



ST ALOYSIUS' COLLEGE

SOLAR ANALYSIS REPORT
FEB 2018

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planning. design. place



Title: St Aloysius' College Solar Analysis
Prepared for: St Aloysius' College
Reference: BLO STA
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INTRODUCTION AND FINDINGS

RobertsDay has been engaged by St Aloysius' College to carry out Solar Analysis for the Upper Pitt Street component of the St Aloysius' College Refurbishment project, Plan Magis.

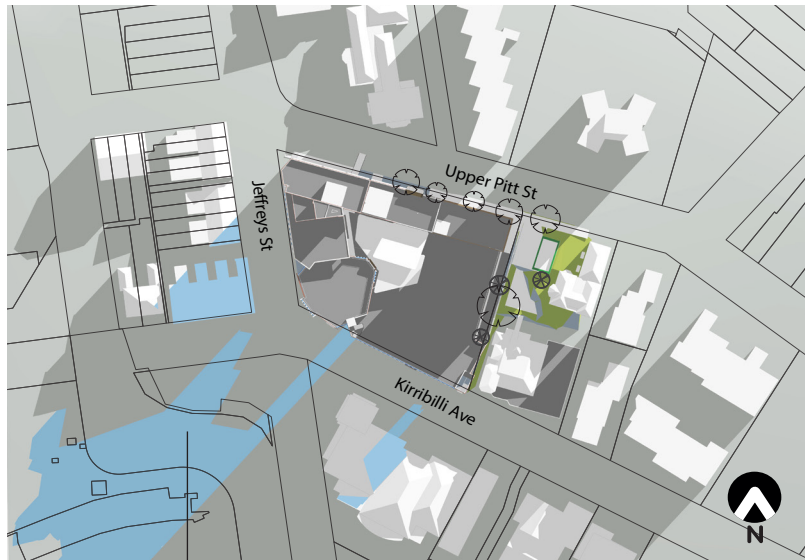
The following shadow diagrams analyse the shadowing impacts caused by the proposed development on Upper Pitt Street. In general, the built form envelope forms a setback, allowing sunlight to reach adjoining properties.

The diagrams on page 2 and 3 highlight the ground floor plane that is impacted by the whole property including the proposed additional elements in BLUE. These diagrams show changes in shadows at hour intervals on the winter solstice (June 21). Shadows are predominantly existing shadows in the morning and in the afternoon, the additional elements do not adversely impact the adjoining buildings along Kirribilli Avenue. The shadow diagrams show that there is very little impact on existing private and public open space and it is balanced throughout the day.

On page 4-6, the diagrams compare changes in shadows between the existing situation and the proposal in residential building on 208/88 Kirribilli Avenue NSW 2061. Although there is some overshadowing on upper windows between the hours of 1pm and 3pm, these windows still receive minimum 2 hours of direct sunlight on the winter solstice.

Overall, the solar analysis of the proposal reveals that shadows are predominantly existing in the morning. The afternoon overshadowing caused by proposed additional elements is also little, and the affected windows in the residential building on 208/88 Kirribilli Avenue remain fully compliant with the Apartment Design Guide (ADG) direct sunlight requirement.

PROPOSED SHADOWS



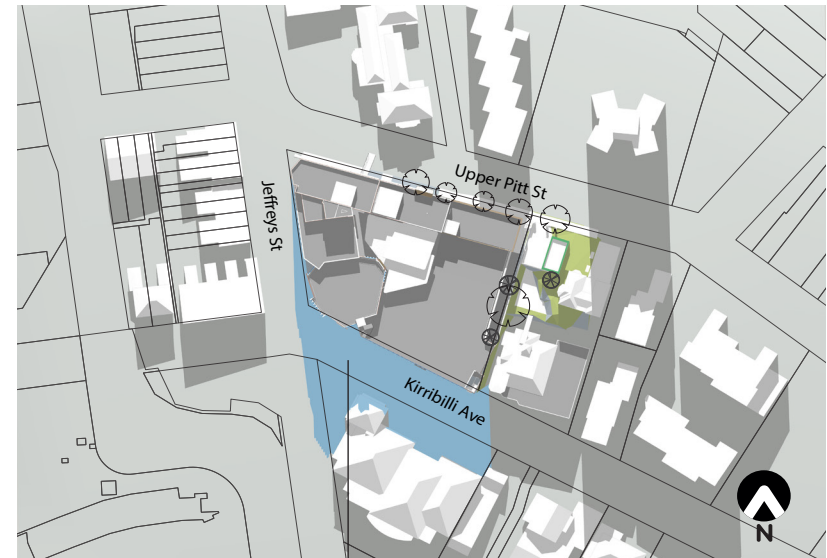
9 AM 21 JUNE | Predominantly existing shadows



