### PART 3  SITE ANALYSIS
#### 3A  OBJECTIVE:
Site Analysis illustrates that design decisions have been based on opportunities & constraints of the site conditions & their relationship to the surrounding context.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considered</td>
<td></td>
</tr>
</tbody>
</table>

### ORIENTATION
#### 3B-1  OBJECTIVE:
Building types & layouts respond to the streetscape & site while optimising solar access within the development

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considered</td>
<td>✓</td>
</tr>
</tbody>
</table>

- Where the street frontage is to the east or west, rear buildings are oriented to the north
  - The proposal is located on a corner allotment with street frontages to the northwest and southwest.
  - The design has been considered with providing optimal solar access to the residential apartments by providing a cone of orientation from the northeast to the northwest to the tower.

- Where the street frontage is to the north or south, overshadowing to the south is minimised & buildings behind the street frontage are oriented to the east & west
  - NA

#### 3B-2  OBJECTIVE:
Overshadowing of neighbouring properties is minimised during mid winter.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considered</td>
<td>✓</td>
</tr>
</tbody>
</table>

- Living areas, private open space & communal open space receive solar access in accordance with section 3D Communal & Public Open Space and section 4A Solar & Daylight Access
  - YES

- Over-shadowing is minimised to the south or downhill by increased upper level setbacks
  - YES

- Buildings are orientated at 90 deg to the boundary with neighbouring properties to minimise overshadowing & privacy impacts, particularly where minimum setbacks are used & where buildings are higher than the adjoining development
  - YES

- A minimum of 4 hours of solar access is retained to solar collectors on neighbouring buildings
  - NO

### PUBLIC DOMAIN INTERFACE
#### 3C-1  OBJECTIVE:
Transition between private & public domain is achieved without compromising safety & security.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considered</td>
<td>✓</td>
</tr>
</tbody>
</table>

- Upper level balconies & windows overlook the public domain
  - The tower sits on top of a podium which provides a covered colonnade to the ground public domain as required by the Masterplan. Pedestrian access at ground level encourage natural surveilence along the colonnade.
  - NO

- Length of solid walls is limited along street frontages
  - YES

- Opportunities for casual interaction between residents & the public domain is provided for. Design solutions may include seating at building entries, rear letter boxes & in private courtyards adjacent to streets
  - Visitor bicycle parking and some residential bicycle parking is located at ground level. A generous residential lobby entry is flanked by the through-site link providing opportunities for casual interaction.
  - YES

- In developments with multiple buildings and/or entries, pedestrian entries & spaces associated with individual buildings/entries are differentiated to improve legibility for residents, using the following design solutions:
  - Architectural detailing
  - Changes in materials
  - Plant species
  - Colours
  - Opportunities for people to be concealed are minimised
  - The architectural form and massing of the commercial, residential and retail entries are sufficiently differentiated to provide legibility for all users.
  - YES

#### 3C-2  OBJECTIVE:
Amenity of the public domain is retained & enhanced.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considered</td>
<td>✓</td>
</tr>
</tbody>
</table>

- Mail boxes are located in lobbies, perpendicular to the street alignment or integrated into front facades where individual street entries are provided
  - YES

- Substations, pump rooms, garbage storage areas & other service requirements are located in basement car parks or out of view
  - Service spaces have been located off the secondary lane to the rear for reduced visibility.
  - YES

- Ramp for accessibility is minimised by building entry location & setting ground floor levels in relation to footpath levels
  - YES

### COMMUNAL & PUBLIC OPEN SPACE
#### 3D-1  OBJECTIVE:
An adequate area of communal open space is provided to enhance residential amenity & to provide opportunities for landscaping.

<table>
<thead>
<tr>
<th>Design Criteria</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

1. Communal open space has a minimum area equal to 25% of the site
   - Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)
   - YES

   - Design Guidance: Considered
Deep soil zones are to meet the following minimum requirements:

<table>
<thead>
<tr>
<th>Site Area (sqm)</th>
<th>Minimum Dim. (m)</th>
<th>Deep Soil Zone (% of site area)</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 650</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>650-1500</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>greater than 1500</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>greater than 1500 with significant existing tree cover</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

On some sites it may be possible to provide larger deep soil zones, depending on the site area & context:
- 10% of the site as deep soil on sites with an area of 650sqm - 1,500sqm
- 15% of the site as deep soil on sites greater than 1,500sqm

The proposal has been built to the boundaries in response to the SOPA Masterplan guidelines. Limited deep soil zones are provided at ground however alternative forms of planting has been provided in the rooftop gardens to the north and south podiums, thereby contributing to the objectives of Section 3E. The landscaped areas on the north and south podium roofs total approximately 790m2 and 515m2 respectively, accounting for approx. 3% of the site area.

Deep soil zones are located to retain existing significant trees & to allow for the development of healthy root systems, providing anchorage & stability for mature trees. Design solutions may include:
- Basements & sub-basement car park design that is consolidated beneath building footprints
- Use of increased front & side setbacks
- Adequate clearance around trees to ensure long term health
- Co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil

The proposed deep soil zones will allow the development of healthy root systems to mature trees where proposed.
Achieving the design criteria may not be possible on some sites including where:
- location & 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 contexts)
- there is 100% site coverage or non-residential uses at ground floor level
Where a proposal does not achieve deep soil requirements, acceptable stormwater management is achieved & alternative forms of planting provided.

As noted planting on structures at podium roof level has been imposed in order to achieve the objectives of this section.

**3F VISUAL PRIVACY**

**Objective:** Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external & internal visual privacy.

Design Criteria

1. Separation between windows & balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side & rear boundaries are as follows:

<table>
<thead>
<tr>
<th>Building Height (m)</th>
<th>Habitable Rooms &amp; Balconies (m)</th>
<th>Non-Habitable Rooms (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 12 (4 storeys)</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>up to 25 (5-8 storeys)</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td>over 25 (9+ storeys)</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room. Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.

**3F-2 Objective:** Site & building design elements increase privacy without compromising access to light & air and balance outlook & views from habitable rooms & private open space.

