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DAYLIGHT AND SUNLIGHT REPORT
25 SHELDON AVENUE
9/1/2022

The attached daylight and sunlight report was prepared for a previous submission on the site (ref. HGY/2021/2919). During the pre-application feedback for the attached new revised scheme on the same site, we were requested to resubmit this report. The building profile facing No.27 of this new scheme is the same as that previous scheme and therefore the conclusions of this report still apply.

Kind Regards,

Cassion Castle
BA(Cantab) MA (RCA) RIBA

On behalf of
Cassion Castle Architects

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4 February 2022

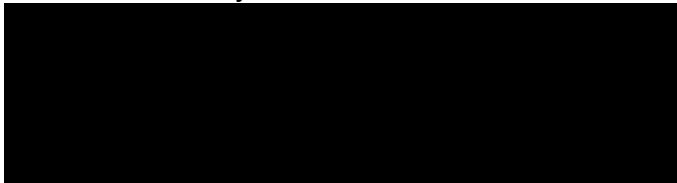
Dear Mr Castle

BRE Daylight & Sunlight Report – 25 Sheldon Avenue London N6 4JS

Following our analysis in regard to the above scheme, I am pleased to confirm that the proposed design meets the recommendations as set out in the BRE Guide when considering the impact on No.27 Sheldon Avenue. This is the case for both the current and proposed layout of the neighbouring property.

I trust this is useful and please come back to me if you need anything further.

Yours sincerely



Paul Hearmon LLB (Hons)
Senior Right of Light Surveyor



RIGHT OF LIGHT
CONSULTING
Chartered Surveyors

Daylight and Sunlight Report

(Neighbouring Properties)

4 February 2022

25 Sheldon Avenue
London N6 4JS

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1 EXECUTIVE SUMMARY

1.1 Overview

- 1.1.1 Right of Light Consulting has been commissioned by Cassion Castle Architects to undertake a daylight and sunlight assessment of the proposed development at 25 Sheldon Avenue, London N6 4JS.
- 1.1.2 The assessment is based on the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, 2nd Edition' by P J Littlefair 2011.
- 1.1.3 The aim of the assessment is to consider the impact of the development on the light receivable by the neighbouring residential property at 27 Sheldon Avenue. For the purpose of this report, we have considered and tested both the current layout and future layout of the neighbouring property. The plans pertaining to the layouts are included in Appendix 1.
- 1.1.4 The window key in Appendix 1 identifies the windows analysed in this assessment. Appendices 2, 3 & 4 give the numerical results of the various daylight and sunlight tests.
- 1.1.5 All neighbouring windows which have been tested pass the relevant BRE diffuse daylight and direct sunlight tests. The development also passes the BRE overshadowing to gardens and open spaces test.
- 1.1.6 In summary, the numerical results in this assessment demonstrate that the proposed development will have a low impact on the light receivable by the neighbouring property. In our opinion, the proposed development sufficiently safeguards the daylight and sunlight amenity of the neighbouring property.

2 INFORMATION SOURCES

2.1 Drawings

2.1.1 This report is based on the following drawings:

Cassion Castle Architects

	Ground Floor Plan	Rev -
	First Floor Plan	Rev -
	Basement Floor Plan	Rev -
	Second Floor Plan	Rev -
	Roof Plan	Rev -
	Rear Elevations	Rev -
	Side Elevations	Rev -
	Architect 3D Model	Rev -
E/001	Existing Block Plan	Rev -
E/001	Existing Plans and Section	Rev -
P/001	Site Plan	Rev -
P/001	Proposed Block Plan	Rev -
P/100	Proposed Plans and Section	Rev B
P/200	Section F Light Study	Rev -
P/102	Proposed First Floor Plan Light Study	Rev -
P/300	Existing & Proposed Front Elevations	Rev -
P/301	Existing & Proposed Rear Elevations	Rev -
P/302	Proposed Elevations	Rev B
	Topographical Survey	Rev -

2.2 Daylight Distribution Room Layout Information

2.2.1 The daylight distribution test has been applied based on the following room layout information:

Online Local Authority planning records

27 Sheldon Avenue (Current Layout):

SK/P/100	Light Study	Rev -
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27 Sheldon Avenue (Future Layout):

100	Ground Floor Plan	Rev X
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3 METHODOLOGY OF THE ASSESSMENT

3.1 Local Planning Policy

- 3.1.1 We understand that the Local Authority take the conventional approach of considering daylight and sunlight amenity with reference to the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, 2nd Edition' by P J Littlefair 2011. A new European standard BS EN 17037 'Daylight in Buildings' was published in May 2019. An update to the BRE guide to take into account the European standard is expected sometime in 2022. It is not yet clear, how and to what extent, the European recommendations will be adopted by the BRE and Local Authorities.
- 3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The BRE guide states:
- 3.1.3 "The guide is intended for building designers and their clients, consultants and planning officials. 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. Although it gives numerical guidelines, these should be interpreted flexibly, since natural lighting is only one of many factors in site layout design."

3.2 National Planning Policy Framework

- 3.2.1 The BRE numerical guidelines should be considered in the context of the National Planning Policy Framework (NPPF), which stipulates that local planning authorities should take a flexible approach to daylight and sunlight to ensure the efficient use of land. The NPPF states:
- 3.2.2 "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)."

