SEPP 65 DESIGN VERIFICATION STATEMENT

PREPARED TO ACCOMPANY A SECTION 4.55 APPLICATION SUBMITTED TO THE DEPARTMENT OF PLANNING & ENVIRONMENT

Project Site Address

1 LAWSON SQUARE, REDFERN

Project Job Number

5578

Prepared on behalf of

LAWSON SQUARE PTY LTD.

Date

28 MARCH 2019

Prepared by

CANDALEPAS ASSOCIATES +

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SECTION 1.0 SUMMARY

This Design Verification Statement has been prepared on behalf of Lawson Square Pty Limited in support of a Section 4.55 Application to the Department of Planning & Infrastructure for the redevelopment of the site at 1 Lawson Square, Redfern.

The development involves:

- The redevelopment of the existing Tower 1 building to provide 1 storey of retail use, 5 storeys of commercial use and 12 storeys of residential apartments
- The redevelopment of the existing Tower 2 building to provide 3 storeys of commercial use and 15 storeys of residential apartments
- A mixture of studio units, one bed units, one bed + study units, two bed units, and 3 bed penthouses providing a total of 151 residential units
- Basement car parking for 20 cars, and the use of 80 car spaces at a nearby site
- Public domain landscaping works to all frontages

The following Council Codes and Planning Instruments provided the controls for the proposal:

- State Environmental Planning Policy No 55 Remediation of Land;
- State Environmental Planning Policy No 65 Design Quality of Residential Apartment Development and Apartment Design Guide (2015);
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy (Major Development) 2005 ('SEPP MD');
- State Environmental Planning Policy (State and Regional Development) 2011 ('SEPP SRD');
- Draft Redfern Centre Urban Design Guidelines;
- NSW Police Safer by Design Code; and
- Section 79C of the Environmental Planning and Assessment Act 1979.

This report is intended to be read in conjunction with the architectural plans prepared by Candalepas Associates Pty Limited and Wendy Lewin, Architect, as well as the following associated reports:

• Environmental Impact Statement prepared by Ethos Urban

We confirm that Mr Angelo Candalepas of Candalepas Associates directed the design of the enclosed Section 4.55 application, which is represented by drawings (S96 - 0000, 1103-1104, 1201-1202, 1301, 1401, 1501) and that Mr Candalepas is registered as an architect in accordance with the NSW Architects Act 2003.

We confirm that the enclosed documentation achieves the design principles set out in *State Environmental Planning Policy* 65 - *Design Quality of Residential Apartment Development* and has been designed with regards to the *Apartment Design Guide*.

State Environmental Planning Policy (Major Development) 2005 includes the following requirements for design excellence under Schedule 3, Part 5 - The Redfern–Waterloo Authority Sites, Clause 22:

(2) In considering whether proposed development exhibits design excellence, the consent authority must have regard to the following matters:

(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,

(b) whether the form and external appearance of the building will improve the quality and amenity of the public domain,

(c) whether the building meets sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency,

(d) if a competition is held as referred to in subclause (3) in relation to the development, the results of the competition.

These provisions have been considered in conjunction with those of SEPP 65, and this report is intended to be read in the context of both SEPP controls.

Design Excellence through Architectural Collaboration

As a design competition was not deemed necessary in the Director General's Requirements for the proposed development, design excellence has instead been addressed through a collaboration between Candalepas Associates and Wendy Lewin. Wendy Lewin, Architect, is a highly respected professional, and was awarded the Royal Australian Institute of Architecture's 2007 Marion Mahoney Griffin Prize for her contribution to the architectural profession over twenty seven years.

The role of Wendy Lewin in the architectural design process allows an additional level of peerreview, and has introduced further detailed development of planning strategies and building systems that have benefitted the proposal over the course of its development.

The Design Development Option Studies that resulted from the above process have been included in Appendix B of this report.

PRINCIPLE NO. 1: CONTEXT AND NEIGHBOURHOOD CHARACTER

Good design responds and contributes to its context. Context is the key natural and built features of the area, their relationship and the character they create when combined.

The site of the proposed development is located at 1 Lawson Square, Redfern and can be identified as Lot 1 DP 1125312 and Lot 1 DP 396677.

The site has an area of 1,696.5 m² and is irregular in shape as it follows the road alignment of Lawson Square and Regent Street. The site has frontages to Lawson Square and Redfern Streets of approximately 60m and frontages to Gibbons Street and Regent Street of approximately 26m.

Two 12-storey towers of commercial uses currently occupy the site, with a shared single-level basement.

To the west, on the opposite side of Gibbons Street, is the Redfern Train Station and its associated rail corridor. The Redfern Railway Station building is an identified Heritage Item under the State Significant site listing in Schedule 3 of SEPP (Master Development) 2005, and the Redfern Station Group is listed under the NSW Heritage Act 1977.

To the north, on the opposite side of Lawson Square, is a 2 storey commercial building and a 7 storey mixed-use residential and commercial building. Neighbouring buildings to the east, and south of the site along Regent Street have predominate retail/commercial street frontages and are generally between 1 and 3 storeys high.

The development proposes to extensively renovate the existing towers, with the addition of a further 6 storeys. The proposed 18 storey development will provide ground level retail space, 5 storeys of commercial use and a total of 151 studio, one, two, and three-bedroom residential units.



Figure (i). Site Plan & Context

The subject site falls within the Business Zone E – Commercial Core under the Major Development SEPP. The SEPP states that any use not prohibited in the zone is permitted with consent. The

proposal for mixed commercial/residential uses is not listed as a prohibited use and is therefore acceptable.

The maximum Floor Space Ratio applied to the subject site is 7:70 with a central maximum height of 18 storeys and perimeter heights of 5 and two 2 storeys.

The proposal seeks to be a precedent for future development of the area. The development will help define a new context which is envisioned for the area and within which other residential development of a similar scale and height will be built. The proposed mixed use development seeks to make a positive contribution to the current and future character of the area and to set the standard for future high density residential building developments.

