

RECEIVED
Waverley Council

Application No: DA-482/2017/B

Date Received: 12/07/2023

- NOTES
- 1 All dimensions to be verified on site.
 - 2 Report any discrepancies or omissions to SDs prior to construction.
 - 3 Refer to architect for ambiguous details or when clarification is required.
 - 4 All drawings to be read in conjunction with specification.
 - 5 All drawings to be read in conjunction with consultants' drawings.
 - 6 All structure to structural engineer's details.

PRELIMINARY
NOT FOR CONSTRUCTION

ISSUE	REASON	DATE
A	SHADOW STUDY	01.06.23



1 SUN VIEW 0900



2 SUN VIEW 1000



3 SUN VIEW 1100



4 SUN VIEW 1200



5 SUN VIEW 1300



6 SUN VIEW 1400



7 SUN VIEW 1500



8 SUN VIEW 1600
NOT INCLUDED IN SOLAR STUDY

- NOTES
- 1 All dimensions to be verified on site.
 - 2 Report any discrepancies or omissions to SDS prior to construction.
 - 3 Refer to architect for ambiguous details or when clarification is required.
 - 4 All drawings to be read in conjunction with specification.
 - 5 All drawings to be read in conjunction with consultants' drawings.
 - 6 All structure to structural engineer's details.

PRELIMINARY

NOT FOR CONSTRUCTION

ISSUE A REASON SHADOW STUDY

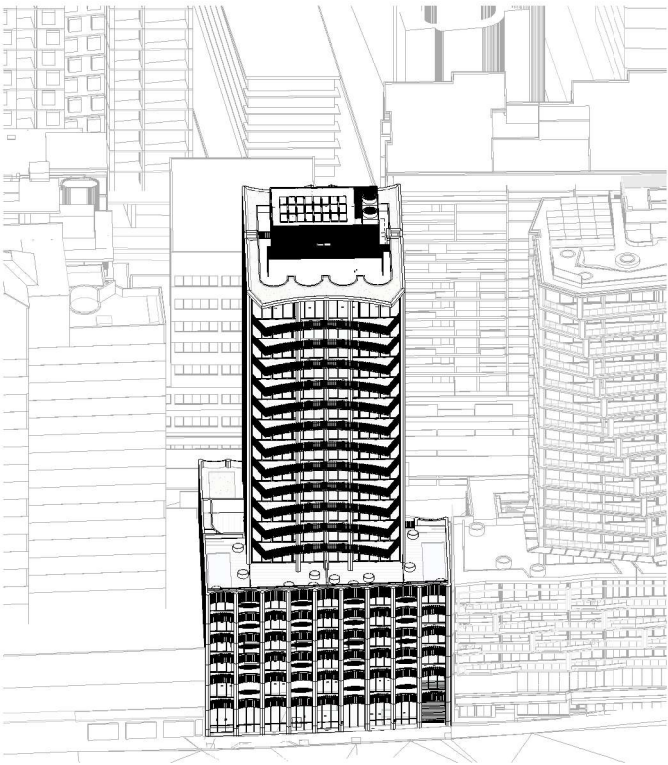
DATE 01.04.23



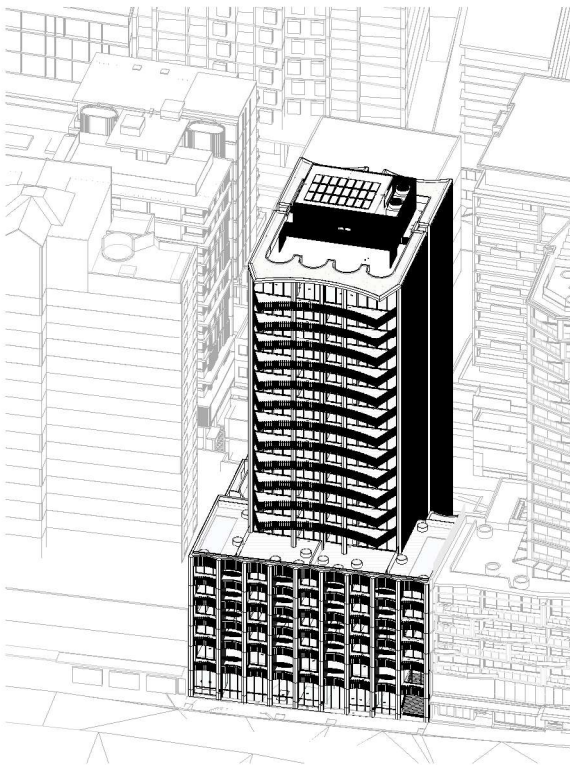
1 SUN EYE VIEW JUNE 21, 09.00



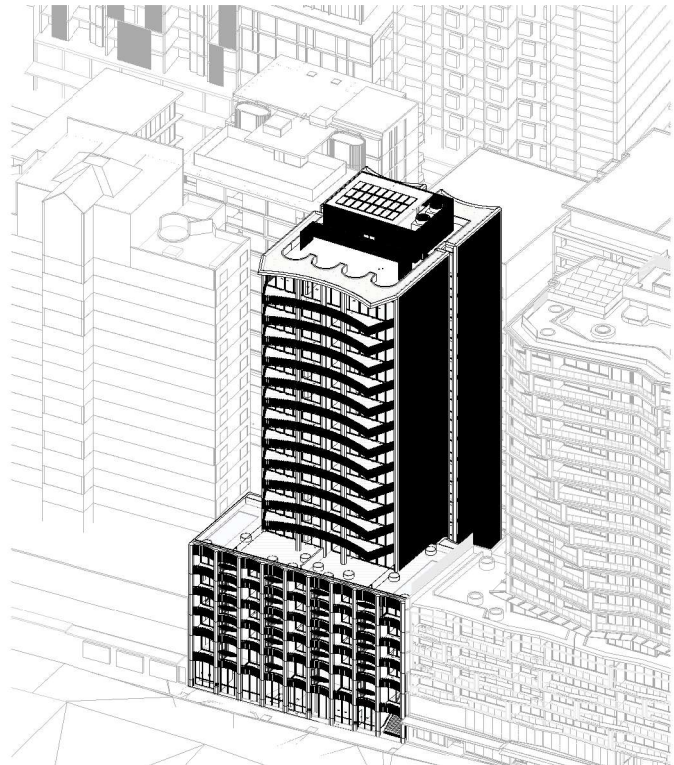
2 SUN EYE VIEW JUNE 21, 10.00



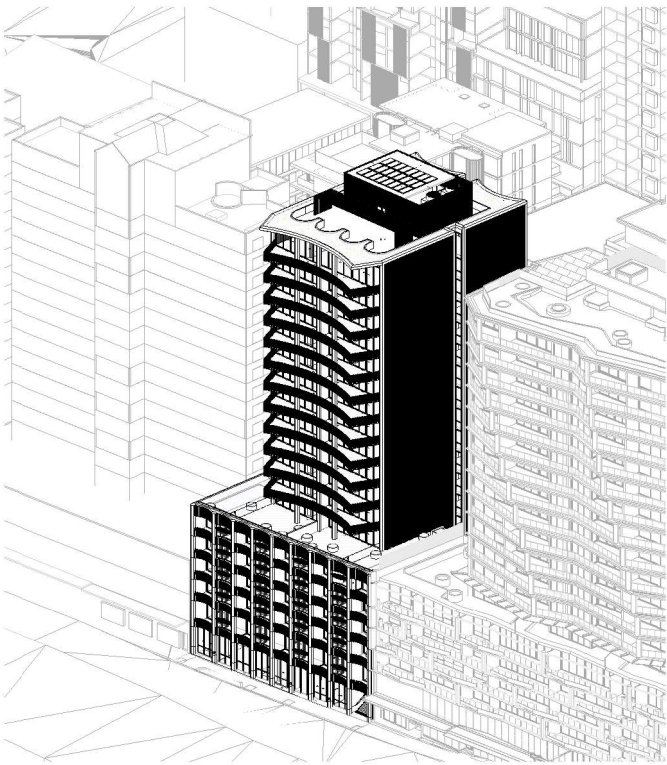
3 SUN EYE VIEW JUNE 21, 11.00



4 SUN EYE VIEW JUNE 21, 12.00



5 SUN EYE VIEW JUNE 21, 13.00



6 SUN EYE VIEW JUNE 21, 14.00



7 SUN EYE VIEW JUNE 21, 15.00

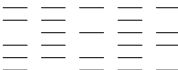


8 SUN EYE VIEW JUNE 21, 16.00
NOT INCLUDED IN SOLAR STUDY

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NTS

PROJECT 2231 GRAFTON 59
DRAWN SI SENIOR QA WS APP'D SS

DWG TITLE PROPOSED SUN VIEW
DWG NO DA811 REV A

LEGEND

- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows

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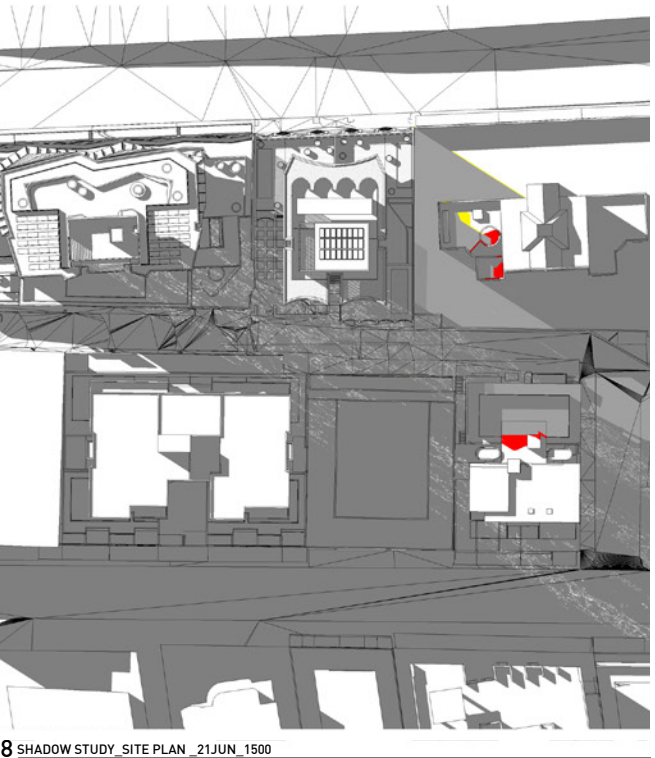
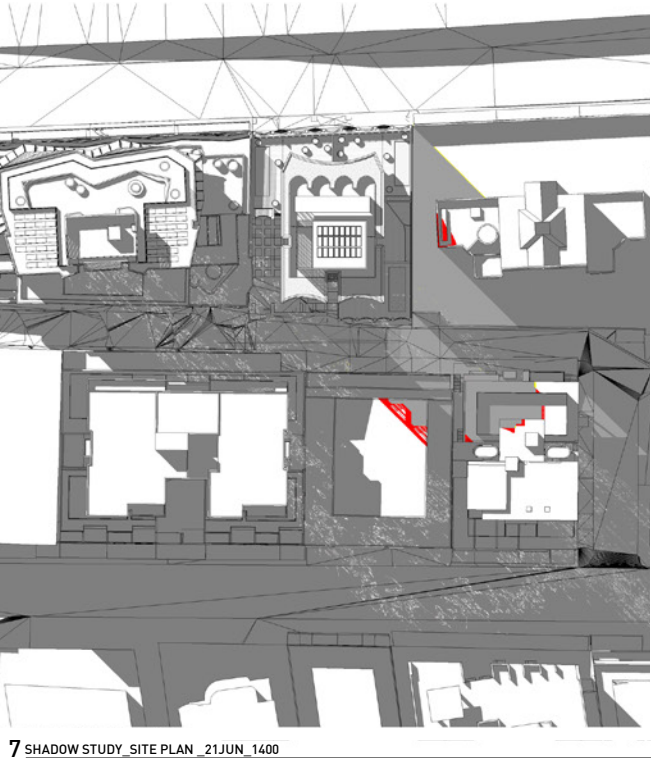
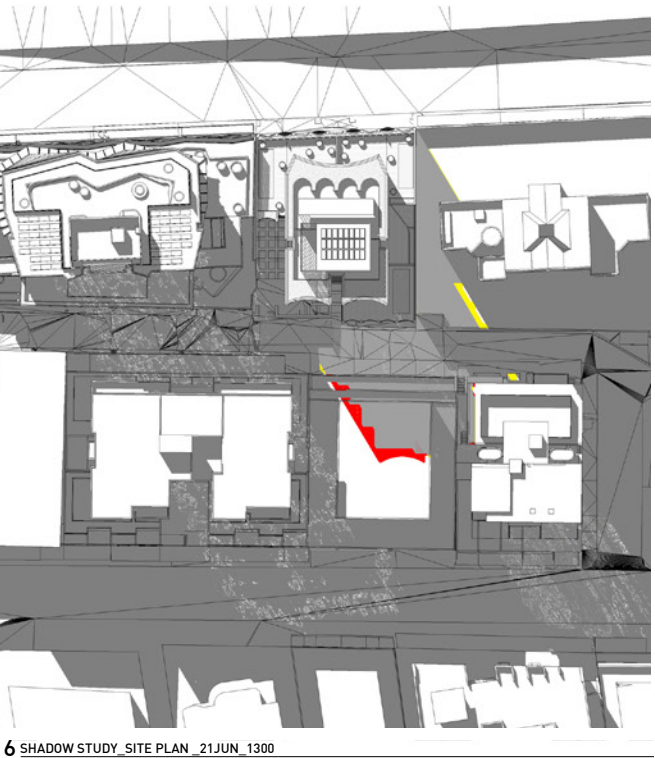
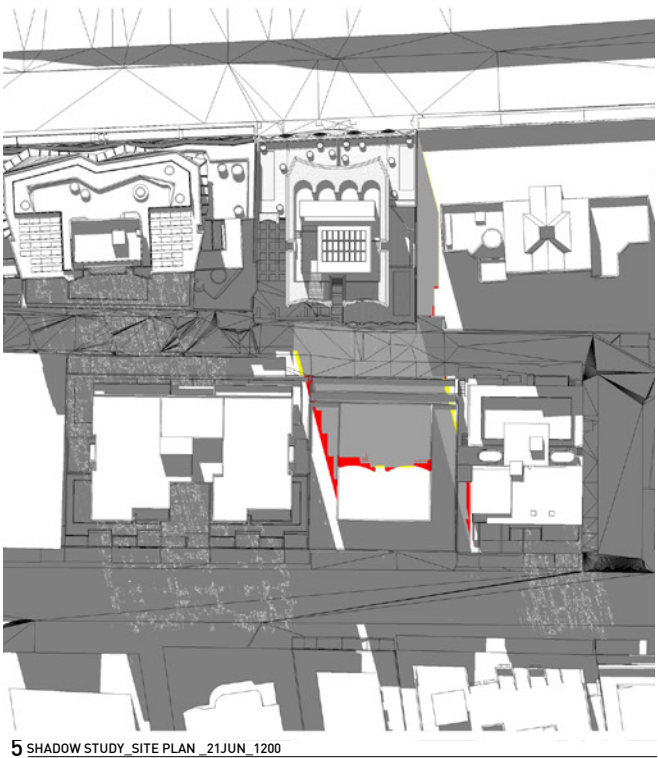
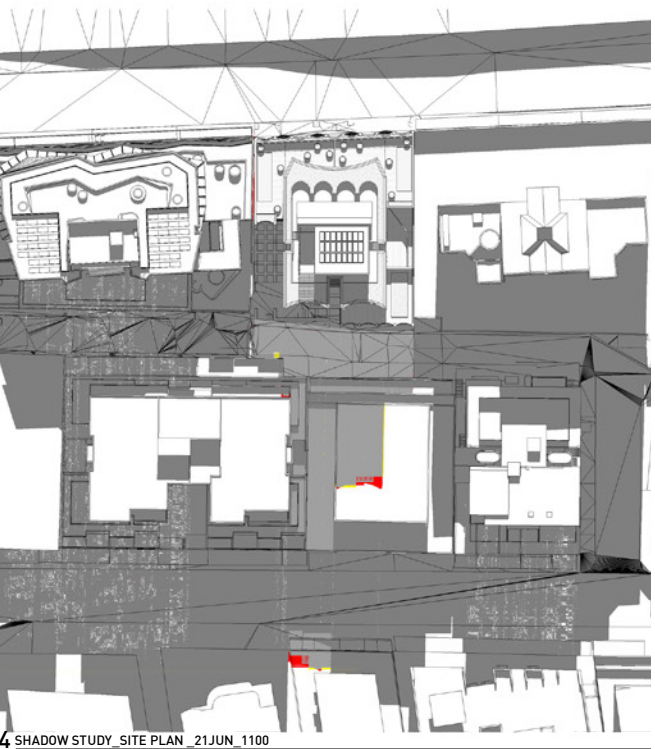
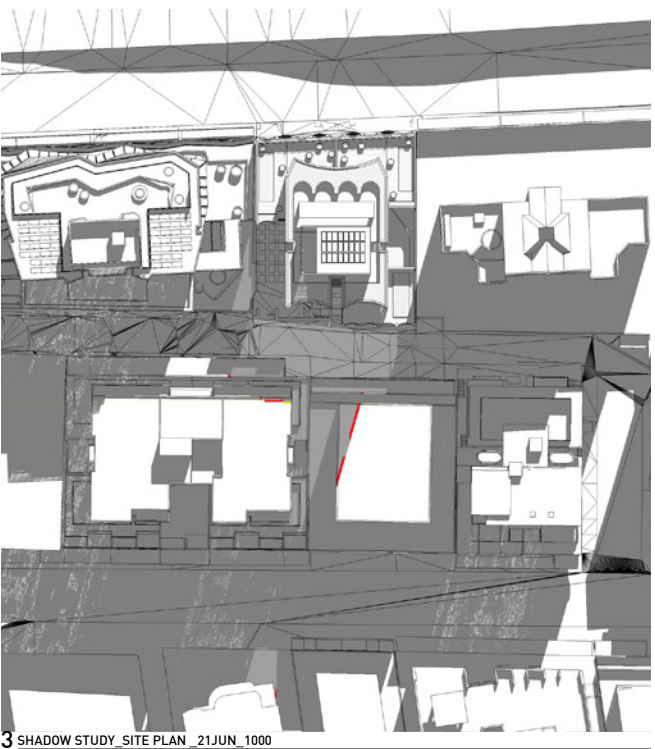
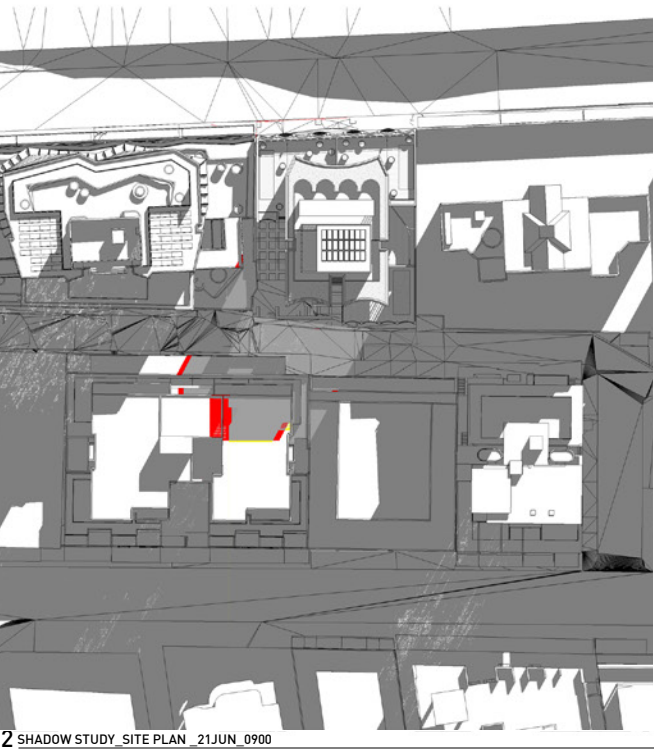
The approved building was overlaid on the proposed building to better understand where the proposed development has increased or reduced shadows to the neighbouring buildings.

