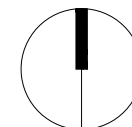
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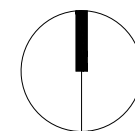
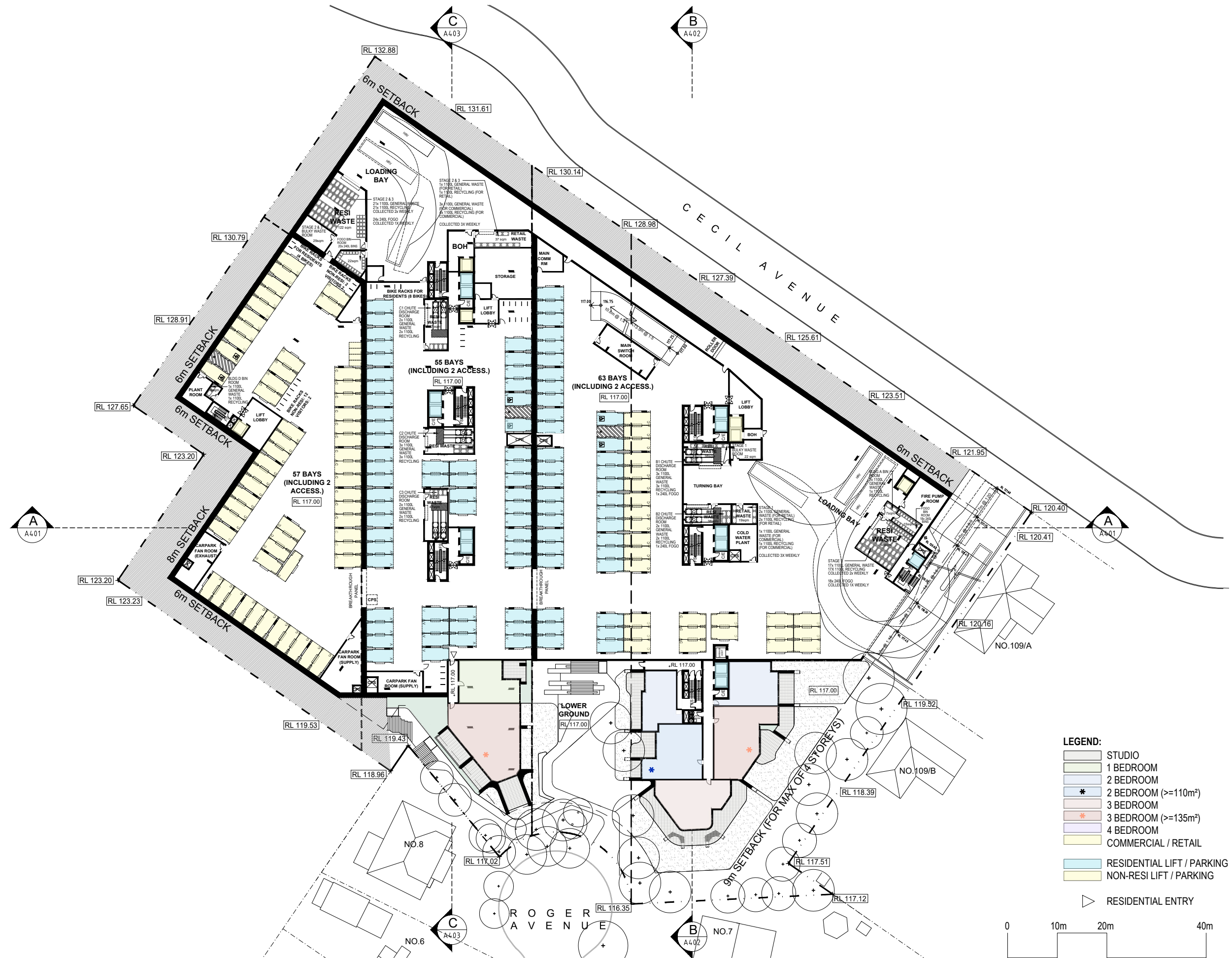
NSW Police Force, Safer by Design Companion Version 2.0, 2012

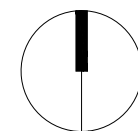
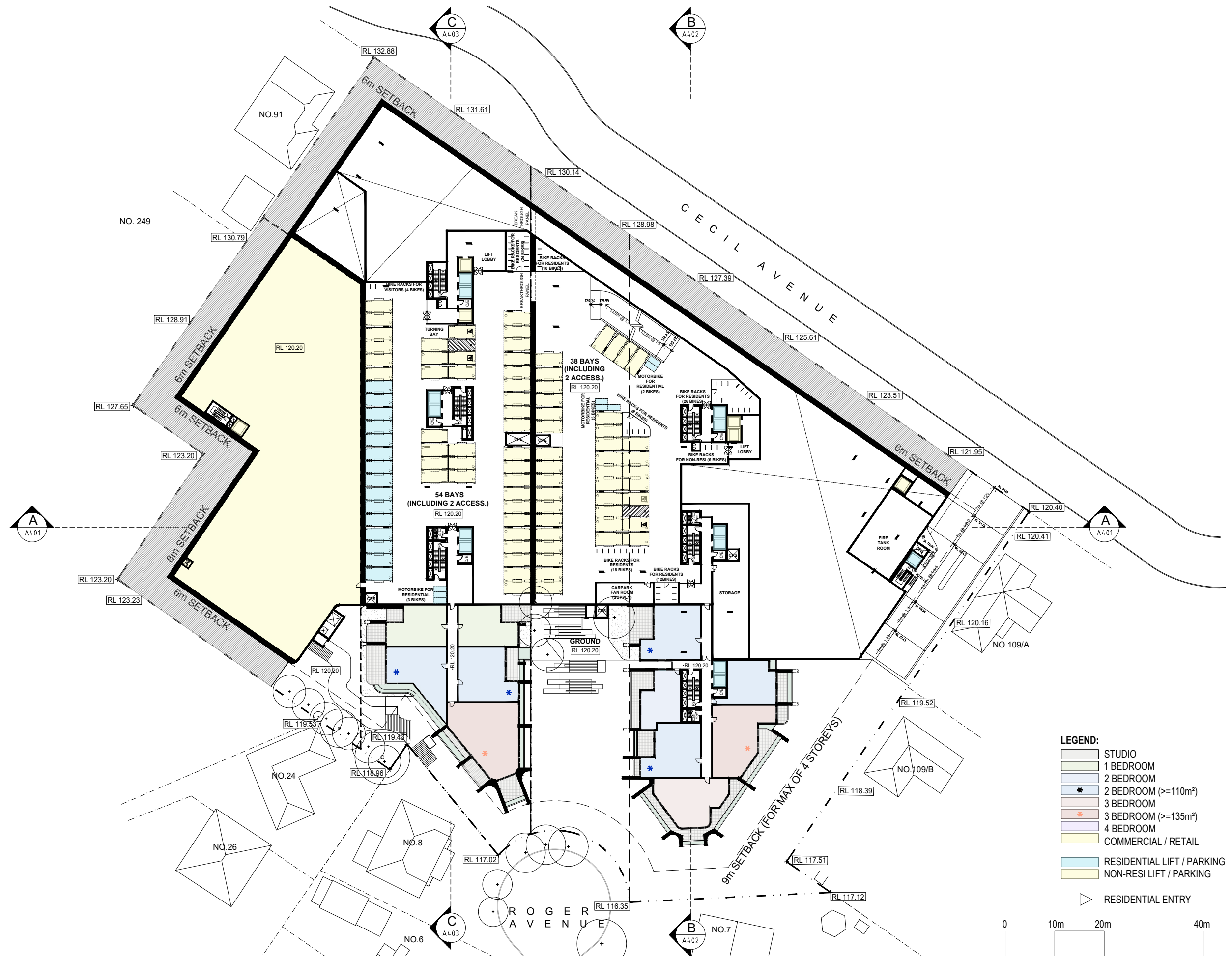
NSW Police Force, Safer by Design Evaluation Version 2.0, 2012

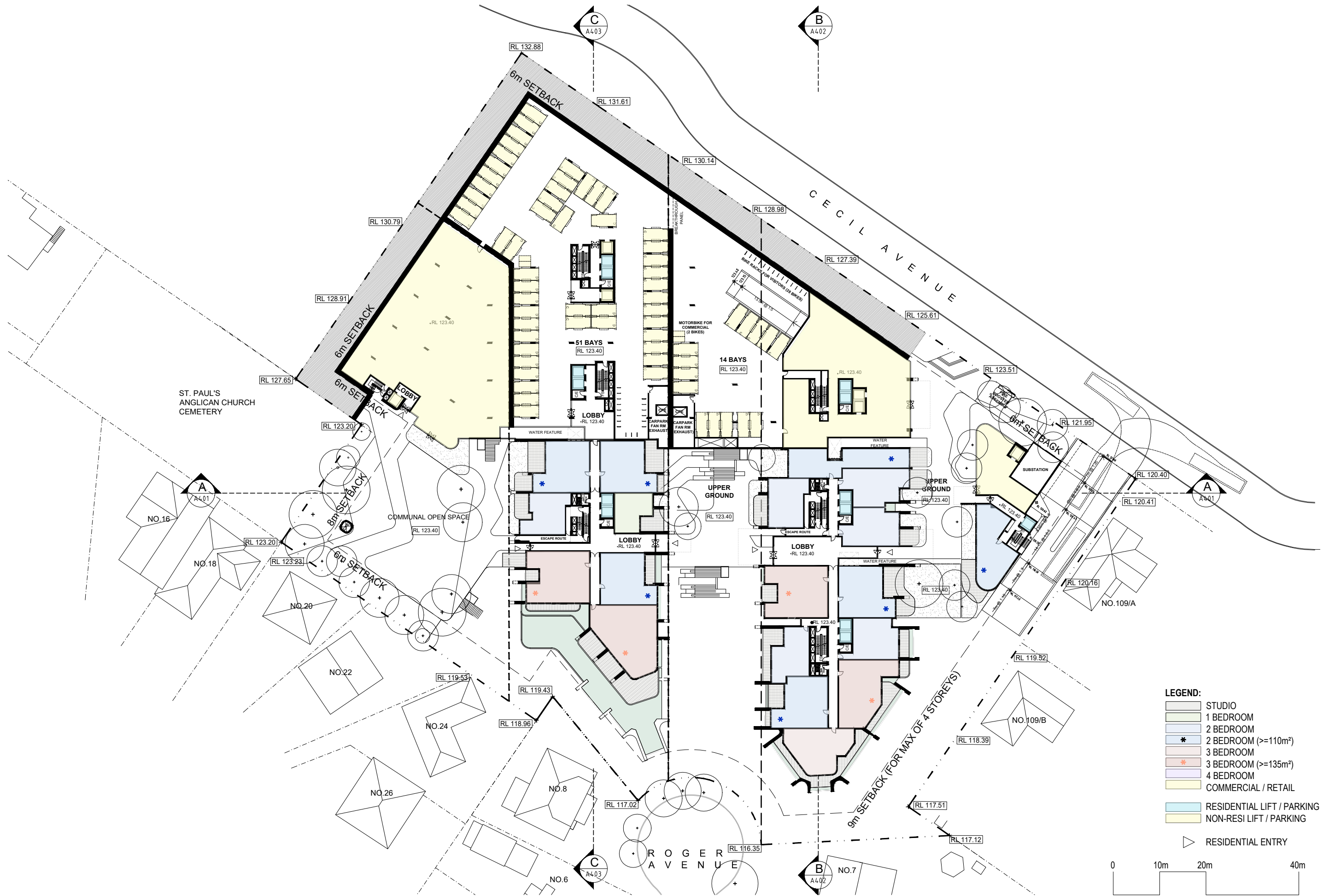
NSW Police Force, Safer by Design Manual Version 3.0, 2012

APPENDIX A | DOCUMENTATION



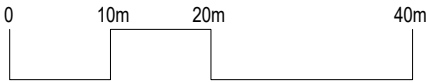






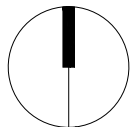
LEGEND:

- STUDIO
- 1 BEDROOM
- 2 BEDROOM
- 2 BEDROOM ($\geq 110\text{m}^2$)
- 3 BEDROOM
- 3 BEDROOM ($\geq 135\text{m}^2$)
- 4 BEDROOM
- COMMERCIAL / RETAIL
- RESIDENTIAL LIFT / PARKING
- NON-RESI LIFT / PARKING
- RESIDENTIAL ENTRY



Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
UPPER GROUND

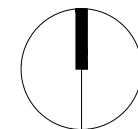
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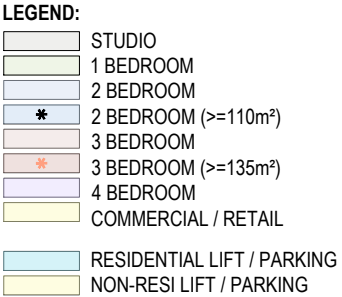
1:750 @ A3

Drawing no:
A205

Project No.
A24033

ISSUE
A



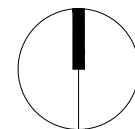




- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - * 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - * 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



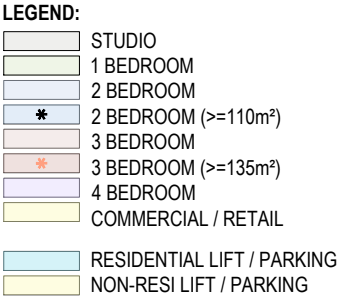
Drawing Title
LEVEL 4

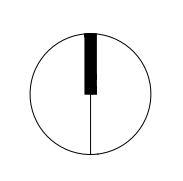
SCALE 1:750 @ A3

Drawing no:
A209

Project No.
A24033

ISSUE
A



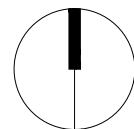




- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
LEVEL 7

SCALE

1:750 @ A3

Drawing no:
A212

Project No.
A24033

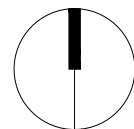
ISSUE
A



- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
LEVEL 8

SCALE 1:750 @ A3

Drawing no:
A213

Project No.
A24033

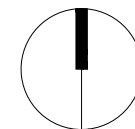
ISSUE
A



- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
LEVEL 9

SCALE
1:750 @ A3

Drawing no:
A214

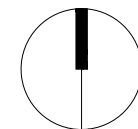
Project No.
A24033
ISSUE
A



- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - * 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - * 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

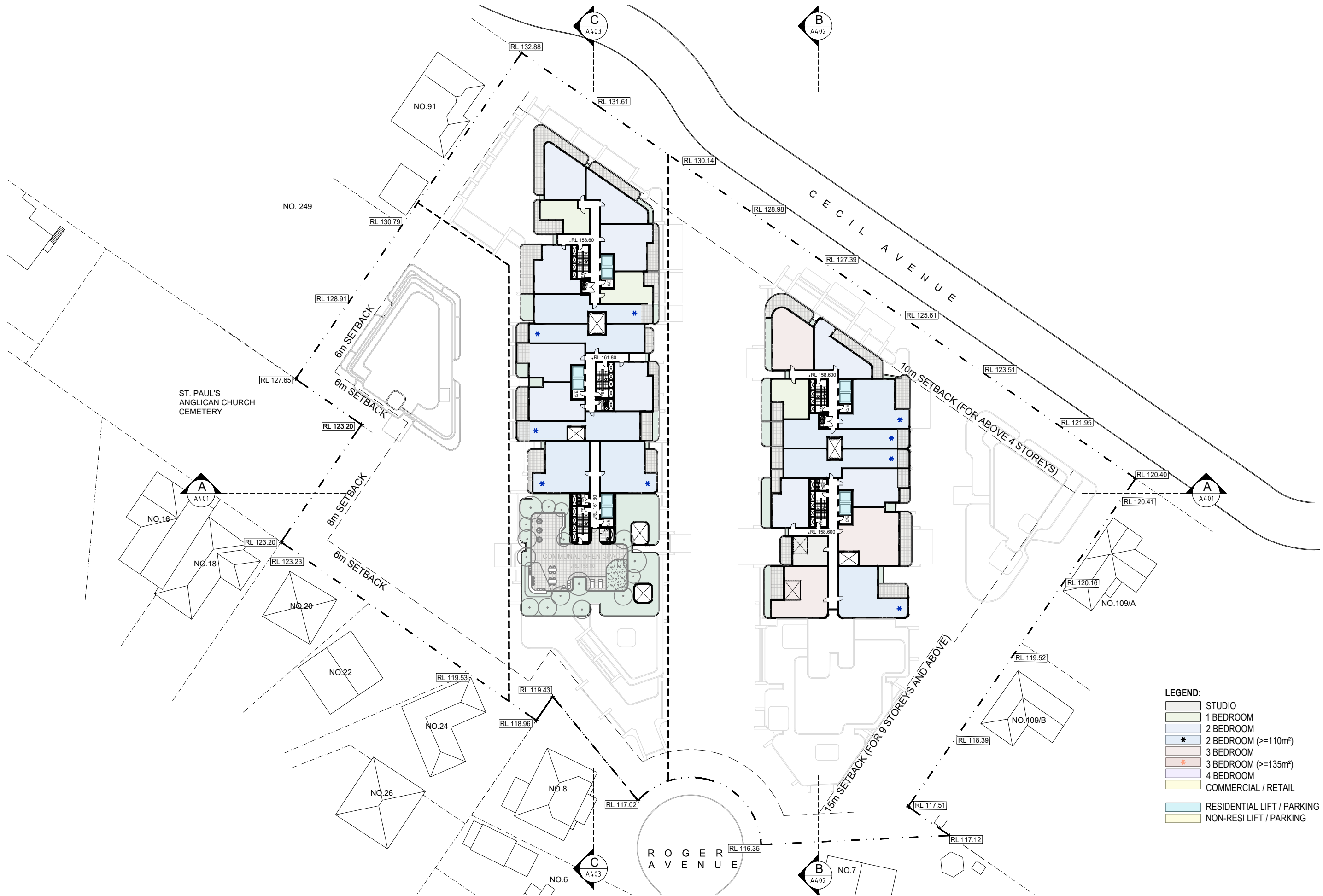


Drawing Title
LEVEL 10

SCALE 1:750 @ A3

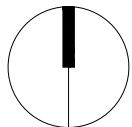
Drawing no:
A215

Project No.
A24033
ISSUE
A



Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
LEVEL 11

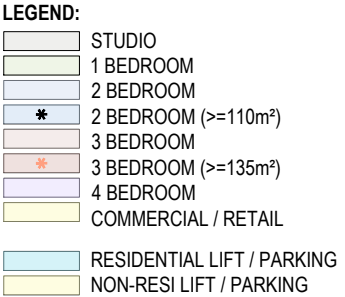
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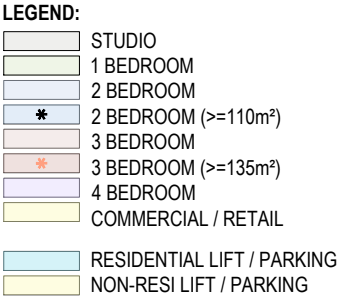
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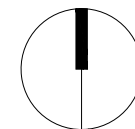
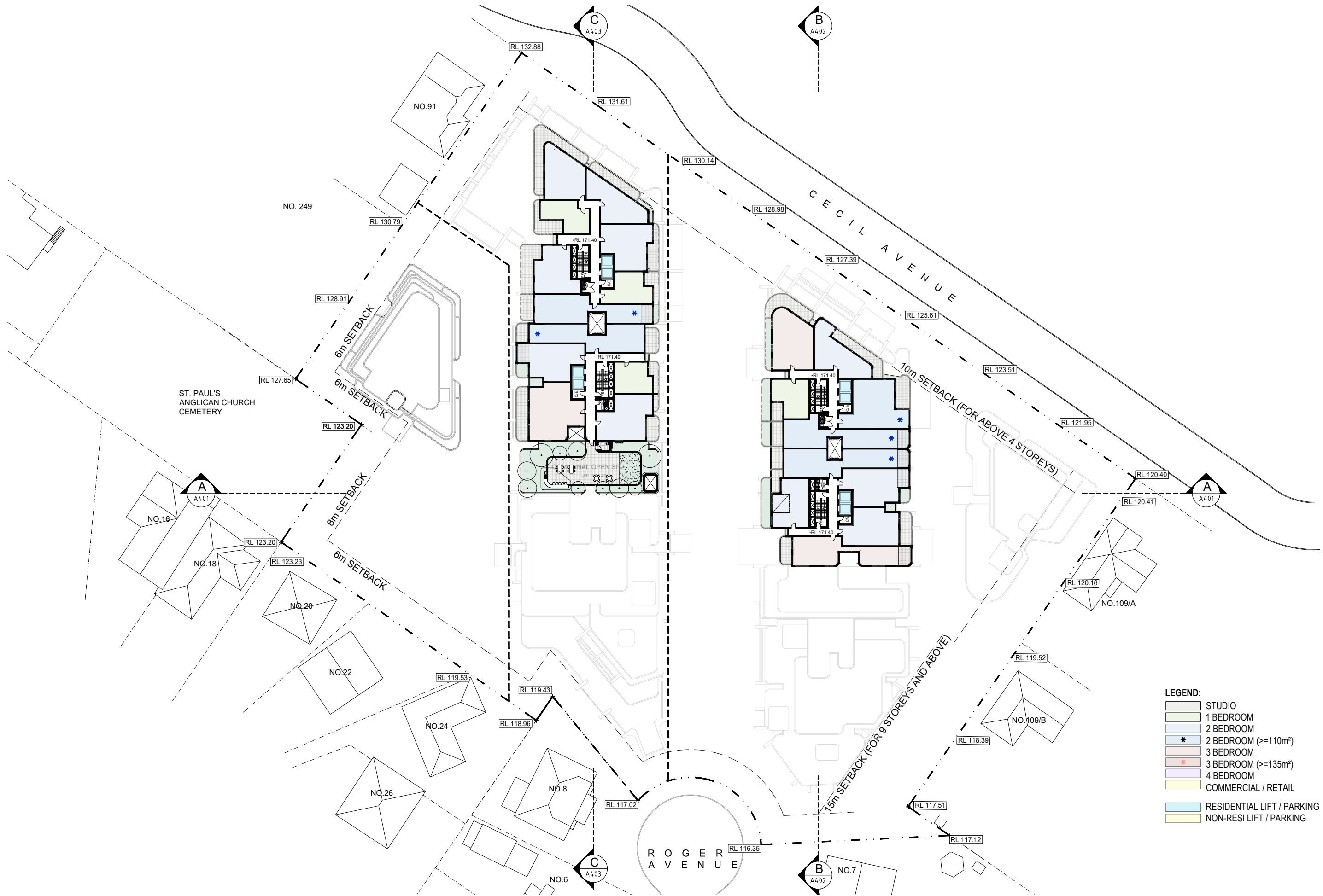
Drawing no:
A216

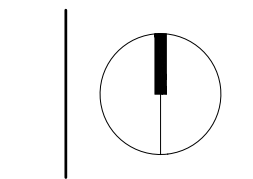
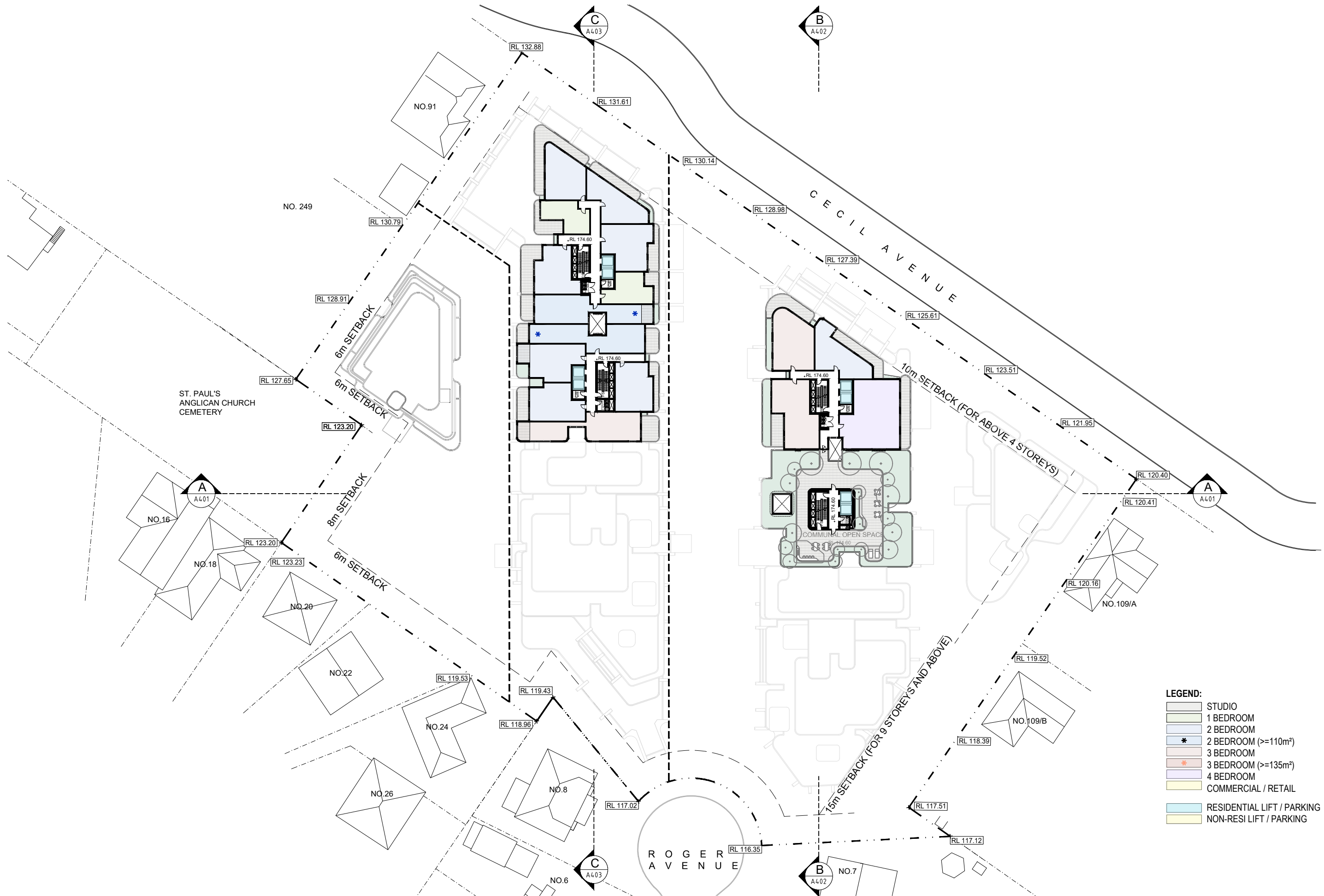
Project No.
A24033

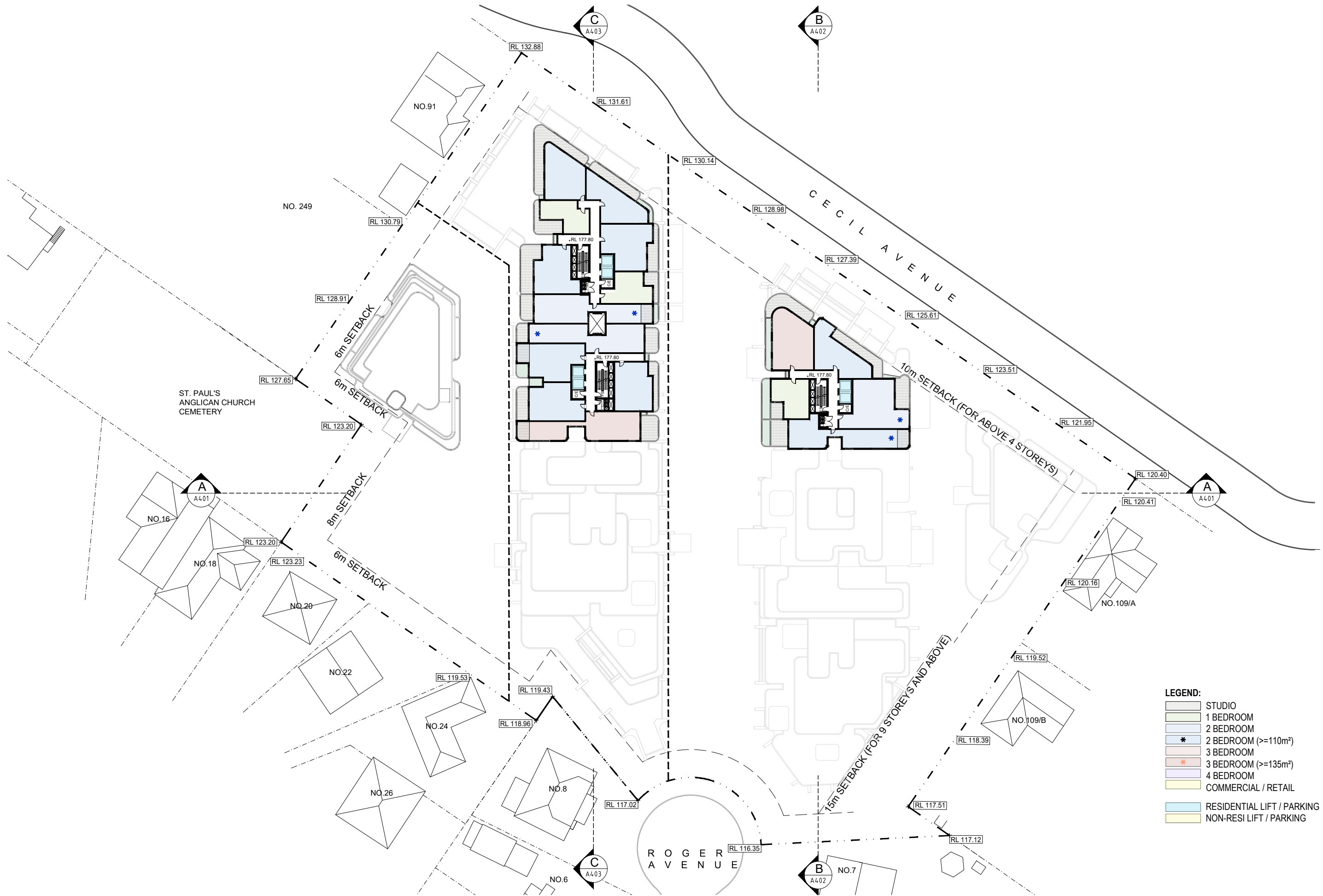
ISSUE
A







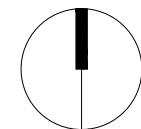




- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
LEVEL 17

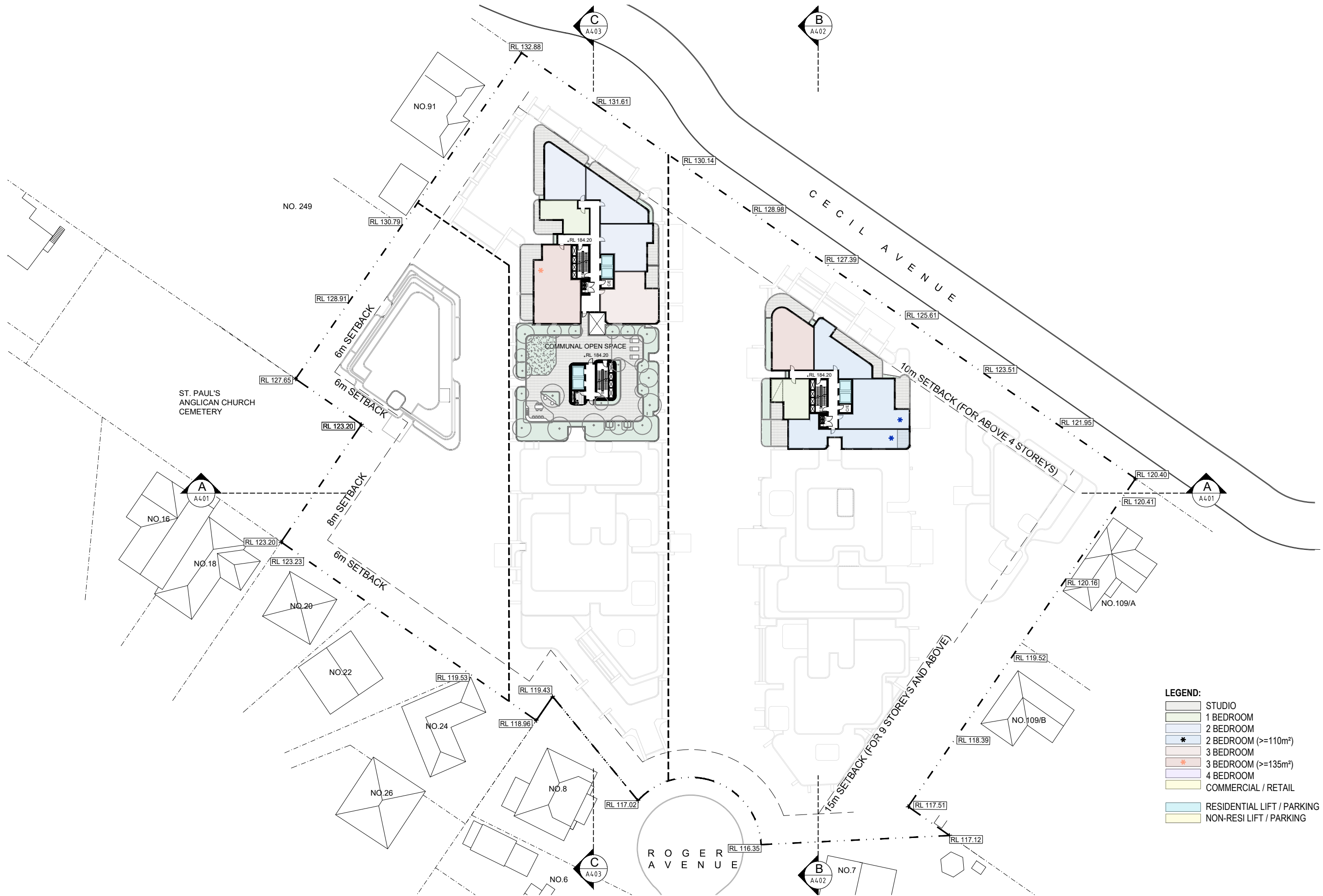
SCALE

1:750 @ A3

Drawing no:
A222

Project No.
A24033

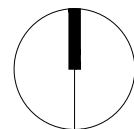
ISSUE
A



- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - * 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - * 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

