ANTOINE J. SAOUMA
Architect 7412

ASSESSEMENT /COMPLIANCE TABLE
SEPP 65 RESIDENTIAL FLAT DESIGN CODE

10/06/2018

DESIGN VERIFICATION STATEMENT

This statement has been prepared by Antoine J.Saouma registered architect No 7412 with the respect to:

The proposal is for Demolition of existing structures and erection of a 6 storey residential flat building development containing 51 units with associated car parking and landscaping

@ Lots B2 DP 161921
No 1 Station Lane Penrith NSW

In accordance with the requirements of State Environmental Planning Policy No 65, Design Quality of Residential Flat Building I verify that:

a) I directed the design of the proposed residential flat development at the above site.
b) That the design quality principles set out in part 2 of SEPP 65 , Design Quality of Residential Flat are achieved for the above Development.

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Job No 03717 June 2018

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The design quality principles are achieved as described below

Principle 1 : Context and neighbourhood character

Good design responds and contribute to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined.it also includes social economic health and environmental conditions. Responding to context involves identifying the desirable element of an area existing or future character.
Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neibourhood. Consideration of local context is important for all sites including sites in established areas, those undergoing change or identified for change.

The proposal is for a new residential development at the site described as Lots B2 DP 161921
No 1 Station Lane Penrith NSW and is considered to be appropriate. The area is in a state of undergoing transition with low density residential being developed and replaced with medium density residential development.
The proposal is consistent with the desired character of the locality and will not result in any unreasonable impacts on the surrounding properties.
The site is a landlocked site with no right of carriage way or access.
Correspondences with council authorities are underway for the acquisition of a part of the lane way
The development bulk and scale is offset by quality articulation and modulation so as to promote an aesthetically pleasing form when viewed from the street and surrounding properties.
Overall the proposal will nicely integrate into the existing context.

Principle 2 : Built form and 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 buildings purpose in terms of building alignment, proportions, building types, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks including their views and vistas and provides internal amenity and outlook.

The proposed design took into consideration the constraint of the site and design the building to present well to the surrounds.
The street is characterised by existing residential flat buildings 3 storeys and above.
The site is located at the southern side of Union Road.
It is approximately 100m away from the shopping area.
The site is bounded at the eastern side by lot 18 Station Lane, a residential flat building at the western side, station lane at the northern side. Council property at the southern side.
The proposal is a typical design response, with a basement parking and a 6 storey development. The proposal is well articulated and the flat roofing form promotes a well-balanced design.
The building is designed to promote excellent opportunities for passive surveillance over the public and the private domain.

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Principle 3 : Density

Good design achieves a high level of amenity for residents and each apartment resulting in a density appropriate for the site and its context. Appropriate densities are consistent with area existing off or projected population .appropriate densities can be sustained by existing or proposed infrastructure , public transport , access to jobs community facilities and the environment

The proposal complies with the maximum density which is permitted under Penrith City Council Local Environmental Plan 2010 .The density of dwellings and floor space yield proposed is considered appropriate for the site and its location. The area is in state of transition with higher demand for housing. The availability and capacity of local infrastructure, public transport and recreational opportunities supports the density of the proposal. The site is located close to bus stop on Union Road and Station Street.

Principle 4 : Sustainability

Good design combines positive environmental social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.

The proposal provides good opportunities for solar access and cross ventilation.
Each unit floor plate is relatively small and cross ventilated while more than 70% of units receive 2 or more hours a day of direct solar access.
All units have a good size balconies with shade devices on the west and eastern façade.
Insulation will be installed in between units.
The proposal meets the NSW government BASIX requirements for water, energy and thermal efficiency.
The building will be provided with natural gas, dual flush toilet system.

Principle 5: landscape

A landscape design should :

- *Improve the amenity of open space*
- *Contribute to the streetscape character.*
- *Improve the energy efficiency and solar efficiency of the public domain.*
- *Contribute to the sites characteristics.*
- *Contribute to water and stormwater efficiency*
- *Provide a sufficient depth of soil for planting*

Minimise maintenance

The landscape plan proposes the planting of good landscaping species in accordance with council guidance DCP that directs applicants to provide appropriate species that will survive in this hot, dry climate.
The proposal has a significant amount of landscaped amenities .34% =231sqm of the site is deep soil planting.

