330 GRAYS INN ROAD
LONDON BOROUGH OF CAMDEN

SCHEME INTERNAL DAYLIGHT REPORT

DIRECTOR: LIAM DUNFORD
CLIENT: GROVEWORLD LTD.
DATE: NOVEMBER 2020
VERSION: DR1
PROJECT: P2150

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POINT 2

Contents

Appendices

1 Introduction

1.1 This report considers the internal daylight amenity of the proposed development of 330 Grays Inn Road ("the Site" / "the Proposed Scheme"). The Site is located in the London Borough of Camden.

Development Description

Redevelopment of the former Royal National Throat, Nose and Ear hospital, comprising: Retention of 330 Gray's Inn Road and a two storey extension for use as hotel, demolition of all other buildings, the erection of a part 13 part 9 storey building plus upper and lower ground floors for use as a hotel including a café and restaurant; covered courtyard; external terraces; erection of a 7 storey building plus upper and lower ground floors for use as office together with terraces; erection of a 10 storey building plus upper and lower ground floors for use as residential on Wicklow Street and office space at lower ground and basement floors; erection of a 5 storey building plus upper and lower ground floors for use as residential on Swinton Street and associated residential amenity space; together with a gymnasium; new basement; rooftop and basement plant; servicing; cycle storage and facilities; refuse storage; landscaping and other ancillary and associated works.

Sources of Information

1.2 In the process of compiling this report, the following sources of information have been used:

Point 2 Surveyors
Site Photography

Warner Surveys
Survey Info (received 18/07/19)
LT3190593P0001-9.dwg

Royal Free Hampstead NHS Trust
Existing 2D Drawings (received 18/07/19)
RNTNE Basement Floor Plan- RNTNE 4th Floor Plan.dwg

Allford Hall Monaghan Morris
Proposed 3D Model (received 17/11/20)
18116_Hotel_201117.3dm
201117_Office.skp
18116_03_(00)_P200.dwg

2 Planning Overview

2.1 Through the planning process the local authority will wish to be reassured that the construction of the new scheme will benefit from acceptable levels of internal daylight amenity within BRE and British Standard Guidance.

2.2 The Local Authority will be informed in this by the BRE document entitled *Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011* (the BRE guidelines). This document is the principal guidance in this area and sets out the methodology for measuring light and recommends what it considers to be permitted or unobtrusive levels of change.

2.3 The BRE guidelines are not mandatory, though local planning authorities and planning inspectors will consider the suitability of a proposed scheme for a site within the context of BRE guidance. Consideration will be given to the urban context within which a scheme is located and the internal daylight amenity will be one of a number of planning considerations which the local authority will weigh

3 Methodology

3.1 In assessing the daylight to the main habitable spaces within the proposed accommodation, as recommended by the guidelines, we have calculated the ADF. With reference to BS8206 Part 2:2008 and Appendix C of the BRE Report, in calculating the values, we have assumed light internal finishes giving the following reflectances: floors 0.4 (light wood or cream carpet), ceilings 0.85 (white paint), internal walls 0.81 (pale cream paint). We have assumed double glazing with a transmittance of 0.68, and have allowed for a maintenance factor of 8% (appropriate for urban residential properties).

3.2 This daylight assessment method considers the transmittance of the glazing to the room in question (i.e. how much light gets through the window glass); the net glazed area of the window in question; the total area of the room surfaces (ceiling, walls, floor and windows) and their reflectances; and the angle of visible sky reaching the window/windows in question.

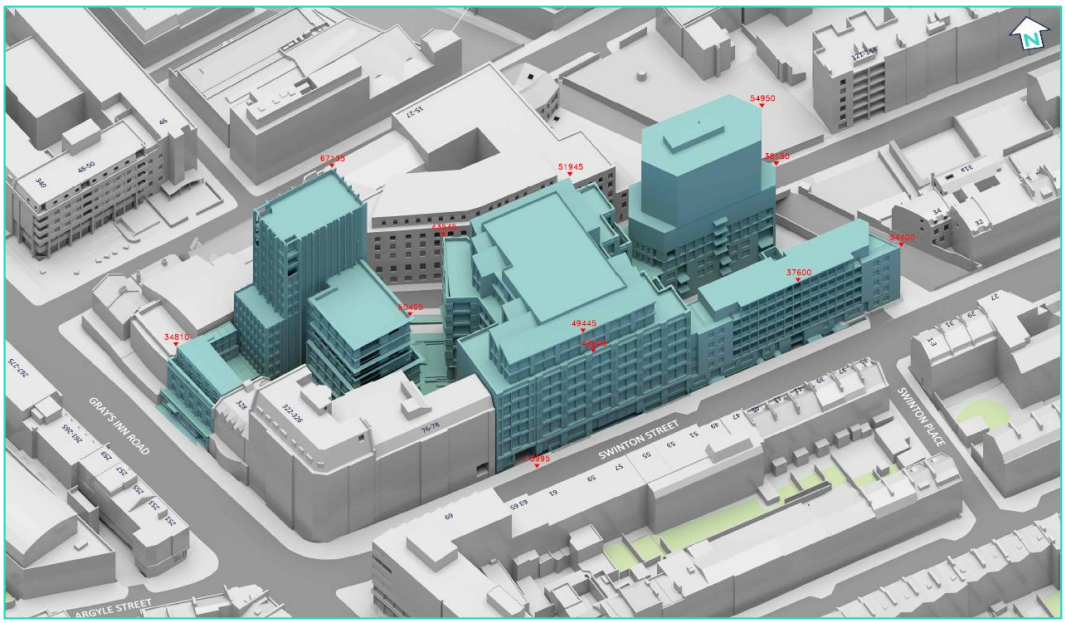
3.3 The BRE guidelines / British Standard sets the following recommended ADF levels for habitable room uses:

- 1% Bedroom
- 1.5% Living Room
- 2.0% Kitchens

3.4 With regard to the combined Living/Kitchen/Dining Rooms (LKDs), strictly the presence of a kitchen means that the target ADF value is 2%. However, as is common in modern residential developments, the kitchen areas are located to the rear of these spaces, furthest from the windows. As such they will receive lower levels of daylight and the ADF target of 1.5% for a living room, which is the principal use, is appropriate for these combined spaces.

3.5 It is important to remember that the BRE Guide states that ‘the advice given here is not mandatory and should not be seen as an instrument of planning policy’. Furthermore, daylight criteria should be ‘interpreted flexibly because natural lighting is only one of many factors’. Based upon these statements it is important to apply the guidance and target levels sensibly and flexibly taking into account the context of the site as a conversion of an existing building

4 The Proposal



Drawing Number: P2150/29 – 3D View – Proposed Scheme

4.1 Our understanding of the proposed scheme is illustrated in drawings P2150/28-30 located within Appendix 1.

4.2 The residential components are split into two blocks; North and South:

5 Internal Daylight Study

5.1 Full and detailed analysis annotated upon floor layout plans are referenced P2150/I23-25 and provided within Appendix 2 to show both the locations and configuration of the rooms which have been analysed.

5.2 108 rooms have been analysed to establish the ADF levels within. This represents the lowest five residential floors. Since these are the lowest residential floors, the analysis results represent a worst case scenario. Daylight amenity will generally improve the higher within the building a residential room is located since the windows serving the rooms will, generally, have a greater view of the sky.

5.3 94 of the 108 rooms (88%) assessed meet the required ADF value appropriate for the rooms' usage, with many of the rooms achieving above the required minimums. Naturally, if the upper floors of the blocks were assessed this overall percentage would be significantly greater.

