

DAYLIGHT AND SUNLIGHT REPORT

Trinity Hall, Reading

Date August 2024



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PRIVATE AND CONFIDENTIAL

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Reading Borough Council
Civic Offices,
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Reading,
RG1 2LU

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5 Aldermanbury Square
London EC2V 7BP

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7th of August 2024

Dear Sir/Madam,

Re. Trinity Hall, Reading – Daylight and Sunlight Assessments

BNP Paribas Real Estate (BNPPRE) have been instructed to undertake technical daylight and sunlight studies for Hanslink Ltd's proposed development at Trinity Hall, Reading (the site), to understand the potential effect of development on the amenity of the neighbouring properties. This report also includes a technical review of the daylight and sunlight amenity received by the proposed dwellings.

Site and Proposed Development

The Site is located at the interchange between Sidmouth Street to the east and South Street to the south. The current building was in use as student accommodation, however we are of the understanding that the building has been vacant for a number of years.



Figure 01 - Existing Site Condition

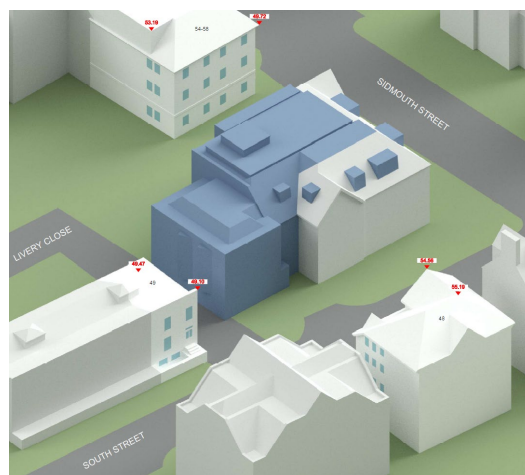


Figure 02 - Proposed Development

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The proposed development seeks to 'Change of use of existing building and extensions to provide 18 apartments' BNPPRE's understanding of the Proposed Development is illustrated in Figure 01 above and further drawings are enclosed in Appendix 01.

Planning Policy

The following documents are, in our opinion, the most pertinent in relation to daylight and sunlight matters and how we have approached the effects of the Proposed Development on the relevant neighbouring properties:

- National Planning Policy Framework (NPPF) (December 2023)
- National Planning Practice Guidance (NPPG)
- Reading Borough Local Plan (Adopted 2019)

The National Planning Policy Framework (December 2023) paragraph 129c outlines that when considering applications for housing;

*"local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a **flexible** approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)."*

Paragraph: 006 Reference ID: 66-006-20190722 of the NPPG acknowledges that new development may cause an impact on daylight and sunlight levels enjoyed by neighbouring occupiers. It requires local authorities to assess whether the impact to neighbouring occupiers would be "unreasonable".

Paragraph: 007 Reference ID: 66-007-20190722 of the NPPG goes on to say that all developments should maintain acceptable living standards, however that the appropriate levels will depend on the context of the development as well as its detailed design. "For example in areas of high-density historic buildings, or city centre locations where tall modern buildings predominate, lower daylight and daylight and sunlight levels at some windows may be unavoidable if new developments are to be in keeping with the general form of their surroundings."

Policy CC8 'Safeguarding Amenity' of the Reading Borough Local Plan states;

"Development will not cause a detrimental impact on the living environment of existing residential properties or unacceptable living conditions for new residential properties, in terms of, Access to sunlight and daylight."

The Daylight and Sunlight analysis has been considered by reference to the criteria and methodology within the Building Research Establishment Guidelines (2022), which when published, recognised that it should not form a mandatory set of criteria, rather it should be used to help and inform design.

The BRE Guidelines state in the Introduction;

"The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer."

It then goes on to say;

*"Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a **higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings.**"*



Daylight and Sunlight

Effect on Neighbouring Amenity

This section details the daylight and sunlight impacts in relation to the relevant properties neighbouring the Site.

A three-dimensional computer model of the Site and surrounding properties was produced to carry out the relevant technical studies. This was based on photogrammetry, site photography and information sourced in the public domain and the Reading Borough Planning Portal.

Surrounding Properties

BNPPRE have identified the following properties as relevant for daylight and sunlight assessment;

- 49 South Street
- 48 South Street
- 54-58 Queens Road

The extension of 54-58 Queens Road and the upper floors of 49 South Street have both recently been constructed/granted permission to convert to residential, in both cases the consented layouts have been used.

The following properties adhere to the numerical values set out within the BRE guidelines and therefore will not be discussed further;

- 54-58 Queens Road
- 48 South Street

Discussion of Results

49 South Street

BNPPRE have modelled the adjacent property, 49 South Street in detail, utilising photogrammetry, site photography and internal plans sourced from the Reading Borough Planning Portal.

This property has an extant planning permission to be split into two residential units which appears yet to be commenced, one on the basement level and a second on the upper two floors which recently received planning consent.

Both flats primary windows face north and south and only small secondary windows face the site. On the upper floors, both secondary windows serve bathrooms and therefore can be excluded from our assessments as they are considered by the BRE Guidelines to be 'non-habitable'. This flat will therefore not be discussed further.

Whilst we were unable to acquire floorplans for the basement flat, these windows are located at floor level on the façade facing the site and both are frosted and are adjacent to extract vents, so it is likely that they are also non-habitable. However, as we are unable to confirm the use of these windows, they have been assessed as habitable for the purpose of this report.

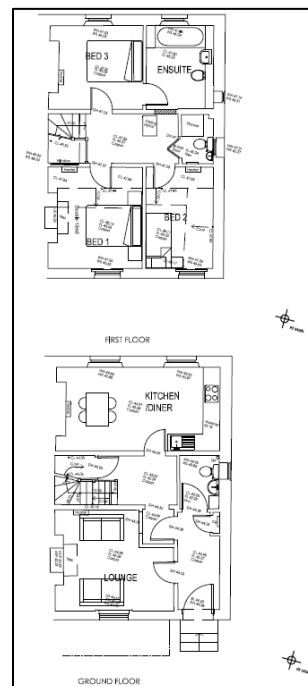


Figure 03 - 49 South Street Layouts



Basement Flat

The main windows of this flat are oriented north and south away from the development site and are therefore unaffected by the proposed development. The secondary smaller windows that face the site, are located at ground level, they are frosted and of a size that they would let minimal light through in the existing situation. Given their location and size, it is extremely likely that they serve non-habitable rooms, such as a bathroom and can therefore be discounted from our assessment, or that they are a secondary window to a room which enjoys light from an aspect unaffected by the proposed development. These windows can be seen in Figure 04.



Figure 04 – Basement Flat Windows Facing Site

Of the six windows within this flat assessed for VSC, four would experience no perceptible change in daylight and remain BRE compliant. The remaining two windows, the aforementioned windows highlighted in Figure 04 would experience VSC reductions of 51% and 25%. Should these windows serve habitable rooms, they would also be served by the other windows unaffected by the proposed development, therefore even in the worst-case scenario, the NSL remains compliant with the BRE Guidelines.

For sunlight, all windows that face within 90 degrees of due south remain compliant with the BRE Guidelines.

Given the minor nature of the reductions to two small secondary windows, and the unaffected nature of the primary living space, we do not consider the level of effect to be 'unreasonable' or that it would cause 'a detrimental impact on the living environment' and thus accords with the NPPG and Reading Borough Local Plan.

Daylight and Sunlight to the Proposed Units

When the BRE Guidelines were updated in 2022, the assessment method for internal daylight and sunlight analysis was updated to reflect BS EN 17037. This therefore removed Average Daylight Factor as the primary assessment and replaced it with the Illuminance Method and the Daylight Factor Method.

The illuminance method is Climate Based Daylight Modelling, and the daylight illuminance is predicted using sun and sky conditions based on the location of the site, the orientation and meteorological data.

The Spatial Daylight Autonomy (SDA) is an assessment of how often set points at the working plane within a room meet or exceed a target threshold to over 50% of the room area for more than half of the daylight hours in a year. The target lux is dependent on the use of the room. The BRE Guidelines suggest these target values are;

- 100 lux for bedrooms
- 150 lux for living rooms
- 200 lux for living/kitchen/diners, kitchens, and studios.

For sunlight the BRE Guidelines suggest;

"In general, a dwelling or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit provided that:

At least one main window faces within 90 degrees of due south, and



A habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March. This is assessed at the inside centre of the window(s); sunlight received by different windows can be added provided they occur at different times and sunlight hours are not double counted. "

Internal Daylight and Sunlight Results

Daylight

The SDA analysis demonstrates that rooms within the proposed development will meet the BRE guidelines for daylight. This shows excellent compliance and suggests that the future occupants will enjoy high levels of daylight, this can be seen on the SDA plots below and in appendix 04.



Figure 05 & 06 – Ground & First Floor Spatial Daylight Autonomy Analysis

Sunlight

As previously discussed, the BRE Guidelines suggest a target of 1.5 hours of direct sun on the 21st of March. 58% (15 out of 26) of the proposed rooms will meet this target. Of the 11 rooms that do not meet the BRE targets, eight are bedrooms, two are living rooms and the final room is a living kitchen diner (LKD).

Inevitably when designing such developments, not all units/rooms can have windows that face south and therefore have a reasonable expectation of sunlight. All units which have windows that predominantly face within 90 degrees of due south are compliant and meet the BRE target.

The four rooms with windows in the eastern façade which are part of the re-purposed existing building. Rooms 6 and 7 on the ground and first floor, are technically north facing (do not face within 90 degrees of due south). These rooms are also to be used as bedrooms which the BRE Guidelines consider having a lower requirement for direct sunlight due to their use predominantly for sleeping.

The other four bedrooms (R9 and 11 on Ground and First) are located on the northern façade and are north facing. Having some north facing rooms in a development are generally unavoidable, and the only single aspect north facing rooms are bedrooms, which the BRE considers to be less important for sunlight.

