DESIGN QUALITY PRINCIPLE 01: CONTEXT

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area.

Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design polices. New buildings will thereby contribute to the quality and identity of the area.

objective/control	evaluation	compliance
Local Context Analysis • Undertake a local context analysis.	The site is located on the Parramatta river between Parramatta's CBD and the University of Western Sydney (Parramatta Campus) to the east; an area characterised by residential scale housing and commercial buildings ranging in small industrial to commercial towers in the Parramatta CBD. Street blocks addressing the development site exhibit a relatively incoherent pattern of built form characterised by a mixed range of buildings from houses of limited historic value, or mid to late modern and contemporary styles of various scales. Broughton Street exhibits an eclectic mix of building types and uses from commercial to residential. The design for the 4 low to medium rise buildings and communal outdoor spaces has been developed within the context of residential buildings to the north and the river foreshore to the south as well as expansive views towards Sydney's and Parramatta's CBD skylines. The elements of the development have been carefully configured in order to optimise the possibilities of the site for the development's occupants. Amenities have been maximised which include shared communal indoor and outdoor spaces, for the enjoyment of its residents. These objectives have been achieved while carefully separating public and private spaces between the river front, the streets and the proposed development. Refer to the Architectural DA report	**YES**
Residential Flat Building Types • Utilise an appropriate flat building type for the local context.	The flat building type proposed is appropriate for the local context and meets the requirements of the Parramatta DCP. There are no existing apartment buildings in the immediate vicinity of the site from which to draw contextual fit. The proposed architecture will be of a high quality and create a benchmark for the Parramatta area. The development has also been influenced by its riverside context and the need for an above ground park due to the flooding of the river, the site's high water table and contaminated land.	**YES**

DESIGN QUALITY PRINCIPLE 02: SCALE

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings.

Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

objective/control	evaluation	compliance
Building Height		
• Ensure development responds to the desired future character of the street and local area.	The proposed building roofs are within Parramatta Council's maximum permissible 40 metre height limit. Building heights on Broughton Street respond to the local context and will inform the desired future character of the street. The heights also comply with the Parramatta DCP's Morton St future character objectives.	**YES**
• Provide reasonable daylight access to surrounding developments and the public domain.	As above. Refer also to accompanying Shadow Diagrams for daylight access. There will be no overshadowing to existing developments.	**YES**
Building Depth		
• Bulk of the development is in scale with the existing or desired future context.	The bulk of the development has been carefully considered and minimised, in order to create an approximate scale with the streetscape, public domain and future developments. Site constraints have determined that the buildings forms are compressed into the northern end of the site away from the flood plane. Buildings have been setback from the side boundaries by 3-4 metres. The upper levels of the buildings are set back by 2-4 metres from the adjoining boundaries to provide an appropriate scale to the houses on Broughton Street, the internal road and to the park to the east. The buildings have been further articulated with full height recessed slots to main entries and lift lobbies which also reduce their length and bulk. Recessed balconies provide undulation to the facades which are comprised of lightweight panels and brickwork The facades have been unitised using lightweight and brick panels as well as recessed windows. These elements provide the buildings with a human scale achieved with fine architectural detailing.	**YES**
• An apartment building depth of 10-18 metres is appropriate to satisfy daylight and natural ventilation requirements.	Typical depth of Building A1 is 13.7 metres and 17.7 metres. Typical building depth of Building A2 is 12.8 metres and 18 metres. Typical building depth of Building A3 is 13.4 metres and 18 metres. Apartments located on the corners and recessed entry /lobby slots achieve natural ventilation.	**YES**

DESIGN QUALITY PRINCIPLE 03: BUILT FORM

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type 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.

