

## Appendix A

**1A and 1B Queen Street, AUBURN**

**State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development**

Requirement	Yes	No	N/A	Comment
<b>Clause 2 Aims, objectives etc.</b>				The proposal is generally considered to satisfy the aims and objectives of SEPP 65. Some aspects of non-compliance are identified with this policy, and these are discussed in greater detail below.
(3) Improving the design quality of residential flat development aims:				
(a) To ensure that it contributes to the sustainable development of NSW:				
(i) by providing sustainable housing in social and environmental terms;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(ii) By being a long-term asset to its neighbourhood;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(iii) By achieving the urban planning policies for its regional and local contexts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(b) To achieve better built form and aesthetics of buildings and of the streetscapes and the public spaces they define.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(c) To better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest range of people from childhood to old age, including those with disabilities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(d) To maximise amenity, safety and security for the benefit of its occupants and the wider community.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(e) To minimise the consumption of energy from non-renewable resources to conserve the environment and to reduce greenhouse gas emissions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(f) to contribute to the provision of a variety of dwelling types to meet population growth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(g) to support housing affordability.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(h) to facilitate the timely and efficient assessment of applications for development to which this Policy applies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Part 2 Design quality principles</b>				
<b>Principle 1: Context</b>				
Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposed development is considered to make a positive contribution to the locality and improve the existing streetscape. The character of this locality is undergoing transition from low/medium-density residential and industrial uses, to high density mixed use developments within Auburn. This proposal is consistent with that shift.
Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.				
Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for				The proposal is within walking distance of the local shops, parks and Auburn train station.

Requirement	Yes	No	N/A	Comment
change.				
<b>Principle 2: Built Form and Scale</b> Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.  Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.  Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The site sits on the edge of Auburn Town Centre and mediates between the high scale of the town Centre, as well as respond to the lower scale of the neighbourhood moving away from the town centre.  The development application is seeking consent for 12 separate residential flat buildings ranging between 3 and 8 storeys over a single level of basement car park.  The building will present a strong façade to both Queen Street and Marion Streets.  The scale bulk and height of the building is considered appropriate to its context and future context and achieves a suitable relationship between the existing and future neighbouring developments.
<b>Principle 3: Density</b> Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population.  Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The site is zoned for high residential development and is located adjacent to the Auburn town centre.  The development will contribute 595 apartments in midrise building forms that will contribute to the redevelopment of the area. The proposal is within the permissible total FSR allowable.  The proposed development complies with the maximum FSR for the site. The proposed development is, therefore, of an appropriate density.
<b>Principle 4: Sustainability</b> Good design combines positive environmental, social and economic outcomes.  Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A BASIX Certificate and relevant reports have been submitted with the development application.  The certificates require sustainable development features to be installed into the development.  The proposal will incorporate features relating to ESD in the design and construction of the development inclusive of water efficient fixtures and energy saving devices.  The development achieves a good level of cross ventilation throughout the development with a majority of the proposed units having dual aspects or diagonal cross ventilation.
<b>Principle 5: Landscape</b> Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.  Good landscape design enhances the	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A landscape plan was submitted with the proposal. The landscaping options are considered to be adequate.  The proposal incorporates several areas of communal open space which is inclusive of the public pocket parks associated with the site. These areas include rooftop terraces, areas in-between developments and the three pocket parks provided along Queen

Requirement	Yes	No	N/A	Comment
development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.  Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.				Street. It is noted that these pocket parks far exceed the 300sqm required by the ADCP 2010 and as such have been utilised within the communal open space calculation given their ability to dual function as additional space for the residents of the development and that of the local residents in proximity to the property. The development incorporates 7254sqm or 27% of communal open space
<b>Principle 6: Amenity</b> Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing.  Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposal will deliver sufficient amenity to residents of the building. The proposal achieves compliance with the ADG in this regard which contains many amenity controls.  The building design incorporates access and circulation, apartment layouts, floor area, ceiling height, private open space, common open space, energy efficiency rating, adaptability and diversity, safety, security and site facilities. The proposal is considered to comply with the ADG and ADCP 2010 which contains numerous amenity controls.  Suitable access is provided to all parts of the building, through the efficient use of lift to access all levels.  The development is considered to provide an appropriate level of amenity for future residents.
<b>Principal 7: Safety</b> Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.  A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Passive surveillance of public space is maximised through orientation of units.  The position and orientation of the various building elements allow balconies and habitable rooms of apartments to overlook the street and communal open spaces on the podium level.  The main pedestrian entrances are generally visible from the street or internal communal courtyard areas.  Safety is achieved by separating the pedestrian paths from the vehicular driveway.  All access paths shall be suitably illuminated at night.  Lighting shall be provided to all common areas including the car parking areas as well as the stairs and access areas to external areas.  Dark unlit areas and entrapment areas within the basement have been avoided or minimised.
<b>Principal 8: Housing Diversity and Social Interaction</b>				The apartment mix is considered to be satisfactory. The specifics of the building

Requirement	Yes	No	N/A	Comment
<p>Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.</p> <p>Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.</p> <p>Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>are:-</p> <ul style="list-style-type: none"> <li>- 107 x 1 Bedroom apartments</li> <li>- 425 x 2 bedroom apartments</li> <li>- 63 x 3 bedroom apartments</li> </ul> <p>Of those there are 60 adaptable apartments out of a total of 595 apartments stre provided.</p> <p>The site is within proximity to the Auburn Town Centre and close to associated services. Services are readily available close by such as shopping facilities, public transport, schools, healthcare and religious activities.</p> <p>The mix of apartments is satisfactory.</p>
<p><b>Principle 9: Aesthetics</b></p> <p>Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.</p> <p>The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The buildings have an attractive contemporary appearance and utilises building elements that provide individuality to the development without compromising the streetscape or detracting from the appearance of existing surrounding development.</p> <p>The buildings respond well in this regard with its provision of good aesthetics through the use of high quality materials, attention to detail in its internal spaces and how it addresses the street frontages.</p> <p>The buildings provide an appropriate response to the existing and likely future character of the locality.</p>
<p><b>Clause 28 Determination of DAs</b></p> <p>(1) After receipt of a development application for consent to carry out development to which this Policy applies (other than State significant development) and before it determines the application, the consent authority is to refer the application to the relevant design review panel (if any) for advice concerning the design quality of the development.</p> <p>(2) In determining a development application for consent to carry out development to which this Policy applies, a consent authority is to take into consideration (in addition to any other matters that are required to be, or may be, taken into consideration):</p> <ul style="list-style-type: none"> <li>(a) the advice (if any) obtained from the design review panel, and</li> <li>(b) the design quality of the development when evaluated in accordance with the design quality principles, and</li> <li>(c) the Apartment Design Guide.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Cumberland Council does not employ a formal design review panel.</p> <p>The design quality principles are considered above and the ADG is considered in the assessment table immediately below.</p>

## Apartment Design Code

Requirement	Yes	No	NA	Comment
<b>Part 3B - Orientation</b>				
<b>3B-1 Design Guidance</b> Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1).  Where the street frontage is to the east or west, rear buildings should be orientated to the north.  Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2).	<input checked="" type="checkbox"/>   <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>	<p>The proposed development is considered to be consistent with the Orientation objectives as the building is appropriately located to maximise solar access to the proposed building but also maintain solar access to adjoining buildings and the street.</p> <p>The proposed building is also appropriately aligned to the street and provides an appropriate design response to the future desired character of the locality.</p> <p>The layout of the buildings are considered to be appropriate with regard to the general positioning of the site and the surrounding developments.</p> <p>The site is generally rectangular in shape, with dual street frontages to Queen Street and Marion Streets. The site is also bounded by an existing industrial site and the Western Railway Line.</p> <p>The buildings have been located in accordance with the built form requirements of the ADCP 2010 which provides the best possible building separation internally and to adjoining buildings / future development sites, streetscape address/alignment.</p> <p>The built form will allow for the majority of residential units enjoying good cross ventilation and solar access throughout the day.</p>
<b>3B-2 Design Guidance</b> Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access.  Solar access to living rooms, balconies and private open spaces of neighbours should be considered.  Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%.  If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy.  Overshadowing should be minimised to the south or downhill by increased upper level setbacks.	<input checked="" type="checkbox"/>   <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input checked="" type="checkbox"/>	<p>The proposed development is considered to be generally consistent with the Daylight Access objectives as the orientation of living areas allows for daylight infiltration.</p> <p>The submitted shadow diagrams demonstrate that there will be minor shadow encroachment of the properties located on the opposing side of queen street, being limited to the front setbacks within the morning only. Shadow impacts are absorbed by the site and the industrial development to the south. This is considered acceptable when taking into consideration the locality and surrounding uses.</p> <p>The development incorporates suitable building separation to allow suitable solar</p>

