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12 HASSALL STREET

PARRAMATTA, AUSTRALIA

URBAN DESIGN REPORT

Sydney

21C Whistler Street
Manly NSW 2095
PO Box 1083 Manly NSW 1655
Ph +61 [0]2 9977 3853
Fax +61 [0]2 9976 5501
sydney@mcgregorcoxall.com

Melbourne

Level 4, 125 Flinders Lane
Melbourne VIC 3000
GPO Box 1634 Melbourne VIC 3000
Ph +61 [0]3 9999 1608
Fax +61 [0]3 8669 4414
melbourne@mcgregorcoxall.com

Bristol

77 Stokes Croft
Bristol BS13RD - United Kingdom
Ph +44 [0] 7496 282 281
bristol@mcgregorcoxall.com

Shanghai

Building 1, Level 4, Unit 3S1
1107 Yuyuan Road
Shanghai 200050 - China
shanghai@mcgregorcoxall.com

Prepared for TopPlace by McGregor Coxall [Sydney]
with sub-consultant services provided by Redshift.

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Introduction



BACKGROUND

This planning proposal report has been prepared by McGregor Coxall on behalf of Toplace Pty Ltd. The report covers the Urban Design proposals for the former PCYC Development site located at 12 Hassall Street Parramatta. Contained in this report are:

An outline of the metropolitan context in which the subject site sits;

A contextual overview of both the existing and future surrounding context;

Identification of the contextual and site challenges facing the development site;

Identification of key strategies that will inform delivery of design excellence outcomes for the architecture and landscape architecture;

The intention of this report is to support a planning proposal to modify FSR and height controls for the site leading to an amendment of the Local Environmental Plan (LEP) through the 'Gateway' process.

The report proposes increasing the number of dwellings permissible on the site consistent with the strategic housing objectives for Parramatta outlined in 'A Plan for Growing Sydney'.

According to 'A plan for growing Sydney' in 20 years 900,000 more people will live in Western Sydney than today. Within 25 years, Western Sydney will be home to more than half of all Sydneysiders. Over the next 20 years, Sydney's population will grow by 1.6 million people, requiring 66,400 new homes by 2031, with 900,000 of this population growth occurring in Western Sydney.

This proposal for a SEPP65 compliant mixed use development is supported by an analysis of the surrounding built form and streetscape together with indicative floor plans.

Planning Context



■ Site Location
■ Parramatta city centre



TOP Aerial image Parramatta
BOTTOM Immediate site location

PLAN FOR GROWING SYDNEY

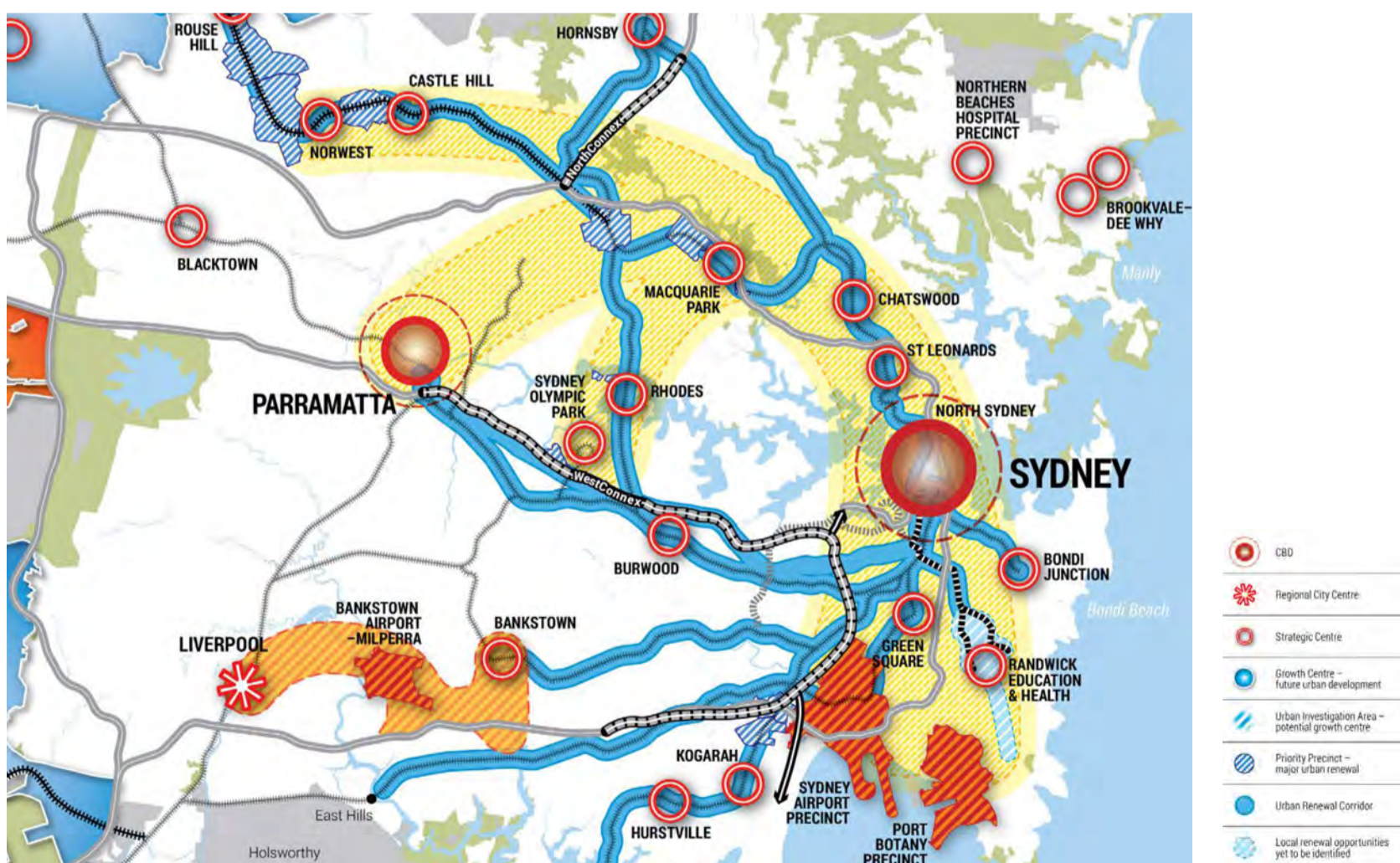
The Plan For Growing Sydney recognises Parramatta as Sydney's Premier Regional City and single biggest concentration of employment outside Global Sydney. It also anticipates Parramatta to be the fastest growing centre outside Global Sydney over the next 20 years.

The plan seeks to provide new housing that will be located close to jobs and public transport. It is expected that the population will grow by 1.6 million requiring 664 000 new homes by 2031. One of the key directions of this plan is to grow Parramatta as Sydney's second CBD and provide an additional 100,000 jobs over the next 20 years around this centre, having job opportunities closer to housing where people want to live.

The strategy expects Parramatta to grow beyond its own CBD boundaries into the surrounding precincts of Westmead, North Parramatta, Harris Park, Rydalmere (including the University of Western Sydney campus) and Rosehill/Camellia. The redevelopment of the site has the potential to support this ambition of increased density and amenity in the town centre and achieve the objectives established in the Plan for Growing Sydney and draft Inner West Sub-regional Strategy.

Key points to note that support the redevelopment of the site are as follows;

- The West Central Sub-regional Strategy promotes Parramatta as a large employment and residential zone with excellent transport connections.
- Improved transport connections between Parramatta and other Western Sydney centres and employment precincts will create long-term opportunities driving increased density, as well as increased connections to Castle Hill, Chester Hill, Bankstown, Blacktown and Carlingford, and greater Sydney beyond.
- The identification, promotion and connection of well-designed and user-friendly urban precincts that comprise the overall conurbation reinforces both movement systems, streetscape and the enhancement of the urban fabric of the Parramatta Town Centre.



LEFT Extract from Plan for Growing Sydney

Site Analysis



- Site Location
- Proposed Light Rail
- Railway
- Ferry
- Main Street Connections

10 20 50 100

SITE LOCATION

The subject site is located at 12 Hassall Street on the south eastern side of the Parramatta Centre 200 metres from the Parramatta Railway Station.

The site has a south facing frontage and is rectangular in plan form. The context of the development site is different on all four edges. Hassall Street to the south is a heavily developed but lightly trafficked commercial street with varying grades and scales of development. Charles Street to the east is a well-used thoroughfare leading the Parramatta River and the ferry wharf.

Directly to the north of the site is the NSW Police Headquarters, a building of up to 16 stories, presenting a blank wall to the site for much of its height. Much of the current existing housing stock in this block is nondescript, with featureless podiums and a predominance of vehicle entries fronting the street.

Urban Form

The immediate area around Hassall Street is a transitioning area with medium scale development to the west and increased high rise mixed use and residential developments to the adjacent streets. Located directly west of the site is a large void of the parking ramps for the basement parking of the Police Headquarters building.

To align with the Plan for Growing Sydney and Parramatta City Council strategic documents, any future development should reflect this medium to high-density environment. This could result in larger building footprints and increased heights that allowed under current controls. It is important, however that all development is designed so that the streetscape is active and permeable and the building form reflects a finer grain of massing.

Access and Movement

The development resides in a key position on a secondary street in Parramatta City Centre, east of Parramatta Station and south of Macquarie Street, a major artery for the city centre which connects Harris Park and Parramatta Park. The location offers potential as a key element in the dense urban fabric of Hassall Street and to act as a focal point and a strengthening asset for the mixed-use area around the station.



PEDESTRIAN AND CYCLE MOVEMENT

The development site is located close to Parramatta Station and thus central to a network of pedestrian and cycleways that seamlessly connect to the local nature reserves, Parramatta River and the greater City Centre via Charles Street and Macquarie Street. These cycle routes intersect with greater regional cycle routes along key surrounding roads such as Grand Avenue heading east and Argyle Street and Park Parade heading west.

A key consideration that directly impacts on the development of the site is the generally poor condition of footpaths, streetscape and urban amenity in and around the southeast side of the City Centre – as per Council's increased focus on streetscape, attention needs to be given to developing adequate responses to enhance the user experience within the urban fabric.

ECONOMIC HUB

The site sits within the Parramatta City Centre, a unique economic hub supporting intense economic and residential activity as well as being the focus for the neighbourhood and neighbouring residential suburbs (north and southern precincts). Parramatta City offers a major business, retail and commercial services for these areas. The City Centre is surrounded by educational and entertainment hubs (University of Western Sydney, Rosehill Racecourse and surroundings) and open and natural space (the Parramatta River and Parramatta Park).



OPEN SPACE NETWORK

The site is in close proximity to both regional and local open space. Hassall Street provides a direct connection to Robin Thomas Reserve and James Ruse Reserve situated at less than 350m from the site. To the east of the site is Charles Street connecting the south of the city centre with the Parramatta River.

The site is very well serviced by an open space network through the adjacent streets.

PUBLIC TRANSPORT

The site sits at a key location, within close proximity to public transport infrastructure. It is within walking distance to Parramatta train station (200m), Parramatta ferry wharf (500m) and well service bus system and connecting directly to the Sydney CBD. Parramatta is one of the most significant, and heavily used, interchanges in both Sydney's rail network and bus system, being well connected to surrounding sub-regional centres and the greater metropolitan area.

Street Analysis

STREET CHARACTER

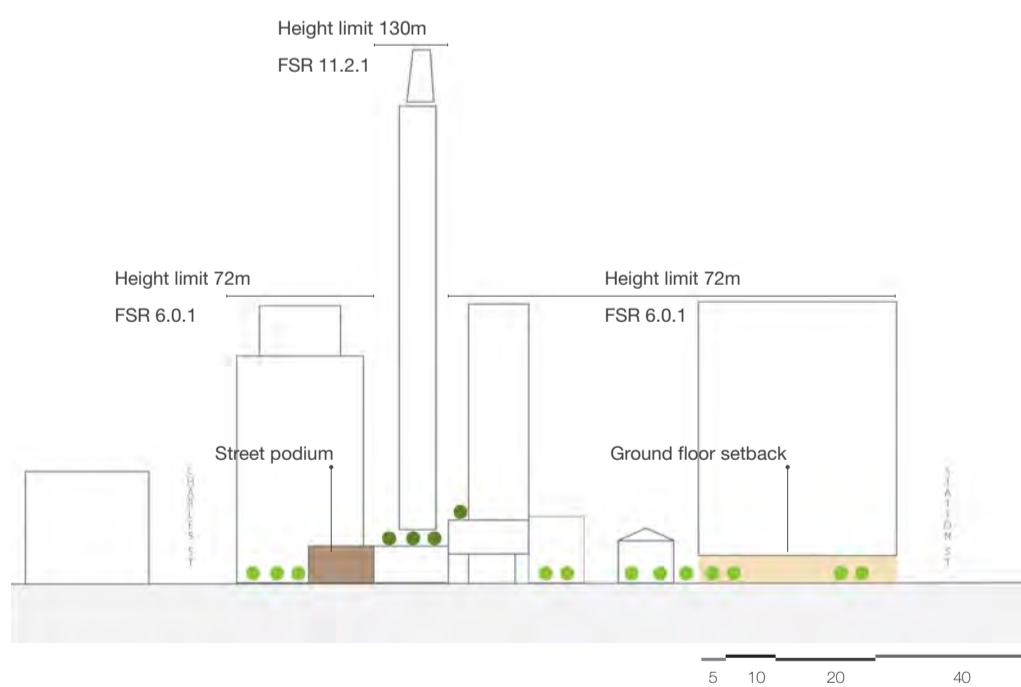
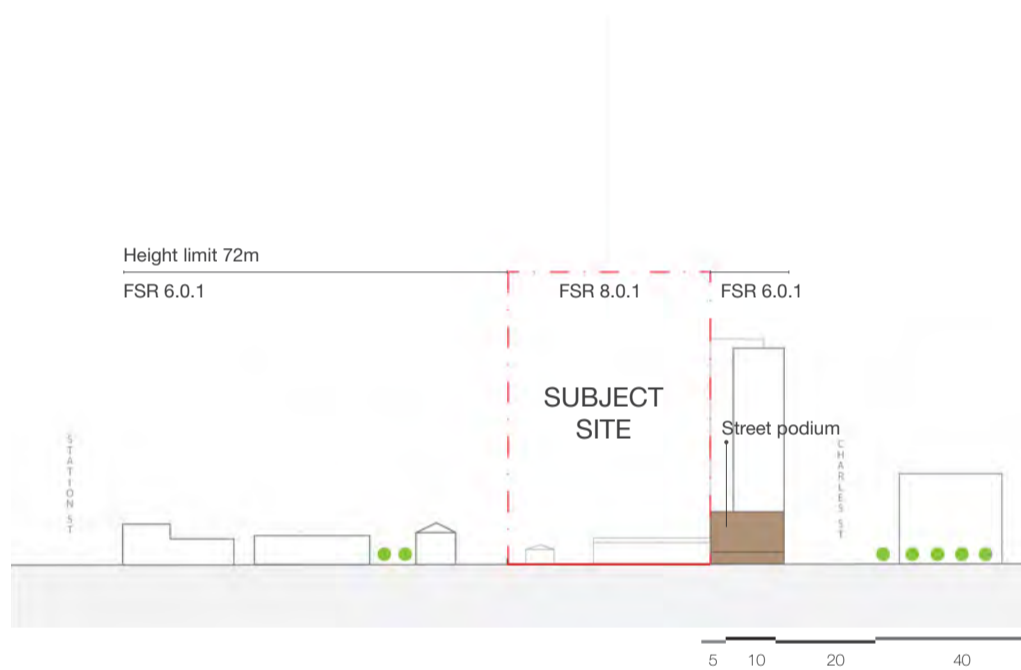
The site is surrounded by different street conditions. On the northern side of Hassall Street there is a considerable difference in heights. Sites to the west are mainly 2 to 3 storey buildings with a 19 storey podium tower located to the east.

The NSW Police Headquarters is directly north of the site, with the police basement driveway immediately adjacent to the western boundary of the site. On the northern side of Hassall Street there is only on-street parking in front of the site.

The current height limit for the northern side is set at 72 metres between Charles and Station Street.

The southern side of Hassall Street contains 2 recently approved multi-storey mixed use developments, immediately opposite the site. The southern side of Hassall Street will consist of high rise buildings between 72 metres and 130 metres. No. 11 Hassall Street is approved to 130 metres with an FSR of 11.2.1.

The southern side provides parallel on street parking in between Charles and Station Street.



TOP Elevation, Northern side Hassall Street
 BOTTOM Elevation, Southern side Hassall Street

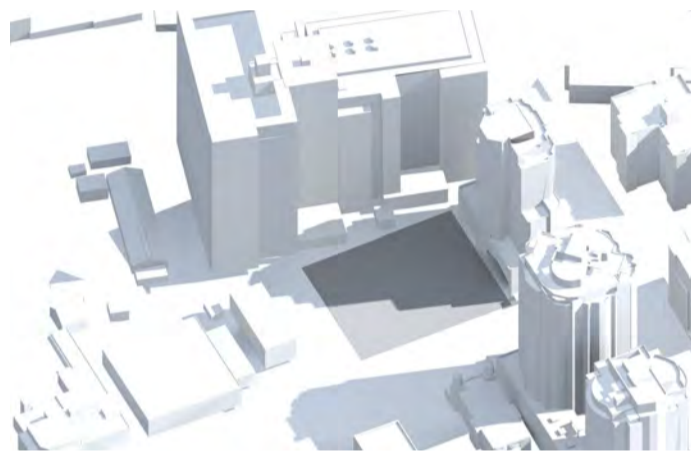
Shadow Analysis

There is a substantial shadow variable along the year, with the site receiving vast sunlight during summer days and less sunlight during winter days. The winter sunlight restriction is mainly caused by the NSW police headquarters, located north and the 18 storeys residential tower located east of the site.

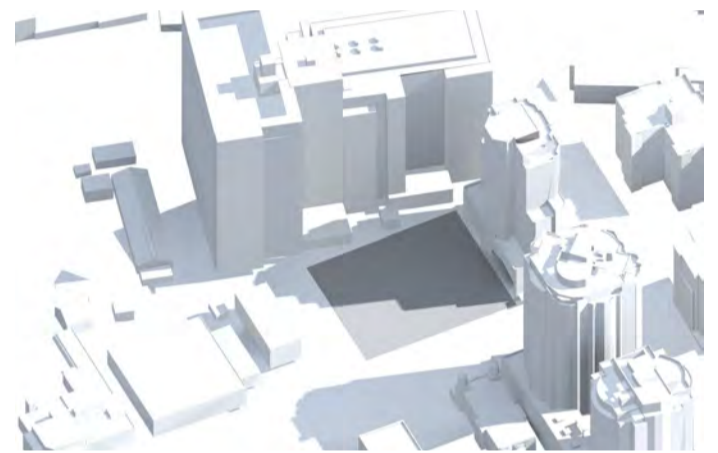
From those constraints, the Northeast side and the Western side are the areas that obtain the majority of sunlight during the year.

Apart from the peak of the winter, the western area of the site receives, for the majority of the time, great solar access along the year, presenting excellent qualities for a public open space within a urban environment.

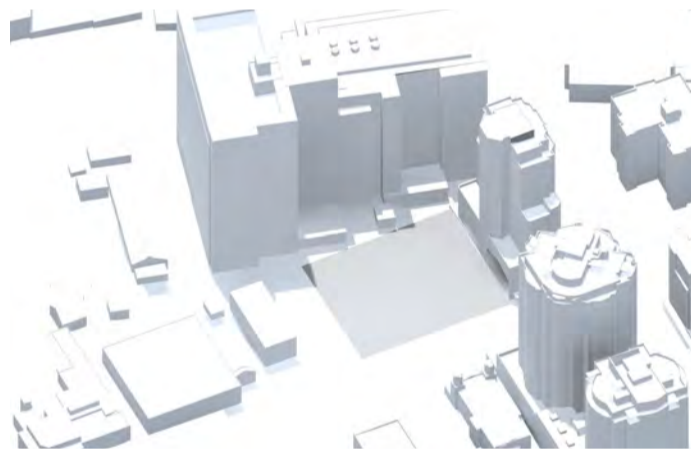
It is highly important that the public domain is informed by sunlight quality and access.