PRINCIPLE NO. 2: BUILT FORM & SCALE

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.

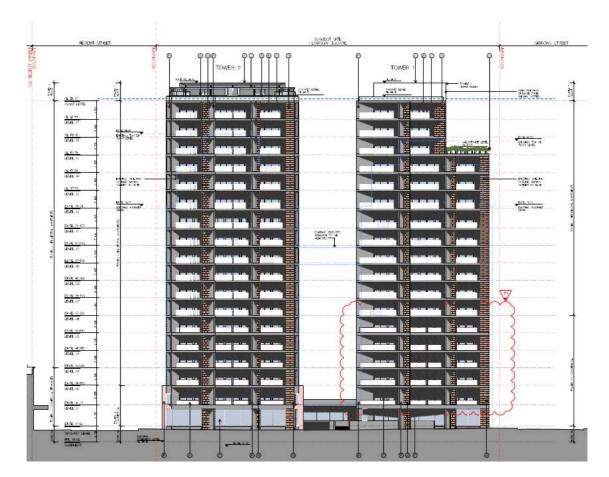


Figure (ii). North Elevation

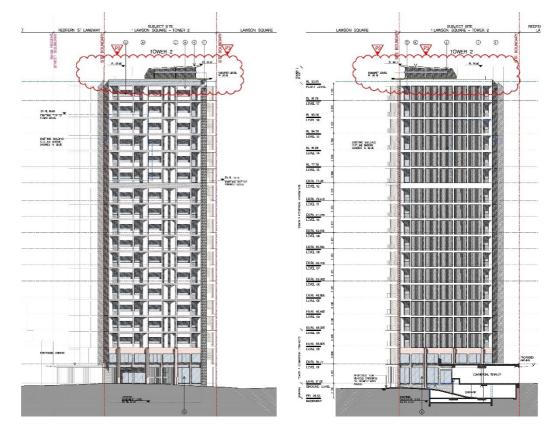


Figure (iv). East Elevation + West Elevation - Tower 1

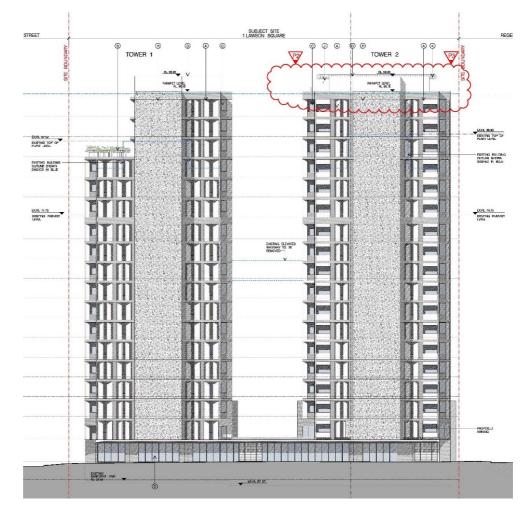


Figure (v). South Elevation

The scale of the proposed development is desirable for the future character of development in the vicinity. The scale and massing of the proposed development is consistent with the permissible height

limit of 18 storeys as specified within the SEPP (Major Projects) 2005 Height of Buildings Map. The proposed mixed-use development provides an appropriate scale in terms of bulk for the potential skyline of the area.

The project has been designed in order to retain the structure of the existing towers. The proposed façades will be highly articulated, serving to reduce the apparent bulk and provide an appropriate scale for a mixed-use development within the existing and future context.

The built form of the proposed development is designed to afford high quality living and working spaces for its occupants without compromising the amenity of the surrounding streets and residences.

The building's articulated facades reduce its apparent bulk whilst providing excellent levels of amenity to all of the residential units and commercial tenants. It also presents an expressive architectural form that forms a "bookend" to the developments along Gibbons St.

The lowering of the western part of Tower 1 assists in reducing the impact of bulk, and ensures there is no loss of amenity to the neighbouring property at 157 Redfern Street. This enables a more modest proportion facing Redfern Railway Station, one of the more public 'faces' of the proposal. From the north, the façade is also more modulated by the stepping of Tower 1, reducing the mass of the proposal as it is perceived from the city.

All primary living spaces and private open spaces of units are provided with an outward aspect from the site. The majority of units have aspects to the north or north east, maximising daylight access and natural ventilation. The existing separation between the towers is maintained in order to preserve ventilation and light as well as visual and acoustic privacy.

The addition of the rooftop terrace has been setback from the façade line to reduce the impact of bulk and scale as viewed from the public domain. The awning is proposed to match the height of the approved rooftop plant areas. Planter pots are proposed as a privacy buffer around the perimeter of the terrace, providing a softening of the building edge. The proposed works will provide a positive contribution to the development, and will largely shield the approved rooftop plant areas from the primary facades.

The built form responds to the character of the locality through considered, distinctive architectural forms and a rich natural material palette. Furthermore the proposal has been designed to minimise the impacts on the amenity of the existing adjacent buildings by maintaining the existing built form.

PRINCIPLE NO. 3: DENSITY

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

The renovation of the existing building for residential as well as commercial/retail use is considered consistent with the zone objectives and the aims and objectives of SEPP SRD and SEPP MD. The development will provide housing opportunities within close proximity to employment opportunities and major public transport routes. Due to a higher residential density, employment within the locality to service the residential needs will also be promoted.

The building form is contained within the existing structure whilst providing an additional 6 storeys. The proposed development maintains the permissible 18 storey height limit. Tower 1 includes ground floor retail and commercial tenancy from level 1 to 5, Tower 2 provides a commercial tenancy from ground floor to Level 2. 151 residential units are provided in total. The development has a total gross floor area of 12, 933 m² which equates to a Floor Space Ratio of 7.65:1, given the site area of approximately 1,696.5 m².

PRINCIPLE NO. 4: SUSTAINABILITY

Good design combines positive environmental, social and economic outcomes.