<p>It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development.</p> <p>A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>penetration to the north facing units of internally located built forms that will experience shadowing from the 8 storey elements adjacent to the railway line and the 6 storey elements internal of the site. Suitable documentation has been provided to demonstrate that satisfactory solar access will be provided to developments within the site.</p> <p>The development is considered to be satisfactorily orientated to be consistent with the built form plan as dictated by the ADCP 2010.</p> <p>There are no solar panels situated on the roofs of nearby buildings especially to the south.</p>
<b>Part 3C - Public domain interface</b>				
<p><b>3C-1 Design Guidance</b></p> <p>Terraces, balconies and courtyard apartments should have direct street entry where appropriate.</p> <p>Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings.</p> <p>Upper level balconies and windows should overlook the public domain.</p> <p>Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m.</p> <p>Length of solid walls should be limited along street frontages.</p> <p>In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions:-</p> <ul style="list-style-type: none"> <li>architectural detailing.</li> <li>changes in materials.</li> <li>plant species.</li> <li>Colours.</li> </ul> <p>Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets.</p> <p>Opportunities for people to be concealed should be minimised.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The public domain interface is considered to positively contribute to the streetscape by providing high quality materials and distinct access to the foyers.</p> <p>The separation between the private and public domains is established by stairs, level changes and paving material.</p> <p>As per the objectives sections the private and public domains are delineated via, stairs, landscaping and level changes.</p> <p>The public domain is enhanced via the provision of an entry lobby and commercial tenancies fronting Joseph Street.</p> <p>There is limited usage of solid walls within the presentation to both Queen Street and Marion Streets.</p> <p>The development is a large scale residential development consisting of 12 distinct buildings. These buildings are separated into 3 separate blocks, being A, B and C, and suitable pathways and communal access ways throughout the site have been proposed to link all communal areas and to allow a site through link from Queen and Marion Street. This has been achieved through the use of architectural detailing and suitable landscaping.</p> <p>All buildings have access to communal open space areas being located internally to each block, between each block and within the rooftop of Building 2 of each block.</p>
<p><b>3C-2 Design Guidance</b></p> <p>Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The proposal incorporates an area of sub-basement for the provision of additional storage and bicycle storage. The area of protrusion is isolated internal to the site and</p>

<p>Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided.</p> <p>The visual prominence of underground car park vents should be minimised and located at a low level where possible.</p> <p>Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view.</p> <p>Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels.</p> <p>Durable, graffiti resistant and easily cleanable materials should be used.</p> <p>Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions:</p> <ul style="list-style-type: none"> <li>• street access, pedestrian paths and building entries which are clearly defined.</li> <li>• paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space.</li> <li>• minimal use of blank walls, fences and ground level parking.</li> </ul> <p>On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>does not present to the streetscape. Suitable treatment of this area has been proposed through landscaping proposed along the internal passageways.</p> <p>Suitable conditions will be imposed on the development to ensure suitable mail boxes are provided for the development.</p> <p>The vehicular access ramps are located on Queen Street and are incorporated within the design to limit any visual prominence. The car park entrances are provided within proximity to the public spaces provided.</p> <p>Service areas such as garbage collection areas, garbage storage and loading spaces are contained within the basement. Substations are located in areas that are generally landscaped and do not cause any significant visual impact.</p> <p>Suitable entrances have been provided for each building. Equitable access is provided to each development and throughout the development site.</p> <p>The development incorporated three pocket parks as part of the development. Each park is designed to be utilised by the public by being open to Queen Street, with landscaping utilised to encourage visitors whilst not disconnecting the spaces from the development itself.</p> <p>No protrusion of parking levels are proposed. It is noted that there is a minor protrusion of the basement level, associated with the bicycle storage and additional storage levels under the queen Street frontage for Block A. This has been adequately integrated into the design through landscaping along any protruding elements.</p>
<b>Part 3D - Communal and public open space</b>				
<p><b>3D-1 Design Criteria</b></p> <p>Communal open space has a minimum area equal to 25% of the site (see figure 3D.3).</p> <p>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).</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The proposal incorporates several areas of communal open space which is inclusive of the public pocket parks associated with the site. These areas include rooftop terraces, areas in-between developments and the three pocket parks provided along Queen Street. It is noted that these pocket parks far exceed the 300sqm required by the ADCP 2010 and as such have been utilised within the communal open space calculation given their ability to dual</p>

				<p>function as additional space for the residents of the development and that of the local residents in proximity to the property. The development incorporates 7254sqm or 27% of communal open space</p> <p>The development has been supported by suitable solar diagrams which demonstrates that these areas receive on average (across all areas) 50% solar penetration for a minimum of 2 hours during the day.</p>
<b>3D-1 Design Guidance</b> Communal open space should be consolidated into a well-designed, easily identified and usable area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The proposal effectively incorporates 12 areas of communal open space, being located in between building blocks, upon rooftops and within the pocket parks. Each area is well designed and will be functional for the residents of the development. It is noted that the pocket parks have been broken into distinctive usage areas, being passive and play areas.</p>
Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>All areas of communal open areas are greater than 3m in dimension.</p>
Communal open space should be co-located with deep soil areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The proposal incorporates several areas of landscaping, including the introduction of planter beds on the communal open spaces to soften the appearance of the building.</p>
Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>All 12 buildings have access to a communal open space area.</p>
Where communal open space cannot be provided at ground level, it should be provided on a podium or roof.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The development incorporates three roof top terraces</p>
Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:				<p>The development incorporates suitably designed communal open spaces which address these requirements..</p>
<ul style="list-style-type: none"> <li>provide communal spaces elsewhere such as a landscaped roof top terrace or a common room.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>provide larger balconies or increased private open space for apartments.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>demonstrate good proximity to public open space and facilities and/or provide contributions to public open space.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>3D-2 Design Guidance</b> Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements:				
<ul style="list-style-type: none"> <li>seating for individuals or groups.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The development is serviced by 12 areas of communal open space each differing in type and function. Areas include outdoor gym equipment, seating, communal gardens and BBQ facilities.</p>
<ul style="list-style-type: none"> <li>barbecue areas.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>It is noted that all facilities area accessible and available for each block (A,B and C).</p>
<ul style="list-style-type: none"> <li>play equipment or play areas.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>swimming pools, gyms, tennis courts or common rooms.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Each area has been designed so as to be</p>



