

3 September 2018

218226

Trevor Byles
Executive Director
Harrington Property
3A Macquarie Street
Sydney NSW 2000

Dear Trevor

Solar Access Standards | Fairfield Forum Planning Proposal

We understand that Rothe Lowman has prepared a draft masterplan to support the preparation of a planning proposal for Fairfield Forum. The masterplan has been presented to Fairfield Council, and Harrington Property is now seeking an urban design peer review prior to proceeding with the planning proposal.

To inform that peer review, this letter outlines the key solar access principles that should apply to any future redevelopment of the site, based on the guidance set out in the *Apartment Design Guide* (ADG).

1.0 Notes and assumptions

Design criteria 1 in Objective 4A-1 of the ADG states that in the Sydney Metropolitan Area, a minimum of 2 hours of direct sunlight is the applicable metric. *Fairfield Town Centre DCP 2013* (Town Centre DCP) requires a minimum of 3 hours. A minimum of 2 hours is considered appropriate, given the following:

- Cl. 6A of SEPP 65 states that for solar and daylight access provisions in the ADG, “if a development control plan contains provisions that specify requirements, standards or controls in relation to a matter to which this clause applies, those provisions are of no effect”. The provisions in the ADG therefore override those in the Town Centre DCP.
- Fairfield is a highly urban area and is zoned to become increasingly urban into the future. This is evidenced by the significant amount of R4-zoned land around the site.

It is also noted that the ADG includes detailed criteria around how solar access to living rooms and private open spaces should be measured. Given the proposed development is at planning proposal stage, this level of detail may not be available. Elevational solar access studies should instead be undertaken to determine whether the proposed development is reasonably capable of complying.

2.0 Principles

2.1 Principles for solar access to surrounding areas

2.1.1 Surrounding detached dwellings

1. Living rooms and private open spaces receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on June 21.
2. Where a surrounding property does not achieve the required solar access, the proposed development does not reduce solar access to the property by more than 20%.

Source: *Objectives 3B-2 and 4A-1.*

Notes:

- Solar access to front private open space is considered to be less important than solar access to rear private open space.
- Solar access to living rooms is achieved if a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes in each hour for 2 hours.
- Solar access to private open spaces (i.e. yards) is achieved if direct sunlight to 50% the principal usable part of the private open space is achieved for at least 2 hours.

2.1.2 Surrounding residential flat buildings

1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on June 21.
2. A minimum of 50% direct sunlight to the principal usable part of the communal open space is achieved for a minimum of 2 hours between 9 am and 3 pm on 21 June.
3. Where a surrounding property does not achieve the required solar access, the proposed development does not reduce solar access to the property by more than 20%.

Source: Objectives 3B-2 and 4-A1.

Notes:

- Solar access to living rooms and private open spaces is achieved if a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes in each hour for 2 hours.

2.2 Principles for solar access within the site

1. Across the entire development, living rooms and private open spaces of at least 70% of apartments should be capable of receiving a minimum of 2 hours of direct sunlight between 9 am and 3 pm on June 21.
2. Across the entire development, a maximum of 15% of apartments receive no direct sunlight between 9 am and 3 pm on June 21.
3. At least 50% of public open space should receive at least 2 hours of direct sunlight between 9 am and 3 pm all year round.

Source: Objectives 3D-4 and 4A-1.

Notes:

- Solar access to living rooms and private open spaces is achieved if a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes in each hour for 2 hours.

Yours sincerely,



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From: Sonny Embleton [mailto:Sonnye@cityplan.com.au]
Sent: Wednesday, September 12, 2018 4:45 PM
To: Trevor Byles
Cc: Edward Saulig; AMooney@fairfieldcity.nsw.gov.au; Marcus Rowan; CShinn@fairfieldcity.nsw.gov.au; Helen Deegan
Subject: Fairfield Urban Design Study - Key Site 1 - Fairfield Forum - Peer Review Assessment Criteria

Hi Trevor,

Thank you for the opportunity to review sunlight and overshadowing considerations for an alternative concept for the Fairfield Forum site at Station Street, Fairfield (subject site). This advice is provided in response to your email to Fairfield City Council dated 3 September 2018, which included attached advice from Ethos Urban also dated 3 September 2018.

The subject site is identified as Site 1 in Fairfield City Centre Urban Design Study 2018, which supports the future development of the site to 66 metres and an FSR of 3:1, with an additional landowner led concept proposing development of up to 86m with an FSR of 3.5:1 subject to appropriate justification being provided.