objective/control	evaluation	compliance
Site Analysis • Undertake a site analysis for the development.	Refer to accompanying Site Analysis Plan. The proposed development responds to the conditions identified in the Site Analysis Plan. The key issue include: • Location on the Parramatta River and interface between private and public domain. • Flooding of the river and its impact on the location of buildings. All habitable spaces are built above the 1 in 100 year flood line RL.6.5. • The existing wetland and the proximity to buildings. Buildings must be built 10 metres clear of the wetland. • High water table requires the car park to be built above ground. • There is a high incidence of asbestos contamination on the site due to previous uses. • There is evidence of acid sulphate contamination which limits the depth of excavation on site.	**YES**
Building Separation • Provide visual and acoustic privacy & to control overshadowing of adjacent properties, provide the following building separation distances- **For up to 4 storeys/12 metres:** • 12 metres between habitable rooms/balconies • 9 metres between habitable/balconies and non-habitable rooms • 6 metres between non-habitable rooms **For up to 25 metres building height/5-8 storeys:** • 18 metres between habitable rooms/ balconies • 13 metres between habitable rooms/ balconies & non-habitable rooms • 9 metres between non-habitable rooms **For nine storeys and above/ over 25 metres:** • 24 metres between habitable rooms/balconies • 18 metres between habitable rooms/balconies & non-habitable rooms • 12 metres between non-habitable rooms	Separation between buildings A1 & A2, 4 and 3 storeys high at podium respectively: • 43 metres between habitable rooms between A1 & A3. Separation between buildings A1 & A3, building A1 being 4 storeys high above podium: • 9 metres between habitable rooms and non-habitable rooms between A1 & A2. On levels 1-3 in the recess setback between these buildings privacy will be achieved with planting and a tree. Separation between buildings A2 & A3, with A2 being 3 storeys high at podium level: • 12.7 metres between habitable rooms (12 metre minimum) A2 is 3 storeys above podium which is the height at which separation is critical.	**YES (qualified)** **YES (qualified)**
Street Setbacks • Identify the desired streetscape character, the common setback of buildings in the street, the height of buildings and daylight access controls. • Relate setbacks to the area's street hierarchy.	Buildings A1 & A2 are setback by 3 metres from the adjoining boundaries. Building A3 is setback 4 metres from the western boundary. The building type, its location and height have been determining factors in creating a scale and streetscape character which is appropriate to its context. The top levels of buildings A1 and A2 have glazing set back by 2-4 metres to reduce visible bulk above the streetscape. Setbacks are in accordance with Parramatta Council's DCP.	**YES** **YES**
Side and Rear Setbacks • Relate side setbacks to existing streetscape patterns. • Test side and rear setbacks with building separation, open space, overshadowing and private open space.	Side and rear setbacks are outlined in Parramatta Council's Morton Street DCP and are maintained. As above. Refer also to accompanying Shadow Diagrams for daylight access.	**YES** **YES**
Building Entry • To create building entrances which provide a desirable residential identity for the development and to orient the visitor. • To contribute positively to the streetscape and building façade design.	Residential access paths provide direct access to the building from Broughton Street and the future internal street. Entry doors are located where tall ventilation slots occur, so the scale of this space is vertical and dramatic. Entry lobbies will be bright, airy, large, and generally attractive spaces. The building entries will be easily recognisable from the street with signage and awnings.	**YES** **YES**
Awnings & Signage		
• To provide shelter for public streets.	Awnings are provided at lobby entries with letter boxes which allow residents to take shelter from weather.	**YES**
ensure signage is in keeping with desired streetscape character and with the development in scale, detail and overall design.	Building signage will be subtle in keeping with the streetscape. They will be low height masonry walls with discrete laser cut letters.	**YES**