3.3 Daylight to Windows

- 3.3.1 Diffuse daylight is the light received from the sun which has been diffused through the sky. Even on a cloudy day, when the sun is not visible, a room will continue to be lit with light from the sky. This is diffuse daylight.
- 3.3.2 Diffuse daylight calculations should be undertaken to all rooms within domestic properties, where daylight is required, including living rooms, kitchens and bedrooms. The BRE guide states that windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. These room types are non-habitable and do not have a requirement for daylight.
- 3.3.3 The BRE guide states that the tests may also be applied to non-domestic buildings where there is a reasonable expectation of daylight. The BRE guide explains that this would normally include schools, hospitals, hotels and hostels, small workshops and some offices. The BRE guide is not explicit in terms of which types of offices it regards as having a requirement for daylight. However, it is widely accepted amongst consultants and local authorities, that for planning purposes, offices (which are commercial in nature) do not have a requirement for daylight. The point is touched on in the 'Daylighting and Sunlighting' guidance note published by the Royal Institution of Chartered Surveyors (RICS), which gives guidance to surveyors on how to produce their reports:
- 3.3.4 "The report should establish the limits of the assessment. For example, existing commercial premises are rarely assessed for loss of amenity."
- 3.3.5 The BRE guide contains two tests which measure diffuse daylight:

Test 1 Vertical Sky Component

- 3.3.6 The Vertical Sky Component is a measure of available skylight at a given point on a vertical plane. Diffuse daylight may be adversely affected if after a development the Vertical Sky Component is both less than 27% and less than 0.8 times its former value.
- 3.3.7 The BRE guide states that the total amount of skylight can be calculated by finding the Vertical Sky Component at the centre of each main window. The BRE guide does not define the term 'main window'. However, in our opinion, where a room has

multiple windows, the largest window is usually taken as the main window and the smaller window(s) as secondary. Although we generally follow the practice of testing all windows, including secondary windows, our interpretation of the BRE guide is that the Vertical Sky Component targets do not apply to secondary windows.

Test 2 Daylight Distribution

- 3.3.8 The distribution of daylight within a room can be calculated by plotting the 'no skyline'. The no skyline is a line which separates areas of the working plane that do and do not have a direct view of the sky. Daylight may be adversely affected if, after the development, the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value.
- 3.3.9 The BRE guide states that both the total amount of skylight (Vertical Sky Component) and its distribution within the building (Daylight Distribution) are important. The BRE guide states that where room layouts are known, the impact on the daylighting distribution can be found by plotting the 'no skyline' in each of the main rooms. Therefore, we are of the opinion that application of the test is not a requirement of the BRE guide where room layouts are not known. We don't endorse the practice of applying the test based on assumed room layouts, because the test is very sensitive to the size and layout of the room and the results are likely to be misleading. However, we can provide additional daylight distribution data upon request by the local authority, if neighbouring room layout information is confirmed.

3.4 Sunlight availability to Windows

- 3.4.1 The BRE sunlight tests should be applied to all main living rooms and conservatories which have a window which faces within 90 degrees of due south. The guide states that kitchens and bedrooms are less important, although care should be taken not to block too much sunlight. The tests should also be applied to non-domestic buildings where there is a particular requirement for sunlight.
- 3.4.2 The test is intended to be applied to main windows which face within 90 degrees of due south. However, the BRE guide explains that if the main window faces within 90 degrees of due north, but a secondary window faces within 90 degrees of due south, sunlight to the secondary window should be checked. For completeness, we have

tested all windows which face within 90 degrees of due south. The BRE guide states that sunlight availability may be adversely affected if the centre of the window:

- receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and
- receives less than 0.8 times its former sunlight hours during either period and
- has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

3.5 Overshadowing to Gardens and Open Spaces

3.5.1 The availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:

- Gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools and paddling pools
- Sitting out areas, such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains.

3.5.2 One way to consider overshadowing is by preparing shadow plots. However, the BRE guide states that it must be borne in mind that nearly all structures will create areas of new shadow, and some degree of transient overshadowing is to be expected. Therefore, shadow plots are of limited use as interpretation of the plots is subjective. Shadow plots have not been undertaken as part of this assessment.

3.5.3 The BRE guide also contains an objective overshadowing test which has been adopted for the purpose of this assessment. The guide recommends that at least 50% of the area of each amenity space listed above should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sunlight on 21 March is less than 0.8 times its former value, then the loss of light is likely to be noticeable.

4 RESULTS OF THE ASSESSMENT

4.1 Windows & Amenity Areas Considered

- 4.1.1 The aim of the assessment is to assess the impact of the development on the light receivable by the neighbouring residential property at 27 Sheldon Avenue. For the purpose of this report, we have considered and tested both the current layout and future layout of the neighbouring property. The plans pertaining to the layouts are included in Appendix 1.
- 4.1.2 Appendix 1 provides plans and photographs to indicate the positions of the windows and outdoor amenity areas analysed in this assessment. Appendices 2, 3 & 4 list the detailed numerical daylight and sunlight test results.

4.2 Daylight to Windows

Vertical Sky Component

- 4.2.1 All windows at 27 Sheldon Avenue in both the current & future layouts, pass the Vertical Sky Component test.

Daylight Distribution

- 4.2.2 We have undertaken the Daylight Distribution test where both the current & future room layouts are known. All rooms pass the daylight distribution test.

4.3 Sunlight to Windows

- 4.3.1 None of the windows included in in both the current and future face within 90 degrees of due south. Therefore, none of the windows need to be tested for direct sunlight. It follows that the proposed development satisfies the BRE direct sunlight to windows requirements.

4.4 Overshadowing to Gardens and Open Spaces

- 4.4.1 The Garden at 27 Sheldon Avenue meets the BRE recommendations.

4.5 Conclusion

- 4.5.1 In summary, the numerical results in this assessment demonstrate that the proposed development will have a low impact on the light receivable by its neighbouring properties. In our opinion, the proposed development sufficiently safeguards the daylight and sunlight amenity of the neighbouring property.

