

APPENDIX 5 : INDEPENDENT SEPP 65 REVIEW

**Proposed Mixed Use Redevelopment
6-16 Atchison Street, St Leonards
GENERAL DESIGN COMPLIANCE REVIEW**

Documents reviewed:

SK200-01 19/05/2010 North South Section
SK201 01 25/02/2010 Shadow Study June 21: East and West Elevations
SK201 01/03/2010 Shadow Study June 21: North Elevation
04 Site and Option Analysis (not dated) pages 11-15
12 SEPP65 Compliance Analysis (not dated) (2 pages unnumbered)
PA-110-01 June 2010 Precinct Plan
PA-120-01 June 2010 Site Plan
PA-130-01 June 2010 View Analysis
PA-300-01 – 04 inclusive June 2010 Elevations
PA-400-01 – 06 inclusive June 2010 Typical Residential Plan Types
PA-500-01 – 06 inclusive June 2010 Typical Residential Plan Types

During the process of preparing the proposal I have meet with the architect on two occasions to review the drawings and have provided advice in relation to the compliance of the development with the Residential Flat Design Code (RFDC) referenced in SEPP65.

Review Content

I have been requested to review the following aspects of the proposal:

- ventilation
- sunlight
- apartment layouts (generally)
- apartment areas, and
- building separation.

The review of these aspects has been undertaken in relation to the Rules of Thumb contained in the RFDC. The Rules of Thumb are shown *in italic* below with commentary in

plain text. Dimensions are rounded to the nearest metre. Apartments numbers are taken from the plan drawings.

Ventilation

Building depths, which support natural ventilation typically range from 10 to 18 metres.

The building is 38 metres in length and the apartment level plans consist of two rectangular shapes with their major axis east west, and set slightly apart, joined by a core and translated on the east west axis either side of the core.

As a result of this 15 metres of the building length has a depth of less than 18 metres and conforms to the Rule of Thumb.

Either side of the core are rooms that face east and west and are relatively shallow in depth and therefore clearly well ventilated. Although this part of the building varies from the minimum standards, natural ventilation can be satisfactorily achieved, particularly in relation to the habitable rooms.

The remaining 16 metres of the building length is 27 metres deep; 8 metres of which is contained in the core.

Apartments to the south of the core are less than 7 metres deep. This is a relatively shallow depth and is clearly well ventilated. Although this part of the building varies from the minimum standards, natural ventilation can be satisfactorily achieved, particularly in relation to the habitable rooms.

North of the core at each end of the northern rectangle are corner apartments that are well cross ventilated.

The remaining 12 metres of the building length contains 2 or 3 single aspect apartments. These apartments are 9 metres deep with the habitable rooms located no more than 7 metres from openable windows. This is a relatively shallow depth and is clearly well ventilated. Although this part of the building varies from the minimum standards, natural ventilation can be satisfactorily achieved, particularly in relation to the habitable rooms.

Sixty percent (60%) of residential units should be naturally cross ventilated.

On Type 1A Plan: 6 residential units being all those on the external corners of the plan are naturally cross ventilated.

On Type 1D Plan: 6 residential units being all those on the external corners of the plan are naturally cross ventilated.

On Type 2D Plan 6 residential units being all those on the external corners of the plan are naturally cross ventilated.

On Type 3C Plan 4 residential units being all those on the external corners of the plan are naturally cross ventilated.

On Type 4E Plan 4 residential units being all those on the external corners of the plan are naturally cross ventilated.

In total 138 of the 228 apartments (over 60%) are naturally cross ventilated in conformance with the Rule of Thumb of the RFDC.

Twenty five percent (25%) of kitchens within a development should have access to natural ventilation.

All kitchens within the development have access to natural ventilation.

This exceeds the requirements of the Rule of Thumb of the RFDC.

Sunlight

Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.

The proposal is in a dense urban area and therefore the acceptable minimum is 2 hours.

The information provided does not allow an analysis to distinguish between sun access to living rooms and balconies. Therefore sun access to the face of the building only is considered here.

If the context is ignored than the following sun access is available.

On Type 1A Plan: 9 residential units receive a minimum of two hours direct sunlight between 9 am and 3 pm in mid winter being all those on the north and west part of the plan.

On Type 1D Plan: 8 residential units receive a minimum of two hours direct sunlight between 9 am and 3 pm in mid winter being all those on the north and west part of the plan.

On Type 2D Plan: 8 residential units receive a minimum of two hours direct sunlight between 9 am and 3 pm in mid winter being all those on the north and west part of the plan.

On Type 3C Plan: 5 residential units receive a minimum of two hours direct sunlight between 9 am and 3 pm in mid winter being all those on the north and west part of the plan.