5.4 The remaining 14 rooms falling below the suggested BRE target are summarised below:

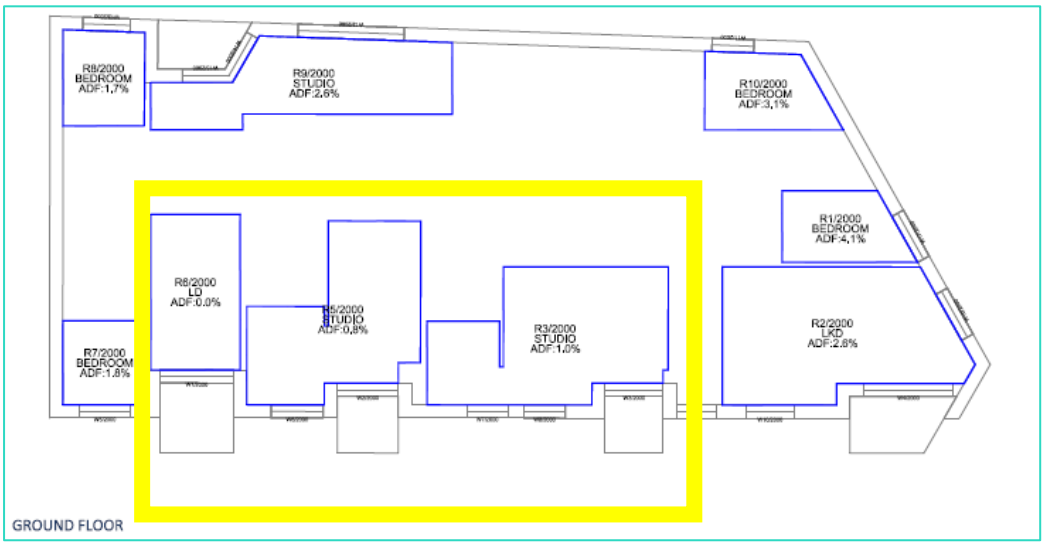
Room	Room Use	Total ADF(%)
R3/2000	STUDIO	1.0
R5/2000	STUDIO	0.8
R6/2000	LD	0.0
R6/2001	LD	1.2
R2/3203	KD	1.0
R2/3204	KD	1.2
R2/3205	KD	1.0
R2/3206	KD	1.2
R9/4001	LKD	1.3
R10/4001	BEDROOM	0.9
R11/4001	BEDROOM	0.3
R12/4001	LKD	1.1
R11/4002	BEDROOM	0.4
R11/4003	BEDROOM	0.8

Rooms below the suggested ADF target

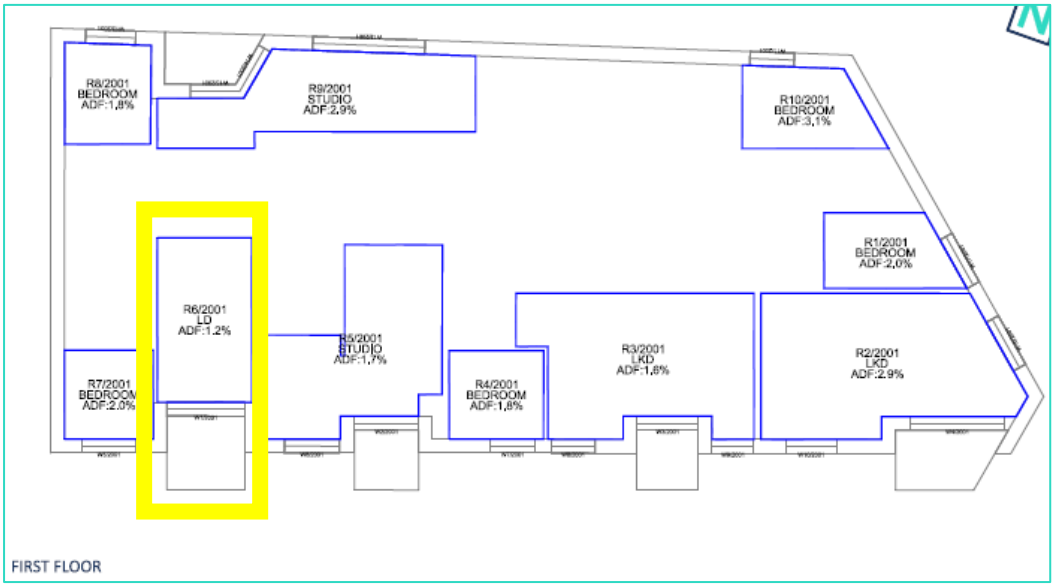
5.5 We will discuss these in more detail below:

North Block

5.6 Only the ground and first floors have rooms which fall below the suggested ADF target, namely two Studios (R3/2000 & R5/2000) and a Living/Dining Room (LD R6/2000) at ground floor level and one LD (R6/2001) at first floor level.



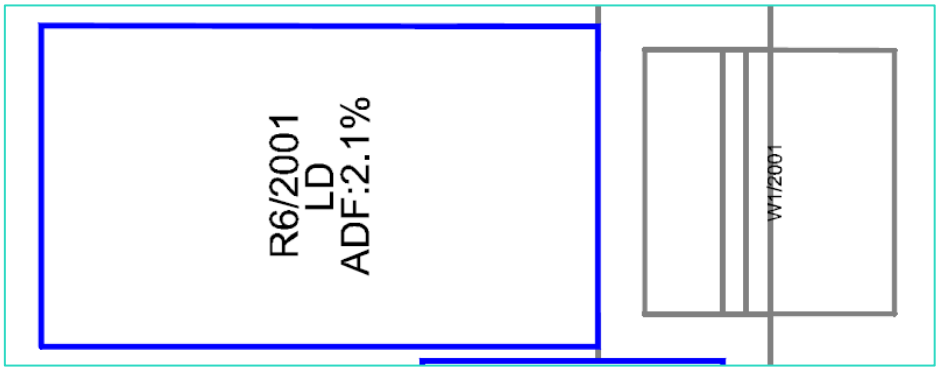
Extract from P2150/I/23 - Ground Floor – North Block – Rooms below target (yellow)



Extract from P2150/I/23 - First Floor – North Block – Rooms below target (yellow)

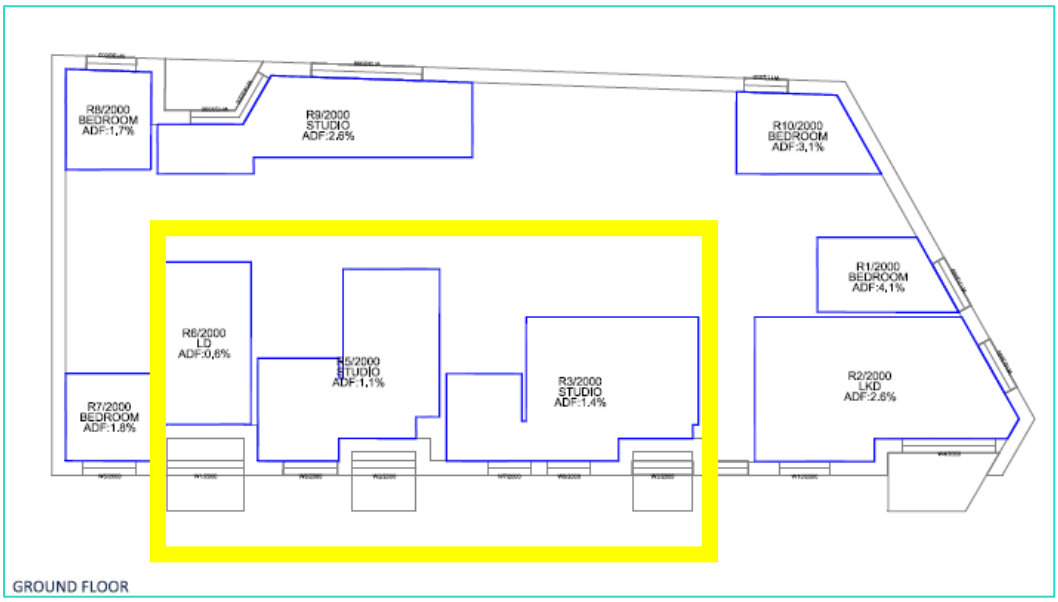
5.7 One of the limitations with the ADF assessment method is that it uses a reference point in the centre of a window to assess the level of sky visibility seen at the face of the window. So, the presence of balconies or recesses (or both) can often show the ADF in the room to be low (or zero), because the visibility at the reference point is low.

5.8 To understand the level of daylight received within the combined space of the room and the recessed external area, we have conducted an analysis of these rooms moving the window to the edge of the façade, but we have kept the remainder of the projecting balcony in place; this assumes the room is now larger but considers the amount of skylight available on the façade.



Extract from P2150/I/26 – First Floor LD with window at façade – North Block

5.9 The first floor LD achieves 2.1% ADF when the room is made larger with the window on the façade, demonstrating the effect of the recess on the ADF calculation.



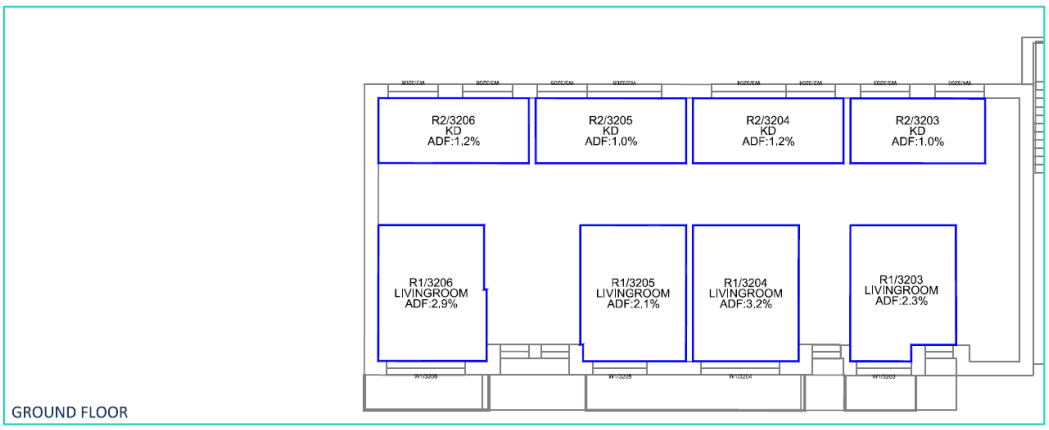
Extract from P2150/I/26 - Ground Floor – North Block – Rooms below target (yellow)

5.10 At ground floor level, the LD now achieves 0.6%, Studio R5 achieves 1.1% and Studio R3 achieves 1.4% when the room is made larger with the window on the façade, demonstrating the effect of the recess on the ADF calculation.