5 CLARIFICATIONS

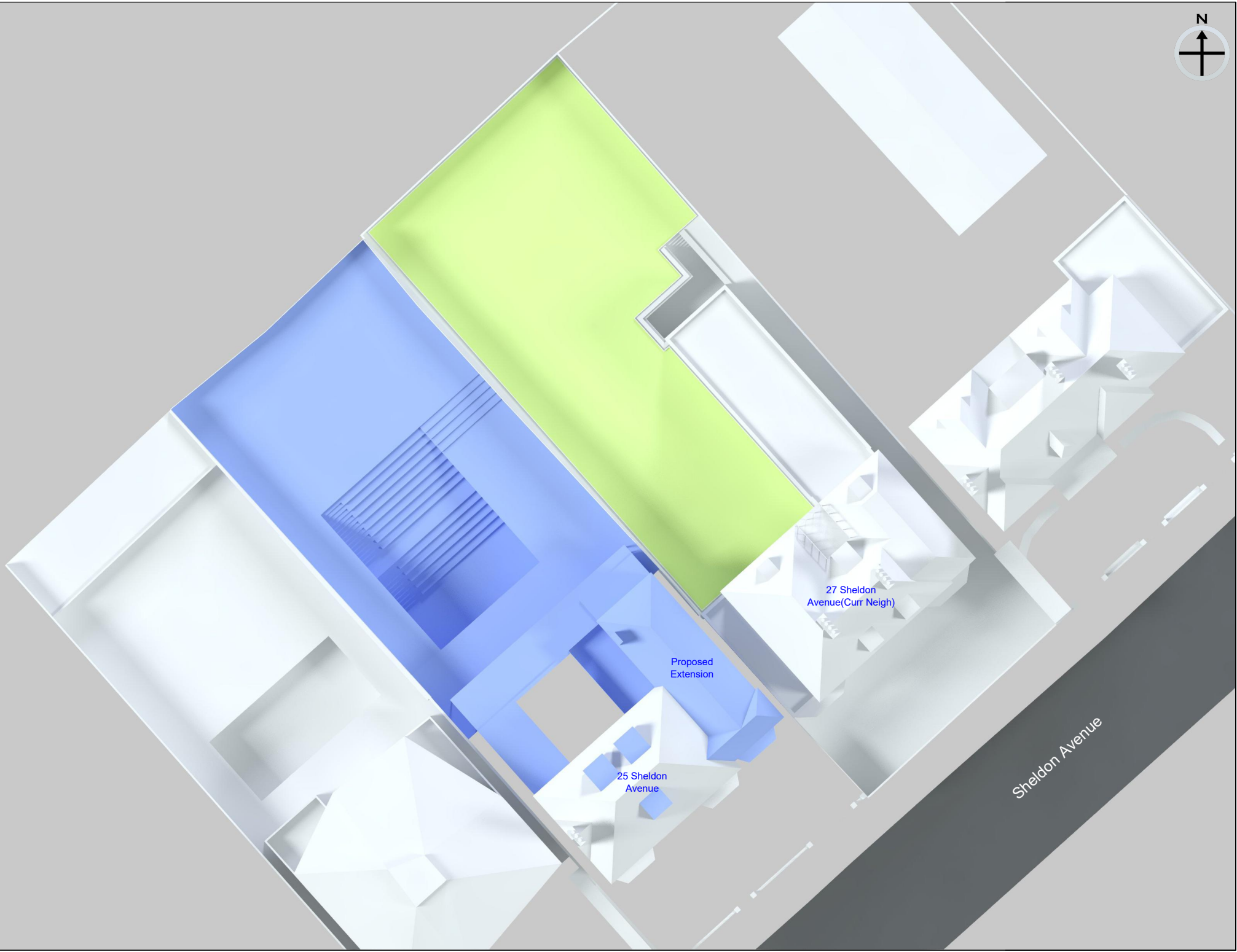
5.1 General

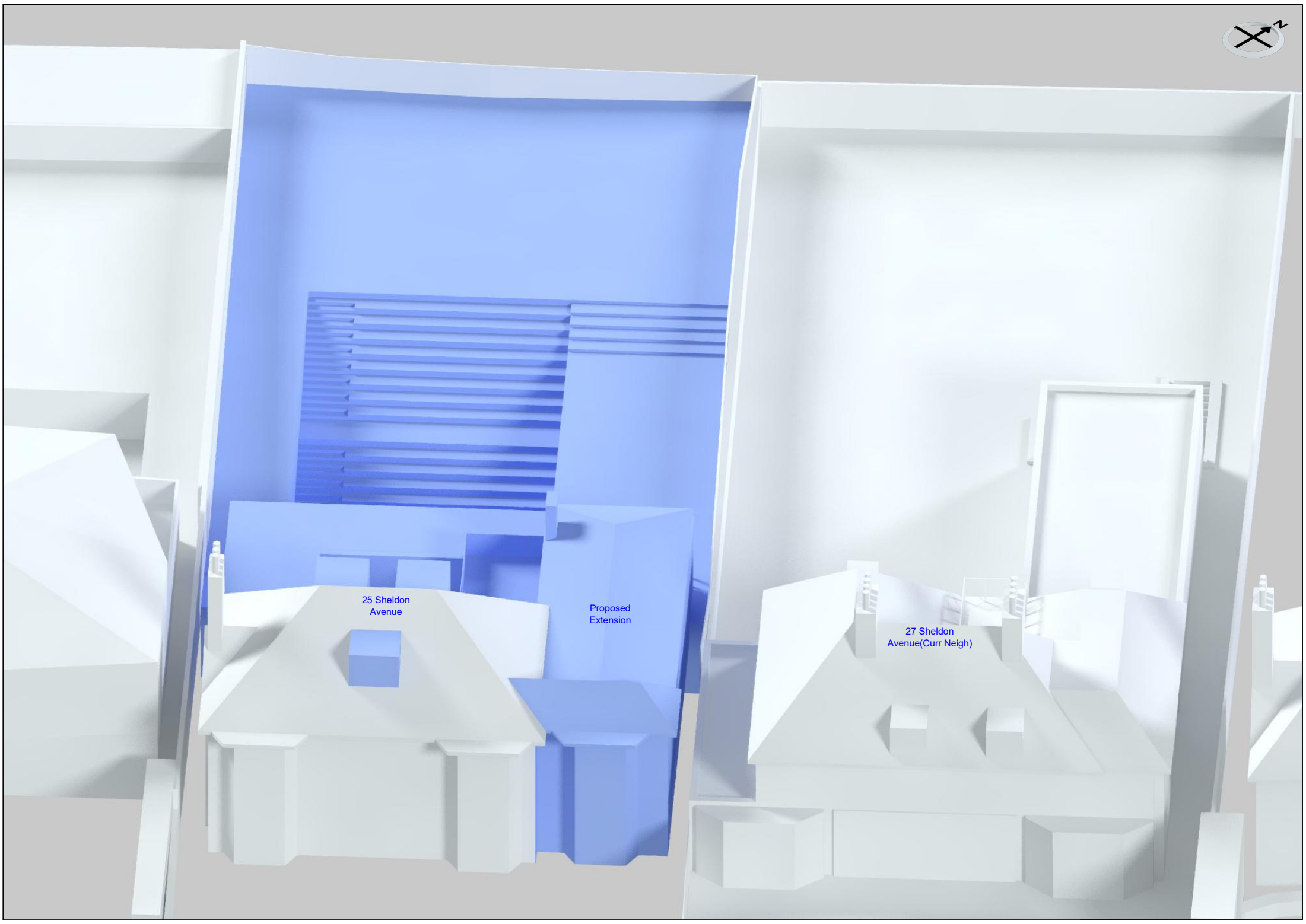
- 5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.
- 5.1.2 The assessment is limited to assessing daylight, sunlight and overshadowing to neighbouring properties as set out in section 2.2, 3.2 and 3.3 of the BRE Guide.
- 5.1.3 The assessment is based on the information listed in section 2 of this report. The assessment has been undertaken without access to the proposed development site or neighbouring properties.
- 5.1.4 This assessment does not calculate the effects of trees and hedges on daylight, sunlight and overshadowing to gardens. The BRE guide states that it is usual to ignore the effect of existing trees.
- 5.1.5 The impact on solar panels is a material planning consideration. However, the BRE guide does not provide assessment criteria for this. The assessment of impact on any neighbouring solar panels is therefore beyond the scope of this report.
- 5.1.6 We have undertaken the assessment following the guidelines of the RICS publication "Surveying Safely". Where limited access or information is available, assumptions will have been made which may affect the conclusions reached in this report. For example, where neighbouring room uses are not known, we will either make an assumption regarding the use, or take the prudent approach of treating the use of the room as being used for domestic purposes. Therefore, the report may need to be updated if room uses are confirmed by the local authority or by the consultation responses.
- 5.1.7 This report is based upon and subject to the scope of work set out in Right of Light Consulting's quotation and standard terms and conditions.