A series of forensic elevational shadow diagrams were conducted to assess the impact on the face of the surrounding buildings.

ISSUE
A

REASON
S4.55 ISSUE

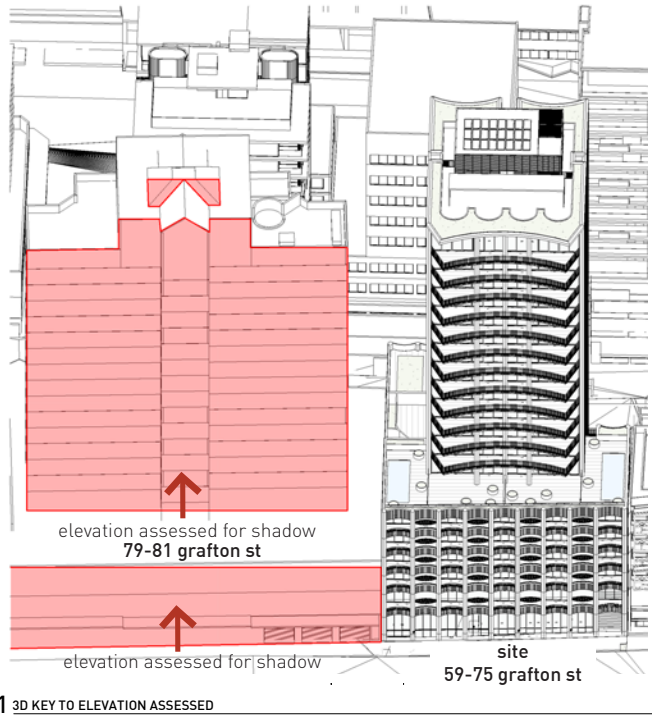
DATE
18.05.23



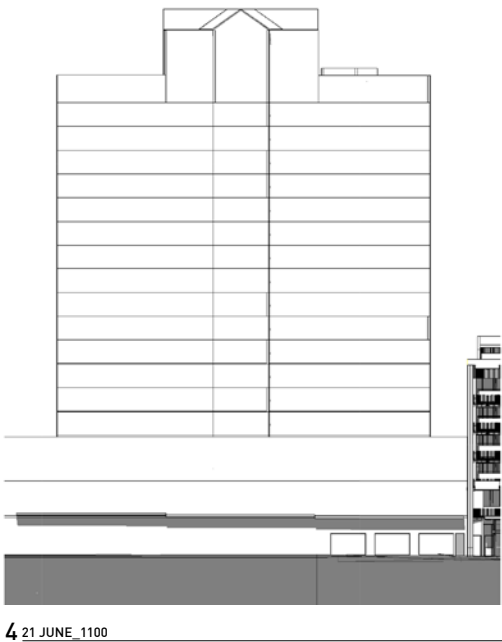
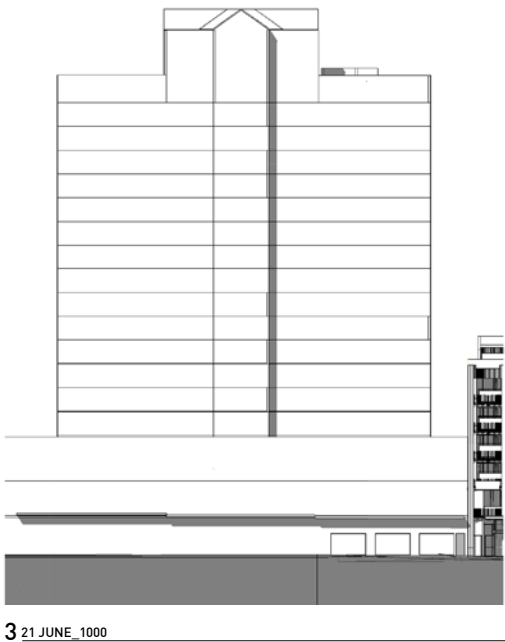
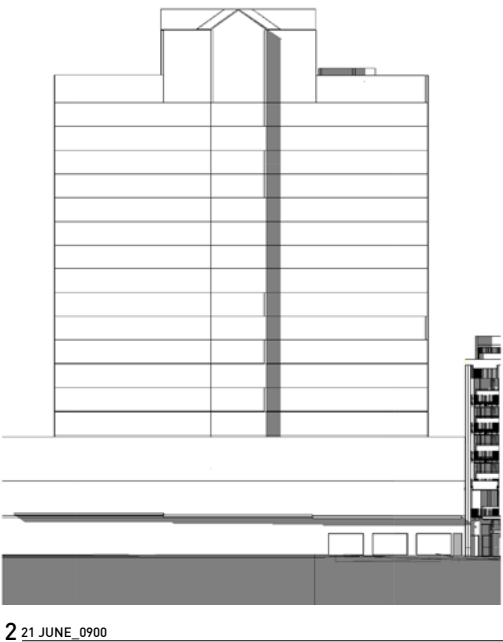
LEGEND

- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows

Shadows to the northern face of 79-81 Grafton St are reduced by the proposal



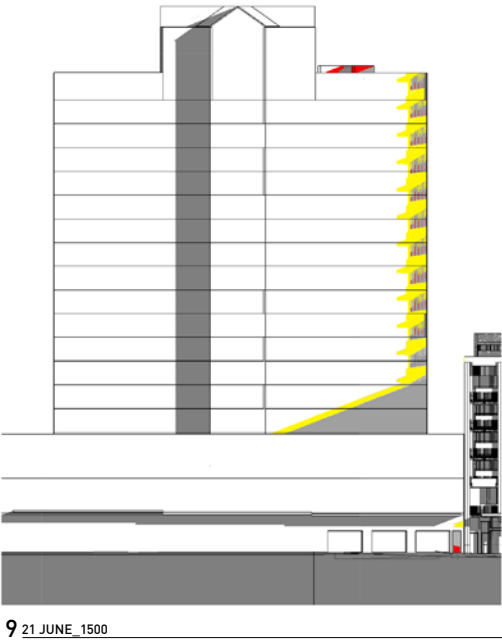
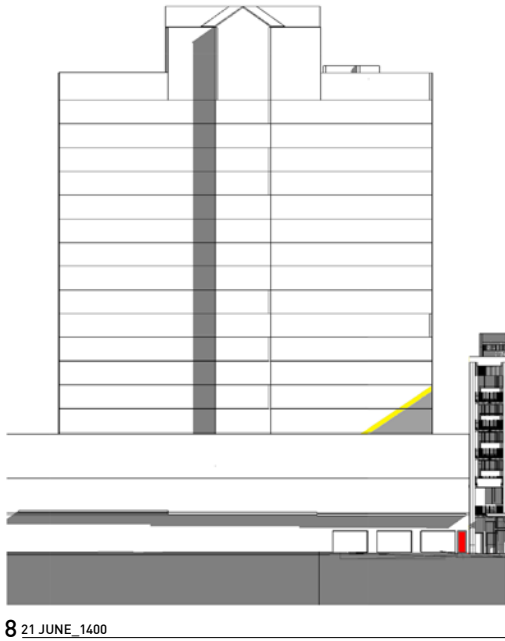
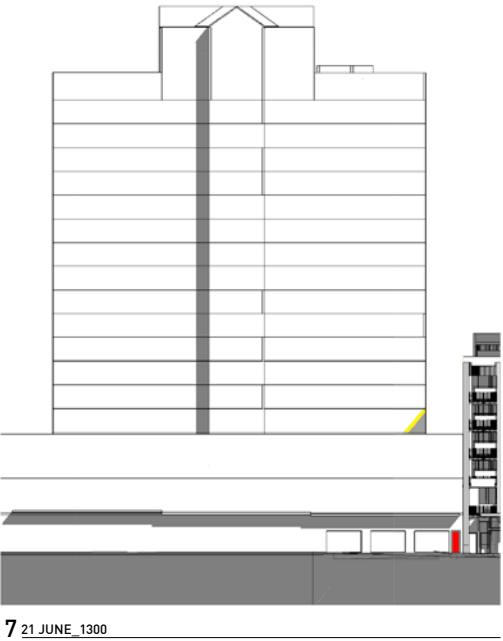
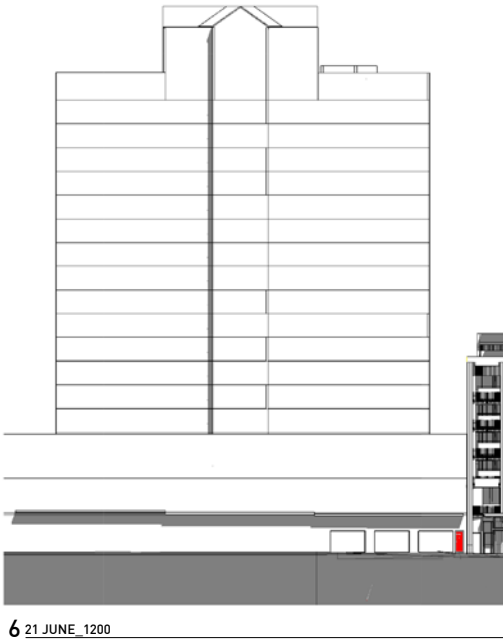
ISSUE	REASON	DATE
A	S4.55 ISSUE	18.05.23



