

12 December, 2014



CERTIFICATE OF VERIFICATION

Erection of 3 residential flat buildings with associated basement (4 level) parking and amenities and Retail / Commercial Spaces to Ground Floor.

311 Hume Highway, Liverpool

This certificate verifies that Robert Gizzi (NSW Registration No 8286)

- Personally directed the design of the above development as architectural director for Design Workshop Australia (DWA) of 81a Princes Highway, Fairy Meadow.
- That the design quality principles set out in Part 2 of the *State Environmental Planning Policy No. 65 – Design of Residential Flat Development* are achieved for this residential flat development.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Robert Gizzi', is written over the printed name.

Robert Gizzi

SEPP 65 – COMPLIANCE ANALYSIS

CLIENT:

Hume Developments Pty Ltd

PROJECT NO. 1086

ADDRESS:

311 Hume Highway, Liverpool

PROJECT:

Erection of 3 residential flat buildings with associated basement (4 level) parking and amenities and Retail / Commercial Spaces to Ground Floor.



Item / Standard	Proposed Development	Comments	Compliance
PART 1: CONTEXT			
Local Context	Undertake local context analysis	Site analysis and local context analysis provided in the SEE and Site analysis plans. An urban design report and planning report have been prepared to accompany the development application.	✓
Residential Flat Building Types	Row Apartments are best used when: mixed use is desired; row apartments can be street-edge aligned and made suitable for commercial/retail uses on the ground floor level or live/work apartment layouts.	The development sits within a large block on the corner of Hoxton Park Road, Hume Highway and Gillespie Street, Liverpool. The proposed development comprises of Residential Units with Commercial / Retail to part of the Ground Floor of the tower. There are associated facilities and amenities throughout the buildings.	✓
Building Envelopes	Establish the bulk, height and location of a development on a site	An Urban Design Report and Planning Report was prepared for Liverpool City Council to establish the bulk, size, siting, height and location of the proposed development envelopes.	✓
Building Height	Test height controls against the FSR and the proposed number of storeys and minimum ceiling heights.	The envelope is site specific and responsive to the context and area. The Development has been designed to respond to the surrounding locality and future character.	✓

Building Depth	Maximum internal depth of a building should be 18m (this guideline generally applies to street wall buildings, buildings with dual and opposite aspect and buildings with minimal side setbacks). Freestanding buildings may exceed 18m, subject to satisfactory daylight and natural ventilation.	The building exceeds 18m in length, however it has been designed to maximise solar access, orientation and urban form with more than 75% of the units having more than 3 hours of solar access on 21st June.	✓
Building Separation	Nine storeys and above/ over 25 metres: 24 metres between habitable rooms/balconies 18 metres between habitable rooms/balconies and non-habitable rooms 12 metres between non-habitable rooms	The building envelope has been derived out of a planning and urban design report.	✓
Street Setbacks	Use a range where the desired character is for variation within overall consistency (5 - 9m for suburban areas). Minimise overshadowing of street and buildings. Consider secondary upper level setbacks to reinforce desired scale of buildings on the street. Underground parking structures, awnings and balconies may encroach on the setback.	The proposed building has been sited to fit the future and desired character of the precinct. Refer to Planning and Urban Design Report. The setbacks have been discussed with council and are the outcome of extensive urban design analysis. The shadow of the building falls into the street and surrounds and has a limited impact on adjacent properties. Car parking on site is provided in the underground basement levels.	✓
Side and Rear Setbacks	To retain or create rhythm or pattern of development that positively defines the streetscape so that space is not just what is left over around the building form. Consider building separation, open space and soil zones.	The building is set back a minimum of 6m from the Hume Highway and 4m Hoxton Park Road boundary and minimum of 4m from the rear boundary. The setbacks correspond to the Building separation, open space and deep soil zones, the setbacks are appropriate and sufficient area is provided in these areas for significant landscaping.	✓
	Maximize the opportunity to retain and	The setbacks vary according to the building	