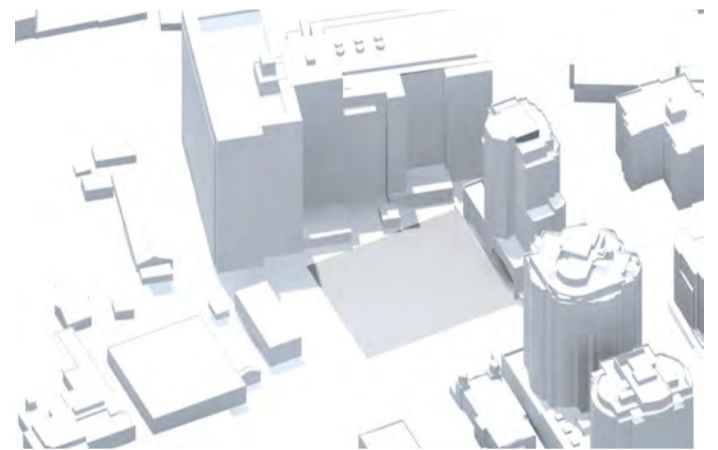
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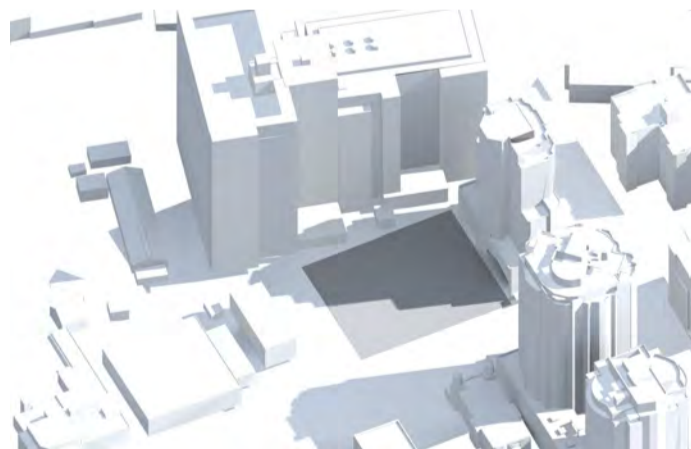
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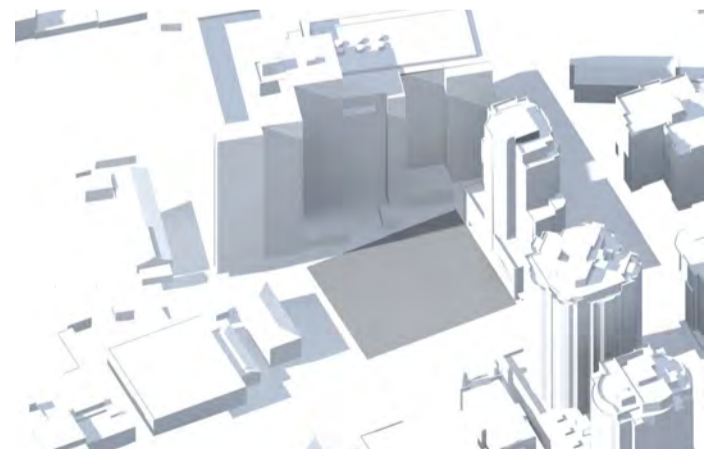
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LEFT Summer Shadow Analysis(June 21)
RIGHT Winter Shadow Analysis(December 21)

Concept Options

MASSING OPTIONS

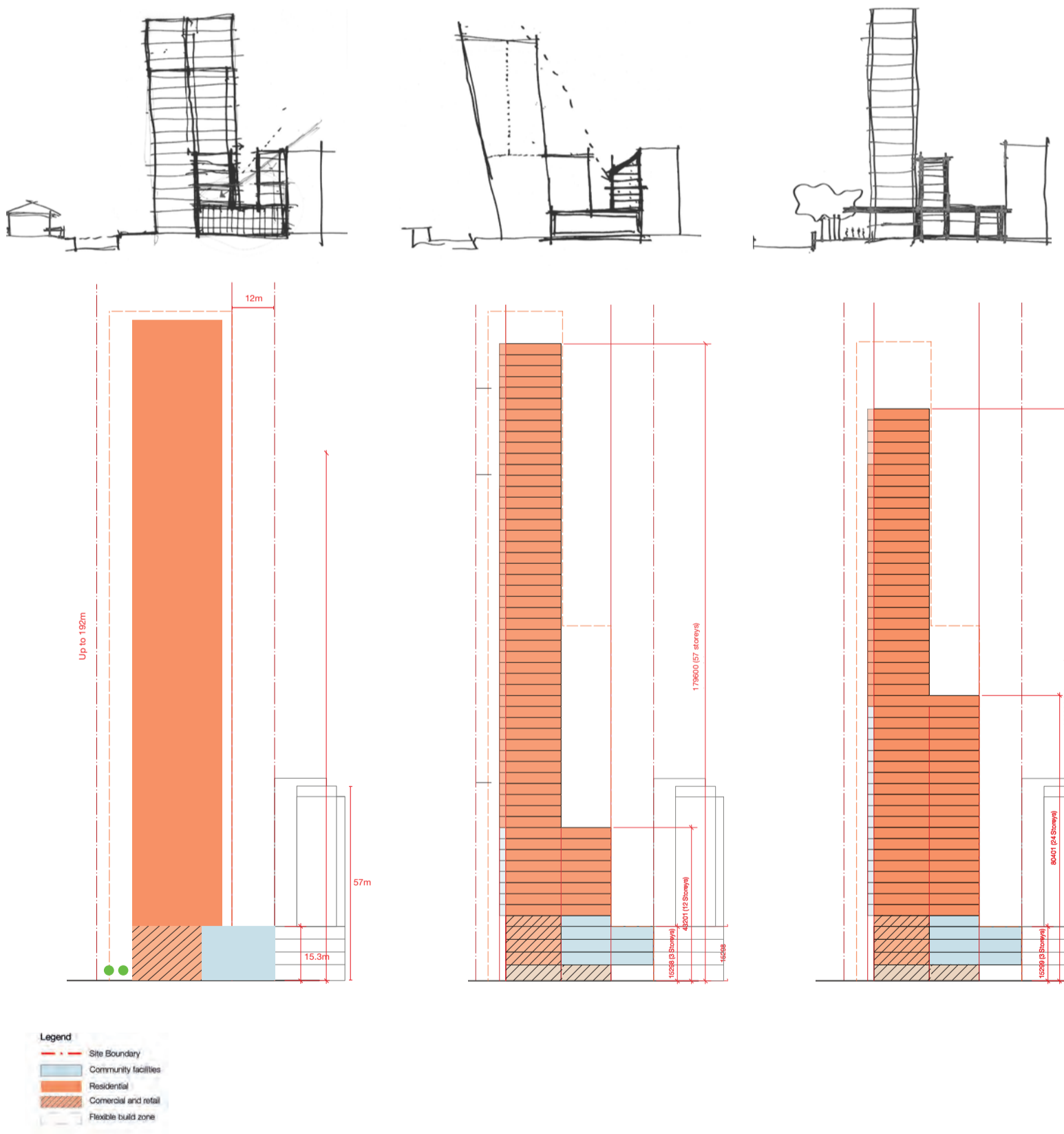
The massing options were regulated by the relationship with the surrounding buildings, shadow impacts and the public domain.

The proposed optimised massing allows to keep an active and permeable streetscape with public access to generous open space.

The massing integrates public and semi-private open space, commercial and community space of 2055m² each, mixed use at street level and a residential tower. Due to the existing constraints imposed by the existing built form, that results in a overshadowing of the site in the winter months, the residential floors are proposed on the upper levels to achieve high quality amenities, compliant with solar access and ventilation requirements.

The massing sketches take in consideration the surrounding context and are based upon urban design principles and considerations, although acknowledges that it may not strictly comply with the ADG or Council controls. It is also considered that the podium should have a relationship with the adjacent building.

The building envelope is informed by the urban design strategy allowing for flexibility and variation, demonstrated on the conceptual elevations below, in order to achieve a design excellence mixed use development.



TOP Conceptual Massing Sketches
 LEFT Conceptual Massing Diagram
 RIGHT Conceptual Elevations

Concept Proposal

STRATEGY 01: BUILT FORM

The following strategy has driven the built form and massing on site. This strategy is designed to provide guidance to a future design competition process, that should occur prior to the lodgement of any Development Application.

Key points to note on built form are

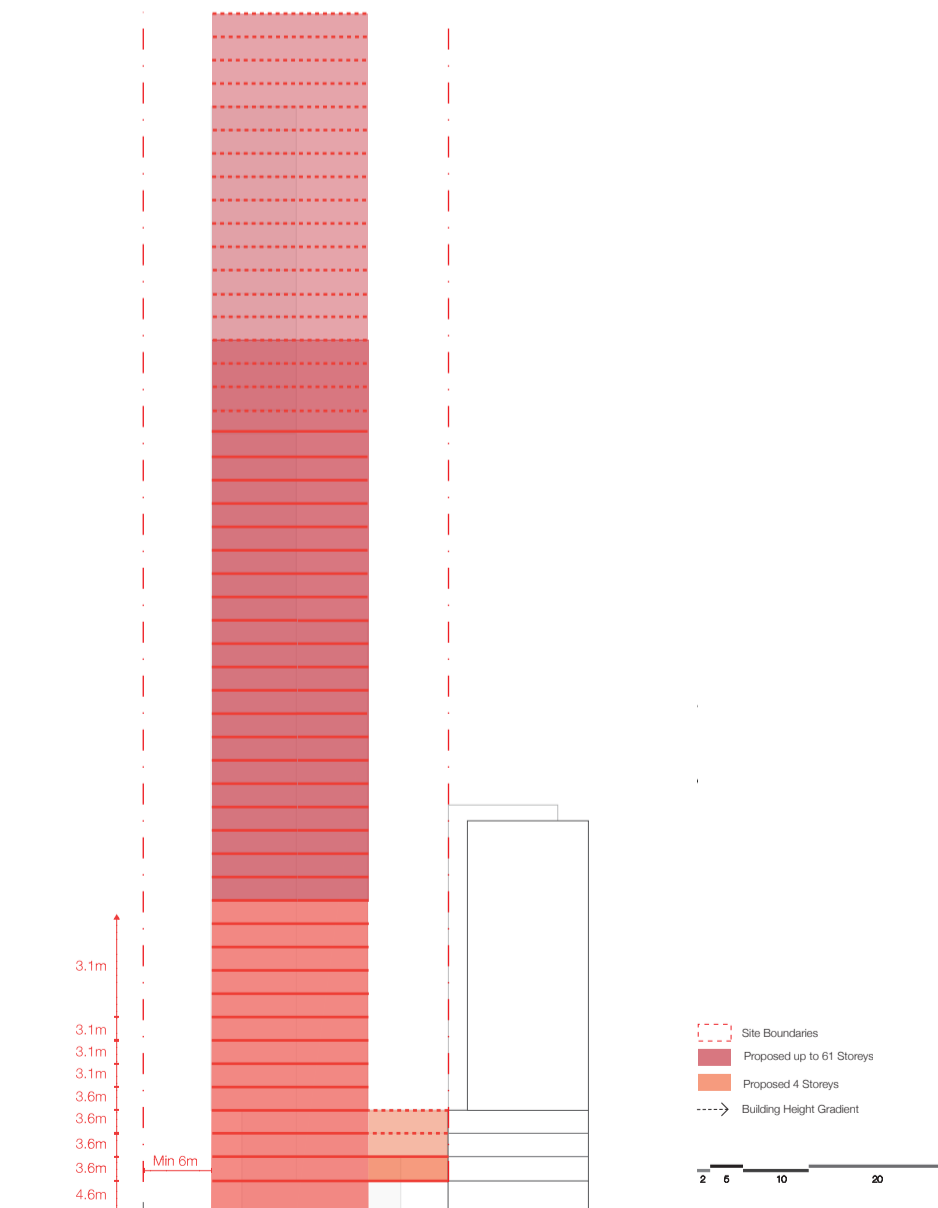
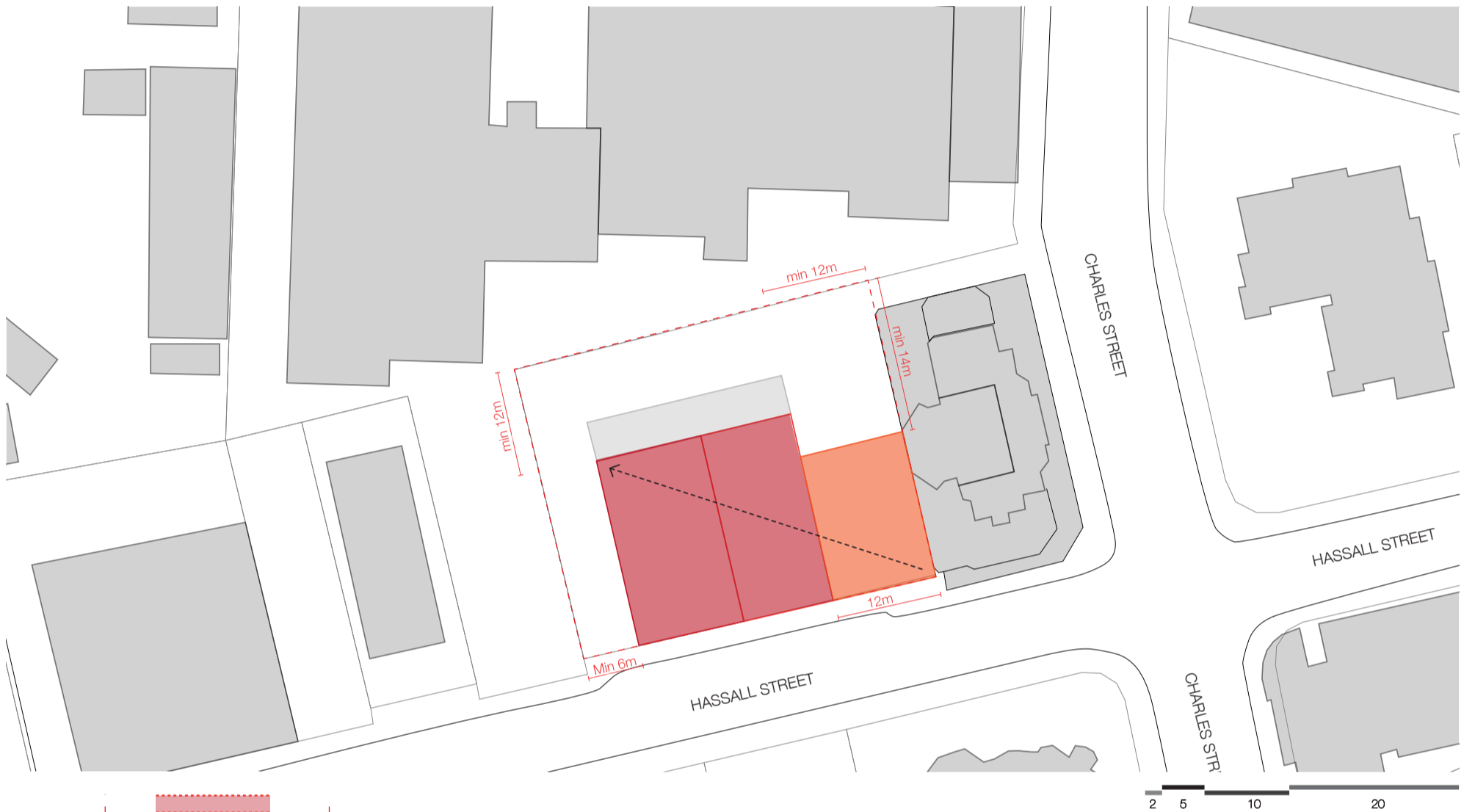
- The site is an enclosed urban block form that only addresses Hassall Street, with high rise buildings to the north and east and an open space to the west due to the Police headquarters driveway.
- The proposed building form and massing responds to the anticipated large scale growth expected in the region and surrounding precincts.
- The building height aims to sympathetically integrate into the existing and proposed residential context, whilst establishing strong street enclosure along Hassall Street.
- Building height is concentrated to the west to enhance and preserve daylight access to the development and surrounding sites (primarily east) and satisfy apartment amenity requirements.
- A perimeter block form enhances street definition.
- A landmark tower to the west diversifies the architecture and establishes a reference point to the immediate city block.



Frontage height variation for street rhythm.



Density with public domain



TOP Built Form Strategy Diagram

STRATEGY 02: PUBLIC DOMAIN

The site development massing establishes a strong relationship between the public and private domain through a new open space to the west of the site creating an internalised semi-private courtyard within the development.

Key points to note on public domain are;

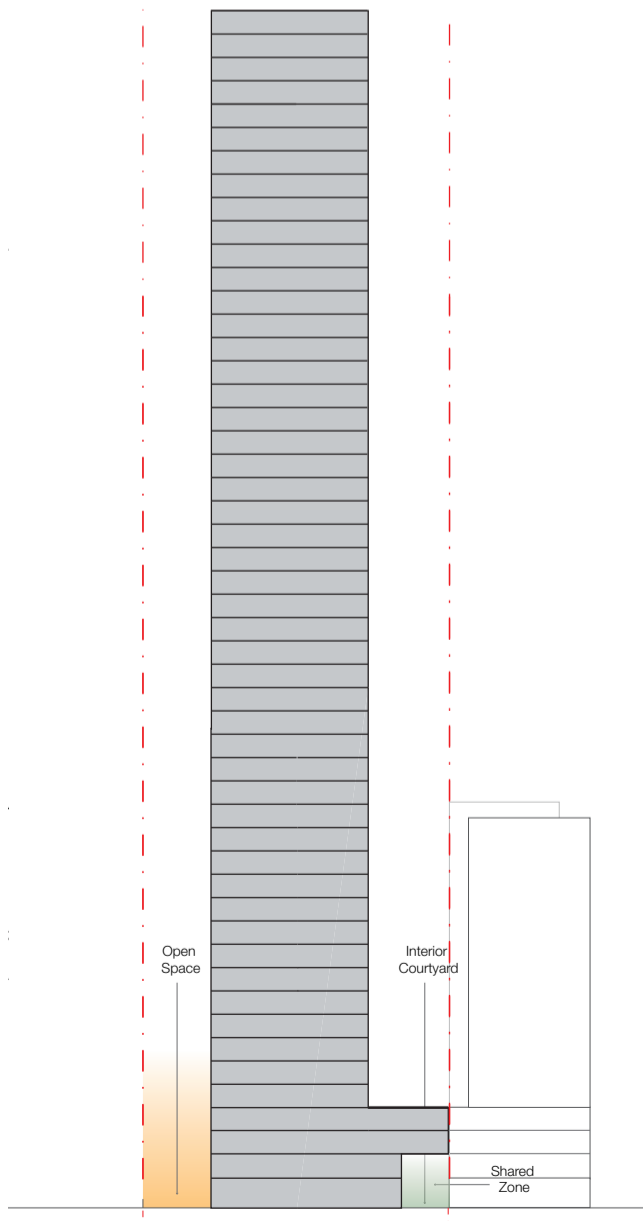
- West space as a green corridor and semi-private open space within the development to ensure both the local residents and surrounding community have spatial amenity, with continuous solar access.
- Safety along Hassall Street is improved through street activation and passive surveillance from new community use spaces and the apartment block.
- Public amenity and community facilities are located spaces connected to the open space and internal site link.
- Recreation space, seating and residential facilities enhance the western courtyard space.
- A segregated service zone to the east takes vehicular traffic and parking entry off the street, minimising conflict with pedestrians as well as integrating into the building form. It also mediates with the adjacent podium of the neighbouring building to the east while improving the streetscape.