Finally, the two living rooms and one LKD that don't meet the BRE targets are R10 and R12 on the ground and R10 first floor. All three are dual aspect and enjoy afternoon sun through their western windows, when it is most likely to be valued by its occupants. The LKD, R12 on the ground achieves 1.3 hours of direct sun on the 21st of March and only marginally falls short of the 1.5 hour target. R10 on the ground and 1st floors achieves 0.8 hours of direct sun. It is important to note that all three of these primary living spaces receive good levels of Daylight as has been shown in the SDA analysis, so they will still be bright desirable units, even though they are limited to afternoon sun.



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In summary, the proposed development has been carefully designed to maximise daylight and sunlight for the future occupants.

We trust the above is clear, should you have any questions we would be happy to discuss the Daylight and Sunlight in more detail in due course.

Yours sincerely,

Daniel Maddox
Lead Director Daylight and Sunlight
BNP Paribas Real Estate



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APPENDIX 01 – 3D PLOTS



SOURCES OF INFORMATION:

3D CONTEXT MODEL FROM
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EXISTING BUILDINGS SHOWN IN GREEN
SITE AREA SHOWN IN RED

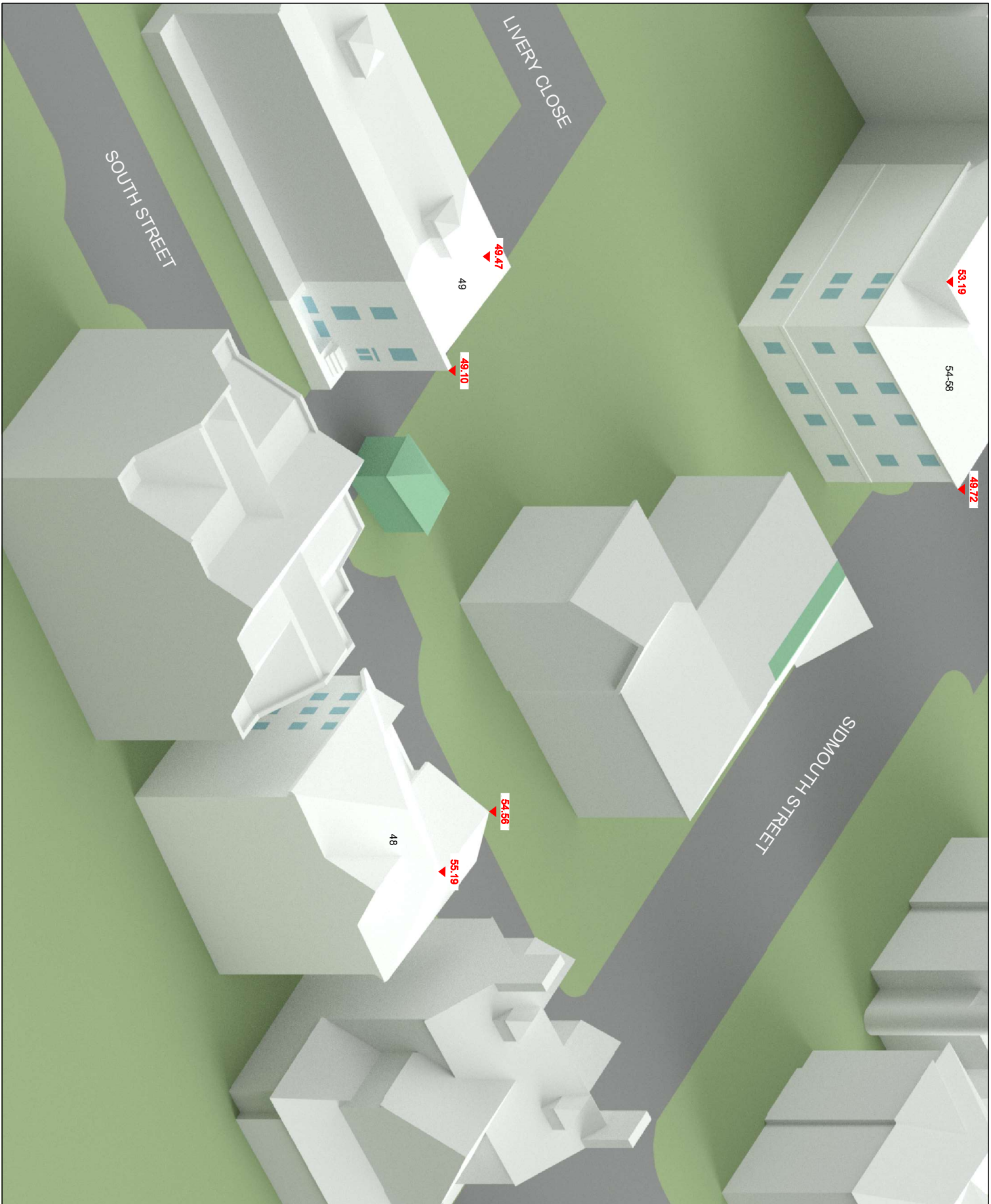
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TRINITY HALL
READING, RG1 4QT