**Design Guidance**

Communal open space, common areas & access paths are separated from private open space & windows to apartments, particularly habitable room windows. Design solutions include:
- setbacks
- solid or partially solid balustrades on balconies at lower levels
- fencing and/or trees and vegetation to separate spaces
- screening devices
- bay windows or pop out windows to provide privacy in one direction & outlook in another
- raising apartments or private open space above the public domain or communal open space
- planter boxes incorporated into walls & balustrades to increase visual separation
- pergolas or shading devices to limit overlooking of lower apartments or private open space
- on constrained sites where it can be demonstrated that building layout options for new build are limited, fixed louvres or screen panels on windows and/or balconies

Bedrooms, living spaces & other habitable rooms are separated from gallery access & other open circulation space by the apartment's service areas

Balconies & private terraces are located in front of living rooms to increase internal privacy

Recessed balconies and/or vertical fins are used between adjacent balconies

**3G PEDESTRIAN ACCESS & ENTRIES**

**3G-1 Objective:** Building entries & pedestrian access connects to and addresses the public domain.

**Design Guidance**

Multiple entries (including communal building entries & individual ground floor entries) activate the street edge

Entry locations relate to the street & subdivision pattern, and the existing pedestrian network

Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries

**3G-2 Objective:** Access, entries & pathways are accessible & easy to identify.

**Design Guidance**

Building access areas including lift lobbies, stairwells & hallways are clearly visible from the public domain & communal spaces

The design of ground floors & underground car parks minimise level changes along pathways & entries

Steps & ramps are integrated into the overall building & landscape design

For large developments electronic access & audio/video intercom are provided to manage access
<table>
<thead>
<tr>
<th>ADG Ref.</th>
<th>Item Description</th>
<th>Notes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>3G-3 p73</td>
<td>Objective: Large sites provide pedestrian links for access to streets &amp; connection to destinations.</td>
<td>Design Guidance: Pedestrian links through sites facilitate direct connections to open space, main streets, car parks &amp; public transport. Pedestrian links are directly visible, have clear sight lines, are overlooked by habitable rooms or private open spaces of dwellings, are well lit &amp; contain active uses, where appropriate.</td>
<td>YES</td>
</tr>
<tr>
<td>3H-1 p59</td>
<td>Objective: Vehicle access points are designed &amp; located to achieve safety, minimise conflicts between pedestrians &amp; vehicles and create high quality streetscapes.</td>
<td>Design Guidance: Car park access is integrated with the building’s overall façade. Design solutions include: - materials &amp; colour palette minimise visibility from street - security doors/gates minimise visibility in the façade - where doors are not provided, visible interiors reflect façade design, and building services, pipes &amp; ducts are concealed.</td>
<td>YES</td>
</tr>
<tr>
<td>3J-1 p71</td>
<td>Objective: Car parking is provided based on proximity to public transport in metropolitan Sydney &amp; centres in regional areas.</td>
<td>Design Criteria: For development in the following locations: - on sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or - on land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre - the minimum car parking requirement for residents &amp; visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.</td>
<td>YES</td>
</tr>
<tr>
<td>3J-2 p71</td>
<td>Objective: Parking &amp; facilities are provided for other modes of transport.</td>
<td>Design Guidance: Conveniently located &amp; sufficient numbers of parking spaces are provided for motorbikes &amp; scooters. Secure undercover bicycle parking is provided &amp; easily accessible from both public domain &amp; common areas. Convenience in access for electric vehicles, where desirable.</td>
<td>NA</td>
</tr>
<tr>
<td>3J-3 p73</td>
<td>Objective: Car park design &amp; access is safe and secure.</td>
<td>Design Guidance: Supporting facilities within car parks, including garbage, plant &amp; switch rooms, storage areas &amp; car wash bays can be accessed without crossing car parking spaces.</td>
<td>YES</td>
</tr>
<tr>
<td>3J-4 p73</td>
<td>Objective: Visual &amp; environmental impacts of underground car parking are minimised.</td>
<td>Design Guidance: Visual &amp; environmental impacts of underground car parking are minimised.</td>
<td>YES</td>
</tr>
</tbody>
</table>
### Design Considerations

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Notes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above ground car parking is proposed.</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Car parking layout is well organised, using a logical, efficient structural grid &amp; double loaded aisles</td>
<td>The width of the site (30.4m) prevents double loaded aisles however car parking grid is organised within an efficient structural grid.</td>
<td>NO</td>
</tr>
<tr>
<td>Protrusion of car parks do not exceed 1m above ground level. Solution include stepping car park levels or using split levels on sloping sites</td>
<td>An above ground car park is proposed due to the inground site contamination as required by the planning guidelines.</td>
<td>NO</td>
</tr>
<tr>
<td>Ventilation grills or screening devices for car parking openings are integrated into the facade &amp; landscape design</td>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>

#### Design Guidance

- On-grade car parking is avoided
- Vertical shading to east & particularly west facing windows
- Horizontal shading to north facing windows
- Living rooms & private open spaces of at least 70% of apartments
- A maximum of 15% of apartments in a building receive no direct sunlight between 9 am - 3 pm at mid winter
- A maximum of 10% of apartments in a building receive no direct sunlight between 9 am - 3 pm at mid winter
- Design Criteria
- The design maximises north aspect. The number of single aspect south facing apartments is minimised
- Single aspect, single storey apartments have a northerly or easterly aspect
- Living areas are located to the north and service areas to the south & west of apartments
- To optimise direct sunlight to habitable rooms & balconies a number of the following design features are used:
  - Dual aspect apartments
  - Shallow apartment layouts
  - Two storey Mezzanine level apartments
  - Bay windows
- The design of the apartments has been oriented to maximise solar access to habitable rooms and balconies. Living areas and wintergardens are proposed on the tower corners to benefit from dual aspect.
- To maximise the benefit to residents of direct sunlight within living rooms & private open spaces, a minimum of 4% of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes

#### Design Guidance

- Design incorporates shading & glare control, particularly for warmer months.
- The facade design incorporates recessed living rooms behind balconies, vertical external fins and high performance double-glazing for thermal comfort.