	reinforce mature vegetation. Optimise use of land at the rear and surveillance of the street at the front. Relate setbacks to existing streetscape pattern.	articulation and treatment. The proposed setbacks are consistent with the future desired character of the precinct. The project has been designed in general compliance with SEPP65.		
Floor Space Ratio	Height, setbacks, FSR, building footprint, building envelope and open space requirements are to be consistent to support the desired built form and urban outcome. FSR should be 75% of the maximum building envelope.	Height, setbacks and FSR are appropriate for the site and the urban context as demonstrated in the accompanying planning report. FSR is 6:1.	✓	
Item / Standard		Proposed Development	Comments	Compliance
PART 2: SITE DESIGN				
Site Analysis	Site analysis to include plans and sections of the existing features of the site, and written description.	Site analysis to include plans and sections of the existing features of the site, and written description.	Site analysis plan, survey plan and written analysis are provided in the SEE.	✓
Deep Soil Zones	Optimise provision of deep soil zones. Support a rich variety of vegetation type and size. Increase permeability of paved areas. Minimum of 25% of open space to be deep soil zone.	Optimise provision of deep soil zones. Support a rich variety of vegetation type and size. Increase permeability of paved areas. Minimum of 25% of open space to be deep soil zone.	Deep soil landscaping can be achieved on 25% of the site. There is also deep podium planting provided to the centre courtyard. The Landscape Plan prepared by WHK Landscape Architects is attached with the DA documentation.	✓
Fences and Walls	Respond to the identified character of street and area. Delineate private and public domain without compromising safety and security. Contribute to amenity, beauty and usability of private and communal open spaces.	Respond to the identified character of street and area. Delineate private and public domain without compromising safety and security. Contribute to amenity, beauty and usability of private and communal open spaces.	Appropriate landscaping is utilised to delineate the public and private entry areas. Details are provided in the architectural plans and address all relevant requirements of the Code, including character, safety and security, amenity and public domain.	✓

	Retain and enhance amenity of public domain by avoiding continuous lengths of blank walls and using planting to soften the edges and reduce their scale. Select durable materials which are easily cleaned and graffiti resistant.		
Landscape Design	Improve amenity of open space with landscape design, including shade, screening and accessibility. Contribute to streetscape and public domain. Improve energy efficiency and solar efficiency of dwellings and microclimate of private open spaces. Design landscape with regard to site characteristics. Contribute to water and stormwater efficiency. Provide sufficient depth of soil above pavers to enable growth of mature trees. Minimise maintenance by robust landscape elements.	A significant portion of the development, particularly at podium and ground level will be landscaped with additional planting to: - Contribute to the streetscape of the public domain and soften the built form. - Reinforce the established character of trees and landscaping in the immediate locality. - Contribute to water and stormwater efficiency. - Provide sufficient depth of soil. - Minimise maintenance by using robust landscape elements.	✓
Open Space	Provide communal open space which is appropriate and relevant to the context and building setting. Facilitate the use of communal open space by optimizing solar access, site features, and minimising overshadowing. Provide private open space for each apartment. Locate open space to increase residential amenity.	The communal and private open spaces address all relevant requirements of the Code, with appropriate landscape treatment of communal open space, terraces and private balconies. Communal Open Space provided is 1820.88m². Private open space provided is minimum of 5.6m² and a maximum of 65.98m².	✓

	Provide environmental benefits including habitat for native flora and fauna, pleasant microclimate, rainwater percolation, outdoor drying area. Communal open space should be at least 25- 30% of site area. Minimum private open space for each ground level apartment is 25m².		
Orientation	Orient buildings to maximise north facing walls and provide adequate building separation. Respond to streetscape and optimise solar access. Align buildings to street on east-west streets. Optimise solar access to living spaces and private open space by orienting them to the north. Building elements to maximise sun in winter and shade in summer.	✓ The development has been orientated to maximise solar access to living spaces and minimise overshadowing to adjacent building. The building has been designed to respond to the surrounding streetscape and will provide adequate solar access. Refer to the accompanying Planning Report.	
Planting on Structures	Design for optimum plant growth by appropriate soil and drainage conditions. Design planters to support soil depth and plant selection.	✓ Appropriate planting provided and integrated with landscaped area around the development.	
Stormwater Management	Retain stormwater on site to reduce impact of stormwater on infrastructure. Protect stormwater quality. Control erosion. Consider using grey water for site irrigation. Optimize deep soil zones.	✓ On-site stormwater detention and retention will be provided. A Stormwater Management Plan has been submitted with the DA completed by Arrow Engineers.	