South Block

5.11 Four ground floor Kitchen/Dining Rooms (KDs), two first floor Living/Kitchen/Dining Rooms (LKDs) and four bedrooms (two at first, one at second, one at third) fall below the suggested ADF target.

KD's



Extract from P2150/I/24 – Ground Floor – North Block

5.12 While the KD's fall below, they do still achieve a degree of internal natural daylight (1%-1.2% ADF) and they are connected to a well-daylit living room; the living rooms range 2.1% to 3.2% against a target of 1.5%.

LKD's and Bedrooms

5.13 These first floor LKDs achieve ADFs of 1.1% and 1.3% against the desired target of 1.5%. The bedrooms achieve 0.3%, 0.4%, 0.8% and 0.9%.

5.14 While these rooms fall below the BRE suggested 'target' it should be borne that the BRE Guidelines are not prescriptive. The Mayor of London Plan, Supplementary Planning Guidance (SPG10) states at paragraph 1.3.46:

"The degree of harm on adjacent properties ***and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area*** [emphasis added] *and of a similar nature across London"*

5.15 This overall small percentage of rooms falling below the desired ADF target value is not considered unusual in this area, and comparable levels of internal daylight can be observed within the immediate area.

6 Conclusion

6.1 Section 5 above, and the appended drawings to this report (P2150/I23-25 & 26-28) show that the scheme demonstrates a good level of compliance with BRE Guidance in terms of internal daylight amenity with over 88% of the rooms on the first five floors meeting their ADF target value in the 'as built' position. Had the entirety of the residential blocks been considered this percentage would be substantially greater.

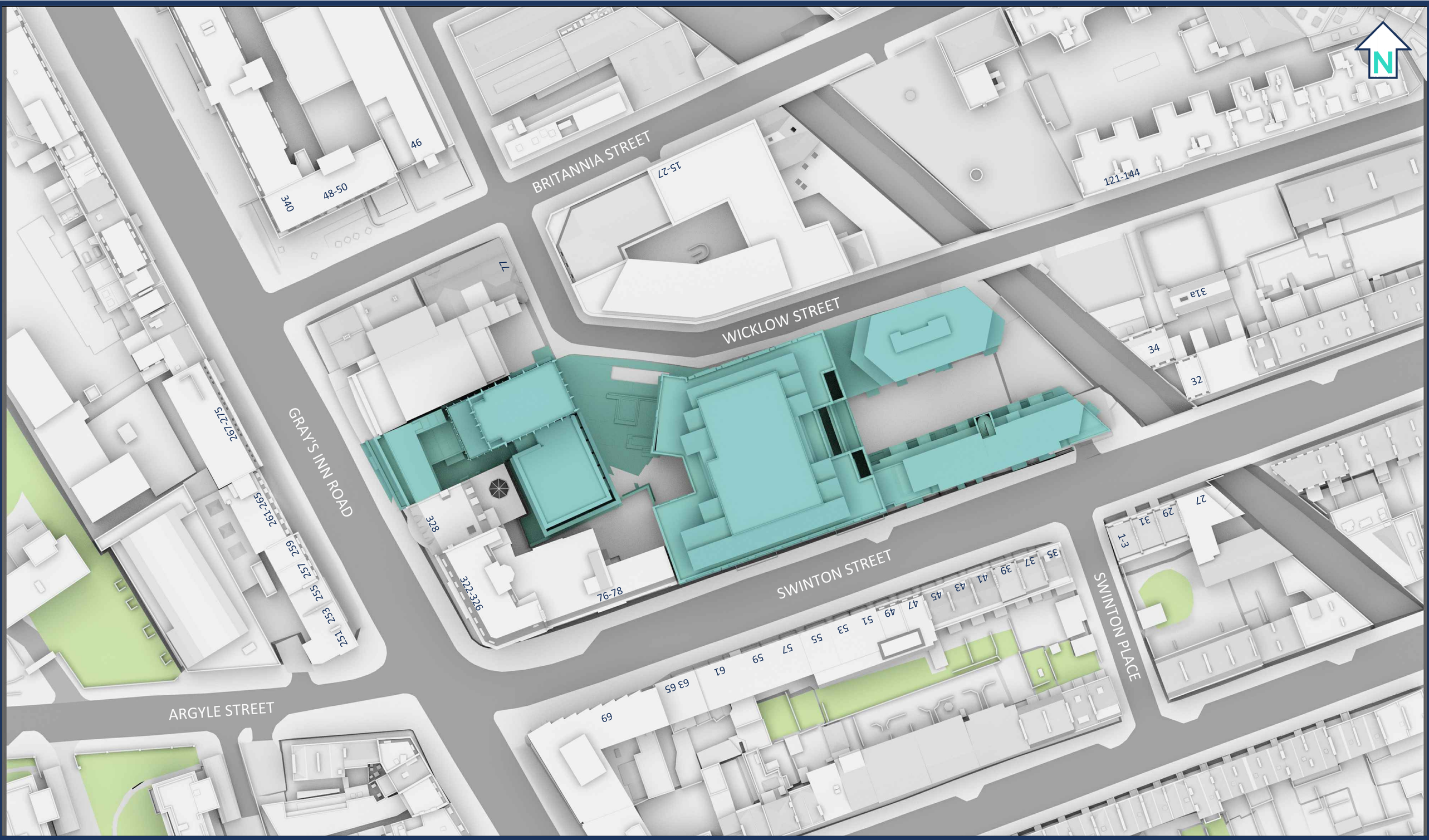
6.2 External amenity areas are readily sought after by occupants and should be considered as a benefit to the property, not a constraint. The position in this regard should be considered holistically, and, once the room is considered with the additional amenity areas, the internal daylight position improves.

6.3 Where the minority of the rooms fall below the targets, decision makers should recognise that the levels of daylight achieved by these units is similar to some existing units within the vicinity of the Site, which has been well-established for many years. SPG10 advises that daylight targets should be assessed on broadly comparable residential typologies, which this Proposed Scheme is.

6.4 Overall, the Proposed Scheme has been designed well to allow good levels of daylight to penetrate into the proposed units and distribute throughout the rooms efficiently – especially in consideration of the it being located in an urban area.

6.5 We fully support this scheme in terms of internal daylight amenity

Appendix 1:
Drawings



Sources: Warner Surveys
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Key: Existing Buildings
Proposed Scheme

Project: 330 Gray's Inn Road
London

Title: Site Plan
Proposed Scheme 17/11/20

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	AFA	1:750 @A3	Nov 20	P2150/28	12