### Part 4 Designing the Building

#### Solar & Daylight Access

<table>
<thead>
<tr>
<th>Objective</th>
<th>Design Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>To optimise number of apartments receiving sunlight to habitable rooms, primary windows &amp; private open space.</td>
<td>The design maximises north aspect. The number of single aspect south facing apartments is minimised</td>
</tr>
<tr>
<td>Living rooms &amp; private open spaces of at least 70% of apartments in a building receive a minimum of 2 hrs direct sunlight between 9am - 3pm at mid winter in Sydney Metropolitan Area and in Newcastle and Wollongong local government areas</td>
<td>YES</td>
</tr>
<tr>
<td>In all other areas, living rooms &amp; private open spaces of at least 70% of apartments in a building receive a minimum of 3 hrs direct sunlight between 9 am - 3 pm at mid winter</td>
<td>N/A</td>
</tr>
<tr>
<td>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am - 3 pm at mid winter</td>
<td>YES</td>
</tr>
</tbody>
</table>

#### Design Guidance

- The design maximises north aspect. The number of single aspect south facing apartments is minimised
- Single aspect, single storey apartments have a northerly or easterly aspect
- Living areas are located to the north and service areas to the south & west of apartments
- To optimise direct sunlight to habitable rooms & balconies a number of the following design features are used:
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  - Shallow apartment layouts
  - Two storey Mezzanine level apartments
  - Bay windows
- The design of the apartments has been oriented to maximise solar access to habitable rooms and balconies. Living areas and wintergardens are proposed on the tower corners to benefit from dual aspect.
- To maximise the benefit to residents of direct sunlight within living rooms & private open spaces, a minimum of 4% of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes

#### Design Guidance

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- The facade design incorporates recessed living rooms behind balconies, vertical external fins and high performance double-glazing for thermal comfort.

### Natural Ventilation

<table>
<thead>
<tr>
<th>Objective</th>
<th>Design Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>All habitable rooms are naturally ventilated.</td>
<td>The building's orientation maximises capture &amp; use of prevailing breezes for natural ventilation in habitable rooms</td>
</tr>
<tr>
<td>Depths of habitable rooms support natural ventilation</td>
<td>YES</td>
</tr>
<tr>
<td>The area of undisturbed window openings should be equal to at least 5% of the floor area served</td>
<td>YES</td>
</tr>
<tr>
<td>ADG Ref.</td>
<td>Item Description</td>
</tr>
<tr>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td>4B-2 p83</td>
<td>Objective: The layout &amp; design of single aspect apartments maximises natural ventilation.</td>
</tr>
<tr>
<td>4B-3 p85</td>
<td>Objective: Number of apartments with natural cross vent is maximised to create comfortable indoor environments for residents.</td>
</tr>
<tr>
<td>4C-1 p87</td>
<td>Objective: Ceiling height achieves sufficient natural ventilation &amp; daylight access.</td>
</tr>
<tr>
<td>4C-2 p87</td>
<td>Objective: Ceiling height increases the sense of space in apartments &amp; provides for well proportioned rooms.</td>
</tr>
<tr>
<td>4C-3 p87</td>
<td>Objective: Ceiling heights contribute to the flexibility of building use over the life of the building.</td>
</tr>
</tbody>
</table>

### Design Guidance

#### Natural ventilation to single aspect apartments

- Primary windows are augmented with plenum and light wells (generally not suitable for cross ventilation)
- Stack effect ventilation, solar chimneys or similar used to naturally ventilate internal building areas or rooms such as bathrooms & laundries
- Courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation & avoid trapped smells

#### Ceiling heights

<table>
<thead>
<tr>
<th>Minimum Ceiling Height for apt and mixed-used buildings (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitable rooms: 2.7</td>
</tr>
<tr>
<td>Non-habitable rooms: 2.4</td>
</tr>
<tr>
<td>For 2 storey apts: 2.7 for main living area floor, 2.4 for second floor, where its area does not exceed 50% of the apt area</td>
</tr>
<tr>
<td>Attic spaces: 1.8 at edge of room with 30kg minimum ceiling slope</td>
</tr>
<tr>
<td>If located in mixed-used areas: 3.3 for ground and first floor to promote future flexibility of use</td>
</tr>
</tbody>
</table>

#### Design Criteria

1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed
2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line

#### Note

- Apartments generally provide open plan living with approximately 8m to the kitchen.
- No cross-over apartments proposed.
- No ceiling fans are proposed in the development.
- Non-residential uses of the development are contained within ground floors and on the commercial floors.
### 4D-1 p89

**Objective:** The layout of rooms within an apartment is functional, well organised & provides a high standard of amenity.

**Design Criteria**

1. Apartments have the following minimum internal areas:

<table>
<thead>
<tr>
<th>Apartment Type</th>
<th>Minimum Internal Area (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>35</td>
</tr>
<tr>
<td>1 Bedroom</td>
<td>50</td>
</tr>
<tr>
<td>2 Bedroom</td>
<td>70</td>
</tr>
<tr>
<td>3 Bedroom</td>
<td>90</td>
</tr>
</tbody>
</table>

The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5sqm each. A fourth bedroom & further additional bedrooms increase the minimum internal area by 12sqm each.