The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	functional for the residents. It is noted that BBQ areas or areas for entertaining have been provided on rooftops for additional solar access.															
Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
<b>3D-3 Design Guidance</b> Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include:- <ul style="list-style-type: none"><li>• Bay windows.</li><li>• Corner windows.</li><li>• Balconies.</li></ul> Communal open space should be well lit.  Where communal open space / facilities are provided for children and young children they are safe and contained.	<div><input type="checkbox"/><input checked="" type="checkbox"/><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div>	<div><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<div><input checked="" type="checkbox"/><input type="checkbox"/><input type="checkbox"/></div> <div><input type="checkbox"/></div>	Secure access to entries to the building and casual surveillance of the public domain from the balconies are to be provided.															
<b>3D-4 Design Guidance</b> The public open space should be well connected with public streets along at least one edge.  The public open space should be connected with nearby parks and other landscape elements.  Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid.  Solar access should be provided year round along with protection from strong winds.  A positive address and active frontages should be provided adjacent to public open space.  Boundaries should be clearly defined between public open space and private areas.	<div><input checked="" type="checkbox"/><input checked="" type="checkbox"/><input checked="" type="checkbox"/><input checked="" type="checkbox"/><input checked="" type="checkbox"/><input checked="" type="checkbox"/></div>	<div><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/></div>	<div><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/></div>	<div>The development incorporates three pocket parks as part of the development, broken into passive and play areas.</div> <div>The parks area provided within the development, but are open to Queen Street access and are considered acceptable in providing for the locality.</div> <div>The public open spaces are linked within the development site through “through site links”, with specifically designed elements to welcome pedestrians into the areas.</div> <div>Suitable solar access is provided. It is noted that these areas have limited solar access given the proposed building pattern and associated overshadowing, however, these areas are still considered to be functional and provide suitable solar penetration. As nominated above, these areas are designed to provide a welcoming component along Queen Street so as to be utilised by the public.</div> <div>Public and private areas are distinguished by good landscape design.</div>															
Part 3E1 - Deep soil zones																			
<b>3E-1 Design criteria</b> Deep soil zones are to meet the following minimum requirements: <table><tr><td>Site Area</td><td>Dimensions</td><td>Deep Soil</td></tr><tr><td>&lt; 650m<sup>2</sup></td><td></td><td>7%</td></tr><tr><td>650m<sup>2</sup> to 1,500m<sup>2</sup></td><td>3m</td><td>7%</td></tr><tr><td>&gt; 1,500m<sup>2</sup></td><td>6m</td><td>7%</td></tr><tr><td>&gt; 1,500m<sup>2</sup> with</td><td>6m</td><td>7%</td></tr></table>	Site Area	Dimensions	Deep Soil	< 650m <sup>2</sup>		7%	650m <sup>2</sup> to 1,500m <sup>2</sup>	3m	7%	> 1,500m <sup>2</sup>	6m	7%	> 1,500m <sup>2</sup> with	6m	7%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<div>The development has a site are in excess of 1500sqm and proposes a deep soil area totalling 3398sqm or 12.6% being consistent with the requirements of this part.</div> <div>It is noted that the development also incorporates areas of permeable paving to assist natural water infiltration and further enriching landscaping within these areas. These permeable paving’s make up</div>
Site Area	Dimensions	Deep Soil																	
< 650m <sup>2</sup>		7%																	
650m <sup>2</sup> to 1,500m <sup>2</sup>	3m	7%																	
> 1,500m <sup>2</sup>	6m	7%																	
> 1,500m <sup>2</sup> with	6m	7%																	

significant existing tree					approximately an additional 802sqm, creating a total deep soil area of 4200sqm or 15.6%.
					In this regard, the development can be seen to achieve a satisfactory area of deep soil in accordance with the requirements of the ADG.
<b>3E-1 Design Guidance</b>					
On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:					
• 10% of the site as deep soil on sites with an area of 650m <sup>2</sup> - 1,500m <sup>2</sup> .	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
• 15% of the site as deep soil on sites greater than 1,500m <sup>2</sup> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		As above, with the inclusion of pervious paving, the development achieves a deep soil area of 15.5%.
Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:					
• basement and sub-basement car park design that is consolidated beneath building footprints.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		The proposed basement is located within the building footprint of the development.
• use of increased front and side setbacks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		The setbacks associated with the development are considered acceptable in promoting large trees to grow within these areas.
• adequate clearance around trees to ensure long term health.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		A majority of the existing trees along Queen Street are to be retained and the development is not considered to impact upon the health of these trees.
• co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		The development is a large development site of 26,876sqm and incorporates several areas of extended continuous deep soil areas, being predominately located within the Queen Street frontage, the rear boundary parallel with the railway line and along the southern boundary.
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).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
• there is 100% site coverage or non-residential uses at ground floor level.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>Part 3F - Visual privacy</b>					
<b>3F-1 Design criteria</b>					
Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		The proposed developments incorporate suitable separation distances with the surrounding developments to all boundaries. It should be noted that developments to east and south are not

Building height	Habitable rooms & balconies	Non habitable rooms				
Up to 12m (4 storeys)	6m	3m				zoned for the purposes of residential (being railway and industrial), however achieve suitable boundary separation to improve noise and any associated pollution concern.
Up to 25m (5-8 storeys)	9m	4.5m				Additionally, the provision of 9 metres separation to the southern boundary allows for any future development to occur within the neighbouring development if ever it is to be rezoned.
Over 25m (9 + storeys)	12m	6m				The developments to the north and west incorporate suitable separation distances in excess of 18 metres and are consistent with the requirements of this part.
<p>Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2).</p> <p>Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.</p>						<p><u>Internal separation</u></p> <p><i>Internal separation between Blocks A, B and C</i></p> <p>The development proposes a general separation distance between Blocks A and B/B and C of 18.47m. This distance increases within the buildings fronting Queen Street to facilitate the pocket parks. Additionally, the separation distances for the rear buildings (A1, B1 and C1) increase on the 6<sup>th</sup> to 8<sup>th</sup> floors to facilitate additional solar penetration into the development site.</p> <p><b>It is noted that an area of non-compliance occurs to the western separation distance between Buildings A2/B4 and B2/C4 given an angled balcony proposed. This distance is 16.95m and is only present for a partial area of the balconies located on levels 5 and 6. Given that this non-compliance effects a minor portion of the balcony and the design of the balcony has been designed so as to incorporate a blank wall for the portion of non-compliance, this is not considered to generate a visual privacy concern in this instance.</b></p> <p><i>Internal separation of buildings of each block</i></p> <p>The separation distances between the buildings of each block are generally consistent with the requirements of this part.</p> <p>Building 3 of each block has been set back a suitable distance of approximately 9 metres and it is noted that the separation distance is taken to a blank wall. This is considered suitable for the purposes of visual separation.</p> <p>It is noted that there are some highlight windows on the west facing walls of Buildings 2 and 4. These are generally not orientated to be in line with opposing habitable areas/balconies and are considered acceptable in this instance.</p>

[illegible]

No separation is required between blank walls.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>through the provision of blank walls or privacy screens.</p> <p>Several areas of blank walls are used to facilitate compliance. The use of blank walls are notably at the end of buildings where windows are not necessary for solar penetration.</p>
<b>3F-2 Design Guidance</b> Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: <ul style="list-style-type: none"> <li>• setbacks.</li> <li>• solid or partially solid balustrades to balconies at lower levels.</li> <li>• fencing and/or trees and vegetation to separate spaces.</li> <li>• screening devices.</li> <li>• bay windows or pop out windows to provide privacy in one direction and outlook in another.</li> <li>• raising apartments/private open space above the public domain or communal open space.</li> <li>• planter boxes incorporated into walls and balustrades to increase visual separation.</li> <li>• pergolas or shading devices to limit overlooking of lower apartments or private open space.</li> <li>• on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Communal open spaces are separated from all private open space areas. The internal communal open space area are adequately landscaped and designed so as to separate communal and private spaces.</p> <p>Any windows with direct access to the communal area are adequately screened.</p> <p>The communal open space on the designated rooftop communal open spaces do not incorporate/adjoin any private open space areas.</p>
Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Rooms are designed to be well separated from gallery access and communal areas. The proposal has been designed so that like-use areas of the apartments are grouped to avoid acoustic disturbance of neighbouring apartments where possible.</p>
Balconies and private terraces should be located in front of living rooms to increase internal privacy. Windows should be offset from the windows of adjacent buildings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Balconies have direct access from living rooms. The development includes recessed balconies for privacy needs where appropriate.</p>
Recessed balconies and/or vertical fins should be used between adjacent balconies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Part 3G - Pedestrian access and entries</b>				
<b>3G-1 Design Guidance</b> Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The built form is articulated into a clearly defined base with discernible pedestrian access. All facades are appropriately articulated through the use of vertical and horizontal elements, including balconies, windows, varied setbacks and external finishes.</p>
Entry locations relate to the street and subdivision pattern and the existing pedestrian network.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The pedestrian entrance to each building is clearly visible from the street front or through communal walkways for buildings internal within the development.
Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Suitable conditions will be imposed in this regard.
<b>3G-2 Design Guidance</b> Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All building entrances are clearly visible from common spaces, whether being from the street frontages or communal access ways.
The design of ground floors and underground car parks minimise level changes along pathways and entries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development has been designed to minimise level changes within the development. It is noted that in some areas the ground floor terraces of buildings are partly raised to accommodate level changes, however all buildings on site are considered to be accessible, inclusive of all pathways and common areas.
Steps and ramps should be integrated into the overall building and landscape design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Suitable conditions will be imposed to ensure way finding maps are installed onsite.
For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Suitable conditions will be imposed to ensure intercom usage will be provided.
For large developments electronic access and audio/video intercom should be provided to manage access.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>3G-3 Design Guidance</b> Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development incorporates 3 pocket parks accessible via Queen Street. These pocket parks link up with a Through Site link that runs parallel with Queen Street and provides safe access through to Marion Street.
Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The through site link and associated pocket parks are overlooked by habitable spaces and will incorporate suitable lighting to promote safety and security.
<b>Part 3H - Vehicle access</b>				
<b>3H-1 Design Guidance</b> Car park access should be integrated with the building's overall facade. Design solutions may include:- <ul style="list-style-type: none"> <li>the materials and colour palette to minimise visibility from the street.</li> <li>security doors or gates at entries that minimise voids in the facade.</li> <li>where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development incorporates two vehicular access points from Queen Street. These access points are designed so as to be integrated within the development.
Car park entries should be located behind the building line.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The entries to the car parks are located beyond the building line as the ramp lowers to the basement level.
Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The access points have been located accordingly to reduce impacts upon the local road network whilst integrating well within the design.