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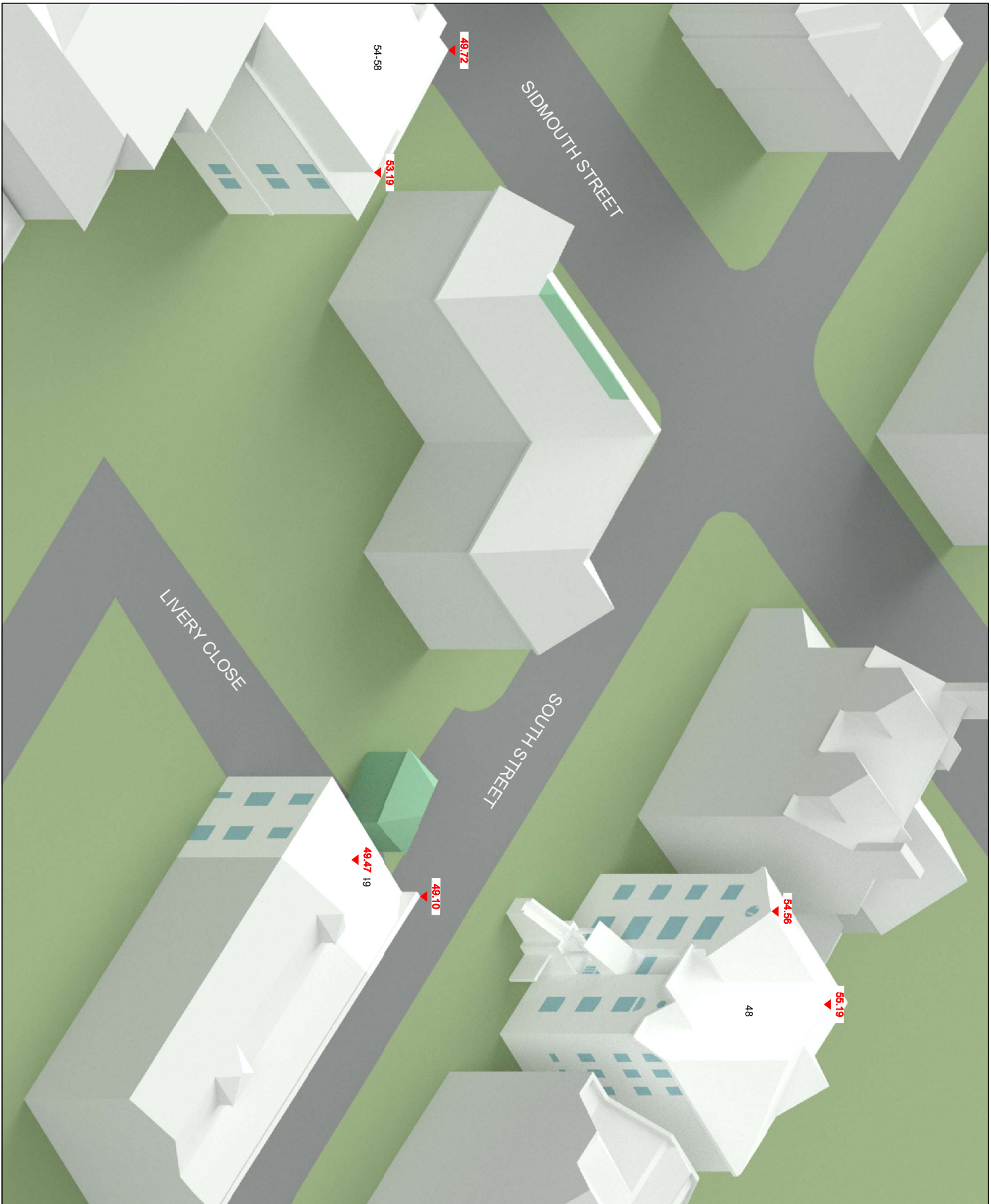
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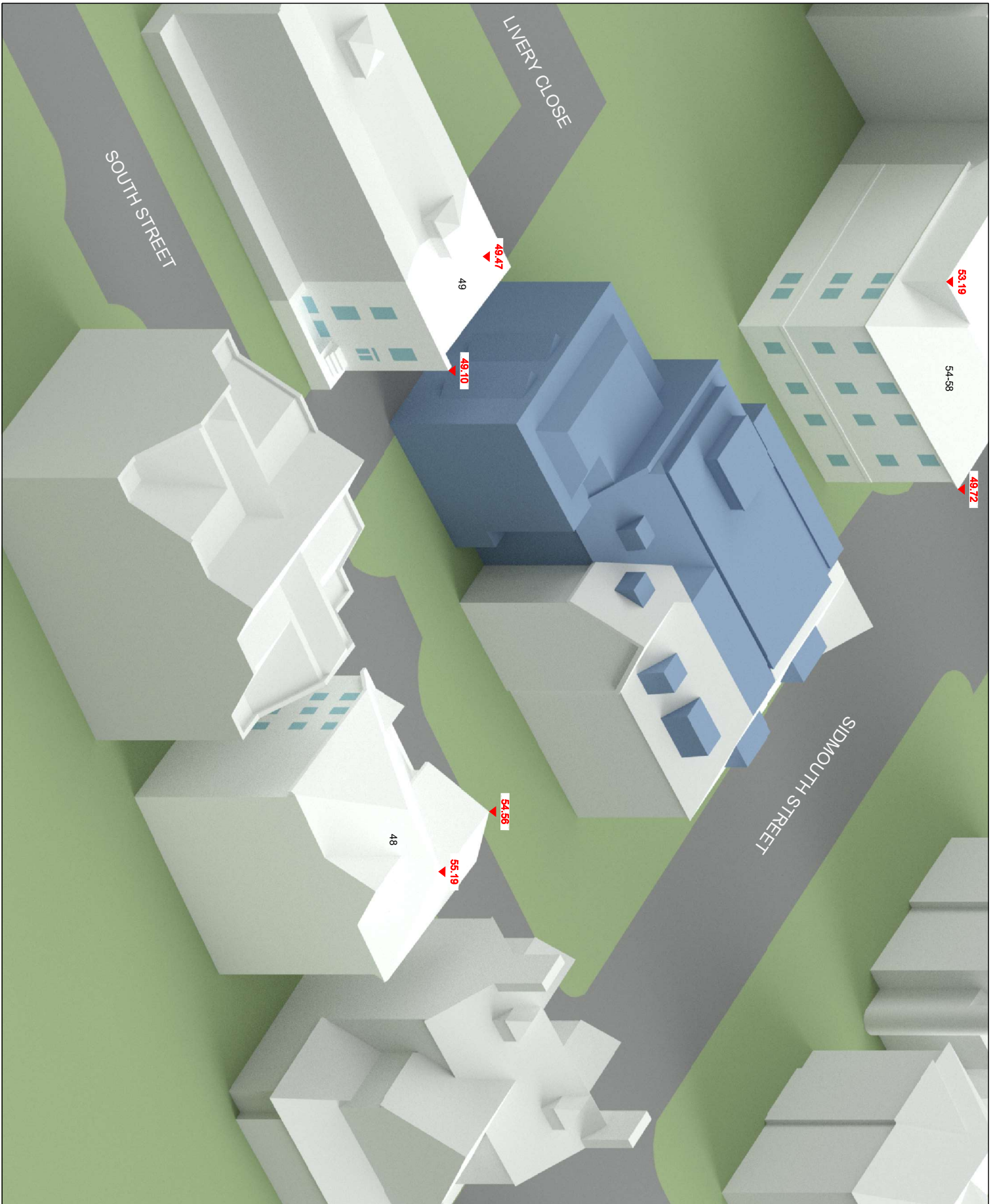
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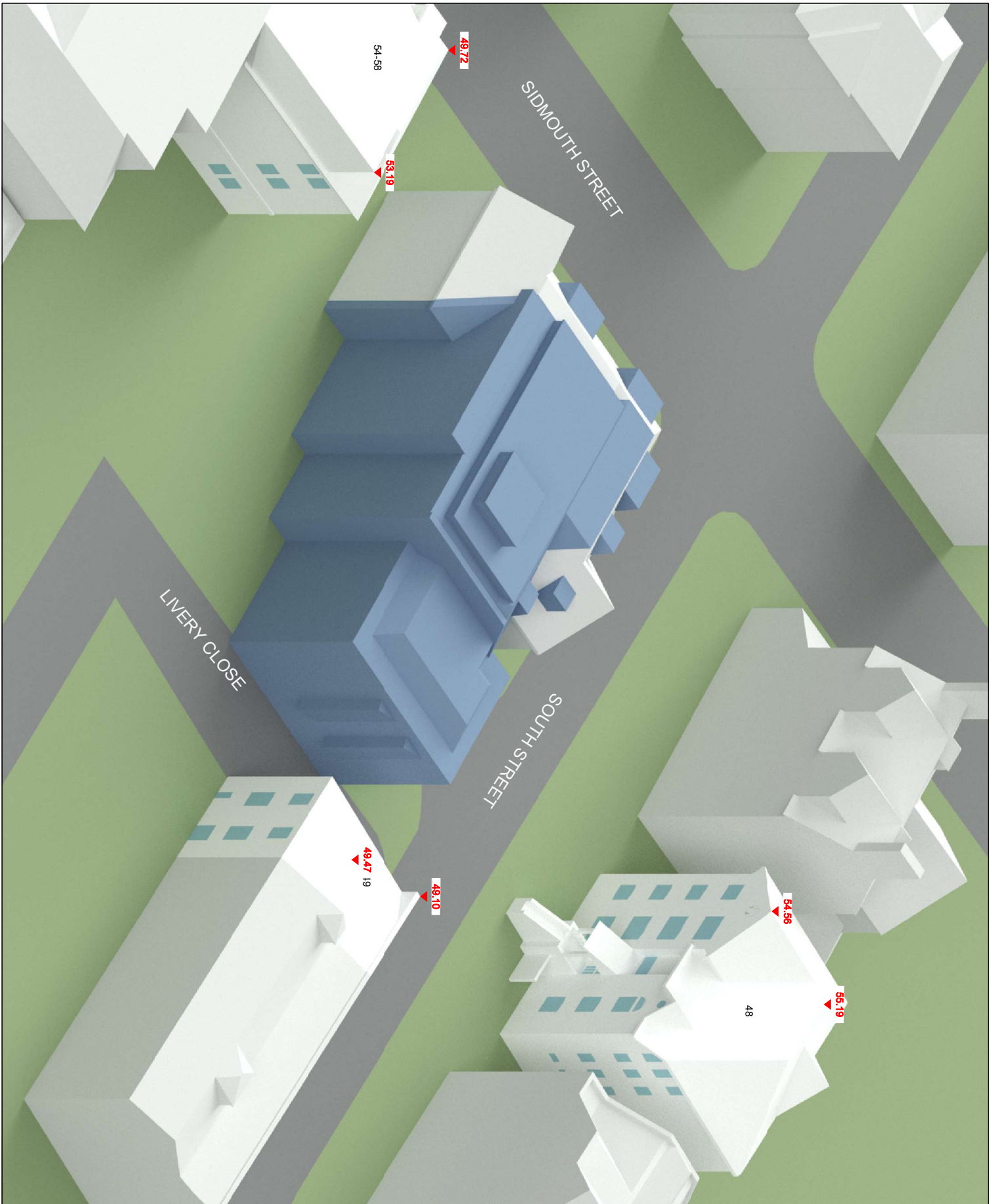
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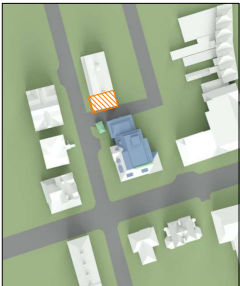


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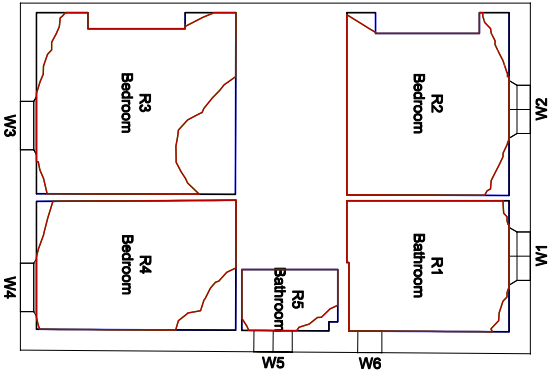
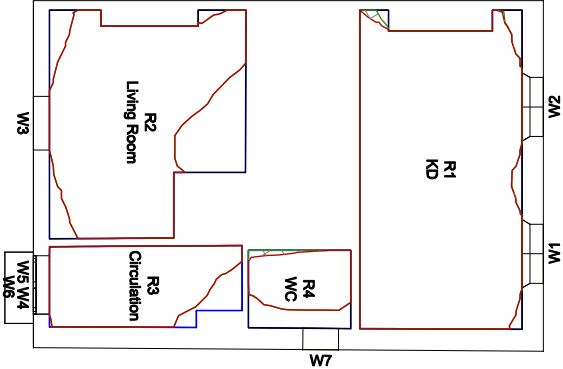
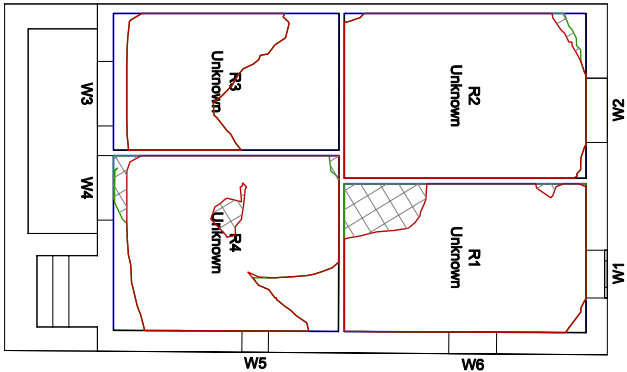
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 - PROPOSED NO SKY LINE CONTOUR
 - AREA OF LOSS / GAIN