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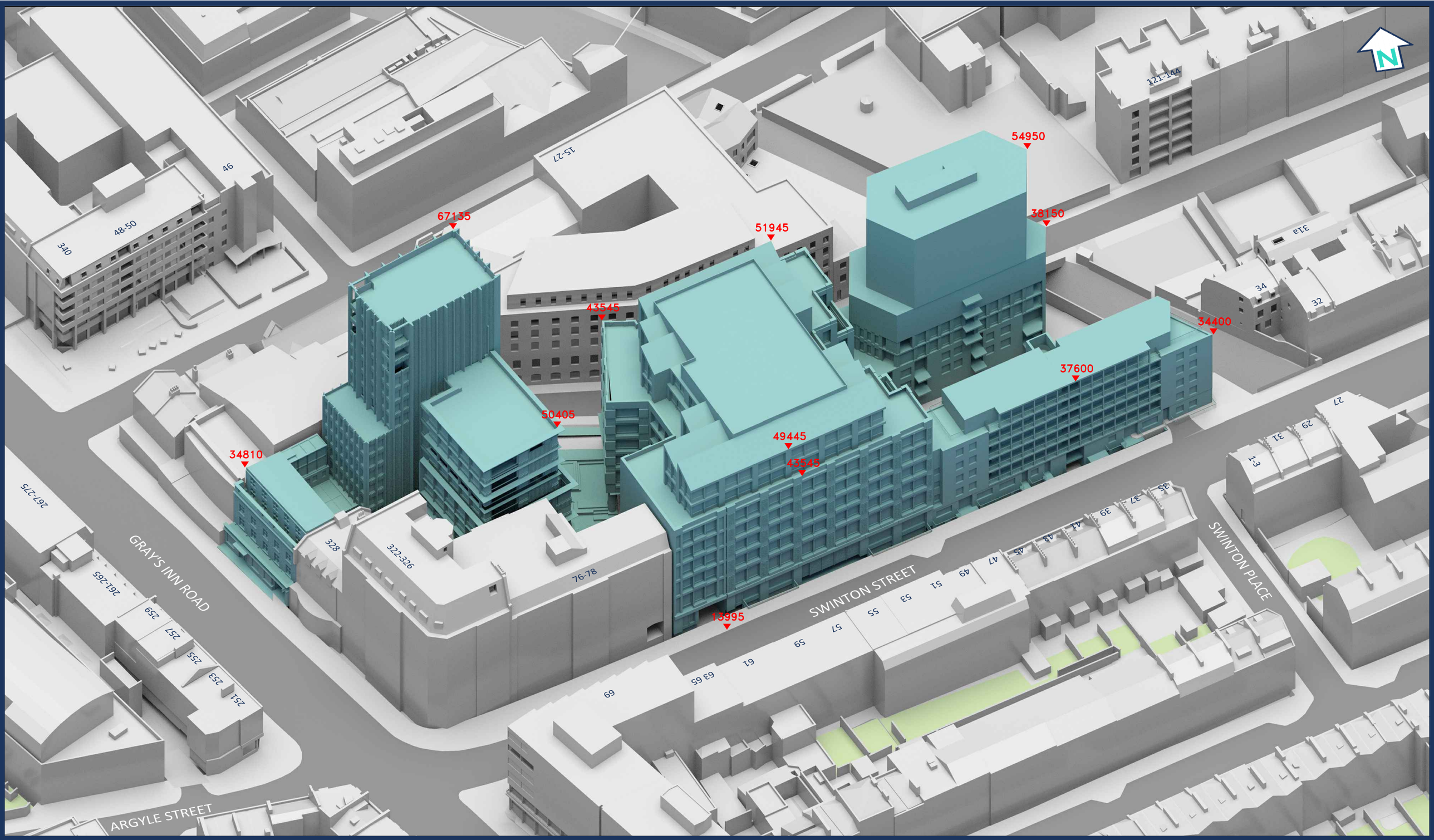

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All Heights in mm AOD

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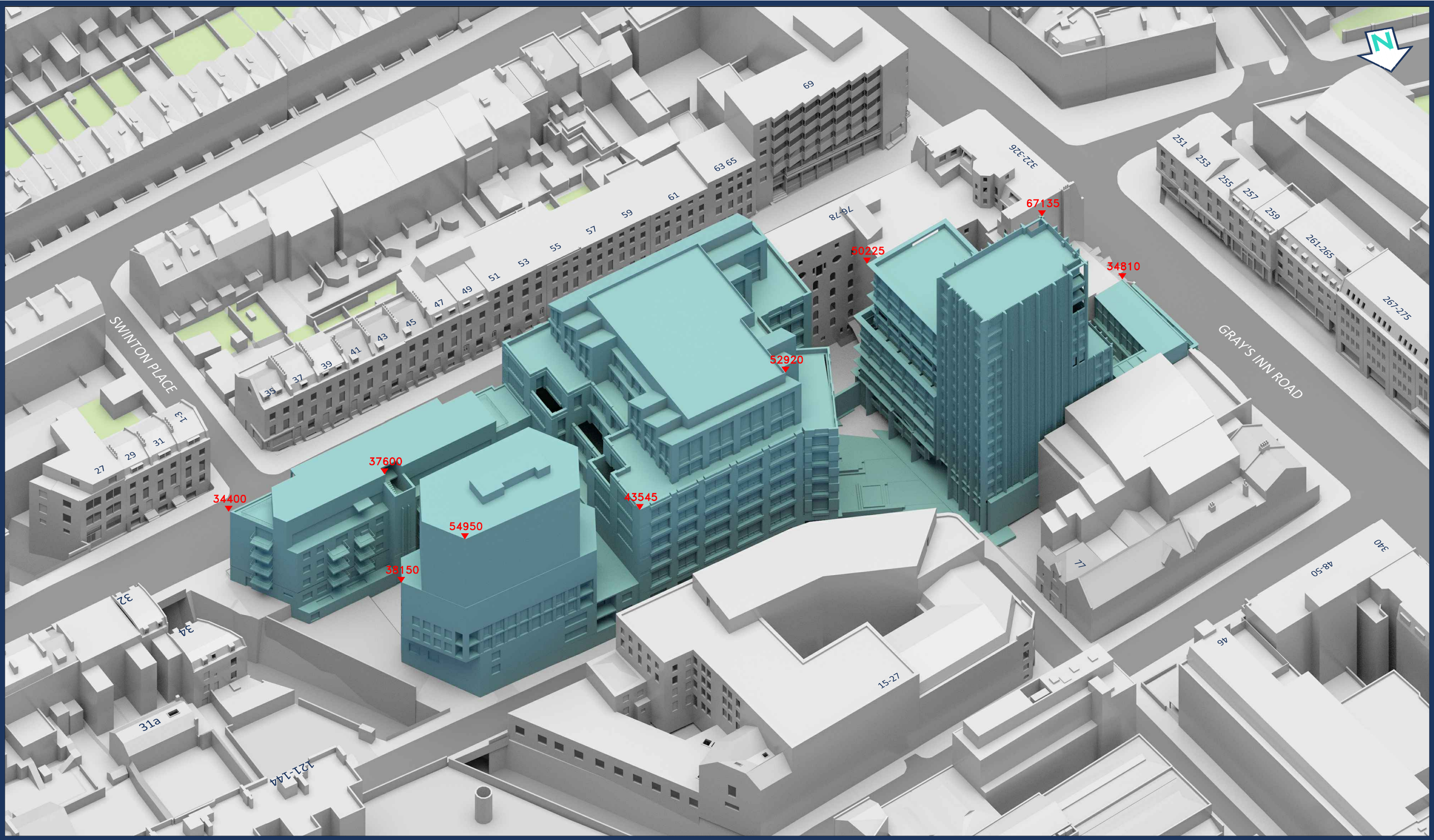

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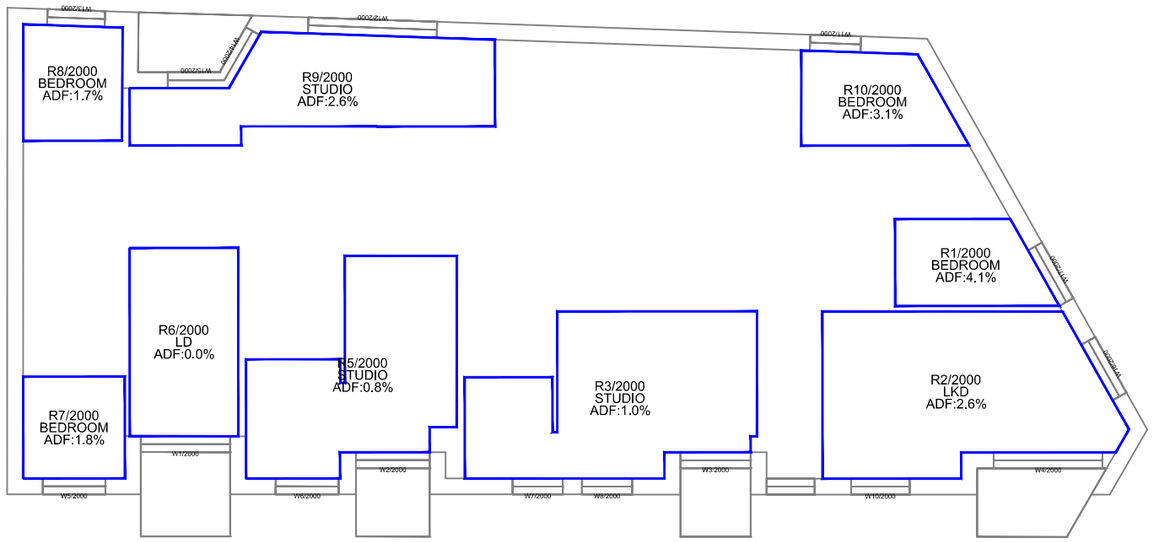
Appendix 2:
Technical Analysis