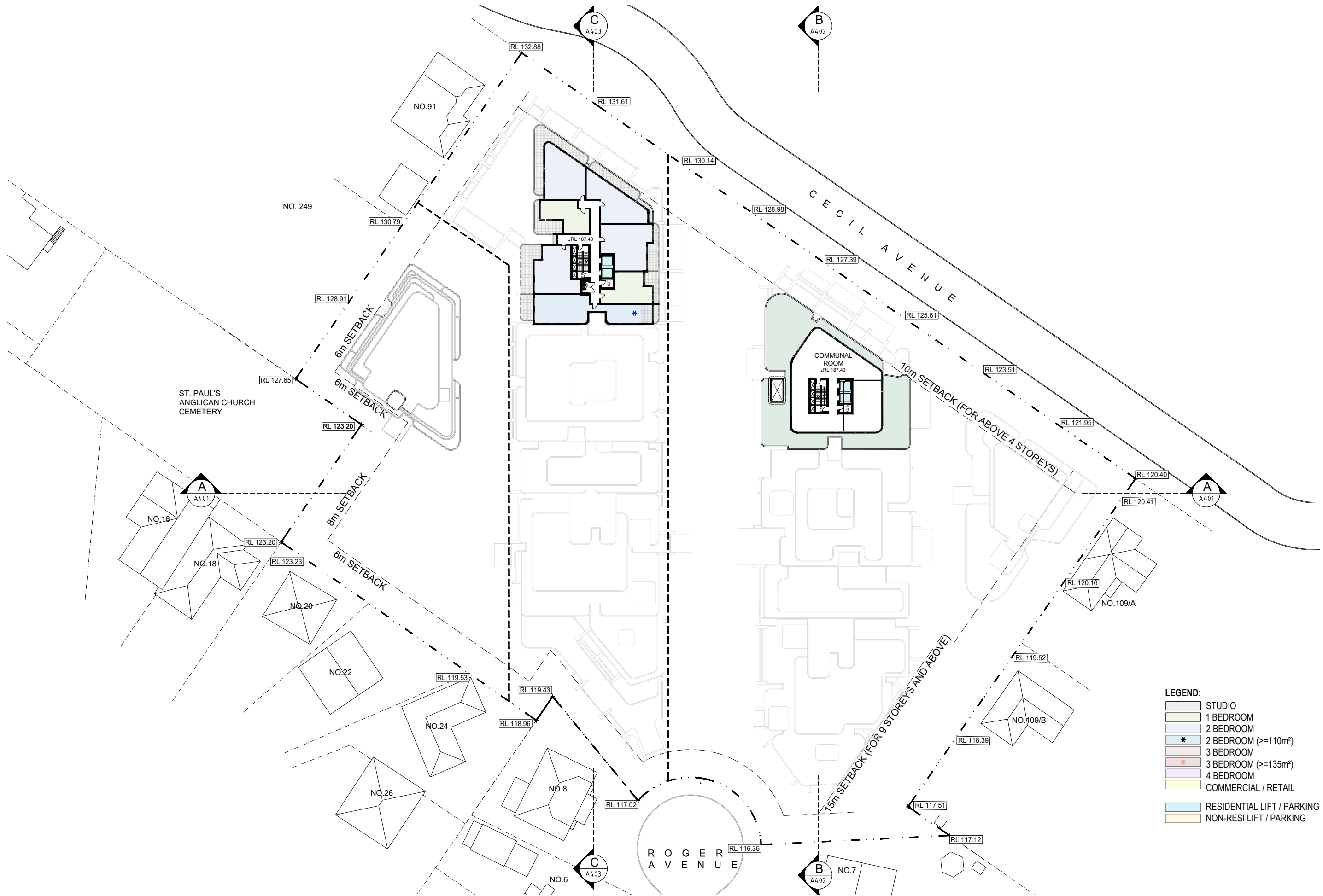


Drawing Title
LEVEL 19

SCALE 1:750 @ A3

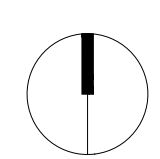
Drawing no:
A224

Project No.
A24033
ISSUE
A

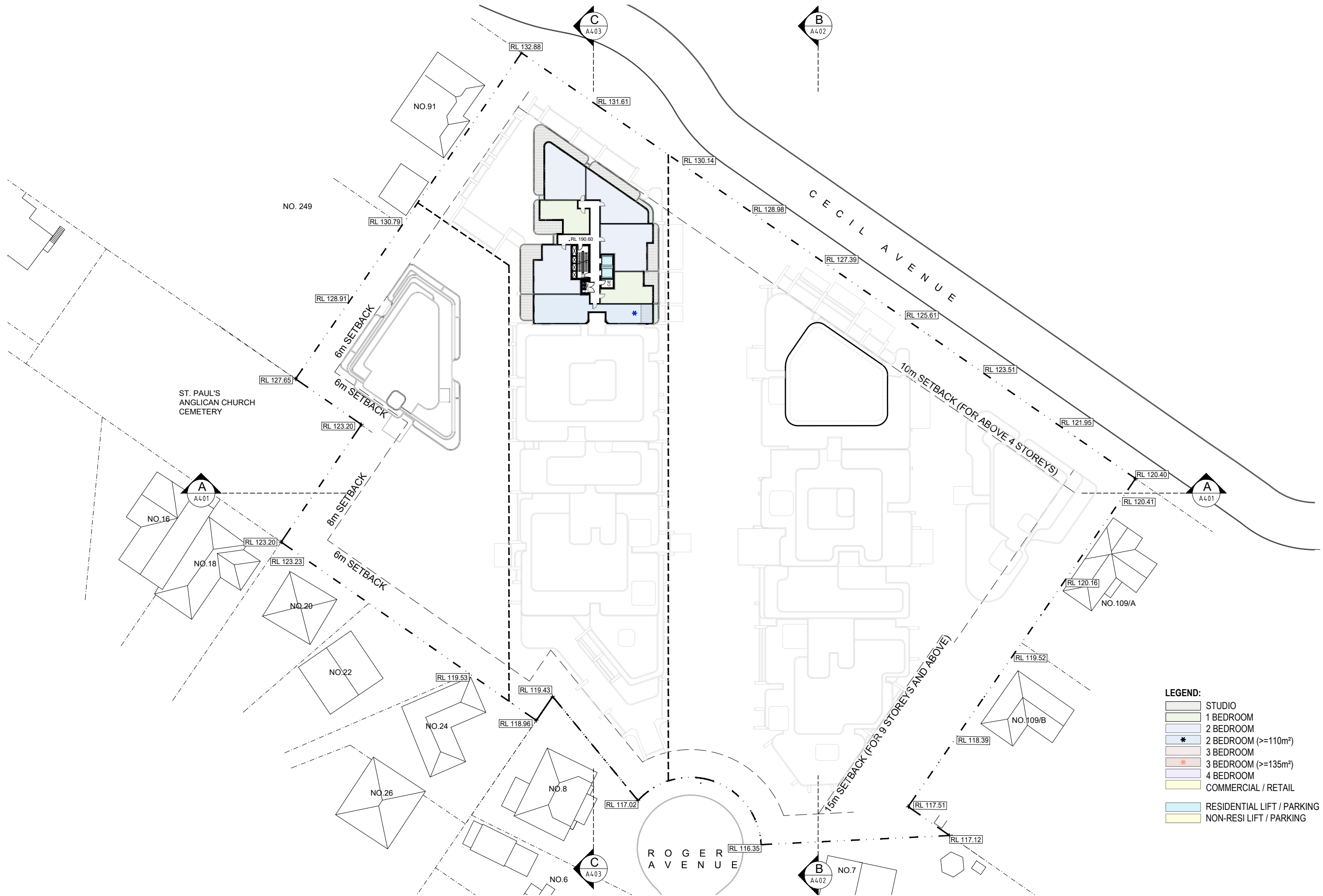


Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



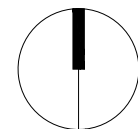
Drawing Title LEVEL 20	Project No. A24033
SCALE 1:750 @ A3	Drawing no: A225
	ISSUE A



- LEGEND:**
- STUDIO
 - 1 BEDROOM
 - 2 BEDROOM
 - 2 BEDROOM ($\geq 110\text{m}^2$)
 - 3 BEDROOM
 - 3 BEDROOM ($\geq 135\text{m}^2$)
 - 4 BEDROOM
 - COMMERCIAL / RETAIL
 - RESIDENTIAL LIFT / PARKING
 - NON-RESI LIFT / PARKING

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
LEVEL 21-25

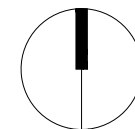
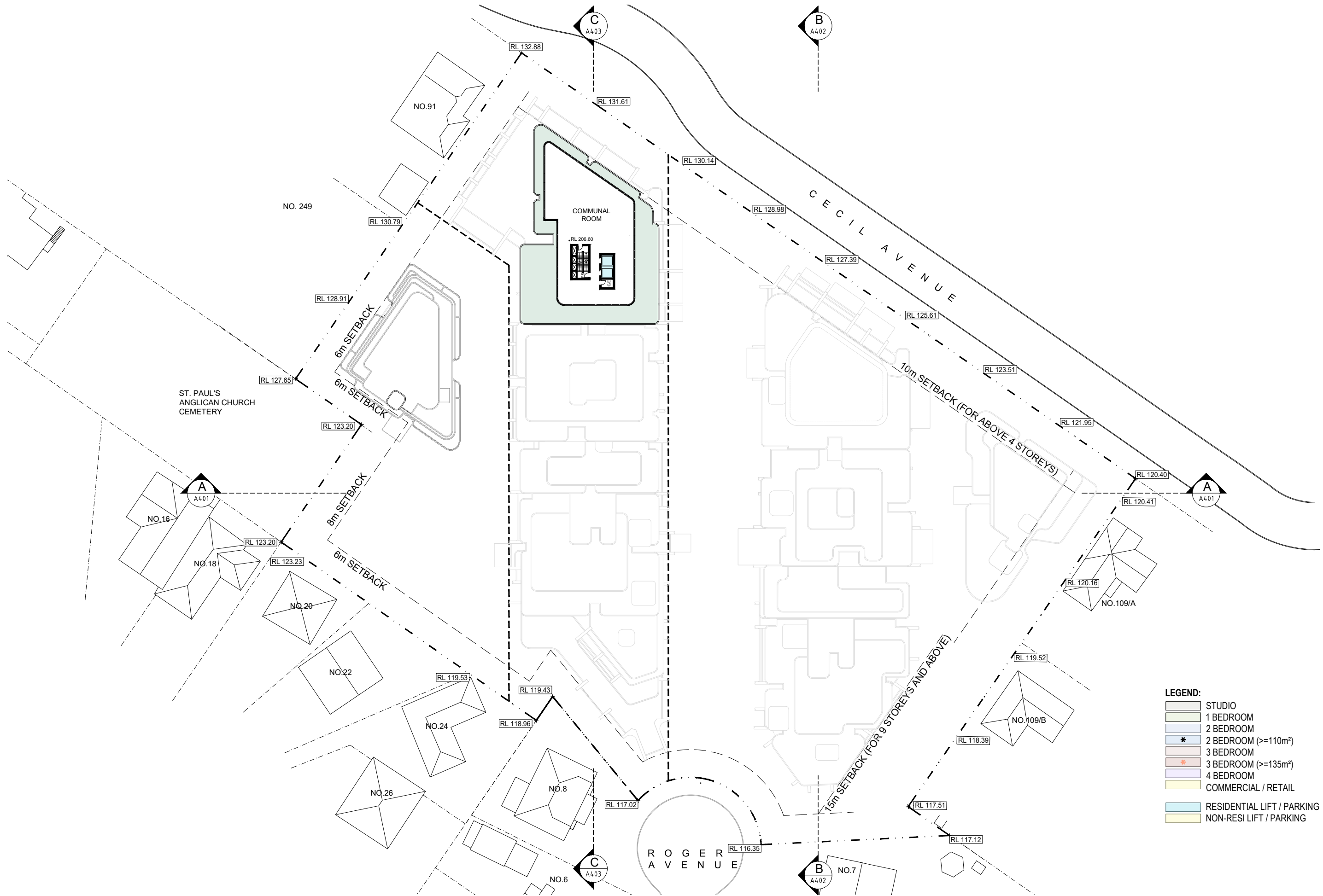
SCALE

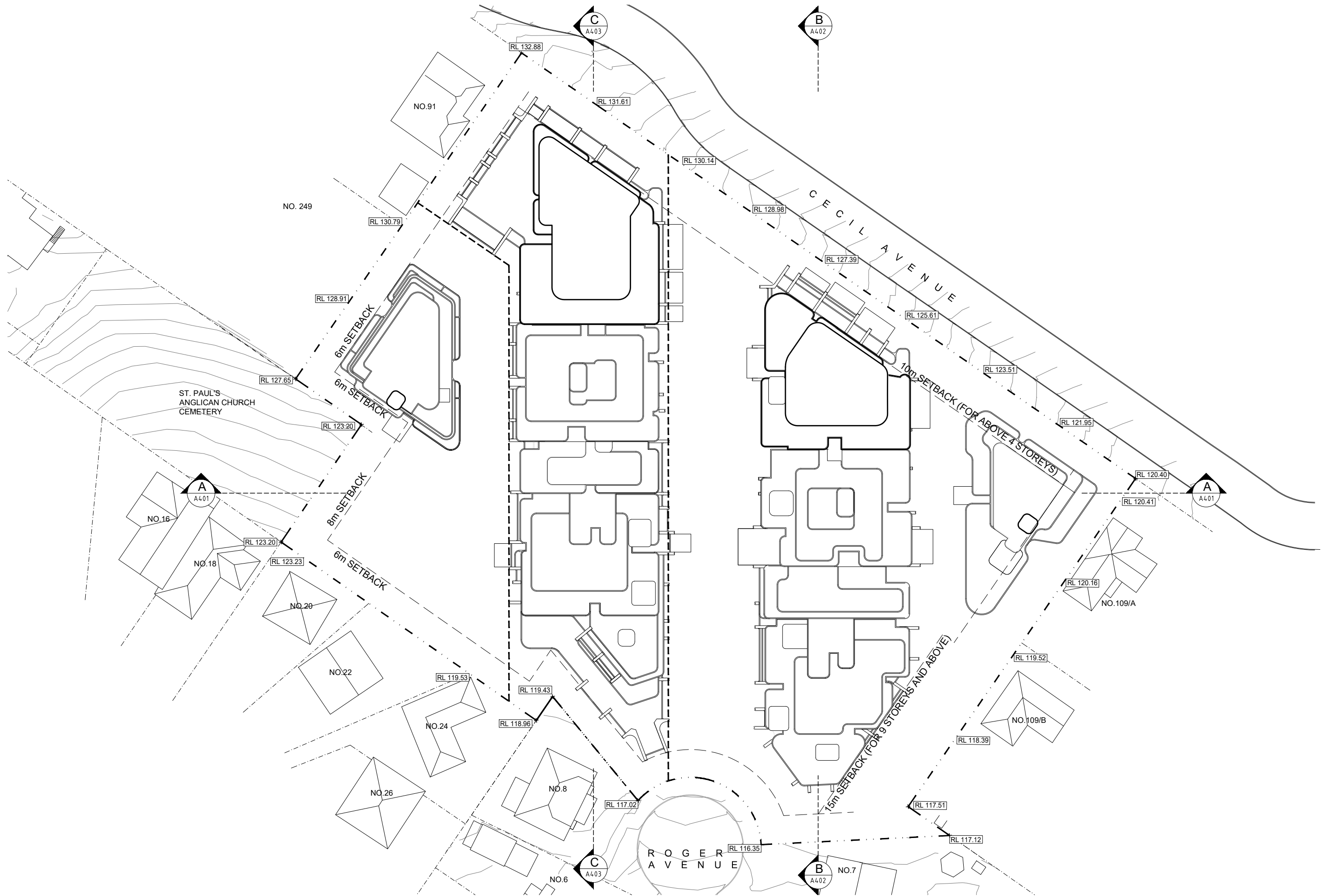
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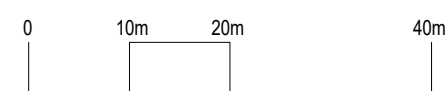
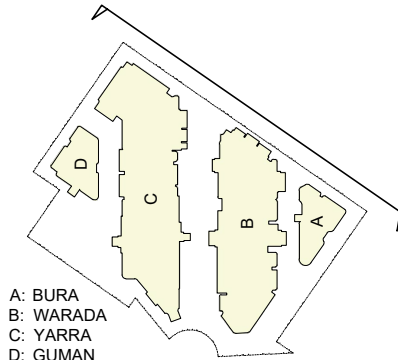
Drawing no:
A226

Project No.
A24033

ISSUE
A





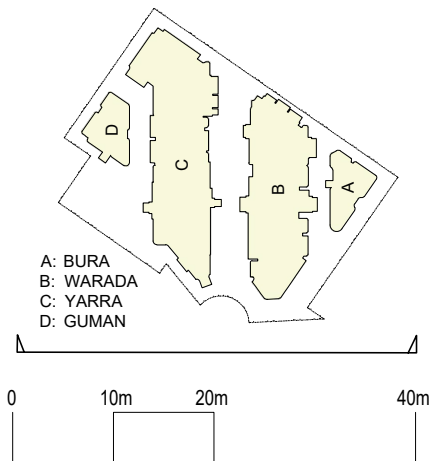


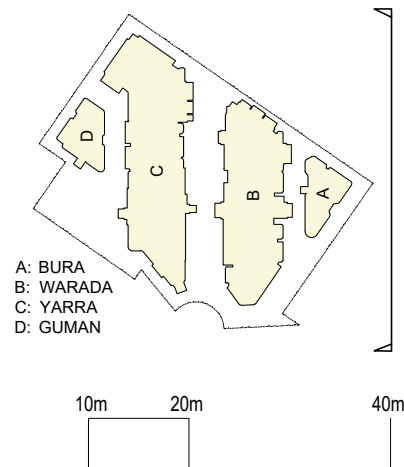
Rev	Description	Date
A	SSDA	2024-12-04

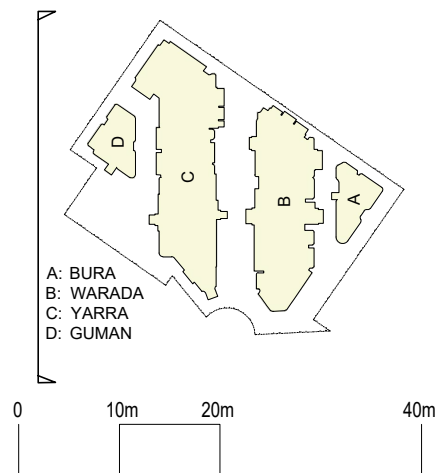
Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

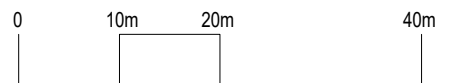
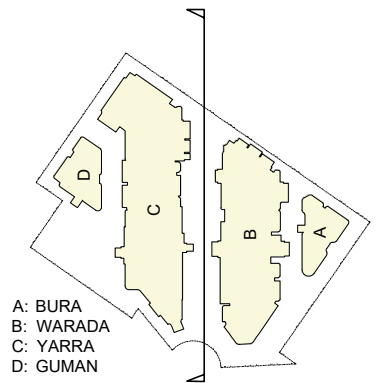
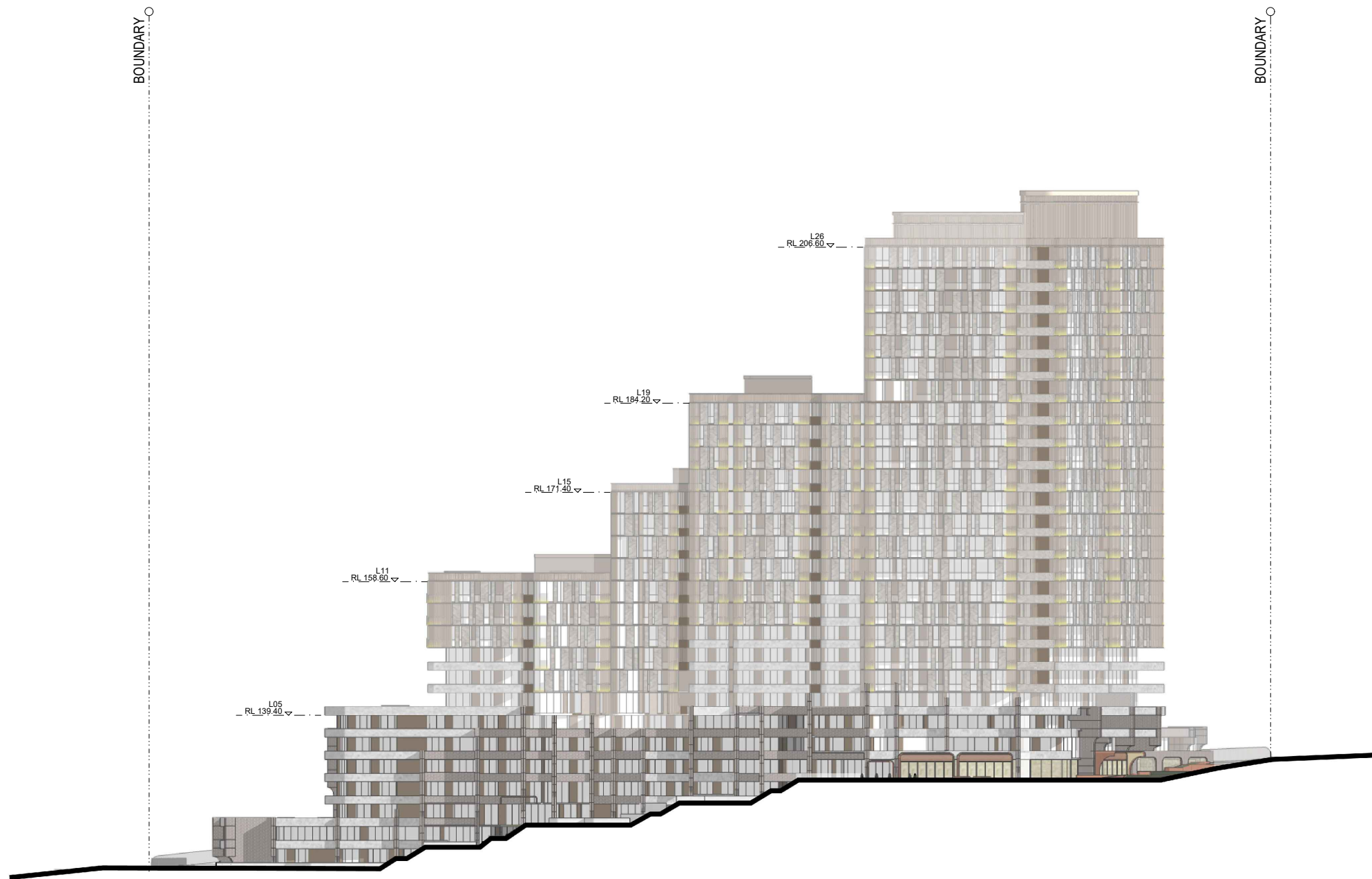
Drawing Title NORTH ELEVATION (CECIL AVENUE)	
SCALE 1:750 @ A3	Drawing no: A301

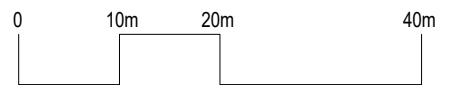
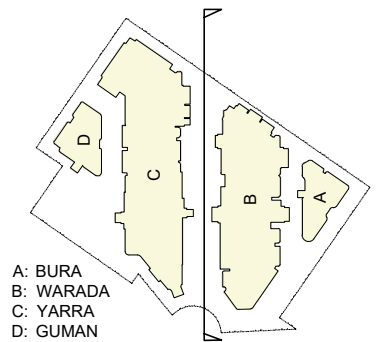
Project No. A24033
ISSUE A











Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

Drawing Title
INTERNAL WEST ELEVATION
THROUGH SITE LINK

SCALE

1:750 @ A3

Drawing no:
A305

Project No.
A24033

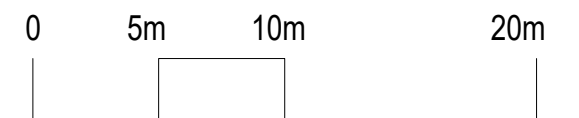
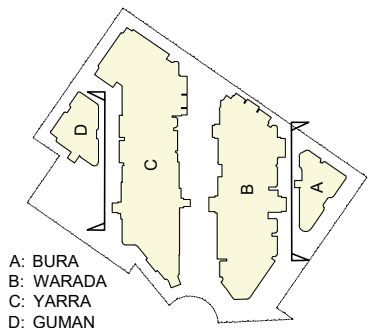
ISSUE
A

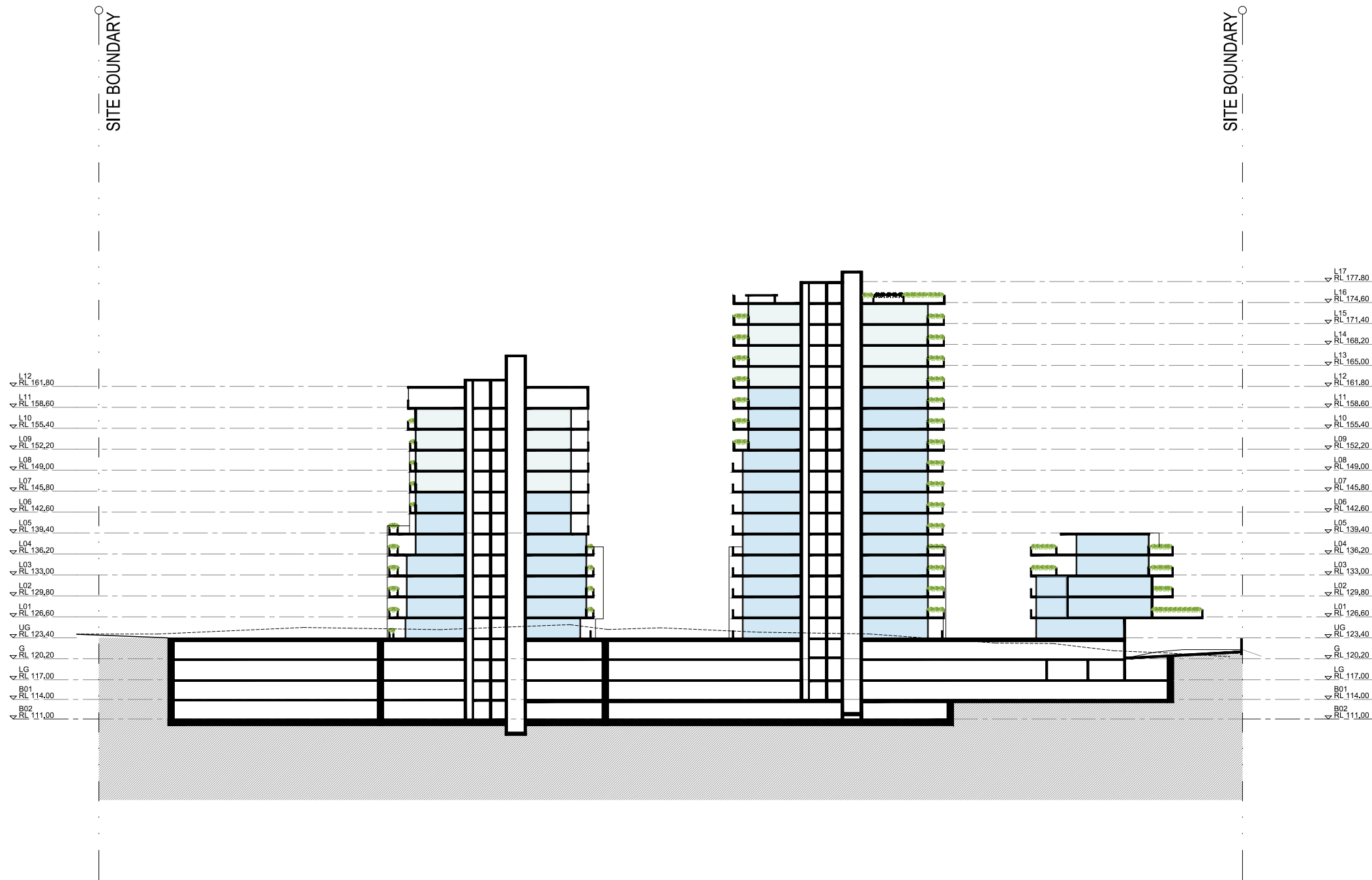


BUILDING A



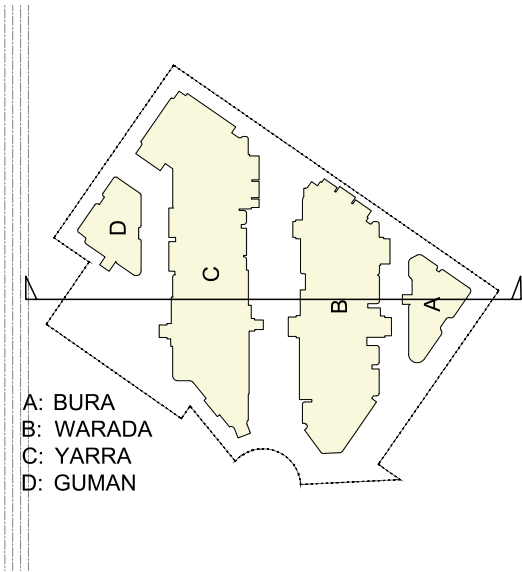
BUILDING D





LEGEND

- 3.5:1 FSR (Incentive FSR - The Hills LEP Clause 7.11 - Area A)
- 1.05:1 FSR (Housing SEPP FSR)