APPENDICES

APPENDIX 1

WINDOW KEY, GARDEN KEY AND CURRENT AND FUTURE LAYOUTS





25 Sheldon Avenue

Proposed Extension

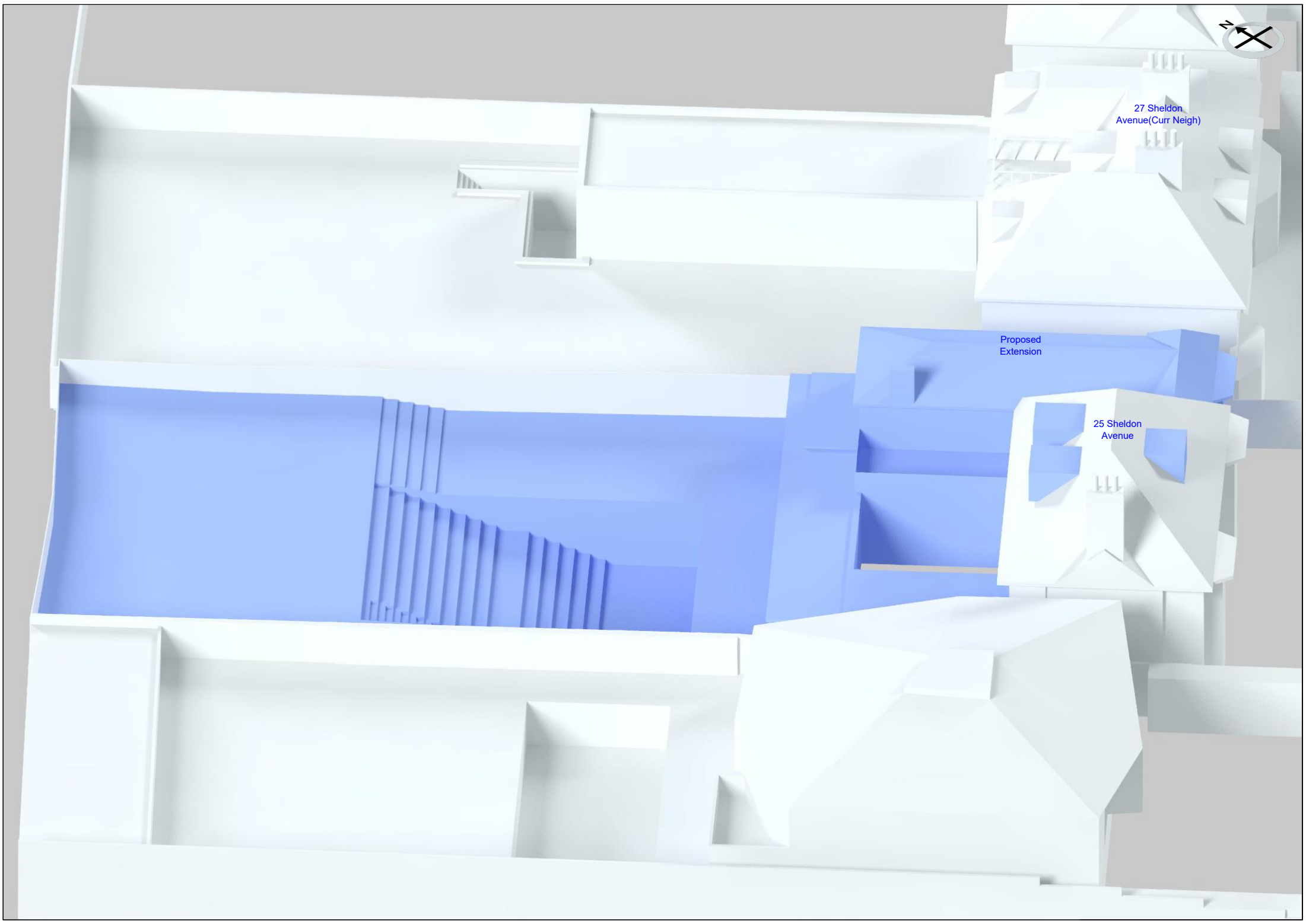
27 Sheldon Avenue (Curr Neigh)