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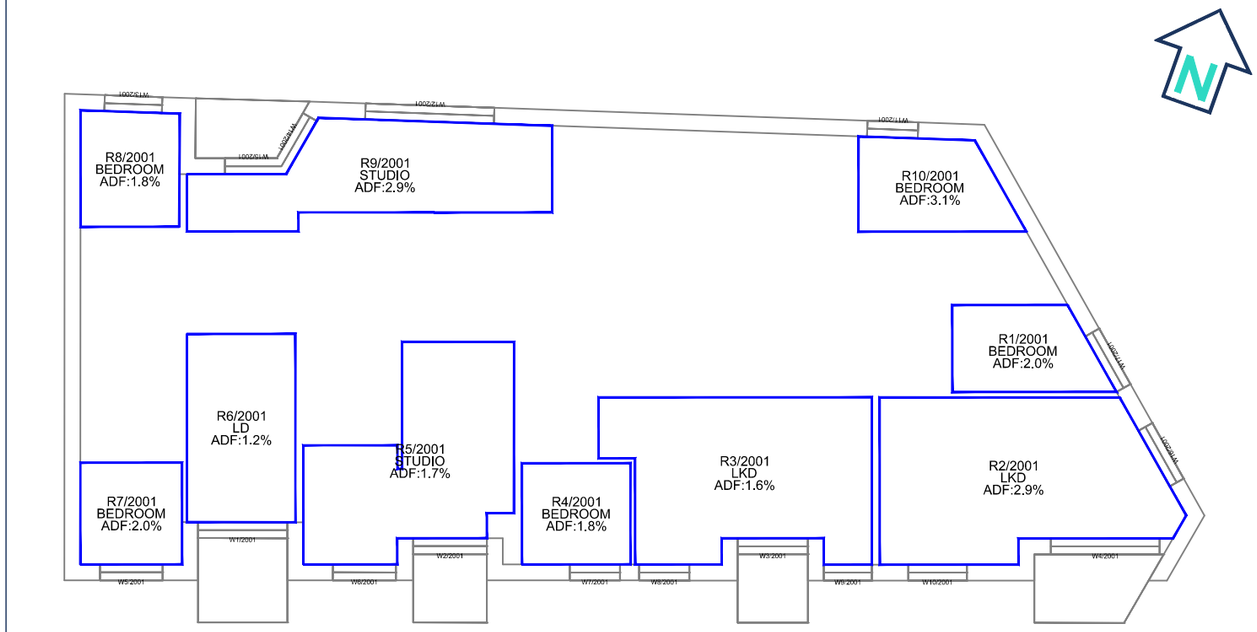

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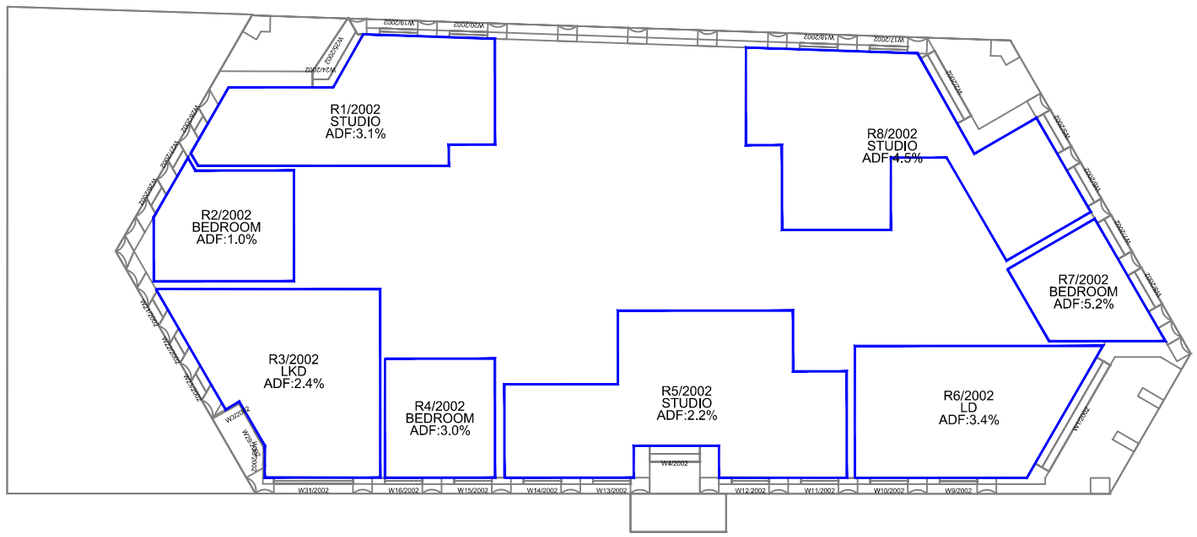

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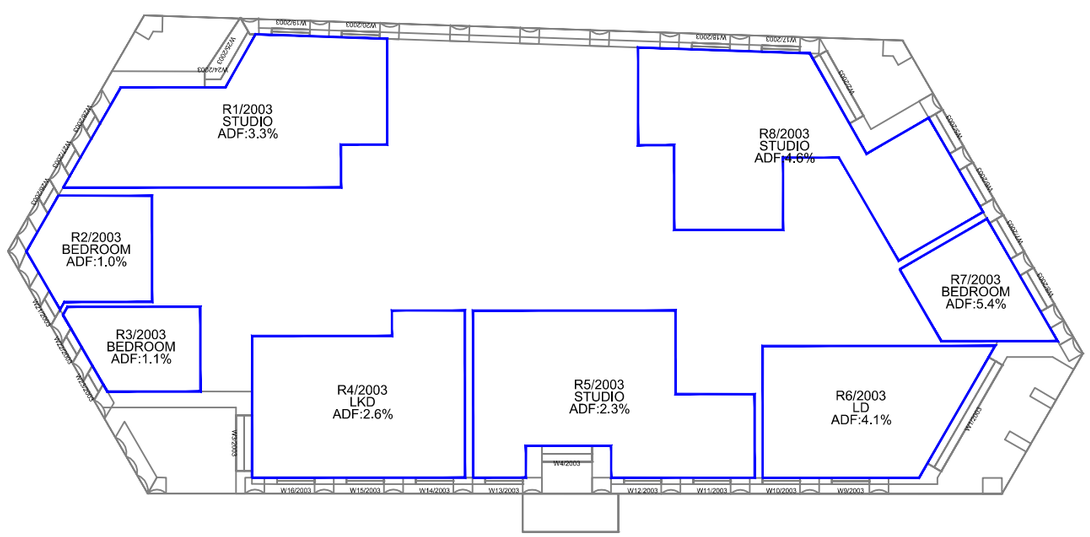

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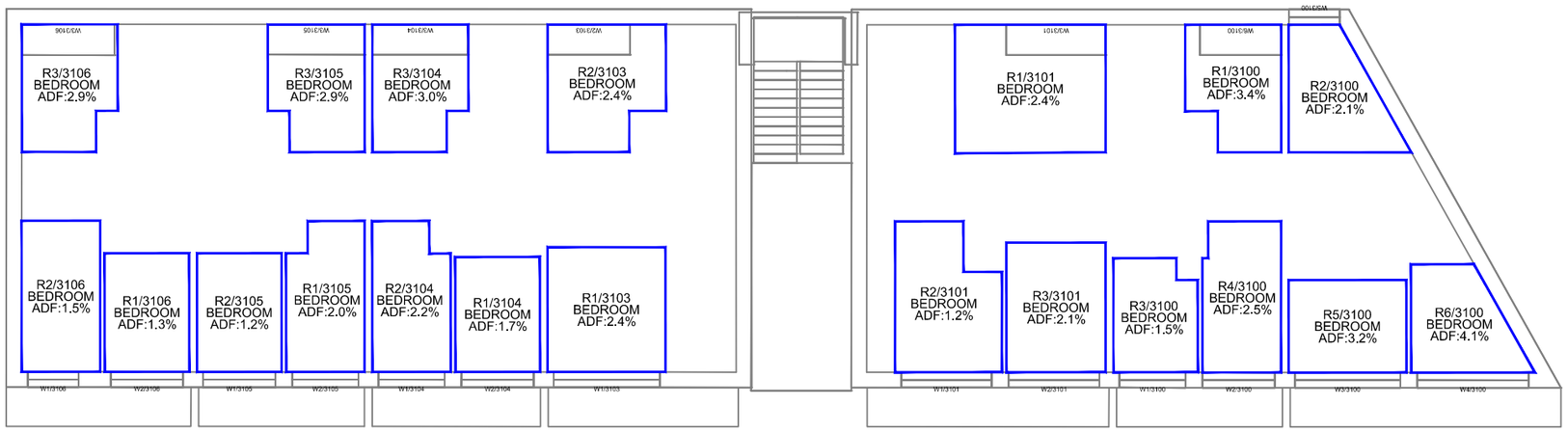