Semi-private shared courtyard.



Single skin invites shared usage



- - - Site Boundaries
- ▨ Private Open Space
- ▨ Open Space
- ▨ Shared zone
- Public Pedestrian Access
- - -> Private Pedestrian Access



TOP Public Domain Strategy Diagram

STRATEGY 03: STREETScape

The site development integrates within the local community and distinct culture of the district by providing a permeable and flexible public domain, strong links to the local area and new community facilities.

Key points to note on culture are:

- The space to the west establishes a flexible forecourt that can be used by residents and for local temporary events.
- The western space integrates public art into the public domain and has the capability to host scale performances.
- A continuous curtilage of shade trees wraps along Hassall Street and into the western space, providing shelter and residential amenity.
- Built form at ground level responds to the streetscape, local movement, and the active western open space, by providing active frontages along Hassall Street and the open space edge.



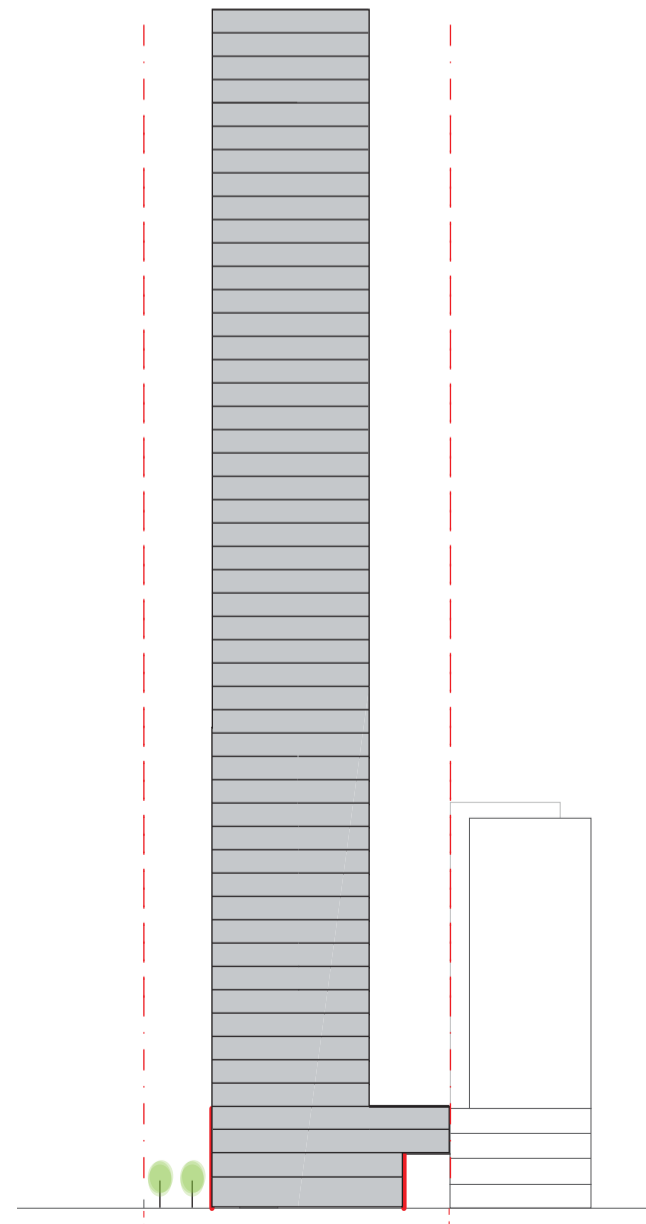
Public domain adds to pedestrian amenity.



Defined street tree alignment



Sense of enclosure at exterior



TOP Streetscape Strategy Diagram

STRATEGY 04: ACCESS & MOVEMENT

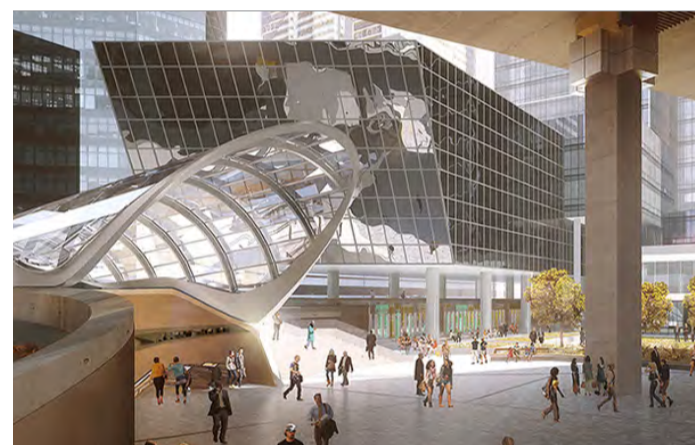
Access and movement to and from the site is a vital component to unlocking the potential of the public domain and appropriately responding to the expected increase in residential density.

Key points to note on access and movement are:

- A new pedestrianised open space to the west creates a community friendly streetscape, enhancing Hassall Street's role as a potential pedestrian and cycle-friendly connection corridor.
- A combined ingress/egress vehicular and service access point at eastern end of the site will improve traffic conditions along Hassall Street and minimise pedestrian conflict.
- A discrete underground car park accessed from Hassall Street supports the development's residential population; the ramps accessing this are set well back within the site so as not to impinge on the streetscape.
- Public pedestrian links are established between Hassall Street, the western space and the internal courtyard imbedded within the site, improving connectivity for residents.
- Close locality to the adjacent bus stops, Parramatta Station and active transport networks ensure that the residents can access alternate modes of transport.



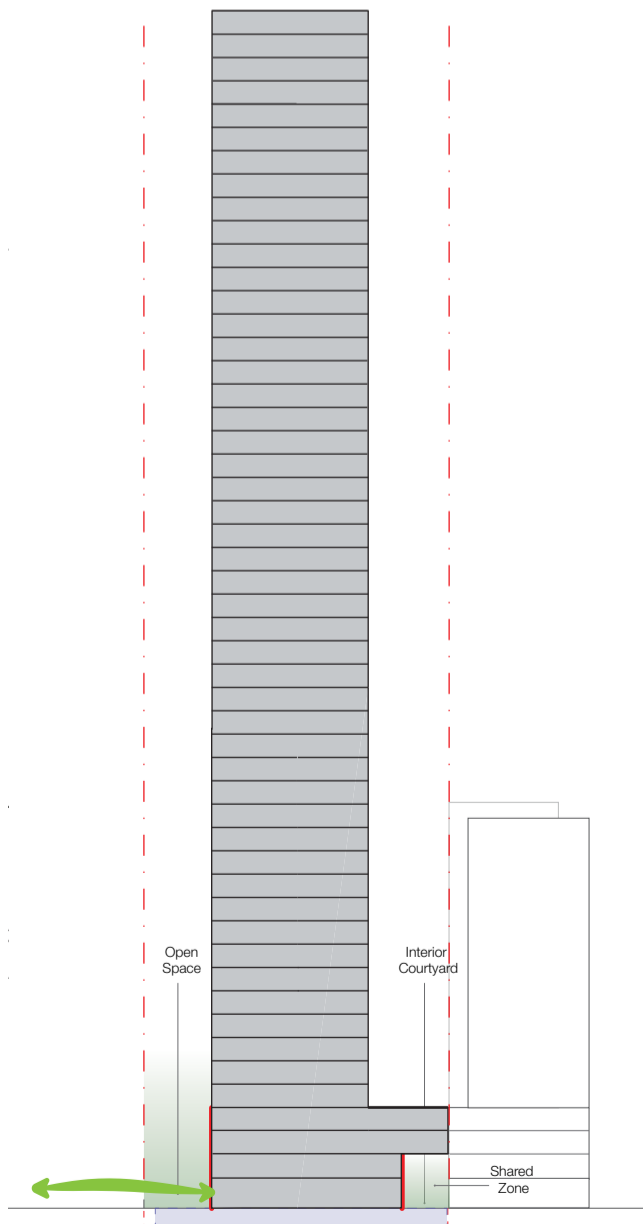
Building edges invite public occupation



Improval of pedestrian experience



Driveway not disturbing streetscape



- Site Boundaries
- Underground Parking
- Pedestrian Access
- Vehicle Access
- Active Edges



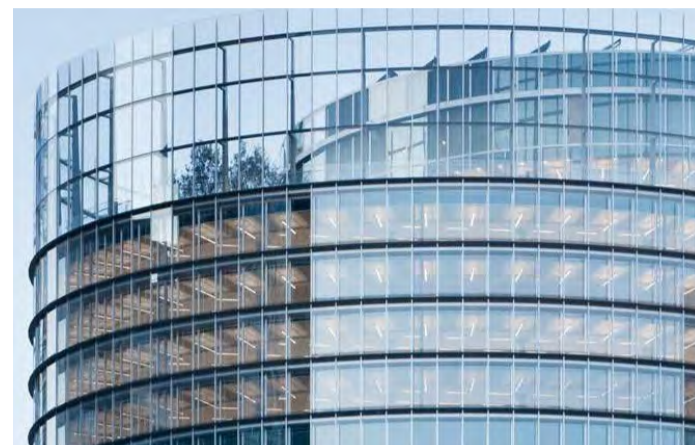
TOP Access and Movement Strategy Diagram

STRATEGY 05: NATURAL ENVIRONMENT

The site development works with the natural characteristics of the area and can establish itself as an appropriate built form that responds to residential amenity, urban integration and natural environment. Through a raised building form to the west and key spaces interlinked within the site and to the street, the development can be resilient to changing conditions while providing resident and local amenity.

Key points to note on natural environment are:

- Water sensitive urban design (WSUD) initiatives along the western edge provides a sustainable treatment response to drainage.
- A consistent street tree canopy along Hassall Street and the western open space provides shade and shelter as well as a natural buffer to the street.
- Native planting is incorporated into the public domain to soften the urban character of the development.
- Views to and from Hassall Street are enhanced through an improved public domain, well defined built form and the street canopy.
- Planting and screening design strategies reduce the impact of noise pollution and increase amenity along the street corridor.



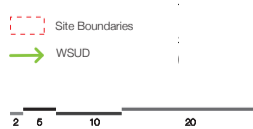
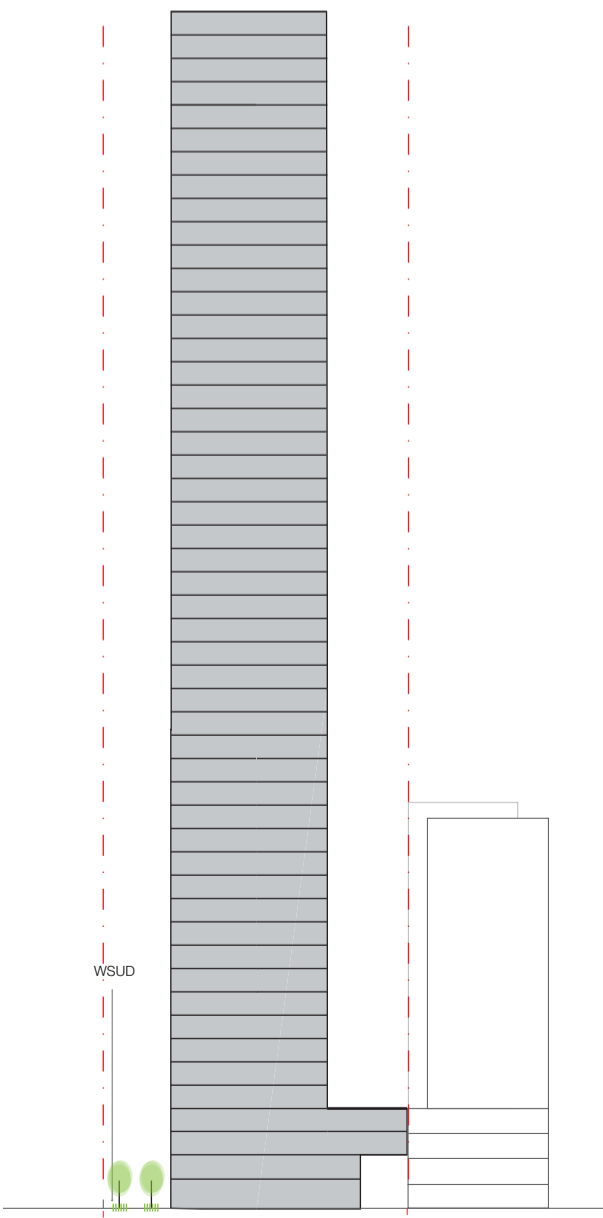
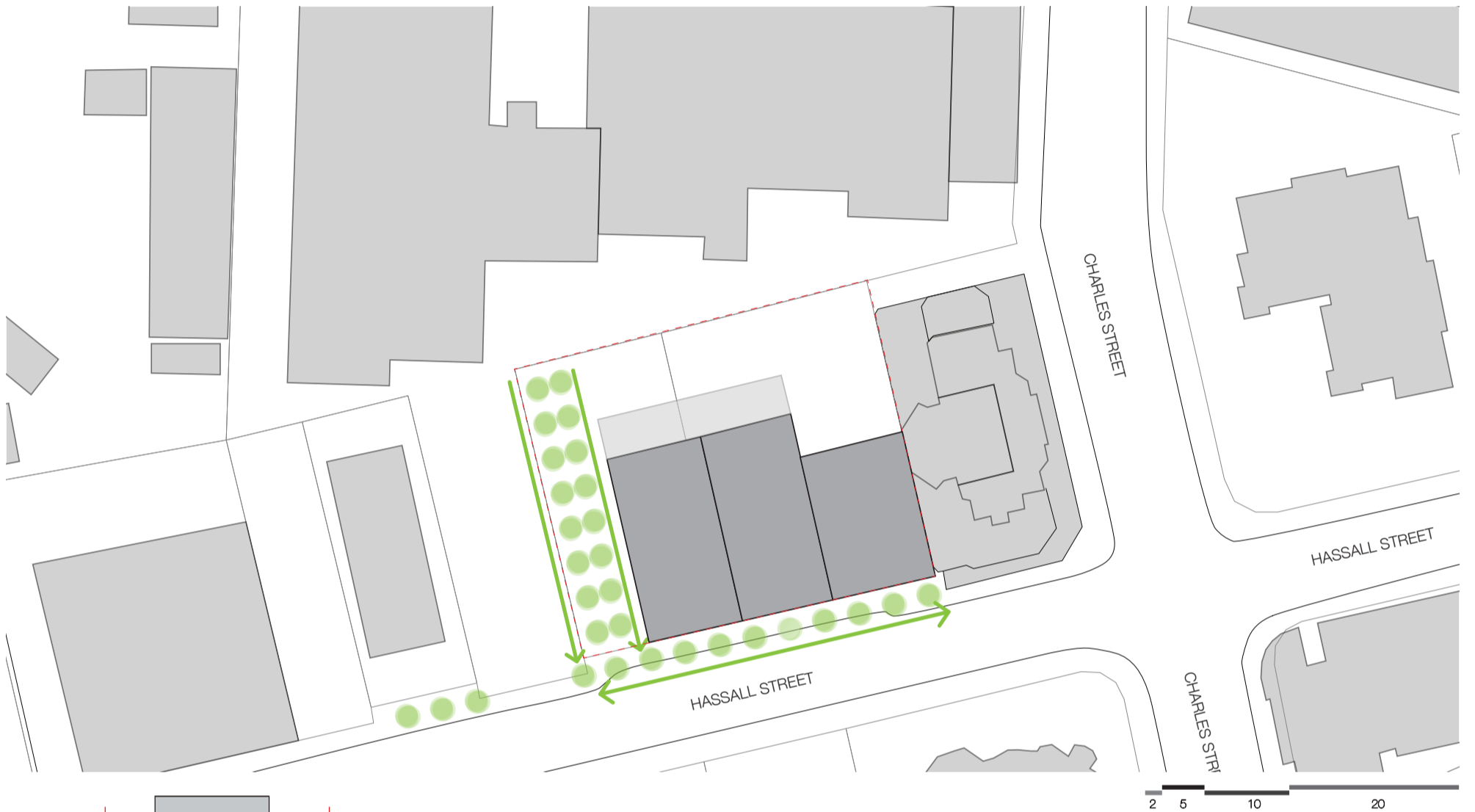
Opening up of sky into public view



WSUD in public open space



WSUD enhances street edge



HEIGHT AND MASSING

The projective site massing is comprised of two main blocks: a centre tower, achieving solar access and residential amenity for most of its height and a low rise block to the east, containing prospective community uses within the development to maximise use of the most heavily shaded portions of the site.

Block A

- Potential height of between 40 and 61 storeys. (up to 192 metres)

Block B

- Proposed as 4 storeys (15 metres).

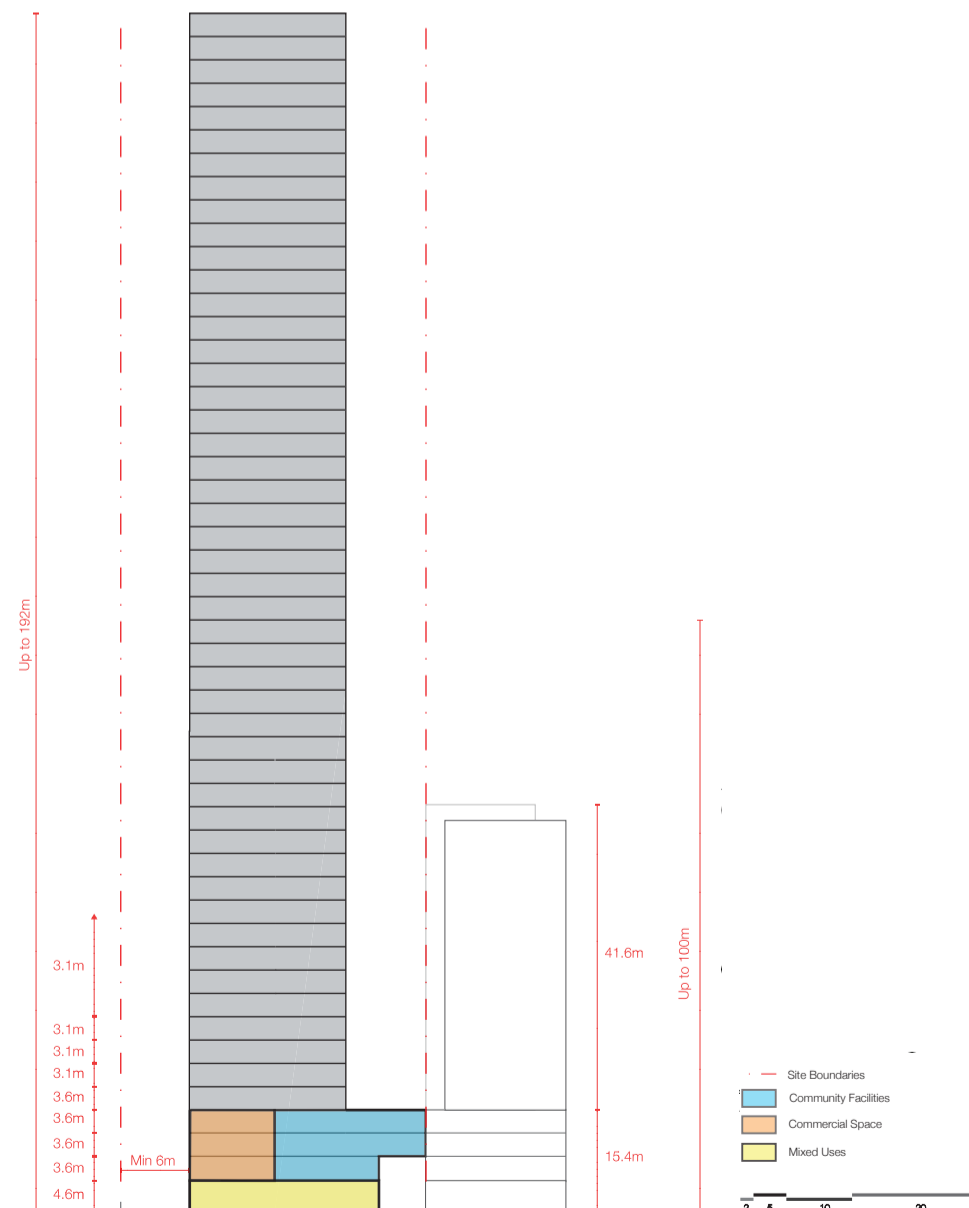
The massing has been informed by the following parameters:

- The tower responds to daylight and the (presumed permanent) openness of the site to the west. This also provides a transition to the existing residential building directly adjacent at podium level.
- Setbacks of the tower and its potential relative slenderness respond to SEPP 65 requirements to offer a massing that achieves a minimum solar access of minimum 2 hours of sunlight, during the winter solstice.
- Building heights form a transition from the existing context while considering the future growth of the area. These buildings have been arranged to provide a strong built edge to the existing streets.

