



Public Works
NSW Water Solutions



Artarmon Public School New Facilities Project

Supplementary Report – DA-2015/431

Prepared for Department of Education

Report No DC16046

May 2016



Education

Artarmon Public School Main Campus

Supplementary Report – DA-2015/431

Prepared for Department of Education

Report No DC16046

May 2016

Pat Timmins

Senior Project manager

Level 5 / 2 Burbank Place

Norwest Business Park

Baulkham Hills NSW 2153

T: 02 9852 0405 M: 0419 252 630

© Crown in right of NSW through the Department of Finance, Services and Innovation 2016

This publication is copyright and may incorporate moral rights of an individual. Other than for the purposes of and subject to the conditions prescribed under the Copyright Act, no part of it may, in any form or by any means, be reproduced, altered, manipulated, stored in a retrieval system or transmitted without prior written consent of the copyright owner or owner of moral rights. Any inquiries relating to consents and use of this publication, including by NSW Government agencies, must be addressed to NSW Water Solutions, NSW Public Works.

While this publication has been formulated with all due care, the State of New South Wales does not warrant or represent that the report is free from errors or omissions, or that it is exhaustive. The State of NSW disclaims, to the extent permitted by law, all warranties, representations or endorsements, express or implied, with regard to this publication including but not limited to, all implied warranties of merchantability, fitness for a particular purpose, or non-infringement. The State of NSW further does not warrant or accept any liability in relation to the quality or accuracy of this publication and no responsibility is accepted by the State of NSW for the accuracy, currency, reliability and correctness of any information in this publication provided by the client or third parties.

1. Introduction

This Supplementary Report has been prepared as a consequence of the verbal notice from the Joint Regional Planning Panel (JRPP) on 14 April 2016 related to the Artarmon Public School – Main Campus proposed development.

The development seeks approval for demolition and construction of new school buildings at Artarmon Public School, located at McMillan Rd, Artarmon, NSW 2064 (Lot 250, 394, 395, 396, 723, 724, 725, 726 and 727 on DP752067, Lot A and B on DP318869, Lot 1 DP257474 and Lot 1 DP88143).

JRPP Notice of Further Information requirement

The JRPP decision is as follows:

1. The Panel defers the determination of the application in order to receive additional information on the application
2. The Panel requests that the applicant supply a comparison between the shadow cast on the eastern living room window of Townhouse 2 at 3 Barton Road by a building of 9m high complying with the setbacks required by the Willoughby DCP 2006 and the shadow cast by the proposal. In order for the Panel to have power to approve the variation of the building height from 9m to 13.6m the Panel must be satisfied that the proposed building does not cast additional shadow on the above building to that cast by a building complying with the controls applying in the zone. (The Panel is aware that under SEPP (Infrastructure) 2007 a complying building would be 12m high, 6m from the boundaries but the building proposed in this application is 13.6m high and therefore not complying.)
3. The Panel notes that the applicant objects to condition 2 requiring a contribution under s94A. The Panel does not have the power to impose that condition without the Minister's agreement. Given that the application is for a school, the Panel is not inclined to seek that agreement. Condition 2 is therefore deleted.
4. The applicant should also demonstrate that the proposed acoustic wall does not cast any shadow on the above window beyond that cast by the proposed building.
5. Following the submission of the above information to Council, the Panel requests the assessment officer to provide a supplementary report which evaluates this information. Following the receipt of the supplementary report, the Panel will determine the application by electronic means, unless the Chair or a Panel Member believes that a public meeting is necessary.
6. The Panel notes the discussion that took place in the meeting regarding the overshadowing of the above window. Irrespective of the result of the comparison in paragraph 2, the Panel expects the applicant to reduce the impact on the above window to the maximum extent possible.

Each of these decision matters will be discussed below.