**Design Guidance**

- Kitchen is not located as part of the main circulation space in larger apartments (such as hallway or entry space). Considered
- A window is visible from any point in a habitable room. Considered
- Where minimum areas or room dimensions are not met, apartments demonstrate that they are well designed and demonstrate the usability & functionality of the space with realistically scaled furniture layouts & circulation areas. Considered

- In some instances study rooms are provided & rely on borrowed ventilation and daylight from an adjoining room, to satisfy BCA requirements. All bedrooms and living rooms are located adjacent to external walls with access to natural ventilation and daylight. NO

---

### 4D-2 p89

**Objective:** Environmental performance of the apartment is maximised.

**Design Criteria**

1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height. Considered

2. In open plan layouts (living, dining & kitchen are combined) maximum habitable room depth is 8m from a window. Considered

**Design Guidance**

- All bathrooms & bedrooms are located on the external face of building. Considered
- Where possible:
  - bathrooms & laundries have external operable window
  - main living spaces are oriented toward the primary outlook & aspect and away from noise sources

All bathrooms and laundries will be mechanically ventilated in order to maximise available facade frontage to habitable living rooms and bedrooms. NO

---

### 4D-3 p91

**Objective:** Apartment layouts are designed to accommodate a variety of household activities & needs.

**Design Criteria**

1. Master bedrooms have a minimum area of 10sqm & other bedrooms 9sqm (excluding wardrobe space). NO

2. Bedroom have a minimum dimension of 3m (excluding wardrobe space). NO

3. Living rooms or combined living/dining rooms have a minimum width of:
   - 3.6m for studio & 1 bedroom apartments
   - 4m for 2 & 3 bedroom apartments

Living rooms have a minimum width of 3.6m for 1 & 2 bedroom apartments. In most apartment types the 3.6m minimum width at the facade line increases to 4m internally in the living and dining areas. 3 bedroom apartments typically have a minimum width of 4m. 4.5-5m living room widths are provided to the 4 bedroom apartments.

4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts. N/A

**Design Guidance**

- Access to bedrooms, bathrooms & laundries is separated from living areas minimising direct openings between living & service areas. YES
- All bedrooms allow a minimum length of 1.5m for robes. YES
- Main bedroom of apartment or studio apartment is provided with a wardrobe of minimum 1.8m L x 0.6m D x 2.1m H. YES
4E-1
Objective: Apartments provide appropriately sized private open space & balconies to enhance residential amenity.

Design Criteria
1. All apartments are required to have primary balconies as follows:

<table>
<thead>
<tr>
<th>Apartment Type</th>
<th>Minimum Area (sqm)</th>
<th>Minimum Depth (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>1 Bedroom</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>2 Bedroom</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>3+ Bedroom</td>
<td>12</td>
<td>2.4</td>
</tr>
</tbody>
</table>

The minimum balcony depth to be counted as contributing to the balcony area is 1m.

Design Guidance
Balcony use may be limited in some proposals where:
- consistently high wind speeds at 10 storeys & above
- close proximity to road, rail or other noise sources
- exposure to significant levels of aircraft noise
- heritage & adaptive reuse of existing buildings

In these situations, Juliet balconies, operable walls, enclosed wintergardens, bay windows are appropriate. Other amenity benefits for occupants are provided in the apartments or in the development or both. Natural ventilation is also demonstrated.

4E-2
Objective: Primary private open space & balconies are appropriately located to enhance liveability for residents

Design Guidance
- Primary open space & balconies are located adjacent to the living room, dining room or kitchen to extend the living space.
- POS & balconies predominantly face north, east or west.
- POS & balconies are orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms.

4E-3
Objective: Private open space & balcony design is integrated into & contributes to the overall architectural form & detail of the building

Design Guidance
Solid, partially solid or transparent fences & balustrades are selected to respond to the location. They are designed to allow views & passive surveillance of the street while maintaining visual privacy & allowing for a range of uses on the balcony. Solid & partially solid balustrades are preferred.

4E-4
Objective: Private open space & balcony design maximises safety

Design Guidance
Changes in ground levels or landscaping are minimised.
Balcony design & detailing avoids opportunities for climbing & falling

**4F COMMON CIRCULATION & SPACES**

**4F-1 p97**

**Objective:** Common circulation spaces achieve good amenity & properly service the number of apartments

**Design Criteria**

1. The maximum number of apartments off a circulation core on a single level is eight

2. For buildings of 10 storeys & over, the maximum number of apartments sharing a single lift is 40

**Notes**

- Compliance

**Design Guidance**

- Greater than minimum requirements for corridor widths and/or ceiling heights allow comfortable movement & access particularly in entry lobbies, outside lifts & at apartment entry doors

- Daylight & natural ventilation are provided to all common circulation spaces that are above ground

- Windows are provided in common circulation spaces & are adjacent to the stair or lift core or at the ends of corridors

- Longer corridors greater than 12m in length from the lift core are articulated. Design solutions include:
  - Series of foyer areas with windows & spaces for seating
  - Wider areas at apartment entry doors & varied ceiling heights

- Primary living room or bedroom windows do not open directly onto common circulation spaces, open or enclosed. Visual & acoustic privacy from common circulation spaces to any other rooms are carefully controlled

**4F-2 p99**

**Objective:** Common circulation spaces promote safety & provide for social interaction between residents

**Design Guidance**

- Direct & legible access are provided between vertical circulation points & apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines

- The floorplate has been designed to provide a high level of amenity and outlook to the lift lobby which is oriented to a glazed facade, with outlook on every floor. The corridor serving the majority of apartment entries provides straight, clear sight lines to each entry. On a typical floor the remaining two apartments are located directly adjacent to the lift lobby around a secondary lobby for privacy

- Tight corners & spaces are avoided

- Circulation spaces are well lit at night

- Legible signage are provided for apartment numbers, common areas & general wayfinding

- Incidental spaces, eg space for seating in a corridor, at a stair landing, or near a window are provided

- In larger developments, community rooms for activities such as owners corporation meetings or resident use, are provided & are co-located with communal open space

**STORAGE**

**4G-1 p101**

**Objective:** Adequate, well designed storage is provided in each apartment

**Design Criteria**

1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:

<table>
<thead>
<tr>
<th>Apartment Type</th>
<th>Storage Size Volume (cubic m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>4</td>
</tr>
<tr>
<td>1 Bedroom</td>
<td>6</td>
</tr>
<tr>
<td>2 Bedroom</td>
<td>8</td>
</tr>
<tr>
<td>3+ Bedroom</td>
<td>10</td>
</tr>
</tbody>
</table>

- At least 50% of required storage is to be located within apartment

**Notes**

- Storage is accessible from either circulation or living areas

**4G-2 p101**

**Objective:** Additional storage is conveniently located, accessible & nominated for individual apartments

**Design Guidance**

- Storage not located in apartments is secure and clearly allocated to specific apartments