In further developing the Council endorsed in principle scheme, please note that any additional height and FSR to that already identified as suitable within the endorsed Fairfield City Centre Urban Design Study for the subject site would need to ensure that it can be justified in terms of broader strategic planning context and merit. Additional advice in this regard is provided further in this email.

A. **Sunlight and overshadowing considerations**

Ethos Urban Statement	City Plan Response
<p>Design criteria 1 in Objective 4A-1 of the ADG states that in the Sydney Metropolitan Area, a minimum of 2 hours of direct sunlight is the applicable metric. Fairfield Town Centre DCP 2013 (Town Centre DCP) requires a minimum of 3 hours. A minimum of 2 hours is considered appropriate, given the following:</p> <ul style="list-style-type: none">• Cl. 6A of SEPP 65 states that for solar and daylight access provisions in the ADG, "if a development control plan contains provisions that specify requirements,	<p>The DCP does not take precedence over the ADG.</p> <p>The minimum of 2 hours of direct sunlight is supported as an appropriate metric given the subject site's metropolitan city centre location.</p> <p>Note that detached residential fabric south west of the subject site is zoned for high density residential uses to maximum of 20</p>

<p>standards or controls in relation to a matter to which this clause applies, those provisions are of no effect". The provisions in the ADG therefore override those in the Town Centre DCP.</p> <ul style="list-style-type: none"> Fairfield is a highly urban area and is zoned to become increasingly urban into the future. This is evidenced by the significant amount of R4-zoned land around the site 	<p>metres and FSR of 2:1.</p>
<p>It is also noted that the ADG includes detailed criteria around how solar access to living rooms and private open spaces should be measured. Given the proposed development is at planning proposal stage, this level of detail may not be available. Elevational solar access studies should instead be undertaken to determine whether the proposed development is reasonably capable of complying.</p>	<p>Detailed assessment of solar access to living rooms and private open spaces is more suited to the DA rather than planning proposal stage. Indicative/ typical floor plans (i.e 1 per typical massing segment) should be provided to demonstrate that appropriate orientation of apartments can be achieved within the massing configuration proposed. This is not to say that the buildings need to be designed to the level of detail required for a DA but high level floor plate testing is a reasonable expectation at planning proposal stage to demonstrate that compliance with ADG solar access/ orientation requirements are achievable. Apartment mix will not be assessed at PP stage.</p> <p>Elevational solar access studies are supported as a means of demonstrating that each form is reasonably capable of complying with SEPP 65/ ADG at DA stage in terms of solar access of this nature. 'Heat map/ sun hours' mapping would be a useful tool in demonstrating solar analysis and providing high level metrics that can be used to assess whether compliance is achievable.</p>
<p>2.1.1 Surrounding detached dwellings</p>	
<p>1. Living rooms and private open spaces receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on June 21.</p> <p>2. Where a surrounding property does not achieve the required solar access, the proposed development does not reduce solar access to the property by more than 20%.</p> <p>Source: Objectives 3B-2 and 4A-1.</p>	<p>These are appropriate assessment criteria outlined in the ADG.</p>
<p>Notes:</p> <ul style="list-style-type: none"> Solar access to front private open space is 	<p>While rear open space is often the primary outdoor living zone, some consideration may</p>