The proposed development has met the targets set out in the Building & Sustainability Index (BASIX). Further, the proposal embodies excellent passive systems of sustainable building design such as:

- Northerly aspect to the majority of living spaces in the development to optimise solar access and natural ventilation.
- Daylight penetration to reduce heating and artificial lighting requirements.
- Proposed selection of low embodied-energy materials.
- Excellent passive solar gain and loss properties.
- Cross ventilation to habitable rooms, assisted by the buildings' spacious open plan and articulated exterior

Furthermore, the proposal seeks to retain and enhance the existing building structure. Apartment layouts have been revised to work within the existing floorplate, previously used for commercial purposes. This strategy allows the development to act as a precedent for adaptive reuse.

PRINCIPLE NO. 5: LANDSCAPE

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity.

The landscape proposal has been designed to improve the amenity of the site, both within the property boundary and in the public domain. Additional street trees are proposed for the north and east boundaries of the site, in accordance with the City of Sydney's street tree planting guide. These trees will shade the public domain and also ameliorate street noise for building occupants.

The two palm trees currently standing in the public domain in Lawson Square, as well as the existing tree along Gibbons Street are proposed to be retained.

To further enhance the existing streetscape, all new paving is proposed to match the existing paving used within the recently renovated Redfern Street Laneway. This same paving will be carried through to the public domain of the site's north, east and west boundaries in order to maintain consistency.

Additional bicycle parking and the placement of shaded seating in areas that are easily accessible and under passive surveillance increases the amenity for both the development's occupants and the local public.

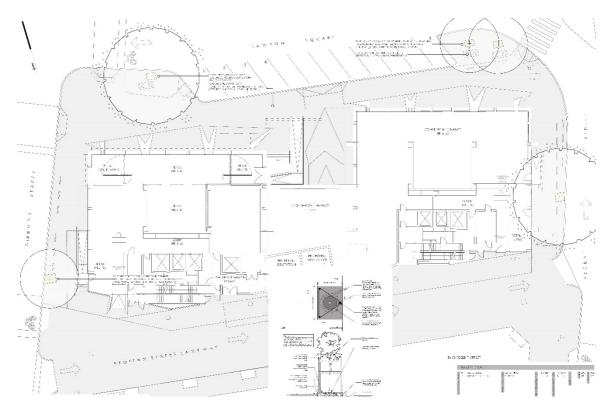


Figure (vi). Landscape and Public Domain Plan prepared by Isthmus Landscape Design

Landscaping also forms an integral part of the communal open space on Level 15 and the proposed rooftop terrace. Glass reinforced concrete (GRC) planters are proposed on the perimeter, providing a natural buffer to the rail corridor, as well as softening the northern and western facades. Landscaping will contribute to providing residents with high quality communal terraces.

PRINCIPLE NO. 6: AMENITY

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

The 151 residential dwellings include 46 studio units (31%), 51 one bedroom units (33%), 3 one bedroom + study units (2%), 49 two bedroom units (33%) and 2 three bedroom penthouses (1%). The proposed development has been designed to provide the maximum amenity to a majority of the dwellings, with most having a direct north-easterly aspect. 109 out of 151 apartments (72%) in the development receive a minimum of two hours of solar access to the living areas and private open spaces during mid-winter. Cross-ventilation is also available to over 60% of the apartments. The design maximises the daylight and natural ventilation available to each unit, and affords high levels of privacy for occupants and future neighbouring developments.

The units have an open plan and a narrow floor plate, which in conjunction with the high 'wall surfacearea to floor-area ratio' facilitates good cross ventilation to all habitable rooms. The units will enjoy a considered approach to materiality and detailed design, with elements such as multi-function doors allowing for various opportunities to close or open each unit as determined by the occupant. The internal layouts of the units have also been designed to ensure acoustic privacy between units and future neighbouring residential development.

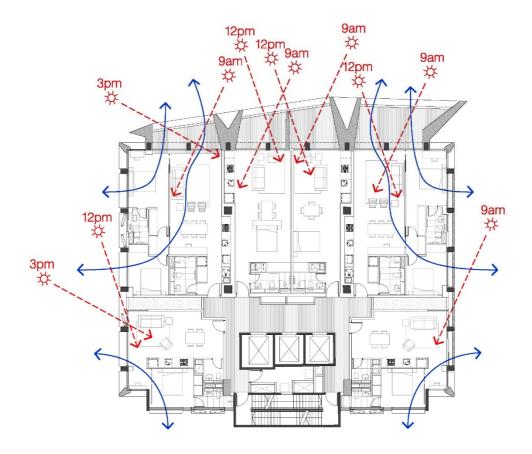


Figure (vii). Solar Access and Ventilation for June 21 - Tower 1

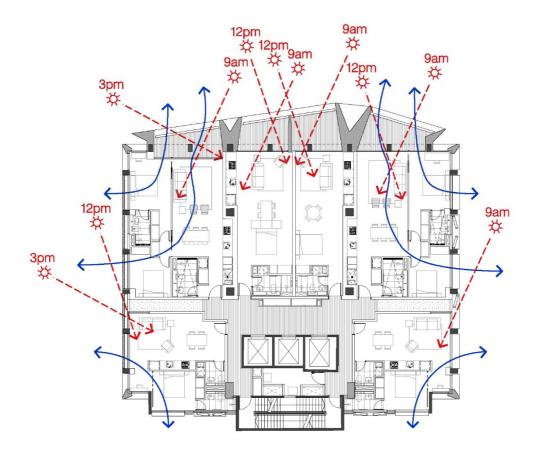


Figure (viii). Solar Access and Ventilation for June 21 - Tower 2

All of the north-facing units have north-facing balconies, protected from sun and wind by marble and off-form concrete blade walls. Units with southern orientations are minimised. The one-bedroom units

at the south of each Tower have been designed without a balcony, as the exposed location is not suitable for usable outdoor space.