Facades		
• To promote high architectural quality in residential flat buildings and to ensure that new developments have facades which define and enhance the public domain and desired streetscape character.	The facades for buildings A1 & A3, are composed of vertical screens which neatly integrate windows and recessed balconies. Cantilevering balconies extend past the screens at the north and southern ends as well as being located in the middle, in order to modulate and reduce the length of the vertical screen façades. The screens have been modulated with vertical panels, balustrades, and casement windows to reduce them down to human scale. When casement windows are opened, they will animate the facades and create dynamic variation to the screen. Carefully placed 50mm wide vertical joints have also been included to reduce the width of Compressed Fibrous Cement (CFC) panels and provide additional modulation and scale reduction. The bulk and scale of the buildings is further reduced visually by splaying their southern ends in plan, while creating recessed entry lobbies at the junctions. The splaying divides the façade into 2 screens while the recesses and balconies create interest and modulation which bookend the screens. The existing masonry architecture of the streetscape will be complemented by the facades of building A2. This building's facade has been conceived as an art based masonry screen, clad with warm light grey coloured brickwork, coloured balustrades and exposed floor slabs. The brick facade, balconies, setback glazing and openings are of variable width and size, creating visual interest and a layered effect. The unitised façade allows for interesting variation while providing elements which relate to the scale of the streetscape.	**YES**
• To ensure that building elements are integrated into the overall building form and façade design.	Building elements, such as balconies, drainage and other building services and the carpark entry are considered and integrated into the overall building form. Downpipes will be concealed in risers located internally and will not be visible.	**YES**
Roof Design • Provide quality roof designs and integrate the design of the roof into the overall façade, building composition and desired contextual response.	The proposal includes a low profile roof design, responding to the need for a building that keeps its height and bulk to a minimum. The building's top level will be a finely detailed object on top of a heavy base; the roof then forms the top edge of this composition. It's roof design allows natural light to the uppermost apartments. Clerestory windows allowing direct solar access, ventilation and distant/sky views are an integral part of the roof design.	**YES**

DESIGN QUALITY PRINCIPLE 04: DENSITY

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents).

Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

objective/control	evaluation	compliance
Floor Space Ratio • To provide opportunities for modulation and depth of external walls within the allowable FSR.	The building facades have been modulated with full height recess ventilation slots which occur at lift lobbies. The facades are further modulated with recessed balconies and windows of varying depths.	**YES**
• To ensure that development is in keeping with the optimum capacity of the site and the local area.	The development meets Parramatta Council's FSR 1.75 : 1 control for the site. The proposed density meets the optimum capacity for the site when considered in combination with flood constraints, height controls, desired scale and built form and amenity to the apartments.	**YES**
• To allow generous habitable balconies.	Generous habitable balconies have been provided to all apartments, which are located for maximum amenity. All apartments have a balcony or terrace which is at least 2 metres deep.	**YES**

DESIGN QUALITY PRINCIPLE 05: RESOURCE, ENERGY & WATER EFFICIENCY

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction.

Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

objective/control	evaluation	compliance
Energy Efficiency		
• To reduce the necessity for mechanical heating and cooling.	Refer to accompanying BASIX Certificate. Passive solar design techniques have been utilised to optimise heat storage in winter and heat transfer in summer by: • Maximising solar mass internally, e.g. tile floors over concrete slab. • Maximising solar access with appropriate building orientation and roof design • 60% of apartments utilise natural cross-ventilation. • Insulation to building elements to meet or exceed BASIX requirements.	**YES**
• To reduce reliance on fossil fuels and to minimize greenhouse gas emissions.	Reduction in reliance on fossil fuels and use of greenhouse gases is encouraged via: • Site's location in close proximity to public transport and cycle path. • Use of energy efficient lighting on motion detector operation. • Installing high efficiency appliances. • Above ground car park minimises excavation and transportation of contaminated fill.	**YES**
• To promote and support renewable energy initiatives.	None proposed.	**NO**
Water Conservation		
• To reduce mains consumption of potable water.	Refer to accompanying BASIX Certificate. Water efficient fixtures and fittings will be incorporated into the development. Native plants and grasses have been maximised to the podium and landscaped open space to minimise water requirements.	**YES**
Material Selection		
• To select appropriate & sustainable materials.	It is proposed to use bricks for about 30% of the external structural walls of the building. Brick is an inherently sustainable material which ultimately helps to create energy efficient buildings. Exposed brick is extremely low-maintenance and has no need of re-painting or re-rendering. Brick has excellent longevity, is extremely durable to weather conditions, and resistant to impact. It is considered that this is a positive action towards sustainability. Compressed Fibrous cement cladding has also been proposed which will be designed with minimal waste due to the use of standard panel widths to minimise cutting.	**YES**

DESIGN QUALITY PRINCIPLE 06: LANDSCAPE

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.

Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character.

Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

objective/control	evaluation	compliance
Deep Soil Zones		
• A minimum of 25% of the open space shall be deep soil zones. Exemptions may be made in urban areas where sites are built out and there is no capacity for water infiltration.	The vast majority of the site will exceed 25% deep soil achieving 50%. .	**YES**
Fences & Walls		
• Fences & walls should be designed to define the boundaries between the development, provide privacy & security and contribute positively to the public domain.	1.5 metre high timber and palisade fences with verges have been provided to the perimeter of the site and to the podium terraces. Refer to Landscape Report for detail.	**YES**

Landscape Design • A landscape design should: • Improve the amenity of the open space, • Contribute to the streetscape character, • Improve the energy efficiency and solar efficiency of dwellings, and • Minimise maintenance.	The landscape design for the site will be a vast improvement to the amenity of the open space by maintaining and extending the existing wetland to the south of the site. This space will be designed as a visual extension of the public domain next to the river foreshore. The streetscape will also be improved with extensive street planting on Broughton Street and the internal road as well as carefully considered fencing and planting between the footpath and boundary. Trees have been located to shade buildings as well as filter cold winds from the south in Winter and capture cooling breezes from east and north-east in Summer. Hearty native planting has been maximised in communal landscaped areas to minimise water usage and maintenance. Refer to Landscape Architecture Development Application Report for detail.	**YES**
Planting on Structures • To contribute to the quality and amenity of communal open space on roof tops, podiums etc by designing for optimum conditions for plant growth.	A large communal outdoor space has been provided at podium level which has been heavily landscaped. This podium has been configured with a transition between private and public space by use of carefully design fences and landscaped verges to access corridors. Communal spaces have been differentiated from large to more intimate spaces. Raised lawn sections have been provided to improve views of the river. An organic mounded area with a tree will become playful areas for children to play. The lawn depth will be 300mm deep while tree zones will be 1 metre deep. Refer to Landscape Architecture Development Application Report for detail.	**YES**
Stormwater Management • To minimize the impact of residential flat development on the health and amenity of natural waterways.	The stormwater management for this site requires a very complex and sensitive solution given the site's location on the Parramatta river and its flooding issues. The site is part of a greater network of stormwater management which extends to the surrounding suburbs and is part of a larger catchment. Refer to the Flood Modeling and Impact Assessment & Flood Evacuation and Management Measures report. Site specific measures include onsite detention and water collection from clean roofs for irrigation of apartment gardens. There will be no irrigation for the site once the proposed native plants have been established. Innovative storm water design has been integrated with street design. Elements such as first flush road and pavement water is captured and directed to a series of bioswales or rain gardens which run along New Zealand Street and the Internal Street. This water is filtered before entering the Parramatta river. Clean roof water is collected in rain water tanks located in the car park where it is stored for irrigating courtyard gardens.	**YES**
• To minimise the discharge of sediment and other pollutants to the urban stormwater drainage system during construction.	Stormwater and sediment control is a key issue on this site and will be sensitively managed during construction. Refer to Sediment Control Plan.	**YES**