PROJECT:
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READING, RG1 4QT

TITLE:
NSL CONTOURS
49 SOUTH STREET

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BASEMENT

GROUND FLOOR

FIRST FLOOR



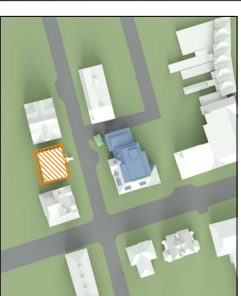
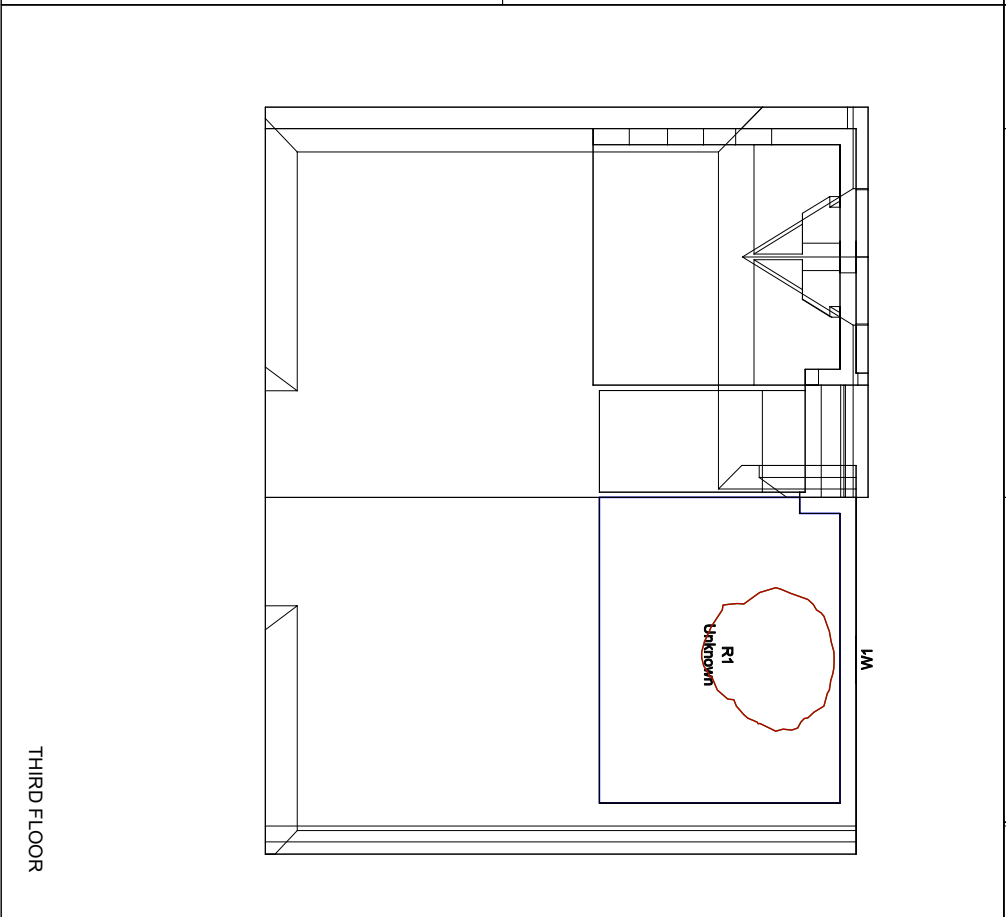
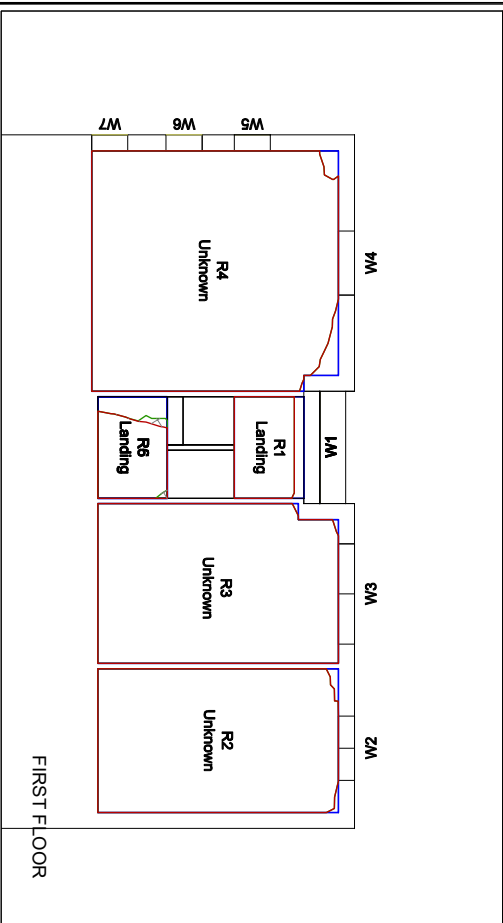
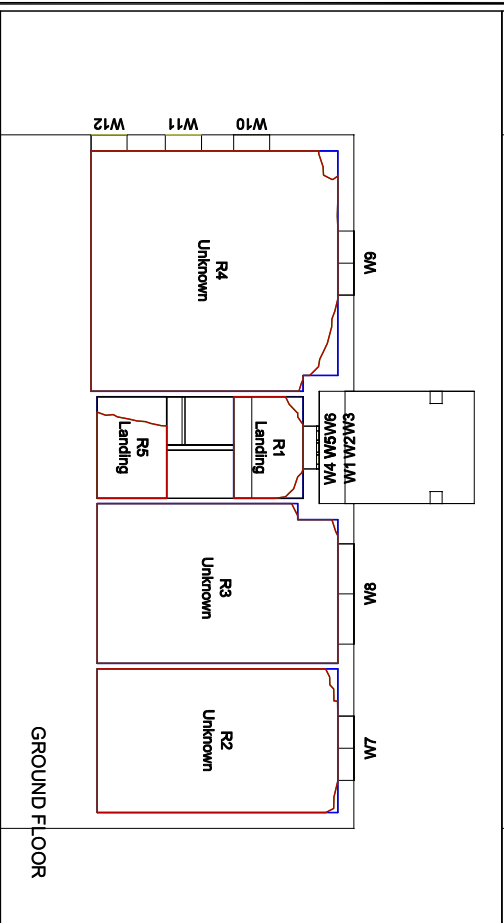
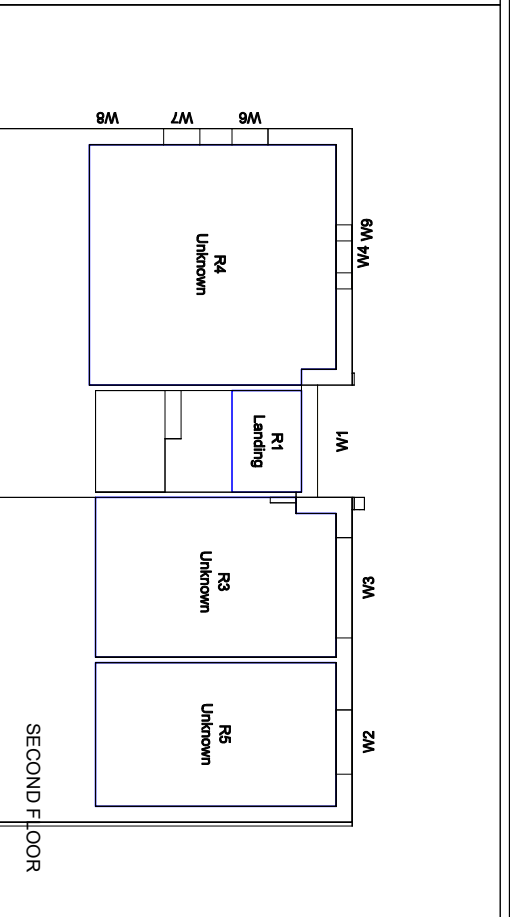
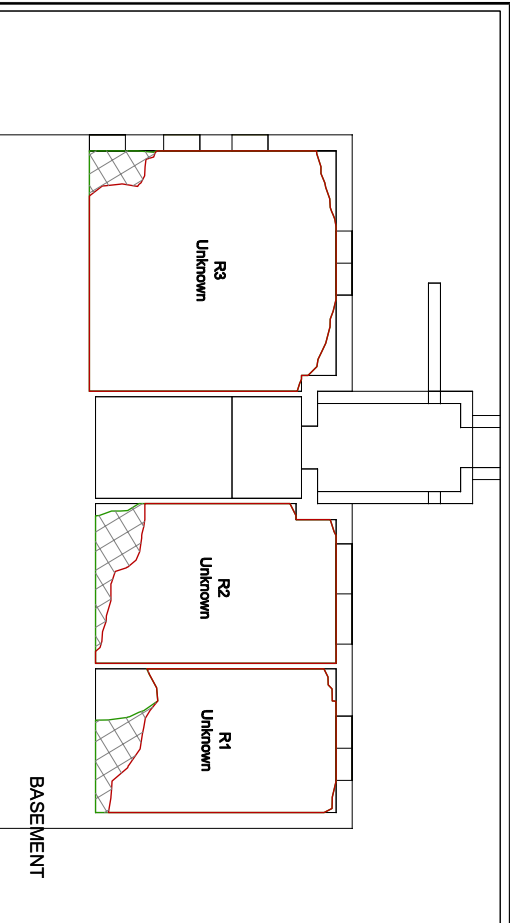
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PROPOSED SCHEME ROL CONTOURS

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AREA OF LOSS / GAIN



PROJECT:

TRINITY HALL
READING, RG1 4QT

TITLE:

NSL CONTOURS
48 South Street

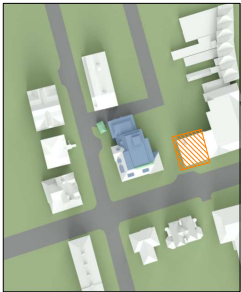
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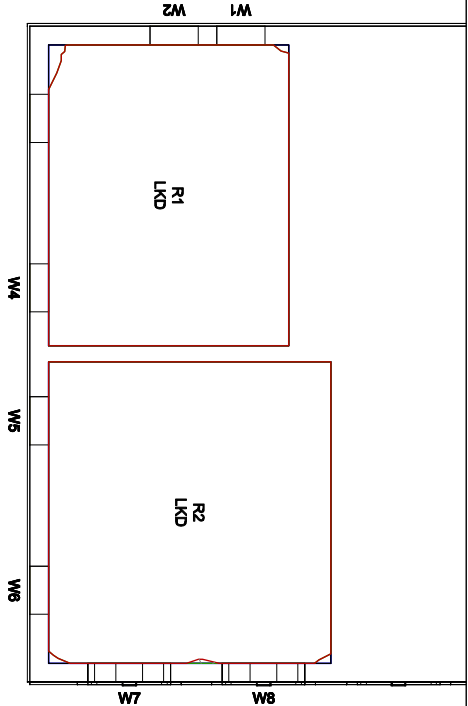
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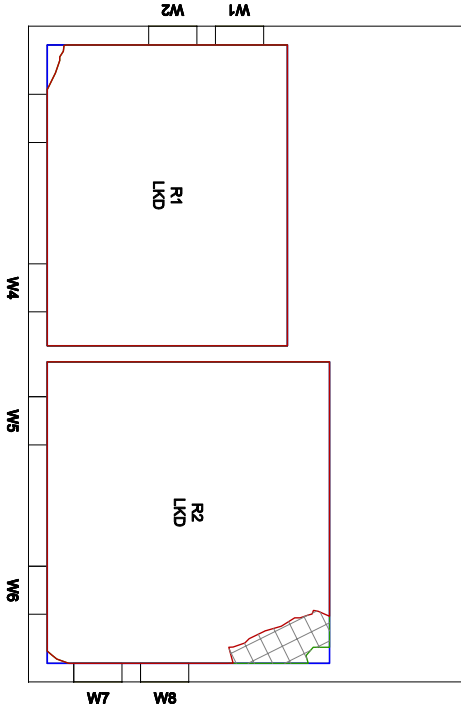


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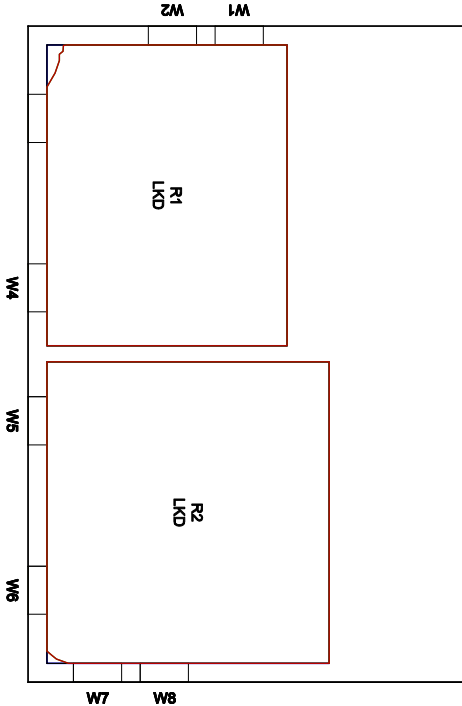
GROUND FLOOR



FIRST FLOOR



SECOND FLOOR





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APPENDIX 02 – DAYLIGHT AND SUNLIGHT RESULTS – NEIGHBOURS

Project Name: Trinity Hall-M01 Project No.: 12345 Report Title: Daylight & Sunlight Analysis - Neighbour Date of Analysis: 28/06/2024																	
Floor Ref.	Room Ref.	Room Attribute	Property Type	Room Use	Window Ref.	Daylight VSC				Sunlight							
							VSC	Pr/Ex	Window Orientation	Annual	Pr/Ex	Winter	Pr/Ex	Total Suns per Room Annual	Pr/Ex	Total Suns per Room Winter	Pr/Ex
49 South Street																	
B01	R1	Assumed	Residential	Unknown	W1	Existing Proposed	33.61 31.25	0.93	346°N		*North		*North				
					W6	Existing Proposed	28.94 14.25	0.49	77°N		*North		*North				
	R2	Assumed	Residential	Unknown	W2	Existing Proposed	34.16 33.13	0.97	346°N		*North		*North		*North		*North
	R3	Assumed	Residential	Unknown	W3	Existing Proposed	24.13 24.15	1.00	166°	65.00 66.00	1.02	9.00 9.00	1.00		*North		*North
	R4	Assumed	Residential	Unknown	W4	Existing Proposed	23.92 23.92	1.00	166°	63.00 63.00	1.00	11.00 11.00	1.00	65.00 66.00	1.02	9.00 9.00	1.00
					W5	Existing Proposed	28.27 20.83	0.74	77°N	32.00 34.00	*North	4.00 4.00	*North				
														68.00 70.00	1.03	13.00 13.00	1.00
F00	R1	Floorplans	Residential	KD	W1	Existing Proposed	35.44 33.74	0.95	346°N		*North		*North				
					W2	Existing Proposed	35.69 34.96	0.98	346°N		*North		*North				
	R2	Floorplans	Residential	Living Room	W3	Existing Proposed	27.61 27.62	1.00	166°	74.00 74.00	1.00	17.00 17.00	1.00		*North		*North
	R3	Floorplans	Residential	Circulation	W4	Existing Proposed	27.54 27.56	1.00	166°	71.00 71.00	1.00	14.00 14.00	1.00	74.00 74.00	1.00	17.00 17.00	1.00
					W5	Existing Proposed	27.50 27.52	1.00	166°	71.00 71.00	1.00	14.00 14.00	1.00				
					W6	Existing Proposed	28.48 28.48	1.00	166°	73.00 73.00	1.00	16.00 16.00	1.00				
R4	Floorplans	Residential	WC	W7	Existing Proposed	31.76 21.25	0.67	77°N		*North		*North					
																*North	*North
F01	R1	Floorplans	Residential	Bathroom	W1	Existing Proposed	37.05 36.28	0.98	346°N		*North		*North				
					W6	Existing Proposed	34.35 28.85	0.84	77°N		*North		*North				
	R2	Floorplans	Residential	Bedroom	W2	Existing Proposed	37.21 36.84	0.99	346°N		*North		*North		*North		*North
	R3	Floorplans	Residential	Bedroom	W3	Existing Proposed	30.85 30.85	1.00	166°	79.00 79.00	1.00	21.00 21.00	1.00	79.00 79.00	1.00	21.00 21.00	1.00
	R4	Floorplans	Residential	Bedroom	W4	Existing Proposed	30.89 30.89	1.00	166°	81.00 81.00	1.00	23.00 23.00	1.00	81.00 81.00	1.00	23.00 23.00	1.00
	R5	Floorplans	Residential	Bathroom	W5	Existing Proposed	34.32 29.68	0.86	77°N		*North		*North				
																*North	*North
48 South Street																	
B01	R1	Assumed	Residential	Unknown	W1	Existing Proposed	32.47 30.84	0.95	346°N		*North		*North				
	R2	Assumed	Residential	Unknown	W2	Existing Proposed	29.73 27.93	0.94	346°N		*North		*North		*North		*North
	R3	Assumed	Residential	Unknown	W3	Existing Proposed	30.91 29.32	0.95	346°N	8.00 8.00	*North	0.00 0.00	*North		*North		*North
					W4	Existing Proposed	11.76 11.75	1.00	256°	17.00 17.00	1.00	8.00 8.00	1.00				
					W5	Existing Proposed	10.50 10.49	1.00	256°	20.00 20.00	1.00	10.00 10.00	1.00				
W6					Existing Proposed	10.00 9.99	1.00	256°	20.00 20.00	1.00	10.00 10.00	1.00					
													28.00 28.00	1.00	10.00 10.00	1.00	
F00	R1	Assumed	Residential	Landing	W1	Existing Proposed	14.05 12.42	0.88	346°N		*North		*North				
					W2	Existing	14.17	0.89	346°N		*North		*North				

Project Name: Trinity Hall-M01
Project No.: 12345
Report Title: Daylight & Sunlight Analysis - Neighbour
Date of Analysis: 28/06/2024

						Daylight VSC								Sunlight				
Floor Ref.	Room Ref.	Room Attribute	Property Type	Room Use	Window Ref.		VSC	Pr/Ex	Window Orientation	Annual	Pr/Ex	Winter	Pr/Ex	Total Suns per Room Annual	Pr/Ex	Total Suns per Room Winter	Pr/Ex	
			Residential	Unknown	W3	Proposed Existing	12.55 13.88	0.89	346°N		*North		*North					
					W4	Proposed Existing	12.40 4.94	0.76	346°N		*North		*North					
					W5	Proposed Existing	3.77 4.95	0.77	346°N		*North		*North					
					W6	Proposed Existing Proposed	3.79 4.98 3.94	0.79	346°N		*North		*North					
	R2	Assumed	Residential	Unknown	W7	Existing Proposed	35.24 34.10	0.97	346°N		*North		*North		*North		*North	
	R3	Assumed	Residential	Unknown	W8	Existing Proposed	35.03 33.78	0.96	346°N		*North		*North		*North		*North	
	R4	Assumed	Residential	Unknown	W9	Existing Proposed	35.10 34.03	0.97	346°N	9.00 9.00	*North	0.00 0.00	*North					
					W10	Existing Proposed	14.79 14.78	1.00	256°	18.00 18.00	1.00	8.00 8.00	1.00					
					W11	Existing Proposed	13.36 13.35	1.00	256°	20.00 20.00	1.00	10.00 10.00	1.00					
					W12	Existing Proposed	12.72 12.71	1.00	256°	24.00 24.00	1.00	10.00 10.00	1.00					
	R5	Assumed	Residential	Landing	W1	Existing Proposed	14.05 12.42	0.88	346°N		*North		*North					
					W2	Existing Proposed	14.17 12.55	0.89	346°N		*North		*North					
					W3	Existing Proposed	13.88 12.40	0.89	346°N		*North		*North					
					W4	Existing Proposed	4.94 3.77	0.76	346°N		*North		*North					
					W5	Existing Proposed	4.95 3.79	0.77	346°N		*North		*North					
					W6	Existing Proposed	4.98 3.94	0.79	346°N		*North		*North					
					W1	Existing Proposed	30.33 29.57	0.97	346°N		*North		*North					
					W1	Existing Proposed	14.21 13.93	0.98	346°N		*North		*North					
	F01	R1	Assumed	Residential	Landing	W1	Existing Proposed	30.33 29.57	0.97	346°N		*North		*North				
	W1	Existing Proposed	14.21 13.93	0.98	346°N	*North		*North										
		R2	Assumed	Residential	Unknown	W2	Existing Proposed	37.34 36.70	0.98	346°N		*North		*North				
		R3	Assumed	Residential	Unknown	W3	Existing Proposed	37.32 36.68	0.98	346°N		*North		*North		*North		*North
R4		Assumed	Residential	Unknown	W4	Existing Proposed	37.10 36.57	0.99	346°N	12.00 12.00	*North	0.00 0.00	*North					
					W5	Existing Proposed	20.93 20.93	1.00	256°	24.00 24.00	1.00	9.00 9.00	1.00					
					W6	Existing Proposed	19.22 19.22	1.00	256°	24.00 24.00	1.00	11.00 11.00	1.00					
					W7	Existing Proposed	18.32 18.32	1.00	256°	27.00 27.00	1.00	12.00 12.00	1.00					
R5		Assumed	Residential	Landing	W1	Existing Proposed	30.33 29.57	0.97	346°N		*North		*North					
					W1	Existing Proposed	14.21 13.93	0.98	346°N		*North		*North					
R6		Assumed	Residential	Landing	W1	Existing Proposed	14.21 13.93	0.98	346°N		*North		*North					
F02	R1	Assumed	Residential	Landing	W1	Existing Proposed	14.21 13.93	0.98	346°N		*North		*North					
R3	Assumed	Residential	Unknown	W3	Existing Proposed	38.79 38.60	1.00	346°N	*North			*North	*North					*North
R4	Assumed	Residential	Unknown	W4	Existing Proposed	34.45 34.27	0.99	346°N	6.00 6.00	*North	0.00 0.00	*North		*North		*North		