The east and western facades have been designed to maintain deep recesses for areas of glazing. This allows solar access and ventilation to apartments, whilst offering shade to prevent excessive solar gain.

In lowering the western part of Tower 1, there was an opportunity to introduce a communal open space at Level 15. The plausibility of this terrace rests in the fact that there is also programme and usable space at the same level. This offers a sense of internal self-surveillance to ensure the area is not redundant. In addition, the terrace provides a buffer and outlook to the west for the upper apartments.

Overlooking opportunities between the units and neighbouring residents have been minimised through the use of aluminium privacy louvres to exclude views to neighbouring residences, whilst allowing solar access and views to the city.

The development proposes to maintain the existing building separation between the towers. This will ensure that privacy and amenity issues are acceptable both within the proposed buildings and to the surrounding properties and infrastructure.

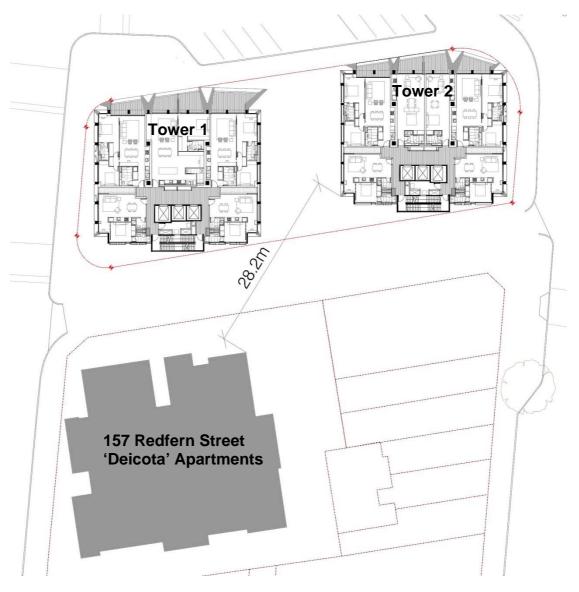


Figure (iv). Building separation between Tower 1 and neighbouring property at 157 Redfern St.

PRINCIPLE NO. 7: SAFETY

Good design optimises safety and security, within the development and the public domain.

The design proposes the following security measures to restrict and control communal access around the proposal:

- The residential access to Tower 1 from Gibbons Street and Tower 2 from Regent Street is direct and highly visible allowing passive surveillance to occur.
- A video entry system at residential entry points linked to the units allows access through the external security point upon confirmation from inside.
- A FOB key is supplied to occupants; this allows access through the entry security points and controls lift entry and exit, dependant on pre-programmed access allocations. The FOB can be kept inside a wallet, unlocking the security points upon approach.
- The residential mail boxes are located within the site boundary and close to the main entry.
- Wide common circulation areas with clear sight lines are provided at all levels with no obscured corners within the main public spaces.
- High quality architectural lighting throughout the development assists in securing the area at night.
- Generous windows and balconies provide passive surveillance to the neighbouring residential and commercial areas.

PRINCIPLE NO. 8: HOUSING DIVERSITY AND SOCIAL INTERACTION

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

The site is located close to facilities such as retail shops, health and veterinary care, sports facilities, recreational reserves, schools, restaurants and cafes. The site provides good local and regional connectivity via Redfern Railway Station and is well serviced by public bus routes.

The development comprises a mix of 46 x studio units (ranging from 43 - $53m^2$), 51×1 bedroom units ($50m^2$), 3×1 bedroom + study units ($67m^2$), 49×2 bedroom units (ranging from $78m^2 - 85m^2$) and 2×3 bedroom penthouses ($167m^2$). The varied unit mix and sizes are considered appropriate for the locality and correspond to the future vision for the area in terms of density and built form. This also provides for a healthy unit mix in social terms enabling varying types of occupants of varying age groups to co-exist in the development.

PRINCIPLE NO. 9: AESTHETICS

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.

The proposed development has been carefully considered with respect to the surrounding built environment. Materials such as marble, glass, aluminium, off-form concrete, and glass reinforced concrete (GRC) echo the colours of the surrounding city area. The materials are considered appropriate for the local climate, while ensuring a high aesthetic standard. The proposed palette will provide a precedent for future high density multi residential developments in the area.

The north façade of the proposal has a vertical character expressed by the proportions of the marble and off-form concrete blade walls. This verticality is considered an improvement over the existing towers, which have a heavy appearance caused by their exposed square grid structure. This strong vertical expression is softened by the undulations of the articulated balconies and the play of shadows across the façade.

The east, west and south façades propose to use a combination of GRC panels and glazing within deep recesses, set within the existing building grid. The recessed glazing punctuating the GRC 'screen' will help add a level of articulation to these elevations. Aluminium louvres have also been introduced as a privacy measure between the towers, adding a textural quality to the internal facades.

The 'Dune White' metal deck roofing proposed for the rooftop awning will provide a lightweight and low impact addition to the top of the building. This will be further softened by a planting buffer, and will tie in to the colours of the approved development.

The development proposal is considered a positive improvement over the existing view from this location, as the façades display more elegant proportions and the subtle use of colour is complementary to the surroundings.



Figure (x). Materials

	>
D - WHITE PAINTED CONCRETE CANDALEPAS ASSOCIATES - PINDARI	
B - GLASS REINFORCED CONCRETE (GRC) PLANTERS CANDALEPAS ASSOCIATES - PELICAN STREET	
E – METAL BALUSTRADE CANDALEPAS ASSOCIATES – FINLAYSON STREET	
C - CLEAR GLASS CANDALEPAS ASSOCIATES - FRANCIS STREET	
A – GLASS REINFORCED CONCRETE CANDALEPAS ASSOCIATES – PELICAN STREET	
At the	
1 A A A	
G - MARBLE CANDALEPAS ASSOCIATES - PELICAN STREET	

Figure (xi). Materials

F - OFF-FORM CONCRETE CANDALEPAS ASSOCIATES - KENSINGTON HOUSE



Figure (xii). Materials



Figure (xiii). Materials



Figure (xiv). Materials

The use of materials and textures such as off-form concrete, marble, aluminium, glass reinforced concrete and glazing provide a rich character for the benefit of the occupants and the community, with high levels of refinement and longevity. Through its material palette and largely rectilinear geometry, the development seeks to encourage a sense of the domestic as well as commercial qualities found in the locality.