Car park entry and access should be located on secondary streets or lanes where available.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The access points have been located along Queen Street, being the recommended street for access given the existing local road network. Suitable traffic reports have been submitted to demonstrate that these areas are the best locations for on-site access.
Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vehicle standing areas are considered satisfactory given that onsite queuing and double ramp access has been accommodated for.
Access point locations should avoid headlight glare to habitable rooms.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Access points have been designed so as to not significantly provide headlight glare to adjoining residencies.
Adequate separation distances should be provided between vehicle entries and street intersections.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Suitable traffic reports have been provided to demonstrate best locations for driveway access. Councils development engineers have provided suitable conditions to ensure that the vehicle entries are suitable and that there is limited impact on street intersections.
The width and number of vehicle access points should be limited to the minimum.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As discussed above.
Visual impact of long driveways should be minimised through changing alignments and screen planting.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The driveway/driveway ramps extend below to within the basement and are not considered to be visually prominent.
The need for large vehicles to enter or turn around within the site should be avoided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Garbage collection, loading and servicing areas are screened.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Garbage collection, loading and servicing areas are located within the basement.
Clear sight lines should be provided at pedestrian and vehicle crossings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Suitable reports have been provided and found satisfactory in regards to traffic access and associated manoeuvring.
Traffic calming devices such as changes in paving material or textures should be used where appropriate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Suitable conditions will be imposed on the development to facilitate this requirement.
Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: <ul style="list-style-type: none"> <li>• changes in surface materials.</li> <li>• level changes.</li> <li>• the use of landscaping for separation.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vehicular and pedestrian access is separated through design and landscaping. It is noted that there is a multitude of pedestrian access points and through links to limit any concern related to the two vehicular access points.
<b>Part 3J - Bicycle and car parking</b>				
<b>3J-1 Design Criteria</b> For development in the following locations: <ul style="list-style-type: none"> <li>• on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or</li> <li>• on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre.</li> </ul> <p>The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Under the Roads and Maritime Service Guidelines, the development should be provided with the following requirements; <ul style="list-style-type: none"> <li>• Studio/1 bedroom: 0.6 = 64.2 spaces</li> <li>• 2 bedroom: 0.9 spaces = 382.5 spaces</li> <li>• 3 bedroom: 1.4spaces = 88.2 spaces</li> <li>• Visitors: 1 per 5 units = 119</li> <li>• Total Residential: 653.9 (654 spaces)</li> </ul>

The car parking needs for a development must be provided off street.				<b>Required total: 654 spaces</b>  The proposal is compliant with this part.
<b>3J-1 Design Guidance</b> Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces when provided should be on site.  Where less car parking is provided in a development, Council should not provide on street resident parking permits.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The guidelines will not need to apply to the development as no car share programme operates in the area.
<b>3J-2 Design Guidance</b> Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters.  Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas.  Conveniently located charging stations are provided for electric vehicles, where desirable.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Further parking for motorbikes and scooters should be considered. However, the application has provided suitable provision for vehicles on site and this is considered suitable.  An additional Bicycle storage area is proposed within a mezzanine area of the basement..  There is no provision for charging stations
<b>3J-3 Design Guidance</b> Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces.  Direct, clearly visible and well lit access should be provided into common circulation areas.  A clearly defined and visible lobby or waiting area should be provided to lifts and stairs.  For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Secure access doors/gates can be provided to lift lobbies and basement car parking.  All main entrances are easily visible from the streets. Suitable lift access has been provided from the basement car park to all levels associated with the development.  Suitable condition will be imposed on the development to ensure the parking areas are sufficiently lit and clearly marked.
<b>3J-4 Design Guidance</b> Excavation should be minimised through efficient car park layouts and ramp design.  Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles.  Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites.  Natural ventilation should be provided to basement and sub-basement car parking areas.  Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposal is considered to have optimised car parking layout.  All car parking spaces are located within the basement and ground level parking area with access off Queen Street.  Suitable conditions will be imposed on the development to ensure compliance with this part.
<b>3J-5 Design Guidance</b>				



<p>On-grade car parking should be avoided.</p> <p>Where on-grade car parking is unavoidable, the following design solutions are used:-</p> <ul style="list-style-type: none"> <li>• parking is located on the side or rear of the lot away from the primary street frontage.</li> <li>• cars are screened from view of streets, buildings, communal and private open space areas.</li> <li>• safe and direct access to building entry points is provided.</li> <li>• parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space.</li> <li>• stormwater run-off is managed appropriately from car parking surfaces.</li> <li>• bio-swales, rain gardens or on site detention tanks are provided, where appropriate.</li> <li>• light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No at grade parking proposed.
<p><b>3J-6 Design Guidance</b></p> <p>Exposed parking should not be located along primary street frontages.</p> <p>Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include:-</p> <ul style="list-style-type: none"> <li>• car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels).</li> <li>• car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9).</li> </ul> <p>Positive street address and active frontages should be provided at ground level.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Due to the absence of exposed car parking, it is considered that Part 3J-6 will not apply.
<b>Part 4A - Solar and daylight access</b>				
<p><b>4A-1 Design Criteria</b></p> <p>Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.</p> <p>In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>The proposed development is considered to be generally consistent with the Solar and Daylight Access objectives as the orientation of living areas allows for daylight infiltration</p> <p>The applicant provided shadow diagrams/tables that demonstrate that 411 of the 595 units or 69.1% of all units have living areas and private open space areas achieving the minimum 2 hours solar access.</p> <p>101 of the 595 units or 17% will receive less than 2 hours solar access.</p>

18

<p>by orientating the living rooms away from the noise source.</p> <ul style="list-style-type: none"> <li>on south facing sloping sites.</li> <li>where significant views are oriented away from the desired aspect for direct sunlight.</li> </ul> <p>Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
<p><b>4A-2 Design Guidance</b></p> <p>Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms. Where courtyards are used:</p> <ul style="list-style-type: none"> <li>use is restricted to kitchens, bathrooms and service areas.</li> <li>building services are concealed with appropriate detailing and materials to visible walls.</li> <li>courtyards are fully open to the sky.</li> <li>access is provided to the light well from a communal area for cleaning and maintenance.</li> <li>acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved.</li> </ul> <p>Opportunities for reflected light into apartments are optimised through:</p> <ul style="list-style-type: none"> <li>reflective exterior surfaces on buildings opposite south facing windows.</li> <li>positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light.</li> <li>integrating light shelves into the design.</li> <li>light coloured internal finishes.</li> </ul>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p>It is considered that daylight access is maximised across the building.</p> <p>Primary light is provided by primary windows.</p> <p>The development does not require the use of reflected light into apartments.</p>
<p><b>4A-3 Design Guidance</b></p> <p>A number of the following design features are used:</p> <ul style="list-style-type: none"> <li>balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas.</li> <li>shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting.</li> <li>horizontal shading to north facing windows.</li> <li>vertical shading to east and particularly west facing windows.</li> <li>operable shading to allow adjustment and choice.</li> <li>high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided).</li> </ul>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>It is considered that glare would not be a significant issue for the site. All balconies are appropriately recessed to ensure adequate shading for the amenity of each unit.</p>
<b>Part 4B - Natural ventilation</b>				
<p><b>4B-1 Design Guidance</b></p> <p>The building's orientation maximises capture and use of prevailing breezes for natural</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>It is considered that all the rooms will be naturally ventilated 372 of 595 units</p>