Project Name: Trinity Hall-M01 Project No.: 12345 Report Title: Daylight & Sunlight Analysis - Neighbour Date of Analysis: 28/06/2024																	
Floor Ref.	Room Ref.	Room Attribute	Property Type	Room Use	Window Ref.	Daylight VSC				Sunlight							
							VSC	Pr/Ex	Window Orientation	Annual	Pr/Ex	Winter	Pr/Ex	Total Suns per Room Annual	Pr/Ex	Total Suns per Room Winter	Pr/Ex
					W6	Existing Proposed	23.72 23.72	1.00	256°	34.00 34.00	1.00	9.00 9.00	1.00	37.00 37.00	1.00	9.00 9.00	1.00
					W7	Existing Proposed	23.62 23.62	1.00	256°	32.00 32.00	1.00	9.00 9.00	1.00				
					W8	Existing Proposed	22.42 22.42	1.00	256°	26.00 26.00	1.00	9.00 9.00	1.00				
					W9	Existing Proposed	37.44 37.10	0.99	346°N	9.00 9.00	*North	0.00 0.00	*North				
					W2	Existing Proposed	38.78 38.58	0.99	346°N		*North		*North				
F03	R1	Assumed	Residential	Unknown	W1	Existing Proposed	39.50 39.47	1.00	346°N		*North		*North				
54-58 Queens Road																	
F00	R1	Floorplans	Residential	LKD	W1	Existing Proposed	33.84 32.78	0.97	251°	55.00 50.00	0.91	19.00 14.00	0.74	87.00 82.00	0.94	21.00 16.00	0.76
					W2	Existing Proposed	34.21 32.95	0.96	251°	55.00 50.00	0.91	19.00 14.00	0.74				
					W3	Existing Proposed	27.46 22.21	0.81	161°	74.00 63.00	0.85	18.00 8.00	0.44				
					W4	Existing Proposed	26.73 22.98	0.86	161°	71.00 65.00	0.92	15.00 9.00	0.60				
					W5	Existing Proposed	26.97 24.30	0.90	161°	72.00 67.00	0.93	15.00 10.00	0.67				
R2	Floorplans	Residential	LKD		W6	Existing Proposed	28.69 27.10	0.94	161°	72.00 68.00	0.94	16.00 12.00	0.75	76.00 71.00	0.93	18.00 13.00	0.72
					W7	Existing Proposed	31.90 31.90	1.00	71°N	32.00 32.00	*North	7.00 7.00	*North				
					W8	Existing Proposed	32.13 32.13	1.00	71°N	33.00 33.00	*North	7.00 7.00	*North				
F01	R1	Floorplans	Residential	LKD	W1	Existing Proposed	35.84 35.20	0.98	251°	56.00 53.00	0.95	20.00 17.00	0.85	94.00 90.00	0.96	26.00 22.00	0.85
					W2	Existing Proposed	36.14 35.36	0.98	251°	57.00 53.00	0.93	20.00 16.00	0.80				
					W3	Existing Proposed	32.09 28.02	0.87	161°	83.00 77.00	0.93	25.00 19.00	0.76				
					W4	Existing Proposed	31.49 28.50	0.91	161°	82.00 77.00	0.94	24.00 19.00	0.79				
					W5	Existing Proposed	31.54 29.37	0.93	161°	80.00 77.00	0.96	23.00 20.00	0.87				
R2	Floorplans	Residential	LKD		W6	Existing Proposed	32.56 31.25	0.96	161°	79.00 77.00	0.97	22.00 20.00	0.91	83.00 80.00	0.96	26.00 23.00	0.88
					W7	Existing Proposed	34.42 34.42	1.00	71°N	38.00 38.00	*North	8.00 8.00	*North				
					W8	Existing Proposed	34.47 34.47	1.00	71°N	38.00 38.00	*North	9.00 9.00	*North				
F02	R1	Floorplans	Residential	LKD	W1	Existing Proposed	36.08 35.79	0.99	251°	55.00 55.00	1.00	20.00 20.00	1.00	99.00 98.00	0.99	30.00 29.00	0.97
					W2	Existing Proposed	36.28 35.91	0.99	251°	55.00 55.00	1.00	20.00 20.00	1.00				
					W3	Existing Proposed	34.32 32.06	0.93	161°	85.00 82.00	0.96	29.00 26.00	0.90				
					W4	Existing Proposed	34.10 32.27	0.95	161°	83.00 80.00	0.96	29.00 26.00	0.90				
					W5	Existing Proposed	34.11 32.69	0.96	161°	83.00 82.00	0.99	29.00 28.00	0.97				
R2	Floorplans	Residential	LKD		W6	Existing Proposed	34.55 33.60	0.97	161°	83.00 83.00	1.00	29.00 29.00	1.00	83.00 83.00	1.00	29.00 29.00	1.00
					W7	Existing Proposed	35.00 35.00	1.00	71°N	36.00 36.00	*North	10.00 10.00	*North				
					W8	Existing Proposed	34.97 34.97	1.00	71°N	35.00 35.00	*North	9.00 9.00	*North				

Project Name: Trinity Hall-M01
Project No.: 12345
Report Title: Daylight Distribution Analysis - Neighbour
Date of Analysis: 28/06/2024

Floor Ref.	Room Ref	Room Attribute	Property Type	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
49 South Street									
B01	R1	Assumed	Residential	Unknown	Area m2	12.54	12.43	11.04	0.89
					% of room		99.14%	88.08%	
	R2	Assumed	Residential	Unknown	Area m2	13.94	13.62	13.49	0.99
					% of room		97.77%	96.81%	
	R3	Assumed	Residential	Unknown	Area m2	10.78	5.67	5.67	1.00
				% of room		52.58%	52.58%		
F00	R4	Assumed	Residential	Unknown	Area m2	13.81	11.84	11.29	0.95
					% of room		85.72%	81.74%	
	R1	Floorplans	Residential	KD	Area m2	17.34	16.86	16.79	1.00
					% of room		97.27%	96.83%	
	R2	Floorplans	Residential	Living Room	Area m2	13.45	10.82	10.82	1.00
				% of room		80.44%	80.44%		
R3	Floorplans	Residential	Circulation	Area m2	5.19	4.60	4.60	1.00	
				% of room		88.67%	88.67%		
F01	R4	Floorplans	Residential	WC	Area m2	2.78	2.03	1.94	0.95
					% of room		73.04%	69.62%	
	R1	Floorplans	Residential	Bathroom	Area m2	7.36	7.20	7.20	1.00
					% of room		97.79%	97.79%	
	R2	Floorplans	Residential	Bedroom	Area m2	9.60	8.97	8.97	1.00
				% of room		93.39%	93.38%		
R3	Floorplans	Residential	Bedroom	Area m2	12.08	9.83	9.83	1.00	
				% of room		81.38%	81.38%		
F00	R4	Floorplans	Residential	Bedroom	Area m2	8.99	8.11	8.11	1.00
					% of room		90.22%	90.22%	
	R5	Floorplans	Residential	Bathroom	Area m2	2.02	1.85	1.85	1.00
					% of room		91.49%	91.49%	
	48 South Street								
B01	R1	Assumed	Residential	Unknown	Area m2	12.09	11.02	9.95	0.90
					% of room		91.09%	82.24%	
	R2	Assumed	Residential	Unknown	Area m2	13.22	13.08	11.81	0.90
					% of room		98.92%	89.35%	
F00	R3	Assumed	Residential	Unknown	Area m2	20.57	20.01	19.30	0.96
					% of room		97.24%	93.81%	
	R1	Assumed	Residential	Landing	Area m2	2.47	2.30	2.30	1.00
					% of room		93.00%	93.00%	
F01	R2	Assumed	Residential	Unknown	Area m2	12.09	11.97	11.97	1.00
					% of room		99.02%	99.02%	
	R3	Assumed	Residential	Unknown	Area m2	13.22	13.19	13.19	1.00
					% of room		99.76%	99.76%	
	R4	Assumed	Residential	Unknown	Area m2	20.57	20.12	20.12	1.00
				% of room		97.81%	97.81%		
F00	R5	Assumed	Residential	Landing	Area m2	2.47	1.91	1.91	1.00
					% of room		77.52%	77.52%	
	R1	Assumed	Residential	Landing	Area m2	2.47	2.13	2.13	1.00
					% of room		86.32%	86.32%	
	R2	Assumed	Residential	Unknown	Area m2	12.09	11.97	11.97	1.00
				% of room		99.02%	99.02%		
F01	R3	Assumed	Residential	Unknown	Area m2	13.22	13.19	13.19	1.00
					% of room		99.76%	99.76%	
	R4	Assumed	Residential	Unknown	Area m2	20.57	20.13	20.13	1.00
					% of room		97.83%	97.83%	
	R5	Assumed	Residential	Landing	Area m2	2.47	1.99	1.92	