DESIGN QUALITY PRINCIPLE 07: AMENITY Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.		
objective/control	evaluation	compliance
Open Space • The area of communal open space should be between 25 & 35% of the site area. Where developments are unable to achieve the recommended requirement, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or a contribution to public open space.	Including the podium outdoor space and the open spaces to the south at ground level, communal area amounts to 60% of the site area.	**YES**
• The minimum recommended area of private open space for apartments at ground or podium level is 25m^2, with a minimum dimension of 4m in one direction.	Generally private open space areas have a depth greater than 3.5m, with some up to 8.2m deep. Floor areas of private open space range from 15 square metres to 107 square metres.	**YES (Qualified)**
Orientation • To optimize solar access to residential apartments within the development and adjacent development.	23% of apartments have a primary northern orientation. Building orientation and height has been nominated to achieve optimum solar access to living rooms, and to largely avoid buildings overshadowing each other. The tallest building has been kept to the south-west of the site, which minimises shadow on buildings on the neighbouring site. Roof design makes the most of solar access to apartments at tops of buildings.	**YES**
Daylight Access • Living rooms and private open spaces for at least 70% of apartments should receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter. In dense urban areas, a minimum of 2 hours may be permissible.	70% of living rooms will receive a minimum of 3 Hours of direct sunlight during the designated time. (Refer to the Architectural DA report.)	**YES**
• Limit the number of single aspect apartments with a southerly aspect to a maximum of 10% of the total number of proposed apartments.	9% of apartments have a single aspect towards the south. A portion of these have generous clerestory windows in their roof to allow glancing views to the north.	**YES**
Natural Ventilation • Building depths which support natural ventilation typically range from 10-18 metres.	The maximum building depth is 18.5 metres, whilst the maximum depth of a cross-ventilated apartment is 13.7m. Generally, cross-ventilated apartments are 8 metres deep. Generous ventilation slots are incorporated into each building to allow apartments towards the centre of the floor plate to enjoy cross-ventilation.	**YES**
• 60% of apartments should be naturally ventilated.	60% of apartments achieve cross-ventilation. A portion of apartments also enjoy optimised ventilation through the clerestory windows in the roof.	**YES**
• 25% of kitchens within a development should have access to natural ventilation.	100% of kitchens are located within a naturally ventilated open plan arrangement.	**YES**