Safety	Delineate private and public space. Optimise visibility, functionality, and safety of building entrances. Improve opportunities for casual surveillance. Minimise opportunities for concealment. Control access to the development. Undertake crime risk assessment.	The principles of CPTED (Crime Prevention Through Environmental Design) have been addressed as follows: Casual surveillance of the street through balconies and communal open space fronting the street. Landscaping has been used to delineate private and public space. Security entry to the resident car park and pedestrian entries Niches and areas. Security Intercom system to all parts of the building. Ample lighting to common and pedestrian areas.	✓
Visual Privacy	Maximise visual privacy adjoining buildings by separation, setbacks and site layout. Design layouts to minimise direct overlooking of rooms and private open spaces. Use site and building design elements to increase privacy without compromising light and air access.	Visual privacy has been addressed through: - Adequate setbacks and screening to adjoining properties. - Room layouts and balcony locations to minimise overlooking.	✓
Building Entry	Improve presentation to street by entry treatment. Direct connection and clear transition between street and entry. Ensure equal access for all. Provide safe and secure access. Separate entries for pedestrians and cars. Design entries/circulation to allow furniture movement. Provide mailboxes to be convenient, but not clutter the appearance of the	The building entries have been designed to provide an appropriate, identifiable, secure, safe and accessible entry. Separate entries are provided for pedestrians and vehicles. Mailboxes are provided in appropriate locations proximate to the lobby areas.	✓

	development from the street.		
Parking	Determine car spaces by access to public transport, density and ability to accommodate parking on site. Limit visitor spaces, where impact on landscape and open space is significant. Give preference to underground parking. Provide bicycle parking which is easily accessible.	The provision of residential car parking spaces comply with the parking provisions of the Liverpool DCP. All car and bicycle parking is provided in the basement of the building. Visitor bike spaces are also provided to ground / podium level.	✓
Pedestrian Access	Accessible routes to public and semi-public areas. Promote equity by accessibility of entry and integrating ramps into the building design. Ground floor apartments to be accessible from the street and associated open space. Maximise number of accessible, visitable and adaptable apartments in a building. Barrier free access to at least 20% of dwellings.	All dwellings have lift and stair access. Fire egress is by way of Fire isolated stairs designed in a scissor configuration, accessible on all levels of the building. Distances have been designed to comply with BCA.	✓
Vehicle Access	Ensure adequate separation between vehicle entries and street intersections to reduce potential pedestrian/vehicle conflicts. Optimise opportunities for active street frontages and streetscape design. Improve appearance of car parking entries. Limit width of driveways to a maximum of 6 metres.	There is adequate separation from the proposed driveway to surrounding intersections . The driveway is 6m and has been designed to have minimum impact on the streetscape in accordance with the traffic report prepared by TTPA Engineers. Pedestrian and vehicular entries are provided for separately. Vehicular entry originates via Gillespie Street functioning with a ramp entry to the basement carpark.	✓

	Locate vehicle entries away from pedestrian entries and on secondary frontages.		
Item / Standard	Proposed Development	Comments	Compliance
PART 3: BUILDING DESIGN			
Apartment Layout	Determine apartment sizes in relation to location, market, spatial configuration and affordability. Ensure apartment layouts are resilient over time. Design layouts to respond to natural and built environments and optimise site opportunities. Avoid locating kitchen in circulation space. Include adequate storage in the apartment. Ensure apartments facilitate furniture removal and placement. Single aspect apartments to have maximum depth of 8m from a window. Kitchen to be maximum of 8m from window. Cross over or cross through apartments > 1.5m deep to have minimum width of 4m.	The units in the development have been designed to: Be an appropriate mix for the local market. Allow modifications over time. Respond to site characteristics. Provide appropriate kitchen and storage facilities. Enable furniture removal and replacement. Provide adequate solar access and natural ventilation. Provide kitchens within 8m of a window.	✓
Apartment Mix	Provide variety of apartments in larger buildings. Refine appropriate mix by considering population trends and proximity to transport, employment and services. Locate mix of 1 and 3 bed units on	The development provides a range of 1, 2 and 3 bedroom units which is considered appropriate for the local market. 10% are provided as adaptable units.	✓