- The building envelope is more than 30% greater than the achievable FSR as recommended by the Apartment Design Guide (ADG) and an allowable Gross Floor Area (GFA) fills approximately 90% of the building envelope as indicated by the ADG.

Further key points that support an increase in building heights are as follows:

- The relative slenderness and isolated status of the tower component acts as a signature element in this area of the Parramatta City Centre, increasingly defined by tower elements set on top of the podium.



FSR RECOMMENDATIONS

As noted, the current proposal seeks an increased FSR for the site. As such, the FSR should be determined in response to the likely future immediate context of the Parramatta City centre and the surrounding areas. On top of this the FSR should also consider the surrounding lower density residential context which are likely to be enhanced by future developments and offer an FSR that will allow for an appropriate transition between these densities.

Given this development has the potential to support the continued development and activation of this corner of the City Centre, an increased height and FSR will not offer any negative impacts to the surrounding immediate area. There are no impacts on significant views, either across or over the site.

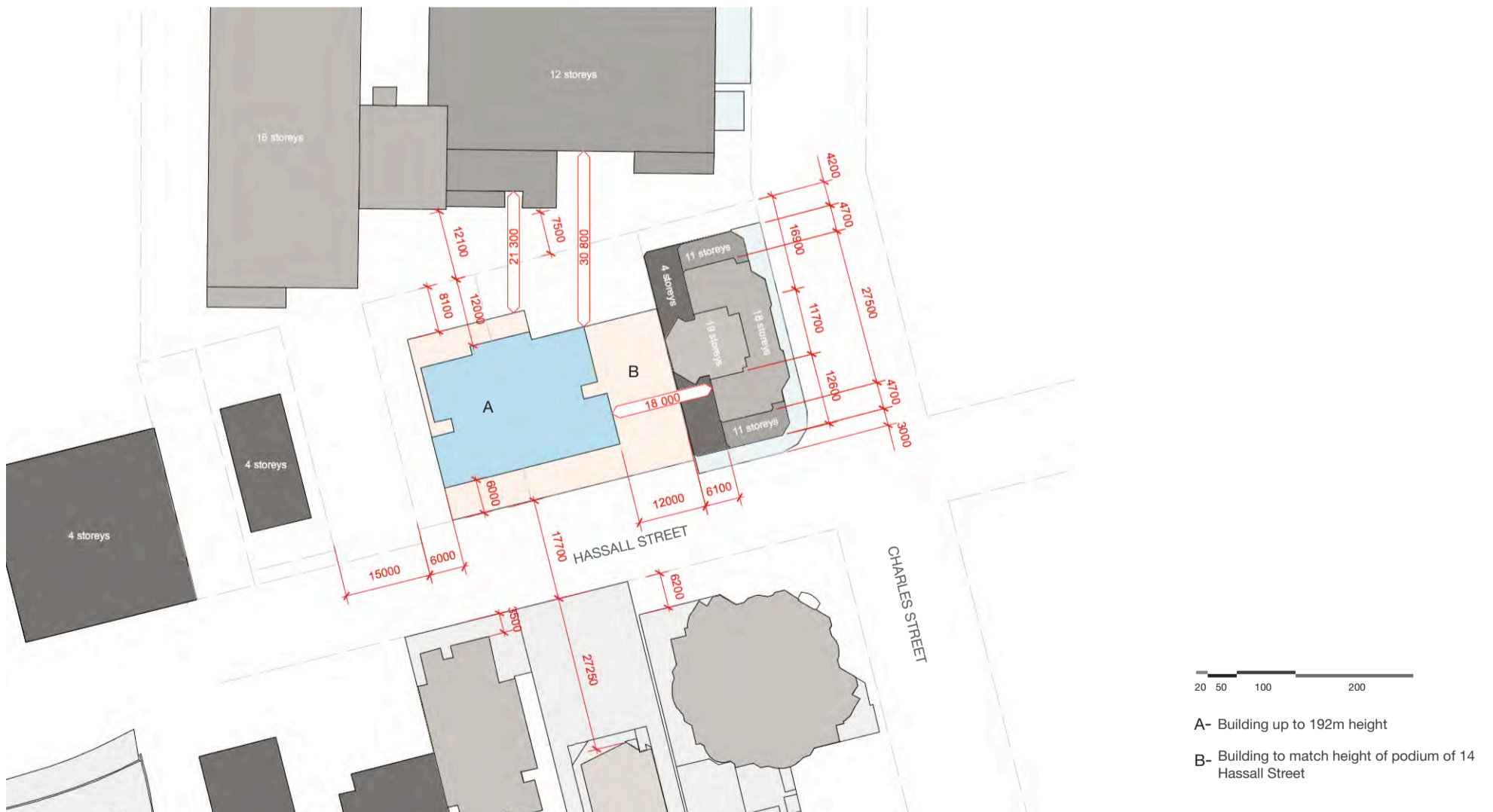
As has been previously mooted, the FSR of the City Centre city is likely to be increased, with the outlying transition zones increasing density towards the denser (and taller) City Centre proper. We would recommend a FSR which provides a gradient between the transition zone FSR and an expected upper limit city FSR. Given this, a FSR of 15:1 is appropriate for the site and could be made to be compliant with the ADG requirements.

Further key points that support an increase in FSR are as follows;

- The site is located along a key transport corridor for both rail and road.
- Current and future development is of a similarly proposed scale.
- The immediate precinct supports robust urban-scaled development.

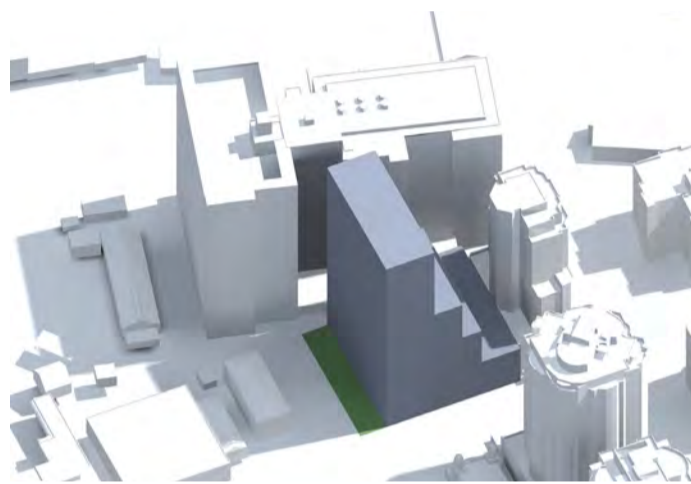
The key principles developed from the urban design strategy that support the proposed FSR of 15:1, are;

- Setback controls illustrated in the setbacks control plan.
- A maximum building height of 192m and the eastern block to match the 14 Hassall Street podium.
- The open space at the western end with a 6m minimum width and a semi-private open space at the north eastern side accessible by a share way. Basement carpark entry to be included in this area.
- A minimum FSR of 1:1 for commercial uses and opportunity for additional 1:1 floor space beyond the proposed maximum floor space ratio for community facilities and a mixed use ground floor with active frontages for Hassall Street and to the open spaces.

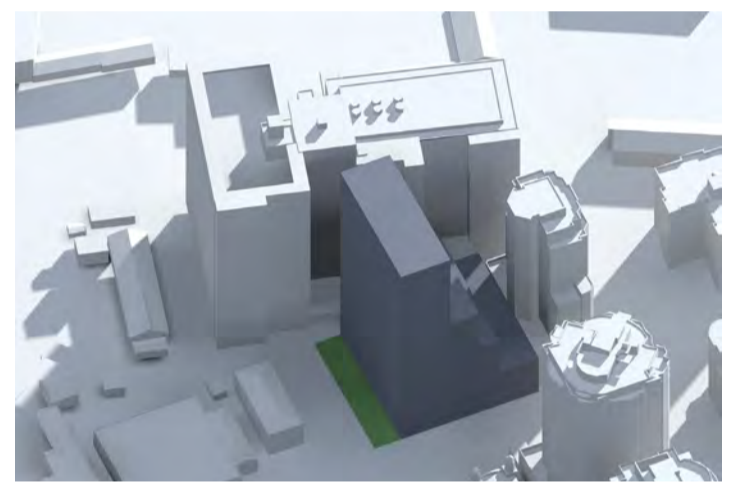


Shadow Analysis

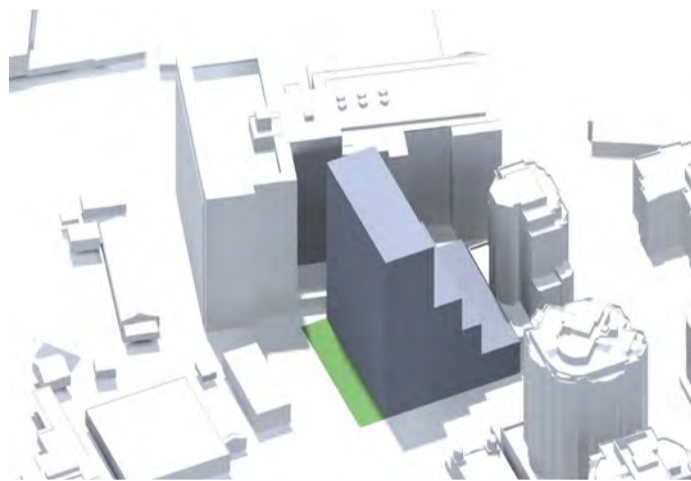
The shadow analysis of the proposed envelope, indicates that solar access to the property and to the adjacent properties achieves ADG requirements with the increase in height. Due to the north-south orientation of the potential tallest part of the development, adjacent properties still receive a minimum of 2 hours sunlight during the winter months, which is in accordance with ADG requirement. The east façade will also receive adequate sunlight during summer and winter months due to the increase in height.



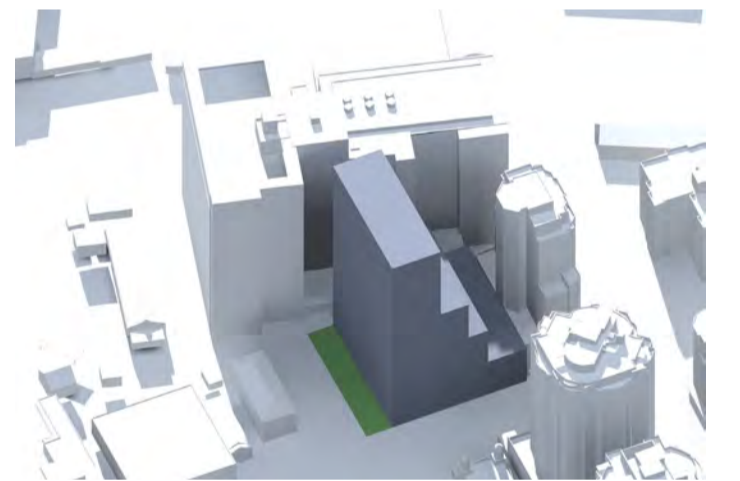
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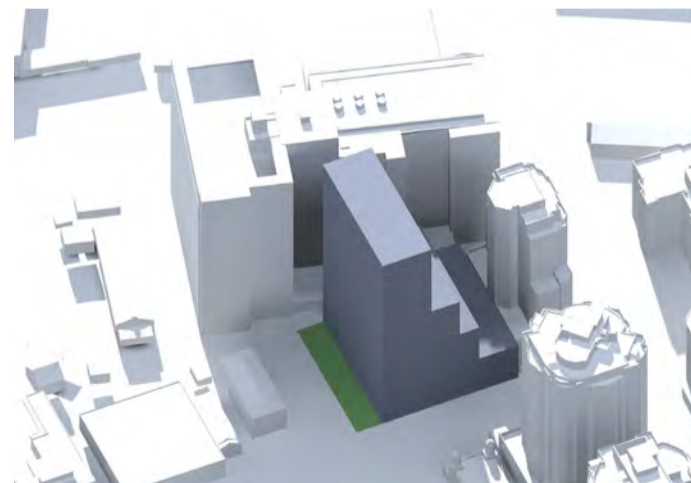
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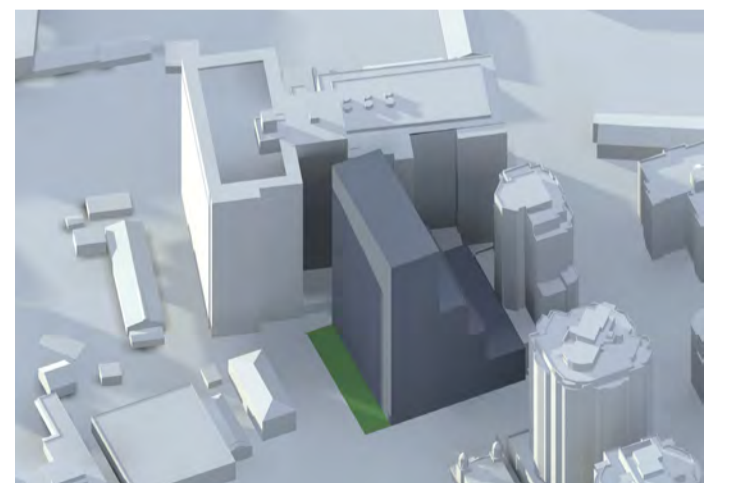
🕒 SUMMER - 12.00



🕒 WINTER - 12.00



🕒 SUMMER - 16.00



🕒 WINTER - 16.00

With current 72m height limit
LEFT Summer Shadow Analysis
RIGHT Winter Shadow Analysis

The building not only creates a transition along Hassall Street but also ensures that the western courtyard space receives continuous sunlight throughout summer and minimal sunlight during winter.

As indicated on the shadow analysis diagrams, the potential increase in tower height does not cast any overshadowing on any significant public spaces, parks, or residential open space, thus preserving solar amenity for the surroundings and enhancing solar access to the residential amenities.



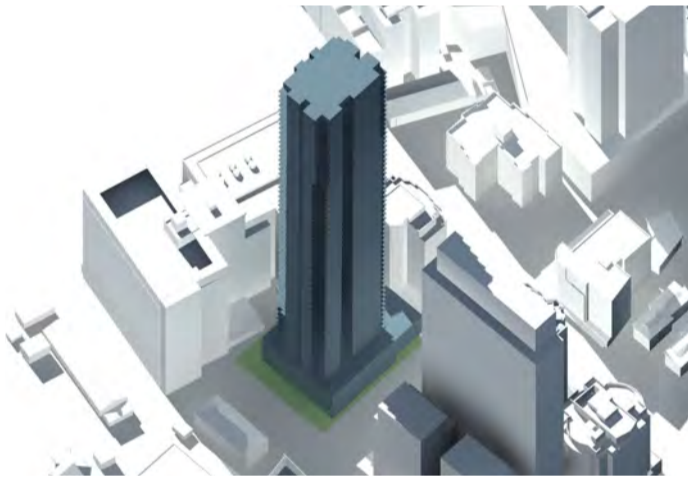
🕒 SUMMER - 09.00



🕒 WINTER - 09.00



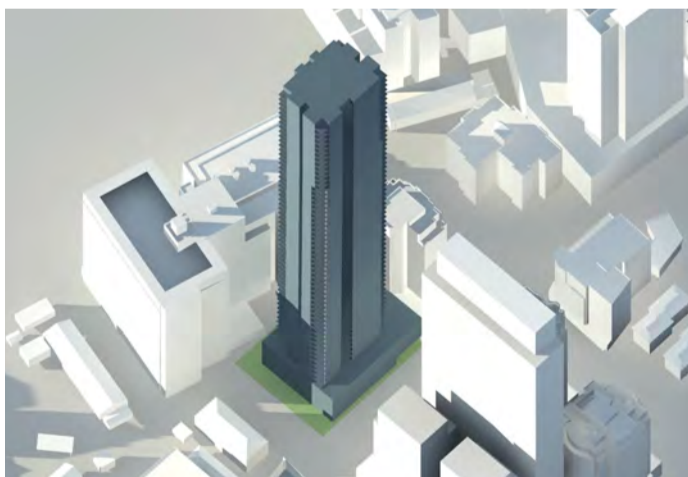
🕒 SUMMER - 12.00



🕒 WINTER - 12.00

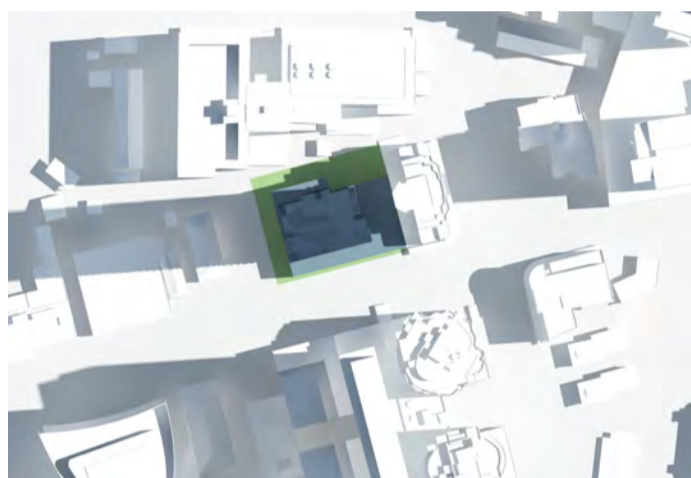


🕒 SUMMER - 16.00

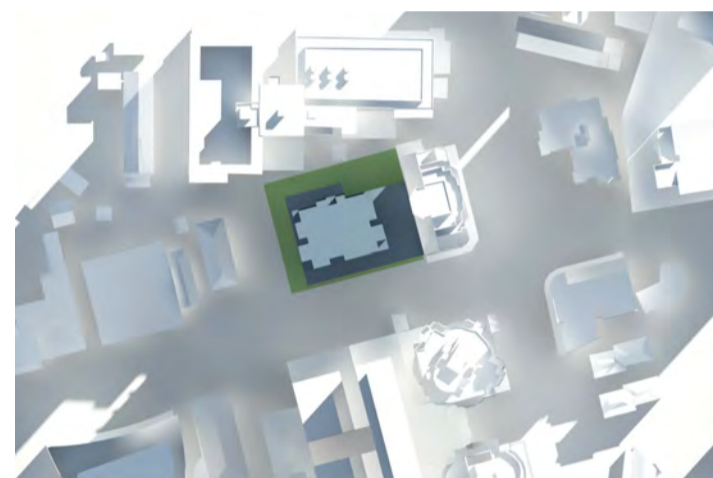


🕒 WINTER - 16.00

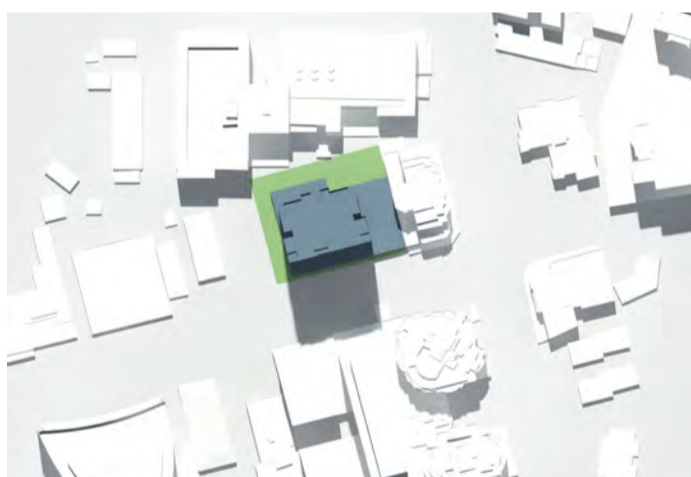
With proposed FSR 15:1
LEFT Summer Shadow Analysis
RIGHT Winter Shadow Analysis