Visual Privacy • To provide reasonable levels of visual privacy externally and internally, during the day and night.	Privacy between apartments is achieved through the design of carefully consider facades and the location and separation of balconies. Recessed balconies provide effective acoustic and visual separation between apartments. Enclosed on 3 sides they also have good privacy from the public domain. Balconies at the southern ends of A2 & A3 are located away from the recessed balconies and have excellent privacy while enjoying views of the river. Apartments at ground level are separated from the footpath with fencing and planters.	**YES**
• To maximize outlook and views from principal rooms and private open space without compromising privacy.	A majority of living spaces and bedrooms are located with windows towards the expansive views of the river foreshore, Parramatta and Sydney CBD. Building separation is optimum and buildings have been planned in order to maximise views.	**YES**
Acoustic Privacy • To ensure a high level of amenity by protecting the privacy of residents.	Acoustic report is provided with the DA submission. Party Walls between apartments will be designed to provide excellent acoustic privacy. Recessed balconies fronting living spaces have been located between bedrooms where possible. This will provided a buffer and additional acoustic separation between apartments.	**YES**
Apartment Layout • Apartments shall be of a minimum size to achieve good amenity: • 1 bedroom apartment, 50m^2 • 2 bedroom apartment 70m^2 • 3 bedroom apartment 95m^2	Apartments are sized as follows: • 1-bedroom apartments are 46 to 61 square metres (48% are greater than 50m2) • 2-bedroom apartments are 66 to 88 square metres (54% are greater than 70m2) • 3-bedroom apartments are typically 103 square metres, with the smallest being 85 m2. Only 1 is less than 95m2 • The apartment type areas have been sized in accordance with what the market pressures. Refer to Market analysis report.	**YES (qualified)**
• Apartments shall have the following minimum external area to achieve good amenity: • 1 bedroom apartment, 8m^2 (cross through) • 2 bedroom apartment, 11m^2 (corner) • 3 bedroom apartment, 24m^2	External areas are sized as follows: • 1 bedroom apartments 8 – 10 sqm (100% achieving 8-10+ m2) • 2 bedroom apartments single aspect 8 -10 sqm (80% achieving 8-10+ m2; 100% achieving 7-10+ m2) • 2 bedroom apartments corner aspect 10 - 11 sqm (85% achieving 10-11+ m2; 100% achieving 7-11+ m2) • 3 bedroom apartments; (7 out of 277 apartments or 3%); Section 96 changes have resulted in either the same balcony / terrace areas or an increase; 72% achieving 24+ m2, as per the approved DA	**YES (qualified)**
• Single aspect apartments should be limited in depth to 8m from a window.	Typically single aspect apartments are limited to 8.0 metres from a window. There is one case where an apartment is 9.5 metres from a window.	**YES**
• The back of a kitchen should be no more than 8m from a window.	The backs of kitchens are typically 5.8 - 7 metres from a window, in one case this distance is increased to 9.5 metres.	**YES (qualified)**
Balconies • Provide all apartments with private open space.	Balconies have been provided to all apartments.	**YES**
• Provide primary balconies to all apartments with minimum depth of 2m.	Primary balconies have a minimum depth of 2m.	**YES**
• Consider balconies' contribution to safety and liveliness of the street.	Balconies fronting both Broughton Street & the future internal street contribute to the safety & liveliness of both streets.	**YES**
Ceiling Heights • Ceiling heights shall be as follows: • Habitable rooms to be a minimum 2.7m ceiling height. • Non-habitable rooms to be a minimum 2.4m ceiling height.	Habitable rooms have a minimum ceiling height of 2.7m and non-habitable rooms have a minimum ceiling height of 2.4m	**YES**
• Ground floor retail to be a minimum 3.3m ceiling height.	There is no retail in this application.	**N/A**
Flexibility • Encourage housing designs which meet the broadest range of occupants' needs possible.	Apartment layouts are provided with an open plan layout to promote flexibility for occupants. Study areas are incorporated in many apartments which will appeal to university students.	**YES**
• Encourage adaptive re-use and 'long life loose fit' buildings.	A flexible structural system will be explored enabling side by side apartments to be united at a later time to create larger apartments, as required.	**YES**
Storage • Provide adequate storage for everyday household items within easy access of the apartment (in addition to kitchen cupboards and bedroom wardrobes): • Studio apartments 6m^3 • 1 bedroom apartments 6m^3 • 2 bedroom apartments 8m^3 • 3 bedroom apartments 10m^3	Storage is provided to all apartments in accordance with and generally in excess of the minimum volumes: • 1 bedroom apartments on average have 3m^3 in the apartment, with an additional 3m^3 on the car park levels • 2 bedroom apartments on average have 4m^3 in the apartment, with an additional 4m^3 on the car park levels • 3 bedroom apartments on average have 5m^3 in the apartment, with an additional 5m^3 on the car park levels. Additional storage is provided for each apartment on the car park levels where required. Adaptable apartments will have increased storage on the car park levels due to internal circulation requirements.	**YES (qualified)**
Internal Circulation • Create safe and pleasant spaces for the circulation of people and their personal possessions. Encourage interaction between residents and improve perception of safety.	A generous lobby is provided on each residential floor. Lobbies are provided with natural ventilation, are dual aspect, and have furnished 'waiting areas'.	**YES**