	Ground floor to enable access by disabled, elderly and families. Optimise accessible and adaptable apartments.		
Balconies	Provide at least one primary balcony where other private space is not provided. Primary balconies to be adjacent to living area and sufficiently proportioned to promote indoor/outdoor living. Consider secondary balconies in larger apartments, adjacent to bedrooms and for clothes drying. Balconies to respond to local climate and context, solar access, wind and privacy. Design balustrades to allow views and casual surveillance, while providing safety and privacy. Coordinate and integrate building services with facade and balcony design. Primary balcony to have minimum depth of 2m.	Each unit has access to at least one balcony and common open space. Generous balconies are provided adjacent to the living areas in all units and designed to be an extension of the living areas. Balconies have been designed to articulate the building facade and are provided at or over 2.2m in depth.	✓
Ceiling Heights	Design better quality spaces and facilitate better access to natural light using ceiling heights. Coordinate internal ceiling heights and slab levels with external height requirements. Minimum floor to ceiling height of 2.7m. Variations to demonstrate satisfactory daylight.	Minimum floor to ceiling height of 2.7m is provided to the main living areas and habitable rooms.	✓
Flexibility	Provide robust building configurations which utilise multiple building entries	Multiple entries are provided to the building components, including main street entries and lift	✓

	and circulation cores. Promote accessibility and adaptability by accessible and visit-able apartments and pedestrian access. Promote apartment layouts that accommodate changing use of zones.	and stair access from the basement parking levels. Stair access is provided to all units. Fire egress is provided via stairs and are accessible on all levels, designed to comply with BCA requirements.	
Ground Floor Apartments	Design gardens to contribute to visual and spatial structure of the street. Promote housing choice by providing private gardens and maximising accessible apartments on ground floor. Increase solar access in ground floor units, by higher ceilings and windows and tree selection.	Ground Floor Apartments contribute to the streetscape and spatial structure of the street.	✓
Internal Circulation	Increase amenity and safety by generous widths, lighting, minimising lengths, avoiding tight corners, legible signage and adequate ventilation. Support better apartment layouts by designing buildings with multiple cores. Maximum number of units accessible from single core/corridor should be eight. Articulate longer corridors by using series of foyer areas and windows along or at end of window. Minimise maintenance and maintain durability by using robust materials in common circulation areas.	The proposed internal circulation addresses the requirement of the Code by: Providing generous and articulated circulation spaces. Utilising robust materials in circulation areas. Minimising the number of unit accessible from a single corridor.	✓
Storage	50% of storage to be within apartment and accessible from hall or living area, and dedicated storage rooms on each floor and car parks. Storage to be suitable for local area and able to accommodate larger	Storage has been provided in accordance with Council's DCP Provisions within apartments and garage areas which provides secure storage for individual use.	✓

	items (e.g. bicycles). Ensure storage is secure for individual use.		
Acoustic Privacy	Maximise acoustic privacy by adequate separation. Internal layout to separate noise from quiet areas by grouping bedrooms and service areas. Resolve conflicts between noise, outlook and views by design measures, such as double glazing. Reduce noise transmission from common corridors or outside by providing seals to entry doors.	The proposed development complies with the requirements of the BCA. Party walls have been designed with the minimum RW rating according to BCA. The majority of the apartment layouts provide similar rooms adjoining each other where possible. Noise from external sources will be treated to ensure compliance with Council's requirements. Refer to Acoustic Report prepared by Acoustic Logic.	✓
Daylight Access	Orient building to optimise northern aspect. Ensure daylight access to communal open space March-September and appropriate shade in summer. Optimise apartments receiving daylight access to habitable rooms and principal windows. Design for shading and glare control. Living rooms and private open space of at least 70% of apartments should receive 3 hours direct sunlight between 9am and 3pm in mid winter. Limit single aspect apartments with a southerly aspect to a maximum of 10% of total units.	The proposed development has been orientated to maximise the northern aspect and to minimise the number of south facing units. The layout of units and window location provides satisfactory daylight access. More than 80% of units receive 3 hours direct sunlight at the winter solstice. Daylight Access has also been considered for the surrounding neighbourhood as shown on the accompanying shadow diagrams.	✓
Natural Ventilation	Promote and guide natural breezes. Utilise building layout and section to increase potential for natural ventilation.	The natural ventilation requirements have been addressed as follows: Open plan unit layouts have been designed to maximise natural ventilation.	✓