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Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living and resident's wellbeing. Good amenity combines appropriate room dimensions and shapes, access to sunlight natural ventilation outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degree of mobility.

The internal layout of the units maximise the opportunity for the balconies to be an extension of the living areas trough wide openings. A high level of privacy is ensured .living spaces and open spaces faces north east and west.
The units will access 2 hours of sun daily.
The apartment sizes comply with the ADG.
The privacy is well maintained with privacy louvre proposed on balconies and windows facing the neighbours.
Passive Surveillance is maximise on James and Vaughan street.

Principle 7 : Safety

Good design optimise safety and security within the development and the public domain. It provided for quality public spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive Surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access and well-lit and visible areas that are easily maintained.

The development will be lit throughout with use of low level lighting facilities along pedestrian access points into the building from the street
The basement parking will be lit avoiding dark spots.
One clear entry is proposed to residents.
Car entry is secure and independent from pedestrian

Principle 8: housing diversity and social interaction

Good design achieves a mix of apartment design sizes providoi9ng housing choices for different demographics living needs and household budgets. Well-designed apartment respond to social context by providing housing and facilities to suit the existing and future social mix.

The proposal is for 17 units over 18m high
There is 8x1 bedroom units and 8x2 and 1x3 bedroom units including 2 adaptable units.
A central lobby with a vertical circulation will connect all levels.
The privacy is well addressed.

Principle 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 visual appearance of well-designed apartment responds to the existing or future local context, particularly desirable elements and repetition of the street scape.

The building has been designed in a contemporary style in materials.
A variety of materials, textures are used to create a building with a consistent theme.
The development will provide a positive contribution to the streetscape

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The following guidelines must be read in conjunction with detailed text contained in the apartment design guide

Part 3 : siting the development	.
Objectives	**comment**
3A Site Analysis *Objective 3A-1* *Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relations to the surrounding context*	A site analysis accompany the application
Objective 3B -1 Orientation *Building types and layouts respond to the streetscape while optimising solar access within the development*	The proposed development defines the street by incorporating units with balconies and windows which overlook the street. The front landscaping and fences assist in defining the street and providing a delineation between the public and private domain. The building is designed to optimise solar access.
Objective 3B-2 *Overshadowing of neighbours properties is minimised during mid-winter*	Solar Access to living rooms and private open spaces of neighbors has been considered. The shadowing on the neighbors properties has been minimized in that the development complies with the height and a minimum of 6m setback.
Objective 3C-1 *Transition between private and public domain is achieved compromising safety and security*	Direct street entry is provided to the main building lobby subject to the approval of the right of carriage way
Objective 3C-2 *Amenity to the public domain is retained and enhanced*	Street access and pedestrian path are well defined. The mail boxes are easy to access from the street. Ramping for accessibility is minimized.

3D Communal and public open space *The communal open space has an area equal to 25% of the site.* *Development achieve a minimum of 50% direct sunlight to the principle usable part of the communal space for a minimum of 2 hours between 9am and 3pm mid-winter.* *The communal open space should have a minimum dimension of 3m.*	All ground floor units have a private open space of more than 35sqm. The communal open space is equivalent to 25% of the site area. 166sqm = 25% Private open space for units exceeds 15sqm and proposed balconies are greater than 10sqm. It receives a minimum of 2 hours sunlight for the 50%

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3E Deep soil

Deep soil zones to meet the following minimum requirements

Site area	Minimum dimension	Deep soil % of site
Less than 650sqm	-	7%
650sqm to 1500sqm	3m	
Above 1500sqm	6m	7%

The site is between 650 and 1500sqm
A minimum of 6m is provided
The total deep soil area proposed is equal with 6m width is 31sqm = 34%

3F Visual privacy

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

Building height	Habitable rooms & balconies	Non habitable rooms
Up to 12m (4 storeys)	6m	3m
Up to 25 m (5-8storeys)	9m	4.5
Over 25m (9+storey)	12m	6m

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

A minimum 9m separation setback is provided between windows and n neighbours properties.
Fixed louvres privacy screens are provided for balconies and windows.
Landscape has been used to provide separation between the communal open space and the private spaces.
Balconies are proposed in front of living rooms to increase internal privacy.