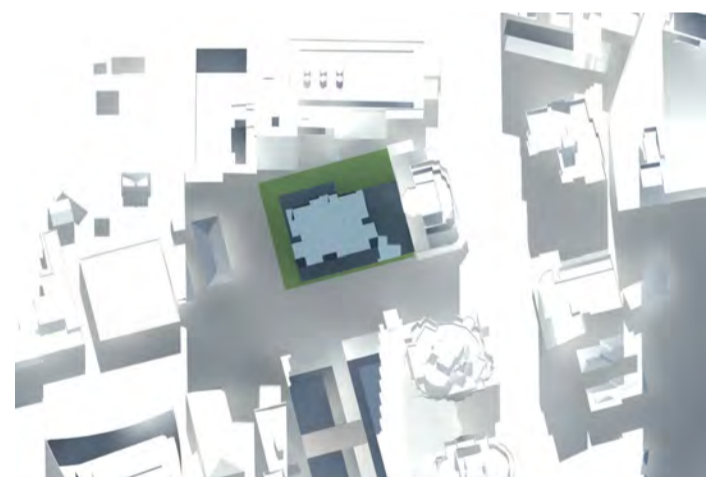
🕒 SUMMER - 09.00



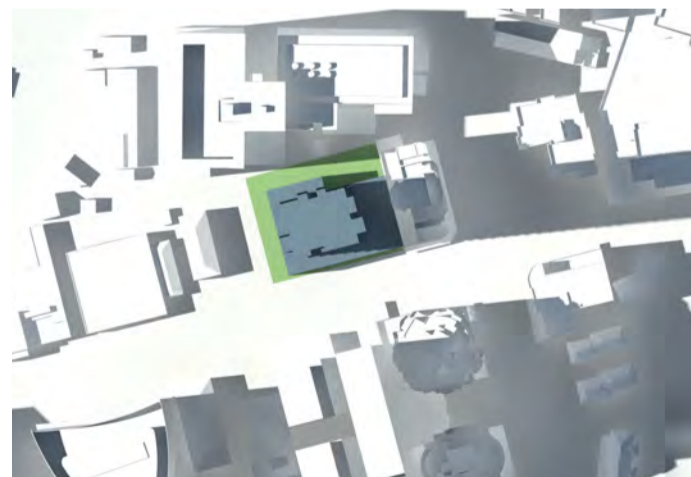
🕒 WINTER - 09.00



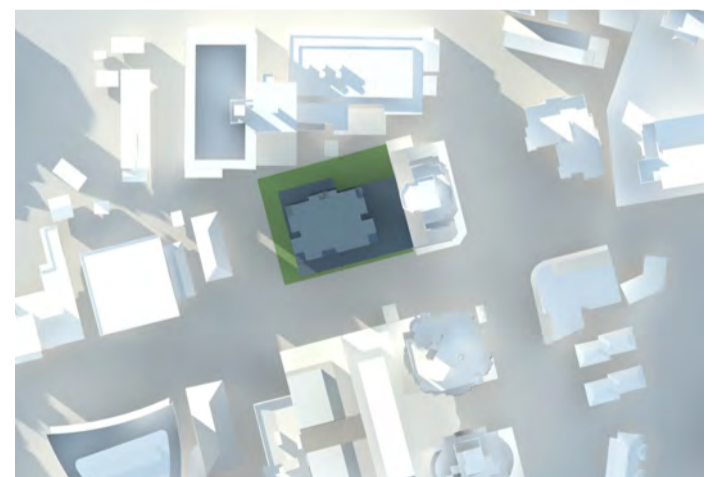
🕒 SUMMER - 12.00



🕒 WINTER - 12.00



🕒 SUMMER - 16.00



🕒 WINTER - 16.00

With proposed FSR 15:1
LEFT Summer Shadow Analysis Plan
RIGHT Winter Shadow Analysis Plan

INDICATIVE FLOOR PLANS

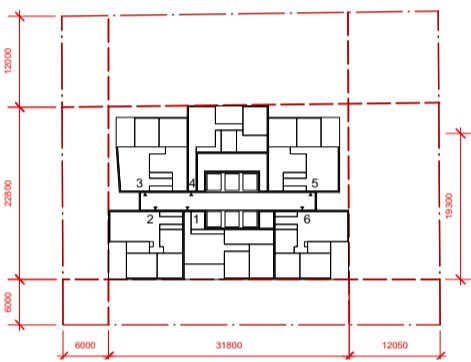
The indicative floor plans illustrate the high level of amenity that can be achieved by the conceptual configuration that easily fits within the proposed envelope. The plans have been designed on a grid to allow for flexibility and variation to the floor plate, contingent upon the desired apartment mix. The plans have been conceived to maximise solar orientation through a mix of careful planning and by projecting living areas to introduce a northern face. On the

upper levels, of the five 2 bedroom apartments are shown, four apartments have dual orientation and therefore an opportunity for cross ventilation, the lower level achieves a higher proportion, with seven of eight apartment with potential for cross ventilation through the face of the building or a broad recess.

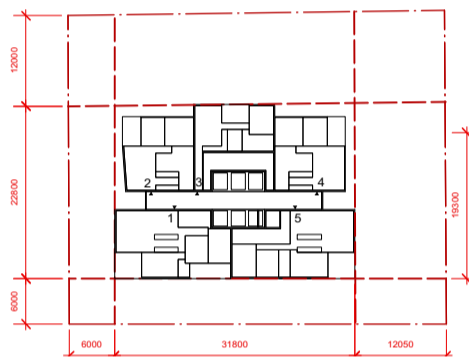
Residential Floor Plan A (43 Storeys)

Residential Floor Plan B (14 Storeys)

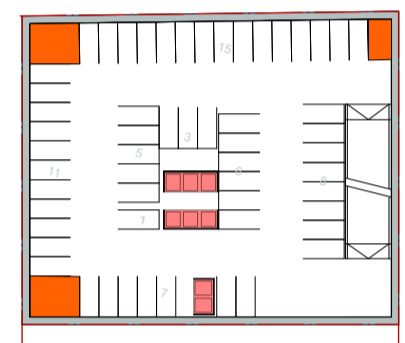
Basement Parking Plan



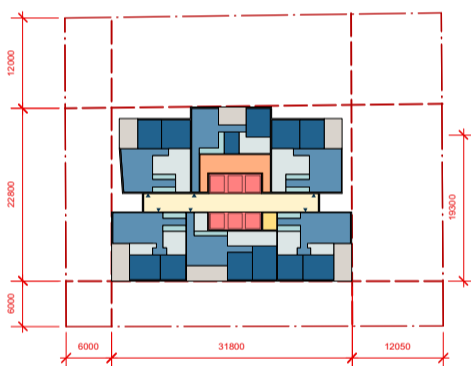
Units per floor (4-46 floor)



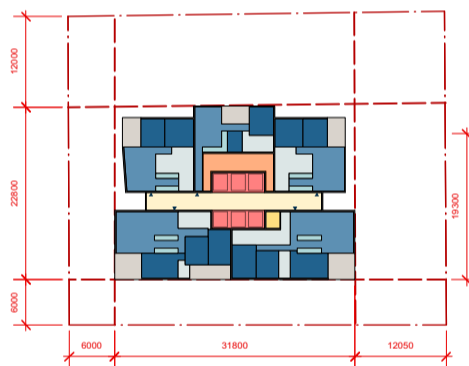
Units per floor (47-60 floor)



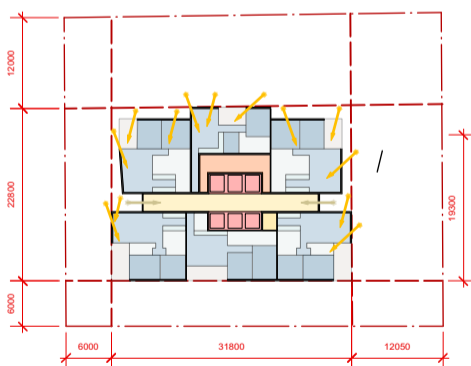
Car Park - 56 spaces per level (maximum)



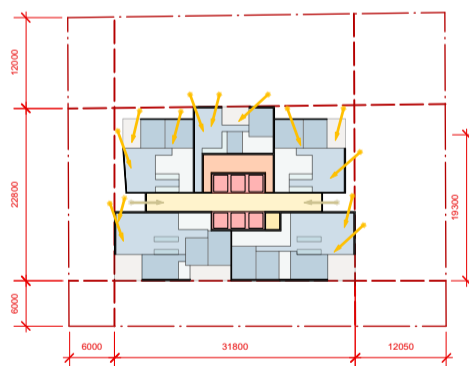
Apartments plan (4-46 floor)



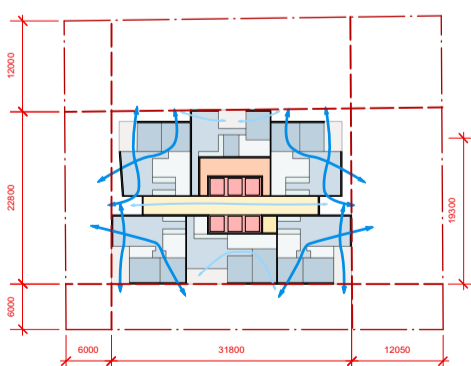
Apartments plan (47-60 floor)



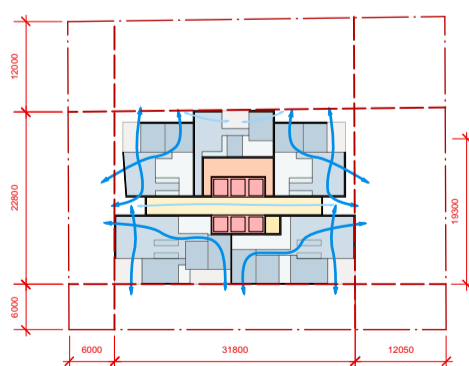
Solar access plan (4-46 floor)



Solar access plan (47-60 floor)



Cross ventilation plan (4-46 floor)



Cross ventilation plan (47-60 floor)

- Legend**
- Bedroom
 - Living/Dining Room
 - Service Rooms; Bathrooms, Laundries, Storage
 - Private Open Space
 - Lift Core
 - Fire Stair
 - Service Risers
 - Front Door
 - Kitchen

Scale: 1:1000

LEFT Lower Residential
MIDDLE Upper Residential
RIGHT Basement

INDICATIVE ELEVATION

The flexibility of the envelope is illustrated in the approach illustrated below. The elevation shows a residential tower above a commercial and a community use base, where solar access is limited then difficult to achieve ADG minimum recommendations for amenity. The taller slender building, will be capable to attain a high level of amenity to all apartments. This approach offers the majority dual orientation with superb outlook, exceptional environmental performance (solar and ventilation) and an optimal building separation for a dense urban

environment.

Such an approach anticipates a variety of architectural outcomes and suggests an approach to the site planning which will lead to a very high quality outcome for all apartments with regard to amenity and internal layouts.

Proposed Gross Floor Area

Site Area 2 055m²

Proposed Areas:

Ground Floor
 Commercial 320m²
 Community 310m²
 Foyers 100m²
Total Ground Floor 730m²

Typical Podium Floors (1st to 3rd Floors)
 Commercial/ Community 1160m²
Total (over 3 floors) 3480m²

TOTAL COMMERCIAL 2055m²
 NB: Minimum commercial FSR of 1:1 required

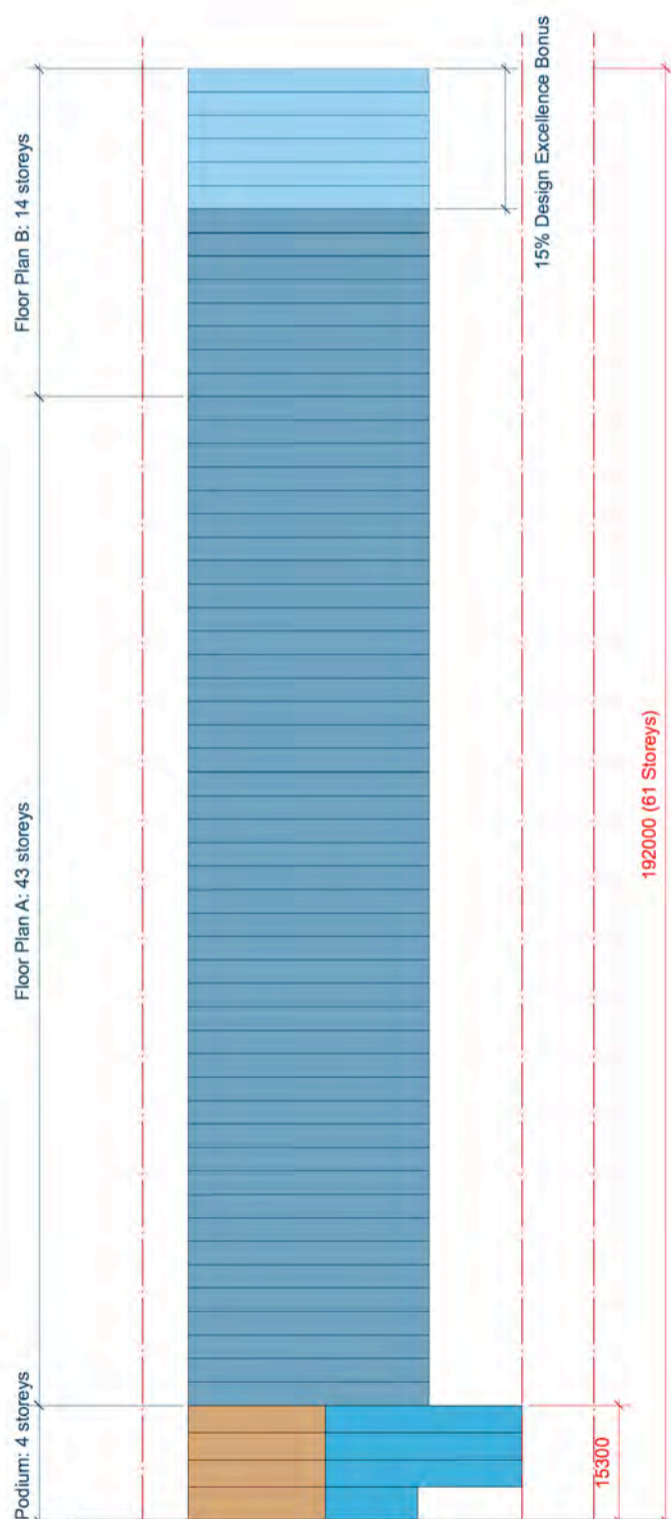
TOTAL COMMUNITY 2055m²

Residential Floors
 Floor Plan A (4th to 46th Floors) 503m²
Total Floor Plan A 21629m²
 Floor Plan B (47th to 60th Floors) 503m²
Total Floor Plan B 7042m²

TOTAL GFA 32,880m²

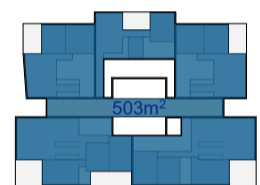
TOTAL GFA excluding Community use (1:1) 30,825 m² 15:1 FSR

Total GFA includes Design excellence bonus of 1.5:1 (3082.5m²)



- Legend
- Mixed uses
- Community facilities
- Commercial spaces
- Residential
- Flexible envelope