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Waverley Council

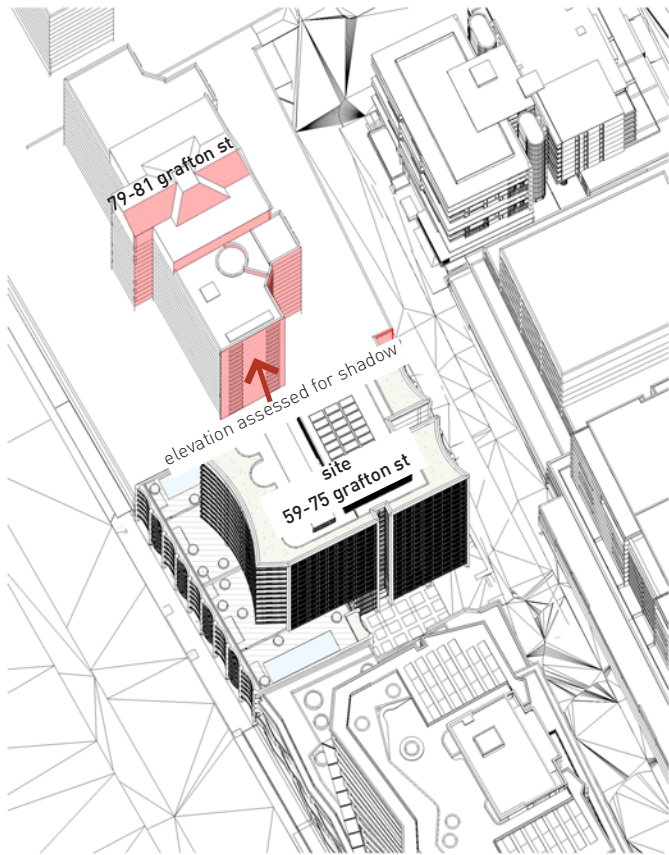
Application No: DA-482/2017/B

Date Received: 12/07/2023

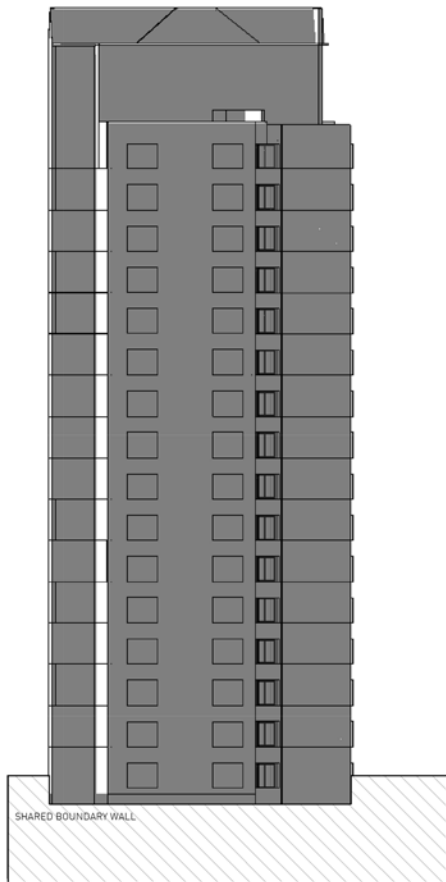


LEGEND

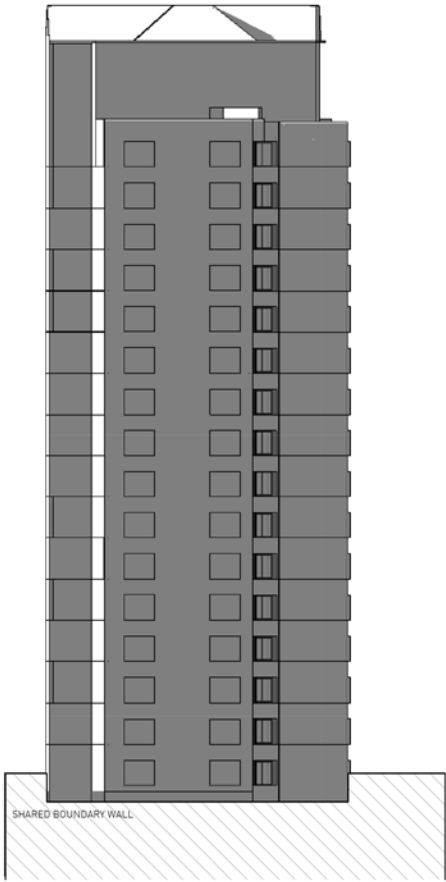
- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows



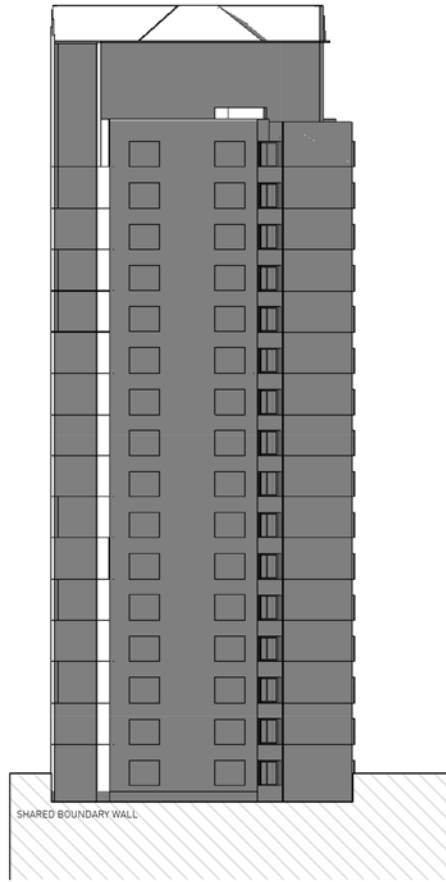
1 3D KEY TO ELEVATION ASSESSED



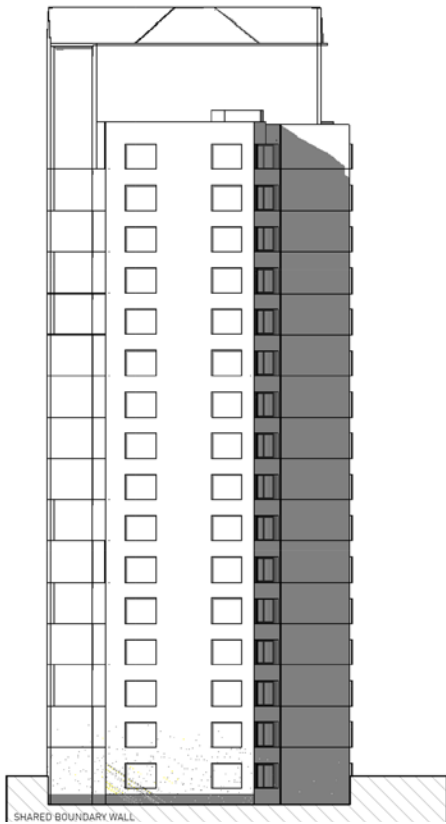
2 21 JUNE_0900



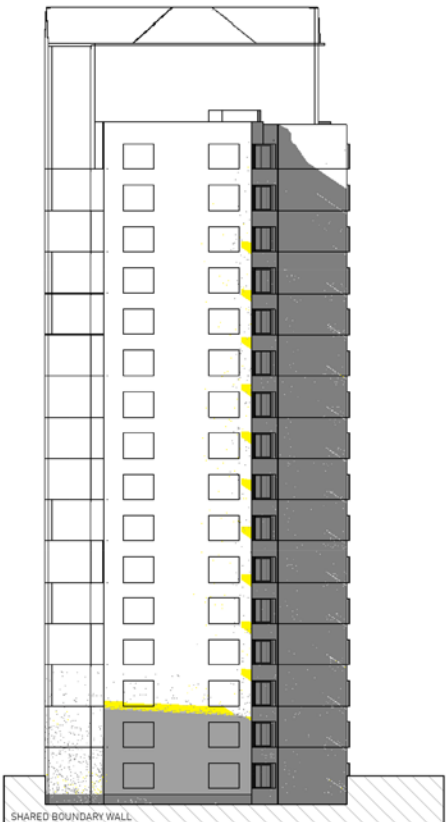
3 21 JUNE_1000



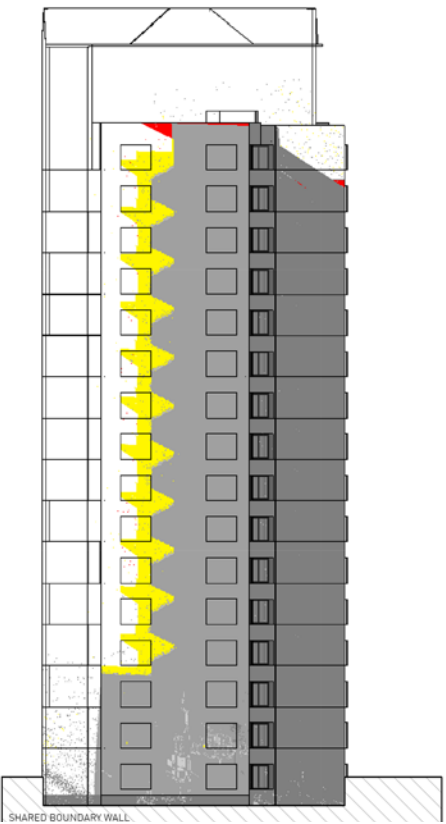
4 21 JUNE_1100



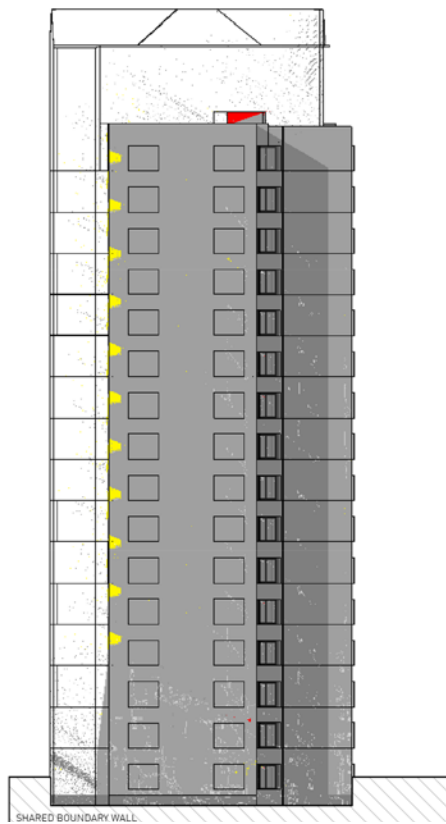
5 21 JUNE_1200



6 21 JUNE_1300



7 21 JUNE_1400



8 21 JUNE_1500

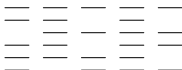
Shadows to the western face of 79-81 Grafton St are reduced by the proposal

ISSUE
A

REASON
54.35 ISSUE

DATE
15.05.23

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Waverley Council
Application No: DA-482/2017/B
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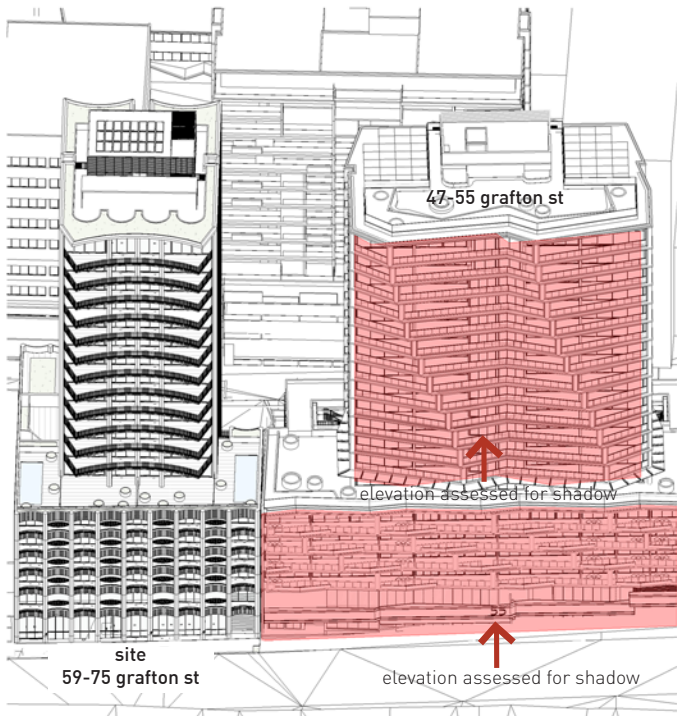
PROJECT
2231 GRAFTON 59
DRAWN
AS SENIOR QA
WS APP'D
SS

DWG TITLE
SHADOWS_79-81 GRAFTON-WEST ELEV
DWG NO
DA823 REV
A

LEGEND

- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows

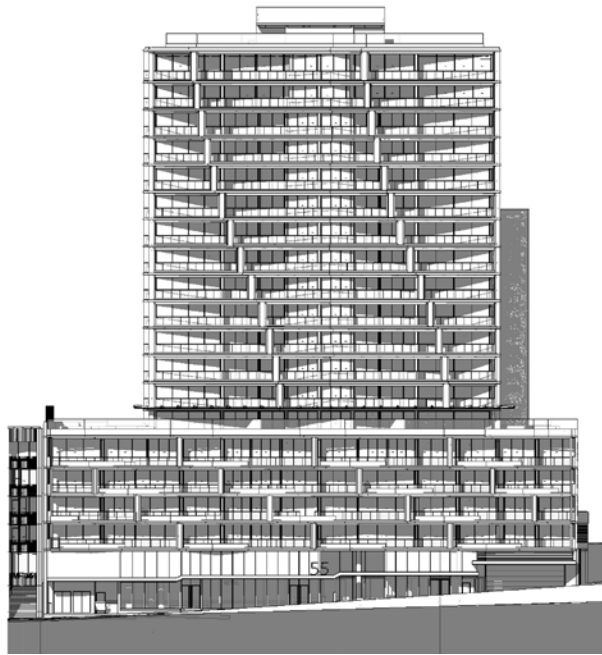
Shadows to the northern face of 47-55 Grafton St are not impacted by the proposal



1 3D KEY TO ELEVATION ASSESSED



2 21 JUNE_0900

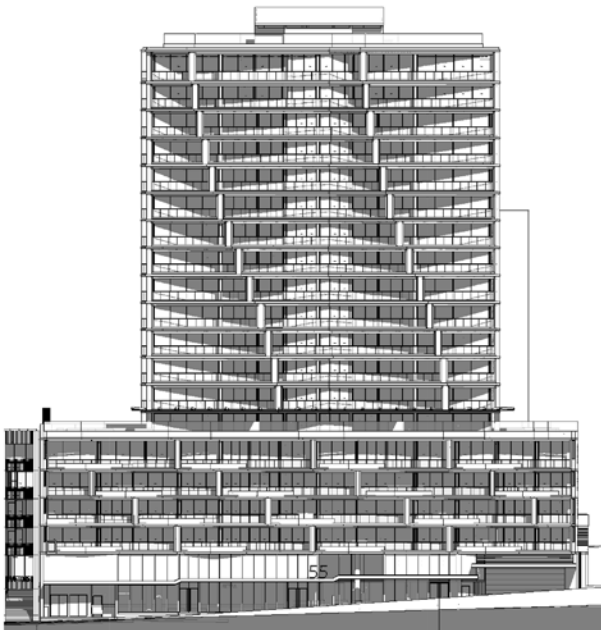


3 21 JUNE_1000

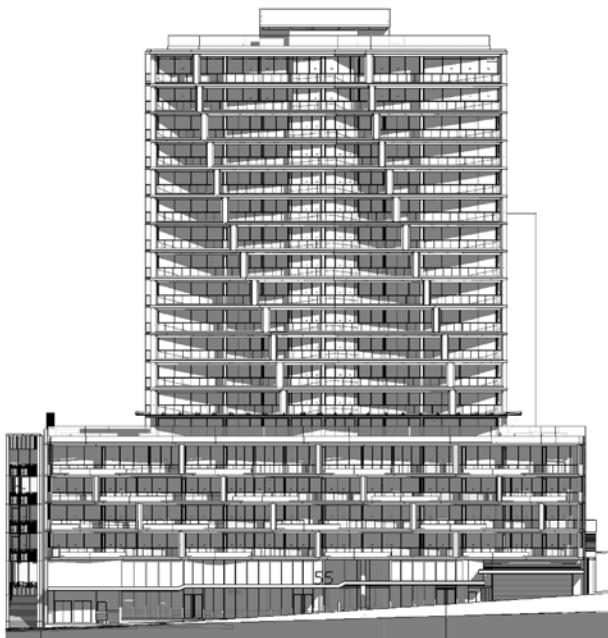


4 21 JUNE_1100

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5 21 JUNE_1200



6 21 JUNE_1300



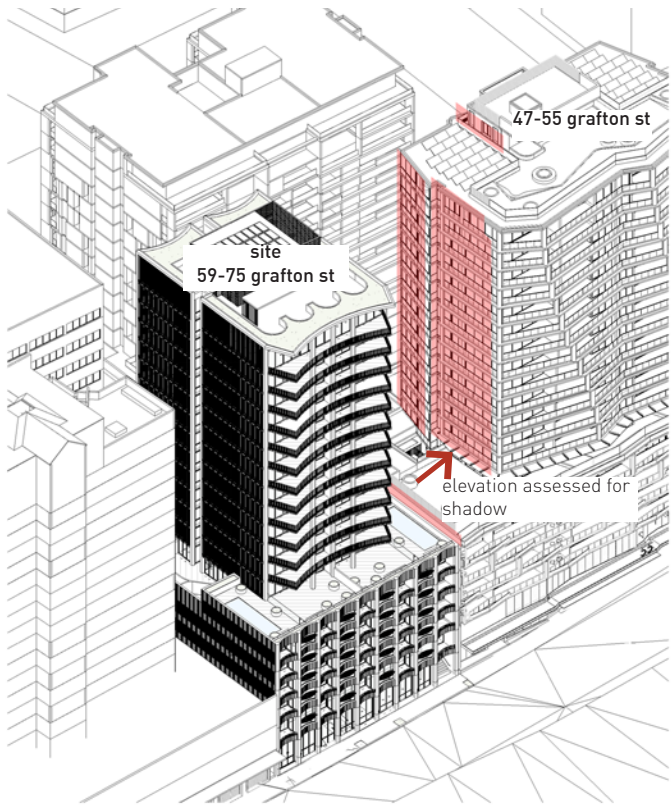
7 21 JUNE_1400



8 21 JUNE_1500

LEGEND

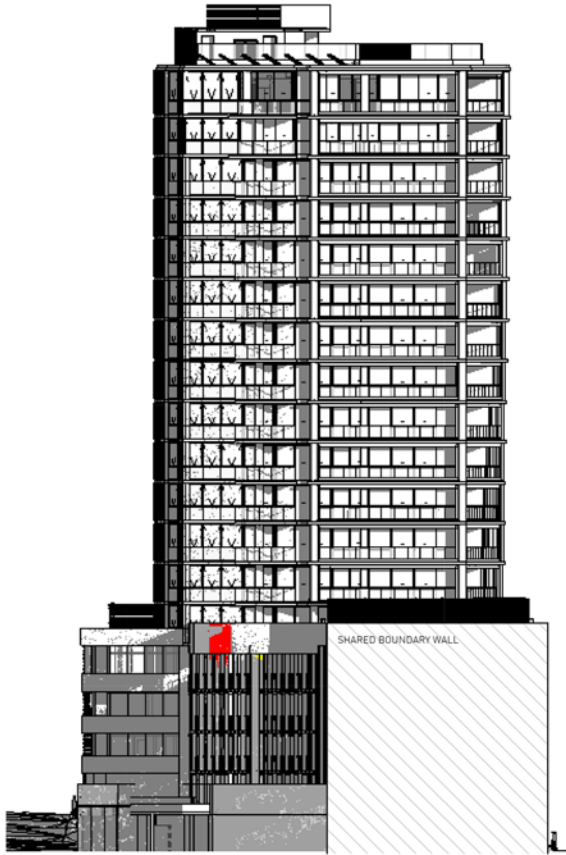
- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows



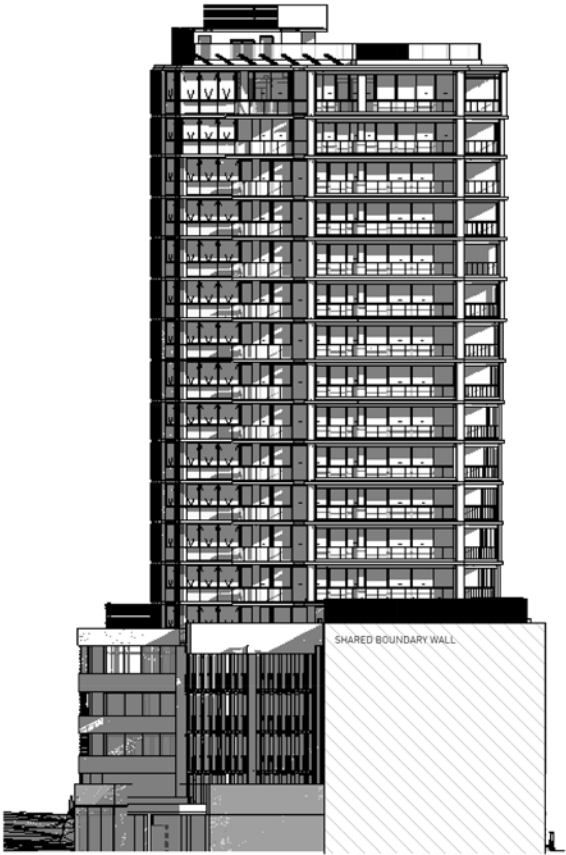
1 3D KEY TO ELEVATION ASSESSED

ISSUE	REASON	DATE
A	54.05 ISSUE	18.05.23

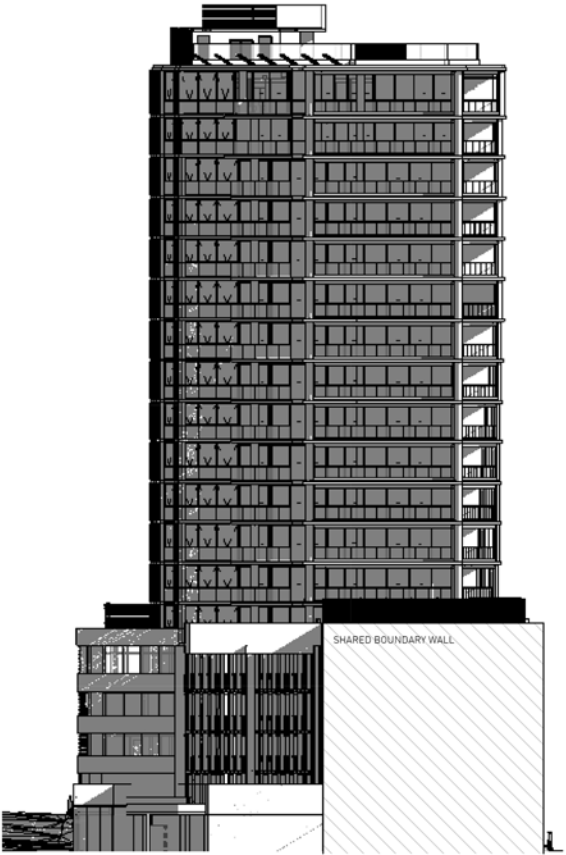
Shadows to the northern face of 47-55 Grafton St are not impacted by the proposal



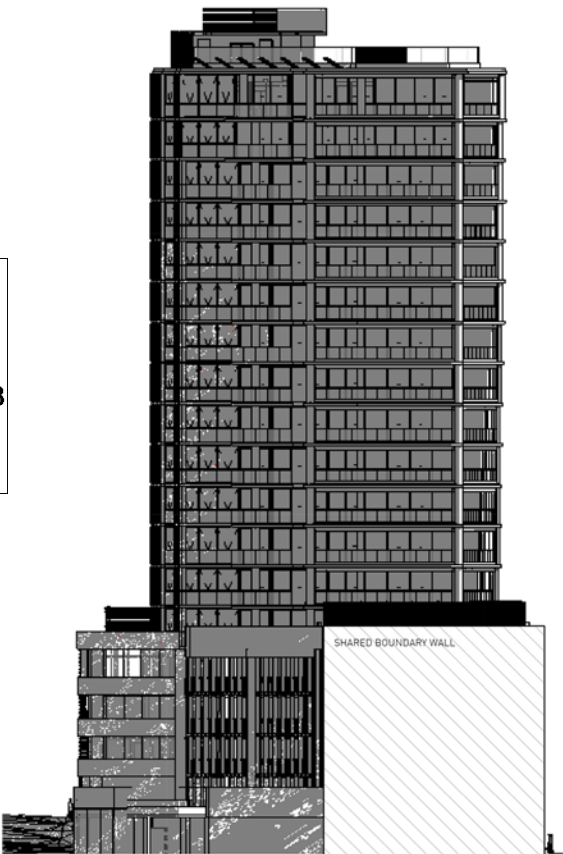
2 21 JUNE 0900



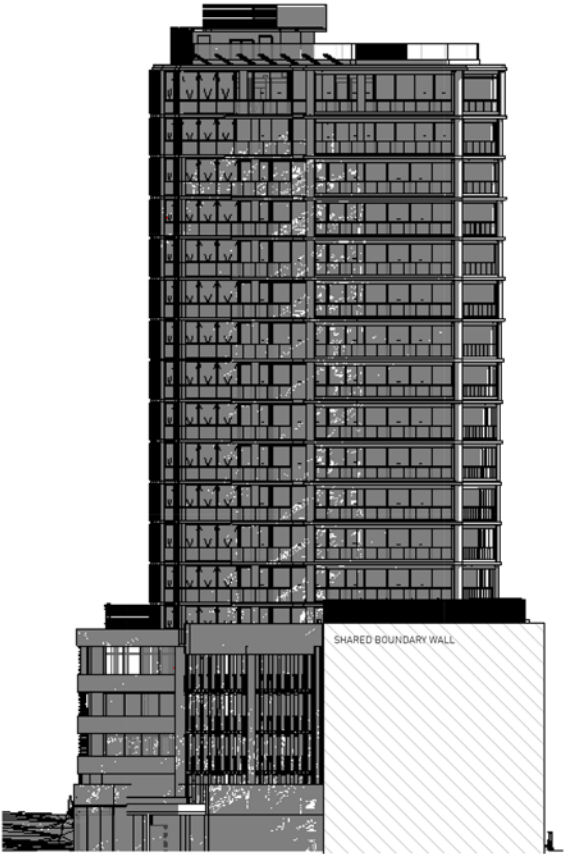
3 21 JUNE 1000



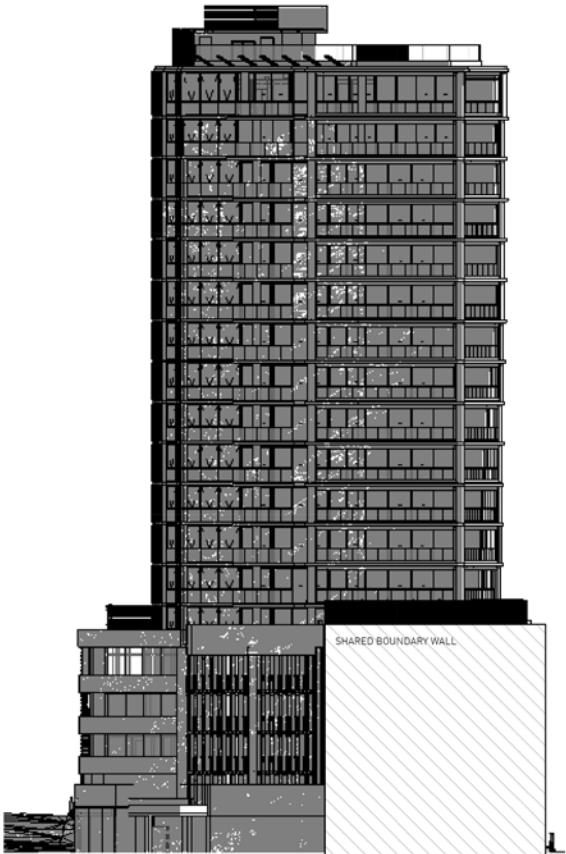
4 21 JUNE 1100



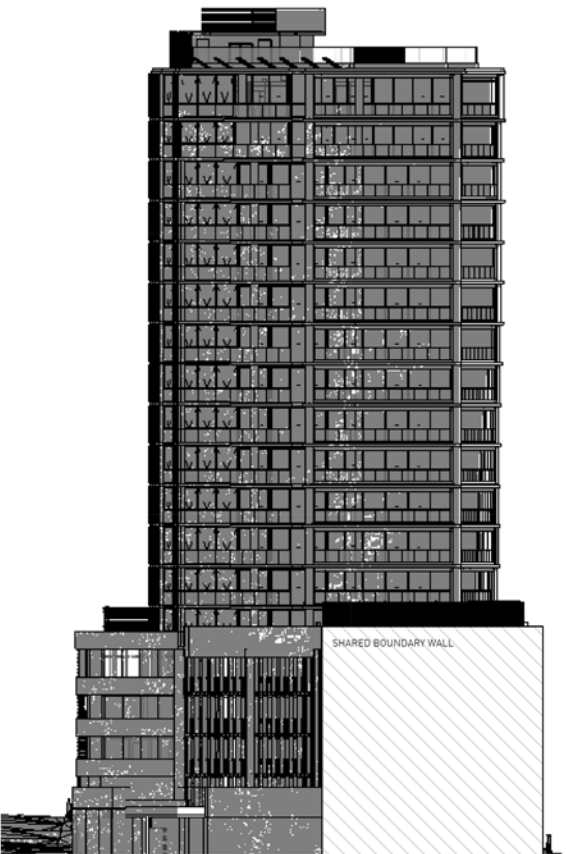
5 21 JUNE 1200



6 21 JUNE 1300



7 21 JUNE 1400

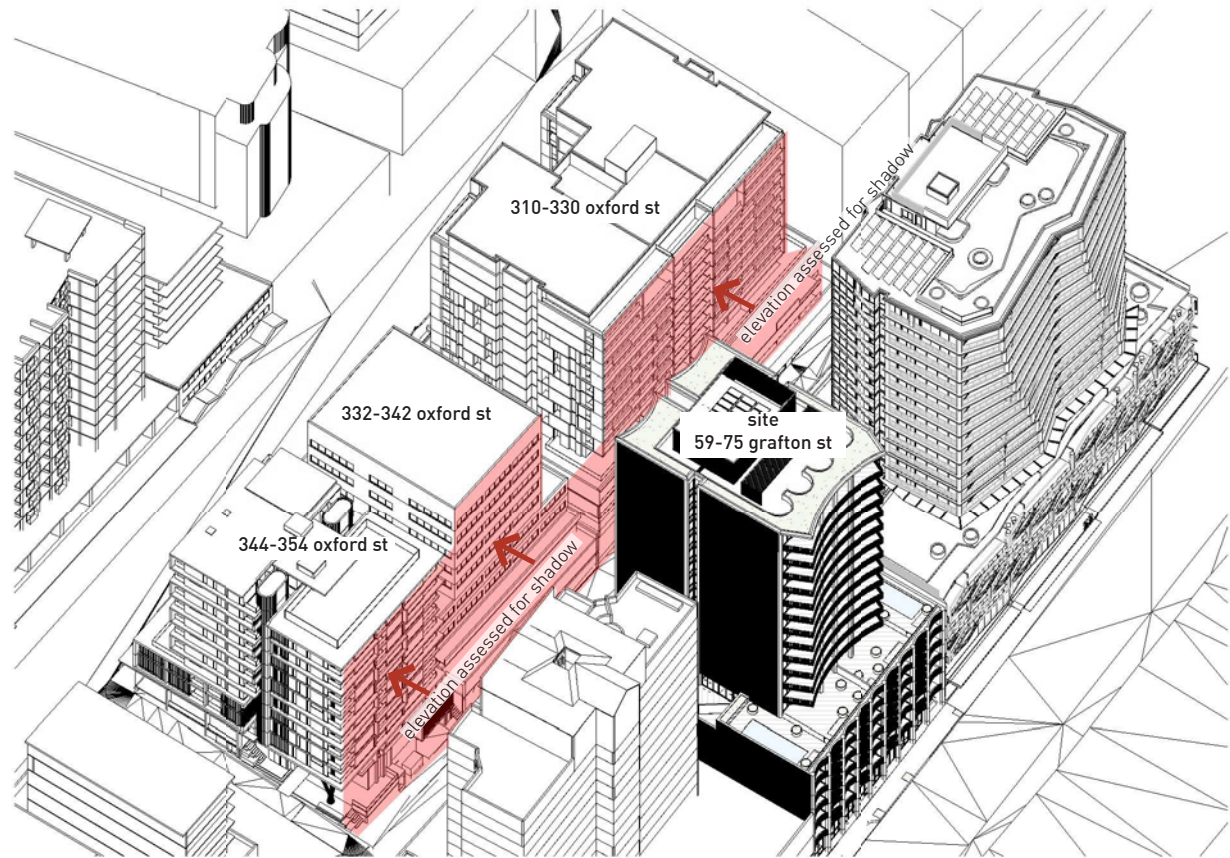


8 21 JUNE 1500

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Waverley Council
Application No: DA-482/2017/B
Date Received: 12/07/2023

