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330 Church, Parramatta
"Waterfront Apartments"
Solar Access Assessment

Report Number 610.12667-R1

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330 Church, Parramatta

"Waterfront Apartments"

Solar Access Assessment

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DOCUMENT CONTROL

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1 INTRODUCTION

SLR Consulting Australia Pty Ltd (SLR) has been engaged Meriton Apartments Pty Ltd (Meriton) to assess the environmental impact of a proposed new development at 330 Church Street, Parramatta also known as the "Riverfront Apartments" with respect to the natural lighting of the residential apartments.

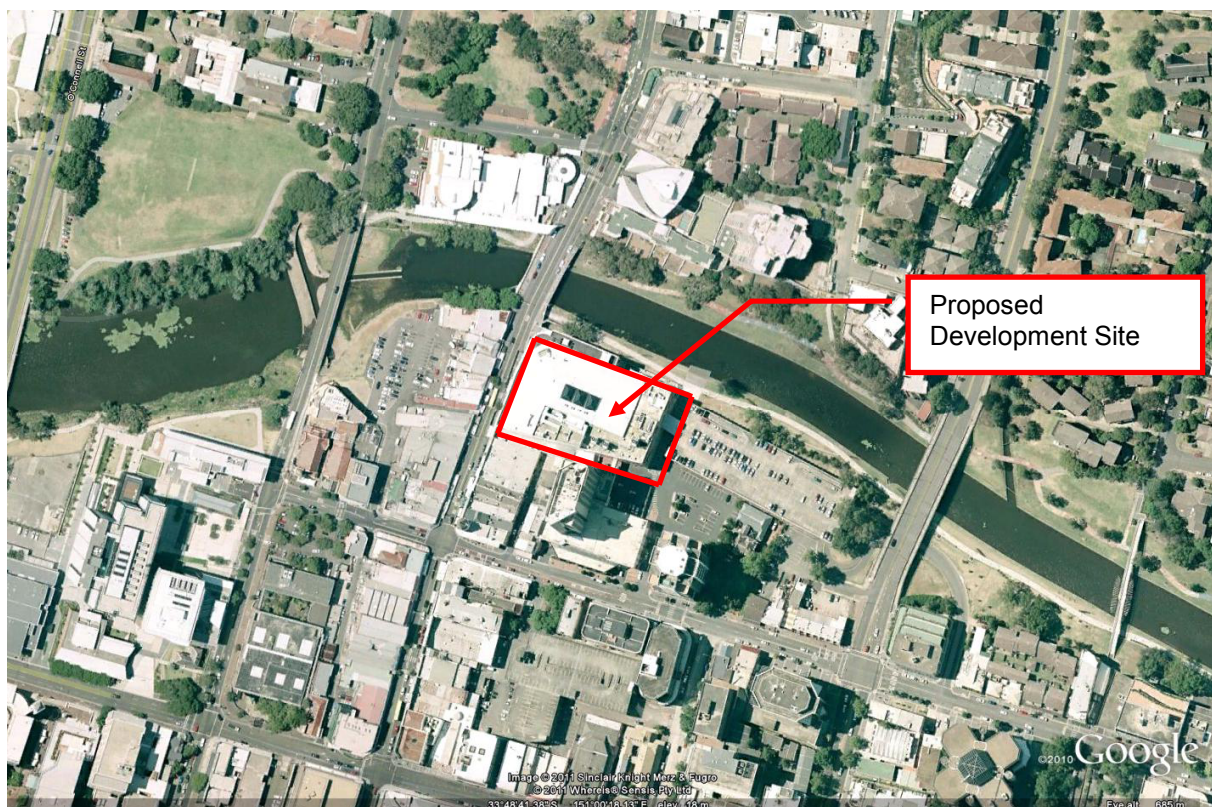
SLR has previously completed a study of the proposed development (dated 17th May 2011) and concluded that 85.3% of the residential apartments would receive at least two hours of direct sunlight between 9:00 am and 3:00 pm and 59.4% would receive at least three hours.

Since then the proposal has changed to include more apartments. There are 16 additional levels in the western residential tower, more apartments in the podium and the eastern serviced apartments tower has also been increased in height.

1.1 Development Site

The site is bounded on the west by Church Street and on the north by the Parramatta River. The surrounding area contains a mixture of low to high rise buildings

Figure 1 Site Location



1.2 Proposed Development Description

The proposed development consists of 378 residential apartments which are accessible from the western core. The other 266 serviced apartments are accessible from the eastern core.

The apartments to be assessed in this study are the 378 residential apartments spaced over 53 floors in the western tower. Levels 1-27 have eight apartments per level, levels 28-33 have seven apartments per level and levels 34-53 have six apartments per level.

2 SOLAR ACCESS TO RESIDENTIAL BUILDINGS

2.1 Day Lighting Considerations

The State Environmental Planning Policy (SEPP) 65 supported by the Residential Flat Design Code - Part 03 Building Design, 'Rules of Thumb' is relevant to the assessment of the daylight access into residential components of the proposed development. The above regulation states that:

Living rooms and private open spaces for at least 70 % in a development should receive a minimum of three hours of direct sunlight between 9.00 am and 3.00 pm in mid-winter. In dense urban areas a minimum of two hours may be acceptable.

Specific interest therefore lies in the solar access through the living areas windows and balconies of the residential apartments of the proposed development during the winter solstice, 21st June, between the hours of 9.00 am and 3.00 pm.

2.2 Solar Access Analysis

Using the latest 3D AutoCAD drawings package, sun's eye view diagrams were generated for each 15 minute interval between 9.00 am and 3.00 pm on the Winter Solstice (21 June) and each apartment was analysed to determine the amount of sunlight reaching the living spaces.

Table 1 Residential Tower (Western) Direct sunlight for June 21st

Level	Number of apartments per level	Number with 3 hours of sunlight	Percentage	Number with 2 hours of sunlight	Percentage
1	8	3	37.5%	7	87.5%
2-27	8	4	50.0%	7	87.5%
28-33	7	2	28.6%	7	100.0%
34-53	6	2	33.3%	6	93.4%
Total	378	159	42.1%	349	92.3%

3 CONCLUSION

SLR has been engaged by Meriton to assess the environmental impact of a proposed new development at 330 Church Street, Parramatta with respect to the natural lighting of the residential apartments.

On the basis of the current Solar Access Analysis of the proposed development SLR has concluded the following:

- The proposed development provides **92.3%** of the residential apartments with at least 2 hours of sunlight on the Winter Solstice, between the hours of 9.00 am to 3.00 pm. This would comply with the suggested rule-of-thumb for solar access in "dense urban areas".