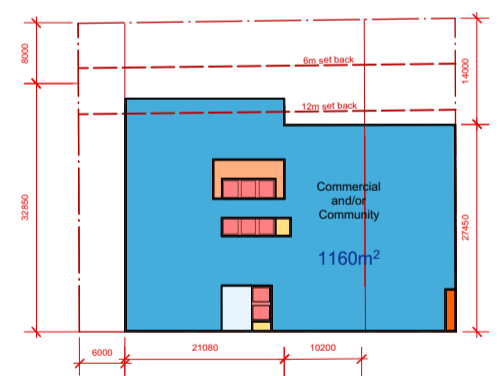
Scale: 1:1000



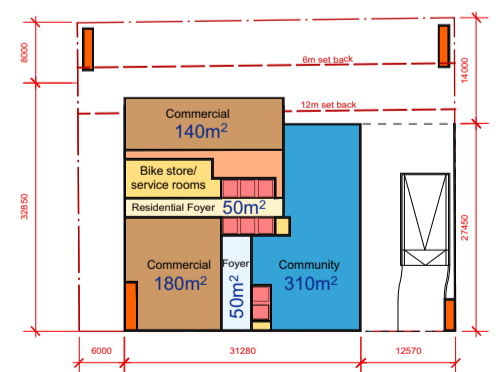
Residential Floor Plan B



Residential Floor Plan A



Podium Levels



Ground Floor

Proposed reference scheme

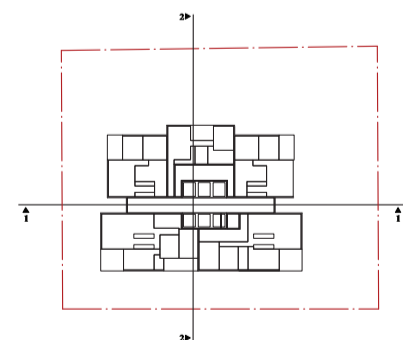
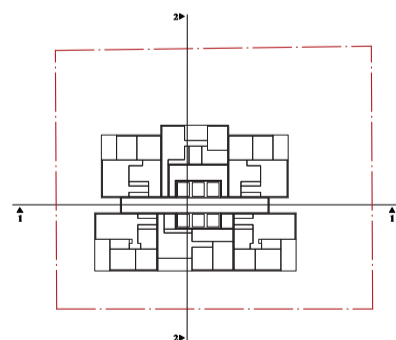
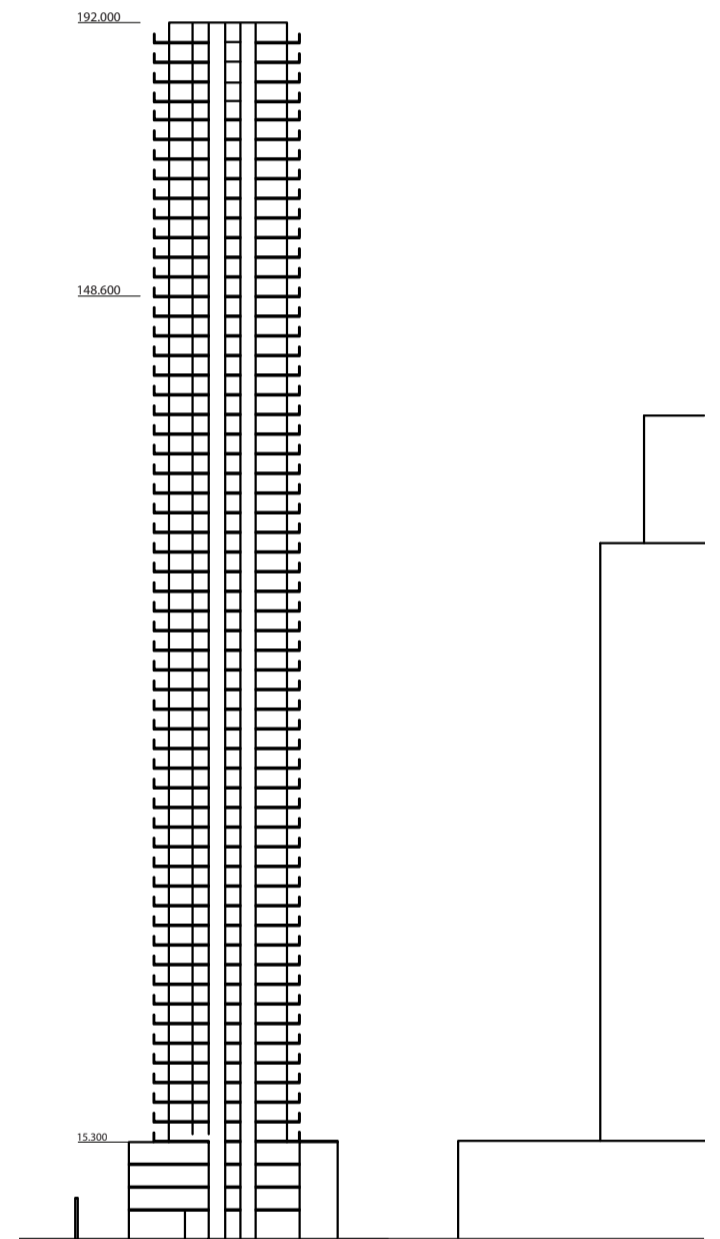
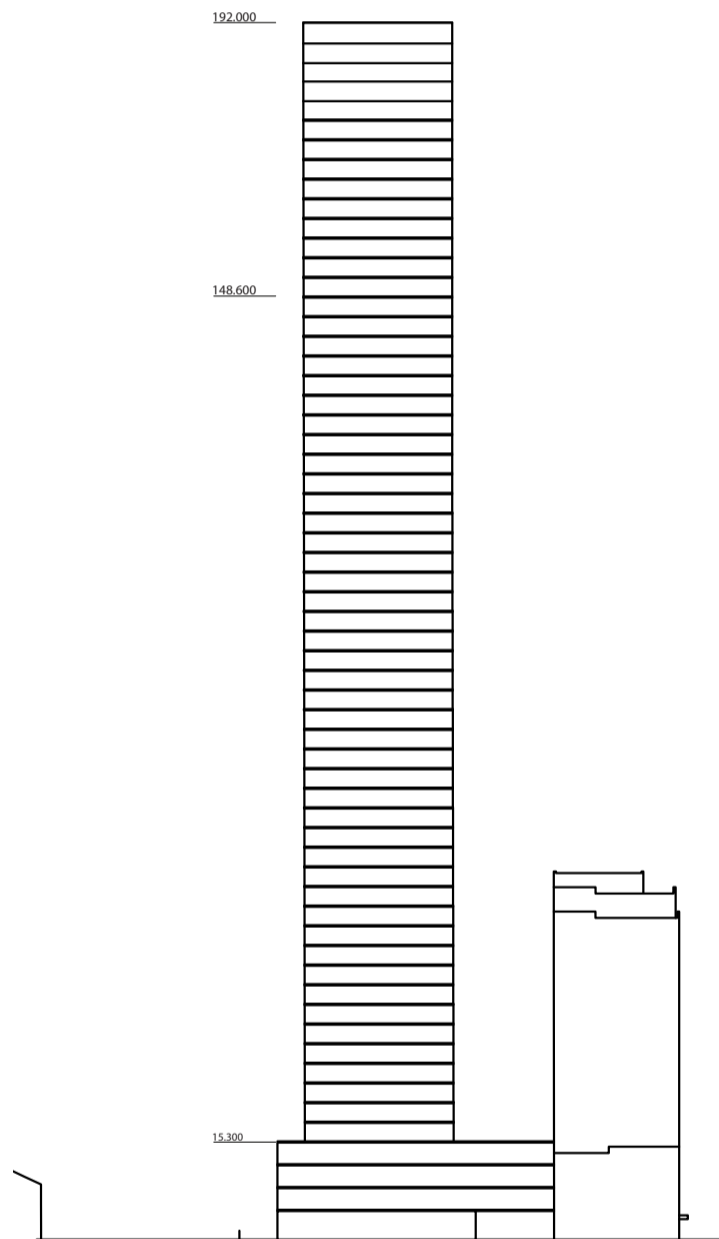
LEFT. Hassall Street Elevation (61 Storeys)

RIGHT. Approximate area per levels

INDICATIVE SECTIONS

The lower levels of the building, the commercial and community use levels will equally achieve a level of flexibility conceived up through the building. The lowest level would be divided as necessary to accommodate lift foyers for the various uses above, whilst still allowing for an active frontage to all external spaces. Floor plates can be utilised for a single use across one floor, or divided into two,

allowing commercial and community uses to independently occupy a single floor plate. These floor plates also encourage a higher level of environmental performance, with ample access to natural light and ventilation (where desired), opportunities to incorporate outdoor spaces on the perimeter, as well as some solar access along the western perimeter for a good part of the year.



Scale: 1:1000

Proposed Scheme
 TOP LEFT: Section 1
 TOP RIGHT: Section 2

Proposed Scheme
 BOTTOM LEFT: Typical floor plan 4-46 level
 BOTTOM RIGHT: Typical floor plan 47-60 level

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Summary

The report has identified the key investigations of the development site, that might be given consideration in the context of a planning proposal to amend the site's FSR and overall height limit. The height, massing and FSR as per recommended option have been formed by an understanding of the context and the future development strategies of the Parramatta City Centre. The report explores the fundamentals of an Urban Design Strategy that should inform the design excellence of any subsequent proposed development.

The following key points outline the primary findings and recommendations from this report:

Given the recent and current development in the immediate area, the development site should be considered a key urban form maker for the area.

The increased FSR of the city, the surrounding transition areas and the location of the development in a key connecting precinct in the city should support a corresponding increased FSR for the site.

It is recommended that the LEP be amended to permit a building height across the site ranging up to 192 metres within the increased FSR. The site is also capable of delivering apartments of high amenity, over and above the requirements of the ADG.

The site sits within a recognised area of urban and regional significance and a special character areas, with views into and out of the immediate district that includes significant landscapes, and a dense conurbation which can best be addressed through robust built form, proactive site responses and an integration into the developing urban fabric.

The public domain establishes enhanced connectivity and amenity and should appropriately respond to the expected increase in residential density afforded by the increased FSR and height limits sought in the accompanying planning proposal.

12 HASSALL STREET PARRAMATTA Planning Proposal Reference Scheme

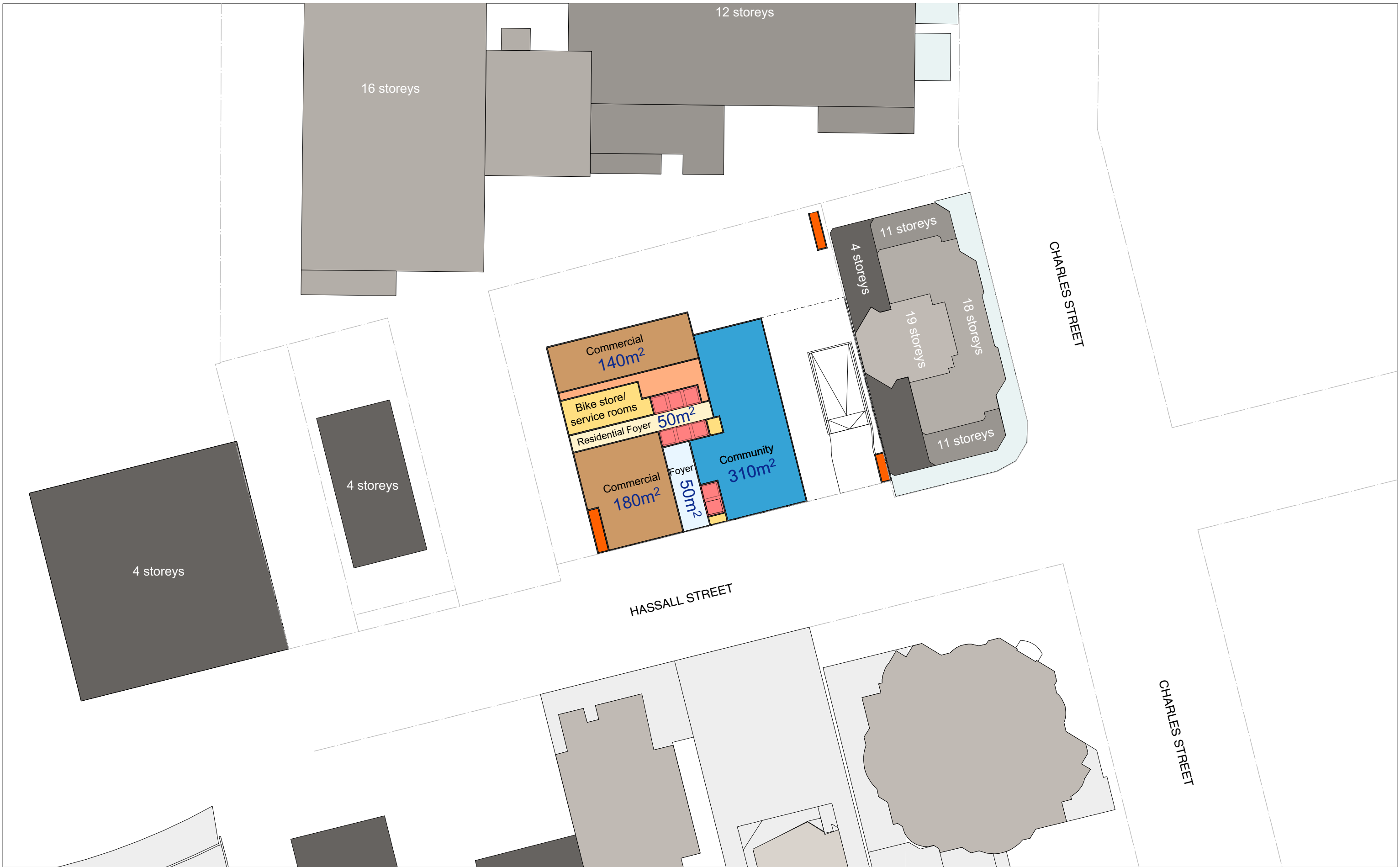
COMPLIANCE TABLE

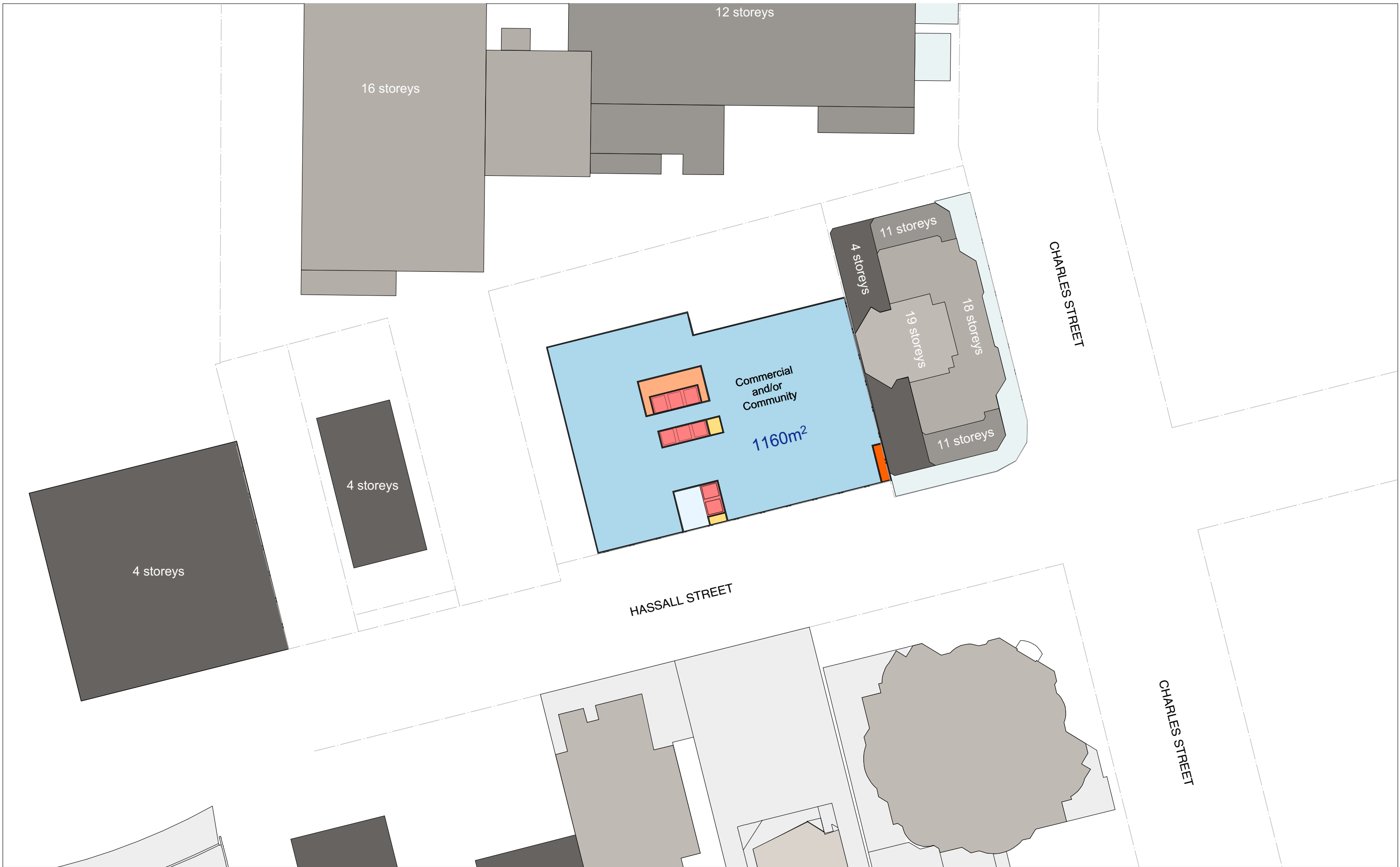
Objectives	Summary	Compliance	Comments												
	SITING														
3A-1	Site Analysis illustrates that design decisions have been based upon the opportunities and constraints of the site.	Complies													
3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	Complies													
3B-2	Overshadowing of neighbouring properties is minimised during mid winter	Generally	In a growing urban environment it is inevitable that there will be some impact.												
3C-1	Transition between private and public domain is achieved without compromising safety and security	Complies													
3C-2	Amenity of the public domain is retained and enhanced	Complies	See Urban Design Report												
3D-1	An adequate area of communal open space is provided to enhance residential amenity and provide opportunities for landscaping	Complies	Spaces will be provided above the podium and at Ground level.												
3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	Capable of complying													
3D-3	Communal open space is designed to maximise safety	Capable of complying													
3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	Complies	See Urban Design Report												
3E-1	Deep soil zones allow for and support healthy plant growth. Min. deep soil zones: <table border="0"> <tr> <td>< 650sqm</td> <td>No min. dimensions</td> <td>7% site area</td> </tr> <tr> <td>650 – 1500sqm</td> <td>3m min dimension</td> <td>7% site area</td> </tr> <tr> <td>≥ 1500</td> <td>6m min dimension</td> <td>7% site area</td> </tr> </table>	< 650sqm	No min. dimensions	7% site area	650 – 1500sqm	3m min dimension	7% site area	≥ 1500	6m min dimension	7% site area	Generally	<i>ADG: "Achieving the design criteria may not be possible on some sites including where the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres)"</i>			
< 650sqm	No min. dimensions	7% site area													
650 – 1500sqm	3m min dimension	7% site area													
≥ 1500	6m min dimension	7% site area													
3F-1	Adequate building separation distances are shared equitably between neighbouring sites to achieve reasonable levels of external and internal visual privacy <table border="0"> <tr> <td>Height</td> <td>Habitable Rooms/balconies</td> <td>No habitable Rooms</td> </tr> <tr> <td>Up to 12m</td> <td>6m</td> <td>3m</td> </tr> <tr> <td>Up to 25m</td> <td>9m</td> <td>4.5</td> </tr> <tr> <td>>25m</td> <td>12m</td> <td>6m</td> </tr> </table>	Height	Habitable Rooms/balconies	No habitable Rooms	Up to 12m	6m	3m	Up to 25m	9m	4.5	>25m	12m	6m	Complies	
Height	Habitable Rooms/balconies	No habitable Rooms													
Up to 12m	6m	3m													
Up to 25m	9m	4.5													
>25m	12m	6m													
3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views between habitable rooms and private open space.	Capable of complying													
3G-1	Building entries and pedestrian access connects to and addresses the public domain	Complies													
3G-2	Access, entries and pathways are accessible and easy to identify	Capable of complying													
3G-3	Large sites provide pedestrian links for access to streets and connection to destinations	N/A													

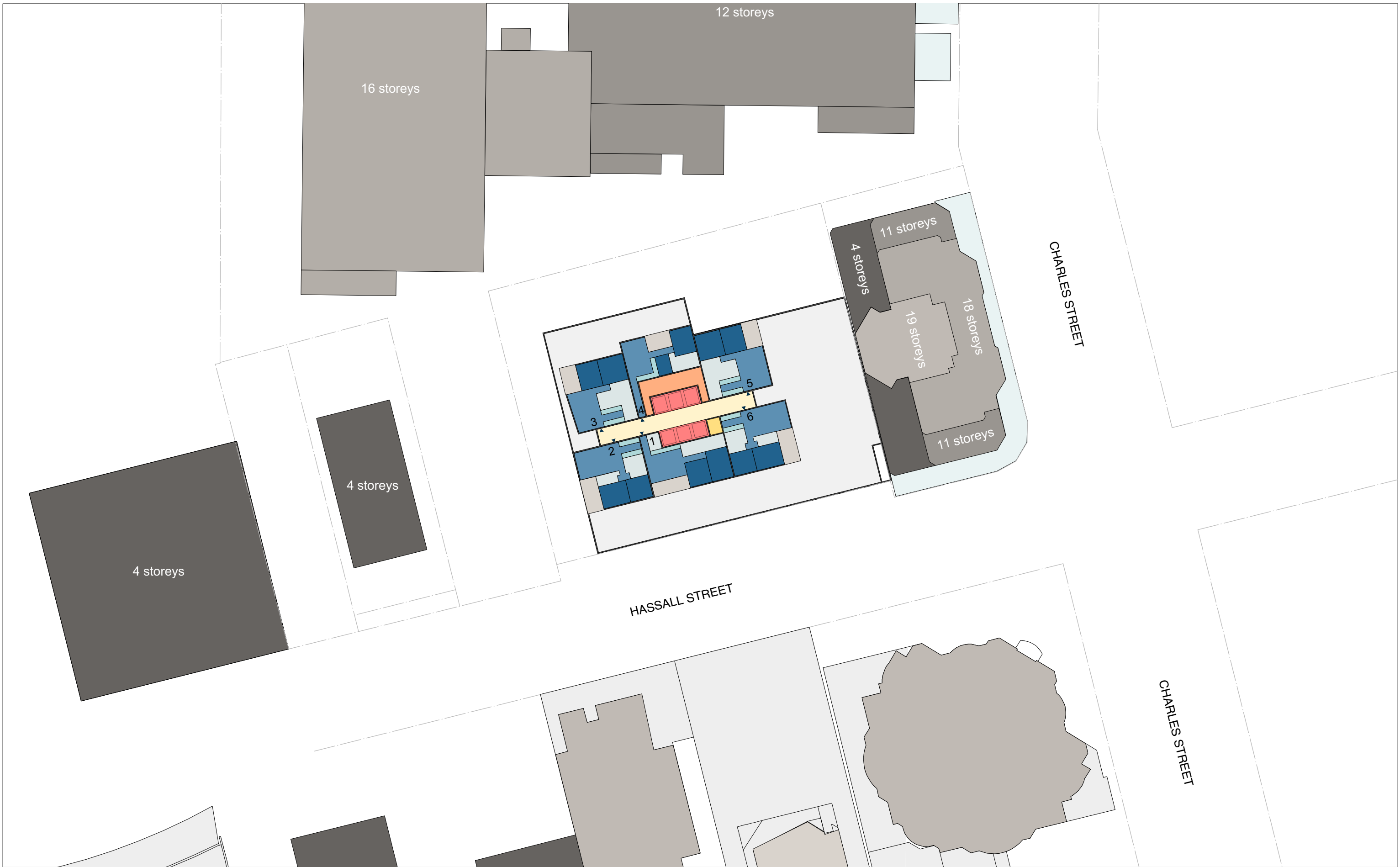
3H-1	Vehicle access points are designed to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	Capable of complying	
3J-1	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	Generally	
3J-2	Parking and facilities are provided for other modes of transport	Generally	
3J-3	Car park design and access is safe and secure	Capable of complying	
3J-4	Visual and environmental impacts of underground car parking are minimised	Complies	
3J-5	Visual and environmental impacts of on-grade car parking are minimised	N/A	
3J-6	Visual and environmental impacts of above ground enclosed car parking are minimised	N/A	
DESIGNING THE BUILDING			
4A-1	Optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space All other areas – a min. of 3 hours* A max. of 15% receive no sun in mid winter * Note: 2 hours min sunlight midwinter in Sydney/Newcastle/Wollongong All other areas a min. of 3 hours A max. of 15% of apartments can receive no sun in mid winter	Complies	86% of apartments receive a minimum of 2 hours of sun in mid-winter to habitable rooms 14% of apartments will not receive any sunlight in mid-winter.
4A-2	Daylight access is maximised where sunlight is limited	Complies	
4A-3	Design incorporates shading and glare control, particularly for warmer months	Capable of complying	
4B-1	All habitable rooms are naturally ventilated	Capable of complying	
4B-2	The layout and design of single aspect apartments maximises natural ventilation	Complies	
4B-3	The number of apartments with cross ventilation is maximised At least 60% of apartments are naturally cross ventilated Over all depth of cross over apartments in 18m max.	Complies	69% of apartments are cross ventilated.
4C-1	Ceiling height achieves sufficient natural ventilation and daylight access. Min height of: Habitable rooms 2.7m Non habitable rooms 2.4m Two storey apartments 2.7m main living floor 2.4m for second floor (max. 50% area) 1.8m at edge of room 30° ceiling slope Attic spaces	Complies	A floor to floor height of 3.1m has been allowed for on the residential floors.
4C-2	Ceiling height increases the sense of space in apartments and provides for well proportioned rooms	Complies	
4C-3	Ceiling height contributed to flexibility of building use over the life of the building	Complies	
4D-1	Layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	Complies	
	Min. Apartment areas: Studio 35sqm 1 bed 50sqm 2 bed 70sqm 3 bed 90sqm	Complies	1 Bed Apt = 60sqm 2 Bed Apt = 75sqm min 3 Bed Apt = 110 sqm min
	Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.	Capable of complying	