On Type 4E Plan: 4 residential units receive a minimum of two hours direct sunlight between 9 am and 3 pm in mid winter being all those on the north and west part of the plan.

In total 173 of the 228 apartments (over 75%) could receive a minimum of two hours direct sunlight between 9 am and 3 pm in mid winter.

However, the context overshadows 11 of the apartments that could receive sunlight leaving In total 162 of the 228 apartments (over 70%) receiving a minimum of two hours direct sunlight between 9 am and 3 pm in mid winter in conformance with the Rule of Thumb of the RFDC.

Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10 percent of the total units proposed.

There are 14 (6%) single-aspect apartments with a southerly aspect in conformance with the Rule of Thumb of the RFDC.

Apartment layouts (generally) and apartment areas

Single-aspect apartments should be limited in depth to 8 metres from a window.

There are single aspect apartments that are more than 8 metres deep on the northern side of the building. However, the parts of these apartments that are more than 8 metres deep are bathrooms or entry halls. These are non-habitable rooms and therefore the habitable rooms are within 8 metres depth and achieve satisfactory day lighting and natural ventilation.

The back of a kitchen should be no more than 8 metres from a window.

All kitchens are no more than 8 metres from a window.

The width of crossover or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts.

There are no crossover or cross-through apartments.

If council chooses to standardise apartment sizes, a range of sizes that do not exclude affordable housing should be used. As a guide, the Affordable Housing Service suggest the following minimum apartment sizes, which can contribute to housing affordability: (apartment size is only one factor influencing affordability)

1 bedroom apartment 50m²

2 bedroom apartment 70m²

3 bedroom apartment 95m²

All apartments conform to these minimum sizes.

Building separation.

Design and test building separation controls in plan and section.

Test building separation controls for daylight access to buildings and open spaces.

The test used is contained on page 28 of the RFDC being:

For buildings over 25 metres, it is recommended that building separation increase in proportion to building height to ensure appropriate urban form, adequate amenity and privacy for building occupants. Suggested dimensions within a development, for internal courtyards and between adjoining sites are:

24 metres between habitable rooms/balconies

18 metres between habitable rooms/balconies

and non-habitable rooms 12 metres between non-habitable rooms

To the east the northern part of the building is located 6 metres from the eastern boundary. If a principal of equity was applied across the boundary the resultant building separation would be 12 metres. Generally speaking the rooms on this face of the building have another orientation to the north or the south. In order maintain visual privacy the east facing windows on this face should be screened. The screen would need to be designed to allow for sun access where this required.

This condition is similar on the west face of southern part of the building.

To the east the southern part of the building is located 12 metres from the eastern boundary. If a principal of equity was applied across the boundary the resultant building separation would be 24 metres. This condition is similar on the west face of northern part of the building.

This is in conformance with the Rule of Thumb of the RFDC.

To the south is a large scale commercial development and the building separation (although not defined in the RFDC) is considered adequate.

To the north opposite the northern part of the proposal are three commercial buildings. From west to east they are four, three and eight storey commercial buildings.

The lower two buildings to the west are probably lower (RLs of these buildings were not supplied) than the residential floors of the proposal. Therefore their existing setback is not an issue.

For the higher building to the east the following setback criteria has been considered:

For buildings from four storeys/12 metres up to eight storeys/25 metres, it is recommended that building separation increase in proportion to building height to ensure appropriate urban form, adequate amenity and privacy for building occupants. Suggested dimensions within a development, for internal courtyards and between adjoining sites are:

18 metres between habitable rooms/balconies

13 metres between habitable rooms/balconies

and non-habitable rooms 9 metres between non-habitable rooms

The distance between the existing eight storey building and the proposal is around 16.5 metres. This is greater than the 13 metres required between habitable and non-habitable rooms and is therefore considered adequate.

If this building's use was changed to residential in the future then it would be required to be further setback to achieve an 18 metre separation. As the existing commercial building is very deep, narrowing the building if it is converted to residential is considered desirable and therefore the proposed setback is considered reasonable. If additional residential use was placed above the existing height of this building in the future, then it would be required to be further setback to achieve a 24 metre separation. Again, as the existing commercial building is very deep, narrowing the building is considered desirable and therefore the proposed setback is considered reasonable.

SUMMARY

Other than for building separation other aspects examined in relation to the proposal generally conforms to the RFDC. Where the proposal does not strictly comply with the RFDC (building depth) the design has been carefully considered and the objectives of the rule are achieved.

In relation to building separation the proposal does not fully conform to the numerical requirements of the RFDC. Where the required separation is not achieved (to the eastern part of the northern wing and the western part of the southern wing) the addition of carefully designed screening could meet the objectives of the rule.

Yours sincerely,



Peter John Cantrill
Director
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5 July 2010