- Storage is provided for larger & less frequently accessed items

- Storage spaces in internal or basement car parks is provided at the rear or side of car spaces or in cages, such that allocated car parking remains accessible

- Storage not located in apartment is integrated into the overall building design & not visible from public domain

**4H ACOUSTIC PRIVACY**

**4H-1 p103**

**Objective:** Noise transfer is minimised through the siting of buildings & building layout

**Design Guidance**

- Adequate building separation is provided within the development & from neighbouring buildings/adjacent uses (see 2F Building Separation & 3F Visual Privacy)

- Window & door openings are orientated away from noise sources

- Noisy areas within buildings including building entries & corridors are located next to or above each other while quieter areas are located next to or above quieter areas
### Design Guidance

**Objective:** Noise impacts are mitigated within apartments through layout & acoustic treatments

#### Design Guidance

- Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions:
  - Rooms with similar noise requirements are grouped together
  - Doors separate different use zones
  - Wardrobes in bedrooms are co-located to act as sound buffers

Where physical separation cannot be achieved, noise conflicts are resolved using the following design solutions:

- Double or acoustic glazing
- Acoustic seals
- Use of materials with low noise penetration properties
- Continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements

### 4.4 NOISE & POLLUTION

#### 4.4.1 Objective:** In noisy or hostile environments impacts of external noise & pollution are minimised through careful siting & layout

**Design Guidance**

- To minimise impacts the following design solutions are used:
  - Physical separation between buildings & the noise or pollution source
  - Residential uses are located perpendicularly to the noise source & where possible buffered by other uses
  - Non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses & communal open spaces
  - Non-residential uses are located at lower levels vertically separating residential component from noise or pollution source
  - Setbacks to the underside of residential floor levels are increased, relative to traffic volumes & other noise sources
  - Buildings respond to both solar access & noise. Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferred

- Landscape design reduces the perception of noise & acts as a filter for air pollution generated by traffic & industry

### 4.4.2 **Objective:** Appropriate noise shielding or attenuation techniques for building design, construction & choice of materials are used to mitigate noise transmission

**Design Guidance**

- Design solutions to mitigate noise include:
  - Limiting the number & size of openings facing noise sources
  - Providing seals to prevent noise transfer through gaps
  - Using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens)
  - Using materials with mass and/or sound insulation or absorption properties eg solid balcony balustrades, external screens & soffits

### 4.5 APARTMENT MIX

#### 4.5.1 **Objective:** A range of apartment types & sizes is provided to cater for different household types now & into the future

**Design Guidance**

- A variety of apartment types is provided
- The apartment mix is appropriate, taking into consideration:
  - Distance to public transport, employment & education centres
  - Current market demands & projected future demographic trends
  - Demand for social & affordable housing
  - Different cultural & socioeconomic groups

- Flexible apartment configurations are provided to support diverse household types & stages of life including single person households, families, multi-generational families & group households

#### 4.5.2 **Objective:** The apartment mix is distributed to suitable locations within the building

**Design Guidance**

- Different apartment types are located to achieve successful facade composition & to optimise solar access
- Larger apartment types are located on ground or roof level where there is potential for more open space, and on corners where more building frontage is available

### 4.6 FACADES

#### 4.6.1 Objective:** Building facades provide visual interest along the street while respecting the character of the local area

**Design Guidance**

- Design solutions for front building facades include:
  - Composition of varied building elements
  - Defined base, middle & top of buildings
  - Revealing & concealing certain elements

- Building services are integrated within the overall facade
<table>
<thead>
<tr>
<th>ADG Ref.</th>
<th>Item Description</th>
<th>Notes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>p111</td>
<td>Objective: Building functions are expressed by the facade</td>
<td>Design Guidance:</td>
<td>Considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Building entries are clearly defined</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Important corners are given visual prominence through change in articulation, materials or colour, roof expression or changes in height</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apartment layout is expressed externally through facade features such as party walls &amp; floor slabs</td>
<td>YES</td>
</tr>
<tr>
<td>p113</td>
<td>Objective: Roof treatments are integrated into the building design &amp; positively respond to the street</td>
<td>Design Guidance:</td>
<td>Considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Roof design relates to the street. Design solutions include:</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Roof design relates to an extension of the tower form and does not detract from the overall massing.</td>
<td>YES</td>
</tr>
<tr>
<td>p113</td>
<td>Objective: Opportunities to use roof space for residential accommodation &amp; open space are maximised</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>p113</td>
<td>Objective: Roof design incorporates sustainability features</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>p115</td>
<td>Objective: Landscape design is viable &amp; sustainable</td>
<td>Design Guidance:</td>
<td>Considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Landscape design is environmentally sustainable &amp; can enhance environmental performance by incorporating:</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diverse and appropriate planting is provided to the rooftop gardens. Shading trees are provided at intervals to provide landmarks as well as seating opportunities to the residents. Plant species have been selected to provide a micro-climate to the communal open space.</td>
<td>YES</td>
</tr>
<tr>
<td>p115</td>
<td>Objective: Landscape design contributes to streetscape &amp; amenity</td>
<td>Design Guidance:</td>
<td>Considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Landscape design responds to the existing site conditions including:</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The planning guidelines permit development to site boundary extents and as such the permissible development will encroach upon the tree protection zones of the existing trees along Olympic Boulevard. The proposal seeks to remove these trees so as not to cause long term adverse impacts. Refer arborist report for details.</td>
<td>NO</td>
</tr>
<tr>
<td>p117</td>
<td>Objective: Appropriate soil profiles are provided</td>
<td>Design Guidance:</td>
<td>Considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Structures are reinforced for additional saturated soil weight</td>
<td>YES</td>
</tr>
</tbody>
</table>
Soil volume is appropriate for plant growth, including:
- Modifying depths & widths according to planting mix & irrigation frequency
- Free draining & long soil life span
- Tree anchorage

Minimum soil standards for plant sizes should be provided in accordance with:

<table>
<thead>
<tr>
<th>Site Area (sqm)</th>
<th>Recommended Tree Planting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 850</td>
<td>1 medium tree per 50sqm of deep soil zone</td>
</tr>
<tr>
<td>850 - 1,500</td>
<td>1 large tree or 2 medium trees per 90sqm of deep soil zone</td>
</tr>
<tr>
<td>Greater than 1,500</td>
<td>1 large tree or 2 medium trees per 80sqm of deep soil zone</td>
</tr>
</tbody>
</table>

Objective: Plant growth is optimised with appropriate selection & maintenance

Design Guidance
- Plants are suited to site conditions, considerations include:
  - Drought & wind tolerance
  - Seasonal changes in solar access
  - Modified substrate depths for a diverse range of plants
  - Plant longevity

A landscape maintenance plan is prepared

Irrigation & drainage systems respond to:
- Changing site conditions
- Soil profile & planting regime
- Whether rainwater, stormwater or recycled grey water is used

Objective: Planting on structures contributes to the quality & amenity of communal & public open spaces

Design Guidance
- Building design incorporates opportunities for planting on structures.
  - Green walls with specialised lighting for indoor green walls
  - Wall design that incorporates planting
  - Green roofs, particularly where roofs are visible from the public domain
  - Planter boxes

Note: Structures designed to accommodate green walls should be integrated into the building facade & consider the ability of the facade to change over time

A landscaped garden is proposed to the roof of the north podium wing for residential use.
A landscaped garden for outlook only is proposed to the roof of the south podium wing.
Both gardens will incorporate planting integrated within the structure with adequate support for deep soil planting.

Objective: Universal design features are included in apartment design to promote flexible housing for all community members

Design Guidance
- Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline’s silver level universal design features

Adaptable housing should be provided in accordance with the relevant council policy

Design solutions for adaptable apartments include:
- Convenient access to communal & public areas
- High level of solar access
- Minimal structural change & residential amenity loss when adapted
- Larger car parking spaces for accessibility
- Parking titled separately from apartments or shared car parking arrangements

Objective: Apartment layouts are flexible & accommodate a range of lifestyle needs

Design Guidance
- Flexible design solutions include:
  - Rooms with multiple functions
  - Dual master bedroom apartments with separate bathrooms
  - Larger apartments with various living space options
  - Open plan ‘loft’ style apartments with only a fixed kitchen, laundry & bathroom

Objective: Mixed use developments are provided in appropriate locations & provide active street frontages that encourage pedestrian movement.

Design Guidance
- Mixed use developments are concentrated around public transport & centres
- Mixed use developments positively contribute to the public domain.
  - Development addresses the street
  - Active frontages provided
  - Diverse activities & uses
  - Avoiding blank walls at the ground level
  - Live/work apartments on the ground floor level, rather than commercial
### ADG Ref. | Item Description | Notes | Compliance
--- | --- | --- | ---
4S-2 | Objective: Residential levels of the building are integrated within the development. Safety & amenity is maximised. |  | ✓
   | Design Guidance | Residential circulation areas are clearly defined. Solutions include: |  |  
   | · Residential entries separated from commercial entries & directly accessible from the street |  | YES
   | · Commercial service areas separated from residential components |  | YES
   | · Residential car parking & communal facilities separated or secured |  | YES
   | · Security at entries & safe pedestrian routes are provided |  | YES
   | · Concealment opportunities are avoided |  | YES
   | | Landscaped communal open space are provided at podium or roof |  | YES

#### AWINING & SIGNAGE

| ADG Ref. | Item Description | Notes | Compliance |
--- | --- | --- | ---
4T-1 | Objective: Awnings are well located and complement & integrate with the building design. | A continuous colonnade integrated with the building form is provided at ground level. | N/A |

#### ENERGY EFFICIENCY

| ADG Ref. | Item Description | Notes | Compliance |
--- | --- | --- | ---
4U-1 | Objective: Development incorporates passive environmental design. |  | ✓
   | Design Guidance | Adequate natural light is provided to habitable rooms (see 4A Solar & Daylight Access) |  | YES
   | | Not considered appropriate for a development of this scale. Apartments are provided with a combined washer / dryer, which is included in the BASIX assessment. |  | NO

#### WATER MANAGEMENT & CONSERVATION

| ADG Ref. | Item Description | Notes | Compliance |
--- | --- | --- | ---
4V-1 | Objective: Potable water use is minimised. |  | ✓
   | Design Guidance | Water efficient fittings, appliances & wastewater reuse are incorporated |  | YES
   | | Apartments are individually metered |  | YES
   | | Rainwater is collected, stored & reused on site |  | YES
   | | Drought tolerant, low water use plants are used within landscaped areas |  | YES

#### WASTE MANAGEMENT

| ADG Ref. | Item Description | Notes | Compliance |
--- | --- | --- | ---
4W-1 | Objective: Waste storage facilities are designed to minimise impacts on streetscape, building entry & amenity of residents. |  | ✓
   | Design Guidance | Adequately sized storage areas for rubbish bins are located discreetly away from the front of the development or in basement car parks |  | YES
   | | Waste & recycling storage areas are well ventilated |  | YES
   | | Circulation design allows bins to be easily manoeuvred between storage & collection points. |  | YES
   | | Temporary storage is provided for large bulk items such as mattresses |  | YES
   | | Waste management plan is prepared |  | YES
## Objective: Domestic waste is minimised by providing safe & convenient source separation & recycling.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Notes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>All dwellings have a waste &amp; recycling cupboard or temporary storage area of sufficient size to hold two days worth of waste &amp; recycling</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Communal waste &amp; recycling rooms are in convenient &amp; accessible locations related to each vertical core</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>For mixed use developments, residential waste &amp; recycling storage areas &amp; access is separate &amp; secure from other uses</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Alternative waste disposal methods such as composting is provided</td>
<td></td>
<td>NO</td>
</tr>
</tbody>
</table>