<p>ventilation in habitable rooms.</p> <p>Depths of habitable rooms support natural ventilation.</p> <p>The area of unobstructed window openings should be equal to at least 5% of the floor area served.</p> <p>Light wells are not the primary air source for habitable rooms.</p> <p>Doors and openable windows maximise natural ventilation opportunities by using the following design solutions:</p> <ul style="list-style-type: none"> <li>adjustable windows with large effective openable areas.</li> <li>a variety of window types that provide safety and flexibility such as awnings and louvres.</li> <li>windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>(62.5%) will be naturally cross ventilated.</p> <p>No light wells are used within the development.</p> <p>Adjustable screens are proposed to the western facing winter gardens to provide acoustic privacy from the railway whilst achieving good ventilation.</p> <p>Balconies are also designed to provide shades to the living area from the sun.</p>
<p><b>4B-2 Design Guidance</b></p> <p>Apartment depths are limited to maximise ventilation and airflow.</p> <p>Natural ventilation to single aspect apartments is achieved with the following design solutions:</p> <ul style="list-style-type: none"> <li>primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation).</li> <li>stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries.</li> <li>courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The building and apartment layouts are designed to maximise natural ventilation through the use of open-plan living areas and generous openings to living areas and bedrooms.</p> <p>The living rooms are adjacent to the balconies and generally promote natural ventilation.</p> <p>The building is well articulated to respond to the size and shape of the site. The performance of the apartments in relation to solar access and natural ventilation is considered acceptable.</p>
<p><b>4B-3 Design Criteria</b></p> <p>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.</p> <p>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>372 of 595 units (62.5%) will be naturally cross ventilated and have openings in two or more external walls of different orientation which achieves the minimum requirement specified at Part 4B-3.</p> <p>All buildings have a general depth of approximately 18m.</p>
<p><b>4B-3 Design Guidance</b></p> <p>The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths.</p> <p>In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>There are dual aspect and cross through apartments within the development.</p> <p>This is achieved as appropriate.</p>

sizes/areas on the other side of the apartment.																
Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This is achieved as appropriate.												
Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This is achieved as appropriate.												
<b>Part 4C - Ceiling heights</b>																
<b>4C-1 Design Criteria</b> Measured from finished floor level to finished ceiling level, minimum ceiling heights are: <table border="1"> <thead> <tr> <th>Type / Use</th> <th>Minimum ceiling height</th> </tr> </thead> <tbody> <tr> <td>Habitable rooms</td> <td>2.7m.</td> </tr> <tr> <td>Non habitable rooms</td> <td>2.4m.</td> </tr> <tr> <td>For 2 storey apartments</td> <td>2.7m for main living area floor. 2.4m for second floor where its area does not exceed 50% of the apartment area.</td> </tr> <tr> <td>Attic spaces</td> <td>1.8m at edge of room with a 30 degree minimum ceiling slope.</td> </tr> <tr> <td>If located in mixed use areas</td> <td>3.3m for ground and first floor to promote future flexibility of use.</td> </tr> </tbody> </table> These minimums do not preclude higher ceilings if desired.	Type / Use	Minimum ceiling height	Habitable rooms	2.7m.	Non habitable rooms	2.4m.	For 2 storey apartments	2.7m for main living area floor. 2.4m for second floor where its area does not exceed 50% of the apartment area.	Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope.	If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Habitable rooms all have a minimum 2.7m floor to ceiling heights and non-habitable rooms have a minimum 2.4m floor to ceiling height. A floor to ceiling height of 3.1m has been nominated, however this does not take into account servicing, slab thickness and the like. The floor to ceiling height is considered to be acceptable in this instance.  This is considered acceptable for solar access and general residential amenity.
Type / Use	Minimum ceiling height															
Habitable rooms	2.7m.															
Non habitable rooms	2.4m.															
For 2 storey apartments	2.7m for main living area floor. 2.4m for second floor where its area does not exceed 50% of the apartment area.															
Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope.															
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use.															
<b>4C-1 Design Guidance</b> Ceiling height can accommodate use of ceiling fans for cooling and heat distribution.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposal is considered to provide sufficient ceiling heights to allow use of ceiling fans.												
<b>4C-2 Design Guidance</b> A number of the following design solutions can be used: <ul style="list-style-type: none"> <li>The hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces.</li> <li>Well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings.</li> <li>Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The floor to ceiling heights of every apartment is compliant with the specified provisions. As such, it is considered that a sense of space and well proportioned rooms are achieved.												
<b>4C-3 Design Guidance</b> Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Development is a purpose built residential estate just on the boundary of the established Auburn Town Centre. No commercial spaces are envisaged for the area.												
<b>Part 4D - Apartment size and layout</b>																
<b>4D-1 Design Criteria</b> Apartments are required to have the following	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The following apartment sizes are achieved:												

minimum internal areas:					<ul style="list-style-type: none"><li>17.8% one bedroom and one bedroom + study apartments (51-63m2);</li><li>71.6% two bedroom apartments (75-85m2); and</li><li>10.6% three bedroom apartments (min 95m2).</li></ul>										
<table><tr><th>Apartment type</th><th>Minimum internal area</th></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>95m²</td></tr></table>	Apartment type	Minimum internal area	Studio	35m²	1 bedroom	50m²	2 bedroom	70m²	3 bedroom	95m²					
Apartment type	Minimum internal area														
Studio	35m²														
1 bedroom	50m²														
2 bedroom	70m²														
3 bedroom	95m²														
<ul style="list-style-type: none"><li>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.</li><li>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each.</li><li>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.</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<p>All units which have a secondary/third bathroom, comply with the additional 5sqm.</p> <p>Units are designed to have sufficient solar access and able to achieved natural ventilation on habitable rooms.</p>										
<b>4D-1 Design Guidance</b> <p>Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space).</p> <p>A window should be visible from any point in a habitable room.</p> <p>Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas.</p> <p>These circumstances would be assessed on their merits.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<p>Kitchens do not form part of the major circulation space of any apartment.</p> <p>The design, location and layout of the living areas are compliant.</p>										
<b>4D-2 Design Criteria</b> <p>Habitable room depths are limited to a maximum of 2.5 times of the ceiling height.</p> <p>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<p>It is considered that compliance is achieved. All apartments have sufficient depth as required.</p>										
<b>4D-2 Design Guidance</b> <p>Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths.</p> <p>All living areas and bedrooms should be located on the external face of the building. Where possible:</p> <ul style="list-style-type: none"><li>bathrooms and laundries should have an external openable window</li><li>main living spaces should be oriented toward the primary outlook and aspect and away from noise sources.</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<p>It is considered that the guidelines are complied with.</p>										
<b>4D-3 Design Criteria</b> <p>Master bedrooms have a minimum area of</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<p>All rooms are designed to meet with the</p>										