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

Drawing Title
Section A-A

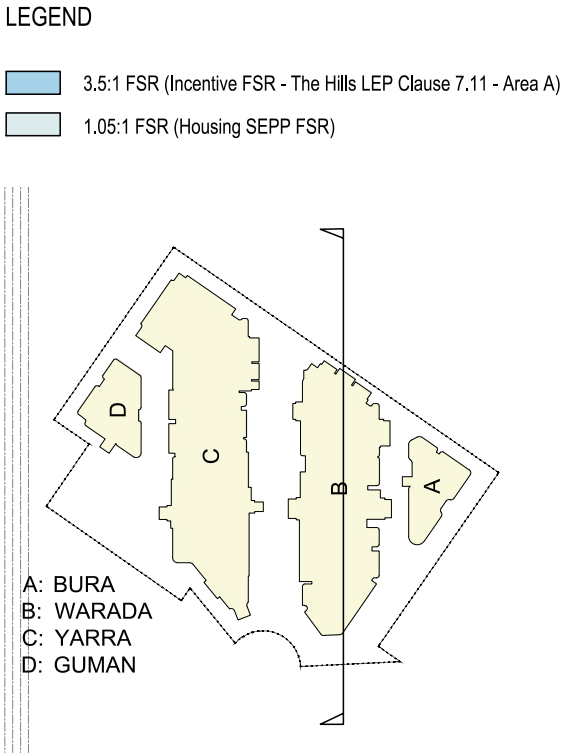
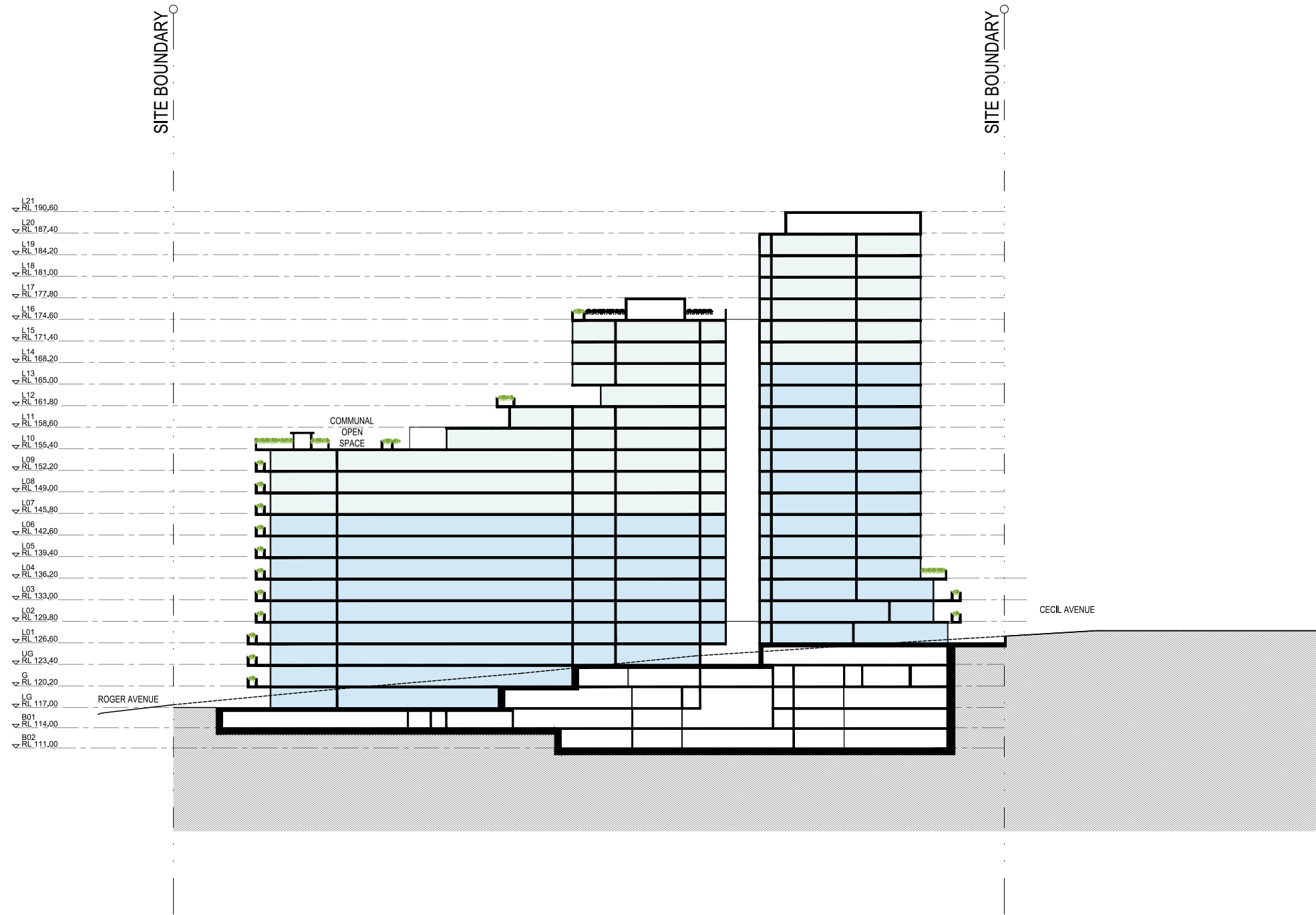
SCALE

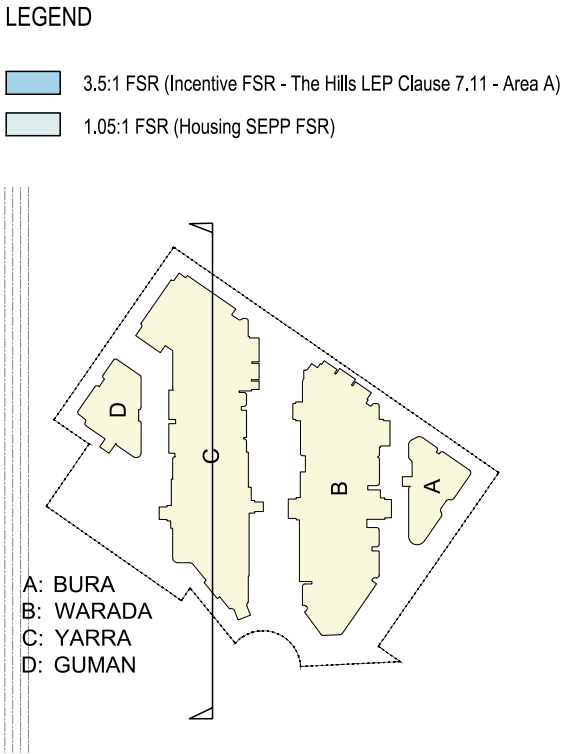
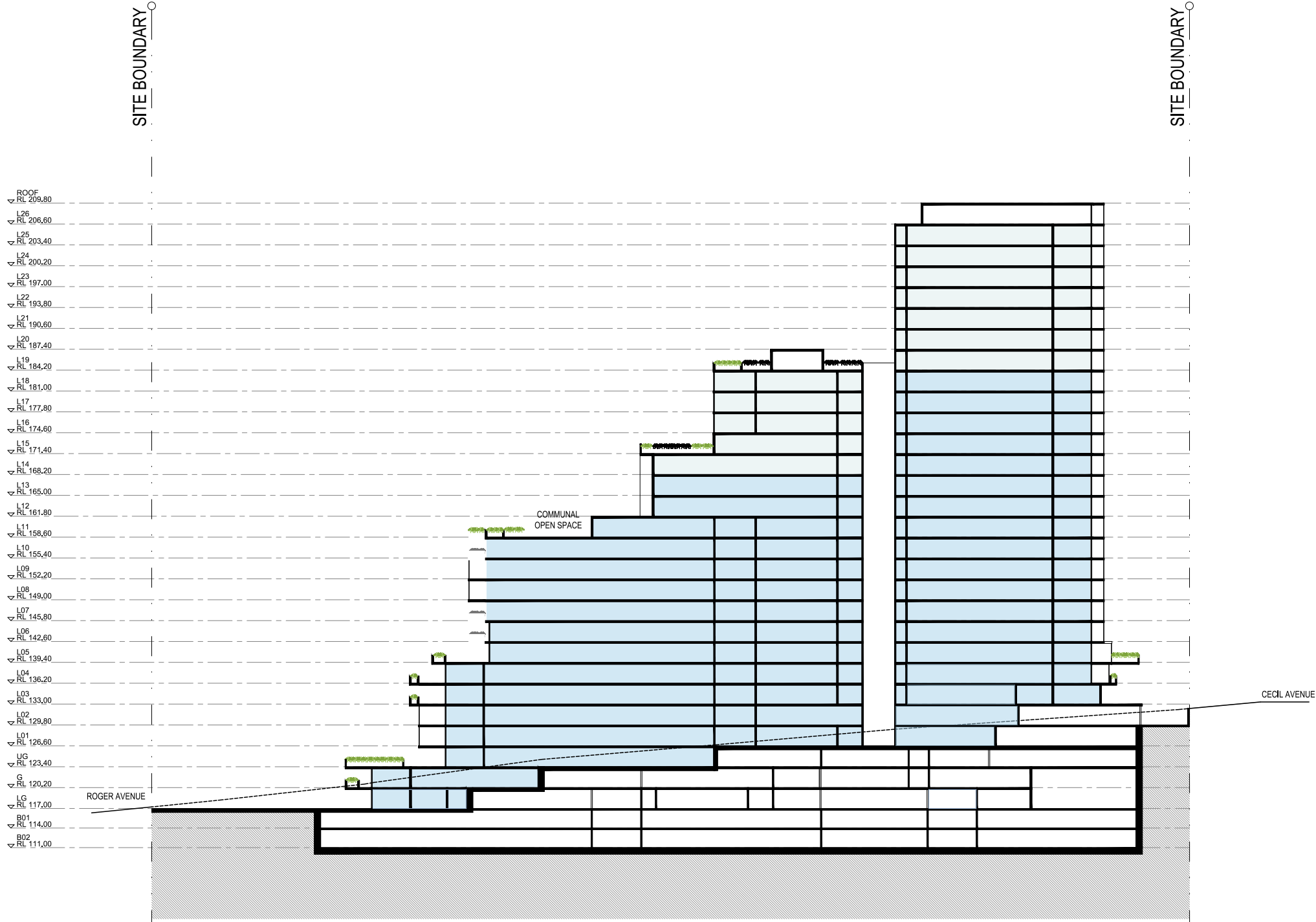
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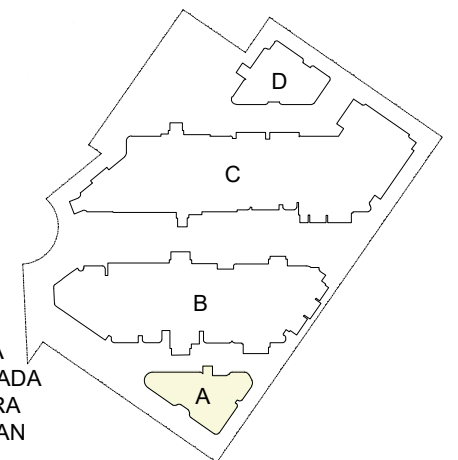
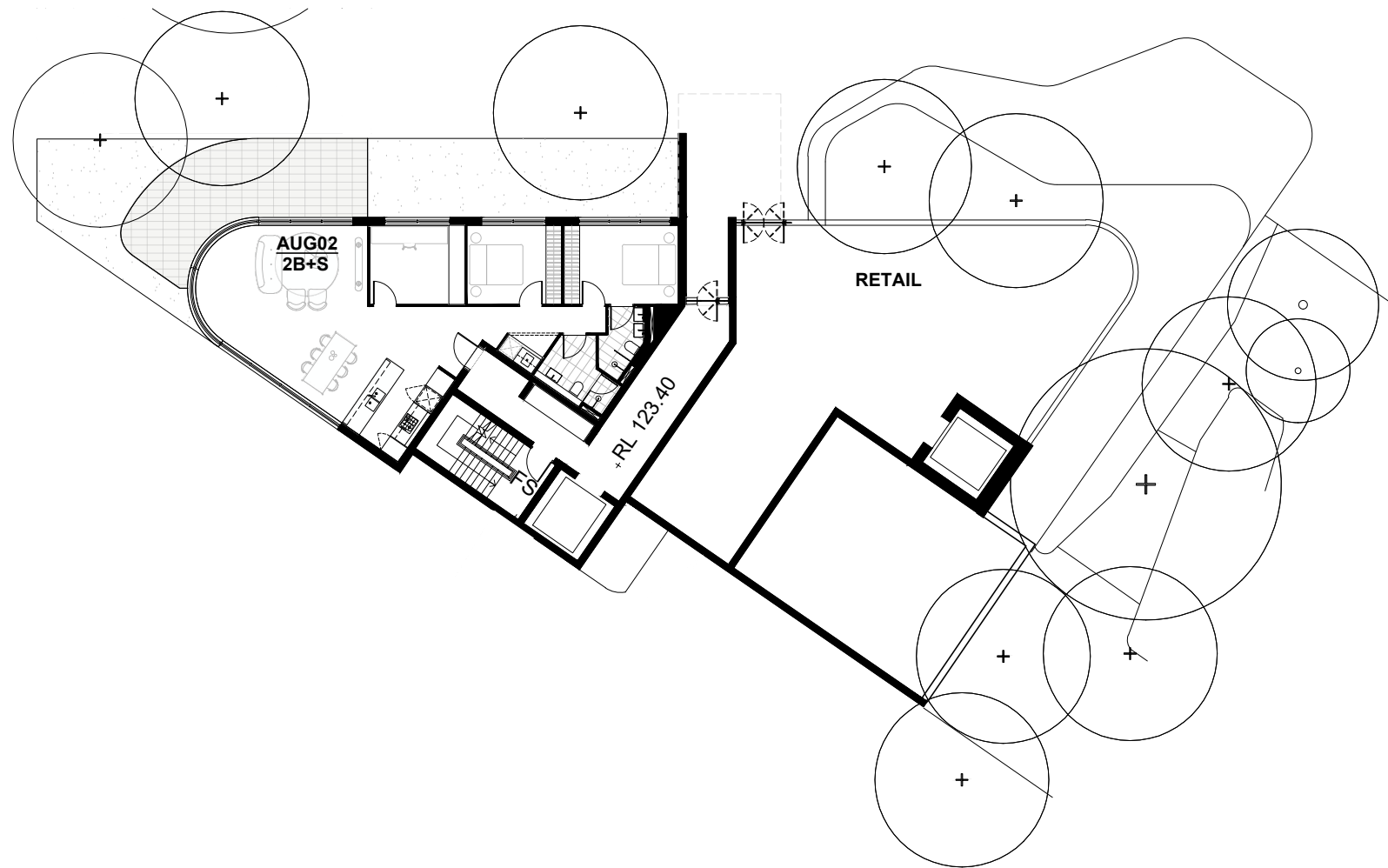
Drawing no:
A401

Project No.
A24033

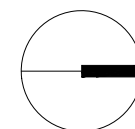
ISSUE

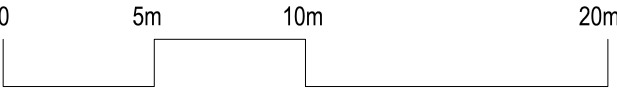
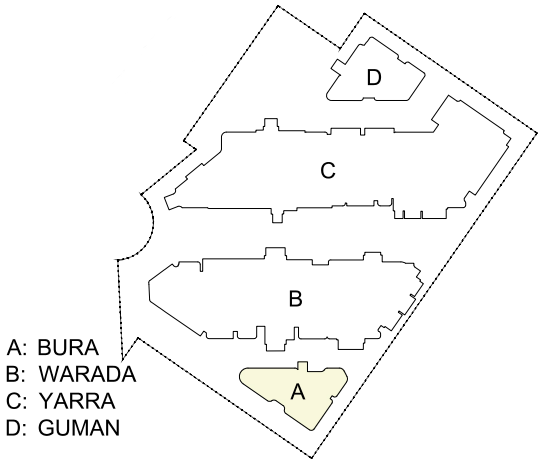




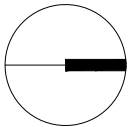


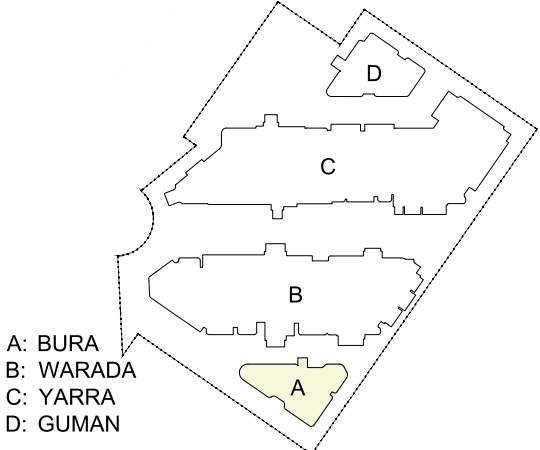
A: BURA
B: WARADA
C: YARRA
D: GUMAN





Rev	Description	Date
A	SSDA	2024-12-04

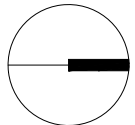




A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING A - LEVEL 2

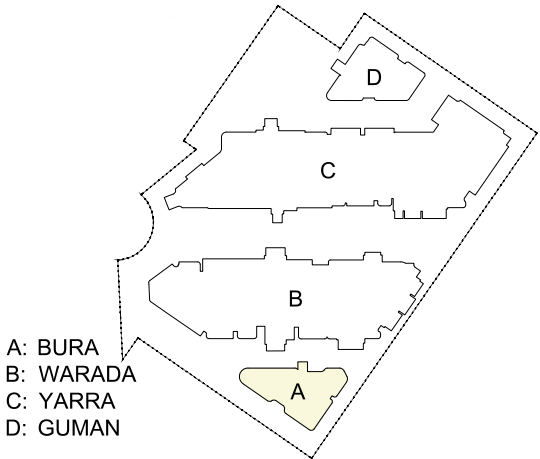
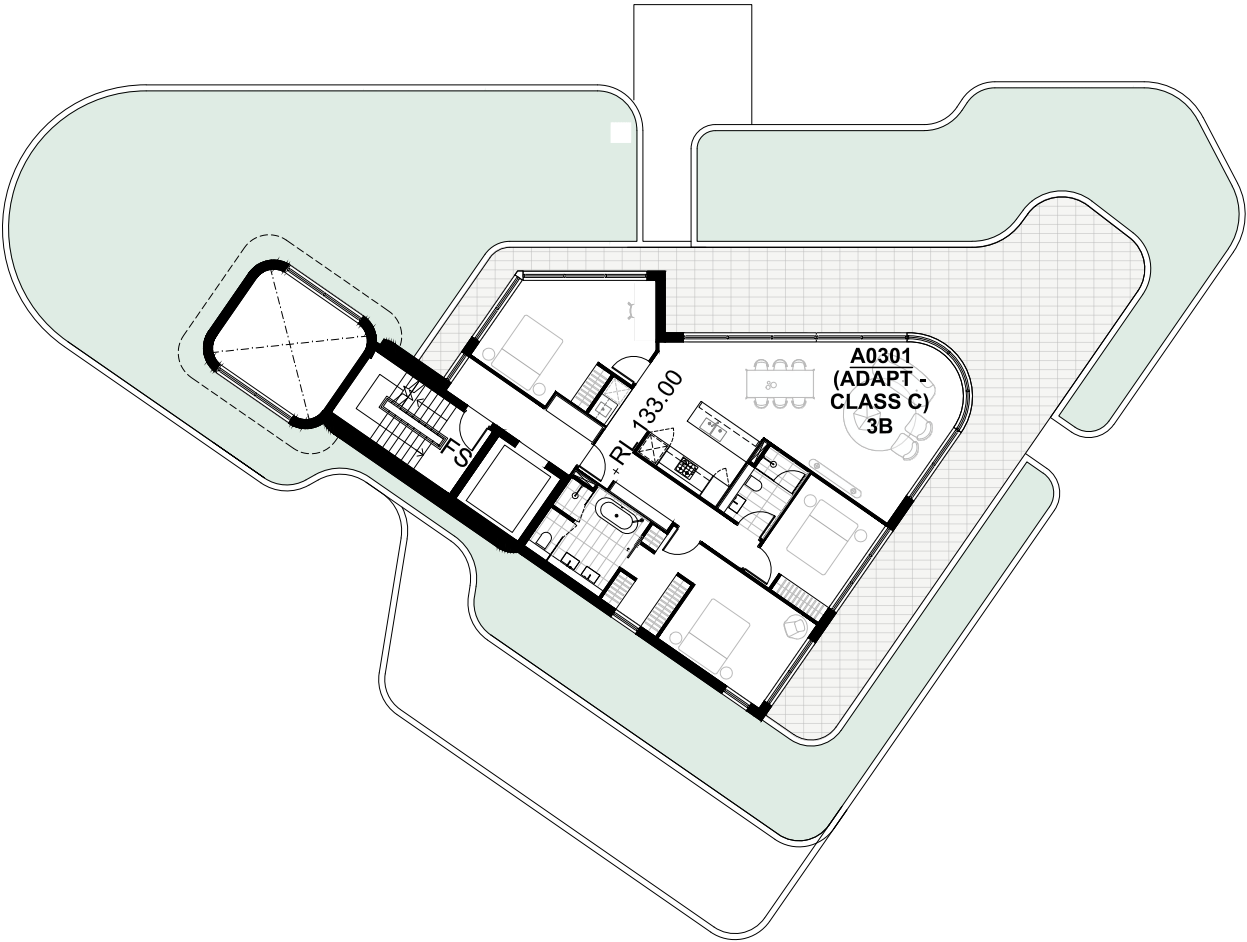
SCALE

1:250 @ A3

Drawing no:
A503

Project No.
A24033

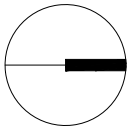
ISSUE
A



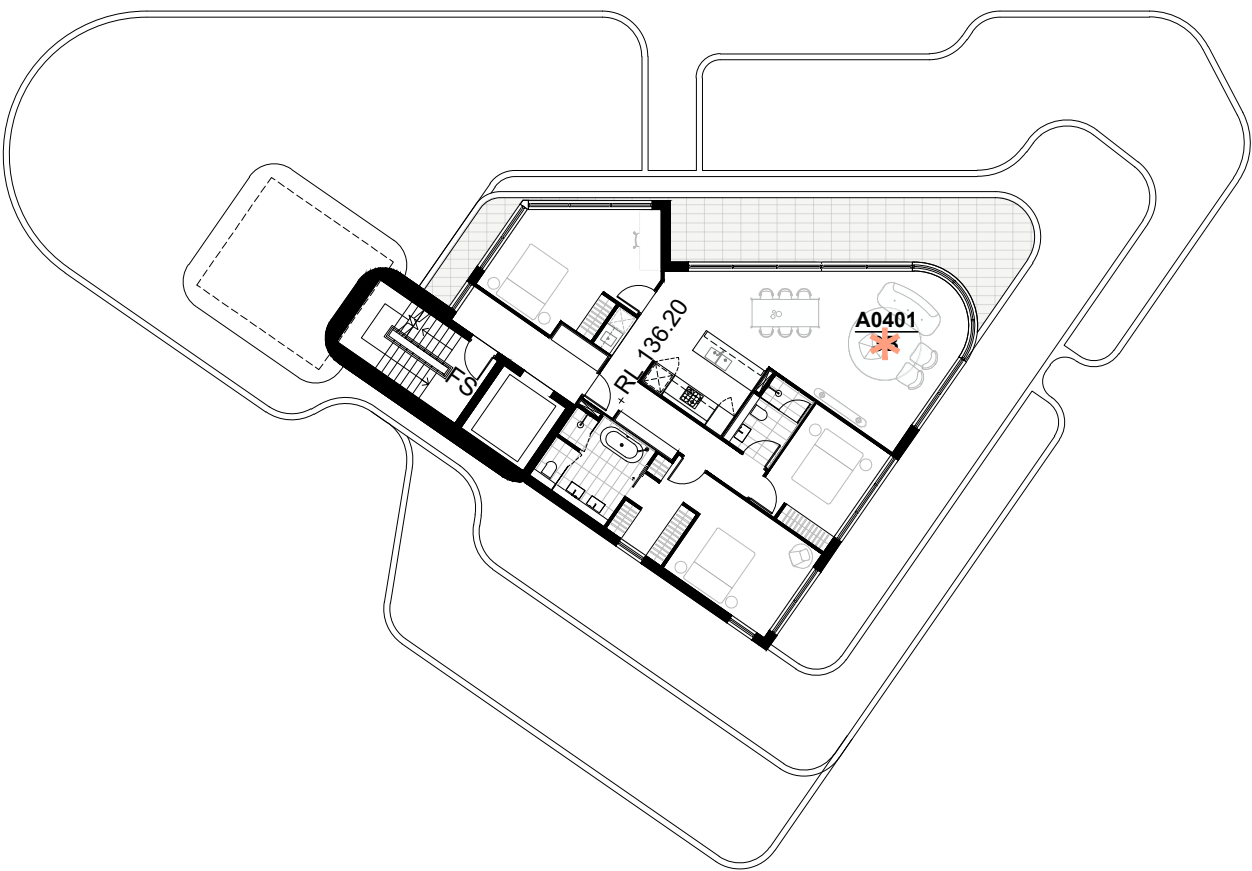
A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

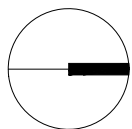
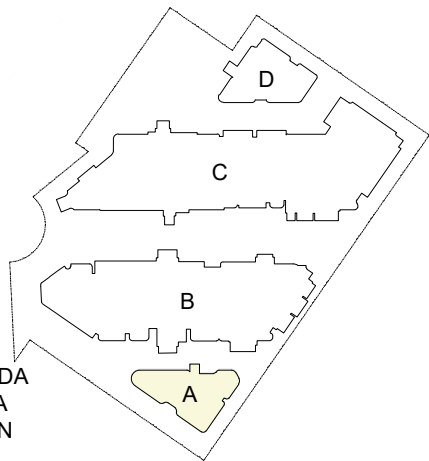
Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

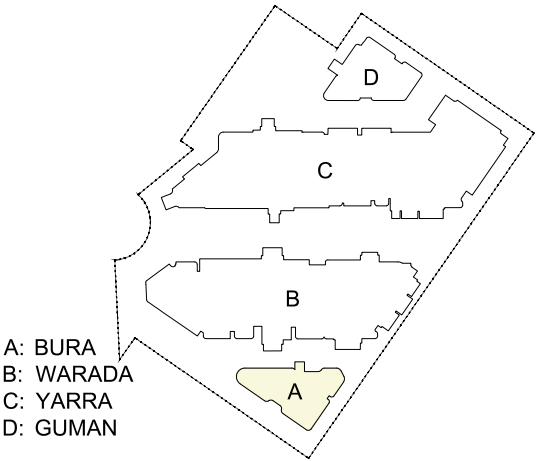
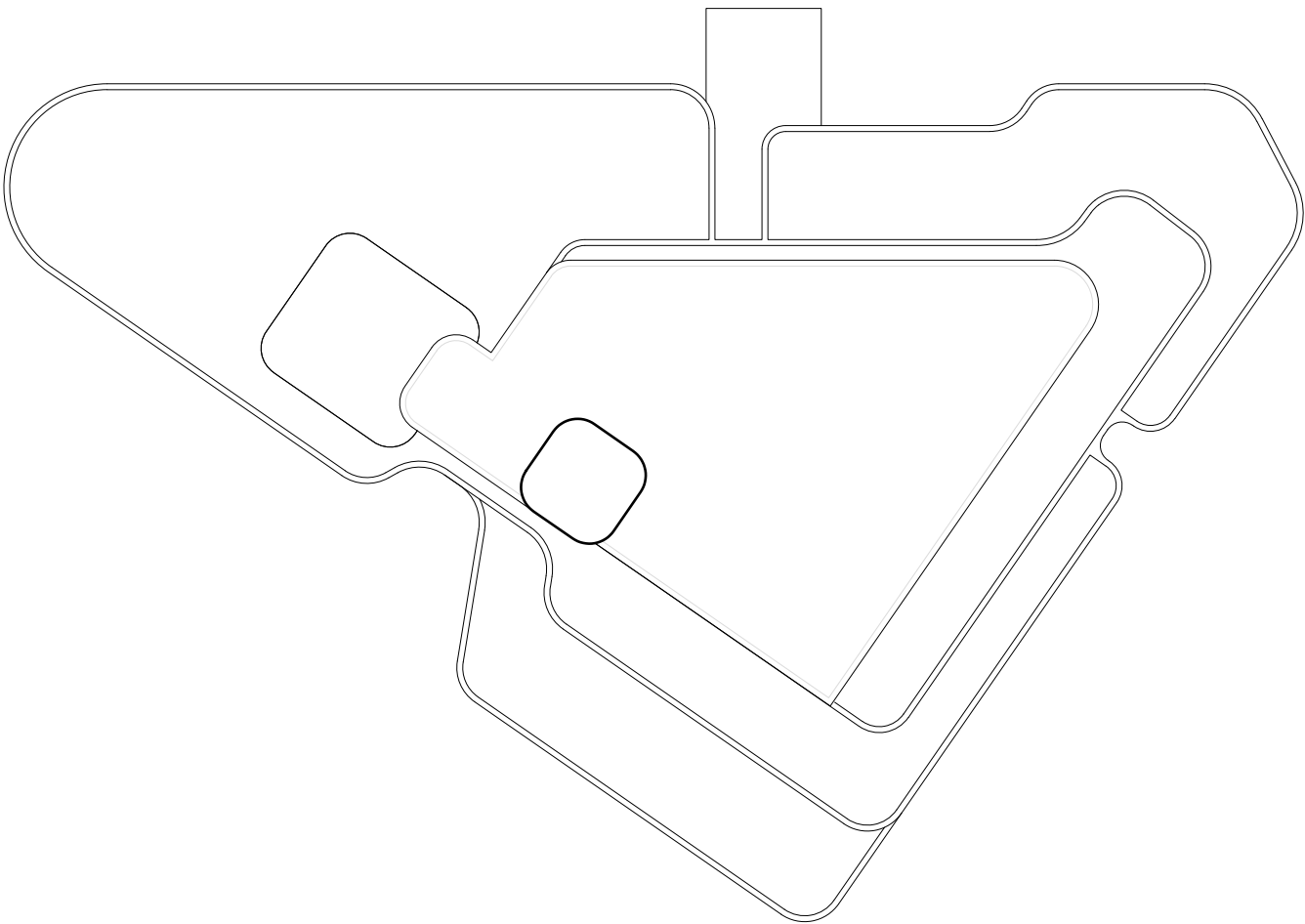


Drawing Title BUILDING A - LEVEL 3		Project No. A24033
SCALE 1:250 @ A3	Drawing no: A504	ISSUE A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