• Facilitate quality apartment layouts, such as dual aspect apartments.	A large portion of apartments have a corner/dual aspect.	**YES**
• The number of units accessible from a double-loaded corridor should be limited to eight.	Each building has 2 corridors which are linked with a generous light filled lobby. Each corridor services either 6 or 5 apartments. One lift is provided on each residential floor of Buildings A1 and A2, providing access to 11-13 apartments at lower levels, and 3-6 apartments at lower levels. Two lifts are provided to Building A3 to serve 14 apartments per floor typically, and 11 apartments at lower levels.	**YES (qualified)**
Pedestrian Access		
• Identify the access requirements from the street or car parking area to the apartment entrance.	Access to the main Ground Floor lobbies is provided in compliance with AS 1428. Direct access from the car parking area is provided into via generous glazed lobbies	**YES**
• Provide barrier free access to at least 20 percent of dwellings in the development.	100% of apartments are accessible & visitable via lift access. 10% of apartments are adaptable.	**YES**
Parking & Vehicle Access		
• To minimise car dependency and to promote alternative means of transport – public transport, cycling & walking.	It is considered that the site is ideally located for proximity to public transport, and within walking and cycling distance to bus stops, ferry stops, and other suburbs for work and services, therefore in combination with the size of the site and apartment mix, a minimum of car parking has been provided to minimise car dependency.	**YES**
• To provide adequate car parking for the building's users and visitors, depending on building type and proximity to public transport.	As above. 404 car parking spaces have been provided, which complies with Parramatta Council's DCP.	**YES**
• To integrate the location and design of car parking with the design of the site and the building.	The proposal to provide 4 storeys of above ground carparking is a response to the unique constraints of the site. However, those constraints also provide opportunities to improve the urban design outcomes. Carparking is integrated into the residential buildings by wrapping the carpark with an outer layer of apartments which face the streets and public domain. Hence the carpark is not visible from the public domain and the buildings appear in no way different to a residential flat building with a conventional basement carpark. The apparent height of the carpark is meaningfully visible to the public domain in only 1 location, the carpark entry at Broughton Street. As it is not desirable to position apartments above a carpark entry due to air quality, noise and vibration impacts, the carpark face is not wrapped by apartments in this area. To ameliorate the visual impact on the existing streetscape, the carpark entry and 2 above ground carpark levels in this location are recessed from the main building frontage by 7m. In addition, a tree in the middle of the driveway and a deep planter is provided on level 2 over the carpark entry. This planter will support landscaping which will screen and soften the building façade in this location.	**YES**
• Generally limit the width of driveways to 6m.	The proposed driveway is 6m wide.	**YES**
• Locate vehicle entries away from main pedestrian entries and on secondary frontages.	The carpark entry is provided level with the street away from the main pedestrian and courtyard entries.	**YES**
Maintenance		
• Ensure long life and ease of maintenance for the development.	To ensure long life and ease of maintenance for the development, the following points have been considered: • The majority of windows can typically be cleaned from the inside. • Preference for low-tech manual systems over high-tech mechanical/electrical system, such as blinds, shutters etc.	**YES**
Waste Management		
• To avoid the generation of waste through design, material selection and building practices.	Brick can be re-used or recycled if a building's life comes to an end. Face-brick also eliminates use of extra materials producing waste such as cement render and paint. Compressed fibrous cement panel widths and heights will be sized to minimise waste from off cuts.	**YES**
• To encourage waste minimization, including source separation, reuse and recycling.	Source separation will be provided in each apartment, in each garbage room and at the waste point in the carpark.	**YES**
• To ensure efficient storage and collection of waste and quality design of facilities.	The waste points are kept on car parking levels and concealed within the carpark, negating any impact on the street, pedestrians, and street parking. Waste bins will be collected on site with garbage truck access provided. The waste rooms will be managed by a superintendent for the building, including the placement and removal of waste receptacles in the laneway for collection.	**YES**
• Supply waste management plans with Development Application.	Refer to the Waste Management Report.	**YES**

DESIGN QUALITY PRINCIPLE 08: SAFETY & SECURITY

Good design provides amenity through the physical, spatial and environmental quality of a development.

This is achieved by maximising overlooking of public and communal spaces whilst maintaining internal privacy, avoiding dark and non visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private open space.

objective/control	evaluation	compliance
Safety		
• To ensure residential developments are safe and secure for residents and visitors.	A secure residential access with intercom to all buildings will be provided directly from the streets or via access walkways, with good lighting and visibility.	**YES**
• To contribute to the safety of the public domain.	The development represents an improved situation with regard to surveillance of the public domain, by locating large areas of glazing and balconies overlooking Broughton Street.	**YES**

• Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings.	A crime risk assessment has been carried out by JBA and is discussed in the SEE.	**YES**

DESIGN QUALITY PRINCIPLE 09: SOCIAL DIMENSIONS & HOUSING AFFORDABILITY

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities.