LEGEND

LIVING ROOM



1 3D KEY TO ELEVATION ASSESSED

Shadows along the northern elevation of the buildings along 310-354 Oxford street were analysed at 15 minute intervals to ensure no adverse solar impacts occurred to the residential units along Hegarty Lane

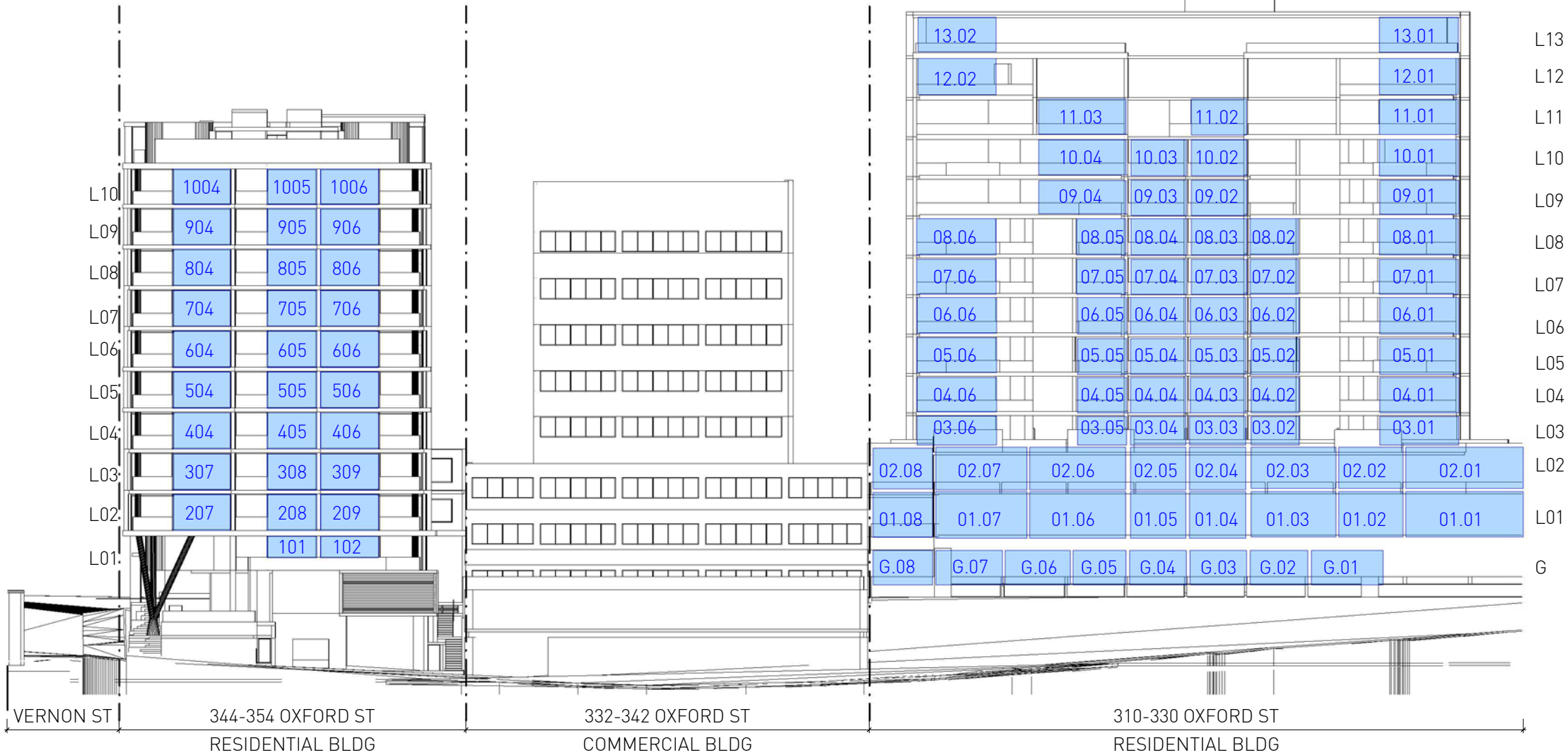
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Waverley Council

Application No: DA-482/2017/B

Date Received: 12/07/2023

ISSUE	REASON	DATE
A	SHADOW STUDY	31.05.23



2 310 - 354 OXFORD STREET NORTH ELEVATION

RECEIVED
Waverley Council

Application No: DA-482/2017/B

Date Received: 12/07/2023

LEGEND

- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows
- Living room

NOTE TO COUNCIL

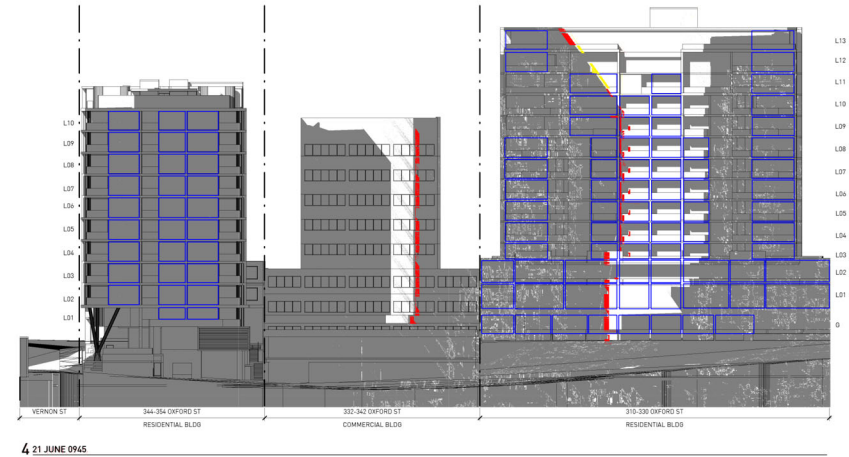
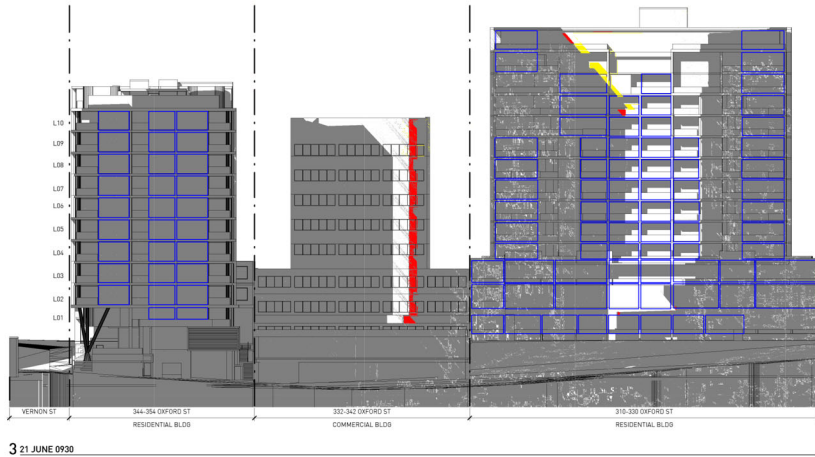
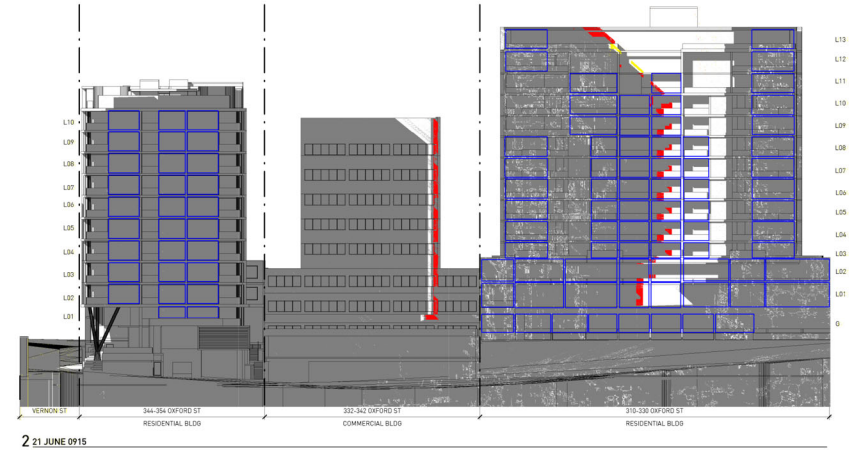
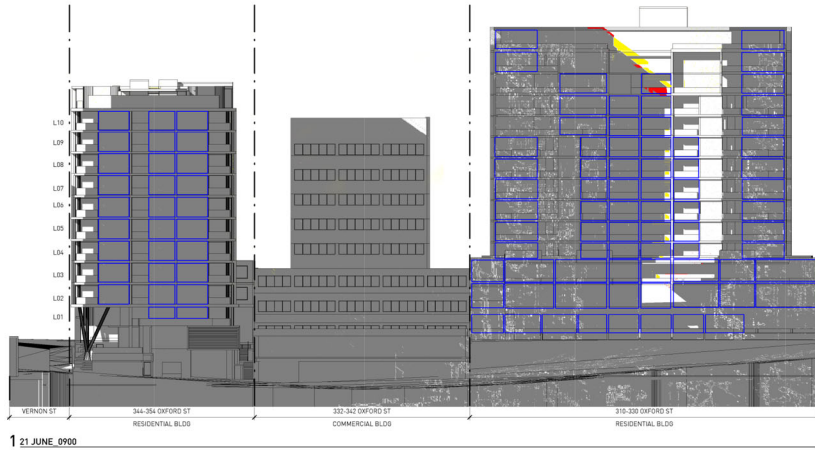
DA827 REV B HAS BEEN UPDATED TO CORRECTLY REFLECT THE SHADOWS IMPACT OF EXISTING NEIGHBOURING BUILDINGS 332-342 OXFORD ST AND 310-330 OXFORD ST.

REFER TO PREVIOUS DWG REV A DWGS 1 AND 3 THAT HAD INCORRECTLY SHOWN CHANGES TO THE SHADOWS PRODUCED BY 332-342 OXFORD ST AND 310-330 OXFORD ST.

THESE BUILDINGS ARE NOT CHANGING IN ANY WAY IN RELATION TO THIS DA.

PRELIMINARY
NOT FOR CONSTRUCTION

ISSUE: A REASON: SHADOW STUDY
B 54 55 RPI ISSUE
DATE: 01.06.23
28.04.23



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PROJECT: 2231 GRAFTON 59
DRAWN: SI SENIOR GA: SS APP'D: SS

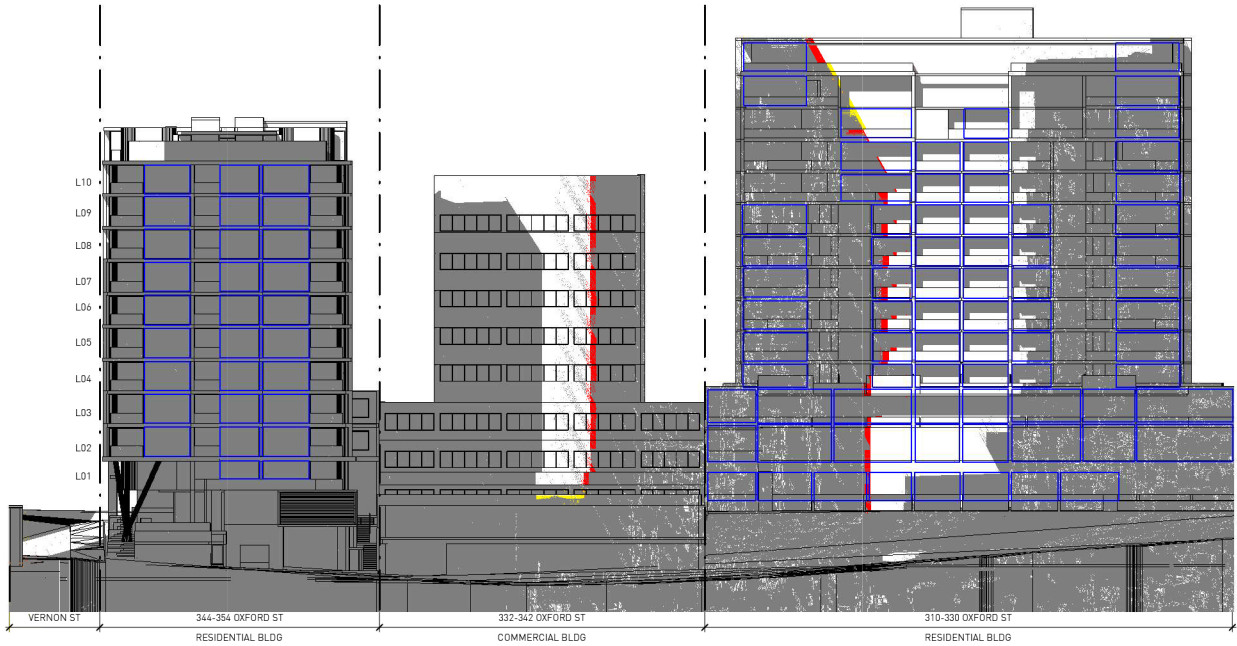
DWG TITLE: SHADOWS- HEGARTY LN 0900
DWG NO: DA827 REV: B

LEGEND

Shadow decreased by proposal compared to approved DA shadows

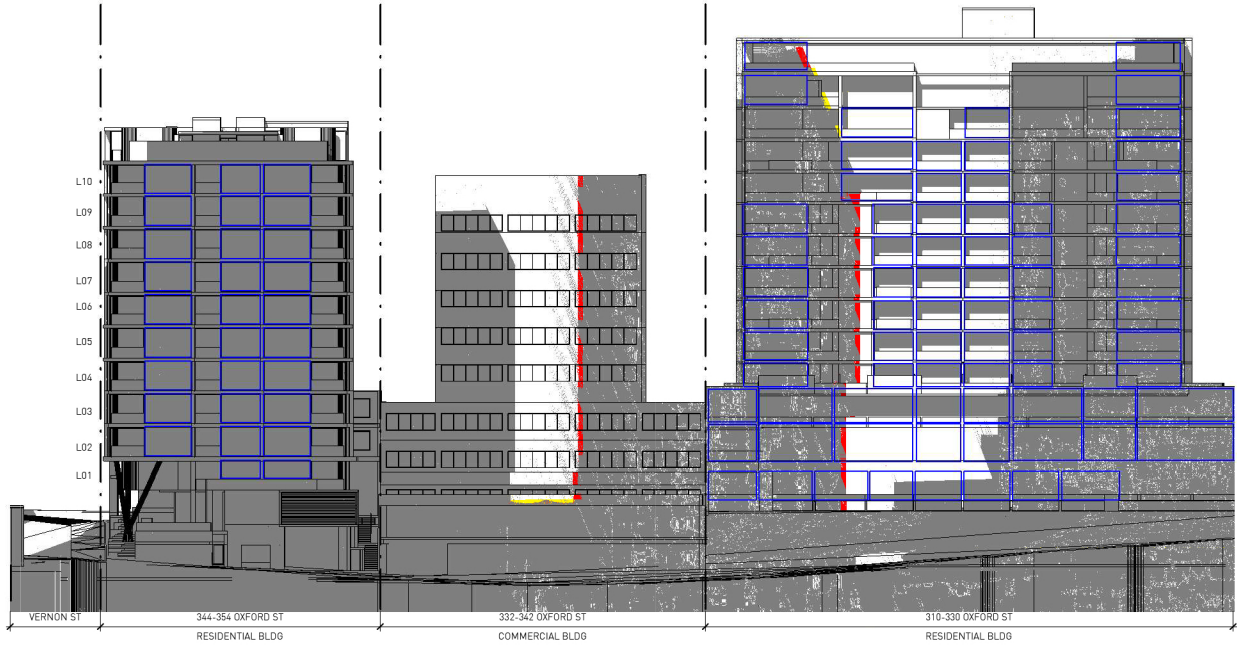
Shadow increased by proposal compared to approved DA shadows