Project Name: Trinity Hall-M01
Project No.: 12345
Report Title: Daylight Distribution Analysis - Neighbour
Date of Analysis: 28/06/2024

Floor Ref.	Room Ref	Room Attribute	Property Type	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
	R6	Assumed	Residential	Landing	% of room	2.47	80.39%	77.79%	0.97
					Area m2		0.02	0.01	
					% of room		0.76%	0.32%	0.43
F02	R1	Assumed	Residential	Landing	Area m2	2.47	1.42	1.42	
	R3	Assumed	Residential	Unknown	% of room	13.22	57.50%	57.50%	1.00
					Area m2		13.19	13.19	
	R4	Assumed	Residential	Unknown	% of room	20.57	99.76%	99.76%	1.00
					Area m2		19.97	19.97	
	R5	Assumed	Residential	Unknown	% of room	12.09	97.05%	97.05%	1.00
Area m2					11.97		11.97		
F03	R1	Assumed	Residential	Unknown	% of room	25.49	99.02%	99.02%	1.00
					Area m2		4.84	4.84	
					54-58 Queens Road				
F00	R1	Floorplans	Residential	LKD	Area m2	25.27	25.10	25.10	
	R2	Floorplans	Residential	LKD	% of room	29.74	99.31%	99.31%	1.00
					Area m2		29.67	29.64	
F01	R1	Floorplans	Residential	LKD	% of room	25.27	99.78%	99.69%	1.00
	R2	Floorplans	Residential	LKD	Area m2	29.74	25.12	25.12	
					% of room		99.41%	99.41%	1.00
F02	R1	Floorplans	Residential	LKD	Area m2	29.74	29.58	28.44	
	R2	Floorplans	Residential	LKD	% of room	25.27	99.48%	95.64%	0.96
					Area m2		25.13	25.13	
	R1	Floorplans	Residential	LKD	% of room	29.74	99.43%	99.43%	1.00
					Area m2		29.70	29.70	
	R2	Floorplans	Residential	LKD	% of room		99.88%	99.88%	1.00

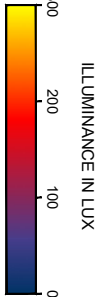
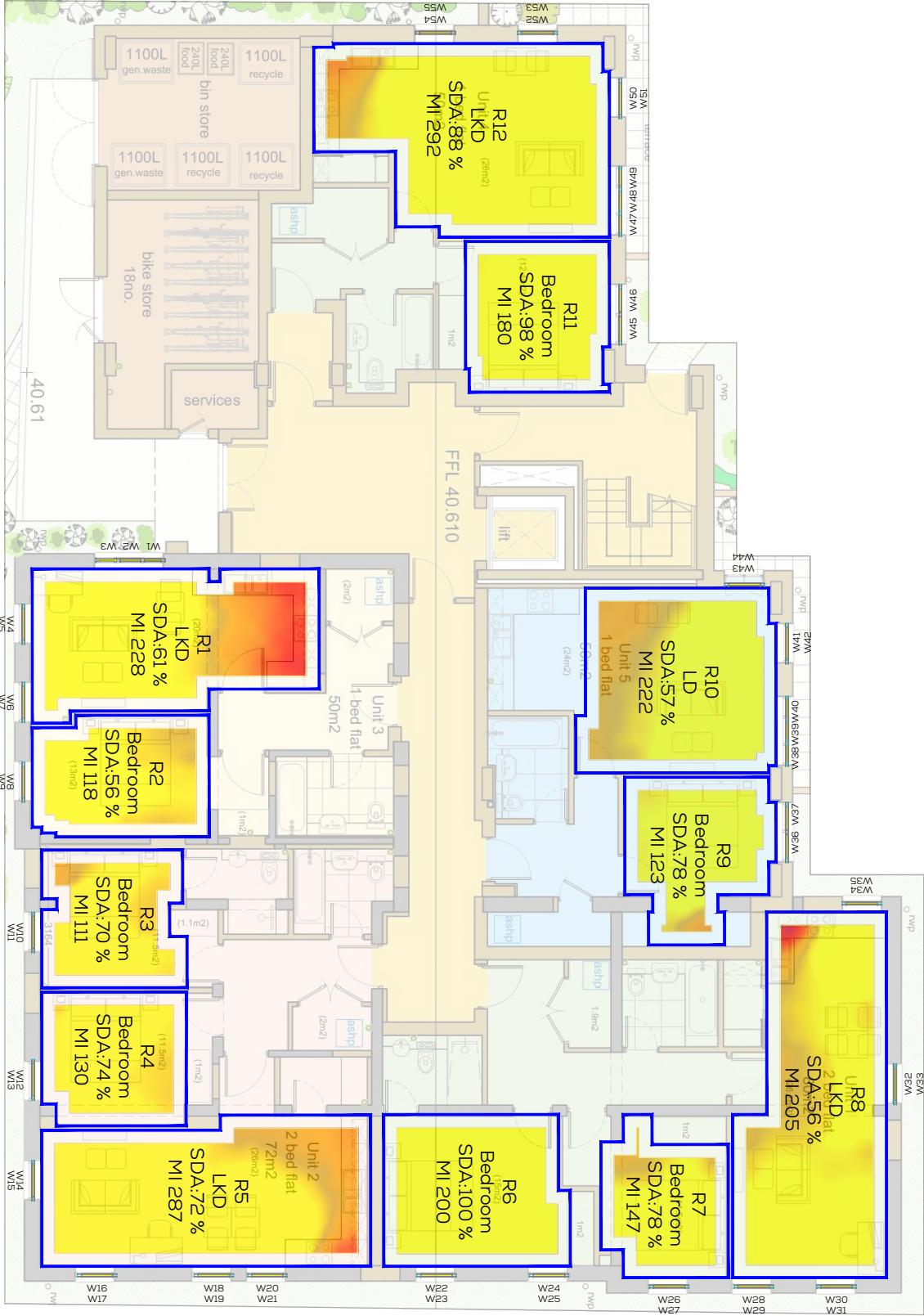


**BNP PARIBAS
REAL ESTATE**

APPENDIX 03 - DAYLIGHT AND SUNLIGHT TO PROPOSED UNITS

SOURCES OF INFORMATION:

3D CONTEXT MODEL FROM
EXTENDED OS MAP USING
ASSUMED DIMENSIONS & GEOLOCATION
TO339714
BRITISHNATIONALGRID.UK
PROPOSED SCHEME MODEL
FROM 2D PDF DRAWINGS
HANS LINK LTD
RECEIVED 30/07/2024



PROJECT:
TRINITY HALL
READING, RG1 4QT

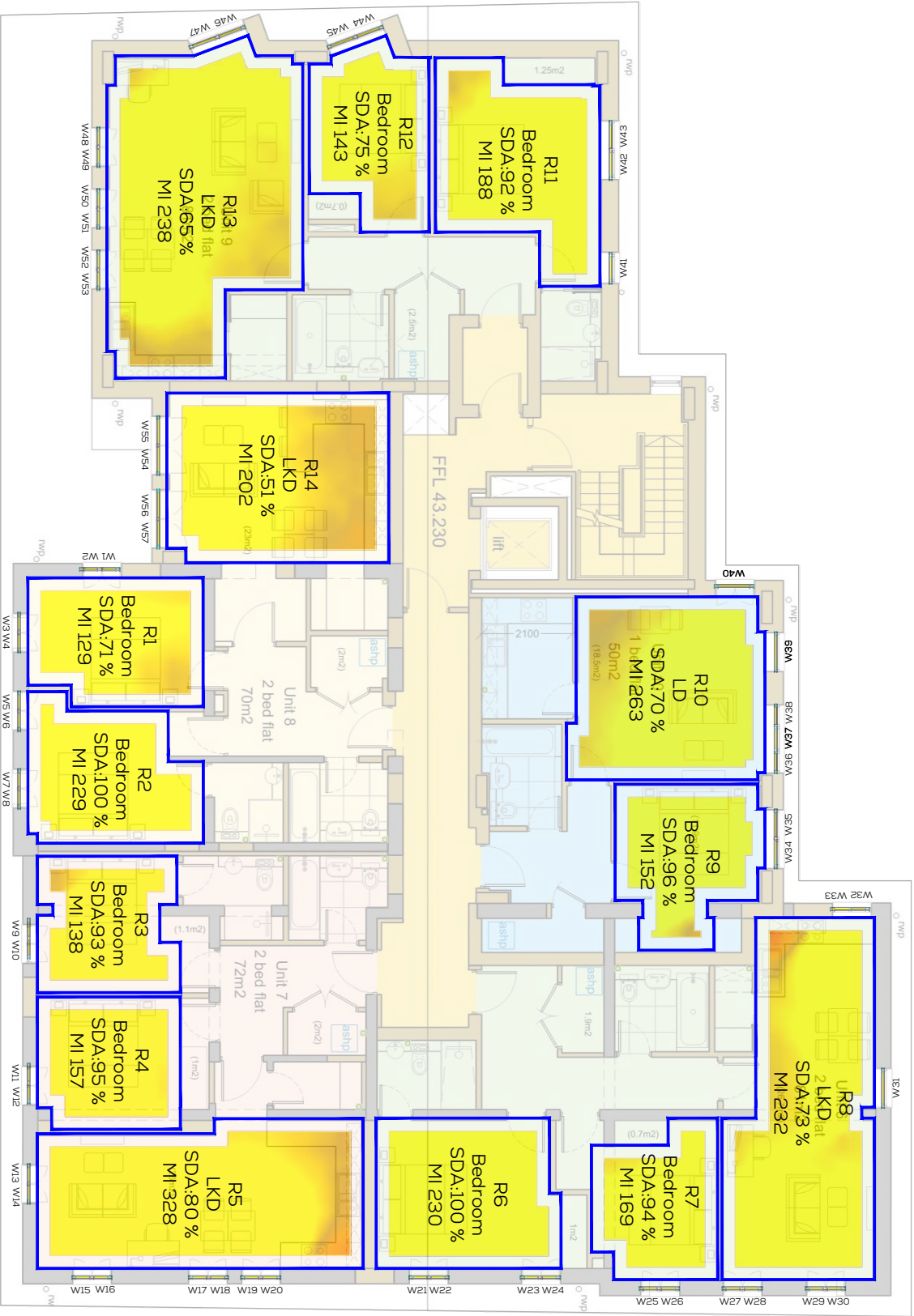
TITLE:
PLAN VIEW
PROPOSED SCHEME INTERNAL TEST
SPATIAL DAYLIGHT AUTONOMY ANALYSIS