10 AM 21 JUNE | Predominantly existing shadows

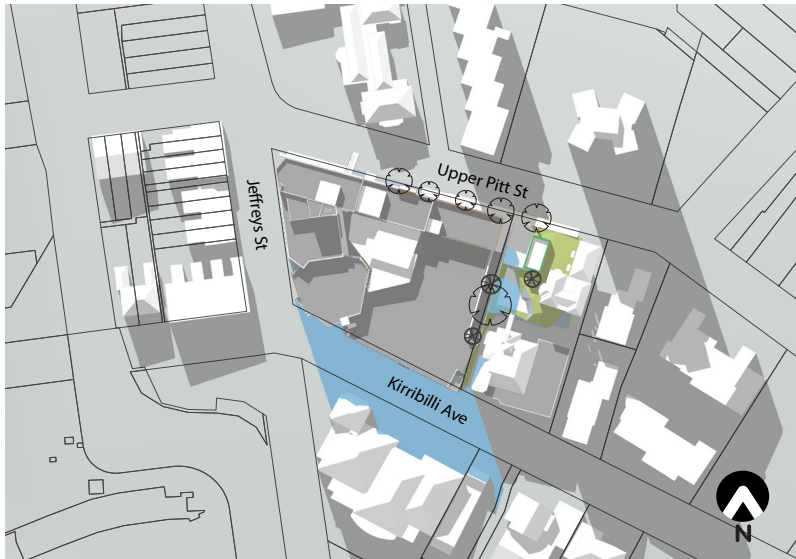


11 AM 21 JUNE | Predominantly existing shadows



12 PM 21 JUNE | Predominantly existing shadows

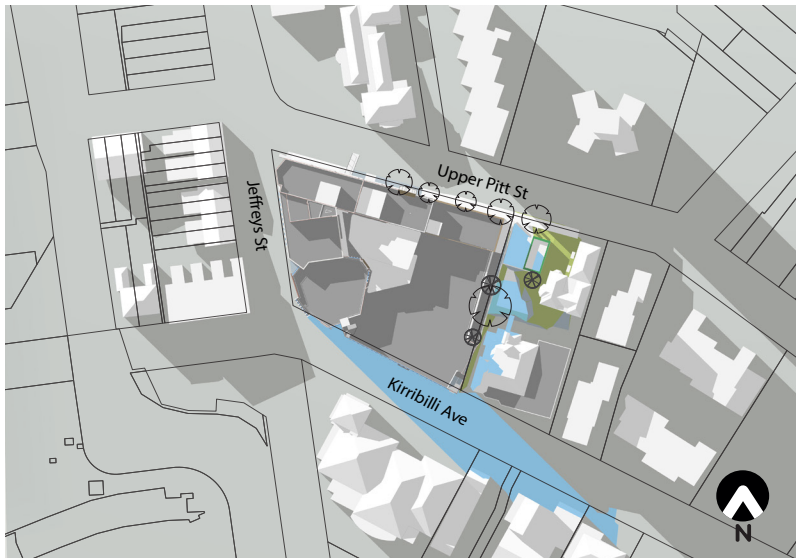
PROPOSED SHADOWS



1 PM 21 JUNE

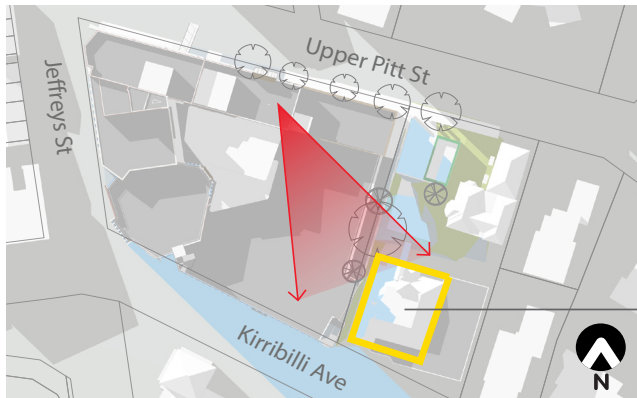


2 PM 21 JUNE



3 PM 21 JUNE

POSSIBLE SHADOWS IMPACT ANALYSIS



Studied building (208/88 Kirribilli Avenue NSW 2061)