Living room



1 21 JUNE 1000

ISSUE	REASON	DATE
A	SHADOW STUDY	01.06.23

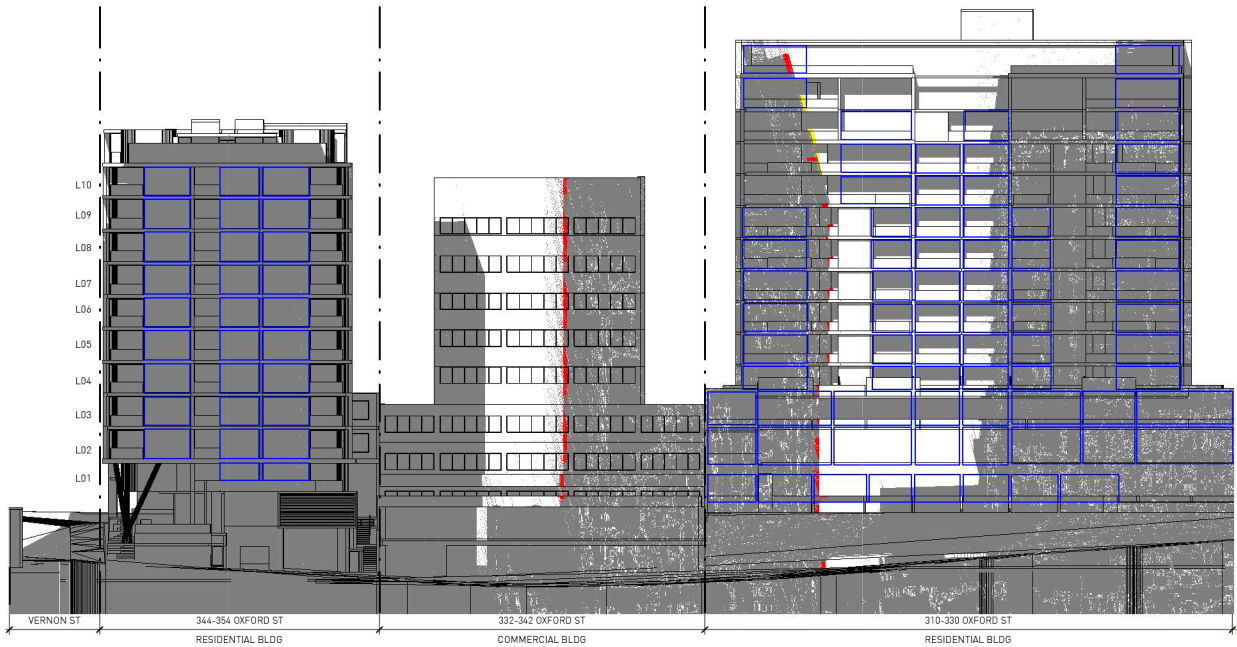


2 21 JUNE 1015

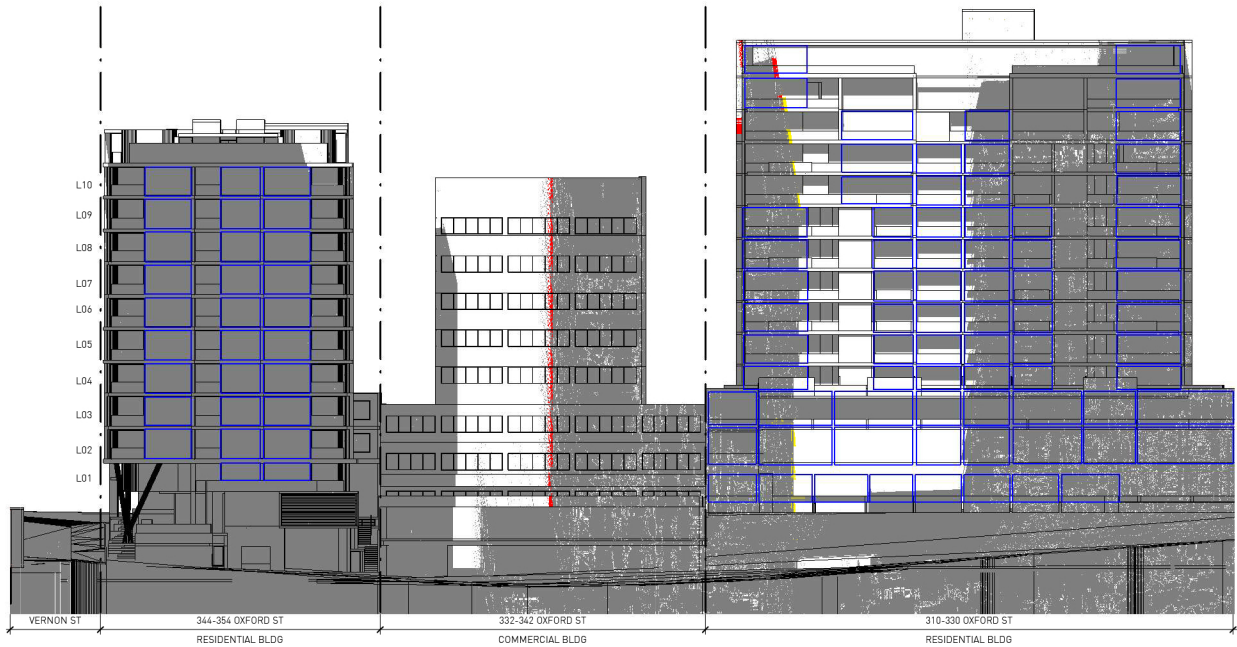
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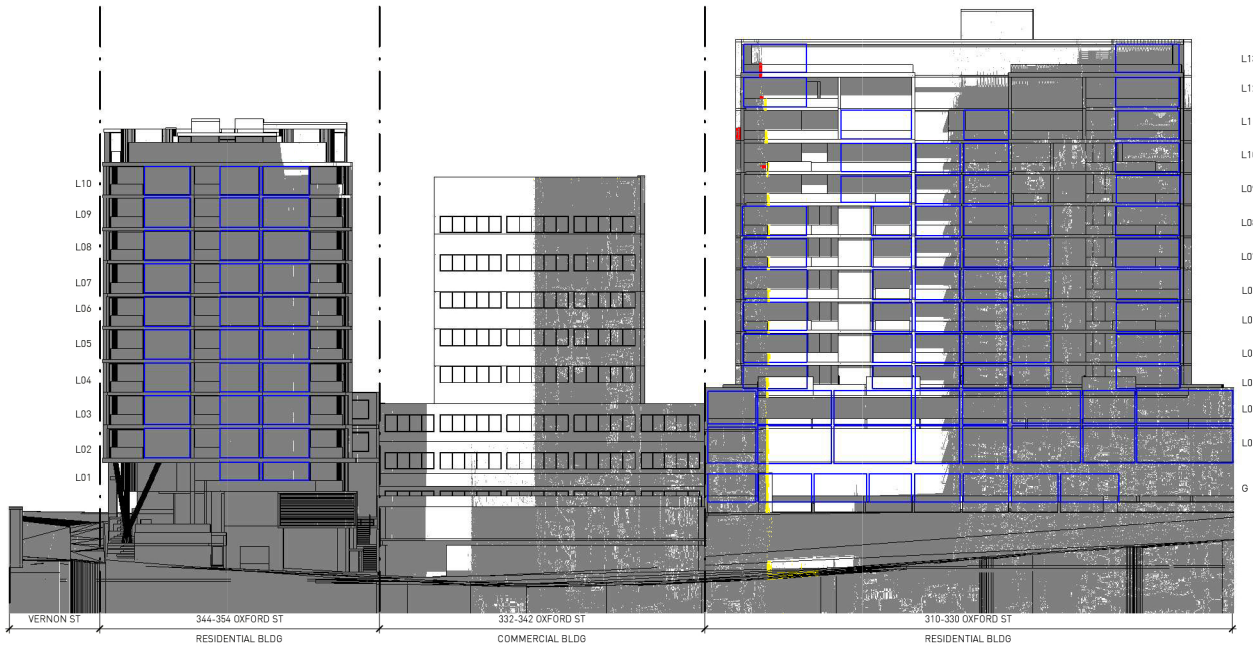
3 21 JUNE 1030



4 21 JUNE 1045

LEGEND

- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows
- Living room



1 21 JUNE 1100

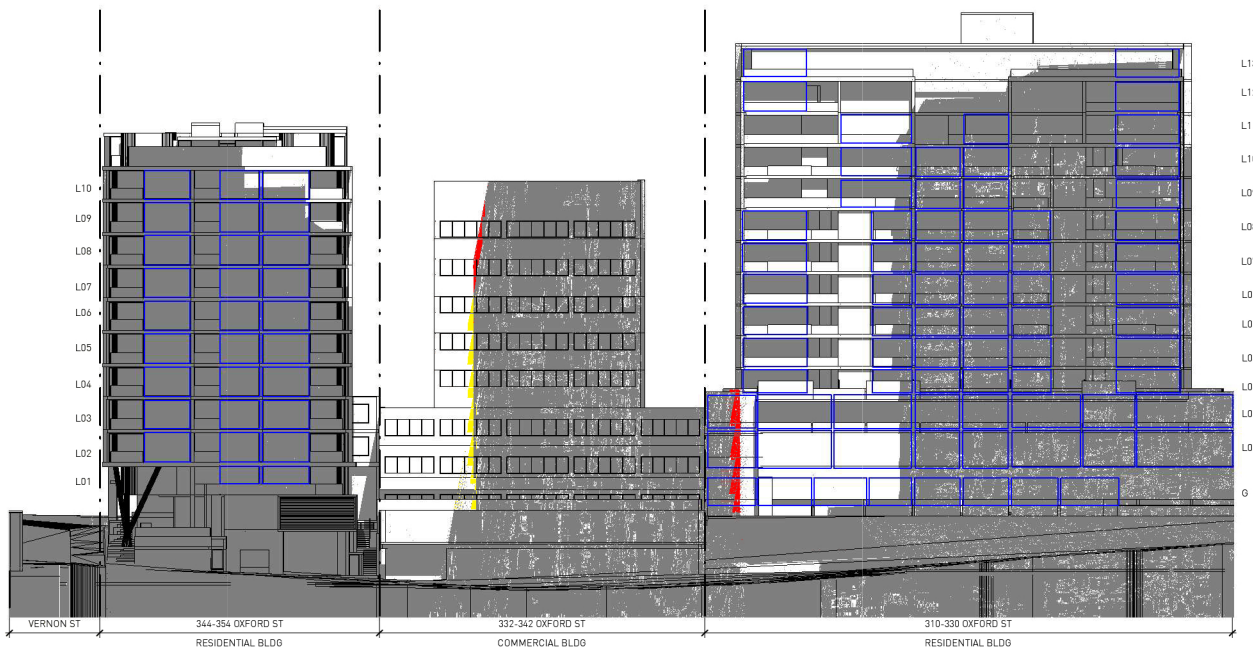
ISSUE A REASON SHADOW STUDY

DATE 01.06.23

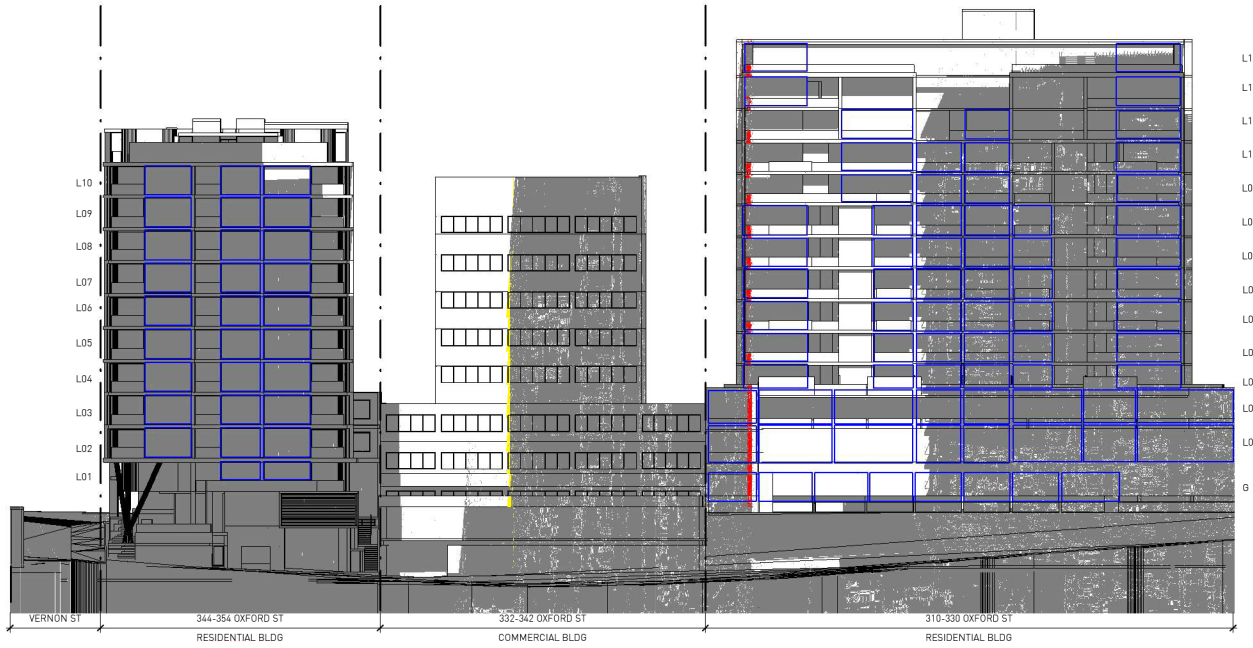
RECEIVED
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Application No: DA-482/2017/B