<p>considered to be less important than solar access to rear private open space.</p> <ul style="list-style-type: none"> Solar access to living rooms is achieved if a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes in each hour for 2 hours. Solar access to private open spaces (i.e. yards) is achieved if direct sunlight to 50% the principal usable part of the private open space is achieved for at least 2 hours. 	<p>be required for dwellings with primary open space at the front of dwelling (if any).</p> <p>It is agreed that solar access to private open spaces (i.e. yards) is achieved if direct sunlight to 50% the principal usable part of the private open space is achieved for at least 2 hours. This is specifically referenced under guiding notes under Objective 3B-2 of the ADG.</p> <p>Note that detached residential fabric south west of the subject site is zoned for high density residential uses to maximum of 20 metres and FSR of 2:1</p>
2.1.2 Surrounding residential flat buildings	
<p>1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on June 21.</p> <p>2. A minimum of 50% direct sunlight to the principal usable part of the communal open space is achieved for a minimum of 2 hours between 9 am and 3 pm on 21 June.</p> <p>3. Where a surrounding property does not achieve the required solar access, the proposed development does not reduce solar access to the property by more than 20%. Source: Objectives 3B-2 and 4-A1.</p>	<p>These are appropriate assessment criteria outlined in the ADG.</p>
<p>Notes:</p> <p>Solar access to living rooms and private open spaces is achieved if a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes in each hour for 2 hours.</p>	<p>Noted. This level of detail should be demonstrated at a later Development Application stage. Detailed design not necessary at PP stage.</p>
2.2 Principles for solar access within the site	
<p>1. Across the entire development, living rooms and private open spaces of at least 70% of apartments should be capable of receiving a minimum of 2 hours of direct sunlight between 9 am and 3 pm on June 21.</p>	<p>This may be demonstrated through 'Heat map/ sun hours' mapping to demonstrate solar analysis and providing metrics that can be used to assess whether compliance is achievable.</p>
<p>2. Across the entire development, a maximum of 15% of apartments receive no direct sunlight between 9 am and 3 pm on June 21.</p>	<p>This may be demonstrated through 'Heat map/ sun hours' mapping to demonstrate solar analysis and providing metrics that can be used to assess whether compliance is achievable.</p>
<p>3. At least 50% of public open space should</p>	<p>This may be demonstrated through 'Heat</p>

<p>receive at least 2 hours of direct sunlight between 9 am and 3 pm all year round. Source: Objectives 3D-4 and 4A-1.</p>	<p>map/ sun hours' mapping to demonstrate solar analysis and providing metrics that can be used to assess whether compliance is achievable.</p> <p>Solar access to public open space both on and off site will need to be considered to demonstrate an appropriate level of impact. At minimum this should include:</p> <p>On site</p> <ol style="list-style-type: none"> 1. 4,000m² park to be provided on the site; 2. New Retail plaza space/ civic square. <p>Off Site</p> <ol style="list-style-type: none"> 3. Thomas Ware Plaza. 4. Plaza at the corner of Station Street and Nelson Street. <p>In terms of items 2, 3 and 4 above sunlight access during peak lunchtime periods 11.30am – 2.30pm should be maximised.</p> <p>In terms of the new park referenced in item 1 above, design consideration can be given to achieve more than the minimum especially given north facing aspect.</p>
<p>Notes:</p> <p>Solar access to living rooms and private open spaces is achieved if a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes in each hour for 2 hours.</p>	<p>Noted. This level of detail should be demonstrated at a later Development Application stage. Detailed design not necessary at PP stage.</p>

B. Other Considerations

Any additional height and FSR to that already identified as suitable within the endorsed Fairfield City Centre Urban Design study for the subject site would need to ensure that it can be justified in terms of broader strategic planning context and merit.

In considering the impact of any potential change in height and FSR for the subject site a PP would also need to ensure it can address issues outlined in the table below.

Should the proponent consider lodgement of a planning proposal for the site, in addition to a well-considered and developed master plan concept, consideration for the following supporting studies should be given:

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Traffic/ Transport/ Car Parking	<ul style="list-style-type: none"> • Traffic generation locally and within the precinct. • Suitability of Access and Egress • Impacts on surrounding traffic network (consideration may be required for cumulative impacts associated with additional development potential of the wider town centre – The scope of the task is broader than if it was a DA and will need to model/consider full scale redevelopment of the whole precinct if it is rezoned and the impacts on the network broadly). • Consideration for car parking requirements and achievability (via the master plan). • Consideration for strategic matters will also be required for sustainable transport, public transport, active transport opportunities (i.e. pedestrian and bicycle movements).
Economics	<ul style="list-style-type: none"> • Any variation to retail floor space currently provided on the site may need to be supported by an economic impacts statement. • Consideration be given to the economic impact of potential dwelling numbers within the context of the town centre particularly in terms of staging and market need.
Flooding/ Drainage	<ul style="list-style-type: none"> • Parts of the site are affected by flooding and overland flow.
Contamination	<ul style="list-style-type: none"> • Minimum Phase 1 contamination assessment should be provided. • Phase 2 may be required following Gateway determination.

We trust the above information will provide a sufficient basis for Harrington Property to progress its planning of the site.

Feel free to contact the undersigned via email (CC Council) if you require any clarifications of the above.

Kind Regards,

Sonny Embleton

Senior Associate | STRATEGY & DEVELOPMENT

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