

**DAYLIGHT &
SUNLIGHT
REPORT**

relating to the

**PROPOSED
REDEVELOPMENT**

of

**96 – 98 SHOOT UP
HILL, LONDON NW2**

on behalf of

**LONDON BOROUGH
OF CAMDEN**

Prepared by:

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1.0 EXECUTIVE SUMMARY

The findings detailed in this daylight and sunlight report shows that the proposals will provide the levels of daylight and sunlight sought by the BRE Guide to all the rooms in the proposed building. As the building's massing will remain unchanged / slightly reduced, there will be no reduction to the amenities of daylight and sunlight to any surrounding buildings as a result of the proposals.

2.0 OVERVIEW

The proposed scheme consists of the redevelopment a site currently occupied as a Day Centre for persons with a range of learning disabilities and to convert it to flats subject to the necessary Planning Consent for change of use.

These proposals are shown in detail on the planning drawings and these drawings are not reproduced as part of this report but we attach our own room-numbering drawing to make the tables easier to understand.

It would appear that Camden purchased the land for social services purposes and not for "Planning Purposes" so that the Council would not be able to use S.237 of the Planning Act 1990 to override any surrounding easements.

3.0 INSTRUCTIONS

Our instructions are to analyse the proposed new accommodation to establish whether the rooms will be adequately lit and to report on our findings for submission to the local planning authority or, since the owner and Planning Authority are one, the Secretary of State should the application be called in.

4.0 DAYLIGHT & SUNLIGHT

4.1 BACKGROUND

The local planning authority, The London Borough of Camden's, policies on sunlight and daylight is set out within its Core Development Strategy :-

Camden Core Strategy policy CS5 – *Managing the Impact of Growth and Development*

Camden Core Strategy policy CS14 – *Promoting high quality places and conserving our heritage*

Policy DP26 – *Managing the impact of development on occupiers and neighbours*

And in particular the following Supplementary Planning Document (SPDs) is applicable :-

Camden Planning Guidance (CPG) 6 – Amenity – Chapter 6 – Daylight & Sunlight

The key messages from CPG 6 - Chapter 6 – Daylight & Sunlight has the following “key message”:-

- ***We expect all buildings to receive adequate daylight and sunlight***
- ***Daylight and sunlight reports will be required where there is potential to reduce existing levels of daylight and sunlight***
- ***We will base our considerations on the Average Daylight Factor and Vertical Sky Component***

Paragraph 6.4 of CPG 6 - Chapter 6 – Daylight & Sunlight states that ‘a daylight and sunlight report should assess the impact of the development following the **methodology set out in the most recent version of Building Research Establishment’s (BRE) “Site layout planning for daylight and sunlight : A guide to good practice”**

When considering the Guide’s requirements, it is important to remember that the Guide is not to be viewed as a set of planning rules, which are either passed or failed. Numerical values are given and used, not as proscriptive or prescriptive values but as a way of comparing situations and coming to a judgement. The Guide is conceived as an aid to planning officers and designers by giving objective means of making assessments. The values given as desirable in the Guide, which are predicated on a more extensive suburban context, may not be obtainable in dense urban areas where the grain of development is tight while higher values might well be desirable in rural areas where the grain is contrastingly open.

London Borough of Camden acknowledge this within Paragraph 6.18 of CPG 6 - Chapter 6 – Daylight & Sunlight states that ‘.....the Council recognises that not all of the guidance

contained within the BRE document, particularly orientation, can be adhered to in all developments due to the dense and constrained urban nature of Camden”.

4.2 METHODOLOGY

We have carried out an analysis of the proposed situations following the methodology set out in the BRE Guide on Sunlight and Daylight 2011 Edition. We have considered daylight by means of the vertical sky component analysis and have then calculated the ADFs using the method set out in Appendix C of the Guide and BRE Information Paper IP 15/88.

We have worked from the design drawings for the amended proposals and as these are part of the formal submission these are not reproduced here except as noted above.

We have carried out our calculations based on the drawings prepared by the Architects and appended hereto for the purposes of identification of the rooms.

In consideration of the surrounding properties, the proposals do not involve any significant changes in massing such that the effects on the surrounding buildings will remain unaltered. We have not, therefore, calculated the existing and proposed values for VSC or, since this is in Camden, the ADFs within, the surrounding properties on the basis that whatever they are at present, the surrounding owners are habituated to them and since they will not be changed, there will be no noticeable or adverse effects.

4.3 SUNLIGHT

We have carried out an analysis of the sunlight reaching the various living rooms which face within 90° of due South in accordance with the recommendations of the BRE Guide. The results are set out in **Table 1 – Self test, Sunlight** at Appendix 1.