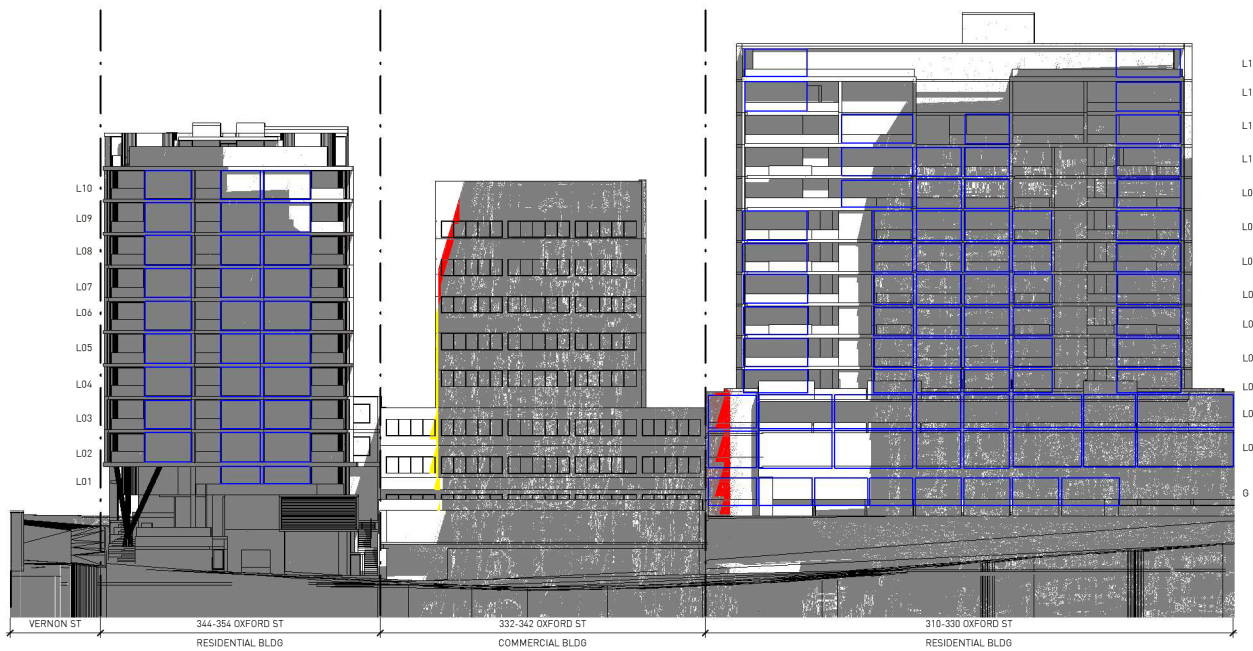
Date Received: 12/07/2023



3 21 JUNE 1130



2 21 JUNE 1115



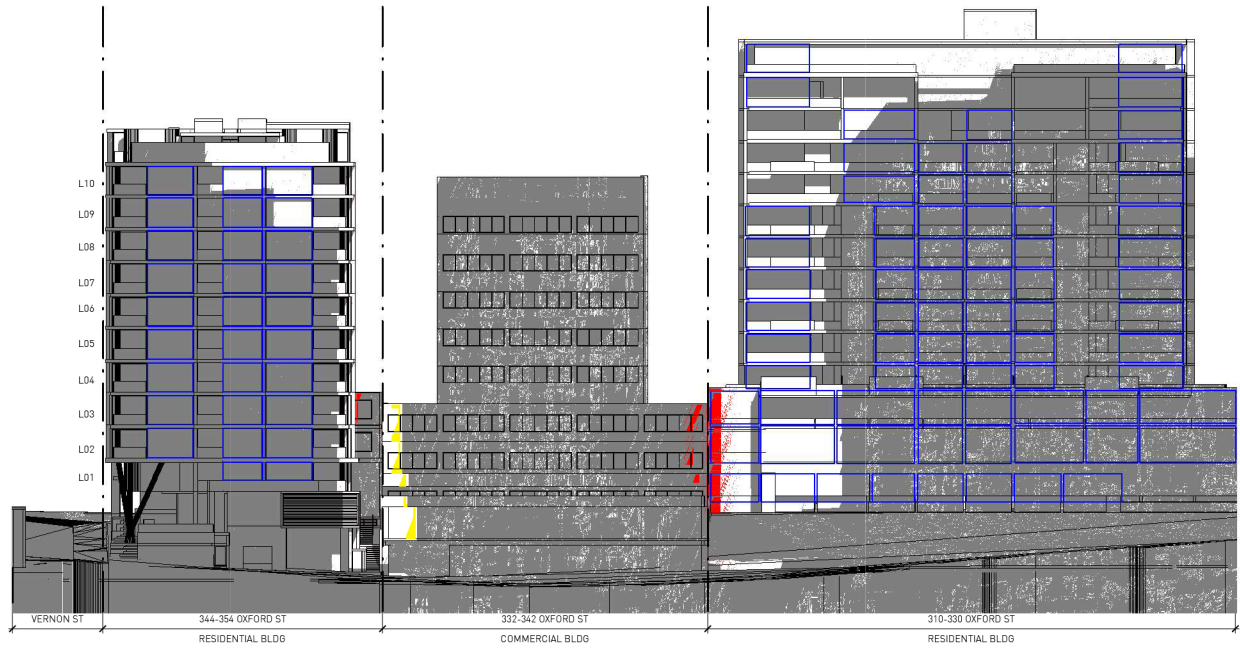
4 21 JUNE 1145

LEGEND

Shadow decreased by proposal compared to approved DA shadows

Shadow increased by proposal compared to approved DA shadows

Living room

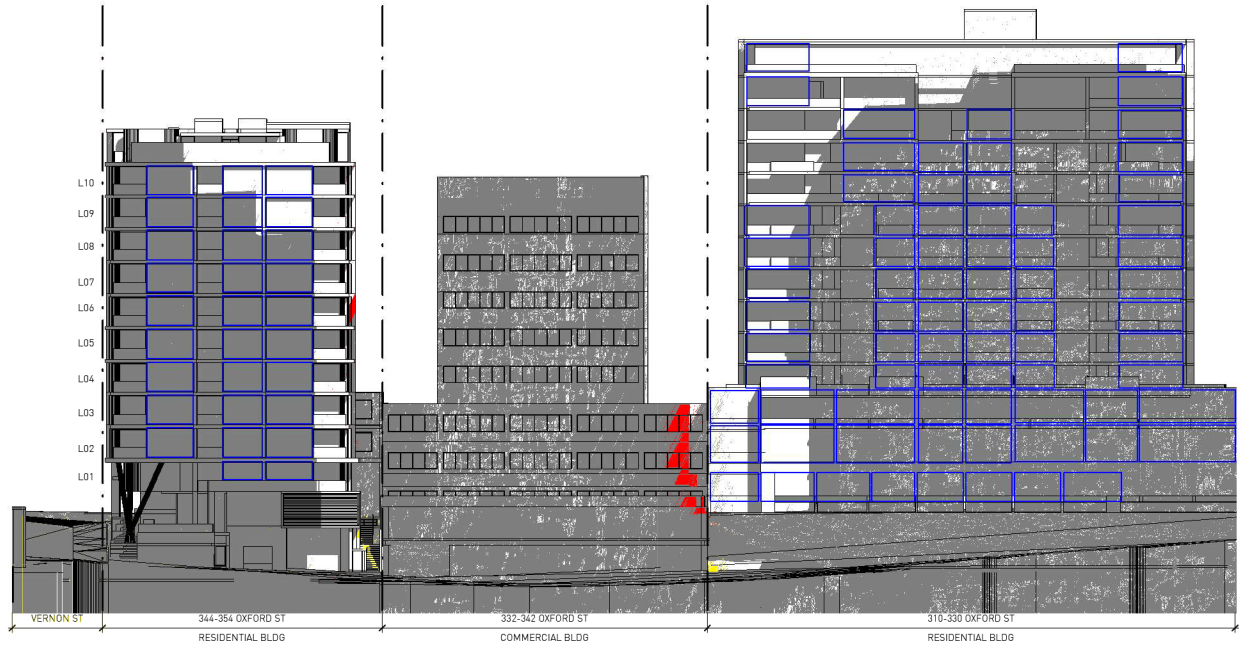


1 21 JUNE 1200

ISSUE
A

REASON
SHADOW STUDY

DATE
01.06.23

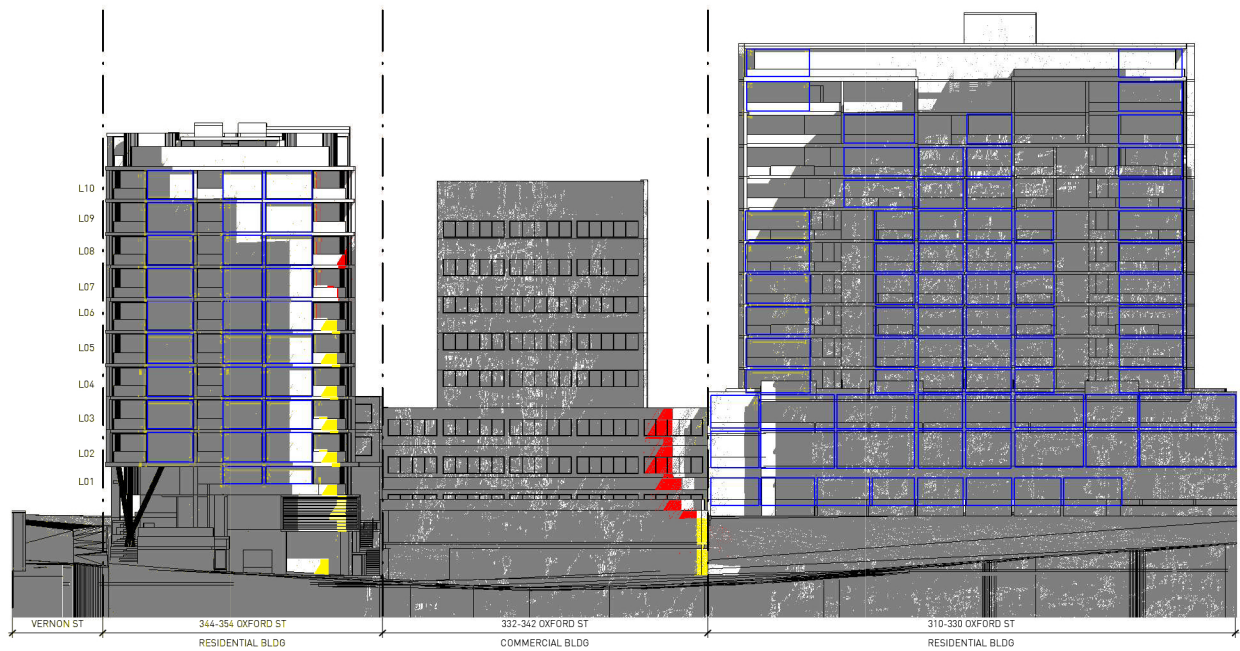


2 21 JUNE 1215

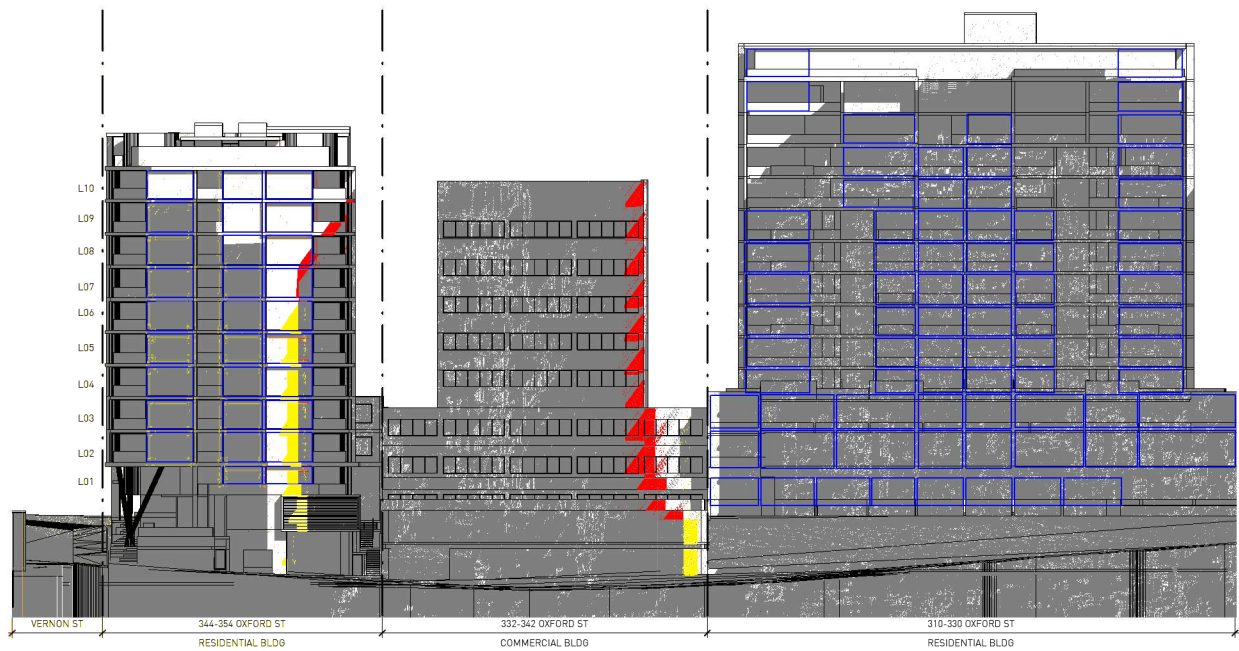
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3 21 JUNE 1230