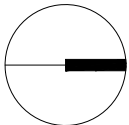




A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

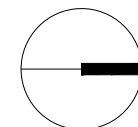
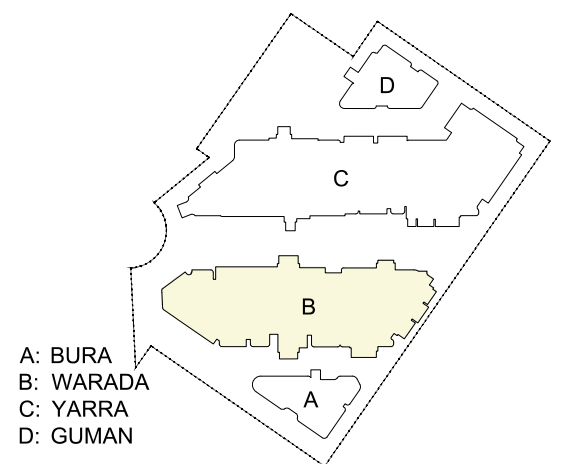
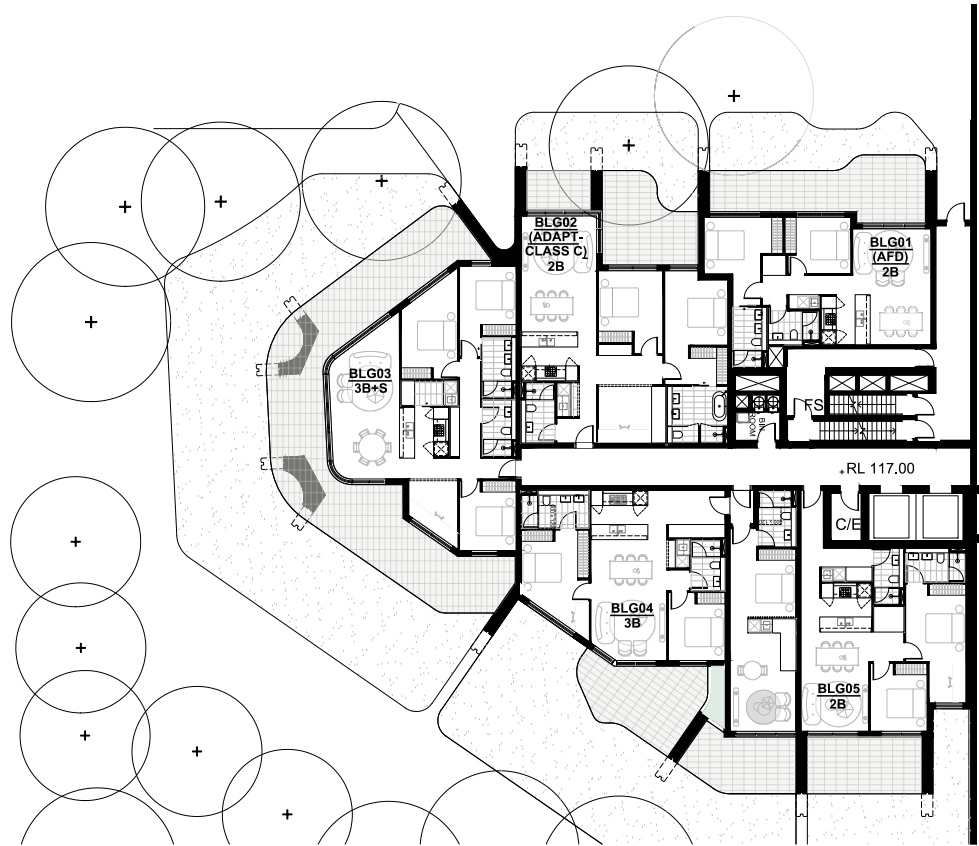


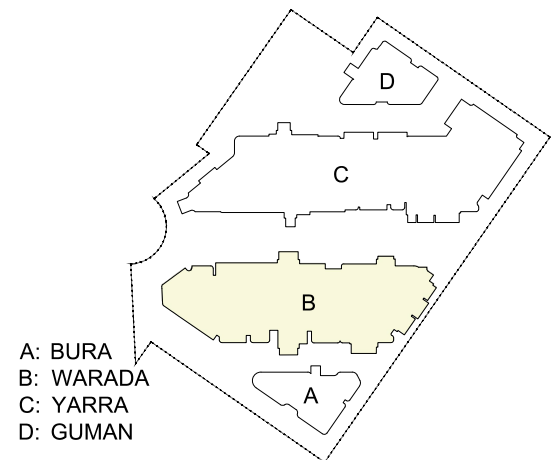
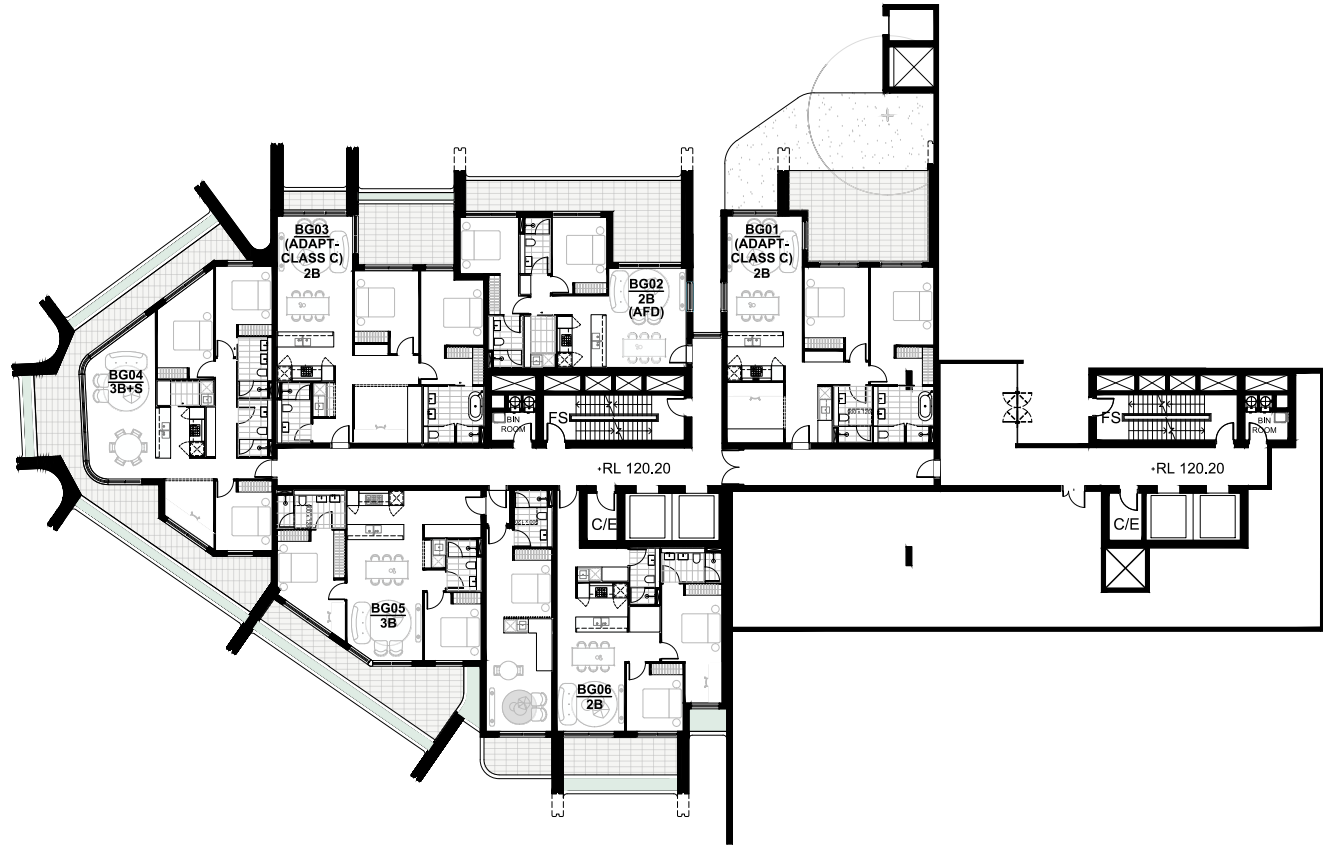
Drawing Title
BUILDING A - ROOF

SCALE
1:250 @ A3

Drawing no:
A506

Project No.
A24033
ISSUE
A

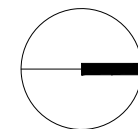




A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

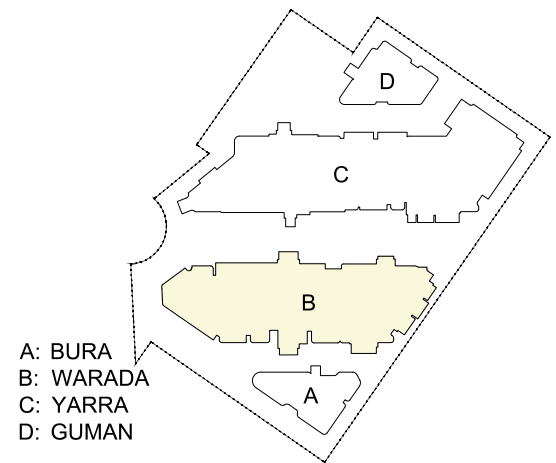
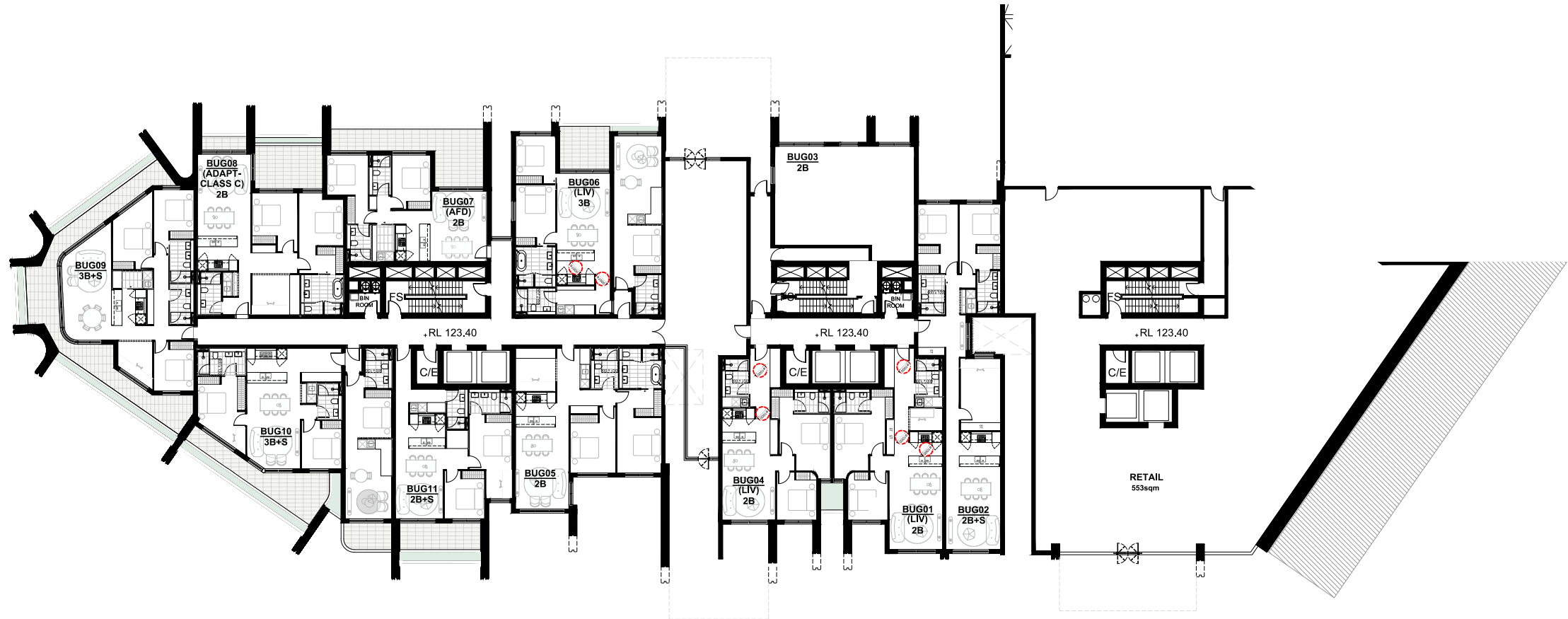


Drawing Title
BUILDING B - GROUND

SCALE 1:400 @ A3

Drawing no:
A512

Project No.
A24033
ISSUE
A

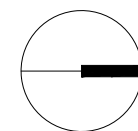


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - UPPER GROUND

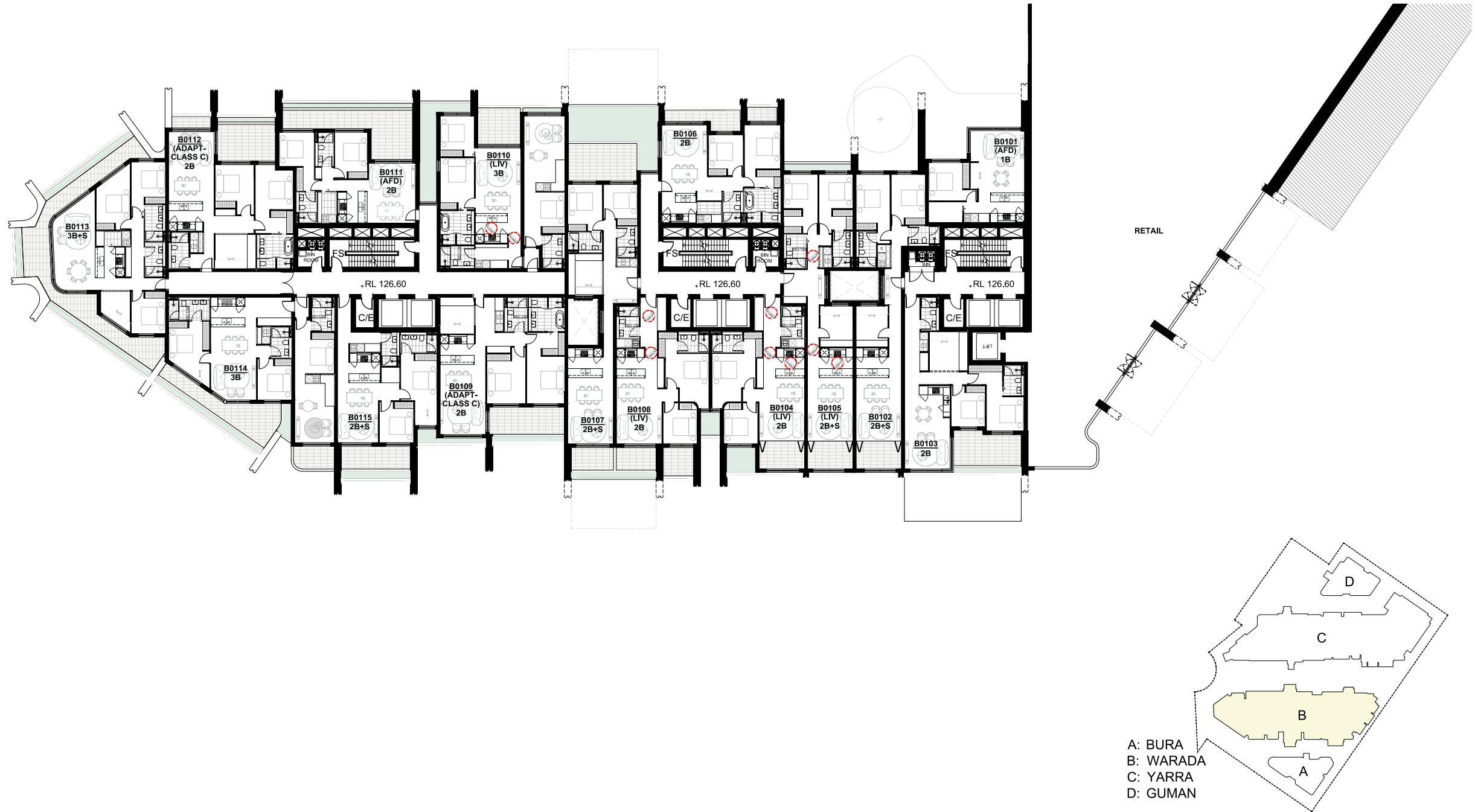
SCALE

1:400 @ A3

Drawing no:
A513

Project No.
A24033

ISSUE
A

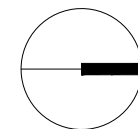


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - LEVEL 1

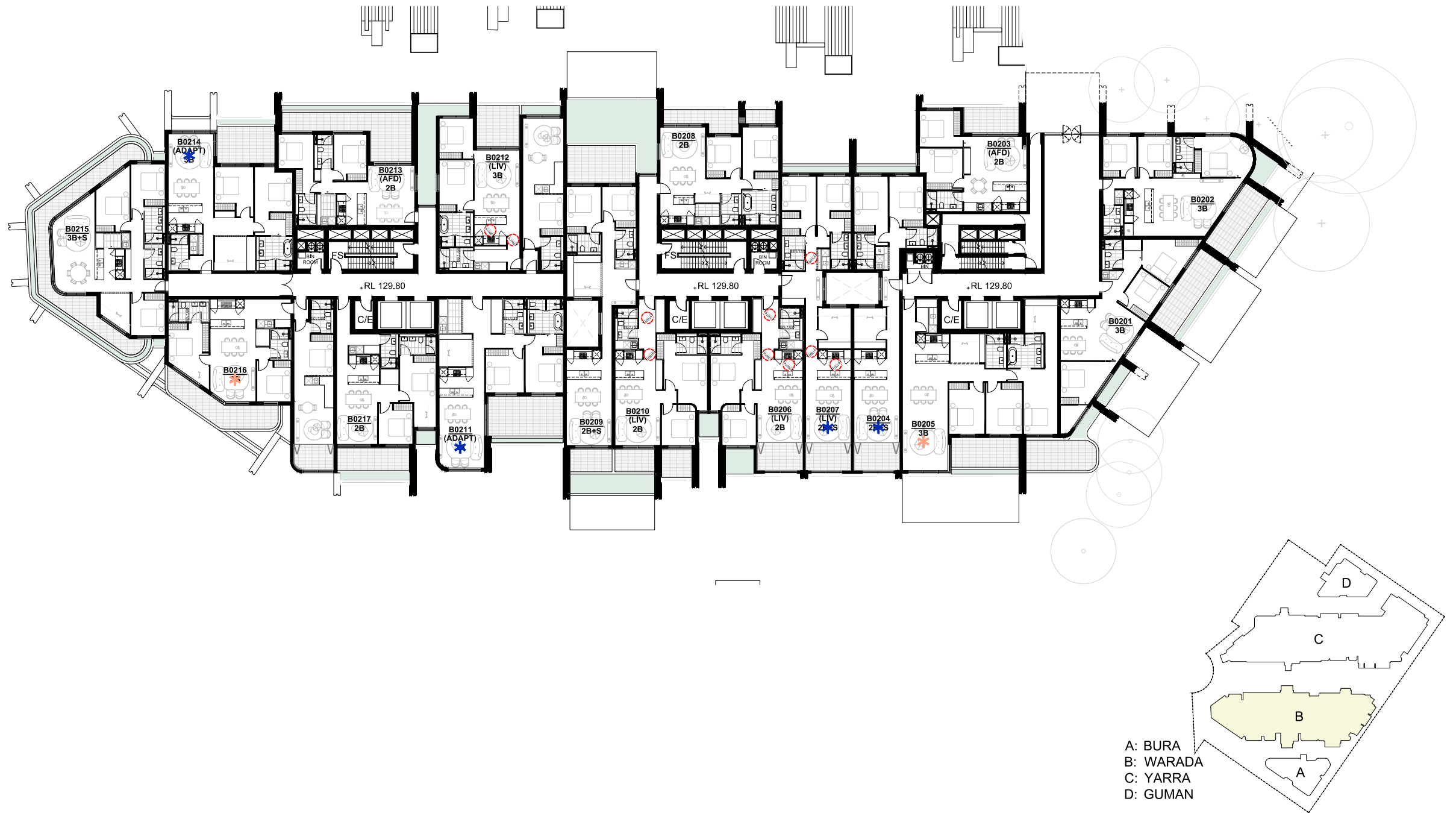
SCALE

1:400 @ A3

Drawing no:
A514

Project No.
A24033

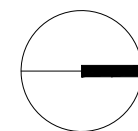
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

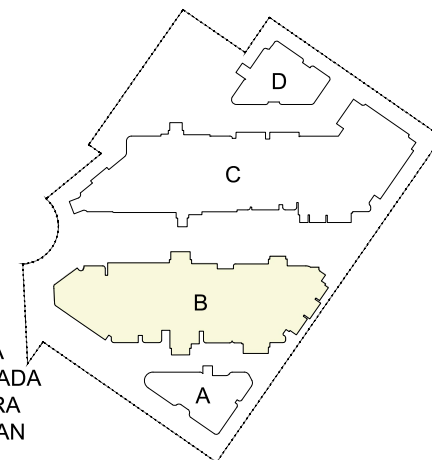


Drawing Title
BUILDING B - LEVEL 2

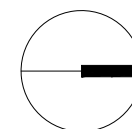
SCALE 1:400 @ A3

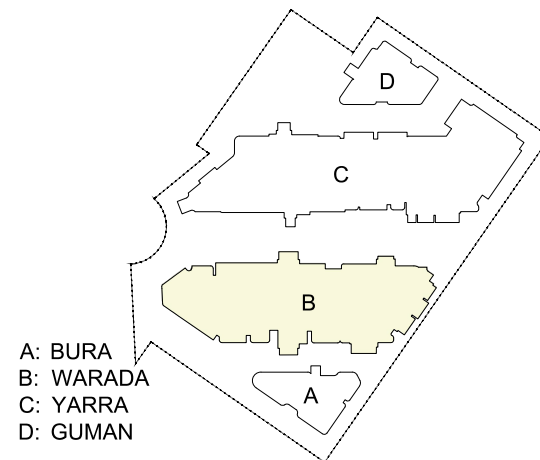
Drawing no:
A515

Project No.
A24033
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN



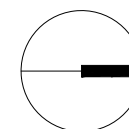


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - LEVEL 4

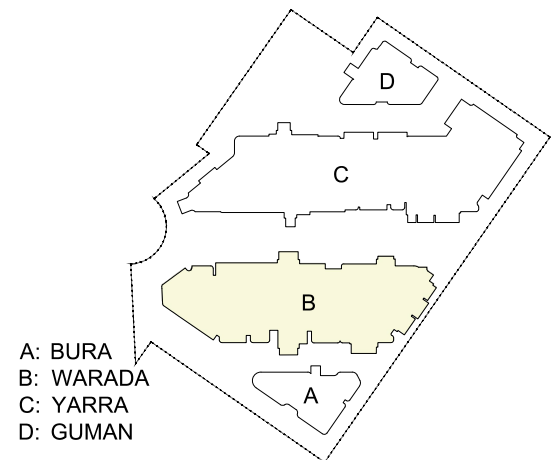
SCALE

1:400 @ A3

Drawing no:
A517

Project No.
A24033

ISSUE
A

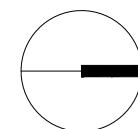


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - LEVEL 5

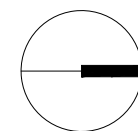
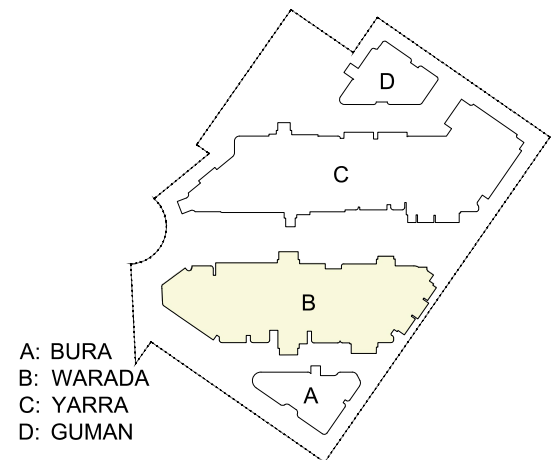
SCALE

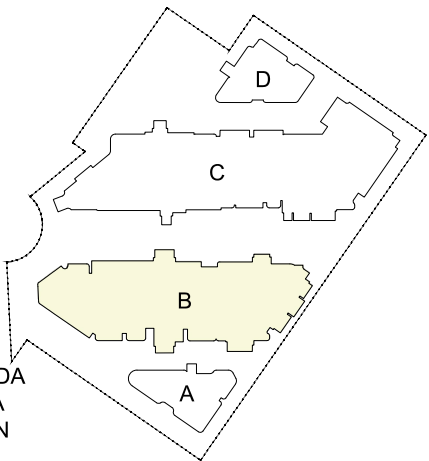
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Drawing no:
A518

Project No.
A24033

ISSUE
A

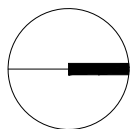




A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



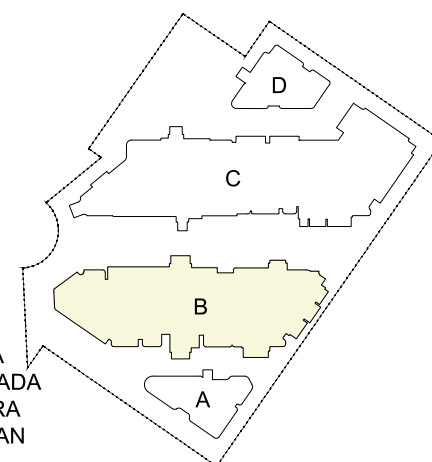
Drawing Title
BUILDING B - LEVEL 7

SCALE
1:400 @ A3

Drawing no:
A520

Project No.
A24033

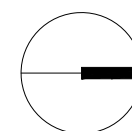
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



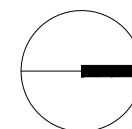
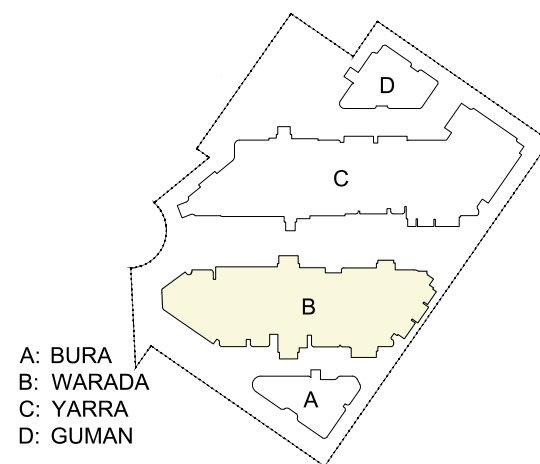
Drawing Title
BUILDING B - LEVEL 8

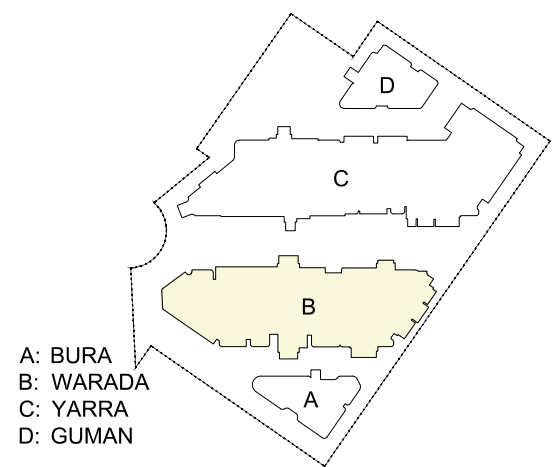
SCALE

1:400 @ A3

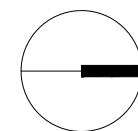
Drawing no:
A521

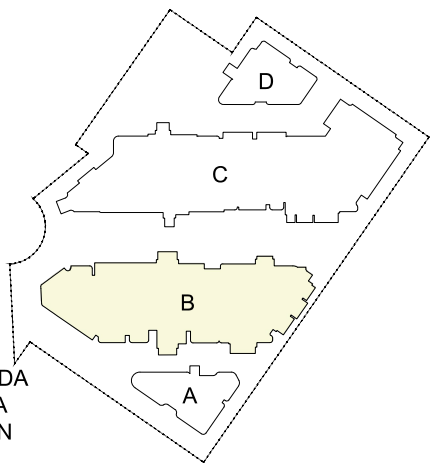
Project No.
A24033
ISSUE
A



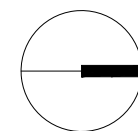


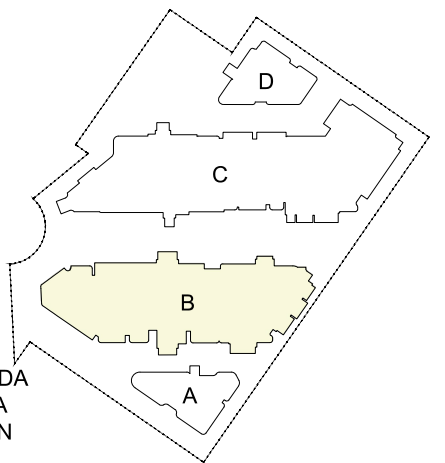
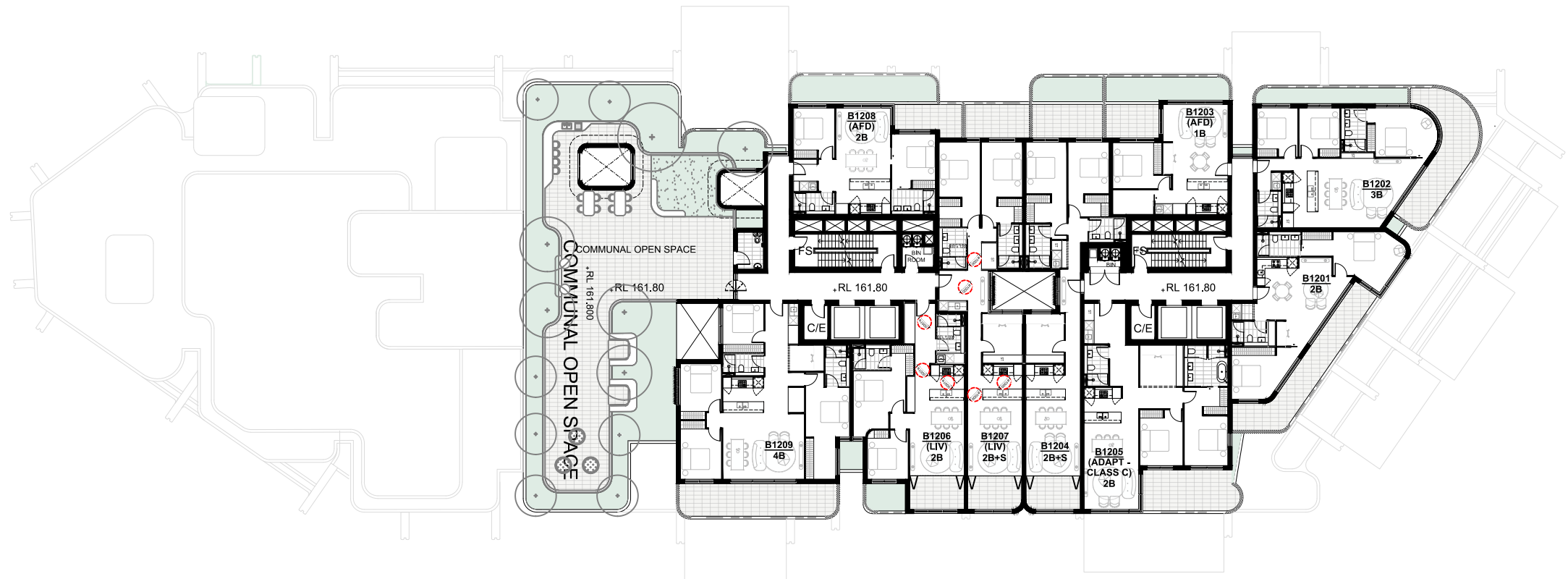
A: BURA
B: WARADA
C: YARRA
D: GUMAN





