

## Appendix J

### Residential Flat Design Code - Compliance Assessment

The following is an assessment against the relevant provisions of the Residential Flat Design Code.

#### Local Context

- Primary Development Controls

The applicant has outlined that the primary development controls are set out in the approved Concept Plan including Floor Space Ratio (FSR), building heights, building envelopes and building separation.

Compliance against the Concept Plan, including building separation, is discussed under part 6 of the report.

#### Site Design

- Site Analysis

This was addressed under Part 6 Concept Plan considerations of the report. The subject application responds to the identified building footprint.

- Site Configuration

The site configuration, in terms of building footprint, is largely governed by the Concept Plan envelope.

The provision of the forecourt is considered a positive contribution to the site and would assist providing visual surveillance and activity to the existing north-south through site pedestrian link.

The 'rules of thumb' suggest that 25% of the site should be deep soil zone. The development incorporates basement parking with landscaping on top of the podium. The landscaping plan nominates deeper soil zones for actual tree planting. This arrangement is generally consistent with previous stages of the concept plan and given the dense urban environment this is considered acceptable.

The 'rules of thumb' suggest 25% to 30% of the site area should be communal area and that ground level apartments should have 25m<sup>2</sup> of open space. In this regard, the applicant advises:

*'In terms of the "rules of thumb", the RFDC requires that area of communal open space should generally be at least between 25 and 30% of the site area. The Communal Open Space Drawing prepared when the concept plan was amended (**Attachment 6**) shows that the required rule of thumb of 25-30% communal open space is achieved outside the Concept Plan building envelope. Based on the drawing, the communal open space area is 1014m<sup>2</sup>, which represents 28% of the total site area (3619m<sup>2</sup>). The 5 ground floor units in the northern building have a combined private open space area of 164m<sup>2</sup>,*

*reducing the communal open space area across the site to 850m<sup>2</sup>. This results in 23.4% communal open space area being achieved.*

*Notwithstanding this, it is important to view the site in the context of its proximity to surrounding open space and recreational opportunities. The site is adjoined by Fletcher Park on the opposite side of Shortland Esplanade, Pacific Park to the north and King Edward Park to the south. The site is also opposite Newcastle Beach.*

*The “rule of thumb” set out in the RFDC for ground level courtyards is 25m<sup>2</sup> per unit, with a minimum dimension of 4m. Private open space areas for each ground floor apartment are as follows with general depths of 4m from screen wall or garden box to apartment façade:*

*Unit 1 - 28sqm,  
Unit 2 - 33sqm,  
Unit 3 - 33sqm,  
Unit 4 - 28.3sqm,  
Unit 5 - 41.7sqm,’*

The ‘rules of thumb’ indicate a soil depth of 1m for medium trees as proposed. This could be accommodated on the podium and addressed in the required comprehensive landscape plan at Construction Certificate stage.

#### Site Amenity

The ‘rules of thumb’ suggest a crime risk assessment for all residential development over 20 dwellings.

- Safety

The submitted SEE included an analysis against the principles of Crime Protection Through Environmental Design (CPTED). The proposed development is considered acceptable as secure access has been achieved. The design generally provides for surveillance of communal areas and clearly defines public and private areas.

- Privacy

In terms of privacy the ‘rules of thumb’ refer to the building separation distances under primary development controls. Building separation is discussed under Part 6 Concept Plan of the report and is considered acceptable.

#### Site Access

- Building entry

The building entries are readily identified and secure access provided.

- Parking

The building incorporates basement parking thereby minimising impact on the streetscape. Consideration of the small at-grade visitor car parking area is made under Part 6 Concept Plan of the report and is considered acceptable.

- Pedestrian access

The 'rules of thumb' suggest readily identifiable access from street or car parking areas which has been achieved in the amended design.

The 'rules of thumb' require compliance against AS1428 – design for access and mobility. The applicant has submitted a Disability Access Report by Philip Chun in support of the DA. The report considers AS1428 and also the Disability Discrimination Act 1992 with regards to access for persons with a disability. The report concludes:

*'We have assessed the architectural documentation available to date and have reviewed the proposed building works with respect to the Building Code of Australia 2013 and Premises Standard. The design is at a point where the inherent BCA philosophies have been checked and development consent can be sought. The finer details with respect to BCA 2014 compliance can be finalised prior to the issue of a Construction Certificate.'*

Appropriate conditions of consent have been recommended in this regard.