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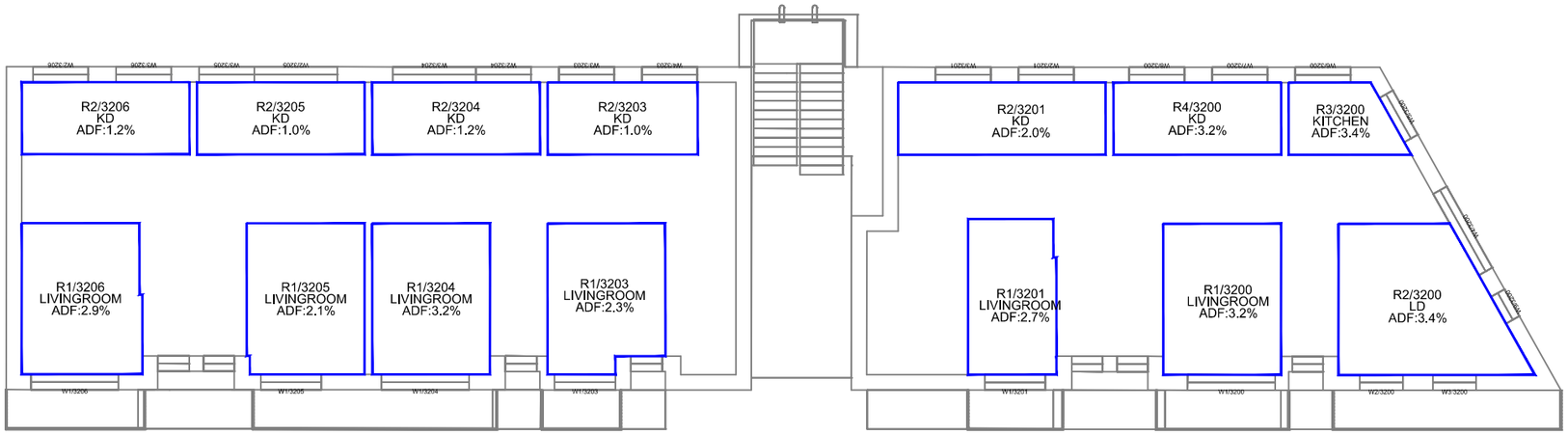

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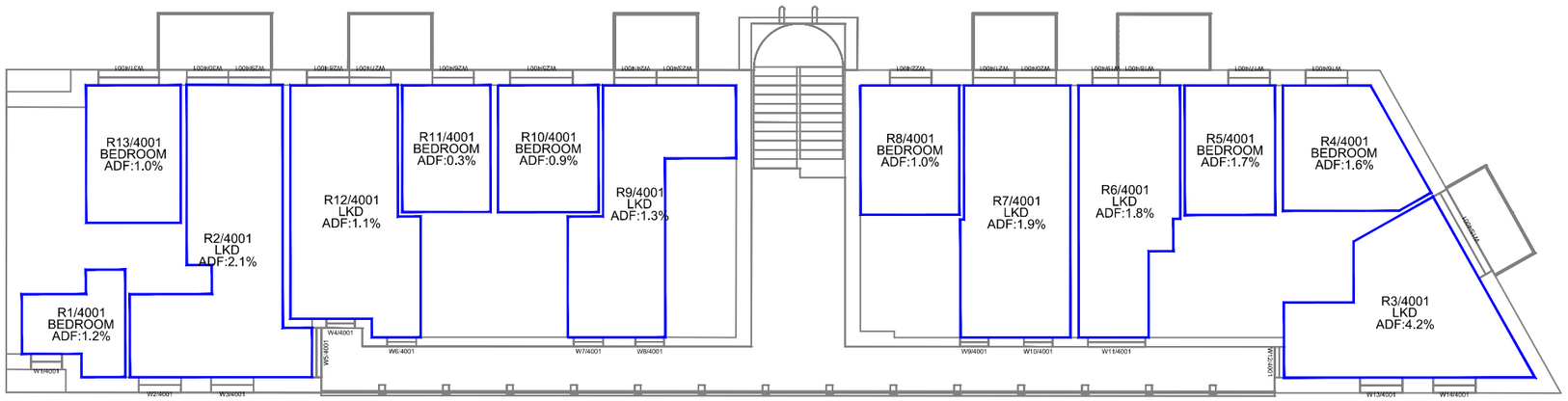

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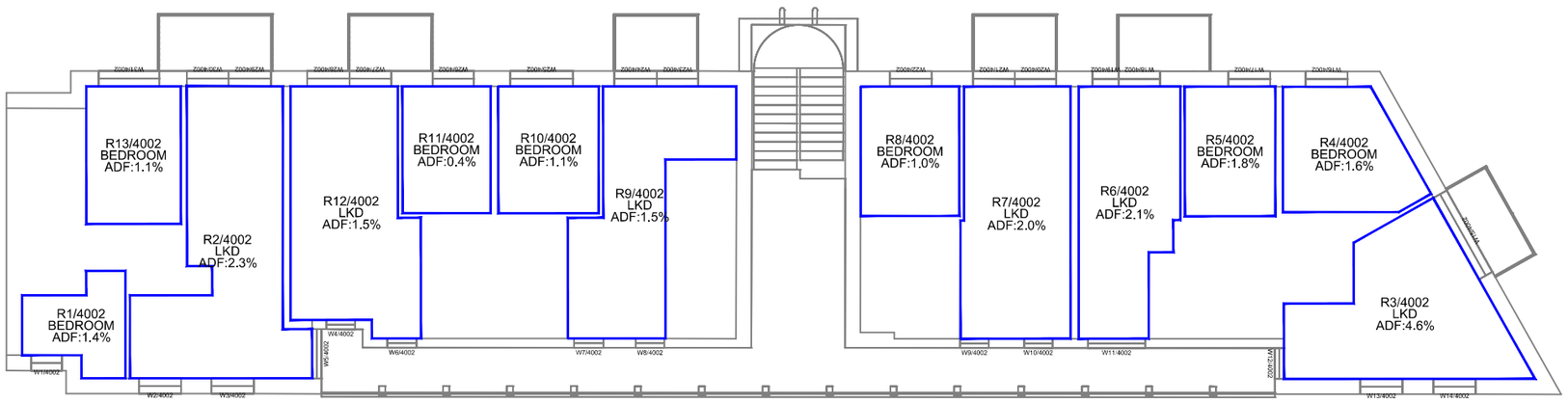

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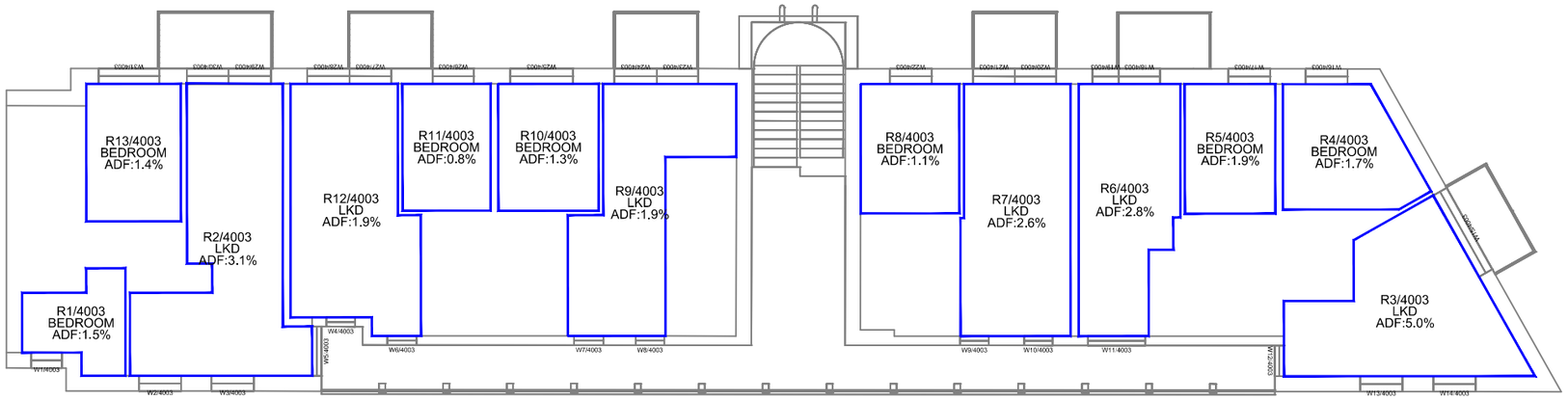