27 Sheldon
Avenue(Curr Neigh)

Proposed
Extension

25 Sheldon
Avenue

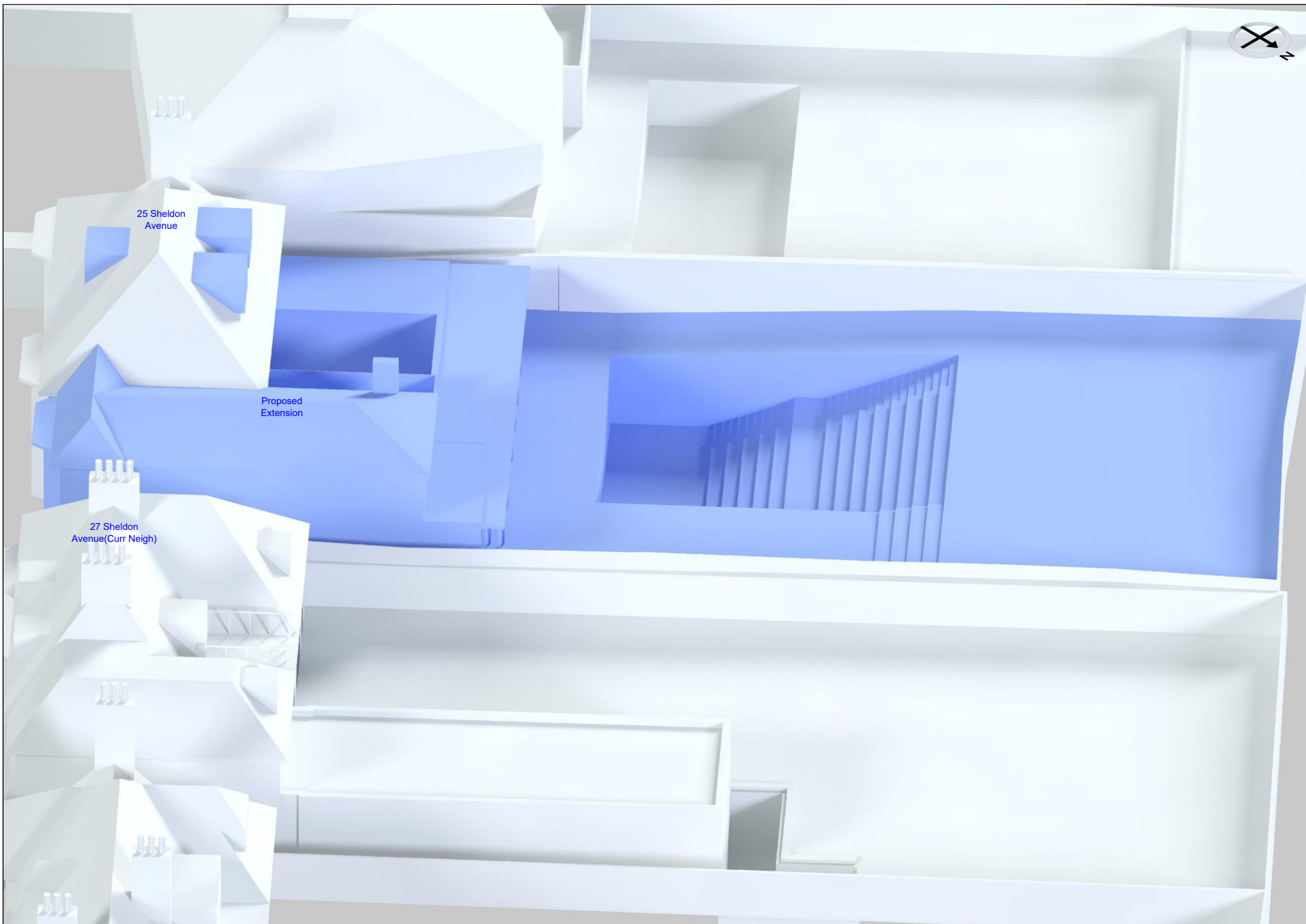




25 Sheldon
Avenue

Proposed
Extension

27 Sheldon
Avenue(Curr Neigh)



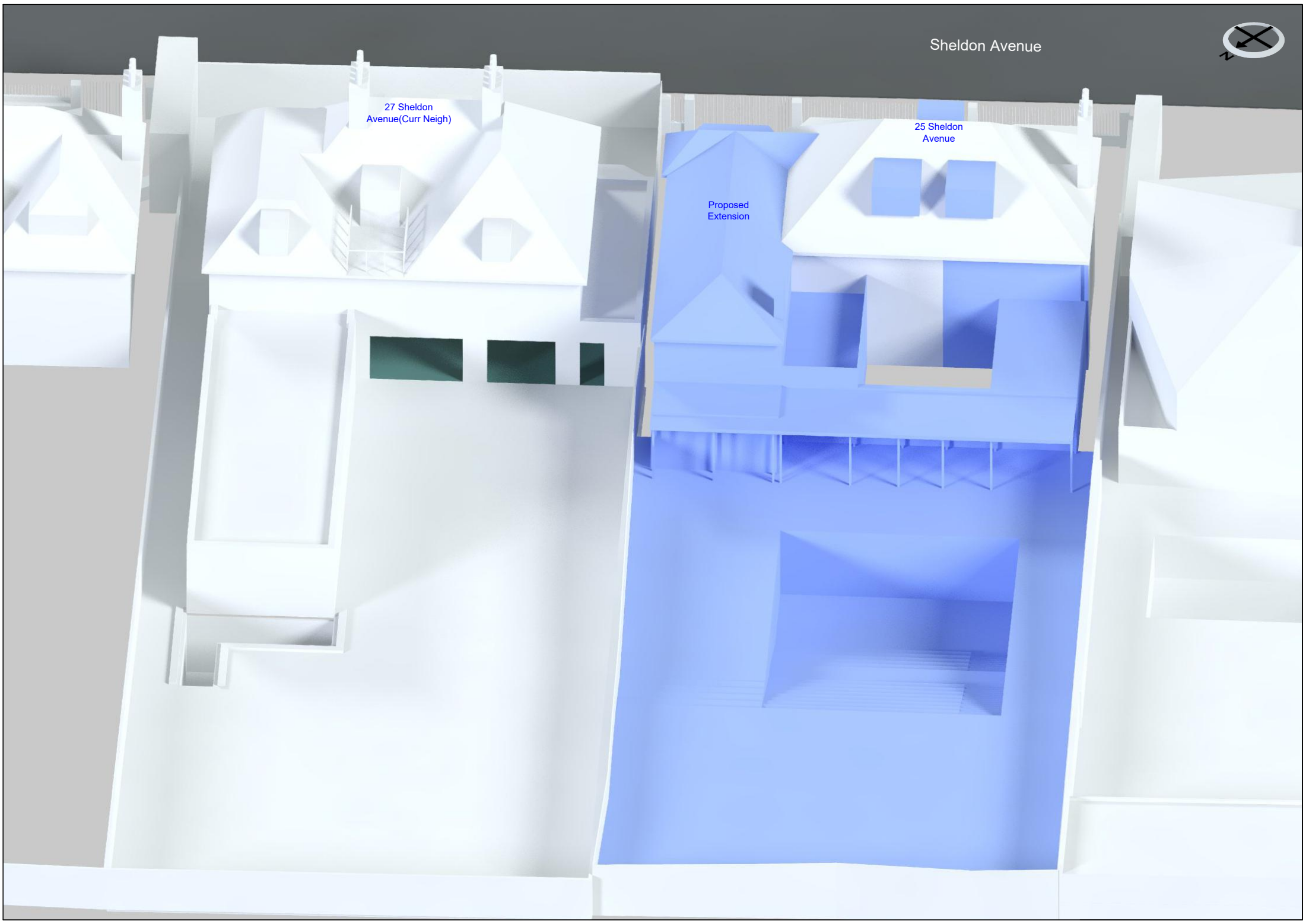
Sheldon Avenue

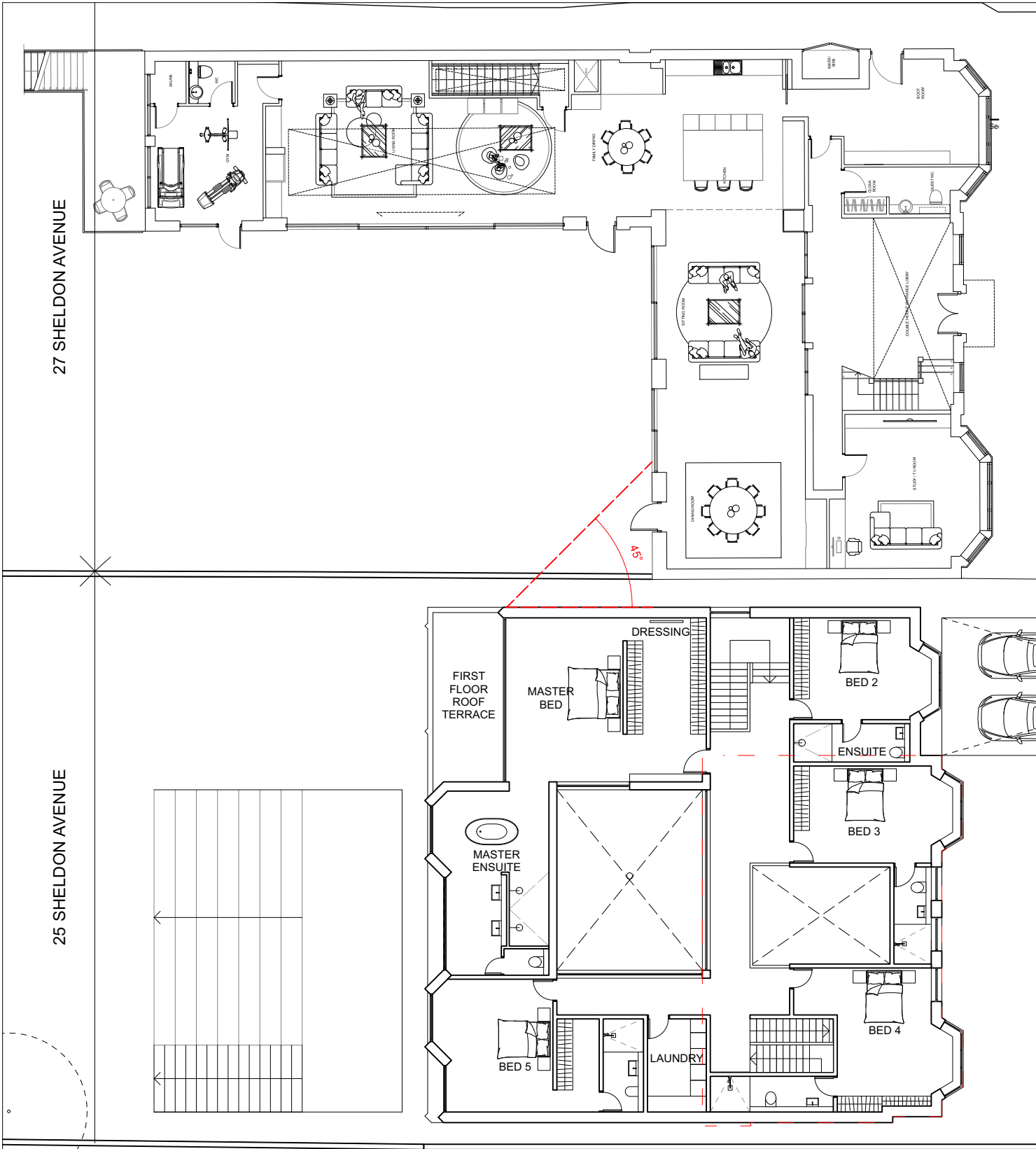


27 Sheldon
Avenue(Curr Neigh)

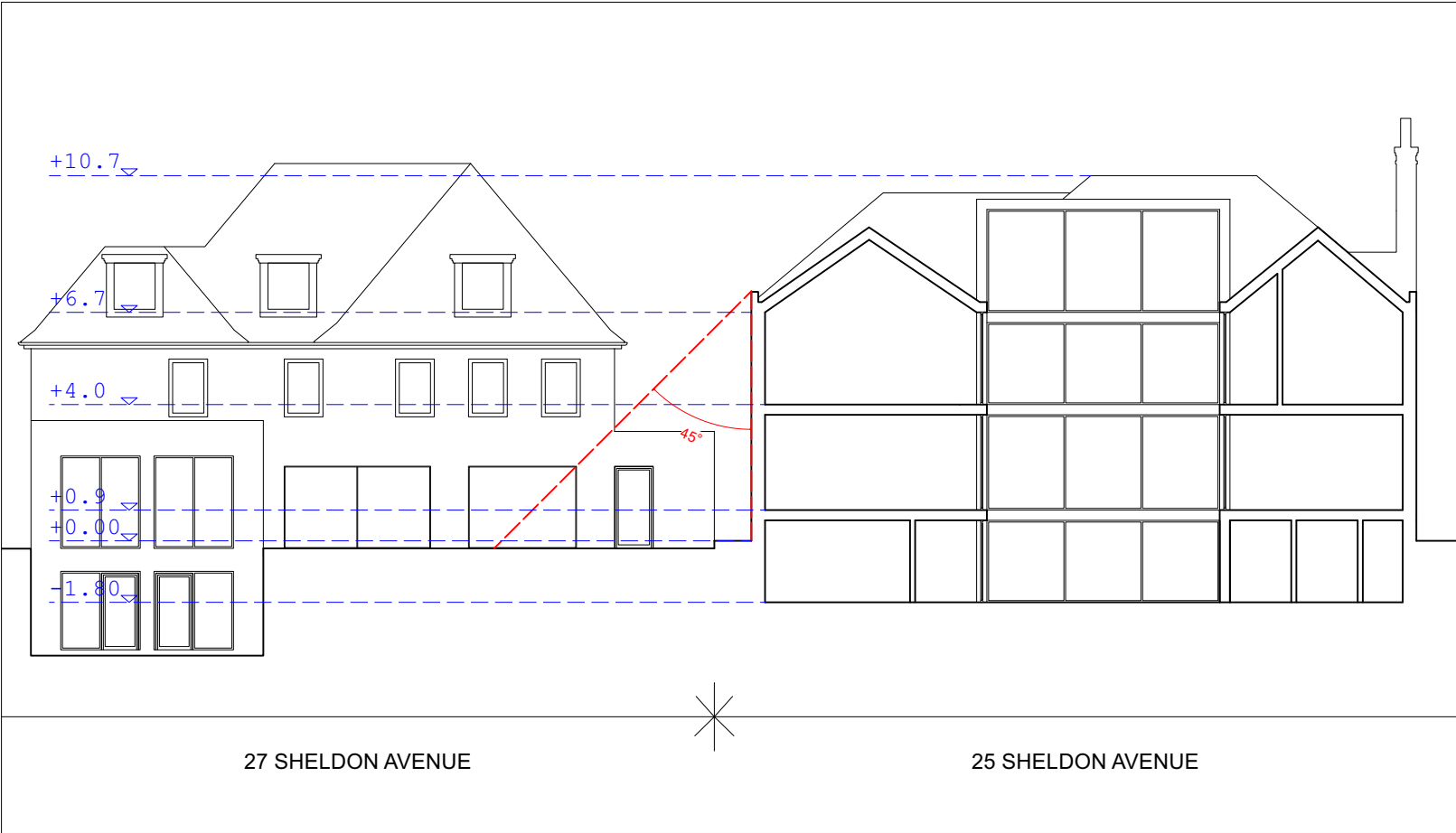
25 Sheldon
Avenue

Proposed
Extension



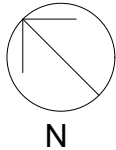


PROPOSED FIRST FLOOR PLAN



PROPOSED SECTION

rev	details	date
-	-	-



DO NOT SCALE FROM THIS DRAWING