2. Supplementary Information

2.1. The Panel defers the determination of the application in order to receive additional information on the application

Comment

Noted

2.2. The Panel requests that the applicant supply a comparison between the shadow cast on the eastern living room window of Townhouse 2 at 3 Barton Road by a building of 9m high complying with the setbacks required by the Willoughby DCP 2006 and the shadow cast by the proposal. In order for the Panel to have power to approve the variation of the building height from 9m to 13.6m the Panel must be satisfied that the proposed building does not cast additional shadow on the above building to that cast by a building complying with the controls applying in the zone. (The Panel is aware that under SEPP (Infrastructure) 2007 a complying building would be 12m high, 6m from the boundaries but the building proposed in this application is 13.6m high and therefore not complying).

Comment

The Government Architects Office (GAO) have prepared a number of Shadow Studies as a consequence of the JRPP's decision.

The following table provides an analysis of each of the Shadow Studies provided.

Table 1

Shadow Study No.	Specifications	Form	Result
1	DCP compliant – 9 metre high building with a ground level @ RL 90.50, setback 5.4M from the western boundary	Form = The building form is based on a block modelled on the buildings current plan footprint with a flat roof, placed at the ground line average of RL 90.50.	Neighbours Living room receives light from Noon to 2.00 pm = 2 hours.
2	ISEP compliant – 12 metre high building with a ground level @ RL 90.50, setback 6.0 M from the western boundary.	Form = The building form is based on a block modelled on the buildings current plan footprint with a flat roof, placed at the ground line average of RL 90.50.	Neighbours Living room receives light from 12.30 pm to 2.00 pm = 1.5 hours

3	Current Design with no modifications – Ground Floor @ RL 92.00, setback 6.9M from the western boundary.	The building's current plan footprint and matches the DA submission	Neighbours Living room receives light from Noon to 2pm = 2 hours. (Matching Study 1 DCP performance)
4	Current Boundary Fence design only, along the western boundary, with the new building design turned off.	The current unmodified design along the new laneway boundary from Barton Road.	Neighbours Living room receives light from 11.00 am to 2.00 pm = 3 hours. (Matching impact with Study 5 – After applying modifications listed)
5	Current Design modification V1 – Basic Floor Plan unchanged – Metal clad Roof cut back 1 metre, over stair 1 & walkway.	Modification = The current plan with a cut back roof line of 1 metre over access Stair 1 and walkway. Roof sheeting is solid metal cladding.	Neighbours Living room receives light from 11.30 am to 2pm = 2.5 hours.
6	Current Design modification V2 – Basic Floor Plan unchanged - Metal clad Roof cut back 1 metre and Glass roof added over stair & walkway	Modification = The current plan with a cut back roof line of 1 metre over access Stair 1 and walkway. Roof sheeting is clear glass with an 80% translucence.	Neighbours Living room receives light from 11am to 2pm = 3 hours. The neighbours Living Room window will receive the maximum possible daylight, which when added to the other indicative's listed in the revised SEE is 50% more than required by the DCP in Shadow Study 1.

- 2.3. The Panel notes that the applicant objects to condition 2 requiring a contribution under s94A. The Panel does not have the power to impose that condition without the Minister's agreement. Given that the application is for a school, the Panel is not inclined to seek that agreement. Condition 2 is therefore deleted.**

Comment

Noted

2.4. The applicant should also demonstrate that the proposed acoustic wall does not cast any shadow on the above window beyond that cast by the proposed building

Comment

Current boundary fence design

Please refer to shadows study 4 as this address the issue. This study models the current boundary fence design only, along the western boundary, with the current building design turned off. The result is the neighbours Living room receives light from 11.00 am to 2.00 pm = 3 hours. Therefore this matches the impact of Study 6 above with both the roof sheeting and roof overhang modifications listed in Table 1.

Amended boundary fence design

As a result of discussions at the JRPP meeting and Council, we have now amended the current boundary fence design to reduce the physical impact of the fence at the boundary. See attached plans (L102, L501, L752 and L762).

Please refer to side Section No 04 on plan L501. This section/elevation shows the lower planter starting from our southern boundary and stopping 17 metres to the north.