A: BURA
B: WARADA
C: YARRA
D: GUMAN



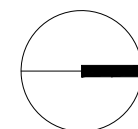


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



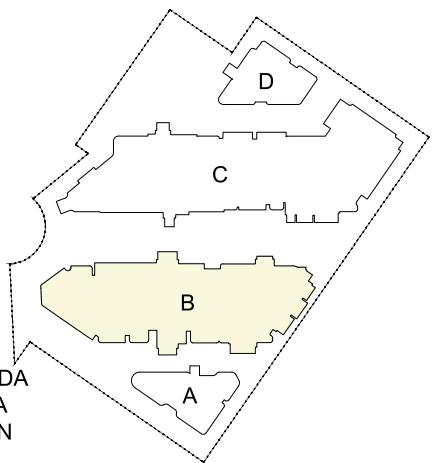
Drawing Title
BUILDING B - LEVEL 12

SCALE 1:400 @ A3

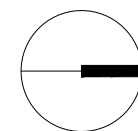
Drawing no:
A525

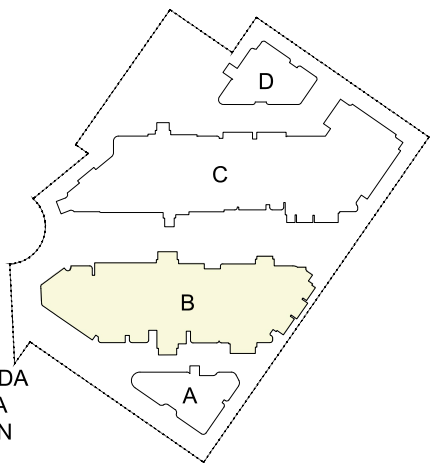
Project No.
A24033

ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN



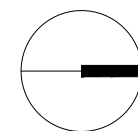


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - LEVEL 14

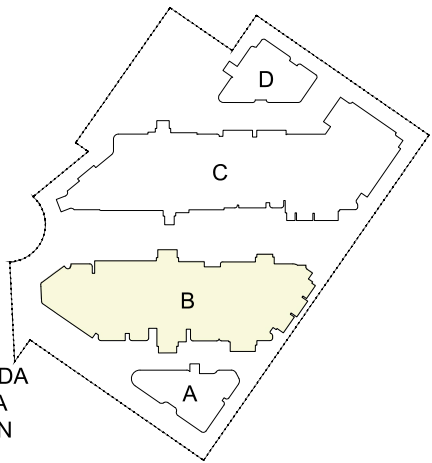
SCALE

1:400 @ A3

Drawing no:
A527

Project No.
A24033

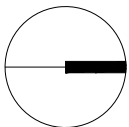
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



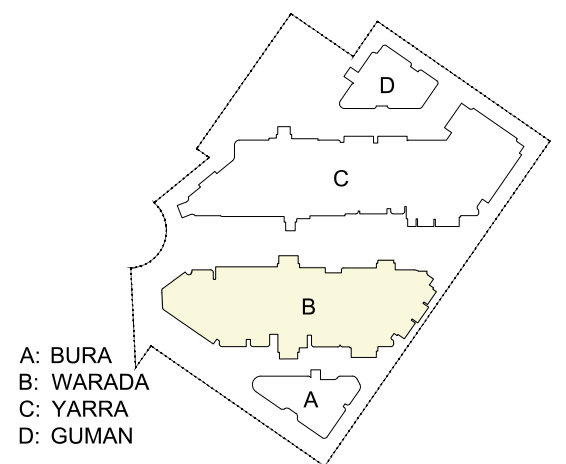
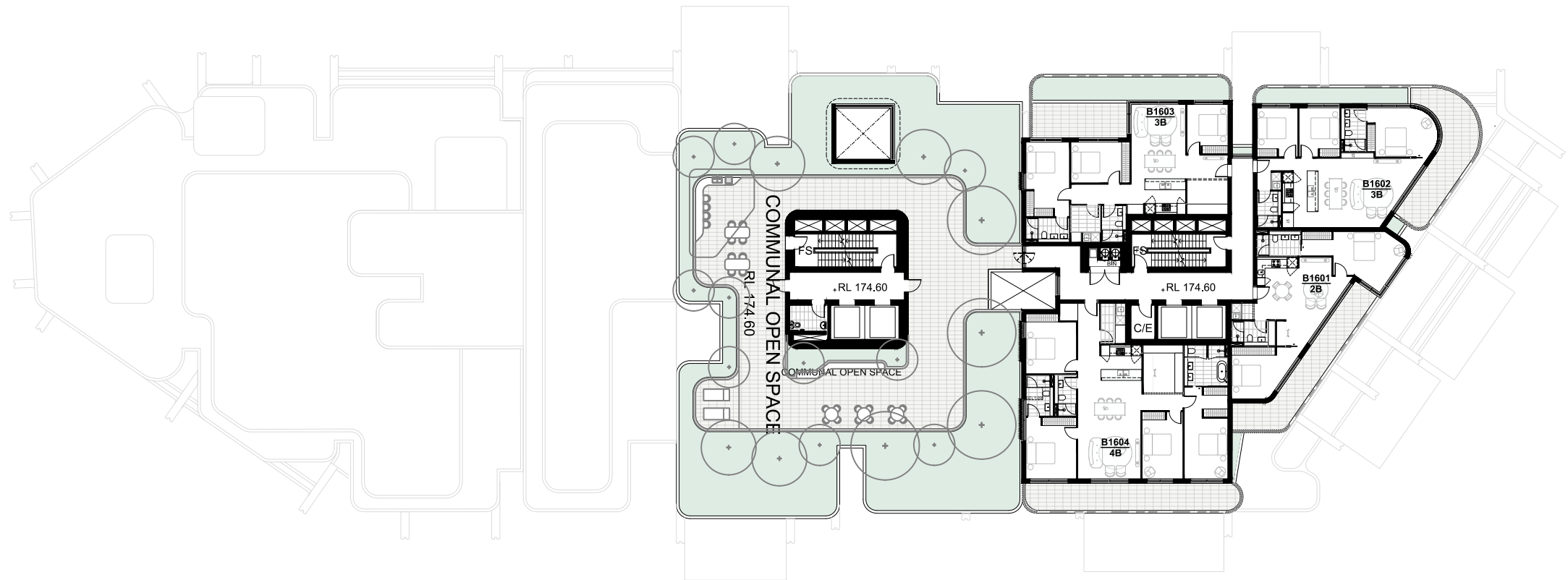
Drawing Title
BUILDING B - LEVEL 15

SCALE
1:400 @ A3

Drawing no:
A528

Project No.
A24033

ISSUE
A

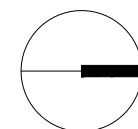


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - LEVEL 16

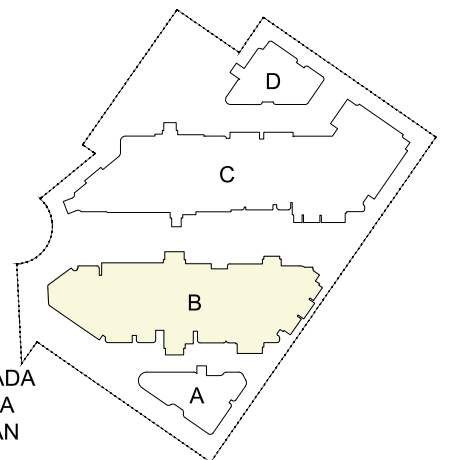
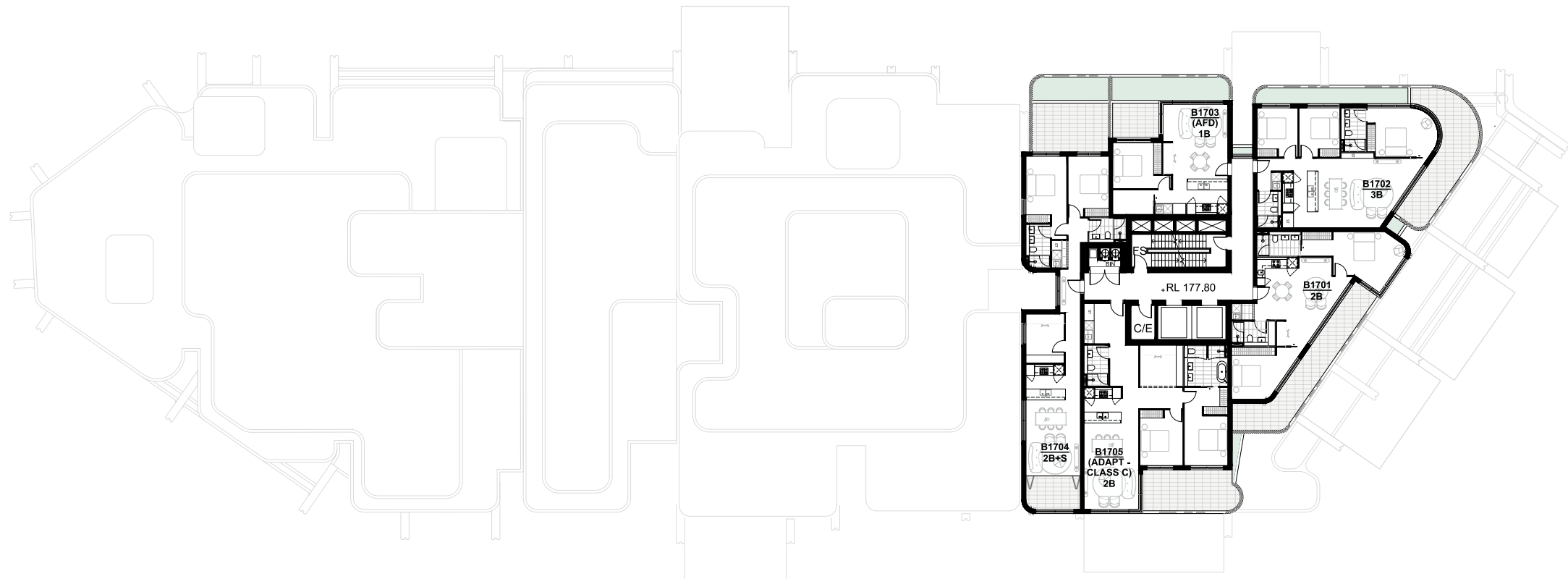
SCALE

1:400 @ A3

Drawing no:
A529

Project No.
A24033

ISSUE
A

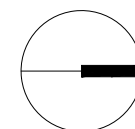


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - LEVEL 17

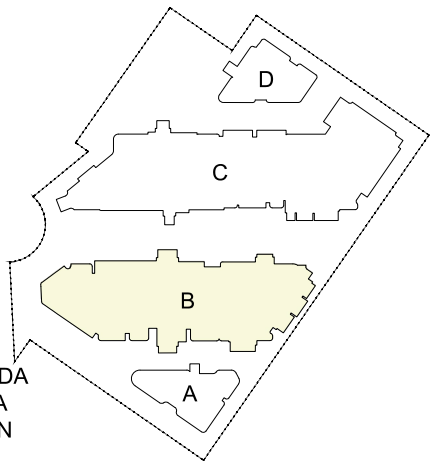
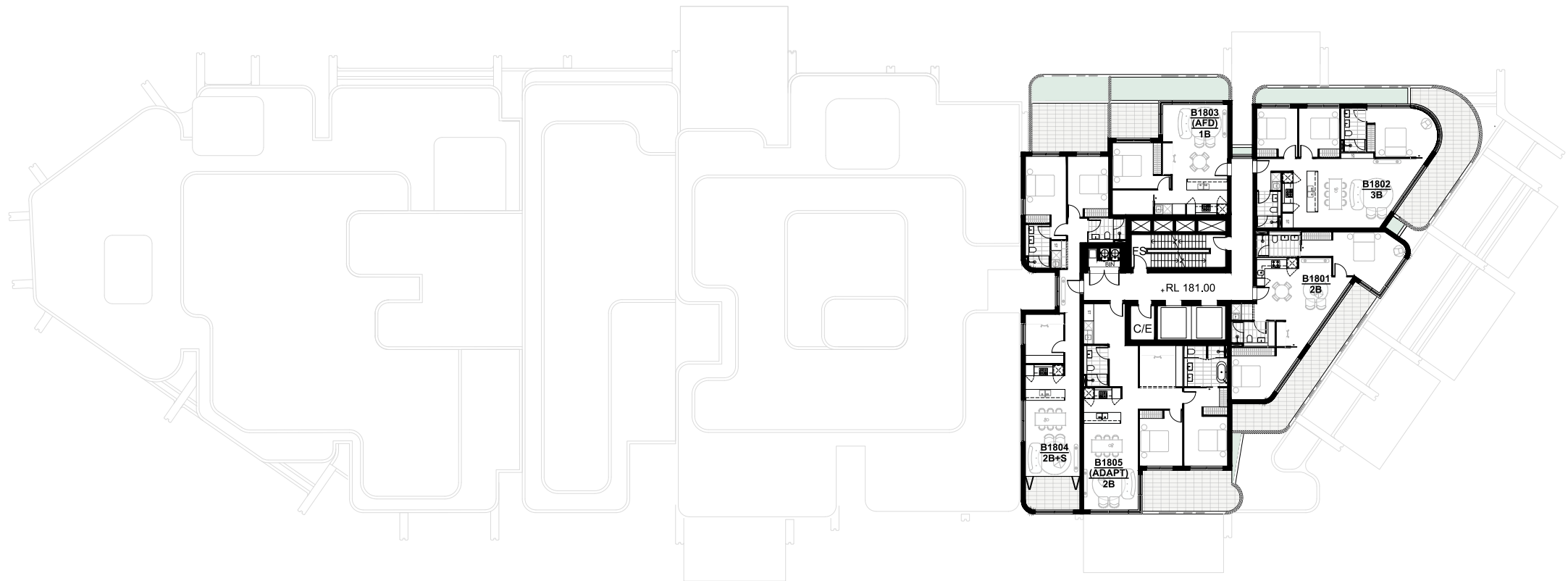
SCALE

1:400 @ A3

Drawing no:
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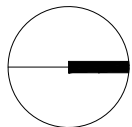
Project No.
A24033

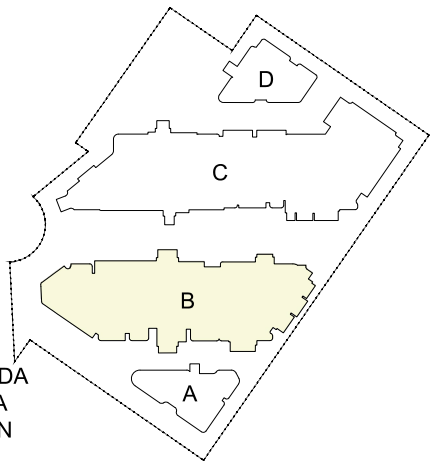
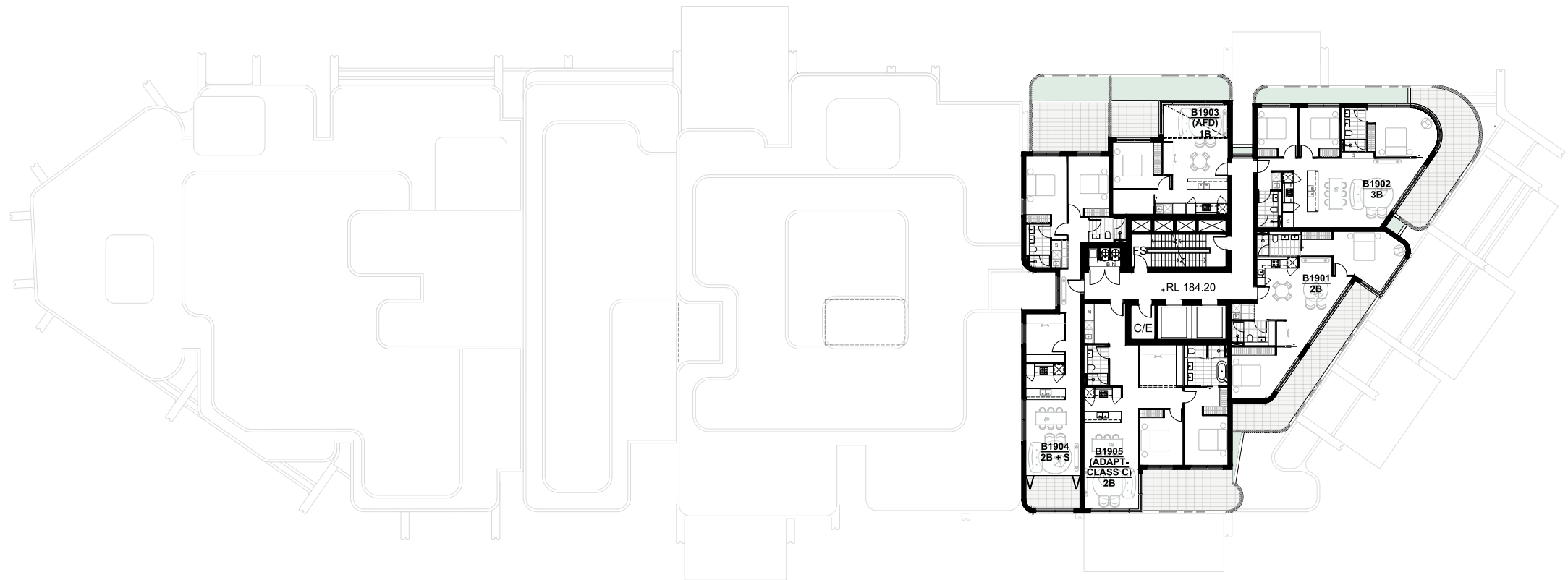
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

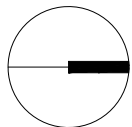
Rev	Description	Date
A	SSDA	2024-12-04

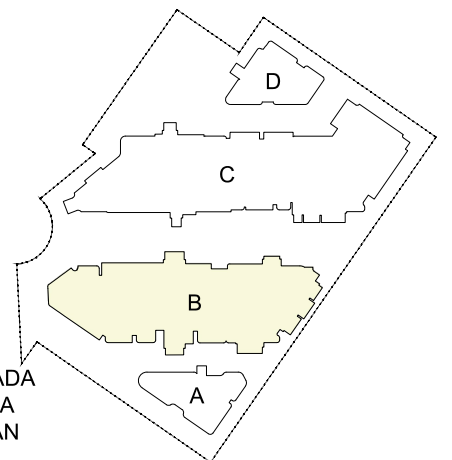
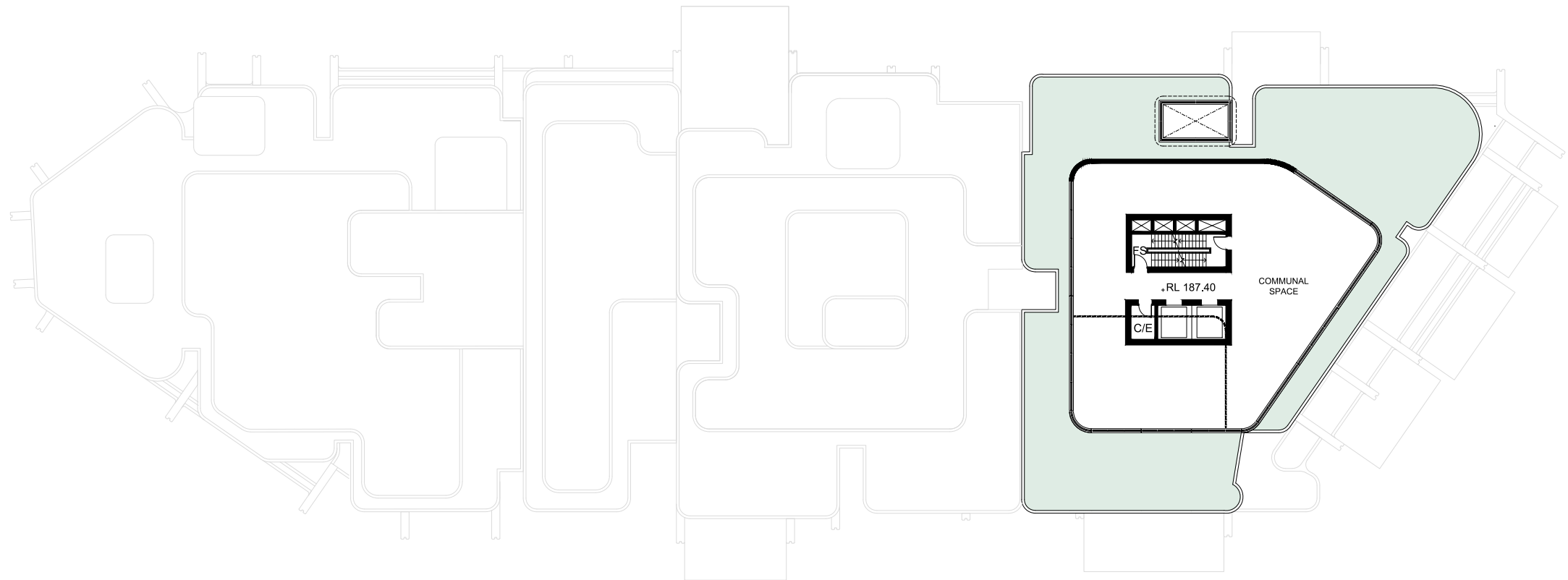




A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04



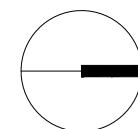


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - LEVEL 20

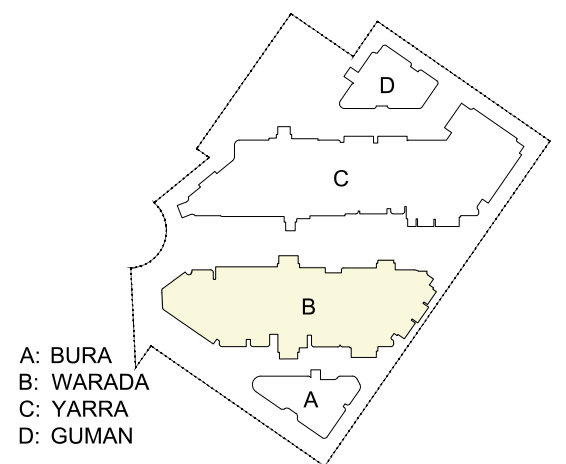
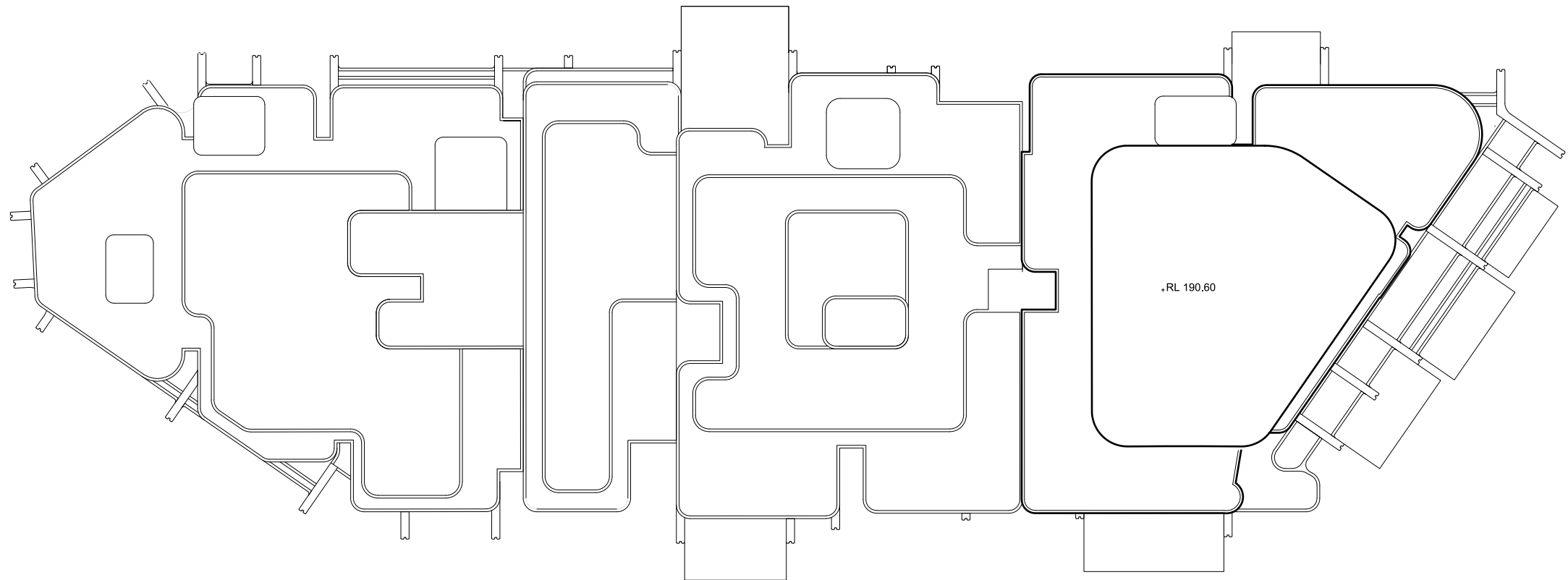
SCALE

1:400 @ A3

Drawing no:
A533

Project No.
A24033

ISSUE
A

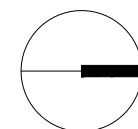


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING B - ROOF

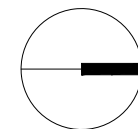
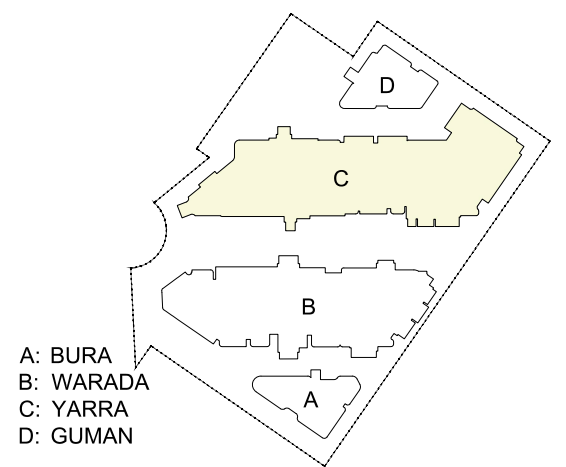
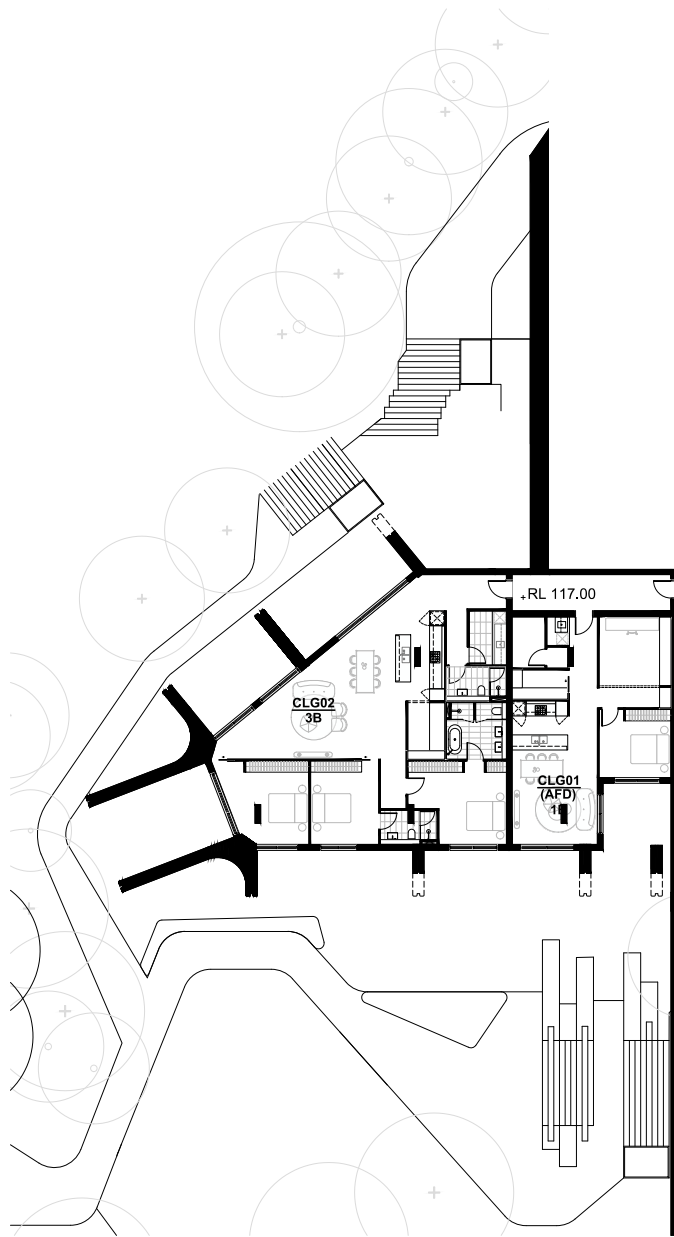
SCALE