<p>10m<sub>2</sub> and other bedrooms 9m<sub>2</sub> (excluding wardrobe space).</p> <p>Bedrooms have a minimum dimension of 3m (excluding wardrobe space).</p> <p>Living rooms or combined living/dining rooms have a minimum width of:</p> <ul style="list-style-type: none"><li>3.6m for studio and 1 bedroom apartments.</li><li>4m for 2 and 3 bedroom apartments.</li></ul> <p>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.</p>				minimum width requirements.															
<p><b>4D-3 Design Guidance</b></p> <p>Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas.</p> <p>All bedrooms allow a minimum length of 1.5m for robes.</p> <p>The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high.</p> <p>Apartment layouts allow flexibility over time, design solutions may include:</p> <ul style="list-style-type: none"><li>dimensions that facilitate a variety of furniture arrangements and removal.</li><li>spaces for a range of activities and privacy levels between different spaces within the apartment.</li><li>dual master apartments.</li><li>dual key apartments <i>Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments.</i></li><li>room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1)).</li></ul> <p>Efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Access to rooms is suitable in this regard.</p> <p>All bedrooms are designed with a minimum 1.5m wide built-in wardrobe.</p> <p>Wardrobes in all master bedrooms are designed to comply with this requirement.</p> <p>The proposed development is considered to be consistent with the requirement as layouts promote changes to furniture arrangement and a suitable number can be adapted to the changing needs of residents.</p>															
<p><b>Part 4E - Private open space and balconies</b></p>																			
<p><b>4E-1 Design Criteria</b></p> <p>All apartments are required to have primary balconies as follows:</p> <table><tr><td>Dwelling type</td><td>Minimum area</td><td>Minimum depth</td></tr><tr><td>Studio apartments</td><td>4m<sup>2</sup></td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m<sup>2</sup></td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m<sup>2</sup></td><td>2m</td></tr><tr><td>3 plus bedroom apartments</td><td>12m<sup>2</sup></td><td>2.4m</td></tr></table> <p>The minimum balcony depth to be counted as</p>	Dwelling type	Minimum area	Minimum depth	Studio apartments	4m <sup>2</sup>	-	1 bedroom apartments	8m <sup>2</sup>	2m	2 bedroom apartments	10m <sup>2</sup>	2m	3 plus bedroom apartments	12m <sup>2</sup>	2.4m	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>All the apartments are provided with balconies of minimum depth dimension of 2m although they vary in size and shape.</p> <p>The balconies for one, two and three bedroom units are designed to be a minimum of 8m<sup>2</sup>, 10m<sup>2</sup> and 12m<sup>2</sup> in area respectively which complies with the requirements.</p>
Dwelling type	Minimum area	Minimum depth																	
Studio apartments	4m <sup>2</sup>	-																	
1 bedroom apartments	8m <sup>2</sup>	2m																	
2 bedroom apartments	10m <sup>2</sup>	2m																	
3 plus bedroom apartments	12m <sup>2</sup>	2.4m																	

[illegible]



design.				
Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ceilings of apartments below terraces should be insulated to avoid heat loss.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water and gas outlets should be provided for primary balconies and private open space.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4E-4 Design Guidance</b> Changes in ground levels or landscaping are minimised.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The separation between the private and public domains is established within the landscape design.
Design and detailing of balconies avoids opportunities for climbing and falls.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minimum 1m high balustrades are installed along all balconies to minimise opportunities for falls and climbing.
<b>Part 4F - Common circulation and spaces</b>				
<b>4F-1 Design criteria</b>				
1. The maximum number of apartments off a circulation core on a single level is eight.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Building 1 within each block incorporates 11 units for up to the 6 <sup>th</sup> storey, with the 7 <sup>th</sup> floor containing 9 units and the 8 <sup>th</sup> floor containing 8 units. This building is serviced by two lift cores which is considered acceptable in this instance.  Building 2 has one lift core which generally serves 8 units on each level. It is noted that the 2 <sup>nd</sup> floor only has access for 7 units given the double storey unit accessible from the ground floor lobby.  Building 3 has two lift cores which service 4 units each.  Building 4 has one lift core which services 8 units per floor.
2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The development only relates to 3, 6 and 8 storey buildings.
<b>4F-1 Design Guidance</b> Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The internal corridors are 1.85m wide (lift lobby).
Daylight and natural ventilation should be provided to all common circulation spaces that are above ground.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The building is punctuated to achieve natural daylight to circulation spaces.
Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This is achieved in most core locations.
Longer corridors greater than 12m in length from the lift core should be articulated. Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The length of corridors measured from each lift core is generally no more than 12m on

<p>solutions may include:</p> <ul style="list-style-type: none"> <li>a series of foyer areas with windows and spaces for seating.</li> <li>wider areas at apartment entry doors and varied ceiling heights.</li> </ul>				<p>all levels. It is noted that Buildings 2 and 4 incorporate long corridors in excess of 20m. However these corridors are open at both ends with glass windows to allow for appropriate solar amenity. This is considered acceptable in these instances.</p>
Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It is noted that many of the units have dual aspects.
<p>Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:</p> <ul style="list-style-type: none"> <li>sunlight and natural cross ventilation in apartments.</li> <li>access to ample daylight and natural ventilation in common circulation spaces</li> <li>common areas for seating and gathering</li> <li>generous corridors with greater than minimum ceiling heights.</li> <li>other innovative design solutions that provide high levels of amenity.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The proposal has been designed to maximum the amount of solar access to all units and 372 units (62.5%) are designed to have natural cross ventilation.</p>
Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is achieved.
Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4F-2 Design Guidance</b>				
Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The common circulation space is acceptable and considered to be safe.
Tight corners and spaces are avoided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development is designed to provide a legible common circulation space to enhance general way finding within each building.
Circulation spaces should be well lit at night.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Legible signage should be provided for apartment numbers, common areas and general way finding.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Incidental spaces, for example 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 should be provided and are ideally co-located with communal open space.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Having considered the scale of the development, and provision of common open space (inclusive of covered areas within each block) the provision of designated community room is not considered warranted in this instance. Each block is suitably designed to have areas available for any community meetings to occur. It is noted that a stratum scheme will be developed on site involving several
Where external galleries are provided, they are more open than closed above the balustrade along their length.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

				strata plans over time.										
<b>4G – Storage</b>														
<b>4G-1 Design Criteria</b> In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: <table border="1"> <thead> <tr> <th>Dwelling type</th><th>Storage</th></tr> </thead> <tbody> <tr> <td>Studio apartments</td><td>4m<sup>3</sup></td></tr> <tr> <td>1 bedroom apartments</td><td>6m<sup>3</sup></td></tr> <tr> <td>2 bedroom apartments</td><td>8m<sup>3</sup></td></tr> <tr> <td>3 plus bedroom apartments</td><td>10m<sup>3</sup></td></tr> </tbody> </table>	Dwelling type	Storage	Studio apartments	4m <sup>3</sup>	1 bedroom apartments	6m <sup>3</sup>	2 bedroom apartments	8m <sup>3</sup>	3 plus bedroom apartments	10m <sup>3</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It is considered that all apartments are provided with sufficient storage space including internal space within each units and storage space in the form of cages situated within the basement car park.
Dwelling type	Storage													
Studio apartments	4m <sup>3</sup>													
1 bedroom apartments	6m <sup>3</sup>													
2 bedroom apartments	8m <sup>3</sup>													
3 plus bedroom apartments	10m <sup>3</sup>													
<b>4G-1 Design Guidance</b> Storage is accessible from either circulation or living areas.  Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street.  Left over space such as under stairs is used for storage.	<input checked="" type="checkbox"/>   <input checked="" type="checkbox"/>   <input checked="" type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/>	Storage is provided within each unit in the form of dedicated separate storage cupboards within each unit.  Additional storage compartments are provided in the form of individual storage compartments located within the basement parking levels.										
<b>4G-2 Design Guidance</b> Storage not located in apartments is secure and clearly allocated to specific apartments.  Storage is provided for larger and less frequently accessed items.  Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible.  If communal storage rooms are provided they should be accessible from common circulation areas of the building.  Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain.	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input checked="" type="checkbox"/>	Storage cages are provided within the basement car park and storage areas provided within each apartment.  Alternative storage areas are provided within each unit in the form of dedicated separate storage cupboards with the apartments.  There is a communal bike storage area located under Building A3. This is seen to be additional to storage requirements as required within the development. This is considered to be accessible via basement levels and secure for the purposes of storing bulkier goods where necessary.										
<b>Part 4H - Acoustic Privacy</b>														
<b>4H-1 Design Guidance</b> Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy). Window and door openings are generally orientated away from noise sources.  Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas.  Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	Suitable building separation is provided to allow private open space areas to be located away from each other. The matter of building separation has been addressed earlier in the report. The service areas are situated within the basement area.  This is achieved  This is achieved.										