## Objective: Building design detail provides protection from weathering.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Notes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A number of the following design solutions are used:</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>- Roof overhangs to protect walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Hoods over windows &amp; doors to protect openings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Detailing horizontal edges with drip lines to avoid staining surfaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Methods to eliminate or reduce planter box leaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Appropriate design &amp; material selection for hostile locations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Objective: Systems & access enable ease of maintenance.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Notes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Window design enables cleaning from the inside of the building</td>
<td></td>
<td>NO</td>
</tr>
<tr>
<td>Building maintenance systems are incorporated &amp; integrated into the design of the building form, roof &amp; facade</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Design does not require external scaffolding for maintenance access</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Manually operated systems such as blinds, sunshades &amp; curtains are used in preference to mechanical systems</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Centralised maintenance, services &amp; storage are provided for communal open space areas within the building</td>
<td></td>
<td>YES</td>
</tr>
</tbody>
</table>

## Objective: Material selection reduces ongoing maintenance costs.

<table>
<thead>
<tr>
<th>Design Guidance</th>
<th>Notes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A number of the following design solutions are used:</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>- Sensors to control artificial lighting in common circulation &amp; spaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Natural materials that weather well &amp; improve with time, such as face brickwork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Easily cleaned surfaces that are graffiti resistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Robust &amp; durable materials &amp; finishes in locations which receive heavy wear &amp; tear such as common circulation areas &amp; lift interiors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C
APARTMENT AREA AND STORAGE SCHEDULE
## TABLE 1: APARTMENT MIX, GFA & PARKING SCHEDULE

Refer accompanying Traffic Impact Assessment for breakdown of parking provision.

<table>
<thead>
<tr>
<th>Level</th>
<th>Retail / Club</th>
<th>Retail</th>
<th>Comm.</th>
<th>Resi.</th>
<th>Retail / Club</th>
<th>Retail</th>
<th>Comm.</th>
<th>Resi.</th>
<th>1 Bed</th>
<th>2 Bed</th>
<th>3 Bed</th>
<th>4 Bed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 9</td>
<td>610</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>610</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 8</td>
<td>719</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>719</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 7</td>
<td>719</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>719</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 6</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 5</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 4</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 3</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 2</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 1</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>679</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Retail / Club</th>
<th>Retail</th>
<th>Comm.</th>
<th>Resi.</th>
<th>Retail / Club</th>
<th>Retail</th>
<th>Comm.</th>
<th>Resi.</th>
<th>1 Bed</th>
<th>2 Bed</th>
<th>3 Bed</th>
<th>4 Bed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 39</td>
<td>668</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>668</td>
<td>1</td>
<td>4</td>
<td>2</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 38</td>
<td>1,185</td>
<td>538</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1,185</td>
<td>538</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 37</td>
<td>1,314</td>
<td>552</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1,314</td>
<td>552</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 36</td>
<td>83</td>
<td>24</td>
<td>41</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level 35</td>
<td>84</td>
<td>24</td>
<td>4</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Level 34</td>
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<td>4</td>
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<td>4</td>
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<td>10</td>
<td>-</td>
<td>-</td>
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<td>Level 33</td>
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<td>38</td>
<td>17</td>
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<td>4</td>
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</tr>
<tr>
<td>Level 32</td>
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<td>16</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>10</td>
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</tr>
<tr>
<td>Level 31</td>
<td>790</td>
<td>160</td>
<td>41</td>
<td>52</td>
<td>39</td>
<td>70</td>
<td>10</td>
<td>10</td>
<td>-</td>
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</tbody>
</table>

Totals: 790 160 2,540 21,640 12 3 34 304 53 148 58 130 30 11

Refer accompanying Traffic Impact Assessment for breakdown of parking provision.
### TABLE 2: APARTMENT TYPE AREA + STORAGE SCHEDULE

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Ad’ptable</th>
<th>Quantity</th>
<th>Internal NSA (m²)</th>
<th>Balcony/W’Grden</th>
<th>Storage Min. Storage Req’d (100%) (m³)</th>
<th>Min. Storage Req’d in Apt (100%) (m³)</th>
<th>Storage Vol. Provided in Apt (m³)</th>
<th>SEPP65 Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1B-A</td>
<td>26</td>
<td>50</td>
<td>8</td>
<td>6.00</td>
<td>3.00</td>
<td>3.00</td>
<td>ü</td>
<td>Yes 26 ü</td>
</tr>
<tr>
<td>1B-B</td>
<td>19</td>
<td>58</td>
<td>8</td>
<td>6.00</td>
<td>3.00</td>
<td>4.87</td>
<td>ü</td>
<td>Yes 19 ü</td>
</tr>
<tr>
<td>1B-C</td>
<td>13</td>
<td>13</td>
<td>8</td>
<td>6.00</td>
<td>3.00</td>
<td>3.95</td>
<td>ü</td>
<td>Yes 13 ü</td>
</tr>
<tr>
<td>1B-D</td>
<td>27</td>
<td>84</td>
<td>11</td>
<td>8.00</td>
<td>4.00</td>
<td>5.92</td>
<td>ü</td>
<td>Yes 27 ü</td>
</tr>
<tr>
<td>1B-E</td>
<td>10</td>
<td>79</td>
<td>10</td>
<td>8.00</td>
<td>4.00</td>
<td>5.13</td>
<td>ü</td>
<td>Yes 10 ü</td>
</tr>
<tr>
<td>1B-F</td>
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<td>79</td>
<td>10</td>
<td>8.00</td>
<td>4.00</td>
<td>5.25</td>
<td>ü</td>
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</tr>
<tr>
<td>1B-G</td>
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<td>77</td>
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<td>4.00</td>
<td>6.21</td>
<td>ü</td>
<td>Yes 28 ü</td>
</tr>
<tr>
<td>1B-H</td>
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<td>74</td>
<td>11</td>
<td>8.00</td>
<td>4.00</td>
<td>5.95</td>
<td>ü</td>
<td>Yes 9 ü</td>
</tr>
<tr>
<td>1B-I</td>
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<td>80</td>
<td>10</td>
<td>8.00</td>
<td>4.00</td>
<td>6.73</td>
<td>ü</td>
<td>Yes 4 ü</td>
</tr>
<tr>
<td>1B-J</td>
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<td>80</td>
<td>10</td>
<td>8.00</td>
<td>4.00</td>
<td>6.84</td>
<td>ü</td>
<td>Yes 5 ü</td>
</tr>
<tr>
<td>1B-K</td>
<td>21</td>
<td>103</td>
<td>13</td>
<td>10.00</td>
<td>5.00</td>
<td>5.27</td>
<td>ü</td>
<td>Yes 21 ü</td>
</tr>
<tr>
<td>1B-L</td>
<td>9</td>
<td>103</td>
<td>20</td>
<td>10.00</td>
<td>5.00</td>
<td>5.04</td>
<td>ü</td>
<td>Yes 9 ü</td>
</tr>
<tr>
<td>1B-M</td>
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<td>168</td>
<td>17</td>
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<td>5.00</td>
<td>5.97</td>
<td>ü</td>
<td>Yes 2 ü</td>
</tr>
<tr>
<td>1B-N</td>
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<td>16</td>
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<td>5.00</td>
<td>5.63</td>
<td>ü</td>
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</tr>
<tr>
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<td>5.00</td>
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</tr>
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<td>5.00</td>
<td>12.01</td>
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</tr>
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<td>169</td>
<td>22</td>
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<td>5.00</td>
<td>5.26</td>
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</tr>
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<td>1B-R</td>
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<td>186</td>
<td>35</td>
<td>10.00</td>
<td>5.00</td>
<td>10.91</td>
<td>ü</td>
<td>Yes 1 ü</td>
</tr>
<tr>
<td>1B-S</td>
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<td>10.00</td>
<td>5.00</td>
<td>7.88</td>
<td>ü</td>
<td>Yes 1 ü</td>
</tr>
</tbody>
</table>