	Internal layout to minimise disruptions to air flow and group rooms with similar usage together. Select doors and operable windows to utilise air pressure or windows to funnel breezes. Coordinate design with passive solar design. Explore innovative technologies to ventilate rooms. 10-18m building depth recommended for natural ventilation. 60% of units to be naturally cross ventilated. 25% of kitchens to have access to natural ventilation.	More than 80% of the units have been designed to achieve cross ventilation.	✓
Awnings and Signage	Locate awnings over building entries. Enhance safety by providing lighting.	Appropriate awnings and lighting will be provided to the building entries.	✓
Facades	Consider relationship between building form and façade or building elements. Facades to have appropriate scale, rhythm and proportion responding to use and desired character. Facades to reflect orientation of site using sun shading devices. Express important corners by giving visual prominence to parts of the façade. Coordinate and integrate building services. Coordinate security grills, ventilation louvers and car park entry doors with overall façade design.	The building elements have been designed with regard to the elements, textures, materials and colours of the existing coastal neighbourhood. The façade is intended to reduce the visual bulk of the building and offers an interesting range of colours, materials and textures which are inspired to create a modern residential building. A detailed schedule of materials and finishes has been submitted with the DA.	✓

Roof Design	Relate roof design to desired built form. Relate to size and scale of building, elevations, building form. Respond to orientation of site. Minimise visual intrusiveness of service elements. Facilitate use of roof for sustainable functions.	The roof design is appropriate as it relates to the desired built form and minimises overshadowing and visual impact. The services elements are kept at an absolute minimum integrated into the overall roof and building design by the selection of similar paint finishes.	✓
Energy Efficiency	Incorporate passive solar design to optimise heat storage in winter and heat transfer in summer. Improve control of mechanical heating and cooling. Plan for photovoltaic panels. Improve hot water system efficiency. Reduce reliance on artificial lighting. Maximise efficiency of household appliances.	The BASIX assessment and Design Statement demonstrate that the proposed retail / commercial space and residential units have been designed for optimal energy efficiency. Both have been submitted with the DA.	✓
Maintenance	Design windows to enable cleaning from inside the building. Select manually operated systems, such as blinds, sunshades, pergolas and curtains. Incorporate and integrate building maintenance systems into the design of the building form, roof and façade. Select durable materials which are easily cleaned and graffiti resistant. Select appropriate landscape elements and vegetation and provide appropriate irrigation systems. Provide garden maintenance and storage area.	Maintenance has been addressed as follows: The roof is accessible for maintenance only with the provision of service ladders to comply with Australian Standards and OH&S. Materials will be durable and cleanable. Landscape elements are appropriate for the site condition, with the selection of hardy, low maintenance plantings and pavings.	✓

Waste Management	Incorporate existing built elements where possible. Recycle and reuse demolished materials. Specify building materials that can be reused or recycled. Integrate waste management into all stages of project. Support waste management by specifying project needs and reducing waste by using standard product sizes. Prepare waste management plan. Locate storage areas for bins away from street frontage. Provide waste cupboards or temporary storage area. Incorporate on-site composting where possible.	A Waste Management Plan has been submitted with the DA and addresses the demolition, construction and ongoing phases of the development and the requirements of the Code. A waste management plan by Elephants Foot has also been provided.	✓
Water Conservation	Use AAA rated appliances. Encourage use of rainwater tanks. Collect, store and use rainwater on site. Incorporate local native vegetation in landscape. Consider grey water recycling.	A BASIX assessment has been undertaken and will be submitted with the DA. This statement confirms that the proposed development complies with the requirements of BASIX. Low energy fixtures and fittings will be implemented. Native and drought tolerant vegetation have been incorporated into the Landscape Plan.	✓

SEPP 65 – DESIGN QUALITY PRINCIPLES

CLIENT:
ADDRESS:
PROJECT:

Hume Developments Pty Ltd
311 Hume Highway, Liverpool
Erection of 3 residential flat buildings with associated basement (4 levels) parking and amenities and Retail / Commercial Spaces to Ground Floor.