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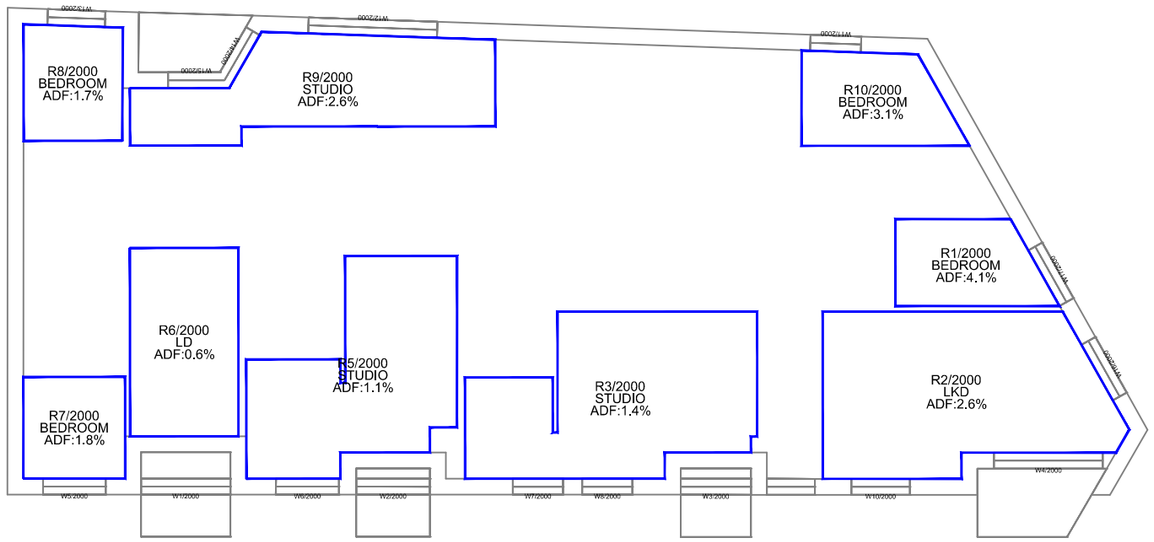

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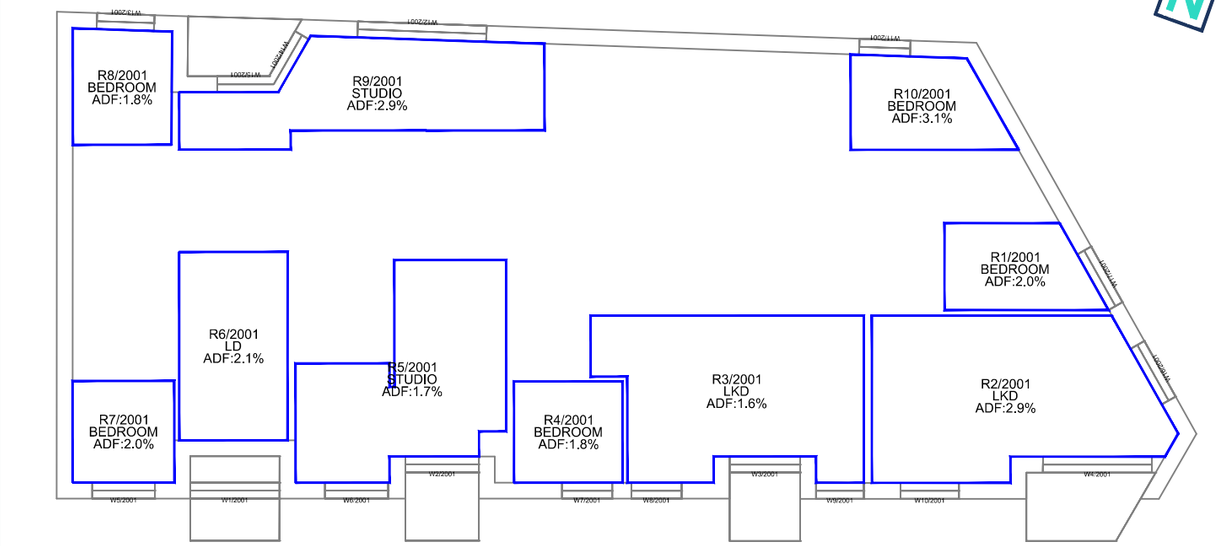

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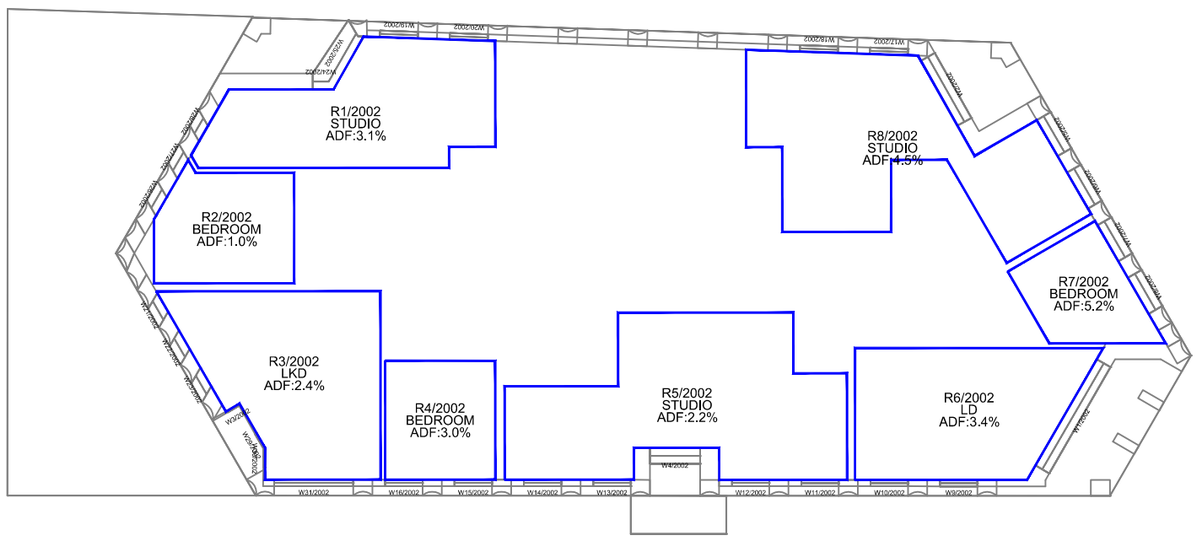

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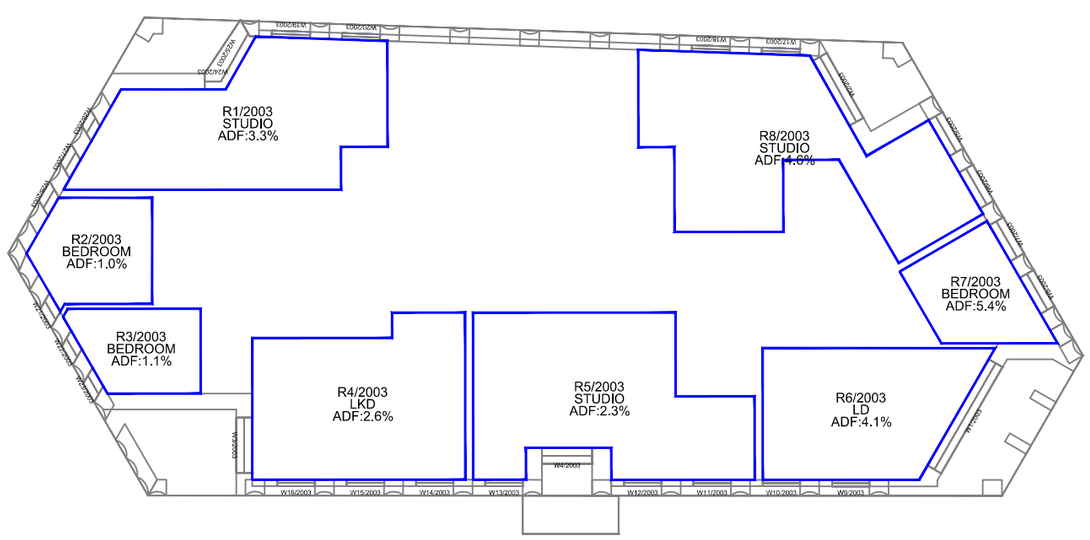