The materials used throughout are robust and designed to withstand the elements whilst maintaining the original appearance of the building. The north façade is highly articulated and enhances the development's prominence within the urban skyline.

The development proposal has been designed with the amenity requirements of the Apartment Design Guide as an inherent part of the design considerations, and the building's contribution to the site will provide an example of design excellence for the benefit of the residents and general public alike.

CANDALEPAS ASSOCIATES MARCH 2019

APPENDIX A: Compliance Table – Apartment Design Guide – SEPP 65

Relevant Sections of SEPP 65 Design Code	Compliance
Part 1: IDENTIFYING THE CONTEXT	· · · · · · · · · · · · · · · · · · ·
1A Apartment building types	The proposal complies. The 'tower apartment' building type is suited to the prominent location along the rail corridor, creating a landmark scheme.
1B Local character and context	The proposal complies. The proposed development has been pursued in recognition of the prominence of the building in the urban skyline. All facades of the development are highly articulated and integrated within the existing building structure. The proposal makes a positive contribution to the further character of the area and sets the standard for other high density mixed-use developments within the locality.
PART 2: DEVELOPING THE CONTROLS	
 2C Building Height Ensure development responds to the desired future scale and character of the street and local area. Ensure adequate daylight and solar access is facilitated to apartments, common open space, adjoining properties and the public domain. 	 The site is subject to a maximum central height of 18 storeys, with perimeter heights of 5 and 2 storeys as stipulated in the SEPP (Major Projects) 2005 Height of Buildings Map. The proposal complies with the 18 storey building height standard for the centre of the site. By retaining the existing building footprint the physical separation of the towers is retained and an 'urban plaza' has been created at ground level. The proposal breaches the 2 and 5 storey height limit across, but does not propose to fully develop the central area of the site that could accommodate 18 storeys. NO CHANGE PROPOSED
 2D Floor Space Ratio Ensure that development aligns with the optimum capacity of the site and the desired density of the local area. 	The site is subject to a maximum floor space ratio (FSR) of 7:1 with a site area of approximately 1,696.5m ² . An additional 10% gross floor area is permissible under the design excellence incentive, allowing an FSR of up to 7.7:1. The development has a total gross floor area of 12, 933m ² which equates to an FSR of 7.65:1. This proposal reflects the opportunity to increase density and maximise area on such a prominent site, setting a precedent for future development in the locality. NO CHANGE PROPOSED
 2E Building Depth Maximum internal plan depth should be 18 metres from glass line to glass line. 	The proposal doesn't comply, due to the reuse of the existing building footprint. Extensive opportunities for glazing and balconies on multiple frontages have been utilised to enhance amenity to individual apartments. NO CHANGE PROPOSED
 2F Building Separation Minimum separation distances for buildings nine storeys and above (over 25m) are: 24 metres between habitable rooms/balconies 18 metres between habitable rooms/balconies and non-habitable rooms 12 metres between non-habitable rooms. 	The proposal doesn't comply, due to the reuse of the existing building footprint. Great efforts have been made to maintain the existing distance between the towers. This distance between the towers is proposed at approximately 12.4 metres. NO CHANGE PROPOSED

 2G Street Setbacks Establish the desired spatial proportions of the street and define the street edge. 	The proposal complies. No street setbacks are stipulated within the legislation relevant to the site. The retention of the existing buildings requires a site specific response, due to the idiosyncratic location and streets to all four sides. The proposal creates a strong urban form that addresses the site's prominent position in the street pattern.
 2H Side and Rear Setbacks Provide access to light, air and outlook for neighbouring properties and future buildings. Retain or create a rhythm or pattern of spaces between buildings that define and add character to the streetscape. 	The proposal complies. By retaining the existing building footprint, there are no proposed changes to the existing spacing between buildings.
Part 3: SITING THE DEVELOPMENT	
 3B Orientation Building types and layouts respond to the streetscape and site while optimising solar access within the development. Overshadowing of neighbouring properties is minimised during mid-winter. 	The proposal complies. The proposed development has been designed to provide maximum amenity to the majority of dwellings, with the majority of units facing North East. 109 out of the 151 apartments in the development (>72%) receive solar access to the living areas and private open spaces for more than 2 hours between the 9am – 3pm in mid-winter. There is very minor overshadowing at 3pm midwinter and equinox from the proposed development, however this is largely cast on the road.
 3C Public Domain Interface Transition between private and public domain is achieved without compromising safety and security. Amenity of the public domain is retained and enhanced. 	The proposal complies. The Public Domain works include additional planting and a proposed awning over the rear laneway, improving the amenity of the site and mitigating the impact of wind. Additional bicycle parking and shaded seating is proposed in areas that are easily accessible and under passive surveillance. The same paving from the rear laneway is proposed for this development, ensuring continuity across the site. Please refer to the landscape plan prepared by Isthmus Landscape Design for more information.
 3D Communal and Public Open Space An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping. Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting. Communal open space is designed to maximise safety. Public open space is responsive to the existing pattern and uses of the neighbourhood. 	The proposal complies. Communal open space has been incorporated into the ground floor pedestrian/retail environment, in addition to the terrace at Level 15 of Tower 1 for exclusive use of the residents. As this space shares a level with apartments, self-surveillance is offered to ensure the communal area is safe and usable. In addition, the terrace helps to provide a buffer and outlook to the west for the top-most units. Public open space is also available within the Public Domain works, providing amenity and an active street frontage for the locality.
3E Deep Soil Zones	
 Provide areas on the site that allow for and support healthy plant and tree growth. Improve residential amenity and promote management of water and air quality. 	Not applicable. Given the urban setting of the site and the level of basement below, the current development does not provide deep soil zones. As the proposed development is contained within the existing building footprint at ground level, this condition will be maintained.

