



9 AM



10 AM



11 AM



12 PM



1 PM



2 PM



3 PM

SHADOW ANALYSIS - 21 June

LEGEND:

	SITE BOUNDARY
	4.5 m SETBACK
	4 m REAR SETBACK IN REVERSED DWELLING ARRANGEMENT
	ZONE FOR PRINCIPAL PRIVATE OPEN SPACE
	MIN. PRINCIPAL PRIVATE OPEN SPACE AREA

AMMENDMENTS				LEGEND
REV	BY	DATE	DESCRIPTION	

STRUCTURAL CIVIL
NORTHROP ENGINEERS
(02) 9241 4188
MECHANICAL ELECTRICAL
STEENSEN VARMING
(02) 9987 2200
HYDRAULIC
WOOLACOTT
(02) 8241 9900
FIRE
MCD FIRE ENGINEERING
(04) 2382 2745

PERUMAL PEDAVOLI ARCHITECTS
T: 02 9291 0000
WEB: www.pp-a.com.au
Nominated Architect:
Vince Pedavoli NSW reg No 5045
LANDSCAPE ARCHITECT
TAYLOR BRAMMER LANDS. ARCH.
(02) 9387 8855

CATHERINE FIELD PS
O'KEEFE DRIVE, ORAN PARK, NSW, 2570
NEW HIGH QUALITY CLASSROOMS PACKAGE 2
DRAWING NAME
SHADOW ANALYSIS - OPTION 1

PROJECT NORTH



SCALE As indicated @ A1				
DRAWN	CHECKED	VERIFIED	DATE	
Author	Checker	Approver	01 APRIL 2020	
DRAWING NUMBER				
REVISION				
PROJECT CODE	SCH. REF.	DISC.	TYPE	SERIES#
NHQC2 - LP - AR - DWG - SH_001				

1/04/2020 4:39:14 PM

DETAIL DESIGN

Catherine Field PS - Principal Private Open Space Shadow Analysis (June 21st 9.00am to 3.00pm)

Time Interval (hour)

Lot Number	9.00am	9.15am	9.30am	9.45am	10.00am	10.15am	10.30am	10.45am	11.00am	11.15am	11.30am	11.45am	12.00pm	12.15pm	12.30pm	12.45pm	1.00pm	1.15pm	1.30pm	1.45pm	2.00pm	2.15pm	2.30pm	2.45pm	3.00pm	50% solar access achieved
Lot 68																										6 h
Lot 69																										6 h
Lot 70																										5 h 45 min
Lot 71																										5 h 30 min
Lot 72																										5 h 30 min
Lot 73																										5 h 30 min
Lot 74																										5h
Lot 75																										4h 30min
Lot 76																										4h 30min
Lot 77																										3 h 45 min
Lot 78																										3 h 30 min
Lot 79*																										3 h 15 min
Lot 80*																										3 h 30 min
Lot 81																										3 h 30 min
Lot 82																										4 h
Lot 83																										5 h
Lot 84																										5 h 30 min
Lot 85																										5 h 45 min
Lot 86																										6 h
Lot 87																										6 h

Legend:

- Achieves sunlight to 50% of principal private open space area
- Does not achieves sunlight to 50% of principal private open space area

Notes:

1. Principal private open space size: 16 m2 for 7-9m wide lots, 20 m2 to lots wider than 9 m
2. Principal private open space located in the worst case shadow scenario
3. Buildings are shown with 4.5 m setback as per received CAD file.
4. Solar Access DCP requirement "In density areas $\leq 20dw/Ha$: At least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) to 50% of the required PPOS of both the proposed development and the neighbouring properties." (REF: Camden Growth Centre Precincts Development Control Plan. Table 4-3 p82)
5. * Principal private open spaces for lots 79 and 80 are located 500mm off the northern boundary.
6. ** Can be improved by moving principal private open space 500 m off the northern boundary as per lots 79 and 80

Catherine Field PS - Shadowing on Dwelling Analysis (June 21st 9.00am to 3.00pm)

Time Interval (hour)

Lot Number	9.00am	10.00am	11.00am	12.00pm	1.00pm	2.00pm	3.00pm	Min. solar access to 4m building line (hours)
Lot 68								6
Lot 69								5
Lot 70								5
Lot 71								5
Lot 72								5
Lot 73								5
Lot 74								5
Lot 75								4
Lot 76								4
Lot 77								4
Lot 78								3
Lot 79								3
Lot 80								4
Lot 81								4
Lot 82								4
Lot 83								4
Lot 84								5
Lot 85								5
Lot 86								6
Lot 87								6

Legend:

- Hours with solar access to whole of northern building setback (4m)
- Hours with less than 100% solar access to whole of northern building setback (4m)

Notes:

1. Northern building setback 4m metres off boundary to analyse worse case scenario.
(minimum rear setback as per Camden Growth Centre Precincts DCP Table 4-3)