In our Table 1, we have only assessed living rooms as set out in the BRE Guide and the remaining windows and those facing other than towards South are marked as “n/a”.

As can be seen from the table, the living room to the rear of No 96 has two south-facing windows and one has 32% of annual hours but only 1% of winter hours while the other has 53% of annual hours and 8% of winter hours. Thus, the room as a whole is compliant with the BRE Guide.

On the 1st floor, the front living room to No 98 has 76% of annual hours and 26% of winter hours to one window and 73% of annual hours and 27% of winter hours to the other. This is over triple the BRE Guide's recommendations. The room is therefore fully compliant with the BRE Guide and, indeed, may suffer from excessive solar gain. In the case of the matching living room to No 96, the room benefits from 72% of annual hours and 25% of winter hours to one window and 71% of annual hours and 26% of winter hours to the other, again over triple the BRE Guide's recommendations so that this room is also fully compliant and, again, may suffer from excess heat gain as a result. The rear living room to No 96 has a single window facing South and this will benefit from 60% of annual hours and 11% of winter hours which is over double the BRE Guide's recommendations so that the room is fully compliant.

The living rooms to the rear of No 98 on Ground and 1st floors do not have south-facing windows so do not fall to be considered for sunlight.

4.4 AVERAGE DAYLIGHT FACTOR

The average daylight factor (ADF) is a calculation of the generalised level of daylighting within a room by reference to the angle of visible sky at the window plane, the transmission losses through the glass, the area of glazing and the reflectivities of the internal surfaces within the room. Clearly, this latter figure will vary with the decorative scheme chosen but the assumption is made that the ceiling would be painted white, the walls a light colour, such as magnolia and the floor would be a medium-coloured carpet.

We have assessed all the habitable rooms within the proposal and our results are set out in **Table 2, - Average Daylight Factors**, in Appendix 1. The rooms are numbered anti-clockwise in each storey, beginning at the front left corner.

The table shows that at Ground floor level, the four front bedrooms all have satisfactory levels of ADF. The rear right bedroom, Room 5, has a good level of ADF also. We have approached the two rear living rooms in two manners; one is excluding the kitchen area and the other is to include the kitchen area. In the case of the living room to No 96, the ADF exceeds 2% both with and without the kitchen area. The same applies to the living room to the rear of No. 98 as well so that both these rooms are fully compliant with the BRE Guide. The rear bedroom to No 98, which is deeper than that to No 96, passes the requirements of the BRE Guide comfortably. Thus, all the habitable rooms at Ground floor level are compliant with the BRE Guide and BS 8206.

At 1st floor level, the Living room/kitchen to No 98 has an ADF of over 2% both with and without the kitchen being taken into account so the room is fully compliant. The same applies to the Living room/kitchen to No 96. Both bedrooms to the front elevation are also fully compliant with the BRE Guide's recommendations. The rear bedroom to No 96 also has an ADF in excess of 2% as does the rear bedroom to No 98 so that these rooms are all fully compliant with the BRE Guide.

The Living room/kitchen to the rear of No 96, when taken without the kitchen has an ADF of 2.54% but with the kitchen included, the ADF falls to 1.88%, which is below the target of 2%. Paragraph 2.1.14 of the BRE Guide addresses this issue as follows; *"Non-daylit internal kitchens should be avoided wherever possible, especially if the kitchen is used as a dining area too. If the layout means that a small internal galley-type kitchen is inevitable, it should be directly linked to a well daylit living room."* In this case, the kitchen is not used as dining area as that is in the main living space, and the kitchen could be described as a "galley-type" one. As the ADF within the living room is over 2%, we would posit that this is a "well daylit living room" as described in the Guide so that the arrangement should be seen as acceptable.

Exactly the same situation applies in the matching living room/kitchen to No 98 and, again, we would posit that this is an acceptable arrangement in the circumstances. If the matter were an issue of moment, then the addition of Velux windows to the outboard slopes of the roofs to the sitting rooms would enable the ADFs to be increased to provide over 2% to the combined spaces.

At Second floor level, there are to be two bedrooms; each has two Velux windows; both achieve the minimum levels of ADF recommended by the BRE Guide so both are fully compliant with the Guide and BS 8206.

5.0 CONCLUSIONS

Compliance with the BRE Guide is not a Planning Criterion and the foreword to the Guide is careful to make this point. The numerical values have to be interpreted carefully and not rigidly. The results of our examination show, however, that all of the rooms as proposed will have levels of daylight and sunlight that fully satisfy the BRE Guide so that in Planning terms as far as daylight and sunlight go, the proposals should be seen as fully acceptable.