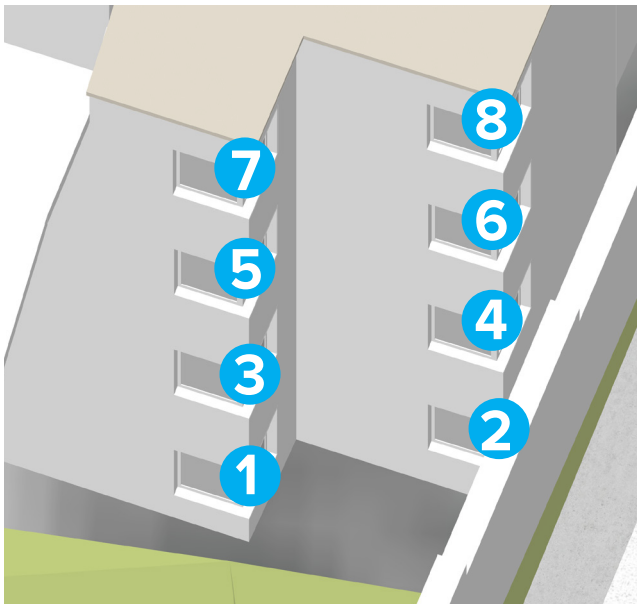


Table of windows with possible impact:

Window N°	Existing direct sunlight (hr) 9am-3pm	Proposed direct sunlight (hr) 9am-3pm	Lost hours
1	0h	0h	N/A
2	0h	0h	N/A
3	0h	0h	N/A
4	1h (10:30am-11:30am)	1h (10:30am-11:30am)	N/A
5	4h (9:30am-1:30pm)	3h (9:30am-12:30pm)	1h
6	3h (9am-12pm)	3h (9am-12pm)	N/A
7	5.5h (9:30am-3pm)	3.5h (9:30am-1pm)	2h
8	5h (9am-2pm)	3h (9am-12pm)	2h

Summary of Findings

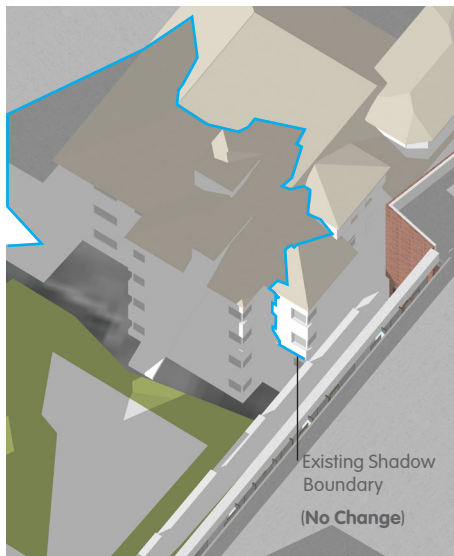
The proposal will not affect the existing situation for windows 1, 2, 3, 4 and 6. For windows 5, 7 and 8, the proposed amount of direct sunlight remains fully compliant with the Apartment Design Guide (ADG) which requires minimum 2 hours direct sunlight between 9am and 3pm at mid-winter.