The number of party walls (walls shared with other apartments) are limited and are appropriately insulated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This is achieved.
Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The entire building is situated over the basement car park. The communal open space and bedrooms are situated at least 3m away of a noise source such as a garage door, plant room, services room or mechanical equipment.
<b>4H-2 Design Guidance</b> Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: <ul style="list-style-type: none"> <li>rooms with similar noise requirements are grouped together.</li> <li>doors separate different use zones.</li> <li>wardrobes in bedrooms are co-located to act as sound buffers.</li> </ul> Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: <ul style="list-style-type: none"> <li>double or acoustic glazing.</li> <li>acoustic seals.</li> <li>use of materials with low noise penetration properties.</li> <li>continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposal has been designed so that like-use areas of the apartments are grouped to avoid acoustic disturbance of neighbouring apartments where possible.  Noisier areas such as kitchens and laundries are designed to locate away from bedrooms where possible.
<b>Part 4J - Noise and pollution</b>				
<b>4J-1 Design Guidance</b> To minimise impacts the following design solutions may be used: <ul style="list-style-type: none"> <li>physical separation between buildings and the noise or pollution source.</li> <li>residential uses are located perpendicular to the noise source and where possible buffered by other uses.</li> <li>non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces.</li> <li>non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources.</li> <li>buildings should respond to both solar access and noise. Where solar access is away from the noise source, non-habitable rooms can provide a buffer.</li> <li>where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4).</li> <li>landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry.</li> </ul> Achieving the design criteria in this Apartment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unit acoustic amenity is considered to be promoted through building separation to adjoining existing buildings, unit orientation and the grouping of like-use rooms in units together.  An amended Acoustic Report has been submitted with the application addressing Councils initial concerns.  The report concluded that the proposed development will satisfy all relevant Australian Standards subject to the adoption of the recommendations in the report.  The report was referred to Council's Environmental Health Officer are concurred with. Accordingly, appropriate conditions will be imposed to ensure no adverse noise impacts arise from the development.

Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas:				
<ul style="list-style-type: none"> <li>solar and daylight access.</li> <li>private open space and balconies.</li> <li>natural cross ventilation.</li> </ul>				
<b>4J-2 Design Guidance</b> Design solutions to mitigate noise include: <ul style="list-style-type: none"> <li>limiting the number and size of openings facing noise sources.</li> <li>providing seals to prevent noise transfer through gaps.</li> <li>using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens).</li> <li>using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The acoustic report provided acoustic criteria and recommended construction methods / materials / treatments to be used to meet the criteria for the site for both internal and external noise sources.  It is noted that the apartments facing the railway line are provided with winter gardens to reduce the acoustic impact upon these units.
<b>Part 4K - Apartment mix</b>				
<b>4K-1 Design Guidance</b> A variety of apartment types is provided. The apartment mix is appropriate, taking into consideration: <ul style="list-style-type: none"> <li>the distance to public transport, employment and education centres.</li> <li>the current market demands and projected future demographic trends.</li> <li>the demand for social and affordable housing.</li> <li>different cultural and socioeconomic groups.</li> </ul> Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An appropriate mix of apartment type from one to three bedroom units are to be provided within the development      The site is close to shopping and transport facilities provided by the Auburn Town Centre. This is seen to accommodate for a range of age groups and family make ups.
<b>4K-2 Design Guidance</b> Different apartment types are located to achieve successful facade composition and to optimise solar access (see figure 4K.3).  Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A variety of apartments are provided across all levels of the apartment buildings.  The development has the following bedroom mix:-  1 bedroom – 107 units 2 bedrooms – 425 units 3 bedrooms – 63 units  This is considered acceptable given the market requirements.
<b>4L - Ground floor apartments</b>				
<b>4L-1 Design Guidance</b> Direct street access should be provided to ground floor apartments.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The proposed development has presentation to both Queen and Marion Streets. It is noted that no individual ground floor access points have been provided. The development incorporates a multitude of entrances along both frontages which are

				considered appropriate in the design. These communal entrances encourage public access into the development whilst separating private spaces from the public areas.
Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development incorporates private open spaces for individual units within the front setback areas.
<ul style="list-style-type: none"> <li>both street, foyer and other common internal circulation entrances to ground floor apartments.</li> <li>private open space is next to the street doors and windows face the street.</li> </ul>				
Retail or home office spaces should be located along street frontages.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No home offices proposed. It is noted that unit configurations allow for home office if desired in the future.
Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to and ground floor amenities for easy conversion.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No SOHOs proposed. It is noted tha the configuration of units allow for conversion at a later date if required.
<b>4L-2 Design Guidance</b> Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include: <ul style="list-style-type: none"> <li>elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4).</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposal incorporates private courtyard levels at the ground floor of each building. These courtyards are suitably separated from communal or public spaces by landscape buffering.  Privacy and safety achieved through the methods mentioned  Solar access is maximised.
<ul style="list-style-type: none"> <li>landscaping and private courtyards.</li> <li>window sill heights that minimise sight lines into apartments.</li> <li>integrating balustrades, safety bars or screens with the exterior design.</li> </ul>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Solar access should be maximised through:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>high ceilings and tall windows.</li> <li>trees and shrubs that allow solar access in winter and shade in summer.</li> </ul>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
<b>4M - Facades</b>				
<b>4M-1 Design Guidance</b> Design solutions for front building facades may include: <ul style="list-style-type: none"> <li>a composition of varied building elements</li> <li>a defined base, middle and top of buildings.</li> <li>revealing and concealing certain elements.</li> <li>changes in texture, material, detail and colour to modify the prominence of elements.</li> </ul>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	The appearance of the buildings from both Queen Street and Marion Street is satisfactory. A distinct base is provided and certain elements such as the vertical blade walls, balconies, and architectural detailing are visible from the roadways.
Building services should be integrated within the overall façade.				
Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions				

<p>may include:</p> <ul style="list-style-type: none"> <li>• well composed horizontal and vertical elements</li> <li>• variation in floor heights to enhance the human scale</li> <li>• elements that are proportional and arranged in patterns</li> <li>• public artwork or treatments to exterior blank walls</li> <li>• grouping of floors or elements such as balconies and windows on taller buildings</li> </ul> <p>Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights.</p> <p>Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>4M-2 Design Guidance</b></p> <p>Building entries should be clearly defined.</p> <p>Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height.</p> <p>The apartment layout should be expressed externally through facade features such as party walls and floor slabs.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Adjacent sites are of different zonings to achieve a similar type of a development. Suitable separation is proposed that if surrounding developments were to be redeveloped in a similar fashion, a uniform streetscape would be maintained.</p> <p>The main pedestrian entrances are identifiable from Queen Street and Marion Street.</p>
<b>4N - Roof design</b>				
<p><b>4N-1 Design Guidance</b></p> <p>Roof design relates to the street. Design solutions may include:-</p> <ul style="list-style-type: none"> <li>• special roof features and strong corners.</li> <li>• use of skillion or very low pitch hipped roofs.</li> <li>• breaking down the massing of the roof by using smaller elements to avoid bulk.</li> <li>• using materials or a pitched form complementary to adjacent buildings.</li> </ul> <p>Roof treatments should be integrated with the building design. Design solutions may include:-</p> <ul style="list-style-type: none"> <li>• roof design proportionate to the overall building size, scale and form.</li> <li>• roof materials compliment the building.</li> <li>• service elements are integrated.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The use of the blade walls, soffit detailing and punctuation of front façade adds visual interest to the building and the parapet assists in creating a skyline.</p> <p>The proposed buildings are to have flat roofs which will not have any impact upon its overall appearance. The lift overruns are suitably setback to ensure it is not visible from street elevations.</p> <p>Additional roof top communal open space has been provided and will incorporate suitable landscaping.</p>
<p><b>4N-2 Design Guidance</b></p> <p>Habitable roof space should be provided with good levels of amenity. Design solutions may include:</p> <ul style="list-style-type: none"> <li>• penthouse apartments.</li> <li>• dormer or clerestory windows.</li> <li>• openable skylights.</li> </ul> <p>Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The proposal incorporates 3 areas of landscaped communal open space on rooftop terraces.</p>
<p><b>4N-3 Design Guidance</b></p> <p>Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access).</p> <p>Well located, screened outdoor areas should be</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>All residential units are designed with minimum of 2m deep usable balconies (minimum) which can be used as clothes drying area for individual units.</p>