All measurements given are indicative, on site dimensions must be determined prior to the purchaser manufacture of any components. All discrepancies between indicative dimensions given and those measured on site to be brought to architect's attention.

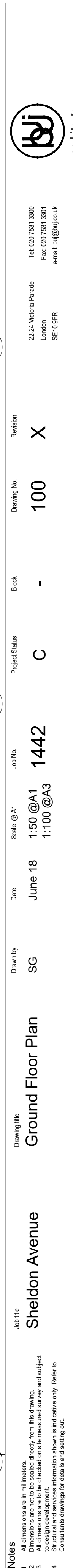
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Project:
25 SHELDON AVENUE

Drg.No:	Rev:	Date:16/06/2021
SK/P/100	-	Scale: 1:200 @ A3

Title:
LIGHT STUDY



Notes:	
1	All
2	Dir
3	All
	to
4	Stu
	Co

Neighbouring Windows



27 Sheldon Avenue

APPENDIX 2

DAYLIGHT (CURRENT LAYOUT) RESULTS

Appendix 2 - Vertical Sky Component (Current Layout) Results
25 Sheldon Avenue, London N6 4JS

Reference	Room Use	Vertical Sky Component			
		Before	After	Loss	Ratio
<u>27 Sheldon Avenue</u>					
<u>Ground Floor</u>					
Window 1	Living/Dining	32.5%	28.9%	3.6%	0.89
Window 2	Living/Dining	35.1%	33.3%	1.8%	0.95
Window 3	Living/Dining	31.6%	31.1%	0.5%	0.98

Appendix 2 - Daylight Distribution (Current Layout) Result
25 Sheldon Avenue, London N6 4JS

Reference	Room Use	Daylight Distribution			
		Before	After	Loss	Ratio
<u>27 Sheldon Avenue</u>					
<u>Ground Floor</u>					
Windows 1 to 3	Living/Dining	99%	99%	0.0%	1.0