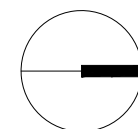
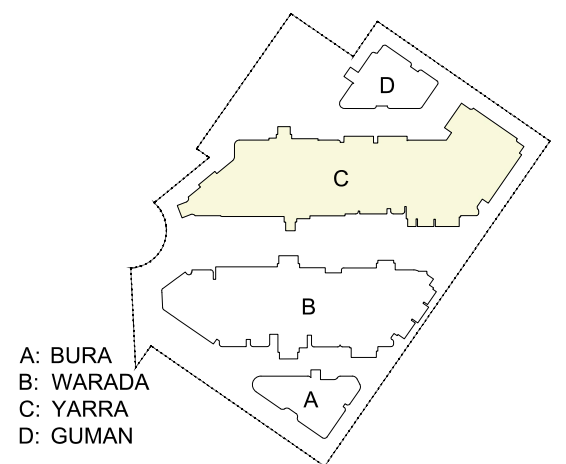
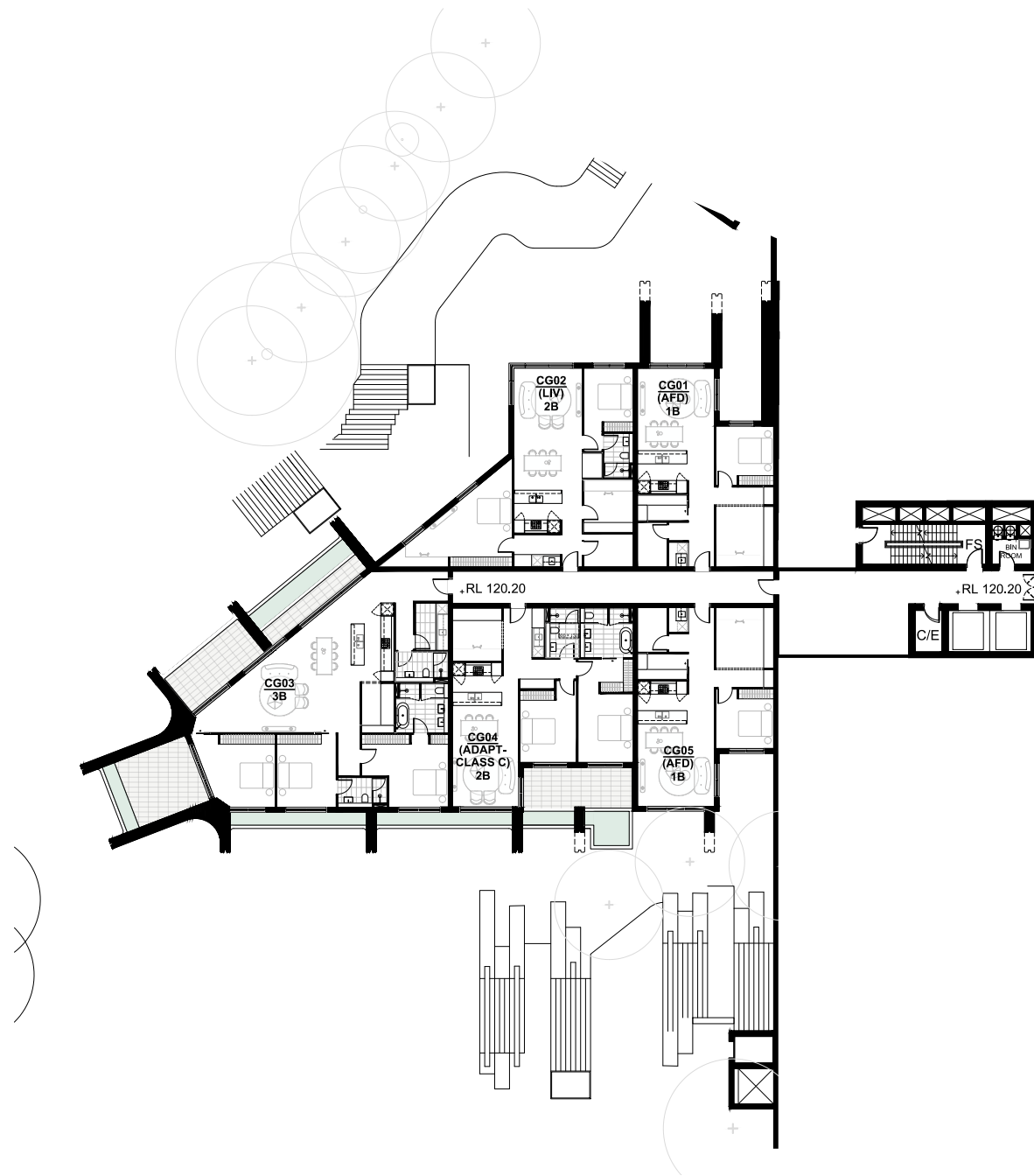
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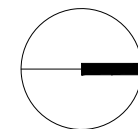
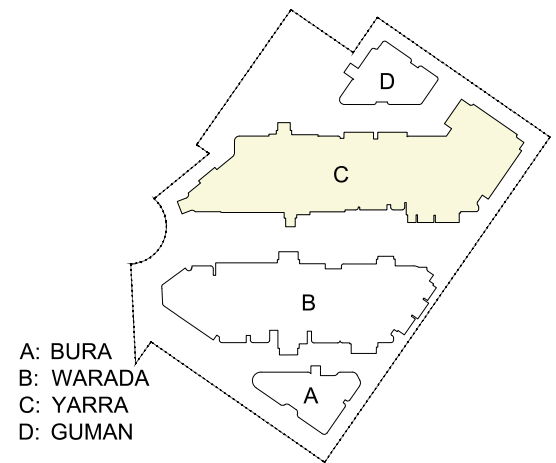
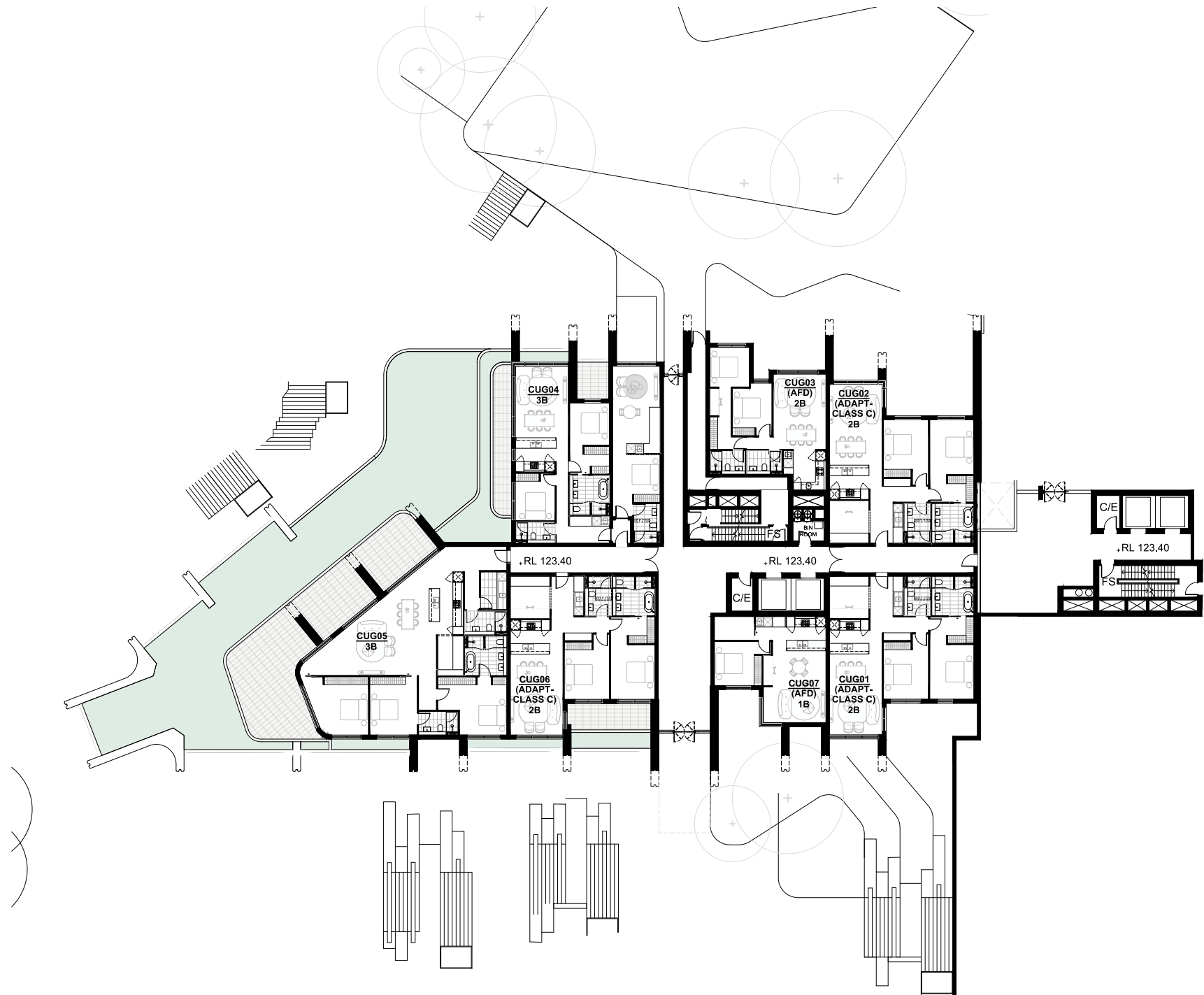
Drawing no:
A534

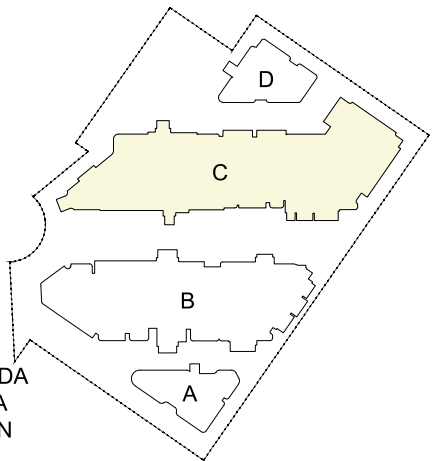
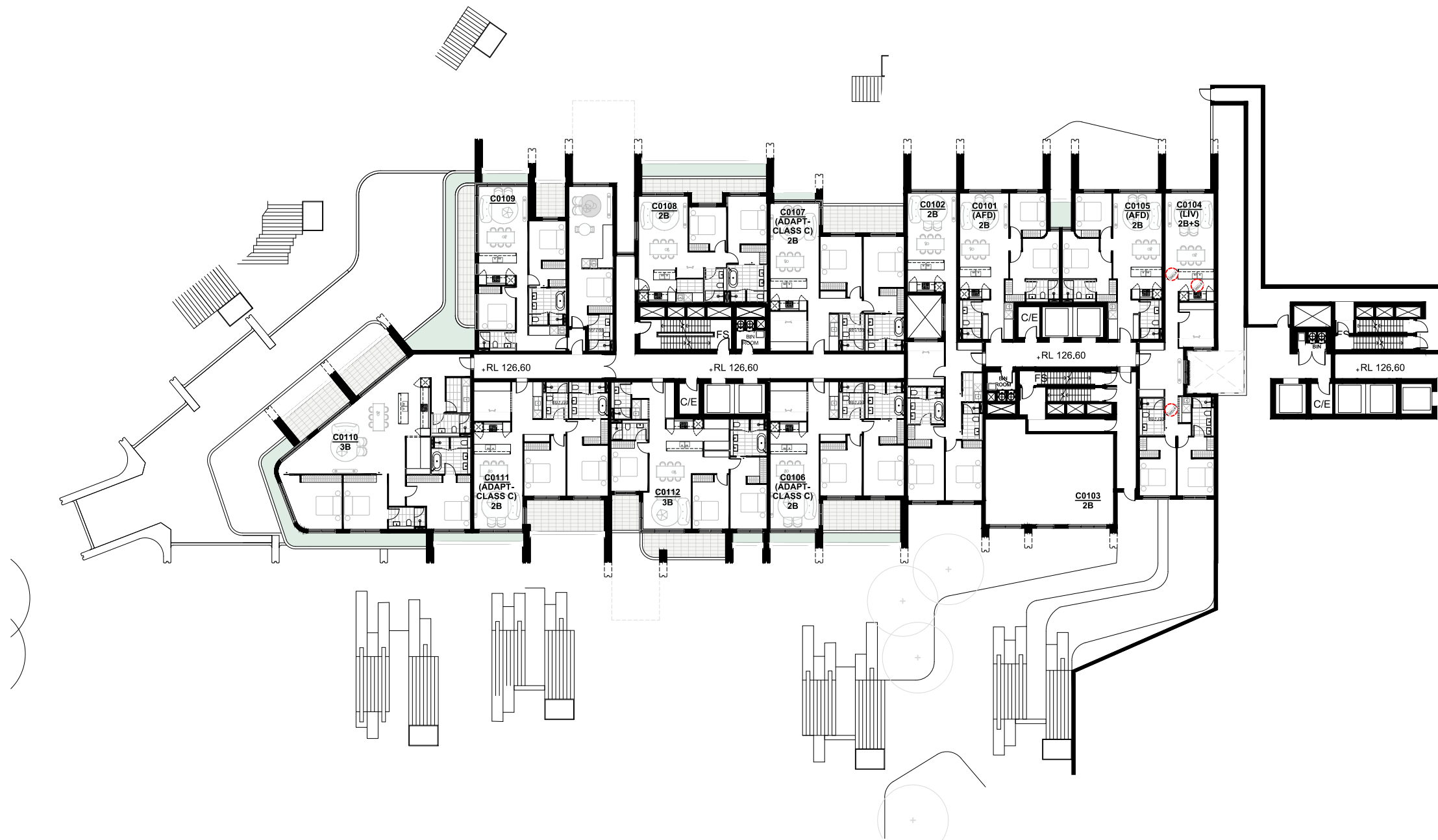
Project No.
A24033

ISSUE
A







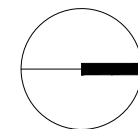


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 1

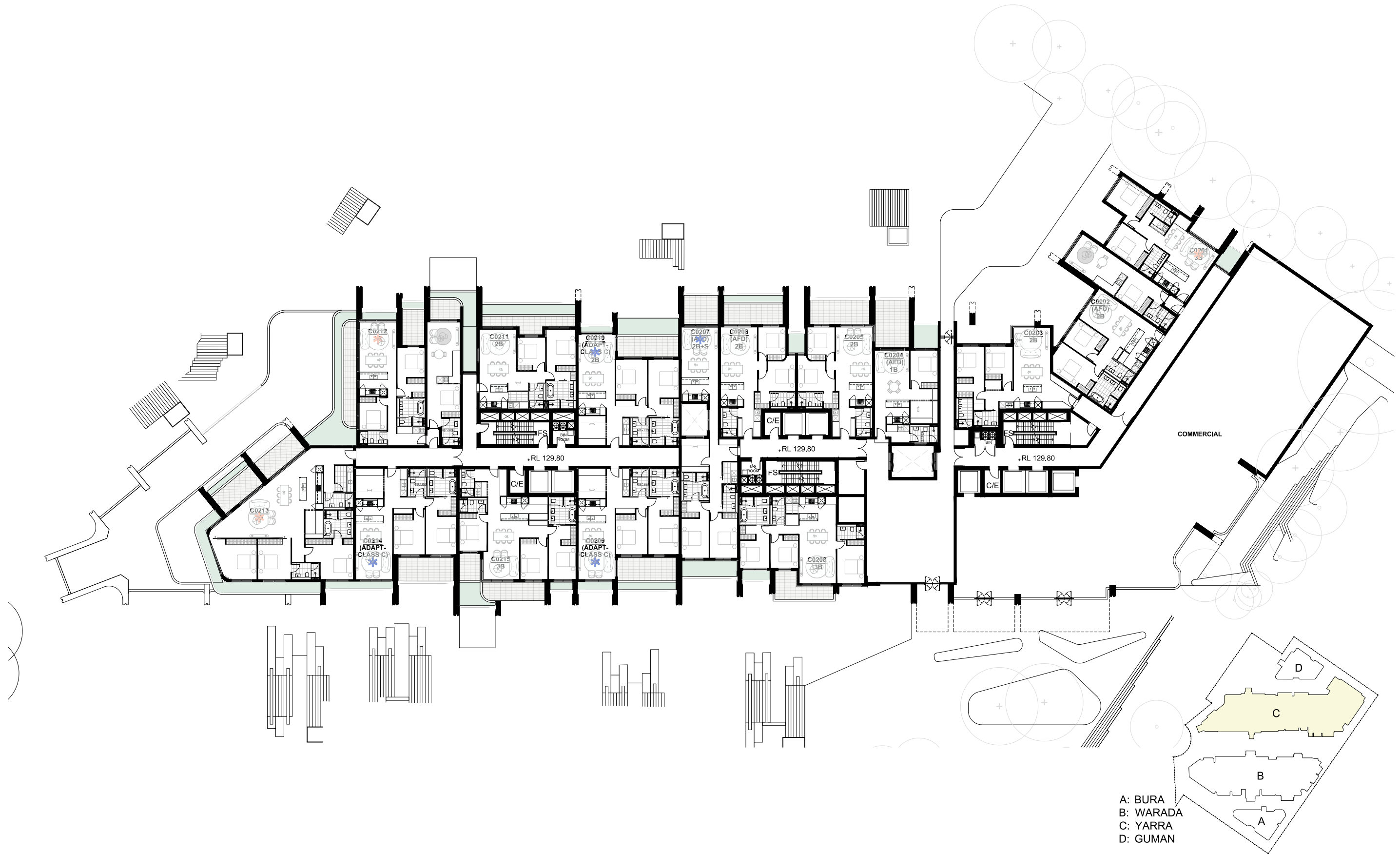
SCALE

1:400 @ A3

Drawing no:
A544

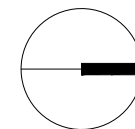
Project No.
A24033

ISSUE
A



Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



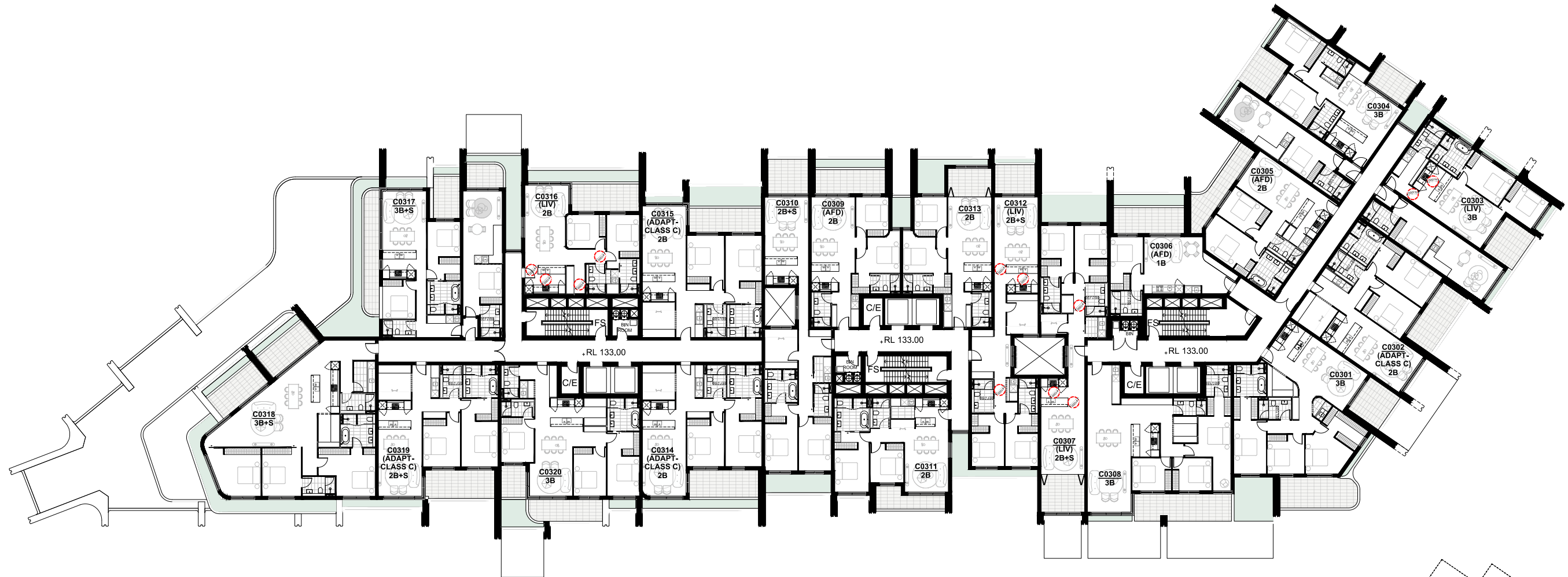
Drawing Title
BUILDING C - LEVEL 2

SCALE 1:400 @ A3

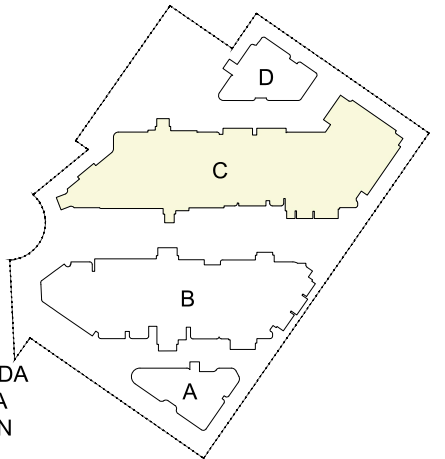
Drawing no:
A545

Project No.
A24033

ISSUE
A

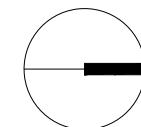


A: BURA
B: WARADA
C: YARRA
D: GUMAN



Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

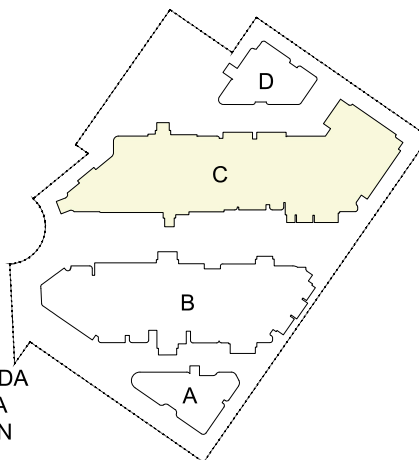


Drawing Title
BUILDING C - LEVEL 3

SCALE 1:400 @ A3

Drawing no:
A546

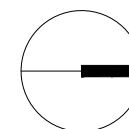
Project No.
A24033
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



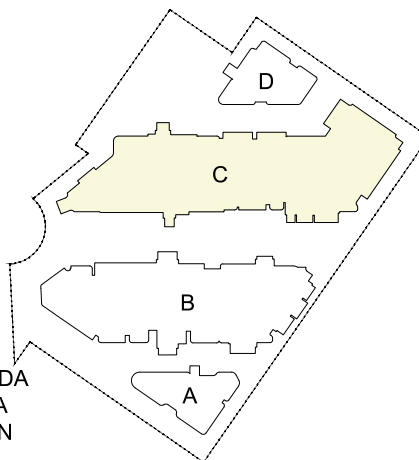
Drawing Title
BUILDING C - LEVEL 4

SCALE 1:400 @ A3

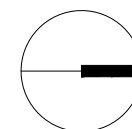
Drawing no:
A544

Project No.
A24033

ISSUE
A

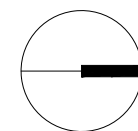


A: BURA
B: WARADA
C: YARRA
D: GUMAN





A: BURA
B: WARADA
C: YARRA
D: GUMAN

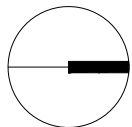




A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 7

SCALE
1:400 @ A3

Drawing no:
A547

Project No.
A24033

ISSUE
A

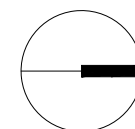


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 8

SCALE

1:400 @ A3

Drawing no:
A548

Project No.
A24033

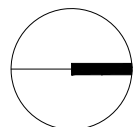
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title BUILDING C - LEVEL 9	Project No. A24033
SCALE 1:400 @ A3	ISSUE A
Drawing no: A549	