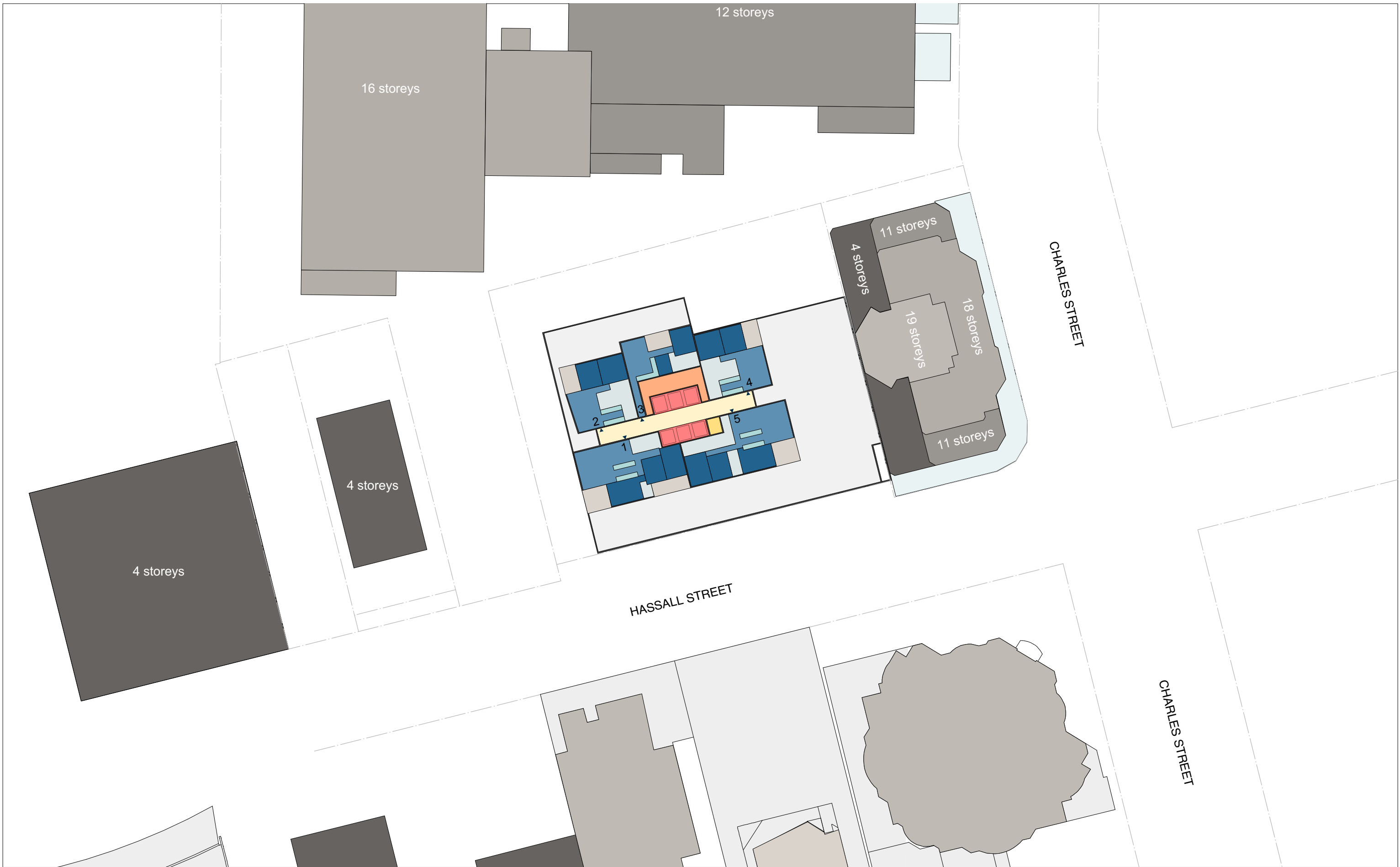
4D-2	Environmental performance of the apartment is maximised	Capable of complying	
	Habitable room depths are limited to a maximum of 2.5 x the ceiling height	Complies	
	In open plan layouts the maximum habitable room depth is 8m from a window	Complies	
4D-3	Apartment layouts are designed to accommodate a variety of household activities and needs	Complies	
	Master bedrooms have a minimum area of 10sqm and other bedrooms 9sqm (excluding wardrobes)	Complies	
	Bedrooms have a minimum dimension of 3m (excluding robes)	Complies	
	Living rooms or open plan living have min width of 3.6m for studios/1beds 4m for 2/3beds	Complies	
	Width of cross over apartments are at least 4m internally to avoid narrow layouts	N/A	
4E-1	Apartments provide appropriately sized private open space and balconies to enhance residential amenity	Complies	
	Primary balconies Studio 4sqm - 1 bed 8sqm 2m min depth 2 bed 10sqm 2m min depth 3 bed 12sqm 2.4m min depth		1 Bed Apt = 8.5sqm balcony 2 Bed Apt = 10 sqm min balcony 3 Bed Apt = 12sqm min balcony
	Apartments at ground level or on podium have a private open space instead of a balcony. Minimum area is 15sqm and minimum depth is 3m	N/A	
4E-3	Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	Capable of complying	
4E-4	Private open space and balcony design maximises safety	Capable of complying	
4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments	Complies	
	Maximum number of apartments off a circulation core on a single level is 8	Complies	
	For buildings 10 + storeys, maximum number of apartments sharing a single lift is 40	Capable of complying	
4F-2	Common circulation spaces promote safety and provide for social interaction between residents	Capable of complying	
4G-1	Adequate, well designed storage is provided in each apartment	Capable of complying	
	Studios 4m3 1 bed 6m3 2 bed 8m3 3 + 10m3		
4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments.	Capable of complying	
4H-1	Noise transfer is minimised through the siting of buildings and building layout	Capable of complying	
4H-2	Noise impacts are mitigated within apartments through layout and acoustic treatments	Capable of complying	
4J-1	In noisy or hostile environments the impacts of external noise and pollution are minimised through careful siting and layout of buildings	Capable of complying	
4J-2	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.	Capable of complying	
4K-1	A range of apartment types and sizes is provided to cater for different household types now and into the future.	Complies	
4K-2	The apartment mix is distributed to suitable locations within the building.	Complies	
4L-1	Street frontage activity is maximised where ground floor apartments are located.	Complies	

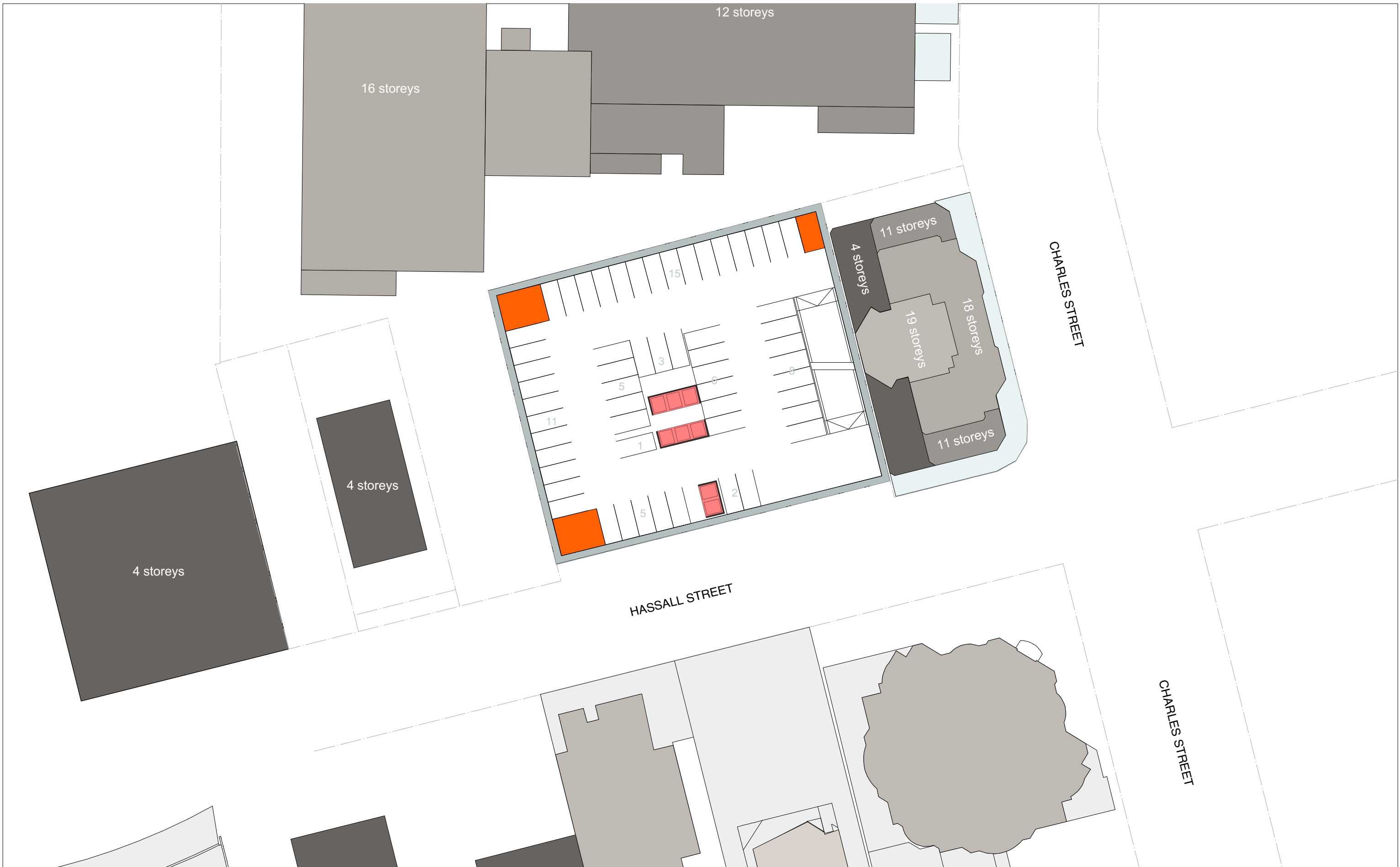
4L-2	Design of ground floor apartments delivers amenity and safety for residents	N/A	
4M-1	Building facades provide visual interest along the street while respecting the character of the local area.	Capable of complying	
4M-2	Building functions are expressed by the façade	Capable of complying	
4N-1	Roof treatments are integrated into the building design and respond positively to the street.	Capable of complying	
4N-2	Opportunities to use roof space for residential accommodation and open space are maximised.	Capable of complying	There is opportunity for rooftop open space
4N-3	Roof design incorporates sustainability features	Capable of complying	
4O-1	Landscape design is viable and sustainable	Capable of complying	
4O-2	Landscape design contributes to the streetscape and amenity	Capable of complying	
4P-1	Appropriate soil profiles are provided	Capable of complying	
4P-2	Plant growth is optimised with appropriate selection and maintenance	Capable of complying	
4P-3	Planting on structures contributes to the quality and amenity of communal and public open spaces	Capable of complying	
4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members	Capable of complying	
4Q-2	A variety of apartments with adaptable designs are provided	Capable of complying	
4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs	Complies	
4R-1	New additions to existing buildings are contemporary and complementary and enhance an areas identity and sense of place	N/A	
4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse	N/A	
4S-1	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.	Complies	
4S-2	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	Capable of complying	
4T-1	Awnings are well located and complement and integrate with building design	Capable of complying	
4T-2	Signage responds to the context and desired streetscape character	Capable of complying	
4U-1	Development incorporates passive environmental design	Capable of complying	
4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	Capable of complying	
4U-3	Adequate natural ventilation minimises the need for mechanical ventilation	Capable of complying	
4V-1	Potable water use is minimised	Capable of complying	
4V-2	Urban stormwater is treated on site before being discharged to receiving waters	Capable of complying	
4V-3	Flood management systems are integrated into site design	N/A	
4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Capable of complying	
4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling	Capable of complying	
4X-1	Building design detail provides protection from weathering	Capable of complying	
4X-2	Systems and access enable ease of maintenance	Capable of complying	
4X-3	Material selection reduces ongoing maintenance costs	Capable of complying	

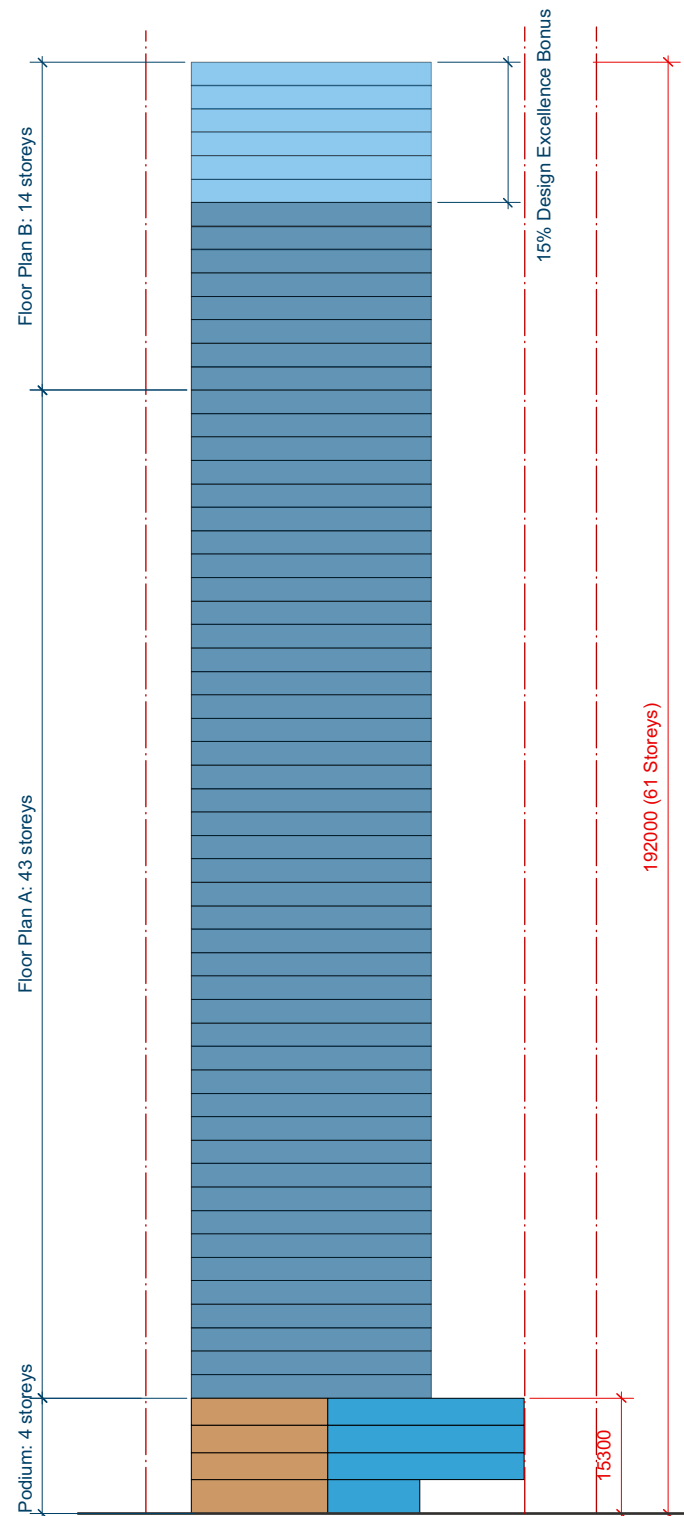




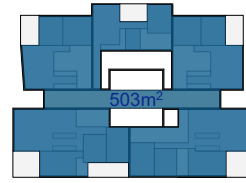




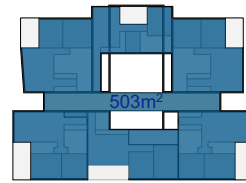




Residential Floor Plan B



Residential Floor Plan A



Proposed Gross Floor Area

Site Area 2 055m²

Proposed Areas:

Ground Floor
 Commercial 320m²
 Community 310m²
 Foyers 100m²
Total Ground Floor 730m²

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TOTAL COMMERCIAL 2055m²
 NB: Minimum commercial FSR of 1:1 required

TOTAL COMMUNITY 2055m²

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 Floor Plan B (47th to 60th Floors) 503m²
Total Floor Plan B 7042m²

TOTAL GFA 32,880m²

TOTAL GFA excluding Community use (1:1) 30,825 m² 15:1 FSR

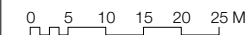
Total GFA includes Design excellence bonus of 1.5:1 (3082.5m²)

Legend

- Bedroom/ Study
- Living/ Dining Room/ Circulation
- Service Rooms: Bathrooms, Laundries, Storage
- Private Open Space - balconies
- Common circulation
- Lift Core
- Fire Stair
- Service Rooms & Risers
- Front Door
- Kitchen