Appendix 2 - Overshadowing to Gardens and Open Spaces

25 Sheldon Avenue, London N6 4JS

Reference	Total Area		Area receiving at least two hours of sunlight on 21st March									
			Before		After		Loss		Ratio			
<u>27 Sheldon Avenue</u>												
<u>Ground Floor</u>												
Garden 1	697.92	m2	648.47	m2	93%	602.21	m2	86%	46.26	m2	7%	0.93

APPENDIX 3

DAYLIGHT (FUTURE LAYOUT) RESULTS

Appendix 2 - Vertical Sky Component (Future Layout) Results
25 Sheldon Avenue, London N6 4JS

Reference	Room Use	Vertical Sky Component			
		Before	After	Loss	Ratio
<u>27 Sheldon Avenue</u>					
<u>Ground Floor</u>					
Window 1	Office/Library	32.5%	28.9%	3.6%	0.89
Window 2	Formal Dining Room	35.1%	33.3%	1.8%	0.95
Window 3	Formal Lounge	31.6%	31.1%	0.5%	0.98

Appendix 2 - Daylight Distribution (Future Layout) Results
25 Sheldon Avenue, London N6 4JS

Reference	Room Use	Daylight Distribution			
		Before	After	Loss	Ratio
<u>27 Sheldon Avenue</u>					
<u>Ground Floor</u>					
Window 1	Office/Library	98%	98%	0.0%	1.0
Window 2	Formal Dining Room	100%	100%	0.0%	1.0
Window 3	Formal Lounge	100%	100%	0.0%	1.0

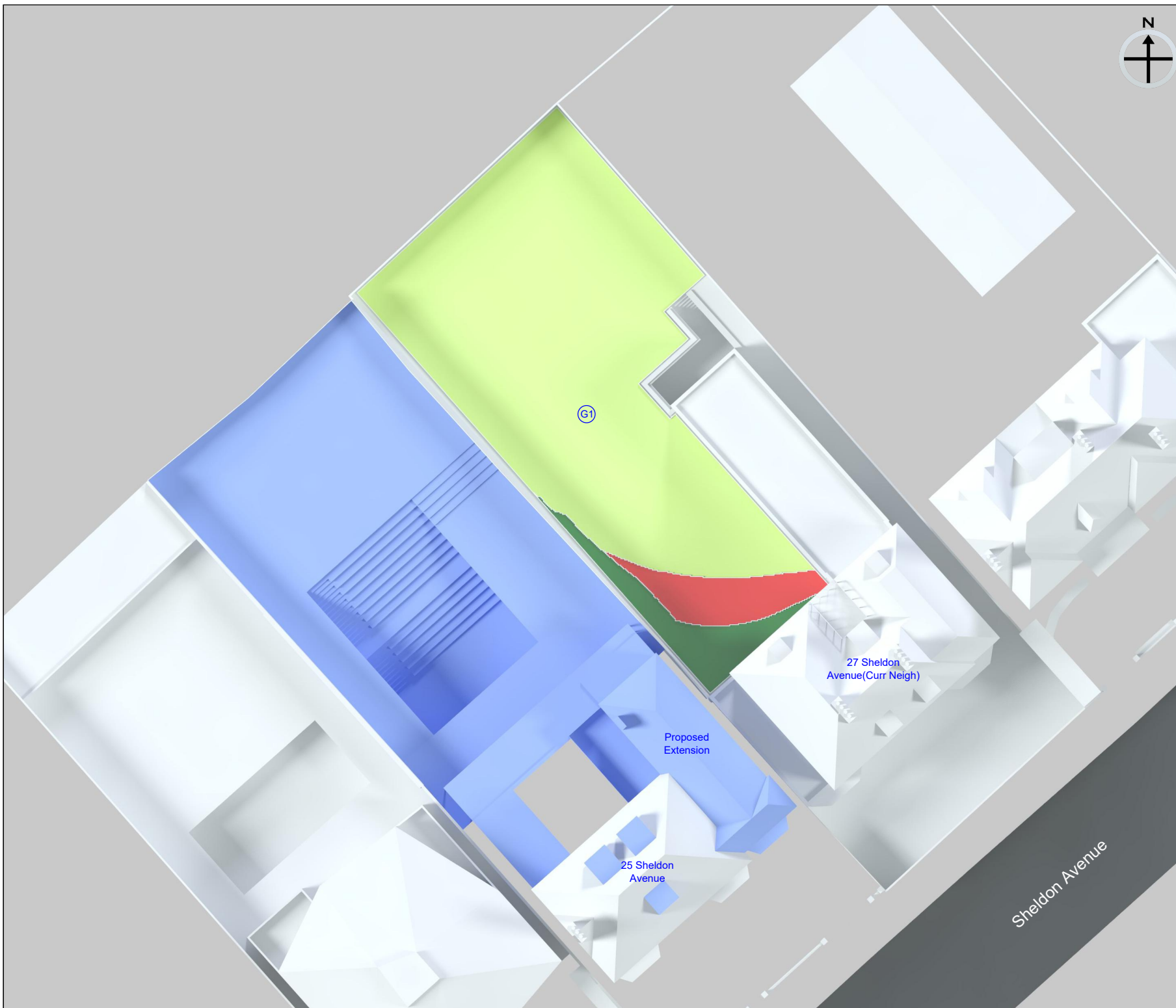
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25 Sheldon Avenue, London N6 4JS

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Garden 1	697.92	m2	648.47	m2	93%	602.21	m2	86%	46.26	m2	7%	0.93

APPENDIX 4

OVERSHADOWING TO GARDENS AND OPEN SPACES



Key

-  Receives under two hours sunlight on 21st March before and after the development.
-  Receives under two hours sunlight on 21st March before the development; but will receive at least two hours sunlight on 21st March after the development (light improved).
-  Receives at least two hours sunlight on 21st March before the development; but will receive under two hours sunlight after the development (light loss).
-  Receives at least two hours sunlight on 21st March before and after the development.
-  Neighbouring Gardens and Amenity Areas

Drawing Title: Appendix 3 - Overshadowing to Gardens and Open Spaces



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