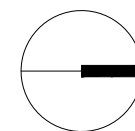


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 10

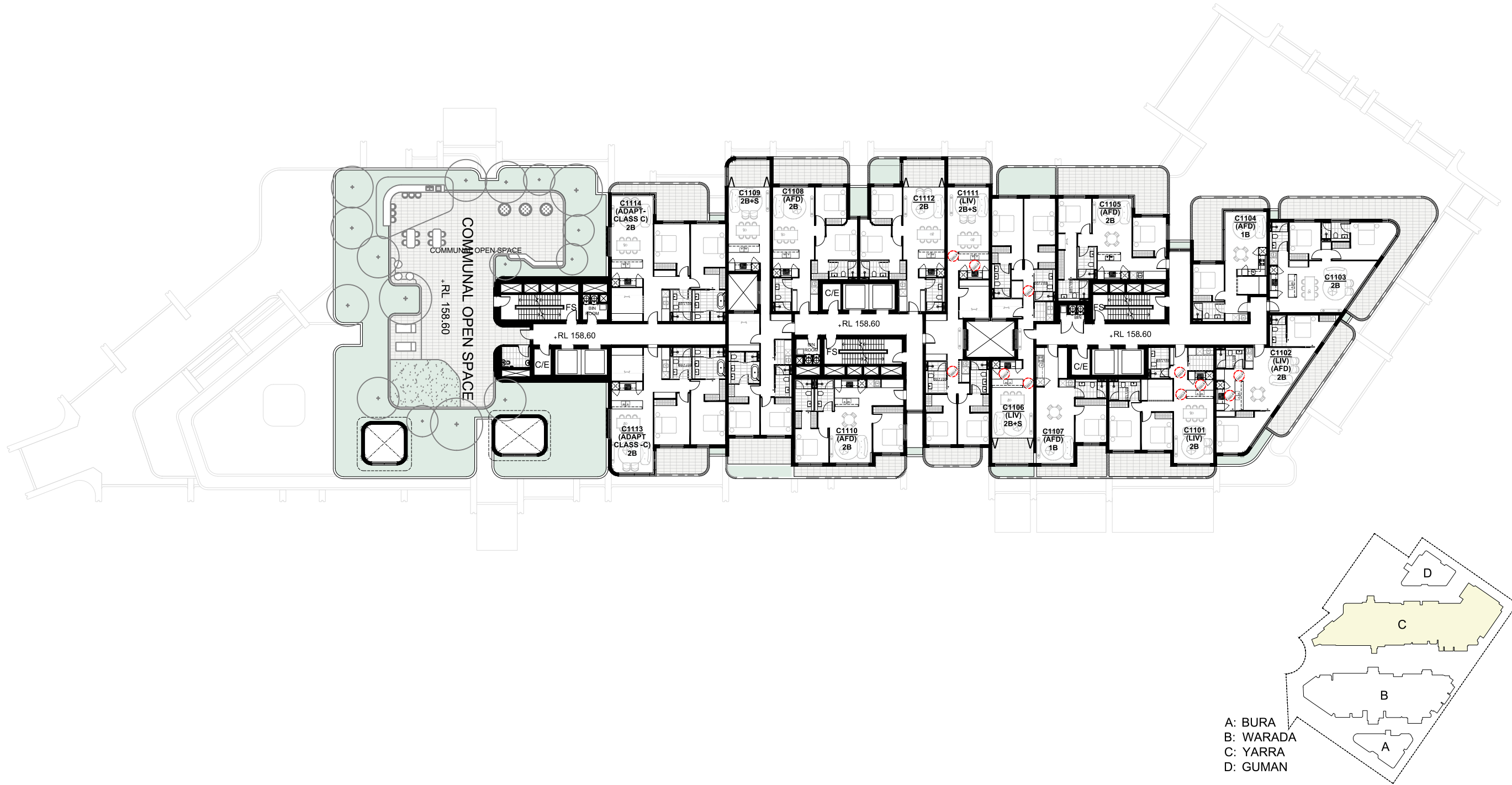
SCALE

1:400 @ A3

Drawing no:
A550

Project No.
A24033

ISSUE
A

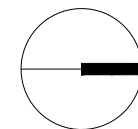


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 11

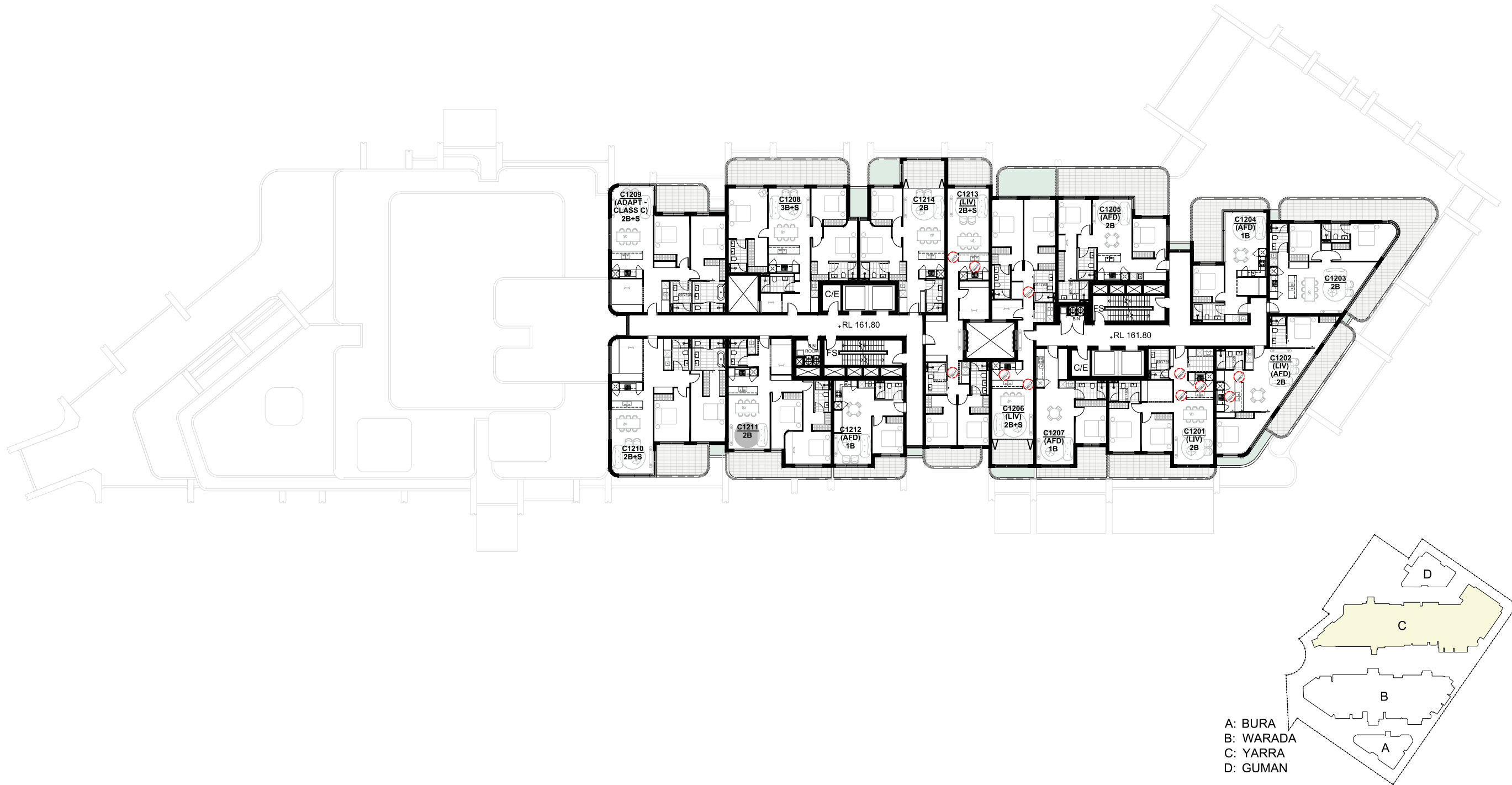
SCALE

1:400 @ A3

Drawing no:
A551

Project No.
A24033

ISSUE
A

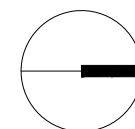


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 12

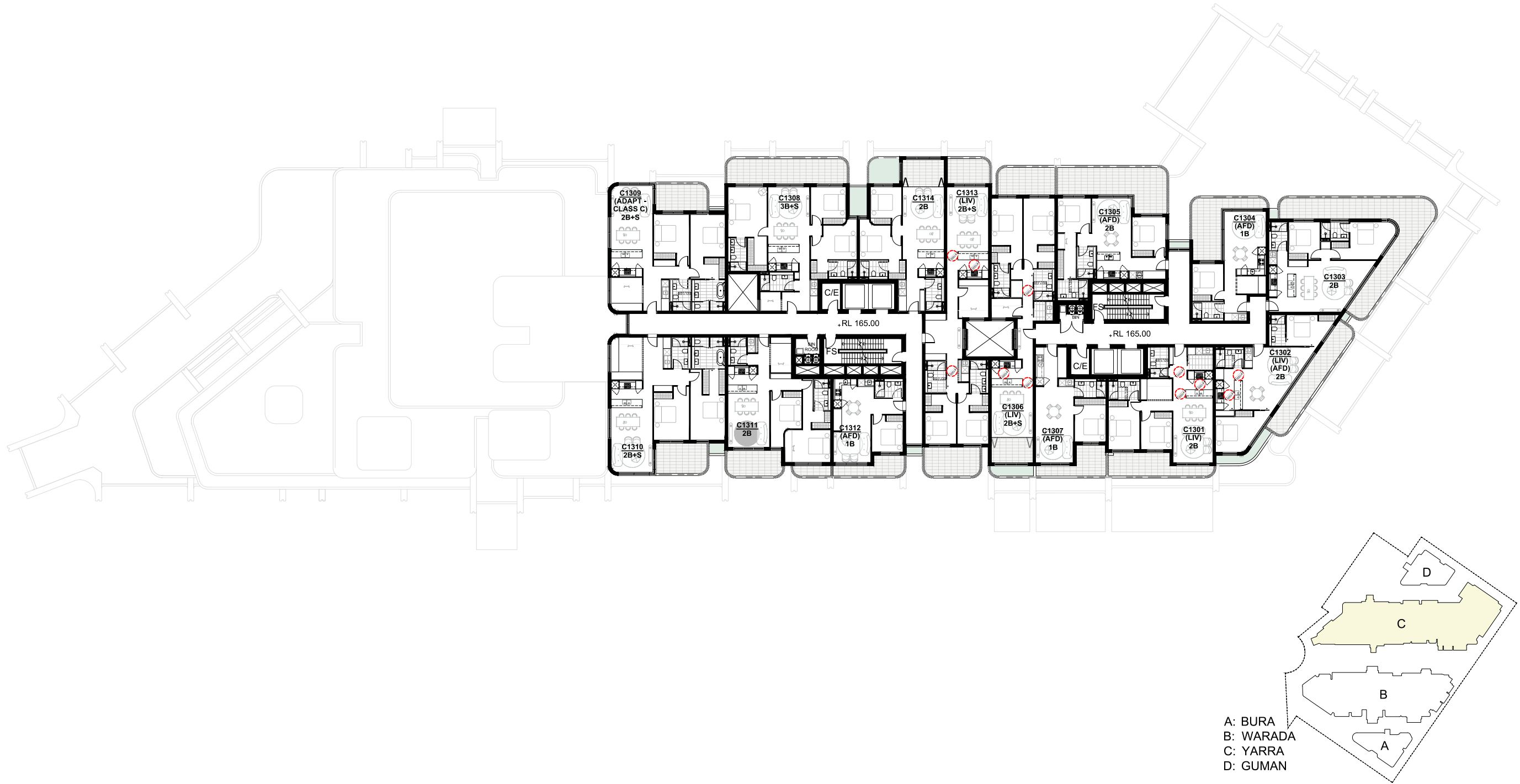
SCALE

1:400 @ A3

Drawing no:
A552

Project No.
A24033

ISSUE
A

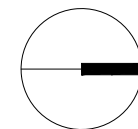


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 13

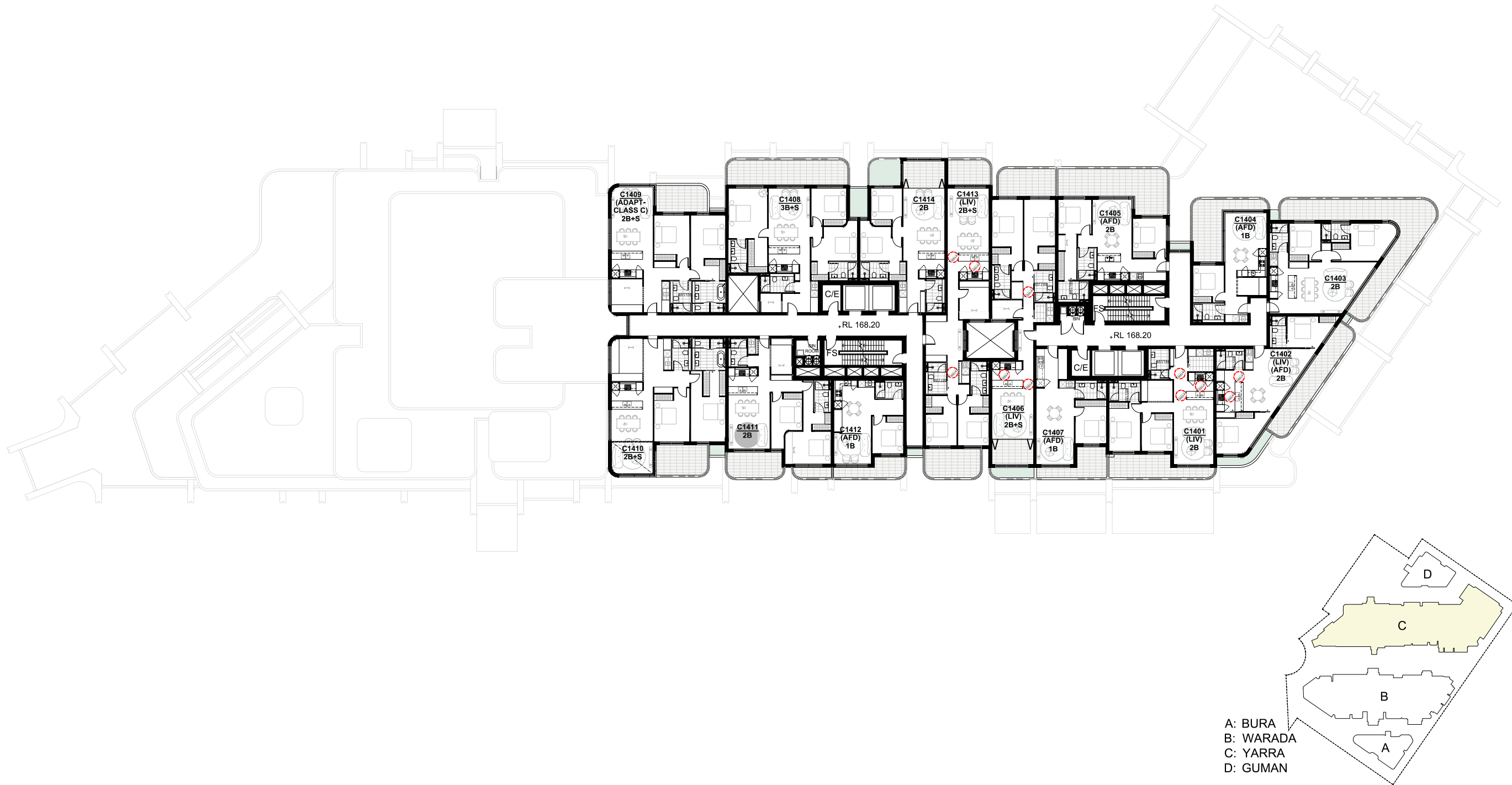
SCALE

1:400 @ A3

Drawing no:
A553

Project No.
A24033

ISSUE
A

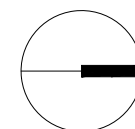


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 14

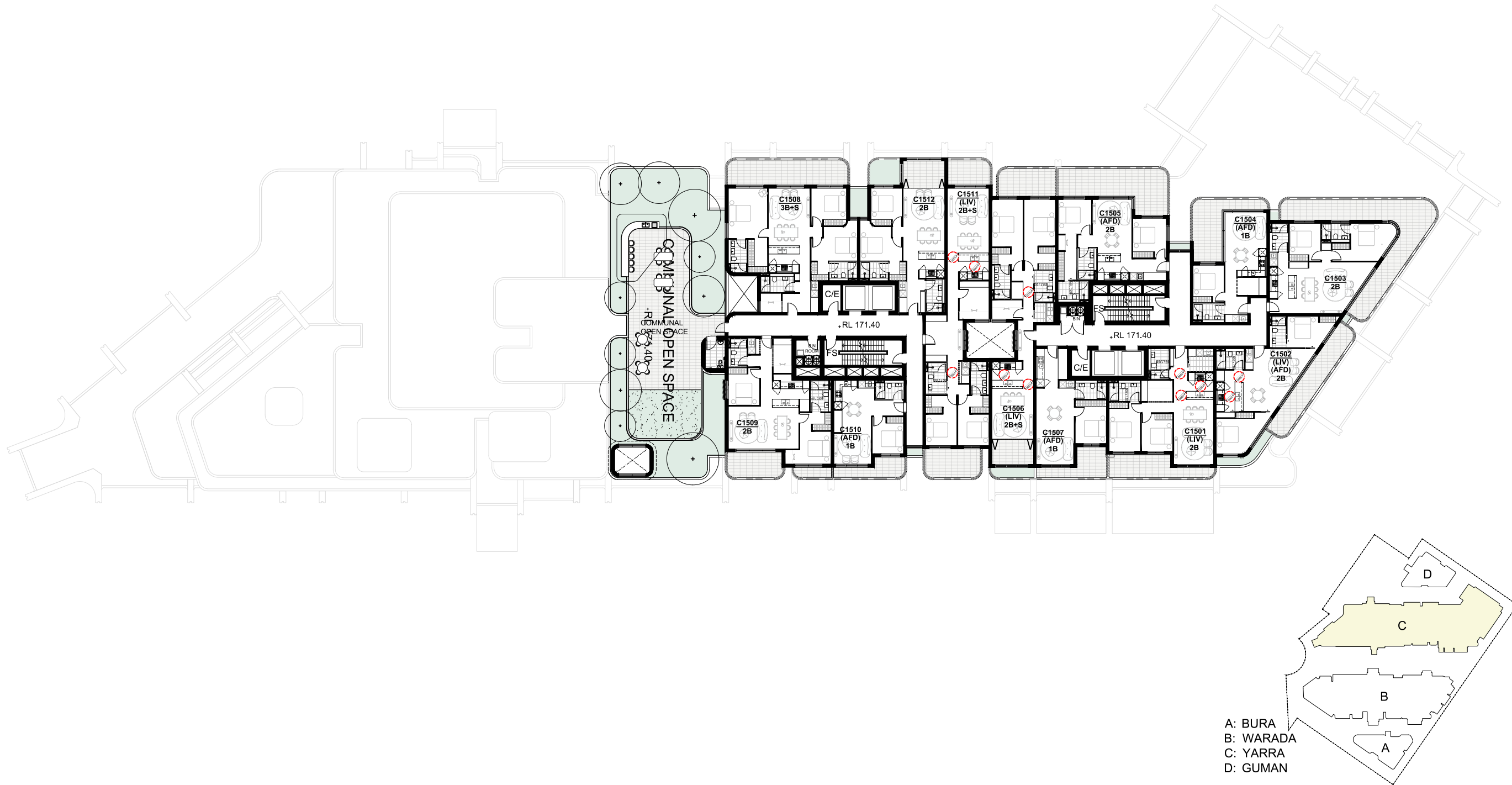
SCALE

1:400 @ A3

Drawing no:
A554

Project No.
A24033

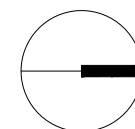
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

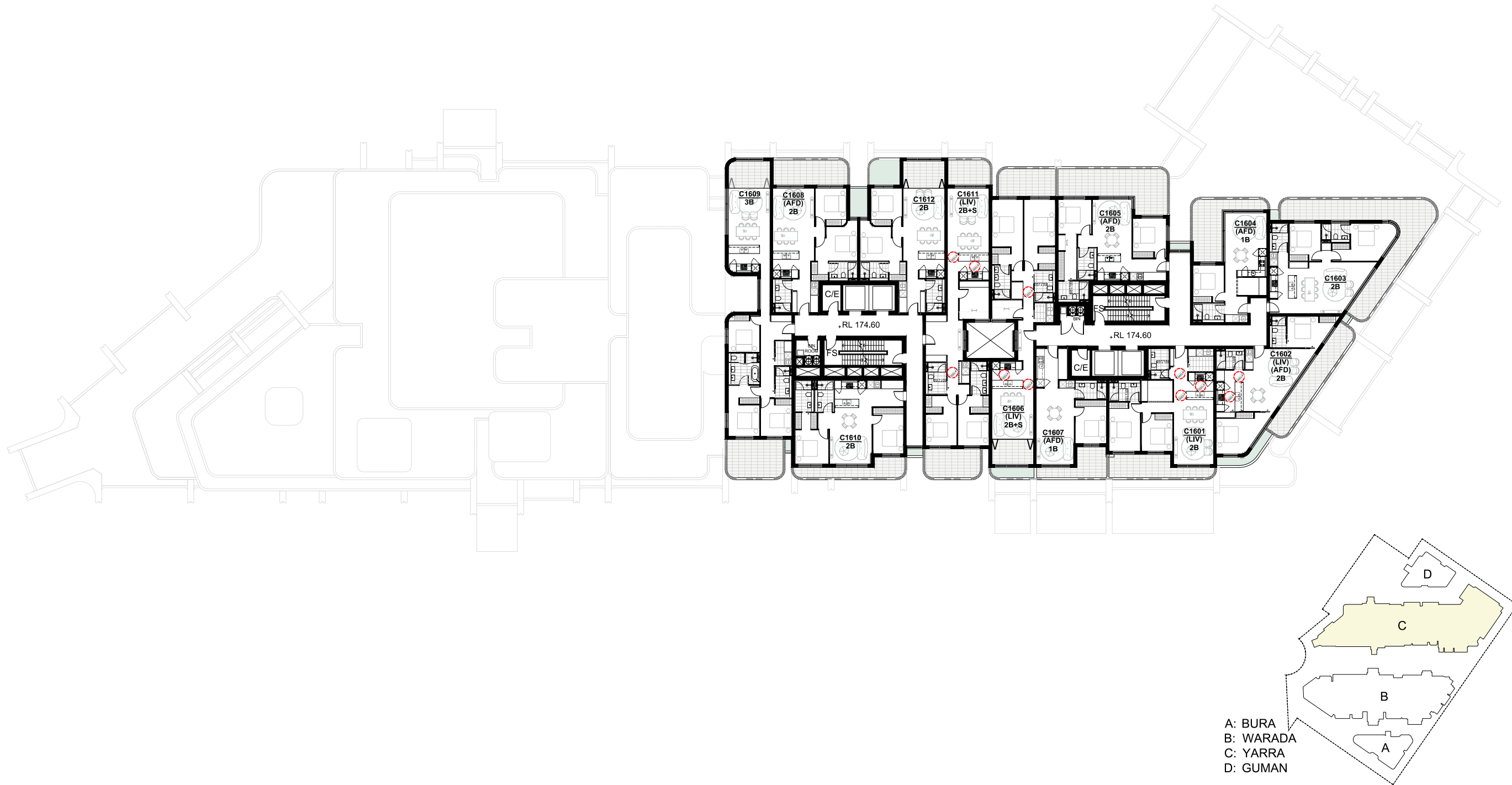


Drawing Title
BUILDING C - LEVEL 15

SCALE 1:400 @ A3

Drawing no:
A555

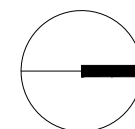
Project No.
A24033
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

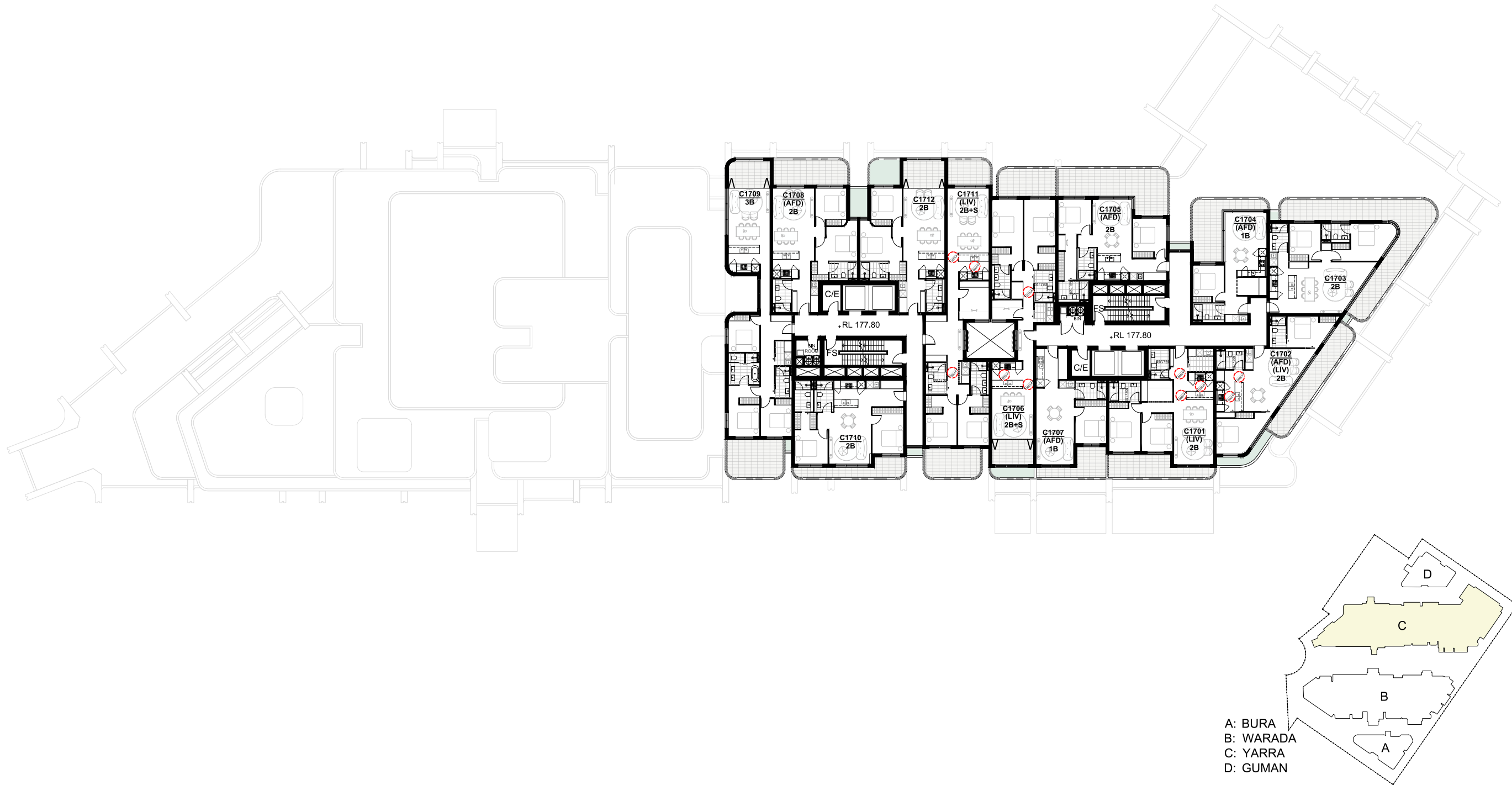


Drawing Title
BUILDING C - LEVEL 16

SCALE 1:400 @ A3

Drawing no:
A556

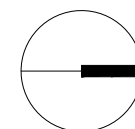
Project No.
A24033
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

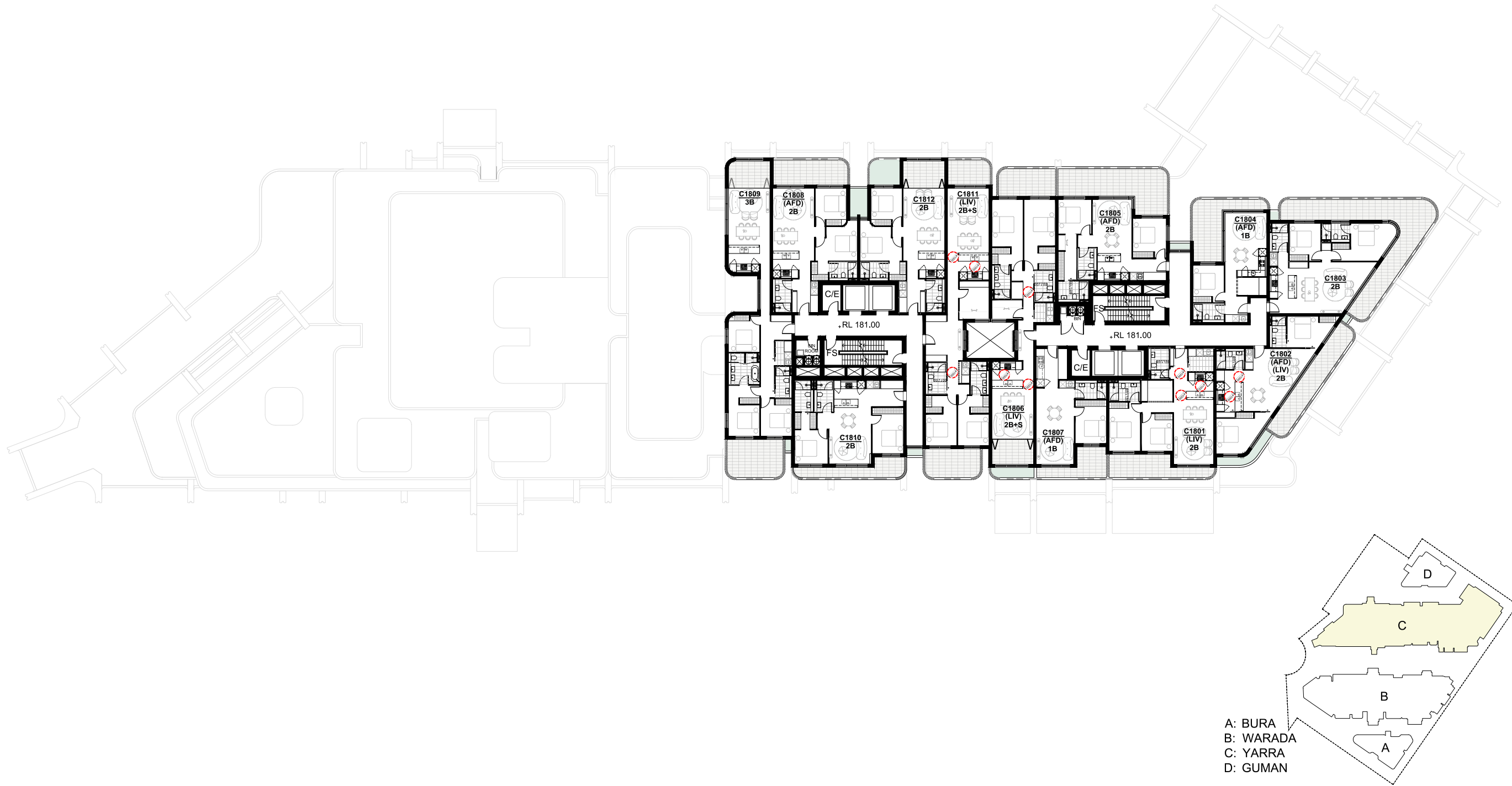


Drawing Title
BUILDING C - LEVEL 17

SCALE 1:400 @ A3

Drawing no:
A557

Project No.
A24033
ISSUE
A

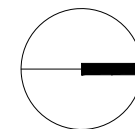


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 18

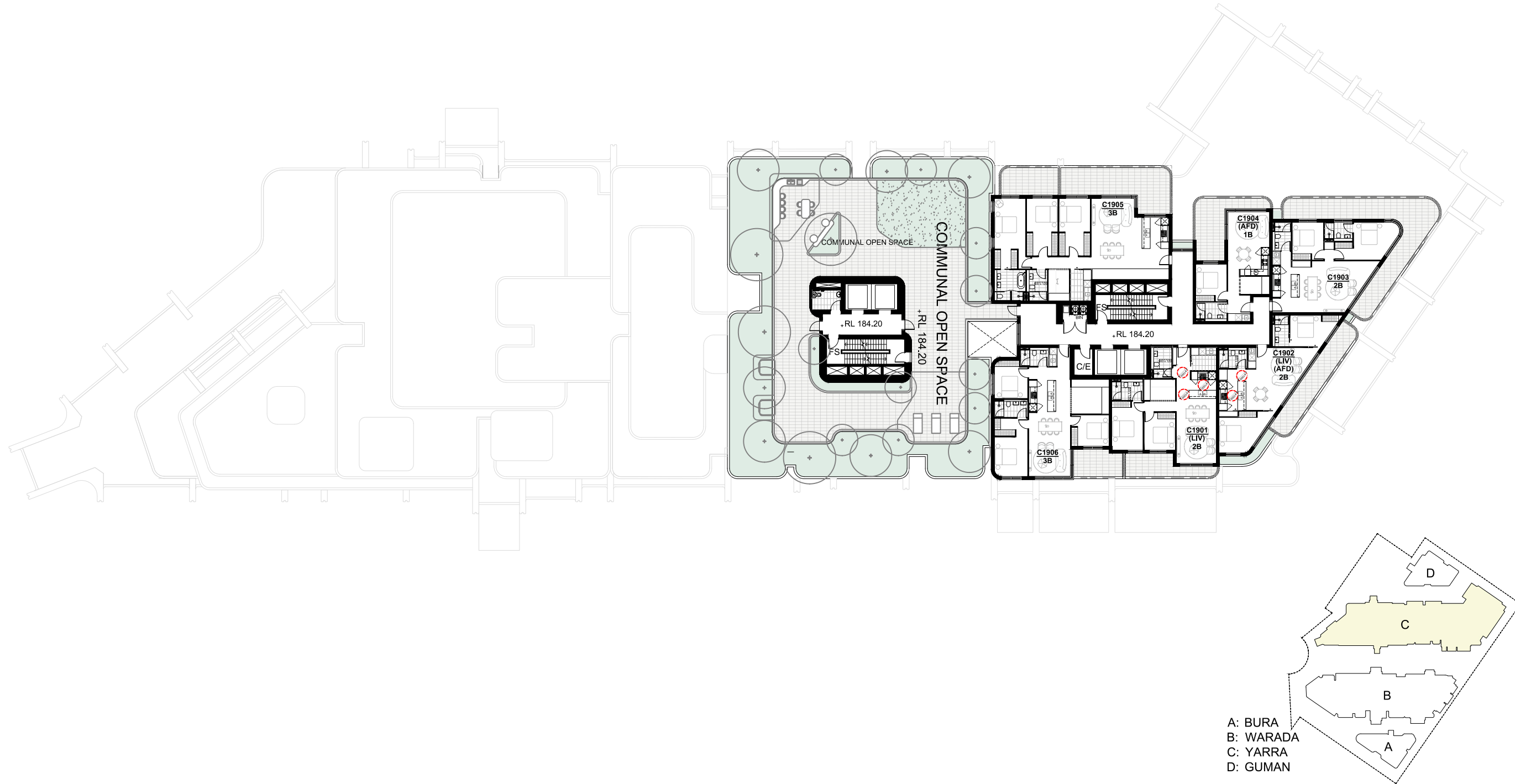
SCALE

1:400 @ A3

Drawing no:
A558

Project No.
A24033

ISSUE
A

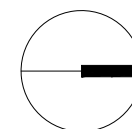


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 19

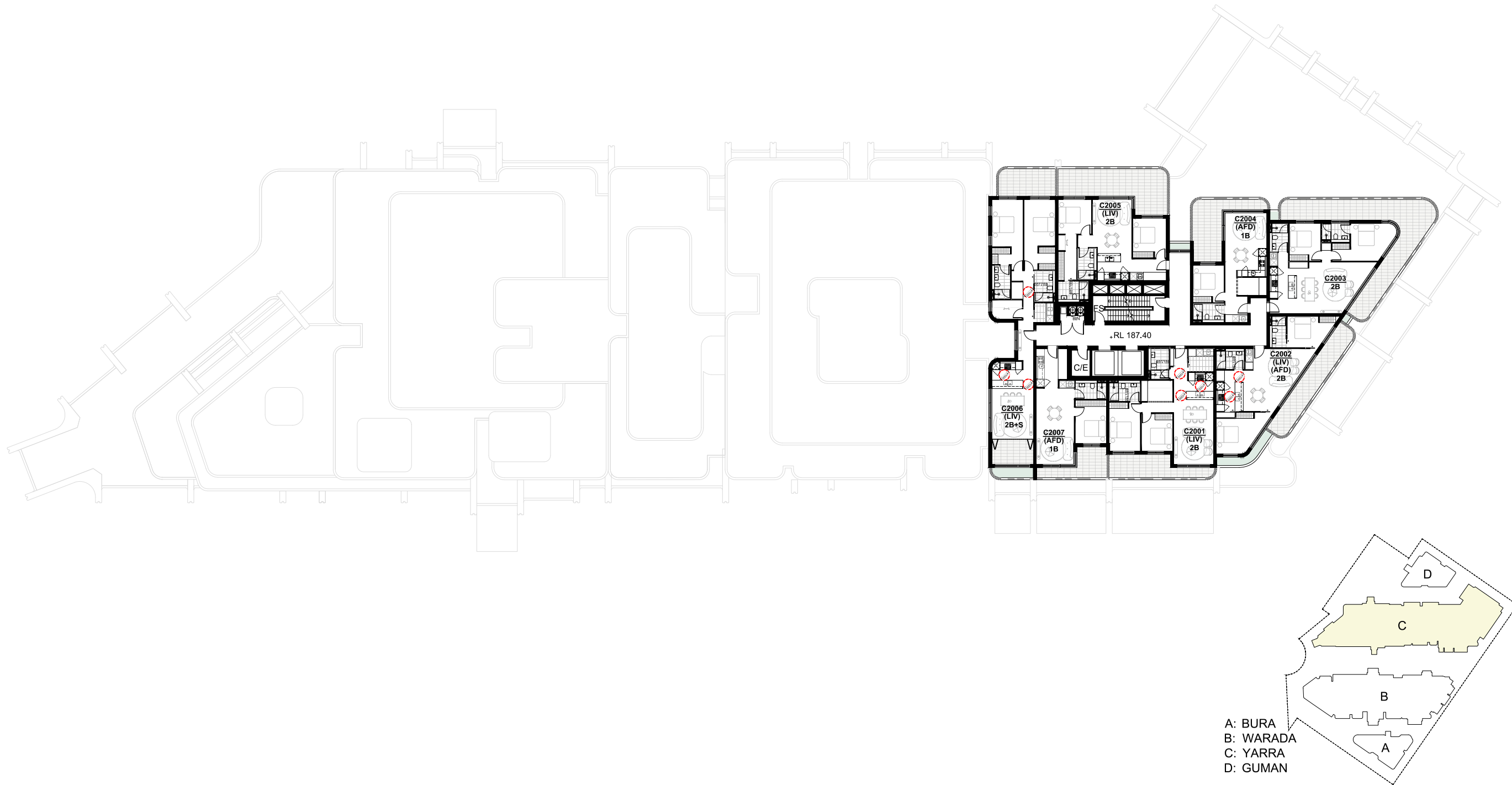
SCALE

1:400 @ A3

Drawing no:
A559

Project No.
A24033

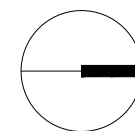
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

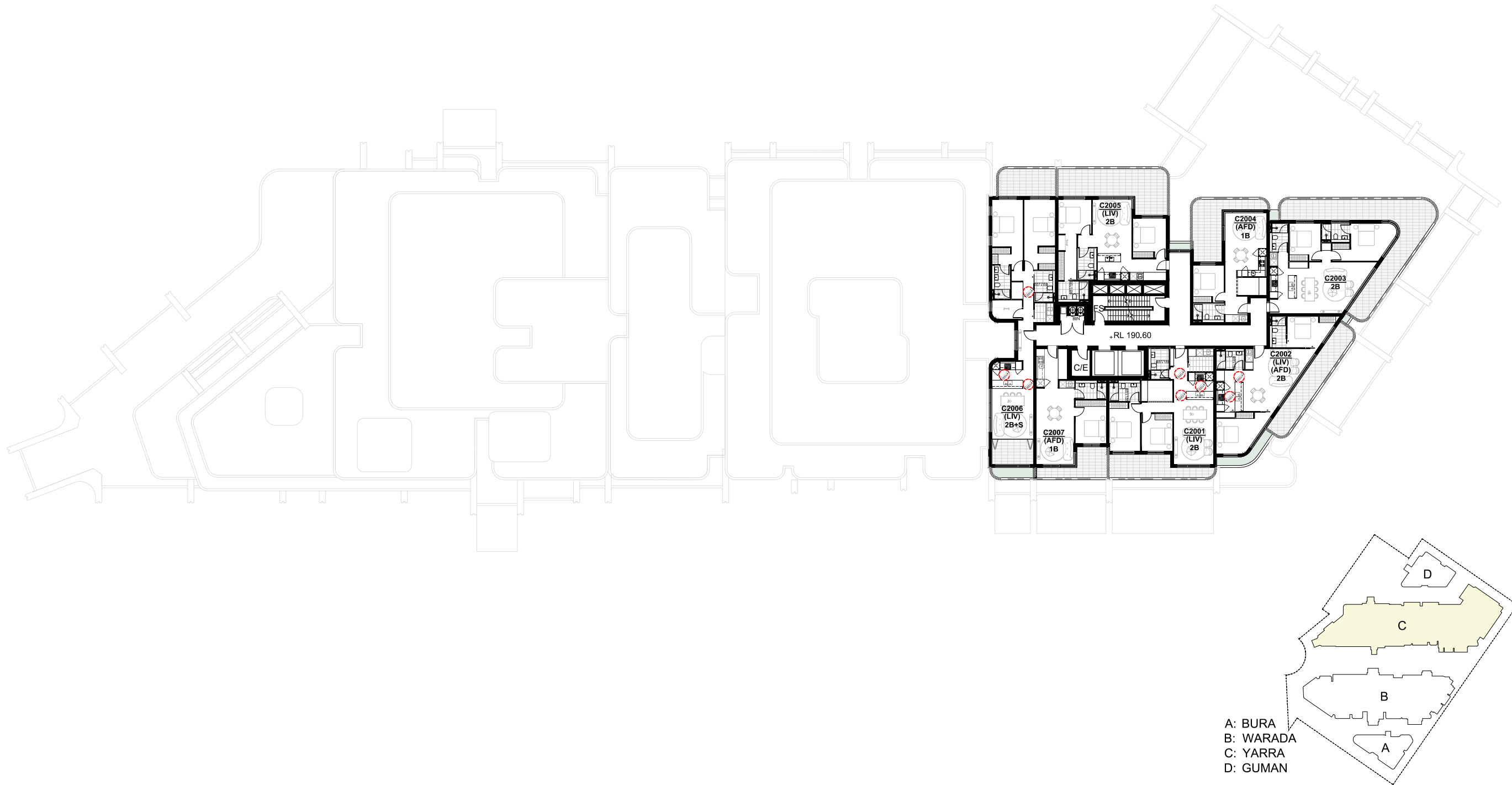
Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 20