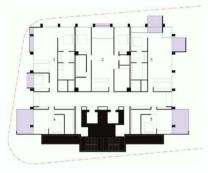
 3F Visual Privacy Minimum required separation distance between habitable rooms and balconies over 9+ storeys is 12m. Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space. 	 The proposal complies. The proposed development has a minimum of 12.4 metres separation between the neighbouring habitable windows of each tower. Full height habitable windows have been located predominately in the north minimising the overlooking of neighbouring units and properties. Aluminium privacy louvres have been introduced between the towers to mitigate effects of overlooking. Planting buffers have also been introduced around both private and communal terraces to assist with visual privacy.
 3G Pedestrian Access and Entries Building entries and pedestrian access connects to and addresses the public domain. Access, entries and pathways are accessible and easy to identify. 	The proposal complies. Each tower contains accessible paths of travel and lift access to all units. Stair and lift access is provided from the basement car park level as well as ramp access to the ground floor of Tower 1. Residential access to Tower 1 from Gibbons Street and Tower 2 from Regent Street is direct yet highly visible. Orientating these entries to the street frontages provides a visual connection between the street and the development.
 3H Vehicle Access Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes. 	The proposal complies. Entry to the basement car parking of the development is proposed off Lawson Square. The entry is well integrated into the design of the proposed north façade and Public Domain works, with minimal disturbance to the street.
 3J Bicycle and Car Parking Parking and facilities are provided for other modes of transport. Car park design and access is safe and secure. Visual and environmental impacts of underground car parking are minimised. 	The proposal complies. 7 on street car spaces of the existing development will be retained. 20 car spaces have been provided in the basement of the proposed development whilst 80 car spaces have been provided in agreement with an adjacent development. Please refer to the Traffic report by Traffix from the original development application for more information. As the proposed car parking facilities are contained within the existing basement, there will be minimal visual and environmental impact. Bicycle spaces are also located within the basement, with additional provisions proposed for the Public Domain works.
Part 4: DESIGNING THE BUILDING	
AMENITY	
 4A Solar and Daylight Access Optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space. Daylight access is maximised where sunlight is limited. Design incorporates shading and glare control, particularly for warmer months. 	The proposal complies. 109 out of 151 apartments (over 72%) receive a minimum of 2 hours of sunlight to the living areas and private open space between 9am and 3pm mid-winter. Blade walls between balconies assist in offering shade and glare control for apartments. The deep recesses and aluminium louvres for glazing along the east and west facades also help to prevent excessive solar gain.
 4B Natural Ventilation All habitable rooms are naturally ventilated. The layout and design of single aspect apartments maximises natural ventilation. The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents. 	The proposal complies. All unit depths range from 7-11 metres, with operable glazing to all habitable rooms offering natural ventilation. Over 60% of the apartments are naturally cross ventilated. More than 25% of kitchens have direct access to natural ventilation.

 4C Ceiling Heights Ceiling height achieves sufficient natural ventilation and daylight access. 	The proposal complies with the 2.7 metre minimum ceiling height requirement.
4D Anastmant Size and Lavaut	The following areas have been provided in the development:
 4D Apartment Size and Layout Minimum internal areas for apartments are: Studio 35m² 1 Bedroom 50m² 2 Bedroom 70m² Maximum habitable room depth is 8m from a window. Bedrooms to have a minimum dimension of 3m. Living rooms to have a minimum dimension of 3.6m (studio/1 bedroom) or 4m (2 bedrooms). 	Unit TypeUnit AreaStudio43 - 53 sqm1 bed50 sqm1 bed + study67 sqm2 bedroom78 - 85 sqm3 bedroom167sqmUnits over 15 meters deep are not provided. All living rooms have a minimum dimension of either 3.6m or 4m.
 4E Private Open Space and Balconies All apartments are required to have primary balconies as follows: Studio 4m² 1 Bedroom 8m² 2m min. depth 2 Bedroom 10m² 2m min. depth Private open space and balconies are appropriately located to enhance liveability for residents. Design is integrated into and contributes to the overall architectural form and detail of the building. Design maximises safety. 	All north-facing apartments are provided with generous balconies. The one-bedroom units at the south of each Tower have been designed without a balcony, as the exposed location is not suitable for usable outdoor space. The north-facing balconies are an essential part of the building's expression. The articulated marble and off-form concrete blade walls transform the existing building's grid-like appearance into a more sensitive and refined composition. These balconies have varying dimensions in order to accommodate the existing building structure and to enable the multi-faceted façade that characterises the design.
 4F Common Circulation and Spaces The maximum number of apartments off a circulation core on a single level is 8. For buildings over 10 storeys, the maximum number of apartments sharing a single lift is 40. Common circulation spaces promote safety and provide for social interaction between residents. 	The proposal complies. There is a maximum of 6 apartments per floor, per tower serviced by a single core. Across both towers 6 lifts service 151 apartments overall. The development provides generous corridor widths and ceiling heights within circulation areas. Natural daylight illuminates these areas through openings at either end. Robust materials have been used within these highly trafficked areas for durability.
 4G Storage In addition to kitchen cupboards and bedroom wardrobes, the following storage is to provided: Studio 4m³ 1 Bedroom 6m³ 2 Bedroom 8m³ 	Storage has been provided inside units.
 4H Acoustic Privacy Noise transfer is minimised through the siting of buildings and building layout. Noise impacts are mitigated within apartments through layout and acoustic treatments. 	The proposal complies. The internal layouts of the apartments, in addition to privacy screening between towers, have been designed to ensure acoustic privacy between apartments and future residential developments. Appropriate use of glazing and materials as outlined in the Acoustic Report prepared by SLR Consulting, achieves the required level of acoustic privacy between apartments and surrounding streets.
4J Noise and Pollution	The proposal complies. Balconies face away from the rail corridor and adjacent residences, protecting them from noise and pollution and enabling visual privacy. Blade walls to the