New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

objective/control	evaluation	compliance
Apartment Layout • To meet one factor which contributes to housing affordability, apartment sizes should be a minimum of: • 1 bedroom apartment 50m^2 • 2 bedroom apartment 70m^2 • 3 bedroom apartment 95m^2	Apartments are sized as follows: - 1-bedroom apartments on average are 50 square metres ranging between 46 and 59 m2 which have a study. 48% of 1 bed apartments are above 50m2. - 2-bedroom apartments on average are 70 square metres. 54% 2 bed apartments are above 70m2. - 3-bedroom apartments are a minimum of 85 up to 110 metres square metres. 87% of 2 bed apartments are above 95m2. Saville's Market research analysis report indicates that the buyers in the Parramatta area are interested in smaller sized apartments. The research also showed that there is a demand for 1 bed apartments with studies as well as more small affordable 2 bed room apartments.	**YES (qualified)**
Apartment Mix • Provide a diversity of apartment types and maintain equitable access to new housing by varying cultural and socio-economic groups.	The apartment mix has been provided with consideration for the location of the development. With close proximity to Parramatta and in reviewing current and projected future demand for the area, the following mix is provided: 1-bedroom apartments: 7.2% 1-bedroom apartments with study: 14.4% 2-bedroom apartments with one bathroom: 5.7% 2-bedroom apartments with two bathrooms, 69.8% 3-bedroom apartments: 3% There is flexibility in the planning and construction of apartments to increase the amount of 3 bedroom apartments with ground floor terraces. This is achieved by removing lightweight walls and combining adjoining 1 & 2 bed room apartments.	**YES**

DESIGN QUALITY PRINCIPLE 10: AESTHETICS

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precinct undergoing transition, contribute to the desired future character of the area.

objective/control	evaluation	compliance
As above.	There are four buildings of varying length, height and orientation. Apartments to the south enclose and conceal a 4 storey car park. At the top of the car park is a communal outdoor space which opens out and enjoys views of the river. Buildings A2 and A4 will be built of a combination of concrete and brick masonry and thus relate to the local context on Broughton Street, while taller 'wharf' buildings A1 and A3 resting on the podium are of a more civic scale, and explore strong, uncompromised forms and patterns. The facades of Buildings A1, A2, A3 and A4 (the riverfront apartments) adopt an aesthetic which seeks to improve upon that which can be found in other large multi-residential developments. The aesthetic strength of large multi-residential developments is often diluted due to size and complexity of spatial arrangements, and residential apartment mix. The patterned façade of buildings A1 and A3 seizes the opportunity to resolve this problem. A play upon solid, void and glass vertical elements means that both private open space, and private enclosed space, can be housed behind similar facades. The scale of the façade elements again tests existing aesthetics of this typology. The façade elements are large and gestural, to define strong bold timeless forms. In this way the development can be seen to contribute to the future urbanising of Parramatta as a satellite city to Sydney. Buildings A2 & A4 are heavy in materiality, massing and use of masonry, and the podium acts as a landscaped plinth for the 'wharf' buildings A1 and A3 to partially rest on. In building A1 and A3, the simple, repetitive and elegantly designed elements such as glass balustrades, façade shadowlines, tapered roofs and pointed balconies articulate the forms of Buildings A1 and A3 and provide striking landmarks on Parramatta River. Buildings A1 and A3 are slim and taller forms which float above the ground plane on recessed facades. The integration and contrast of the new development with the existing local buildings leads to an exciting renewal of the site and injection of energy into the precinct. The architectural treatment of the new development will be clean and simple which will be in dynamic contrast with the older residential buildings.	**YES**