SCALE 1:400 @ A3
Drawing no: A560

Project No.
A24033
ISSUE
A

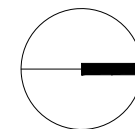


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 21 - 25

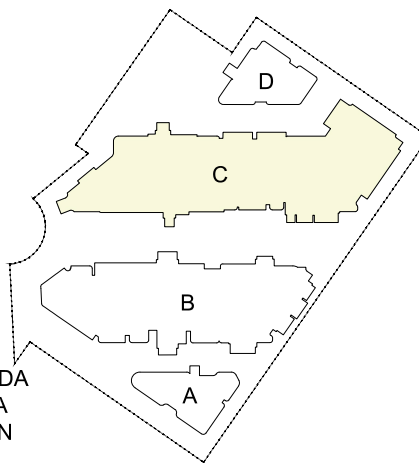
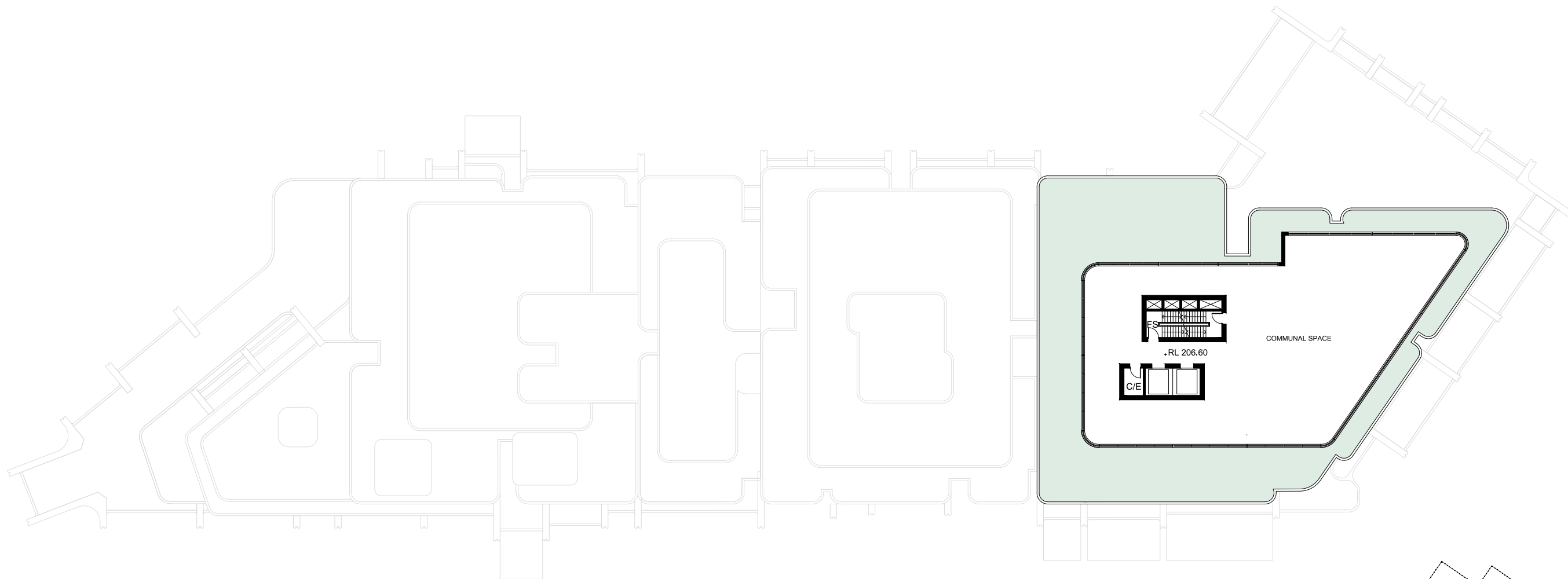
SCALE

1:400 @ A3

Drawing no:
A561

Project No.
A24033

ISSUE
A

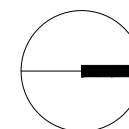


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - LEVEL 26

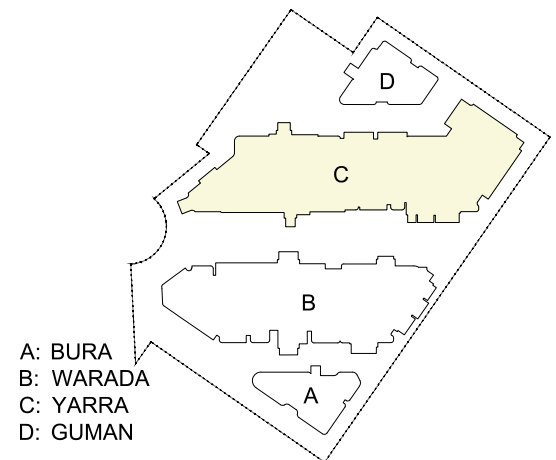
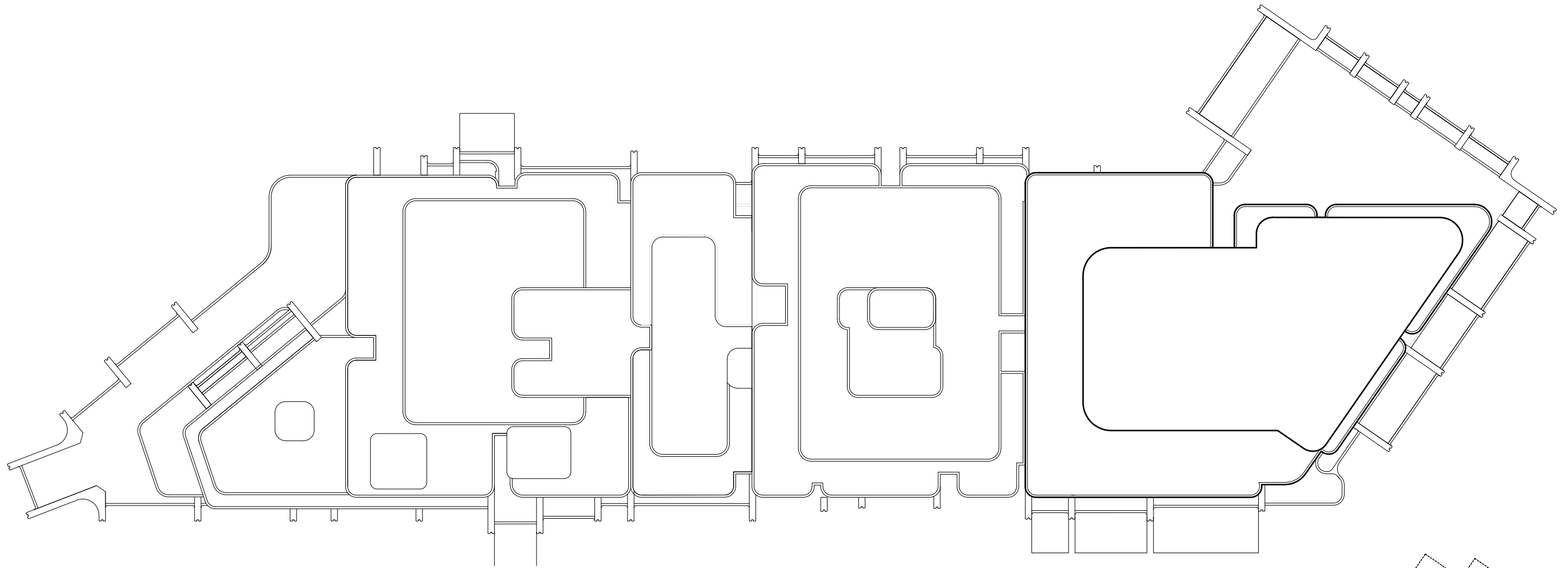
SCALE

1:400 @ A3

Drawing no:
A562

Project No.
A24033

ISSUE
A

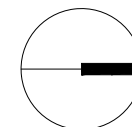


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING C - ROOF

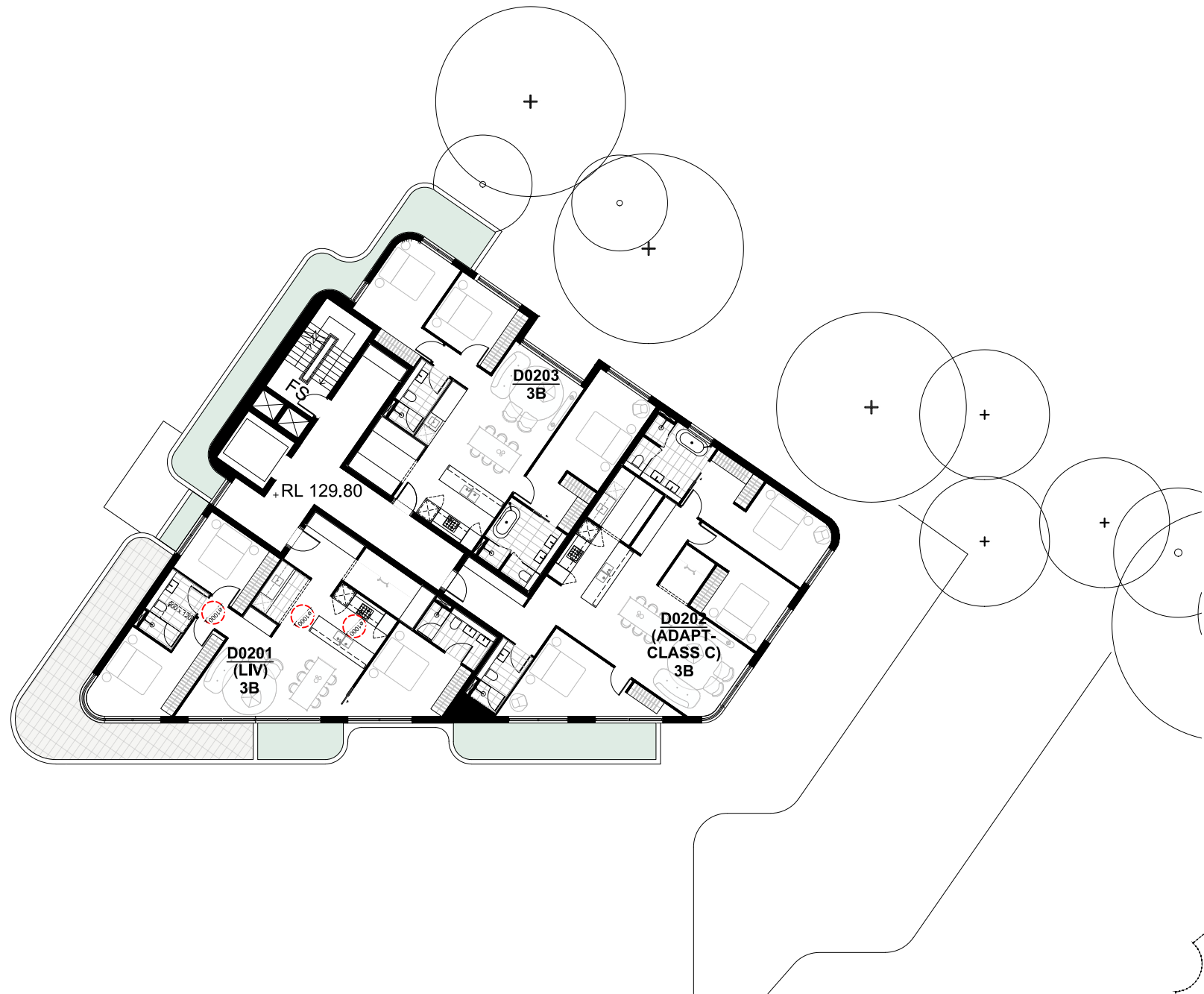
SCALE

1:400 @ A3

Drawing no:
A563

Project No.
A24033

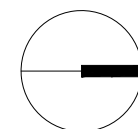
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



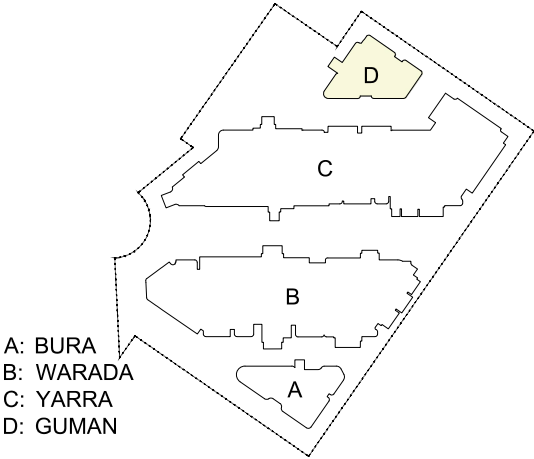
Drawing Title
BUILDING D - LEVEL 2

SCALE

1:250 @ A3

Drawing no:
A571

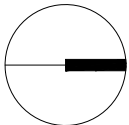
Project No.
A24033
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



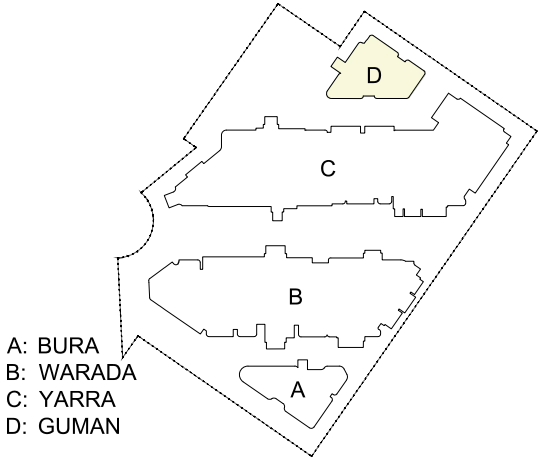
Drawing Title
BUILDING D - LEVEL 3

SCALE
1:250 @ A3

Drawing no:
A572

Project No.
A24033

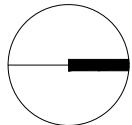
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING D - LEVEL 4

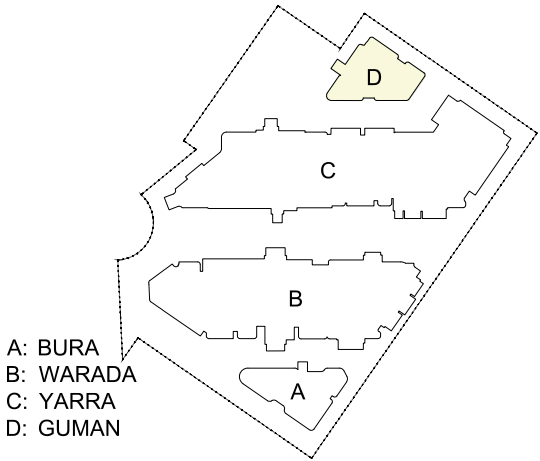
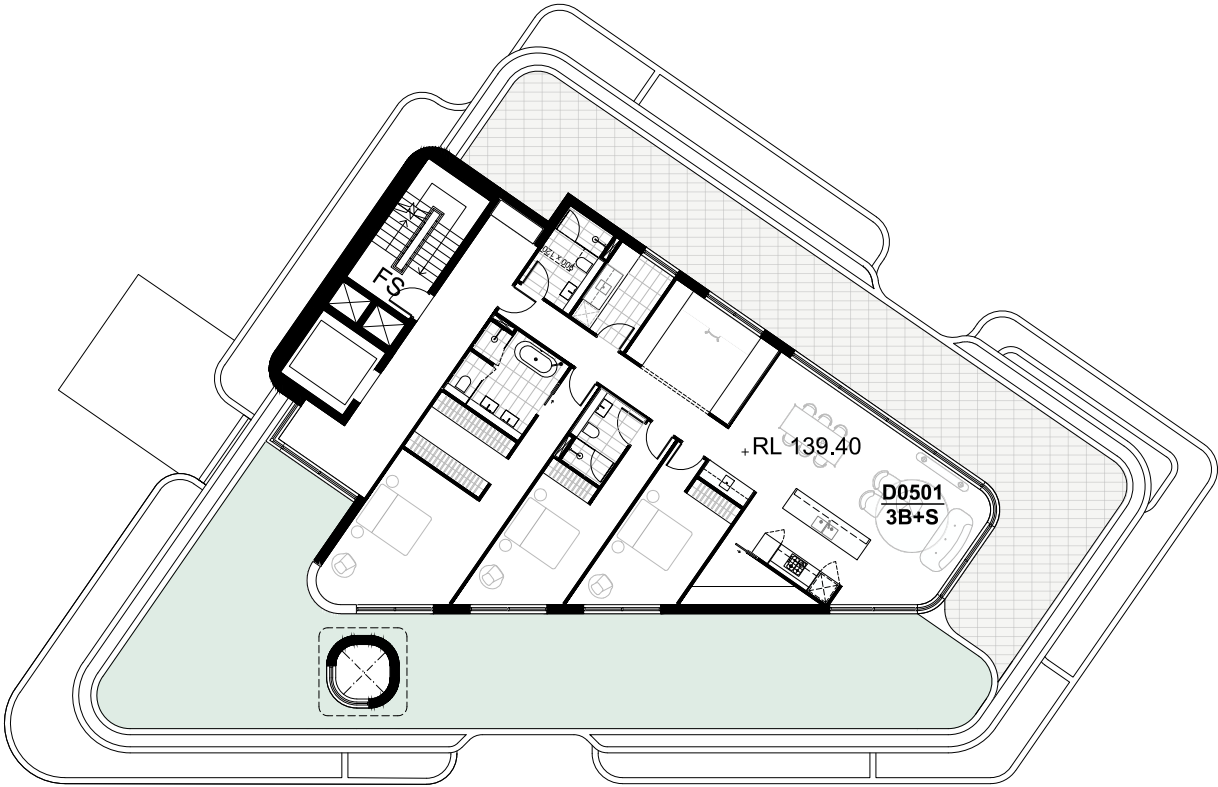
SCALE

1:250 @ A3

Drawing no:
A573

Project No.
A24033

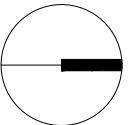
ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name
93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill

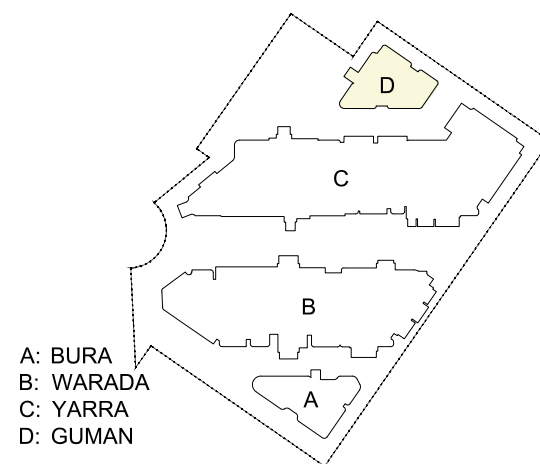
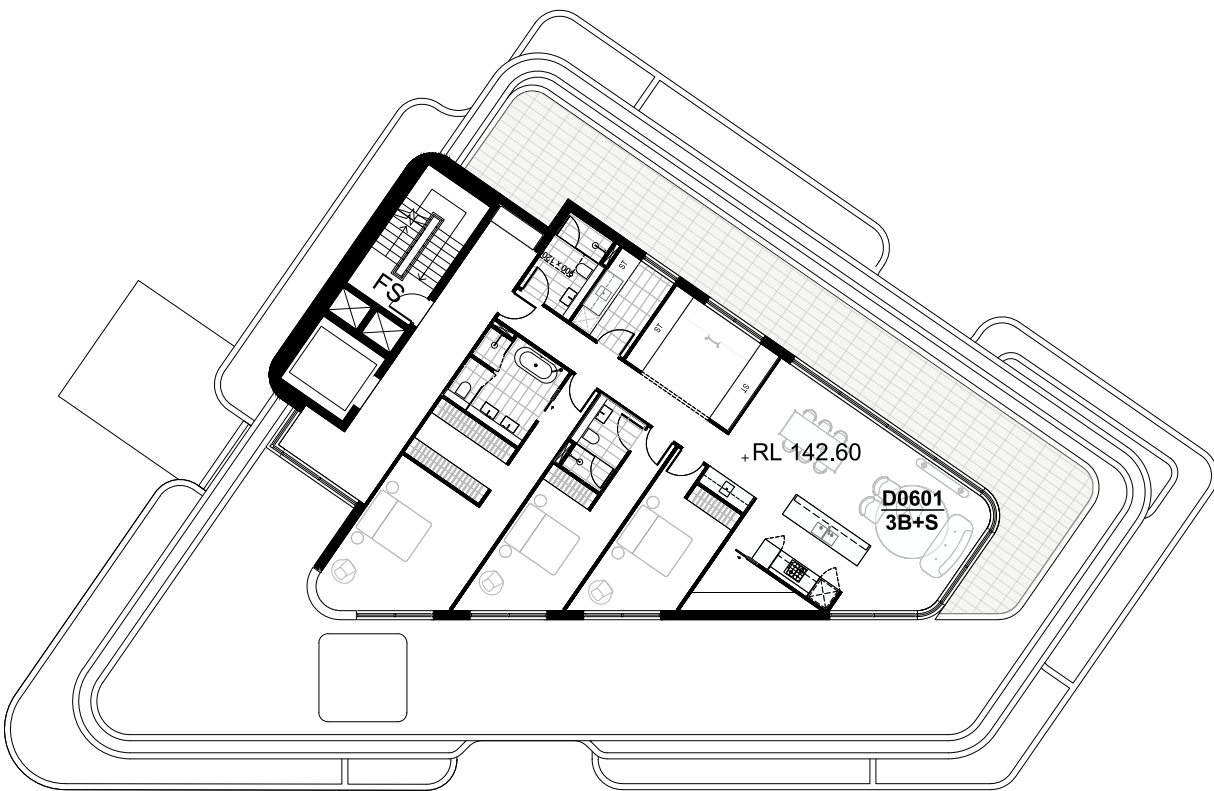


Drawing Title
BUILDING D - LEVEL 5

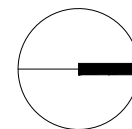
SCALE 1:250 @ A3
Drawing no: A574

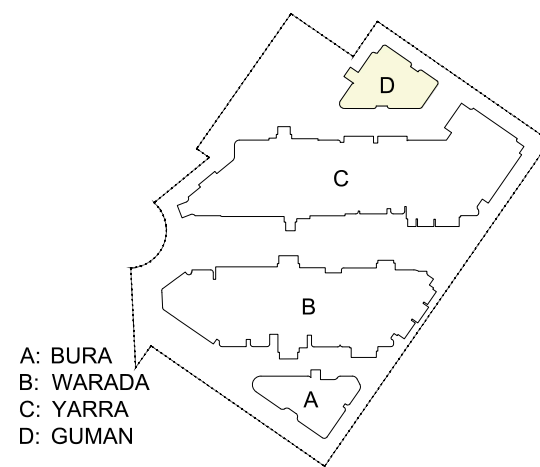
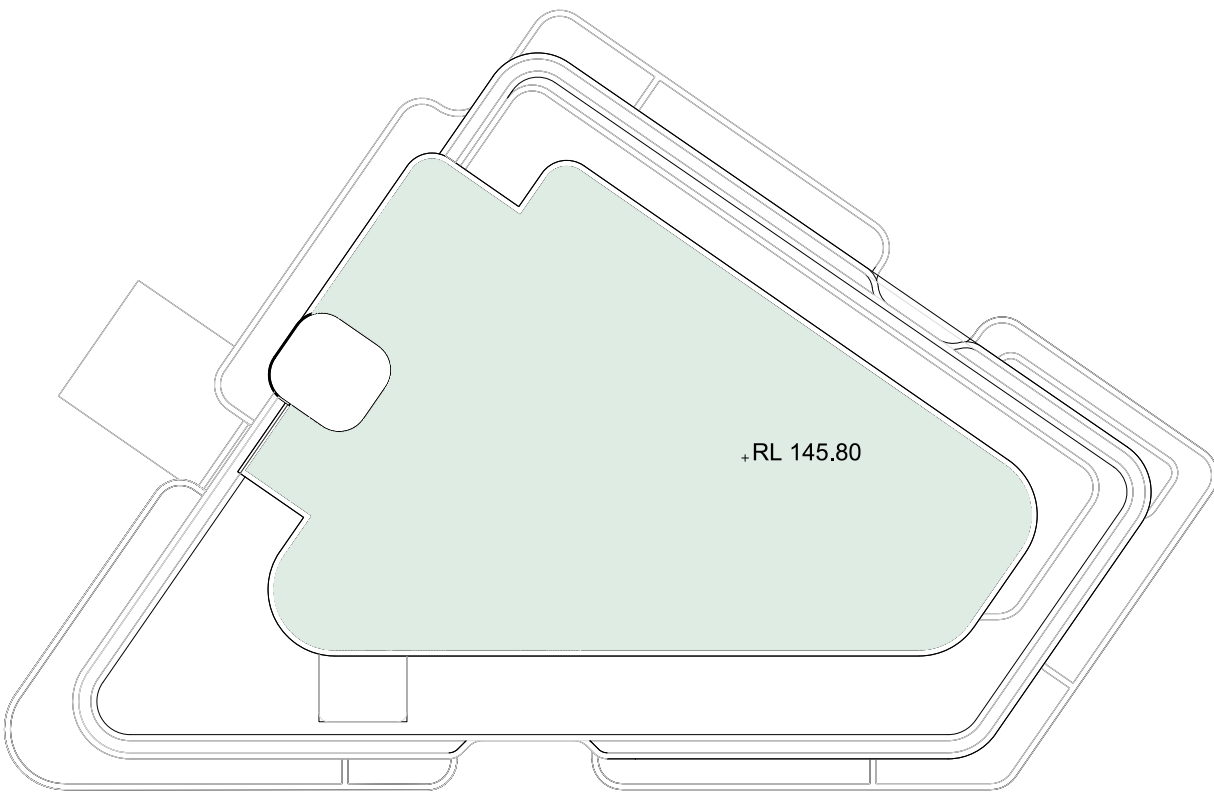
Project No.
A24033

ISSUE
A



A: BURA
B: WARADA
C: YARRA
D: GUMAN



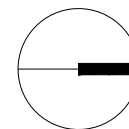


A: BURA
B: WARADA
C: YARRA
D: GUMAN

Rev	Description	Date
A	SSDA	2024-12-04

Project Name

93-107 Cecil Avenue and 9-10 Roger Ave, Castle Hill



Drawing Title
BUILDING D - ROOF

SCALE

1:250 @ A3

Drawing no:
A576

Project No.
A24033

ISSUE
A

APPENDIX B | CRIME RISK ASSESSMENT

SITE OPPORTUNITY
93-107 Cecil Avenue & 9-10 Roger Avenue Castle Hill NSW
Table 1

1	Surveillance	Good	Bad	N/A
1	Buildings – orientation	X		
2	Buildings – frontages/set back	X		
3	Buildings – windows, doors, balconies etc	X**	X**	
4	Buildings – lobbies, foyers, lifts etc	X		
5	Buildings – internal visibility	X**	X	
6	Buildings – loading docks/delivery areas	X***		
7	Buildings – communal areas	X		
8	Grade separated space	X		
9	Spatial gaps/vacant land	X		
10	Public telephones			X
11	Automatic teller machines			X
12	Transport shelters/stands			X
13	Off-street parking	X		
14	Underpasses/tunnels			X
15	Overpasses/footbridges			X
16	Car park – internal obstructions		X	
17	Car park – configuration of bays	X		
18	Car park – ceiling height	X		
19	Fencing/perimeter visibility	X		
20	Public toilets and change rooms			X
21	Parks			X
22	Playgrounds			X
23	Pedestrian and cyclist pathways/routes	X		
24	Wayfinding	X^^		
25	Vegetation – type/quality	X^^		
26	Vegetation – coverage/quantity	X^^		
27	Street furniture	X^^		
28	Bicycle parking	X^^		
29	Concealment/entrapment opportunities	X	X^^^	
Total		20	4	8

** Subject to not screening glazing with decals, signage and the like and appropriate landscaping. The blades coming to ground are also a challenge for viewlines.

*** If the loading dock is gated and secured.

^^ Has the opportunity to be good.

^^^ Subject to good design and management of the dead end path between Building A and B.

Table 1 (cont)

2	Lighting/Technical Supervision	Good	Bad	N/A
30	Lighting – type			X
31	Lighting – brightness			X
32	Lighting – distribution/reflection			X
33	Lighting – colour rendition			X
34	Lighting – vandal resistance			X
35	Lighting – obstructions			X
36	Lighting – of signs and important structures			X
37	Mirrors – corridors, tunnels, fire exit stairs			X
38	Mirrors – ATMs and nightsafes			X
39	CCTV – type/use			X
40	CCTV – coverage			X
41	CCTV – vandal resistance			X
42	Help phones/intercoms/public address			X
<i>Total</i>		0	0	12

3	Territorial Reinforcement	Good	Bad	N/A
43	Community guardians	X		
44	Formal guardians			X
45	Clarity of ownership	X		
46	Placemaking/street art/animation	X**		
47	Space transition	X		
48	Celebrated entries	X		
49	Signage and location markers	X**		
50	Vulnerability of night workers/shoppers	X	X^	
51	Street vendors/buskers			X
52	Proximity of high risk groups/locations	X		
53	Area reputation	X		
<i>Total</i>		9	1	2

** opportunities are good.

^ Unknown at this stage as the hours of the carpark are not identified.

4	Environmental Maintenance	Good	Bad	N/A
54	Area image	X		
55	Vandalism/graffiti	X	X	
56	Rubbish	X		
57	Urban decay	X		
58	Lighting maintenance	X		
59	Landscaping maintenance	X		
60	Maintenance, other	X		
61	Robustness of structures/materials	X		
62	Rubbish bins			X
<i>Total</i>		8	1	1

Table 1 (cont)

5	Activity and Space Management	Good	Bad	N/A
63	Clarity of land use	X		
64	Conflicting activity	X		
65	Safe activities are located in unsafe areas	X		
66	Unsafe activities are located in safe areas	X		
67	Proximity to licensed premises	X		
68	Night activity/transport	X		
69	Street activity during the night	X		
70	Street activity during the day	X		
71	Functional vulnerability/mixed zoning			
72	Crime displacement	X		
73	Neighbourhood edges		X	
Total		9	1	0

* Proximity of train station and associated risks.

6	Access Control	Good	Bad	N/A
74	Street type	X		
75	Linking pathways	X	X	
76	Buildings – number of entry points	X		
77	Buildings – ease of access to side/rear	X		
78	Buildings – fire exits and stairs	X		
79	Buildings – dumpster bays, loading docks	X*		
80	Buildings – natural ladders	X		
81	Gardens – storage sheds			X
82	Doors – security/entry control systems	X**		
83	Windows – glazing protection	X**		
84	Windows and skylights – security hardware	X**		
85	Car park – pedestrian access	X		
86	Car park – vehicle access	X		
87	Car park – actual and symbolic barriers	X		
88	Car park – management of space	X	X***	
89	Car park – recreational use			X
90	Safe routes	X		
91	Child play areas			X
92	Shortcuts/trespassing opportunities	X	X^	
93	Defensive vegetation	X**		
94	Cash carrying routes			X
95	Reception/cashier/mail rooms			X
Total		17	3	5

* If loading bays are secured.

** opportunity to be good.

*** challenges of sharing the lift for Building D.

^ risk for the passage between Building A and B

7	Design, Definition and Designation of Site	Good	Bad	N/A
96	The design, purpose and definition of the space are in harmony	X		
97	It is clear who is responsible for the space	X		
98	Spatial boundaries/borders reinforce intended function	X		
99	Social/cultural norms accord with intended function	X		
100	Legal and administrative requirements are reinforced	X		
Total		5	0	0

PART III: CRIME RISK ASSESSMENT

Table 1.1 – Sub Totals

		Good	Bad	N/A
1	Surveillance	20	4	8
2	Lighting/Technical Supervision	0	0	12
3	Territorial Reinforcement	9	1	2
4	Environmental Maintenance	8	1	1
5	Activity and Space Management	9	1	0
6	Access Control	17	3	5
7	Design/Definition/Designation	5	0	0
	Sub Totals	68	10	28

Table 1.2 – Percentage Rating

Total Applicable Questions = 78

Good	68	÷	Y	x	100	=	87
Bad	10	÷	Y	x	100	=	12.8

Table 1.3 – ‘Good’ Rating

Total Number of ‘Good’ features/conditions	Risk Rating
0 – 50%	High
51 – 79%	Medium
80 – 100%	Low

Table 1.4 – ‘Bad’ Rating

Total Number of ‘Bad’ features/conditions	Risk Rating
0 – 50%	Low
51 – 79%	Medium
80 – 100%	High

Table 1.5 – CPTED Rating

‘Good’ Rating → ‘Bad’ Rating ↓	Low	Medium	High
Low	LOW	MEDIUM	MEDIUM
Medium	MEDIUM	MEDIUM	HIGH
High	MEDIUM	HIGH	HIGH

LOW