 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings. Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission. 	northern balconies also assist in offering noise shielding to private open space. Please refer to the Acoustic Report prepared by SLR Consulting for further information.
CONFIGURATION	
 4K Apartment Mix A range of apartment types and sizes is provided to cater for different household types now and into the future. The apartment mix is distributed to suitable locations within the building. 	The proposal complies. The development provides a varied unit mix across different areas of the building. Unit Type Total Units Unit Mix Studio 46 31% 1 bed 51 33% 1 bed + study 3 2% 2 bedroom 49 33% 3 bedroom 2 1%
 4L Ground Floor Apartments Street frontage activity is maximised where ground floor apartments are located. Design of ground floor apartments delivers amenity and safety for residents. 	Not Applicable. The proposal does not provide ground floor apartments.
 4M Facades Building facades provide visual interest along the street while respecting the character of the local area. Building functions are expressed by the façade. 	The proposed facades are of high architectural quality as outlined above in <i>Principle No. 2.</i> A range of robust materials offer durability as well as aesthetic quality. The north façade is highly articulated, expressing the balcony areas beyond and enhancing the development's prominence within the urban skyline.
 4N Roof Design Roof treatments are integrated into the building design and positively respond to the street. Opportunities to use roof space for residential accommodation and open space are maximised. 	The proposal complies. The roof form of the proposed development consists of a flat concrete roof with a parapet. This style of roof is in keeping with the roof structure of the existing building and enhances the overall aesthetic quality of the proposed façade. The Level 15 terrace maximises the roof's potential for usable communal area for residents. The proposed rooftop terrace at Level 18 also maximises opportunities for further residential amenity and open space offered by the development.
 40 Landscape Design Landscape design is viable and sustainable. Landscape design contributes to the streetscape and amenity. 	The proposal complies. The landscaping plan prepared by lsthmus Landscape Design and proposed public domain works offer a lively streetscape through the use of street trees, awnings and shaded seating areas. The proposal seeks to enhance the amenity of the site.
 4P Planting on Structures Plant growth is optimised with appropriate selection and maintenance. Planting on structures contributes to the quality and amenity of communal and public open spaces. 	The proposal complies. The landscape design for the communal open space at Level 15 and the proposed rooftop terrace at Level 18 includes glass reinforced concrete planters on the perimeter. This proposal will provide a high quality roof terrace for the resident's use.
 4Q Universal Design Promote flexible housing for all community members. 	The proposal complies. The number of adaptable apartments is optimised whilst superior pedestrian mobility and access is provided.

• A variety of apartments with adaptable designs are provided.	
 4R Adaptive Reuse New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place. Adapted buildings provide residential amenity while not precluding future adaptive reuse. 	The proposal complies. The scheme involves the conversion of an existing commercial building to a mixed-use development, utilising sturdy and hard wearing quality materials. The proposed facades are highly articulated and integrated within the existing building structure. The proposal makes a positive contribution to the area and acts as a precedent for other developments within the locality.
 4S Mixed Use Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement. Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents. 	The proposal complies. Significant retail area is provided on the ground floor of Tower 1. It sits on a prominent corner of the site and has clear entry and exit points, separate from the residential lobby. The proposed development also offers commercial tenancy over 5 floors of Tower 1, and 3 floors of Tower 2, with flexible floor plans in order to accommodate a variety of occupancies. The residential floors are located on the upper levels of the building, offering enhanced safety and amenity away from street level and the rail corridor.
 4T Awnings and Signage Awnings are well located and complement and integrate with the building design. 	The proposal complies. An awning is proposed along the rear laneway as part of the Public Domain works. This awning will be designed as an extension of the building, not merely an 'add-on'. The proposal will also help to mitigate the impact of wind along the laneway.
PERFORMANCE	
 4U Energy Efficiency Development incorporates passive environmental design. 	The proposal complies as outlined above in <i>Principle No. 6</i> of this report. Natural ventilation and passive solar design is offered for all apartments.
 4V Water Management and Conservation Potable water use is minimised. Flood management systems are integrated into site design. 	The proposal complies. Please refer to the BASIX report prepared by SLR Consulting for further information regarding water efficient fittings and appliances.
 4W Waste Management Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents. Domestic waste is minimised by providing safe and convenient source separation and recycling. 	The proposal complies. The proposal meets the waste generation rates of the local Redfern area as stipulated by City of Sydney. The waste storage facilities are located in the basement, minimising the impact on the streetscape while still being in a convenient area for residents. The use of garbage chutes in the building also offers a safe and convenient method of waste disposal.
 4X Building Maintenance Building design detail provides protection from weathering. Systems and access enable ease of maintenance. Material selection reduces ongoing maintenance costs. 	The proposal complies. Robust materials selected for the façades are low maintenance and will not require re-painting. The use of blade walls along the northern façade and deep recesses on the east and west façades offer protection from the elements for glazed areas beyond.