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3G Pedestrians access and entries **Objective 3G-1** *Building entries and pedestrian access connects to and addresses the public domain* **Objective 3G-2** *Access , entries and pathways are accessible and easy to identify*	One main central entry is proposed to the building. Private entries to ground floor units to activate the street edge and address the public domain are provided allowing private open spaces to front units facing there street. Entries are clearly defined and identified. All entries are accessible
3H Vehicle access **Objective 3H-1** *Vehicle access points are designed and located to achieve safety , minimize conflicts between pedestrians and cars and create high quality streetscapes*	The car park entry is locate behind the building line and the access driveway is designed to be integrated with the building overall façade with a planter proposed over a part of it. The pedestrian and vehicle access do not intersect and are separate.
3J Bicycle and car parking **Objective 3J-** *For development in the following locations:* • *On sites that are within 800m of a railway station or light rail stop in the Sydney metropolitan area or* • *On land zoned and sites within 400m of land zoned B3 commercial core B4 mixed use or equivalent in a nominated regional centre the minimum car parking requirement for residents and visitors is set out in the guide to traffic generating developments or the car parking requirements prescribed by the relevant council whichever is less* *The car parking needs for a development must be provided off street*	The proposed car parking provision is based on the car parking rates in Penrith City Council Development Control Plan. 12x2beds + 3 x1bed + 2x3 beds x 2 +18/4 visitors = 17 car spaces 2 disable car space are proposed and 1 car wash bay. Secure undercover bicycle racks parking are provided in the ground floor. Common circulation areas are well lit. A visible and defined lobby is provided to lifts and stairs. The car park does not exceed 1m above NGL.
Part 4 designing the building **Objective** **4A Solar and daylight access** *To optimise the number of apartments receiving sunlight to habitable rooms primary windows and private open spaces* *70% of the living rooms and private open space in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter.*	**Comment** More than 70% of the proposed units receive more than 2 hours sun mid-winter between 9am and 3 pm. The proposed development incorporate shading devices such pergolas , balconies external louvre and planting

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A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm mid-winter. **4B Natural ventilation** *At least 60% of apartments are naturally cross ventilated overall depth of a cross over or cross through apartment does not exceed 18m measured glass line to glass line*	More than 60% of proposed apartments are cross ventilated.
4C Ceiling heights **Objective 4C-1** *Measured from finished floor level to finished ceiling level minimum ceiling heights are:* • *Habitable room 2.7m* • *Non habitable room 2.4m* • *2storey apartments 2.7m for main living area and 2.4 for 2nd floor where its area does not exceed 50% of the apartment area*	All habitable rooms in the building have a floor to ceiling height of at least 2.8m.
4D Apartment size and layout **Objective 4D-1** *Apartments are required to have the following minimum internal areas:* • *Studio 35sqm* • *1 bedroom 50sqm* • *2 bedroom 70sqm* • *3 bedroom 90sqm* *A fourth bedroom and further additional bedrooms increase the minimum internal area* *2 bedroom 70sqm by 12sqm each* *Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room .daylight and air may not be borrowed from other rooms.* *Master bedroom have a minimum area of 10sqm and other bedrooms 9sqm excluding ward robes*	All apartment sizes exceed or are equal to the minimum requirement. Refer to architectural floor plans. Every habitable room has an external window with a total minimum glass area of not less than 10%the floor area of the room.