Scale & Orientation

1: 1000 @ A3



All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Revision Log

B Revision B
 A Revision

Rev Revision Description

By/Checked Date

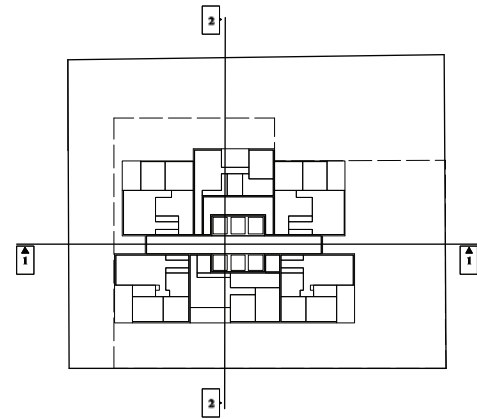
27/4/17
 31/3/17

Sheet Title

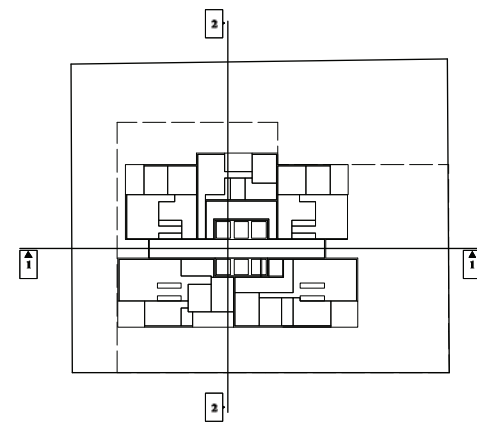
Hassall Street Elevation / GFA Table

Sheet No.
06

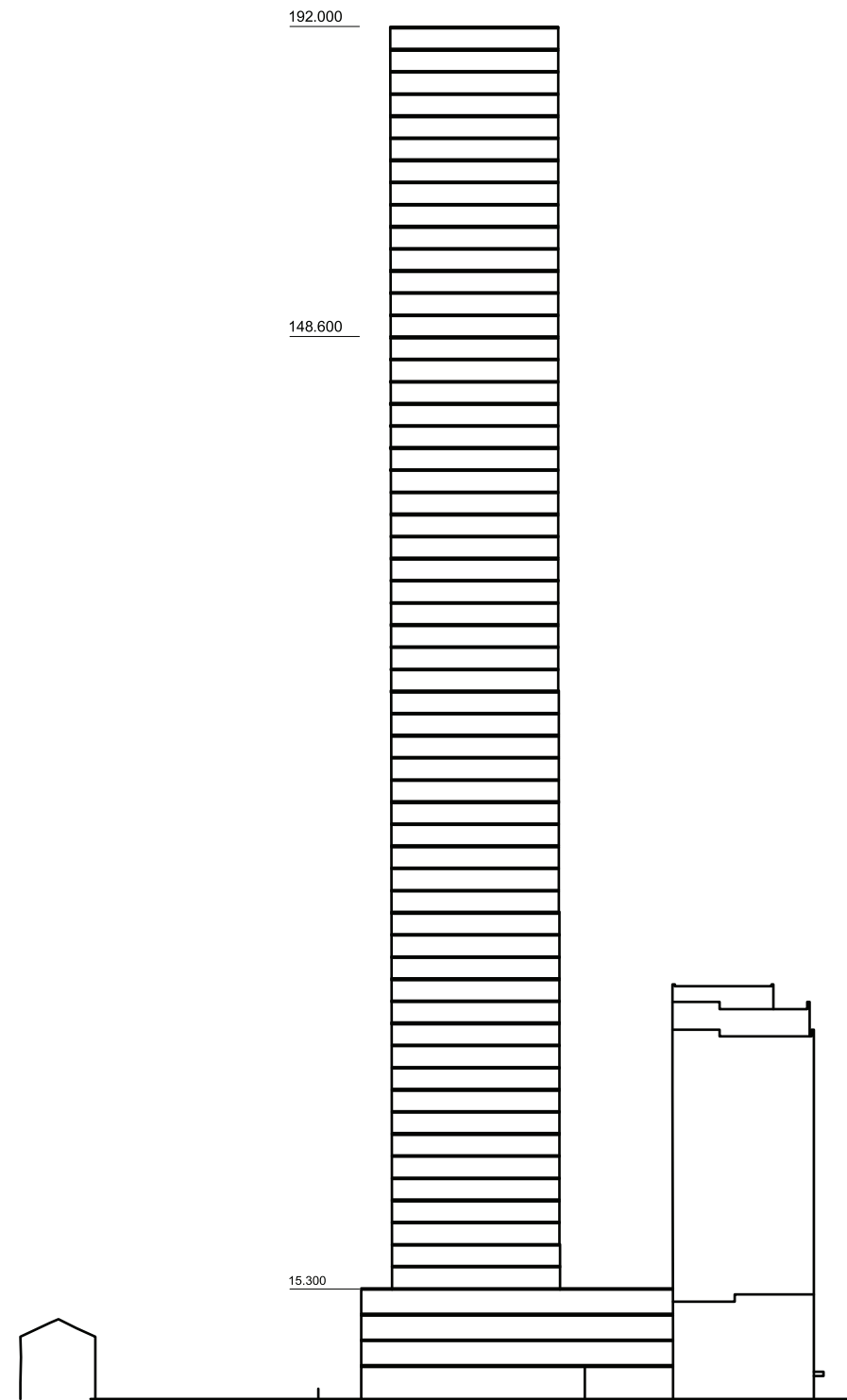
Rev
B



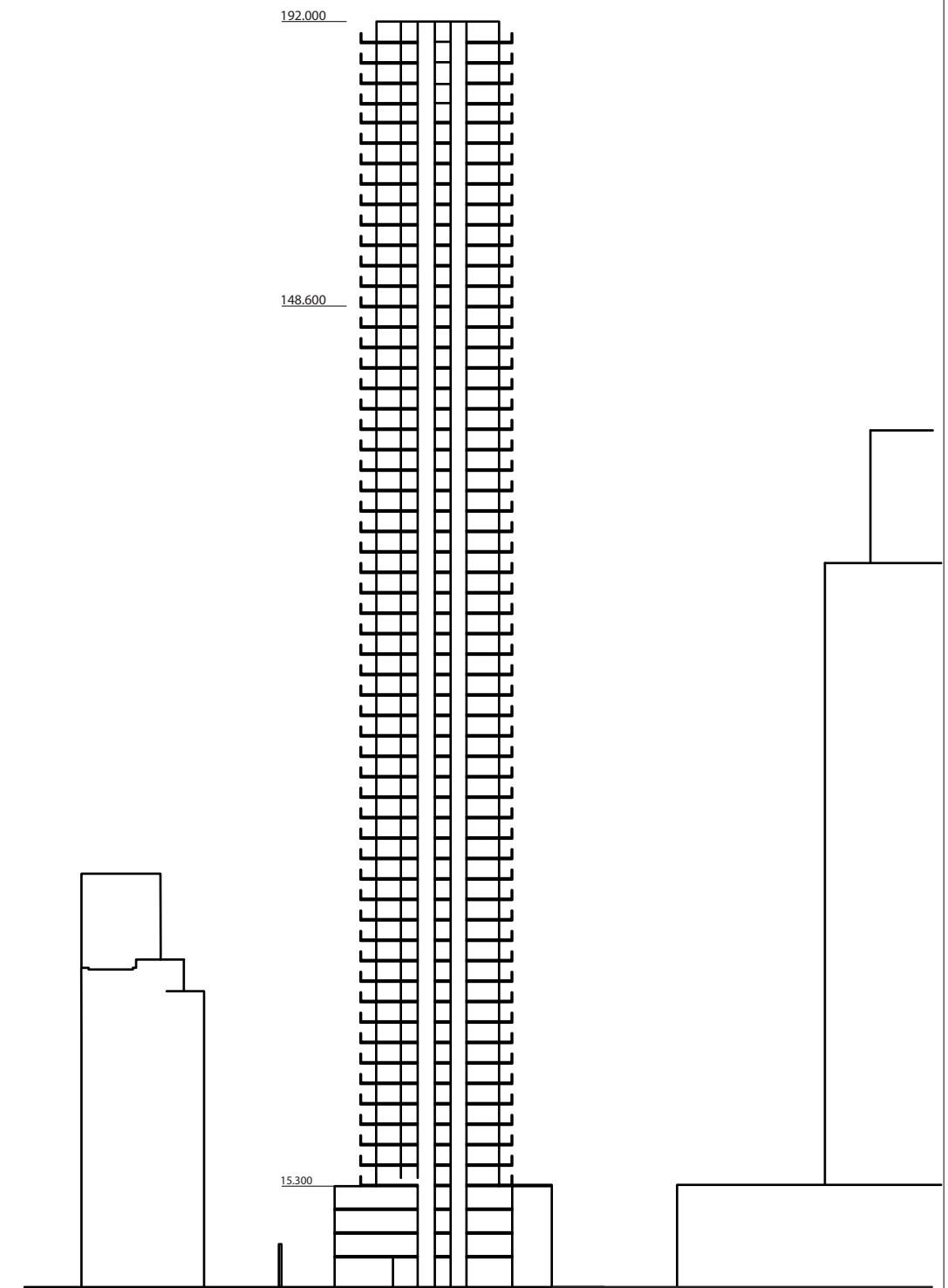
Typical floor plan 4-46 level



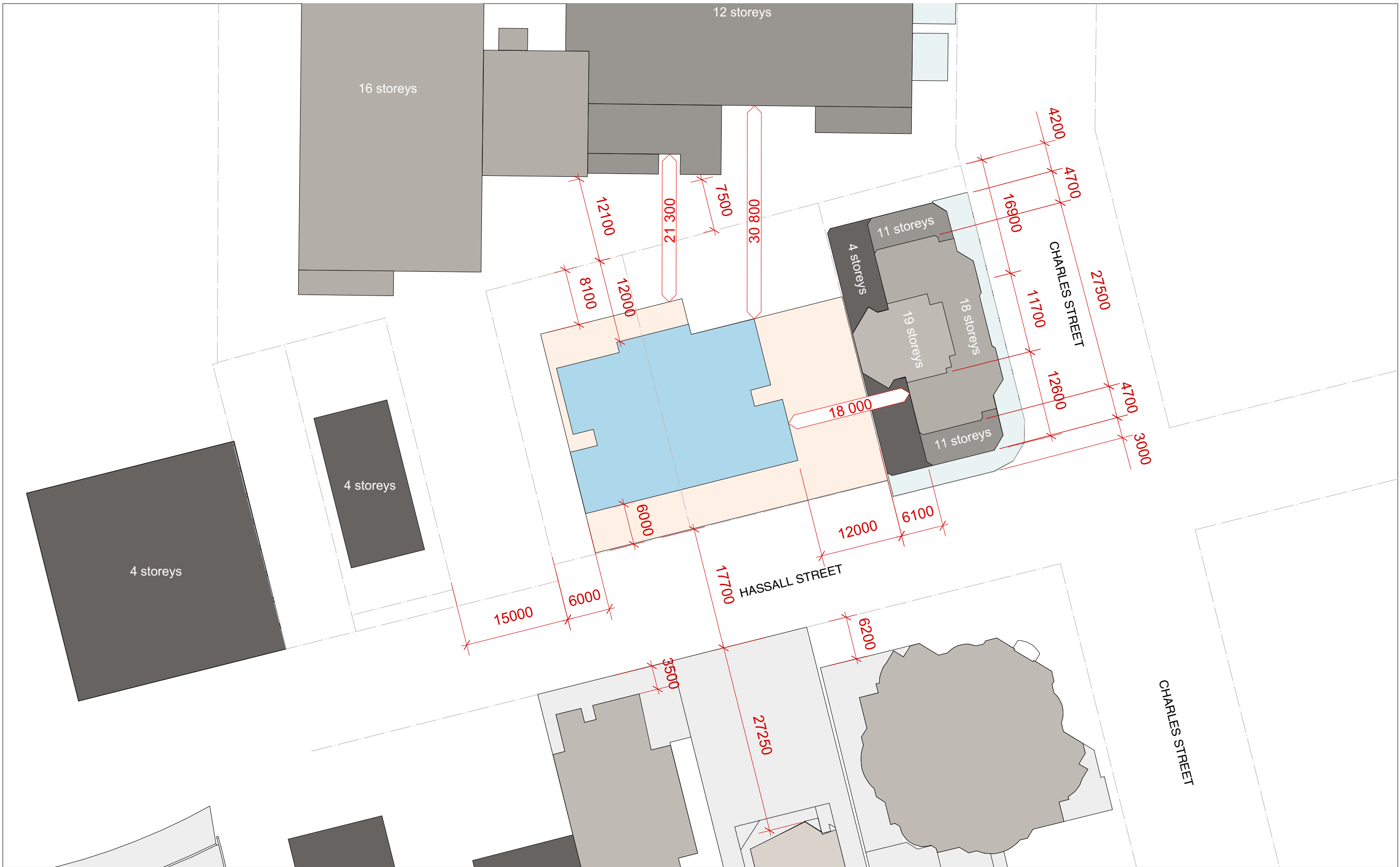
Typical floor plan 47-60 level



Section 1



Section 2



Area & SEPP65 Schedules										
12 HASSALL STREET PARRAMATTA, AUSTRALIA										
Level	Use	floor to floor height(m)	Height(m)	GFA	OFA	Unit Typology			Cars	
						1Bed	2Bed	3Bed+	Total	
Roof			102							
Level 60	Residential	3.1	198.9	654m²	503m²	1	2	2	5	
Level 59	Residential	3.1	185.8	654m²	503m²	1	2	2	5	
Level 58	Residential	3.1	192.7	654m²	503m²	1	2	2	5	
Level 57	Residential	3.1	179.6	654m²	503m²	1	2	2	5	
Level 56	Residential	3.1	176.5	654m²	503m²	1	2	2	5	
Level 55	Residential	3.1	173.4	654m²	503m²	1	2	2	5	
Level 54	Residential	3.1	170.3	654m²	503m²	1	2	2	5	
Level 53	Residential	3.1	167.2	654m²	503m²	1	2	2	5	
Level 52	Residential	3.1	164.1	654m²	503m²	1	2	2	5	
Level 51	Residential	3.1	161	654m²	503m²	1	2	2	5	
Level 50	Residential	3.1	157.9	654m²	503m²	1	2	2	5	
Level 49	Residential	3.1	154.8	654m²	503m²	1	2	2	5	
Level 48	Residential	3.1	151.7	654m²	503m²	1	2	2	5	
Level 47	Residential	3.1	148.6	654m²	503m²	1	2	2	5	
Level 46	Residential	3.1	145.5	654m²	503m²	1	5	0	6	
Level 45	Residential	3.1	142.4	654m²	503m²	1	5	0	6	
Level 44	Residential	3.1	139.3	654m²	503m²	1	5	0	6	
Level 43	Residential	3.1	136.2	654m²	503m²	1	5	0	6	
Level 42	Residential	3.1	133.1	654m²	503m²	1	5	0	6	
Level 41	Residential	3.1	130	654m²	503m²	1	5	0	6	
Level 40	Residential	3.1	126.9	654m²	503m²	1	5	0	6	
Level 39	Residential	3.1	123.8	654m²	503m²	1	5	0	6	
Level 38	Residential	3.1	120.7	654m²	503m²	1	5	0	6	
Level 37	Residential	3.1	117.6	654m²	503m²	1	5	0	6	
Level 36	Residential	3.1	114.5	654m²	503m²	1	5	0	6	
Level 35	Residential	3.1	111.4	654m²	503m²	1	5	0	6	
Level 34	Residential	3.1	108.3	654m²	503m²	1	5	0	6	
Level 33	Residential	3.1	105.2	654m²	503m²	1	5	0	6	
Level 32	Residential	3.1	102.1	654m²	503m²	1	5	0	6	
Level 31	Residential	3.1	99	654m²	503m²	1	5	0	6	
Level 30	Residential	3.1	95.9	654m²	503m²	1	5	0	6	
Level 29	Residential	3.1	92.8	654m²	503m²	1	5	0	6	
Level 28	Residential	3.1	89.7	654m²	503m²	1	5	0	6	
Level 27	Residential	3.1	86.6	654m²	503m²	1	5	0	6	
Level 26	Residential	3.1	83.5	654m²	503m²	1	5	0	6	
Level 25	Residential	3.1	80.4	654m²	503m²	1	5	0	6	
Level 24	Residential	3.1	77.3	654m²	503m²	1	5	0	6	
Level 23	Residential	3.1	74.2	654m²	503m²	1	5	0	6	
Level 22	Residential	3.1	71.1	654m²	503m²	1	5	0	6	
Level 21	Residential	3.1	68	654m²	503m²	1	5	0	6	
Level 20	Residential	3.1	64.9	654m²	503m²	1	5	0	6	
Level 19	Residential	3.1	61.8	654m²	503m²	1	5	0	6	
Level 18	Residential	3.1	58.7	654m²	503m²	1	5	0	6	
Level 17	Residential	3.1	55.6	654m²	503m²	1	5	0	6	
Level 16	Residential	3.1	52.5	654m²	503m²	1	5	0	6	
Level 15	Residential	3.1	49.4	654m²	503m²	1	5	0	6	
Level 14	Residential	3.1	46.3	654m²	503m²	1	5	0	6	
Level 13	Residential	3.1	43.2	654m²	503m²	1	5	0	6	
Level 12	Residential	3.1	40.1	654m²	503m²	1	5	0	6	
Level 11	Residential	3.1	37	654m²	503m²	1	5	0	6	
Level 10	Residential	3.1	33.9	654m²	503m²	1	5	0	6	
Level 9	Residential	3.1	30.8	654m²	503m²	1	5	0	6	
Level 8	Residential	3.1	27.7	654m²	503m²	1	5	0	6	
Level 7	Residential	3.1	24.6	654m²	503m²	1	5	0	6	
Level 6	Residential	3.1	21.5	654m²	503m²	1	5	0	6	
Level 5	Residential	3.1	18.4	654m²	503m²	1	5	0	6	
Level 4	Residential	3.1	15.3	654m²	503m²	1	5	0	6	
Level 3	Commercial/Community	3.6	11.7	1,302m²	1,160m²					
Level 2	Commercial/Community	3.6	9.1	1,302m²	1,160m²					
Level 1	Commercial/Community	3.6	6.5	1,302m²	1,160m²					
Ground	Mixed Uses	4.5	0	930m²	473m²					
Basement 1	Carpark	3.1	-3.1	2,065m²						56
Basement 2	Carpark	2.5	-5.6	2,065m²						56
Basement 3	Carpark	2.5	-8.1	2,065m²						56
Basement 4	Carpark	2.5	-10.6	2,065m²						56
Total				50,334m²	32,880m²	57(17.5%)	243(74%)	28(8.5%)	328	224

SEPP 65	Compliance(Yes or No)
Sunlight Access to Living Rooms & Private Open Space	70% of apartments should receive 3hrs btw 8am & 3pm (Jun21) Yes
Cross Ventilation	80% of apartments should be naturally cross ventilated Yes
South Aspect (SW-SE) Units	10% of single aspect apartments (maximum) yes
Natural Ventilation to Kitchen	25% of apartments should have access to natural ventilation yes
Accessibility	20% of apartments require barrier free access yes
Deep soil Zone	25% of open space area on site(at least 1.3m soil depth) yes
Open Space	Between 25-30% of site area yes
Private Open Space	For each apartment at ground level, 15m² (min depth 3m) n/a
Apartment Mix	Appropriate apt mix for location yes
Single Aspect Apartments	Maximum 8m in depth yes
Rear wall of kitchen	No more than 8m from window yes
Balcony depth	minimum 2m yes
Minimum ceiling heights	2.7m in habitable rooms; 2.4 non-habitable rooms yes
Building Depth	Apt. building depth of 10-18m yes
Building Separation	Compliance with Building separation min standards yes
Internal Circulation	Max. 8 units per corridor yes
Storage	Studio:4m³ 1Bed:6m³ 2Bed:8m³ 3Bed:10m³ yes
Stormwater Management	Reduce the impact of stormwater on infrastructure by retaining it on site. yes