APPENDIX B: Design Development Option Studies



BLADE WALL TO CANTILEVERS



VIEW FROM CORNER OF LAWSON SQUARE & GIBBONS ST EXISTING



OPTION 1 VIEW FROM CORNER OF LAWSON SQUARE & GIBBONS ST



VIEW FROM CORNER OF LAWSON SQUARE & GIBBONS ST OPTION 3



DESIGN DEVELOPMENT OPTION 01 - 05



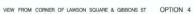
2B APARTMENT TYPE





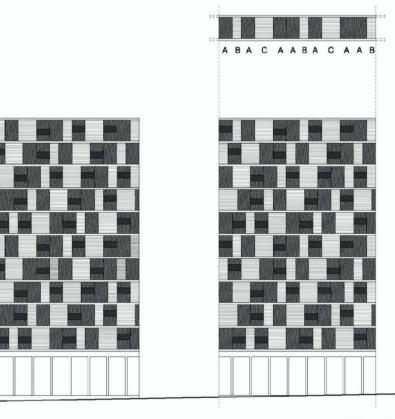
APARTMENT 1 & 4 9AM-5PM WINTER





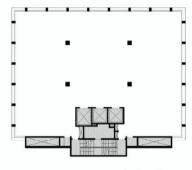
VIEW FROM CORNER OF LAWSON SQUARE & GIBBONS ST OPTION 2

DIRECT SOLAR ACCESS

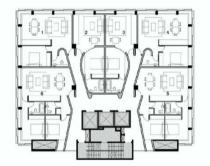




DESIGN DEVELOPMENT OPTION 06



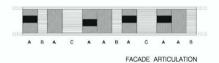
EXISTING FLOOR PLAN



TYPICAL FLOOR PLAN













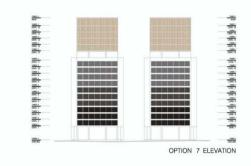


OPTION 8



OPTION 9

DESIGN DEVELOPMENT OPTION 07 - 09



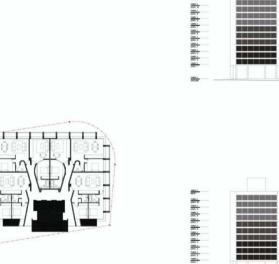
Sector -

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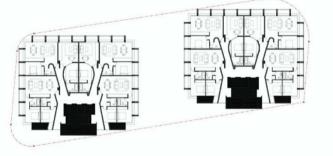
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OPTION 9 ELEVATION

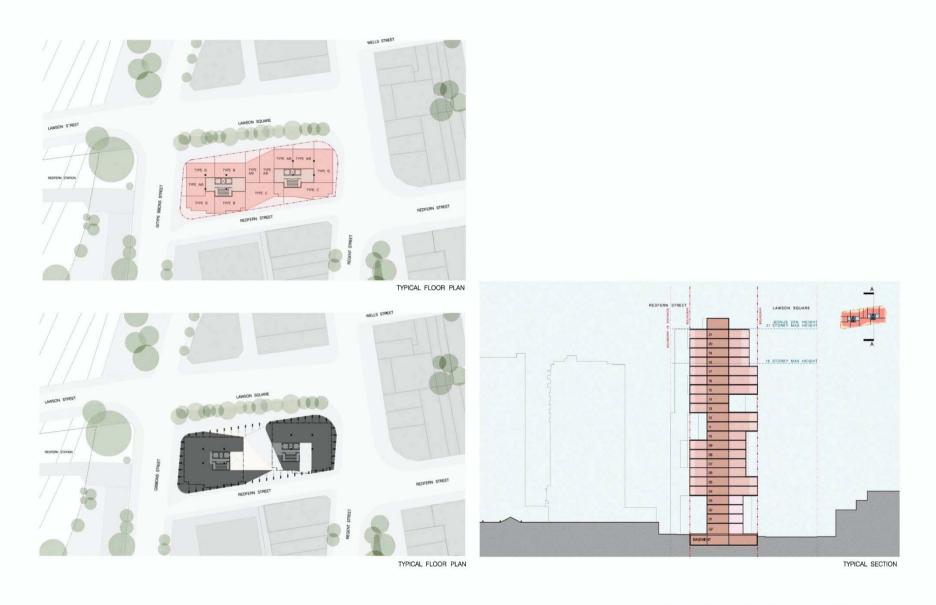
OPTION 8 ELEVATION



1007



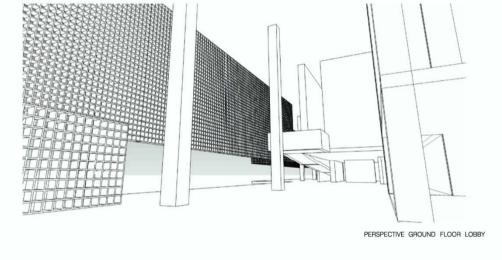


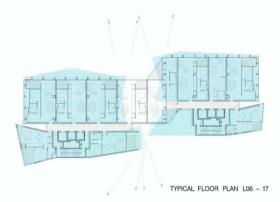


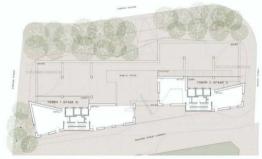


GROUND FLOOR PLAN

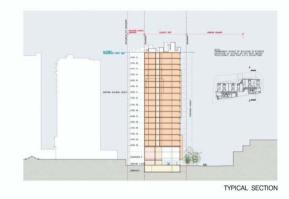




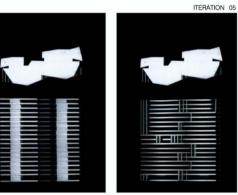




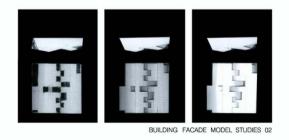
GROUND FLOOR PLAN







BUILDING FACADE MODEL STUDIES 01

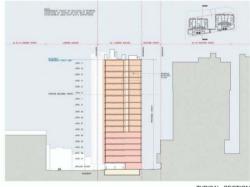




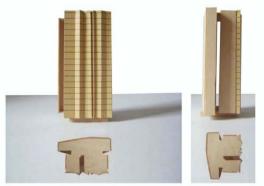
TYPICAL FLOOR PLAN 06 - 07



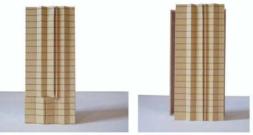
TYPICAL FLOOR PLAN 01 - 05



TYPICAL SECTION



NORTH FACADE MODEL STUDIES 01



NORTH FACADE MODEL STUDIES 02



NORTH FACADE MODEL STUDIES 03