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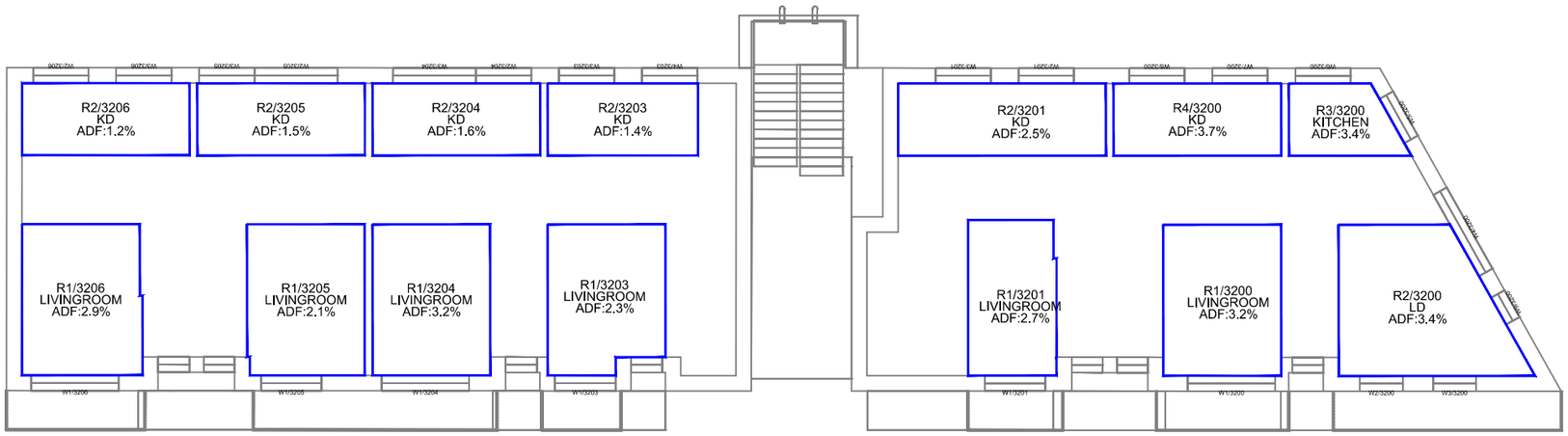

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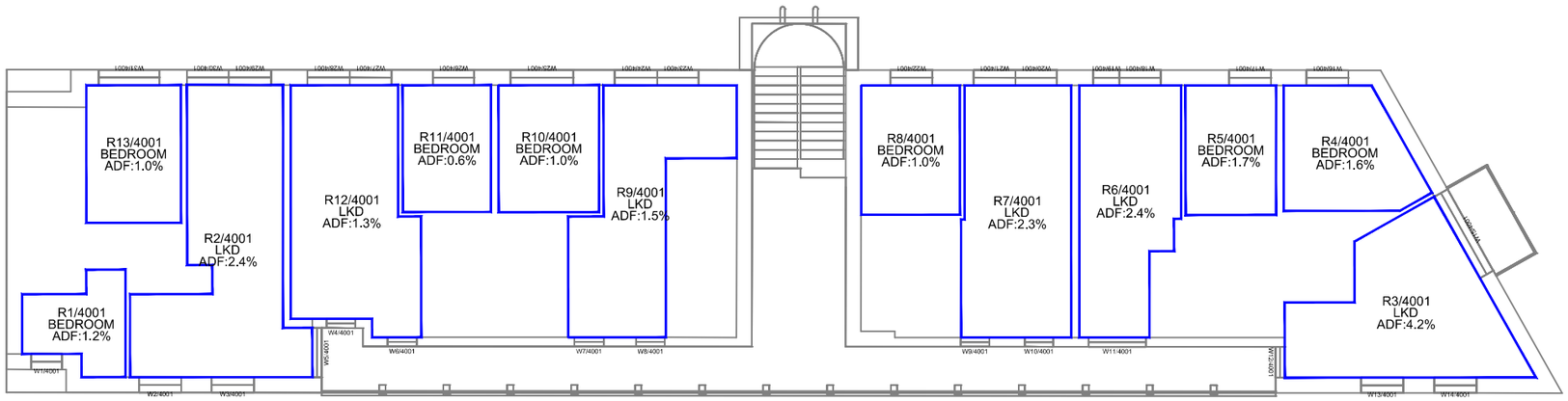

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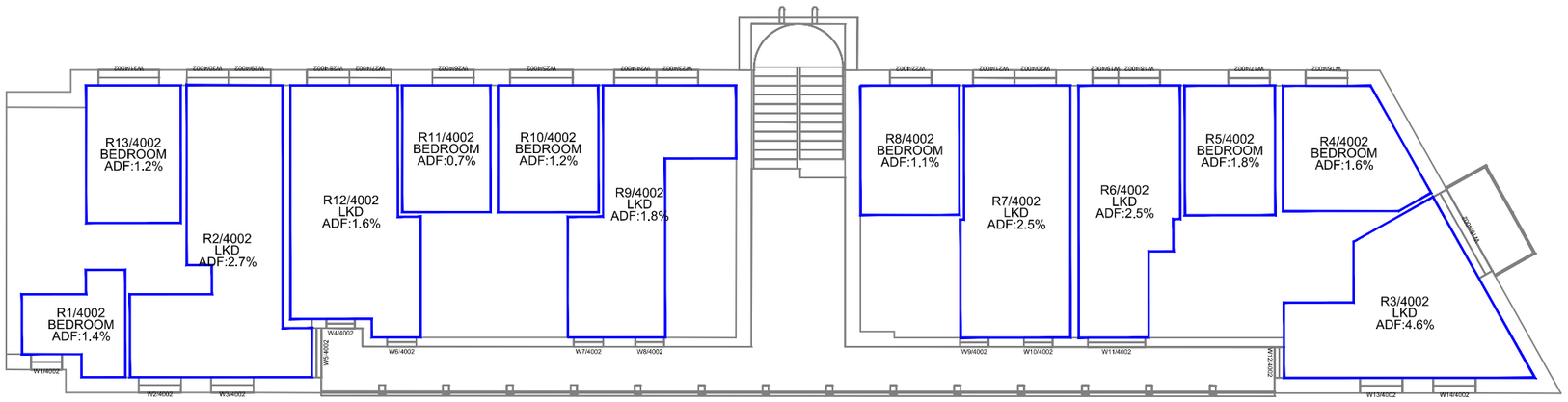
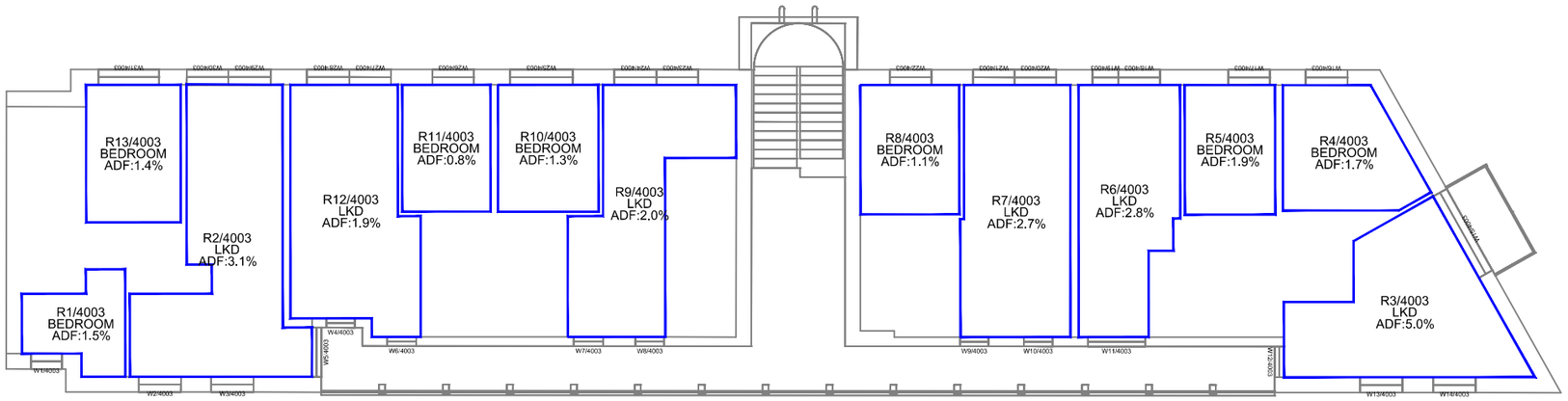


SECOND FLOOR



THIRD FLOOR

Sources: Warner Surveys
Survey Info (received 18/07/19)
LT3190593P0001-9.dwg

Royal Free Hampstead NHS Trust
Existing 2D Drawings (received 18/07/19)
RNTNE Basement Floor Plan- RNTNE 4th Floor Plan.dwg

Allford Hall Monaghan Morris
Proposed Scheme (received 10/11/20)
Set of Plans & Elevation
Proposed 3D Model (received 17/11/20)
18116_Hotel_201117.3dm
201117_Office.skp
18116_03_(00)_P200.dwg
Proposed Changes Including Plan & Elevations (received 20/11/20)

Key:

Project: 330 Gray's Inn Road
London

Title: Internal ADF Results
Proposed Scheme 20/11/20
South Block
Alternate Scenario

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	AFA	1:200 @A3	Nov 20	P2150/I/28	15