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Bedrooms have a minimum dimension of 3m excluding wardrobe. *Living rooms or combined living /dining rooms have a minimum width of:* *3.6m for studio and 1 bedroom* *4m for 2 and 3 bedrooms* **Objective 4D-2** *Habitable room depths are limited to a maximum of 2.5x the ceiling height.* *In open plan layouts where the living dining and kitchen are combined the maximum habitable room depth is 8m from a window*	Where possible the depth of all habitable rooms are limited to 2.5m x the ceiling heights. In open plan kitchen living and dining are not more than 8m from a window The master bedroom and all other rooms area exceed 10sqm Living rooms width is 3.6m for 1 bedroom units and 4m for 2 bedroom units
4E Private open space and balconies **Objective 4E-1** *All apartments are required to have primary balconies as follows:* • *1 bedroom 8sqm 2mdepth* • *2 bedroom 10sqm 2m depth* • *3 bedroom 12sqm depth 2m* *The minimum depth to be counted as contributing to the balcony area is 1m* *For ground level apartment or on a podium a private open space is provided instead of a balcony. it must have a minimum area of 15sqm and a minimum depth of 3m.*	Primary balconies in the development meet the minimum required size and depth. The ground floor units private open space were proposed at the eastern side exceed 15sqm Primary open space and balconies within the proposal are located adjacent to living areas. The design and details of the balconies avoids opportunities for climbing and falls
4F Common circulation and spaces **Objective 4F-1** *The number of units accessible from a single core Corridor should be limited to eight.* *For building of 10 storeys and over the maximum number of apartments sharing a single lift if 40*	The proposed development provides natural light to each core and associated corridor Maximum of 4 units are accessed from a single level of the common circulation space
4G Storage **Objective 4G-1** *In addition to kitchen cupboards and bedroom wardrobes,* *provide accessible storage facilities at the following rates:* • *Studio apartments: 4m3* • *One bedroom apartments: 6m3*	Dedicated storage are provided for each unit in the basement and within the unit. Basement storage are secure and clearly allocated. Over bonnet storage are proposed in the basement areas 50% of the storage are located within the apartments.

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• *Two bedroom apartments: 8m3* • *Three plus bedroom apartments: 10m3* *At least 50% of the required storage is to be located within the apartment* **4H Acoustic privacy** **Objective 4H1** *Noise transfer is minimised through the siting of building and building layout*	Noisy areas in the building such as corridor are located above each other and quieter areas similar. The party wall will be insulated and treated as per the BCA
4J Noise and pollution **Objective 4J-1** *In noisy or hostile environment the impacts of external noise and pollution are minimised through siting and layout of buildings*	The proposed development is located in a quiet area not within a noisy or hostile environment
4K Apartment mix **Objective 4K-1** *A Range of apartment types and sizes is provided to cater for in different household types now and into the future*	A variety of apartment mix is provided. The proposal is for 8x2 bedroom units and 8x1 bedroom units + 1 x3 bedroom units
4L Ground floor apartments **Objective 4L-1** *Street frontage activity is maximized where ground floor apartments are located*	Ground floor open spaces facing units.
4M Facades **Objective 4M-1** *Building façade provide visual interest along the street while respecting the character of the local area.*	The proposed façade incorporate a varied composition achieved through the use of a material mix of textures and colours.
4N Roof design **Objective 4N-1** *Roof treatment are integrated into the building design and positively respond to the street.*	Service element have been properly integrated within the roof design
4O Landscape design **Objective 4O -1** *Landscape design is viable and sustainable*	A landscape plan prepared by a qualified landscape architect accompany this submission

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4P Planting on structures **Objective 4P-3** *Planting on structures contributes to the quality of communal and public open space*	The proposal includes planting on the podium and provides appropriate soil volume to facilitate plant growth.
4Q Universal design **Objective 4Q-1** *Development achieve a benchmark* **of** *20% of the total apartments incorporating the liveable housing guideline* *A variety of apartment with adaptable Design are provided*	The proposed development achieve a benchmark of 10% of the total units incorporating the liveable housing guideline. 2 units out of 18 are adaptable
4U Energy efficiency **Objective 4U-1** *Development incorporate passive environmental design* *Adequate natural ventilation minimise the need for mechanical ventilation*	Adequate natural light is provided to habitable rooms. Shading devices and roof overhang are proposed. The natural ventilation is optimised
4V Water management and conservation **Objective 4V-1** *Potable water use is minimized* *Urban storm water is treated on site before being discharged to receiving waters*	The development will incorporate water efficient fittings appliances
4W Waste management **Objective 4W-1** *Waste storage facilities are designed to minimise impacts on the streetscape , building entry and amenity of residents*	Adequate storage size for rubbish arte proposed as required by PCC DCP A waste management plan will accompany this submission.