- Vehicle access

The 'rules of thumb' suggest limiting driveway crossings to 6m and located off secondary streets. The Site Design Guidelines have preferred vehicular access from King Street. The development incorporates an access from King Street and two access points off Shortland Esplanade. As outlined in the vehicle access and parking discussion under Part 6 of the report it would be desirable to limit the driveway crossings in Shortland Esplanade to one, however on balance the two crossings can be accepted.

### Building Configuration

- Apartment layout

'Rules of thumb' suggest single aspect apartment should be a maximum depth of 8m, cross over apartments a maximum depth of 15m and minimum width of 4m, and back of kitchen a maximum 8m from a window. The apartments comply with these requirements.

- Balconies

'Rules of thumb' suggest minimum 2m deep balconies and provide a range of preferred balcony areas dependent on unit size, with an absolute minimum of 6m<sup>2</sup>. Given the proximity of the site to Newcastle Beach and public open space opposite if the units can achieve a minimum balcony depth of 2m and minimum area of 6m<sup>2</sup> this would be considered acceptable. The design satisfies this requirement and the provision of private open space for the units is considered acceptable.

- Ceiling heights

The 'rules of thumb' recommend minimum 2.7m ceiling heights.

The plans provide for 3m between residential floors. Allowing for the slab thickness would provide for approximately 2.7m ceilings.

- Storage

The 'rules of thumb' recommend at least 3m<sup>3</sup> storage for each dwelling in addition to kitchen cupboards and wardrobes. The basement car park appears to provide at least 161 storerooms. This has been required as a recommended condition of consent.

### Building Amenity

- Daylight access

The 'rules of thumb' recommend living rooms and open space of at least 70% of apartments receive at least two hours of direct sunlight (allowing for dense urban area) between 9am and 3pm mid winter.

The applicant indicates that:

*'The orientation of the apartments allows the majority of them to maximise the views to the South-East and South overlooking Newcastle Beach, Newcastle Baths and the horizon and to the North, and West across the inner city of Newcastle, Christ Church Cathedral and some apartments with vistas of the harbour.'*

*'There are 161 apartments in the proposed building including approved apartment combinations. All apartments on Levels 7 to 14 facing the eastern beachfront aspect receive 2 hours and greater of direct sunlight, while all apartments from levels 5 to 14 facing the western city aspect receive 2 hours and greater of direct sunlight. 15 apartments between Levels 4 and 6 facing the eastern beachfront aspect also receive 2 hours and greater of direct sunlight. Most of the remaining apartments facing both the eastern beachfront and the western city aspect receive between 1 and 2 hours of direct sunlight. Only 38 apartments from level 1 to part of level 6 receive less than 2 hours of direct sunlight. The subsequent proportion of apartments which receive 2 hours and greater of direct sunlight is 76.4% which is consistent with the 70% requirement set out in the RFDC.'*

Given the coastal location it is only natural that the living areas be orientated to capture ocean views. While this does not always result in the best solar access the visual amenity gained is considered to justify the design. Furthermore orientating balconies to the ocean provides for a more attractive urban form facing Shortland Esplanade. It is noted that the UDCG did not raise any objection to building's solar access.

- Natural ventilation

'Rules of thumb' suggest building depths of 10 to 18m support natural ventilation.

The building has a maximum depth of approximately 17m and is considered acceptable.

The 'rules of thumb' suggest 60% of units should be naturally cross ventilated. Units are considered to have reasonable cross ventilation by virtue of cross-over design, a corner location, or very shallow single aspect. The proposal complies with this requirement.

The 'rules of thumb' suggest 25% of kitchens should have access to natural ventilation. All kitchens have access to natural ventilation. While some kitchens are located deeper in the floor layout they all have reasonable access to natural ventilation and are considered acceptable.

### Building Form

The general building form has been considered Council's UDCG, who found the design to be generally acceptable.