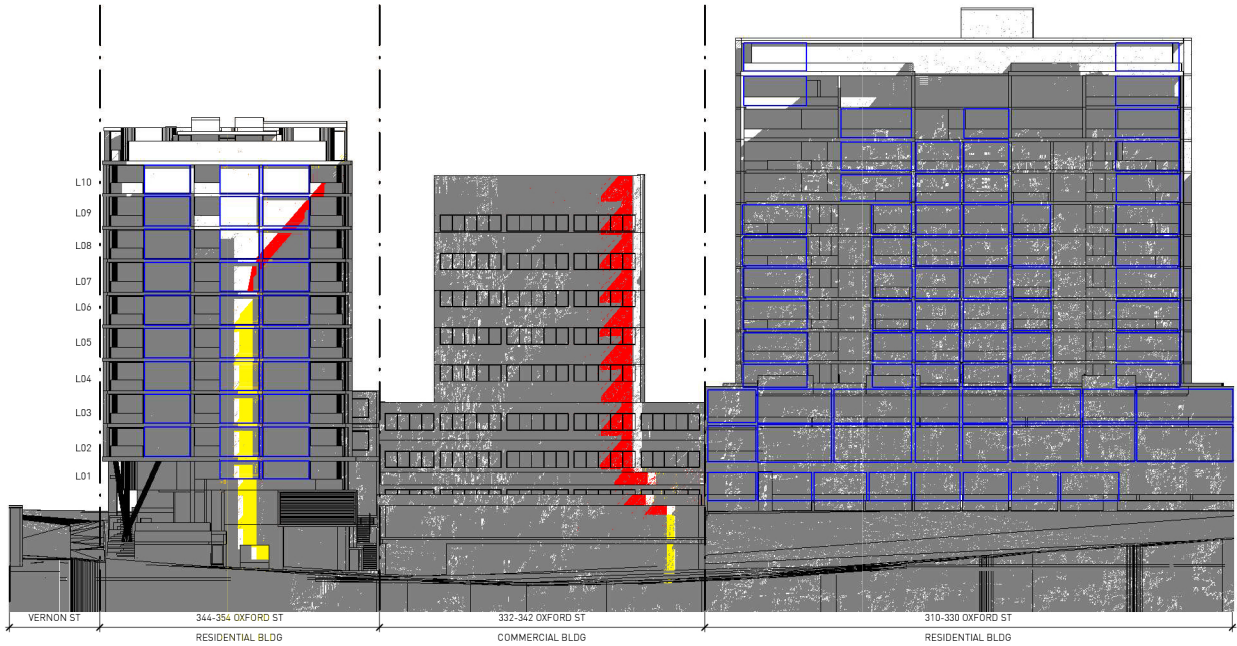
4 21 JUNE 1245

LEGEND

Shadow decreased by proposal compared to approved DA shadows

Shadow increased by proposal compared to approved DA shadows

Living room



1 21 JUNE 1300

ISSUE A REASON SHADOW STUDY DATE 01.06.23

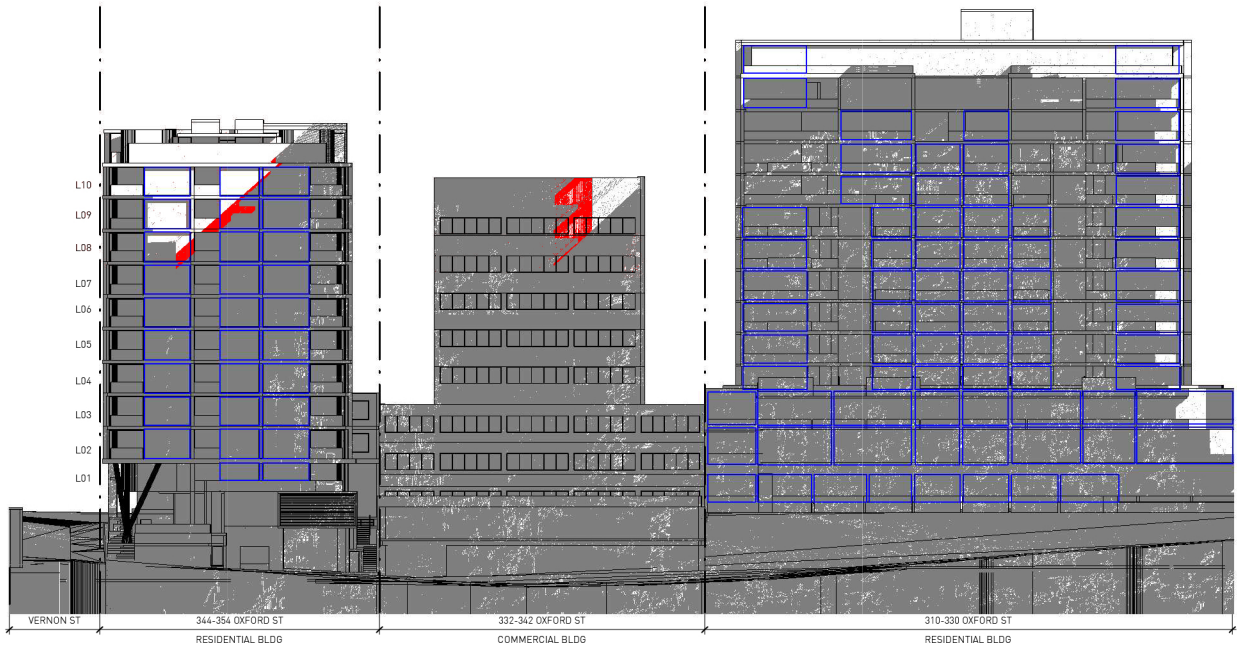


2 21 JUNE 1315

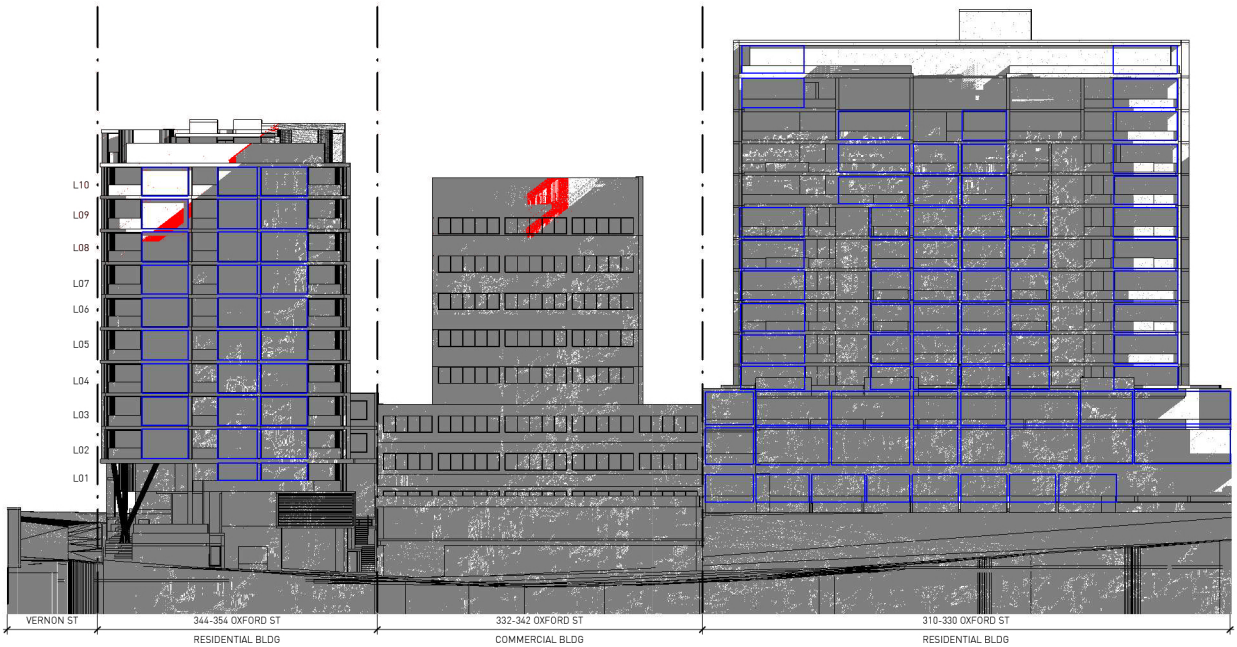
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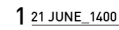


3 21 JUNE 1330

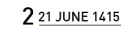


4 21 JUNE 1345

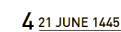
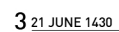
- Shadow decreased by proposal compared to approved DA shadows
- Shadow increased by proposal compared to approved DA shadows
- Living room



ISSUE	REASON	DATE
A	SHADOW STUDY	01.06.23



Date Received: 12/07/2023

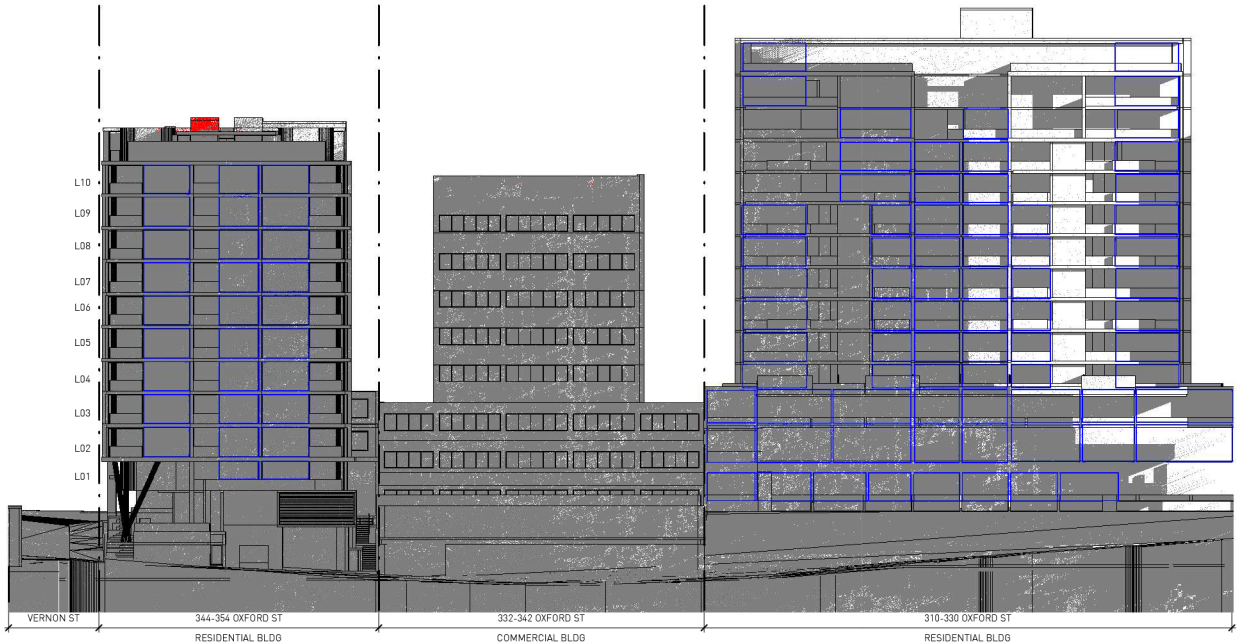


LEGEND

Shadow decreased by proposal compared to approved DA shadows

Shadow increased by proposal compared to approved DA shadows

Living room



1 21 JUNE 1500

ISSUE
A

REASON
SHADOW STUDY

DATE
01.06.23

SHADOW IMPACT SCHEDULE 344-354 Oxford St								
Level	Orientation	Approved DA		Proposed S4.55			Difference	
		Solar Access	Start	End	Solar Access	Start	End	Solar Access
Level 10								
Unit 1006	NW	2:30	11:00	13:30	2:30	11:00	13:30	0:00
Unit 1005	N	2:15	11:30	13:45	2:15	11:30	13:45	0:00
Unit 1004	NE	1:45	12:15	14:00	1:45	12:15	14:00	0:00
Level 09								
Unit 906	NW	1:45	11:30	13:15	1:45	11:30	13:15	0:00
Unit 905	N	1:15	12:15	13:30	1:15	12:15	13:30	0:00
Unit 904	NE	0:45	13:15	14:00	0:45	13:15	14:00	0:00
Level 08								
Unit 806	NW	0:45	12:15	13:00	0:45	12:15	13:00	0:00
Unit 805	N	1:00	12:15	13:15	1:00	12:15	13:15	0:00
Unit 804	NE	0:30	13:15	13:45	0:30	13:15	13:45	0:00
Level 07								
Unit 706	NW	0:15	12:30	12:45	0:15	12:45	13:00	0:00
Unit 705	N	0:15	13:00	13:15	0:15	13:00	13:15	0:00
Unit 704	NE	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Level 06								
Unit 606	NW	0:15	12:30	12:45	0:15	12:45	13:00	0:00
Unit 605	N	0:15	13:00	13:15	0:15	13:00	13:15	0:00
Unit 604	NE	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Level 05								
Unit 506	NW	0:15	12:30	12:45	0:15	12:45	13:00	0:00
Unit 505	N	0:15	13:00	13:15	0:15	13:00	13:15	0:00
Unit 504	NE	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Level 04								
Unit 406	NW	0:15	12:30	12:45	0:15	12:45	13:00	0:00
Unit 405	N	0:15	13:00	13:15	0:15	13:00	13:15	0:00
Unit 404	NE	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Level 03								
Unit 309	NW	0:15	12:30	12:45	0:15	12:45	13:00	0:00
Unit 308	N	0:15	13:00	13:15	0:15	13:00	13:15	0:00
Unit 307	NE	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Level 02								
Unit 209	NW	0:15	12:30	12:45	0:15	12:45	13:00	0:00
Unit 208	N	0:15	13:00	13:15	0:15	13:00	13:15	0:00
Unit 207	NE	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Level 01								
Unit 102	NW	0:15	12:30	12:45	0:15	12:45	13:00	0:00
Unit 101	N	0:15	13:00	13:15	0:15	13:00	13:15	0:00

SHADOW IMPACT SCHEDULE 310-330 Oxford St								
Level	Orientation	Approved DA		Proposed S4.55			Difference	
		Solar Access	Start	End	Solar Access	Start	End	Solar Access
Level 13								
Unit 13.01	NW	5:15	9:45	15:00	5:15	9:45	15:00	0:00
Unit 13.02	NE	4:45	10:15	15:00	4:45	10:15	15:00	0:00
Level 12								
Unit 12.01	NW	2:15	12:45	15:00	2:15	12:45	15:00	0:00
Unit 12.02	NE	3:00	10:30	13:30	3:00	10:30	13:30	0:00
Level 11								
Unit 11.01	NW	1:45	13:15	15:00	1:45	13:15	15:00	0:00
Unit 11.02	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 11.03	N	2:30	9:45	12:15	2:30	9:45	12:15	0:00
Level 10								
Unit 10.01	NW	1:45	13:15	15:00	1:45	13:15	15:00	0:00
Unit 10.02	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 10.03	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 10.04	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Level 09								
Unit 09.01	NW	1:30	13:30	15:00	1:30	13:30	15:00	0:00
Unit 09.02	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 09.03	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 09.04	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Level 08								
Unit 08.01	NW	1:30	13:30	15:00	1:30	13:30	15:00	0:00
Unit 08.02	N	1:00	9:00	10:00	1:00	9:00	10:00	0:00
Unit 08.03	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 08.04	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 08.05	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Unit 08.06	NE	1:45	10:45	12:30	1:45	10:45	12:30	0:00
Level 07								
Unit 07.01	NW	1:30	13:30	15:00	1:30	13:30	15:00	0:00
Unit 07.02	N	1:00	9:00	10:00	1:00	9:00	10:00	0:00
Unit 07.03	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 07.04	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 07.05	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Unit 07.06	NE	1:30	10:45	12:15	1:30	10:45	12:15	0:00
Level 06								
Unit 06.01	NW	1:30	13:30	15:00	1:30	13:30	15:00	0:00
Unit 06.02	N	1:00	9:00	10:00	1:00	9:00	10:00	0:00
Unit 06.03	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 06.04	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 06.05	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Unit 06.06	NE	1:30	10:45	12:15	1:30	10:45	12:15	0:00
Level 05								
Unit 05.01	NW	1:30	13:30	15:00	1:30	13:30	15:00	0:00
Unit 05.02	N	1:00	9:00	10:00	1:00	9:00	10:00	0:00
Unit 05.03	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 05.04	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 05.05	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Unit 05.06	NE	1:30	10:45	12:15	1:30	10:45	12:15	0:00
Level 04								
Unit 04.01	NW	1:30	13:30	15:00	1:30	13:30	15:00	0:00
Unit 04.02	N	1:00	9:00	10:00	1:00	9:00	10:00	0:00
Unit 04.03	N	1:45	9:00	10:45	1:45	9:00	10:45	0:00
Unit 04.04	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 04.05	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Unit 04.06	NE	1:30	10:45	12:15	1:30	10:45	12:15	0:00
Level 03								
Unit 03.01	NW	1:45	13:15	15:00	1:45	13:15	15:00	0:00
Unit 03.02	N	1:00	9:00	10:00	1:00	9:00	10:00	0:00
Unit 03.03	N	1:30	9:15	10:45	1:30	9:15	10:45	0:00
Unit 03.04	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit 03.05	N	1:00	10:00	11:00	1:00	10:00	11:00	0:00
Unit 03.06	NE	1:30	10:45	12:15	1:30	10:45	12:15	0:00
Level 02								
Unit 02.01	NW	1:45	13:15	15:00	1:45	13:15	15:00	0:00
Unit 02.02	N	0:30	14:30	15:00	0:30	14:30	15:00	0:00
Unit 02.03	N	0:45	9:00	9:45	0:45	9:00	9:45	0:00
Unit 02.04	N	1:30	9:00	10:30	1:30	9:00	10:30	0:00
Unit 02.05	N	2:00	9:15	11:15	1:30	9:30	11:00	0:30
Unit 02.06	N	1:45	10:00	11:45	1:45	10:00	11:45	0:00
Unit 02.07	N	2:00	10:30	12:30	2:00	10:30	12:30	0:00
Unit 02.08	NE	1:30	11:15	12:45	1:30	11:15	12:45	0:00
Level 01								
Unit 01.01	NW	1:45	13:15	15:00	1:45	13:15	15:00	0:00
Unit 01.02	N	0:30	14:30	15:00	0:30	14:30	15:00	0:00
Unit 01.03	N	0:30	9:00	9:30	0:30	9:00	9:30	0:00
Unit 01.04	N	1:30	9:00	10:30	1:30	9:00	10:30	0:00
Unit 01.05	N	2:00	9:15	11:15	2:00	9:15	11:15	0:00
Unit 01.06	N	2:15	9:45	12:00	2:15	9:45	12:00	0:00
Unit 01.07	N	2:00	10:30	12:30	2:00	10:30	12:30	0:00
Unit 01.08	NE	1:30	11:15	12:45	1:30	11:15	12:45	0:00
Ground Level								
Unit G.01	NW	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Unit G.02	N	0:15	9:00	9:15	0:15	9:00	9:15	0:00
Unit G.03	N	0:30	10:00	10:30	0:30	10:00	10:30	0:00
Unit G.04	N	1:45	9:30	11:15	1:45	9:30	11:15	0:00
Unit G.05	N	1:45	9:45	11:30	1:45	9:45	11:30	0:00
Unit G.06	N	2:00	9:45	11:45	2:00	9:45	11:45	0:00
Unit G.07	N	1:45	10:45	12:30	1:45	10:45	12:30	0:00
Unit G.08	NE	1:30	11:15	12:45	1:30	11:15	12:45	0:00

RECEIVED

Waverley Council

Application No: DA-482/2017/B

Date Received: 12/07/2023