JOB NO:	03	DWG NO:	01
DATE:	JUL 2024	SCALE:	1:100 @ A3

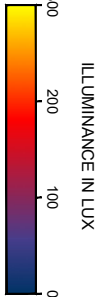


BNP PARIBAS
REAL ESTATE

GROUND FLOOR



FIRST FLOOR



PROJECT:
TRINITY HALL
READING, RG1 4QT

TITLE:
PLAN VIEW
PROPOSED SCHEME INTERNAL TEST
SPATIAL DAYLIGHT AUTONOMY ANALYSIS

JOB NO:	03	DWG NO:	02
DATE:	JUL 2024	SCALE:	1:100 @ A3



BNP PARIBAS
REAL ESTATE

Project Name: Trinity Hall-M01
Project No.: 12345
Report Title: SDA BS En17037 Analysis - Proposed Scheme
Date of Analysis: 28/06/2024

Floor Ref	Room Ref	Room Attribute	Property Type	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux
Trinity Hall									
F00	R1	Floorplans	Residential	LKD	20.25	14.38	228	8.70	61%
	R2	Floorplans	Residential	Bedroom	10.89	7.16	118	4.04	56%
	R3	Floorplans	Residential	Bedroom	9.95	6.04	111	4.25	70%
	R4	Floorplans	Residential	Bedroom	9.94	6.49	130	4.78	74%
	R5	Floorplans	Residential	LKD	24.61	18.39	287	13.24	72%
	R6	Floorplans	Residential	Bedroom	14.36	10.07	200	10.07	100%
	R7	Floorplans	Residential	Bedroom	9.02	5.39	147	4.18	78%
	R8	Floorplans	Residential	LKD	25.81	19.05	205	10.69	56%
	R9	Floorplans	Residential	Bedroom	10.97	6.80	123	5.29	78%
	R10	Floorplans	Residential	LD	18.55	13.63	222	7.81	57%
	R11	Floorplans	Residential	Bedroom	11.17	7.46	180	7.29	98%
	R12	Floorplans	Residential	LKD	25.91	19.56	292	17.31	88%
F01	R1	Floorplans	Residential	Bedroom	11.54	7.69	129	5.48	71%
	R2	Floorplans	Residential	Bedroom	11.77	7.60	229	7.60	100%
	R3	Floorplans	Residential	Bedroom	9.80	5.84	138	5.41	93%
	R4	Floorplans	Residential	Bedroom	9.93	6.47	157	6.14	95%
	R5	Floorplans	Residential	LKD	24.61	18.39	328	14.68	80%
	R6	Floorplans	Residential	Bedroom	14.36	10.07	230	10.07	100%
	R7	Floorplans	Residential	Bedroom	9.43	5.81	169	5.44	94%
	R8	Floorplans	Residential	LKD	25.74	18.80	232	13.76	73%
	R9	Floorplans	Residential	Bedroom	10.97	6.80	152	6.52	96%
	R10	Floorplans	Residential	LD	18.55	13.63	263	9.53	70%
	R11	Floorplans	Residential	Bedroom	15.62	10.54	188	9.75	92%
	R12	Floorplans	Residential	Bedroom	10.41	6.56	143	4.91	75%
	R13	Floorplans	Residential	LKD	30.05	23.11	238	15.13	65%
	R14	Floorplans	Residential	LKD	19.91	14.65	202	7.40	51%

Project Name: Trinity Hall-M01
Project No.: 12345
Report Title: Sunlight Exposure Analysis - Proposed Scheme
Date: 28/06/2024

Floor Ref	Room Ref	Room Attribute	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure (Hours)
Trinity Hall							
F00	R1	Floorplans	Residential	LKD	W1	253°	1.9
					W2	253°	2.1
					W3	253°	1.8
					W4	163°	2.9
					W5	163°	3.7
					W6	163°	2.9
					W7	163°	3.7
							7.8
F00	R2	Floorplans	Residential	Bedroom	W8	163°	2.9
					W9	163°	3.8
							5.7
F00	R3	Floorplans	Residential	Bedroom	W10	163°	2.9
					W11	163°	3.8
							5.7
F00	R4	Floorplans	Residential	Bedroom	W12	163°	2.9
					W13	163°	3.8
							5.7
F00	R5	Floorplans	Residential	LKD	W14	163°	2.9
					W15	163°	3.8
					W16	73°N	0.3
					W17	73°N	1.1
					W18	73°N	0.4
					W19	73°N	1.2
					W20	73°N	0.5
							6.4
F00	R6	Floorplans	Residential	Bedroom	W22	73°N	0.5
					W23	73°N	1.3
					W24	73°N	0.5
					W25	73°N	1.3
							1.3
F00	R7	Floorplans	Residential	Bedroom	W26	73°N	0.2
					W27	73°N	1
							1
F00	R8	Floorplans	Residential	LKD	W28	73°N	0.1
					W29	73°N	1
					W30	73°N	0.1
					W31	73°N	0.9
					W32	343°N	0
					W33	343°N	0
					W34	253°	1
W35	253°	1.1					
							2.1
F00	R9	Floorplans	Residential	Bedroom	W36	343°N	0
					W37	343°N	0
							0
F00	R10	Floorplans	Residential	LKD	W38	343°N	0

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Floor Ref	Room Ref	Room Attribute	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure (Hours)
					W39	343°N	0
					W40	343°N	0
					W41	343°N	0
					W42	343°N	0
					W43	253°	0.8
					W44	253°	0.8
							0.8
F00	R11	Floorplans	Residential	Bedroom	W45	343°N	0
					W46	343°N	0
							0
F00	R12	Floorplans	Residential	LKD	W47	343°N	0
					W48	343°N	0
					W49	343°N	0
					W50	343°N	0
					W51	343°N	0
					W52	253°	1.2
					W53	253°	1
					W54	253°	0.2
					W55	253°	0.2
							1.3
F01	R1	Floorplans	Residential	Bedroom	W1	253°	2.5
					W2	253°	2.8
					W3	163°	4
					W4	163°	3.9
							6.9
F01	R2	Floorplans	Residential	Bedroom	W5	163°	4
					W6	163°	3.9
					W7	163°	4
					W8	163°	3.9
							4.6
F01	R3	Floorplans	Residential	Bedroom	W9	163°	4
					W10	163°	3.9
							4.6
F01	R4	Floorplans	Residential	Bedroom	W11	163°	4
					W12	163°	3.9
							4.6
F01	R5	Floorplans	Residential	LKD	W13	163°	4
					W14	163°	3.9
					W15	73°N	0
					W16	73°N	0.6
					W17	73°N	0
					W18	73°N	0.6
					W19	73°N	0
					W20	73°N	0.6
							5.2
F01	R6	Floorplans	Residential	Bedroom	W21	73°N	0
					W22	73°N	0.6
					W23	73°N	0
					W24	73°N	0.6

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Floor Ref	Room Ref	Room Attribute	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure (Hours)
							0.6
F01	R7	Floorplans	Residential	Bedroom	W25	73°N	0
					W26	73°N	0.6
							0.6
F01	R8	Floorplans	Residential	LKD	W27	73°N	0
					W28	73°N	0.6
					W29	73°N	0
					W30	73°N	0.6
					W31	343°N	0
					W32	253°	1.2
					W33	253°	1
							1.8
F01	R9	Floorplans	Residential	Bedroom	W34	343°N	0
					W35	343°N	0
							0
F01	R10	Floorplans	Residential	LKD	W36	343°N	0
					W37	343°N	0
					W38	343°N	0
					W39	343°N	0
					W40	253°	0.8
							0.8
F01	R11	Floorplans	Residential	Bedroom	W41	343°N	0
					W42	343°N	0
					W43	343°N	0
							0
F01	R12	Floorplans	Residential	Bedroom	W44	233°	2.4
					W45	233°	2.3
							2.5
F01	R13	Floorplans	Residential	LKD	W46	233°	2.5
					W47	233°	2.4
					W48	163°	4
					W49	163°	3.9
					W50	163°	4
					W51	163°	3.9
					W52	163°	4
					W53	163°	3.9
		6.4					
F01	R14	Floorplans	Residential	LKD	W54	163°	4
					W55	163°	3.7
					W56	163°	3.4
					W57	163°	3
							4.8