PROJECT NO. 1086



SEPP 65 DESIGN QUALITY PRINCIPLES	
PRINCIPLE 1 - 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 policies. New buildings will thereby contribute to the quality and identity of the area. STATEMENT OF COMPLIANCE The proposal has been designed to provide a quality mixed-use development that responds to and utilises the advantages of its context within the centre of Liverpool and the greater area. Additionally the proposal responds to Principal 1 by providing: • The Hoxton Park Road & Gillespie Street frontage has been developed to address a continuance of a setback residential edge by way of the residential elevation of the building. • The tower responds to the creation of a nodal point and reinforce the landmark intersection. • The tower addresses the Hume Highway, the smaller towers respond to the residential context of Gillespie and Hoxton Park Road. • Entry positions have been located in positions to retain existing pedestrian pathways, create better address to the street for the various uses and provides comfortable walking distances and access regimes. • An increased diversity for the Town Centre, with greater activity • The building form relates to the future desired character of the area. The tower building has commercial to the ground level corner, whilst the remainder of the building is residential units

PRINCIPLE 2 - 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 to achieve the scale identified for the desired future character of the area. STATEMENT OF COMPLIANCE An appropriate bulk and scale of the development was established after extensive urban design analysis. The proposal responds to Principle 2 as follows : • The height and scale of the proposal provides an appropriate response to the Liverpool area. This approach is envisaged to compliment the future development of the Liverpool Town Centre core and future character of the precinct. • It has distributed the gross floor area in a way that improves a better outcome in terms of: – Residential amenity by its orientation to the north allowing for maximization of solar access, and other positive outcomes which is outlined in the planning proposal and urban design report. – The proposal addresses 3 separate street frontages by 3 distinct building forms, of varying size and scales with good articulation and massing. – The planning proposal and urban design report responds to the desired future character of the precinct.
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PRINCIPLE 3 - 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.	STATEMENT OF COMPLIANCE • The building form is segmented into 3 distinct buildings - a tower to the corner of Hoxton Park Road and Hume Highway Frontage, 2 smaller towers on each street frontage; integrate the surrounds. • The bulk and scale has been derived from the Urban Design Analysis and future desired character. • The tallest building is on the corner, whilst the smaller 2 towers are located along the southern and western portions of the site. • The proposed built form creates a variety of passive and active landscaped courts and gardens for communal use with clear entry and access paths and communal facilities such as a BBQ and drying (screened) areas. • Living areas have access to views and passive outlook across these communal spaces, enhancing character and amenity and providing a sense of security via passive surveillance. • The apartments are clearly articulated and robust in terms of internal amenity by designing all of the apartments to be dual aspect with a predominant orientation to north. • Vistas and pedestrian paths have been strengthened and maintained.

PRINCIPLE 4 - 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.	STATEMENT OF COMPLIANCE The residential density proposed corresponds with the gross floor area allowed under the LEP. The proposal also follows the building envelope requirements which in the DCP, exhibited concurrently with this DA. The proposal responds to Principal 4 by providing : • The proposal responds to the desired future density of the Liverpool City Centre; • FSR has been developed out of an urban design analysis approach. • The proposal has been developed as part of an urban design proposal and planning report. • Apartments are all in keeping with the minimum size and mix required by Liverpool City Council. • The density of the development is sustainable within the existing area in consideration of the context, proximity to public transport, services, and infrastructure, social and environmental qualities of the site.

PRINCIPLE 5 - 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. STATEMENT OF COMPLIANCE The proposal aims to promote a high standard of environmental performance incorporating the use of ecologically sustainable development principles including: • Appropriate housing density to maximise use of public transport infrastructure due to the sites proximity to railway and bus interchange • Designing the orientation of layout of apartments to maximise access to natural light, natural cross ventilation and aspect. • Use of construction materials that is conducive to thermal mass such concrete slabs. • Creation of a defined winter garden spaces. • Landscape spaces laid out for maximum solar access, natural ventilation, water and planting management. • Selective use of sun screening devices as required to minimise use of high energy consumption cooling	

PRINCIPLE 6 - 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 usability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management. STATEMENT OF COMPLIANCE The proposal addresses principle 6 by providing: • Appropriate open space and landscaped areas that have been designed to respond to the climate, with garden areas and courtyard areas aimed at gaining solar in winter. • Sustainable planting species selected, that is low maintenance, locally appropriate and available that should also provides good ground cover and canopy shading in summer. • The common space has been located for ease of access at and a degree of privacy at podium roof level and Ground Level. • Street trees are proposed to make good the existing nature of the streetscape. • Equitable access has been considered for the landscape areas by minimising the need for ramps. Ramps are in accordance with the Access Code as provided for in the Accessible Report completed Howard Moutrie. • The landscape has been designed to create a distinction of private and public spaces.	