POSSIBLE SHADOWS IMPACT ANALYSIS



9 AM 21 JUNE

EXISTING

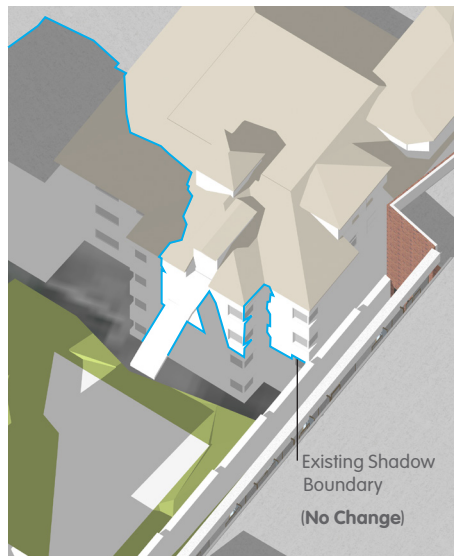


PROPOSED



10 AM 21 JUNE

EXISTING



PROPOSED



11 AM 21 JUNE

EXISTING

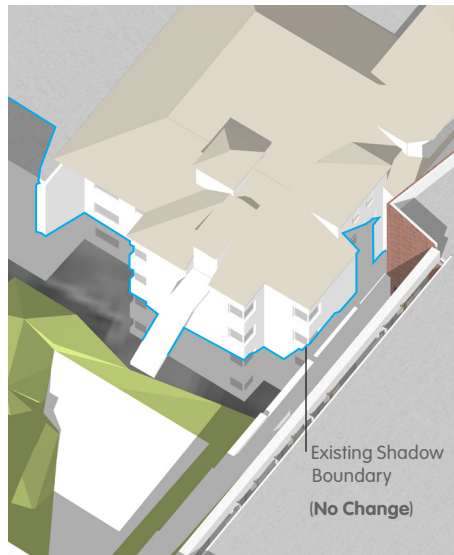


PROPOSED



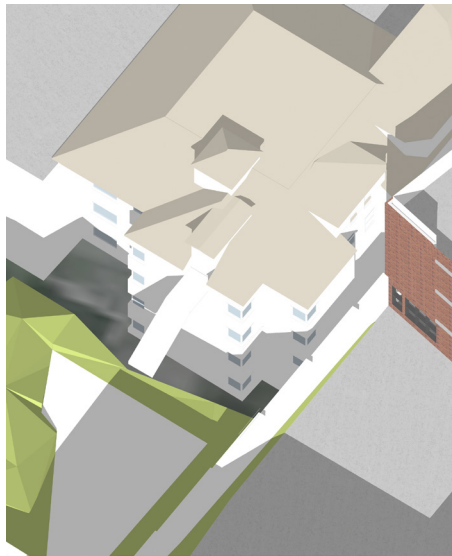
12 PM 21 JUNE

EXISTING



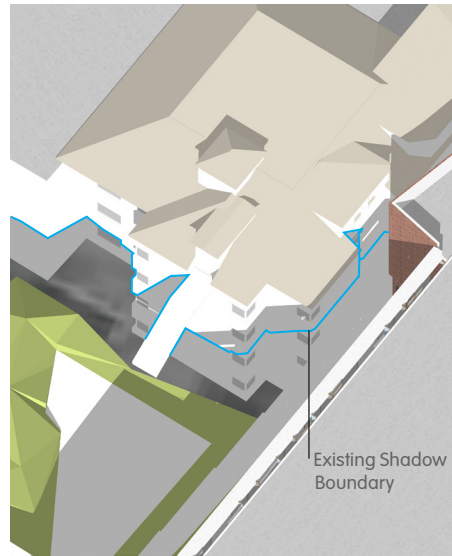
PROPOSED

POSSIBLE SHADOWS IMPACT ANALYSIS



1 PM 21 JUNE

EXISTING

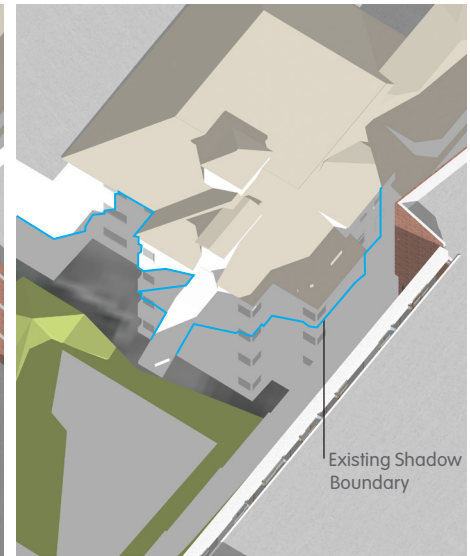


PROPOSED



2 PM 21 JUNE

EXISTING



PROPOSED



3 PM 21 JUNE

EXISTING



PROPOSED

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