[illegible]



<p>range of plants.</p> <ul style="list-style-type: none"> <li>plant longevity.</li> </ul> <p>A landscape maintenance plan is prepared.</p> <p>Irrigation and drainage systems respond to:</p> <ul style="list-style-type: none"> <li>changing site conditions.</li> <li>soil profile and the planting regime.</li> <li>whether rainwater, stormwater or recycled grey water is used.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The landscape plan shows appropriate maintenance.
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>4P-3 Design Guidance</b></p> <p>Building design incorporates opportunities for planting on structures. Design solutions may include:</p> <ul style="list-style-type: none"> <li>green walls with specialised lighting for indoor green walls.</li> <li>wall design that incorporates planting.</li> <li>green roofs, particularly where roofs are visible from the public domain.</li> <li>planter boxes.</li> </ul> <p>Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time.</p>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Appropriate design outcome is provided on the landscape plan for the proposed landscaped areas throughout the development, including the rooftop terraces.
<b>4Q - Universal design</b>				
<p><b>4Q-1 Design Guidance</b></p> <p>Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>There are 595 units in the development. Of that figure, at least 60 or 11% are to be designated as "adaptable units".</p> <p>However, all the apartments are capable of being redesigned to meet the requirements of universal design apartments.</p>
<p><b>4Q-2 Design Guidance</b></p> <p>Adaptable housing should be provided in accordance with the relevant council policy.</p> <p>Design solutions for adaptable apartments include:-</p> <ul style="list-style-type: none"> <li>convenient access to communal and public areas.</li> <li>high level of solar access.</li> <li>minimal structural change and residential amenity loss when adapted.</li> <li>larger car parking spaces for accessibility.</li> <li>parking titled separately from apartments or shared car parking arrangements.</li> </ul>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The site is considered to be appropriately barrier free with wheelchair access possible from the street and lift access from the basement and to the upper residential floors of the development.</p> <p>Vehicular and pedestrian entries are well separated but convenient.</p>
<p><b>4Q-3 Design Guidance</b></p> <p>Apartment design incorporates flexible design solutions which may include:-</p> <ul style="list-style-type: none"> <li>rooms with multiple functions.</li> <li>dual master bedroom apartments with separate bathrooms.</li> <li>larger apartments with various living space options</li> <li>open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom.</li> </ul>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The development offers a variety of unit types within proximity to a town centre location.</p> <p>The proposed development is considered to be consistent with the requirement as layouts are suitably sized to permit a satisfactory furniture layout to occur.</p>
<b>4R - Adaptive reuse</b>				
<p><b>4R-1 Design Guidance</b></p> <p>Design solutions may include:</p> <ul style="list-style-type: none"> <li>new elements to align with the existing</li> </ul>				Part 4R will not apply to the development because an adaptive reuse of a building is

[illegible]

35

Well located, screened outdoor areas should be provided for clothes drying.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4U-2 Design Guidance</b> A number of the following design solutions are used: <ul style="list-style-type: none"> <li>the use of smart glass or other technologies on north and west elevations.</li> <li>thermal mass in the floors and walls of north facing rooms is maximised.</li> <li>polished concrete floors, tiles or timber rather than carpet.</li> <li>insulated roofs, walls and floors and seals on window and door openings.</li> <li>overhangs and shading devices such as awnings, blinds and screens.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The BASIX Certificate for the building show that the development as a whole achieves the pass mark for energy efficiency.
Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4U-2 Design Guidance</b> A number of the following design solutions are used: <ul style="list-style-type: none"> <li>rooms with similar usage are grouped together.</li> <li>natural cross ventilation for apartments is optimised.</li> <li>natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible.</li> </ul>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	The proposal has been designed so that like-use areas of the apartments are grouped together where possible.  The buildings and apartment layouts are designed to maximise natural ventilation through the use of open-plan living areas and generous openings to living areas and bedrooms.  The living rooms are adjacent to the balconies and generally promote natural ventilation.
<b>4V - Water management and conservation</b>				
<b>4V-1 Design Guidance</b> Water efficient fittings, appliances and wastewater reuse should be incorporated.  Apartments should be individually metered.  Rainwater should be collected, stored and reused on site.  Drought tolerant, low water use plants should be used within landscaped areas.	<input checked="" type="checkbox"/>  <input type="checkbox"/> <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input checked="" type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/>	The BASIX Certificate addresses water efficient fittings and appliances.    The planting for the site is considered as being satisfactory.
<b>4V-2 Design Guidance</b> Water sensitive urban design systems are designed by a suitably qualified professional.  A number of the following design solutions are used: <ul style="list-style-type: none"> <li>runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation.</li> <li>porous and open paving materials is maximised.</li> <li>on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits.</li> </ul>	<input checked="" type="checkbox"/>  <input type="checkbox"/>  <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	The BASIX Certificate for the building show that the development as a whole achieves the pass mark for water conservation.
<b>4V-3 Design Guidance</b> Detention tanks should be located under paved areas, driveways or in basement car parks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An onsite detention tank is provided within the basement car park to address excess

On large sites parks or open spaces are designed to provide temporary on site detention basins.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	stormwater and control stormwater runoff.
<b>4W - Waste management</b>				
<b>4W-1 Design Guidance</b>				
Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A separate waste storage facility is located within the basement level. It is noted that several waste refuse areas have been designated so as to allow residents to place their garbage in areas accessible to their respective buildings. A waste manager will then facilitate collection at one point to be able to be collected.
Waste and recycling storage areas should be well ventilated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A medium rigid vehicle is capable of accessing the garbage store within the development. This will prevent garbage removal from the street.
Circulation design allows bins to be easily manoeuvred between storage and collection points.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temporary storage should be provided for large bulk items such as mattresses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A waste management plan should be prepared.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An amended Waste Management Plan has been prepared and is considered satisfactory.
<b>4W-2 Design Guidance</b>				
All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days worth of waste and recycling.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Each unit has suitable room to accommodate waste/recycling for this period of time.
Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A separate waste storage facility is located within the basement level. It is noted that several waste refuse areas have been designated so as to allow residents to place their garbage in areas accessible to their respective buildings. A waste manager will then facilitate collection at one point to be able to be collected.
For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Alternative waste disposal methods such as composting should be provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4X - Building Maintenance</b>				
<b>4X-1 Design Guidance</b>				
A number of the following design solutions are used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There are roof overhangs to provide weather protection.
• roof overhangs to protect walls.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• hoods over windows and doors to protect openings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• detailing horizontal edges with drip lines to avoid staining of surfaces.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• methods to eliminate or reduce planter box leaching.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• appropriate design and material selection for hostile locations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4X-2 Design Guidance</b>				
Window design enables cleaning from the inside of the building.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Main habitable windows are capable of being cleaned by residents.
Building maintenance systems should be incorporated and integrated into the design of	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

the building form, roof and façade.				
Design solutions do not require external scaffolding for maintenance access.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Centralised maintenance, services and storage should be provided for communal open space areas within the building.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4X-3 Design Guidance</b> A number of the following design solutions are used:- <ul style="list-style-type: none"> <li>• sensors to control artificial lighting in common circulation and spaces.</li> <li>• natural materials that weather well and improve with time such as face brickwork.</li> <li>• easily cleaned surfaces that are graffiti resistant.</li> <li>• robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors.</li> </ul>	<input checked="" type="checkbox"/>    <input checked="" type="checkbox"/>    <input checked="" type="checkbox"/>    <input checked="" type="checkbox"/>    	<input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    	<input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    	The materials to be used are determined as being satisfactory.  Conditions of consent could be imposed in relation to use of high-quality materials and general maintenance of the site.