PRINCIPLE 7 - 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. STATEMENT OF COMPLIANCE The proposal addresses principle 7 by providing: • Good access to public transport, retail, open space and community facilities/services needs. The proposal is within 15 minute walking proximity to Liverpool Train Station and the numerous bus stops linking residents to the greater region. • Privacy buffers by the selection of landscape species, use of privacy screens and appropriate building separation from neighbouring buildings existing and potential. • Direct solar access to apartments by way of its orientation to the north and providing adequate building separation. • Natural and cross-ventilation by limiting single aspect apartments. Windows are located to catch breezes from dominant wind directions in summer mornings and afternoons. • Well designed waste and recycling regime, integrating discretely positioned waste rooms at each level; chutes to ventilated garbage rooms at podium ground level. • Adaptability of apartments overtime by providing 10% adaptable units. • Apartments designed with large living and dining areas that are orientated north for optimal solar access, opening onto generous balconies with views/outlook to landscaped areas below enhancing passive surveillance and outlook; • Winter gardens have been provided to units to provide option use of outdoor spaces. • Bedrooms that have been designed to accommodate queen size or two single beds with generous wardrobes/storage space Good amount of common open space on the podium with bbq areas, landscaped areas and clear pedestrian paths.
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PRINCIPLE 8 - SAFETY & SECURITY	Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while 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 spaces. STATEMENT OF COMPLIANCE • The residential entries are well located in high activity and visibility areas. • Constant passive surveillance maintained; • Access lobbies are well lit; • Secure carparking spaces have been provided • Swipe card access to all areas including basement • Separate visitor and residential / retail parking spaces • Access to common open space on the landscaped podium roof level will be restricted to residents and their visitors using a pre-programmed card or other proprietary system. • Recessed areas have been minimised, with a provision for a well lit • External areas will be well lit with clear line of sight from active frontages
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PRINCIPLE 9 - SOCIAL DIMENSIONS	
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.	STATEMENT OF COMPLIANCE The proposal addresses principle 9 by providing: • Range of apartment design and size will accommodate a range of prices for sale. This ensures a diverse range of people from differing social groups. • Development will add an optimum density to the existing residential population in-line with the draft residential strategy • It is anticipated that there will be no negative impacts on existing social groups or other housing in the area • Beneficial economic impact to the Town Centre and nearby businesses • A safe and well serviced landscaped communal space on the podium roof level and facilities for residential use • Large well accessed common areas for a range of uses. • A provision of 10% accessible apartments • A broad range of apartment size, position and dual-orientation to address affordability • Additional population to the Town centre enlivens the centre area and enhances community identity • An increase in the residential population to the immediate area by the development will. • Clear access into and within the complex to optimise use of adjacent public and private amenities • The proposal includes good access to the common area and good visual links to surrounds. • The proposal becomes an example of good residential building form.

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 precincts undergoing transition, contribute to the desired future character of the area.	STATEMENT OF COMPLIANCE • The proposed massing achieves a balance between large and small elements, solid and void, built and natural parts, horizontal/vertical and consistent principal of solid structural frame and panel and glass infill. • A strong corner element feature defines the corner anchoring the site and strengthening the tower element. • The base is modulated with respect of the scale of the street and adjacent heritage item. • The building is clearly defined in distinct proportions breaking down the scale of the tower; the buildings to Hoxton Park Road and Gillespie Street represent a scaled response to the surrounds. • Consistent with the type, the base of the proposal is articulated as a massy, solid base in materials and colour, using rendered blockwork and punched openings – recessed balconies serving habitable space, or screened openings to parking. • Use of cladding, glass louvres and textured glass to higher areas provides a sense of scale and texture. • The vertical arrangement of panels, vertical and horizontal articulation elements containing glass, masonry & cladding all contribute to a modulated façade. • Modulated facade / balconies to street frontage • Use of separate proportions to break down the scale of the building