The neighbouring property will still have its existing 1.8 metre high timber screen boundary fence in place and benefit from the new 2 metre wide (easement) walkway space made possible by DoE from the balance of space available from the existing laneway. And now also the lowered planter alongside the school access stair to Barton Road. This will substantially deduce the current designs physical impact at the boundary, while still maintaining privacy, both from and into the school.

2.5. Following the submission of the above information to Council, the Panel requests the assessment officer to provide a supplementary report which evaluates this information. Following the receipt of the supplementary report, the Panel will determine the application by electronic means, unless the Chair or a Panel Member believes that a public meeting is necessary

Comment

The Applicant has met with Council on Friday 22 April 2016. This Supplementary Report is the result of the outcomes of that meeting.

2.6. The Panel notes the discussion that took place in the meeting regarding the overshadowing of the above window. Irrespective of the result of the comparison in paragraph 2, the Panel expects the applicant to reduce the impact on the above window to the maximum extent possible

Comment

Response:

1. Prior to the owner of unit 2/3 Barton Road lodging their initial objection during the notification period with Willoughby Council the following amendments were made to the design to ensure that the overshadowing impact on the eastern facing window of 2/3 Barton Road.
 - The design has already taken into consideration the overshadowing impact on the eastern facing window of 2/3 Barton Road by setting western wall of the Classroom Block 11.5 metres off the side boundary and setting the western required stair 6.9 metres off the existing boundary. The allowable setback for a 3 storey building under the WDCP 2006 is 5.4metres.
 - The roof of the western access and egress stair was been attenuated to minimise the impact on the eastern window of 2/3 Barton Road.
2. Since the owner of unit 2/3 Barton Road lodged their initial objection with Willoughby Council during the notification period, the following further amendment was made to the design in response to their objection:
 - The height of the building was reduced by 350 mm to improve the solar access to the Eastern window of 2/3 Barton Road.
3. Since the owner of unit 2/3 Barton Road lodged a further objection with Willoughby Council and appeared at the JRPP planning Panel meeting for DA 2015/431 we have now provided the following further amendments to the design:
 - The roof above the stair over the Western access / egress stair and walkway has been changed from colorbond metal roofing to a glazed roof light. This clear glass translucent material has improved the amount of daylight that the eastern facing window of 2/3 Barton Road by 60 minutes, which is 50 % more than the DCP requirement, would provide.
 - Also the roof to the stair over the Western access / egress stair has been reduced in length at the northern end by 1.0m, further improving the solar access to the Eastern window of 2/3 Barton Road.

The applicant would like to draw the panels attention to above measures taken, not only following the further objection on 13-04-2016 but also after the initial objection during the notification period and prior to that during the design process.

The amendments we have just made provide a 50% improvement over the DCP compliant design. The amendment as provided in Table 1 (6) provides an 80% translucent glazed roofing material in lieu of solid colourbond material over the Western access / egress stair and walkway. The roof over has also been reduced in length from the northern end by 1.0m, further improving the solar access to the Eastern window of 2/3 Barton Road.

4. Further Design Issues Considered

4.1 West Elevation –Homebase - Lift Core - Shadow Impact

We have considered changing the location of the lift core, however have concluded that changing its location will not make an impact.

The shadows cast by the lift Core have no impact on the neighbour. Falling well away and to the south of the subject window before 10 am.

4.2 West Elevation - Homebase – Stair 1 orientation - Shadow Impact

We have considered changing the orientation of the stairs, however have concluded that changing their orientation will not make an impact.

Changing the stair orientation had been addressed in November 2015, in response to council and was modified then to reduce overshadowing & other impacts perceived by the neighbour. Therefore the impact of these stair flights has already been considered. The shadows cast do not impact the neighbour as they fall away from the subject window and within the main building footprint before 10 am.

4.3 Home Base building – Additional height above DCP & ISEP - Shadow Impact

We have considered addressing the additional height of the Gallery Skylight and if it has an impact on the neighbouring window.

The shadows cast by the Gallery Skylight at the centre of the roof line, fall onto the lower skillion roof over the western stair and walkway. The shadows cast do not impact the neighbour as they fall away from the subject window and within the main building footprint before 10 am.