Carpark storage cages provided: 229

Number of units achieving SEPP65 storage requirements: 229 (100%)

SOPA storage requirements are equal to that required by the ADG (SEPP65)

Storage allocations per unit type are located on the following pages.
<table>
<thead>
<tr>
<th>Type</th>
<th>Storage Volume Provided within Apartment</th>
<th>Storage Cage Provided in Carpark</th>
<th>Total Storage Volume Compliant with SEPP 65 Guidelines (8.00 m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE 1B-A</td>
<td>3.00 m³</td>
<td>Yes (3 m³)</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 1B-B</td>
<td>4.87 m³</td>
<td>Yes (3 m³)</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 1B-C</td>
<td>3.95 m³</td>
<td>Yes (3 m³)</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 2B-A</td>
<td>5.92 m³</td>
<td>Yes (4 m³)</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 2B-B</td>
<td>9.94 m³</td>
<td>Yes</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 2B-C</td>
<td>5.60 m³</td>
<td>Yes (4 m³)</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 2B-D</td>
<td>4.55 m³</td>
<td>Yes (4 m³)</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 2B-E</td>
<td>5.13 m³</td>
<td>Yes (4 m³)</td>
<td>✓</td>
</tr>
<tr>
<td>TYPE 2B-E2</td>
<td>5.25 m³</td>
<td>Yes (4 m³)</td>
<td>✓</td>
</tr>
</tbody>
</table>
**TYPE 2B-F**
- Storage volume provided within apartment: 6.21 m³
- Storage cage provided in carpark: Yes (4 m³)
- Total storage volume compliant with SEPP 65 guidelines (8.00 m³)

**TYPE 2B-G**
- Storage volume provided within apartment: 5.95 m³
- Storage cage provided in carpark: Yes (4 m³)
- Total storage volume compliant with SEPP 65 guidelines (8.00 m³)

**TYPE 2B-H**
- Storage volume provided within apartment: 12.45 m³
- Storage cage provided in carpark: Yes
- Total storage volume compliant with SEPP 65 guidelines (8.00 m³)

**TYPE 2B-I**
- Storage volume provided within apartment: 6.73 m³
- Storage cage provided in carpark: Yes (4 m³)
- Total storage volume compliant with SEPP 65 guidelines (8.00 m³)

**TYPE 2B-I2**
- Storage volume provided within apartment: 6.84 m³
- Storage cage provided in carpark: Yes (4 m³)
- Total storage volume compliant with SEPP 65 guidelines (8.00 m³)

**TYPE 3B-A**
- Storage volume provided within apartment: 5.27 m³
- Storage cage provided in carpark: Yes (5 m³)
- Total storage volume compliant with SEPP 65 guidelines (10.00 m³)
TYPE 4B-A
Storage volume provided within apartment
Storage cage provided in carpark
Total storage volume compliant with SEPP 65 guidelines (10.00m³)

TYPE 4B-B
Storage volume provided within apartment
Storage cage provided in carpark
Total storage volume compliant with SEPP 65 guidelines (10.00m³)

TYPE 4B-C
Storage volume provided within apartment
Storage cage provided in carpark
Total storage volume compliant with SEPP 65 guidelines (10.00m³)

TYPE 4B-D
Storage volume provided within apartment
Storage cage provided in carpark
Total storage volume compliant with SEPP 65 guidelines (10.00m³)
TYPE 4B-E

Storage volume provided within apartment: 5.26m³
Storage cage provided in carpark: Yes
Total storage volume compliant with SEPP 65 guidelines (10.00m³): ✔

TYPE 4B-F

Storage volume provided within apartment: 10.91m³
Storage cage provided in carpark: Yes
Total storage volume compliant with SEPP 65 guidelines (10.00m³): ✔

TYPE 4B-G

Storage volume provided within apartment: 7.88m³
Storage cage provided in carpark: Yes (5m³)
Total storage volume compliant with SEPP 65 guidelines (10.00m³): ✔
APPENDIX D
MATERIALS SAMPLE BOARD
MATERIAL SAMPLE BOARD

PICTURED
1. Precast concrete
2. Aluminium facing
3. Aluminium fins
4. Glass
5. Colourback glass
6. Metal framing and cladding
7. Aluminium mesh
8. Terracotta
9. Concrete columns