Schroeders Begg Ltd

August 2013

APPENDIX 1

Tables referred to in the text:

Table 1: Self-test, Sunlight Availability

Table 2: Self-test, Average Daylight Factors

Table 1 - Self test, Sunlight

Available Sunlight Hours

Floor Ref.	Window Ref.	Annual %	Winter %
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Ground	W1	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W2	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W3	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W4	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W5	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W6	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W7	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W8	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W9	n/a	n/a	n/a
		Proposed	32	1
Ground	W10	n/a	n/a	n/a
		Proposed	53	8
Ground	W11	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W12	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W13	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W14	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W15	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W16	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W17	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W18	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W19	n/a	n/a	n/a
		Proposed	n/a	n/a

Table 1 - Self test, Sunlight

Available Sunlight Hours

Floor Ref.	Window Ref.		Annual %	Winter %
Ground	W40	n/a	n/a	n/a
		Proposed	n/a	n/a
Ground	W41	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W20	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W21	n/a	n/a	n/a
		Proposed	73	26
First	W22	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W23	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W24	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W25	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W26	n/a	n/a	n/a
		Proposed	72	25
First	W27	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W28	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W29	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W30	n/a	n/a	n/a
		Proposed	60	11
First	W31	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W32	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W33	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W34	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W35	n/a	n/a	n/a
		Proposed	n/a	n/a
First	W42	n/a	n/a	n/a
		Proposed	73	27

Table 1 - Self test, Sunlight				
Available Sunlight Hours				
Floor Ref.	Window Ref.		Annual %	Winter %
First	W43	n/a	n/a	n/a
		Proposed	71	26
Second	W36	n/a	n/a	n/a
		Proposed	n/a	n/a
Second	W37	n/a	n/a	n/a
		Proposed	n/a	n/a
Second	W38	n/a	n/a	n/a
		Proposed	n/a	n/a
Second	W39	n/a	n/a	n/a
		Proposed	n/a	n/a

Table 2 - Self test ADFs

Floor Ref.	Room Ref.	Room Use	Window Ref.	ADF Proposed	Req'd Value	Pass/Fail
Ground	R1	Bedroom	W2	1.95	1.0	PASS
			W40	1.23		
			W1	1.41		
				4.60		
Ground	R2	Bedroom	W3	1.40	1.0	PASS
				1.40		
Ground	R3	Bedroom	W5	2.11	1.0	PASS
			W41	1.27		
			W4	1.24		
				4.62		
Ground	R4	Bedroom	W6	2.03	1.0	PASS
			W7	2.92		
				4.95		
Ground	R5	Bedroom	W8	1.94	1.0	PASS
				1.94		
Ground	R6	Living room	W9	0.53	1.5	PASS
			W10	0.51		
			W11	0.41		
			W12	2.34		
			W13	0.40		
				4.19		
Ground	R7	Living room	W14	0.38	1.5	PASS
			W15	2.17		
			W16	0.37		
			W17	0.45		
			W18	0.44		
				3.81		
Ground	R8	Living room	W9	0.32	1.5	PASS
			W10	0.31		
			W11	0.25		
			W12	1.43		
			W13	0.25		
				2.57		

Table 2 - Self test ADFs

Floor Ref.	Room Ref.	Room Use	Window Ref.	ADF Proposed	Req'd Value	Pass/Fail
Ground	R9	Living room	W14	0.22	1.5	PASS
			W15	1.25		
			W16	0.21		
			W17	0.26		
			W18	0.26		
				2.20		
Ground	R10	Bedroom	W19	3.54	1.0	PASS
				3.54		
First	R11	Living room	W20	1.12	1.5	PASS
			W21	1.48		
			W42	1.05		
				3.65		
First	R12	Living room	W35	0.29	1.5	PASS
			W20	0.84		
			W21	1.11		
			W42	0.79		
				3.04		
First	R13	Bedroom	W22	1.34	1.0	PASS
			W23	1.19		
			W24	1.19		
				3.72		
First	R14	Living room	W43	1.36	1.5	PASS
			W26	2.03		
			W25	1.39		
				4.78		
First	R15	Living room	W25	1.01	1.5	PASS
			W26	1.47		
			W43	0.99		
				3.47		
First	R16	Bedroom	W27	1.24	1.0	PASS
			W28	1.71		
				2.95		
First	R17	Bedroom	W29	2.50	1.0	PASS
				2.50		

Table 2 - Self test ADFs

Floor Ref.	Room Ref.	Room Use	Window Ref.	ADF Proposed	Req'd Value	Pass/Fail
First	R18	Living room	W30 W31	0.86	1.5	PASS
				1.68		
				2.54		
First	R19	Living room	W30 W31	0.64	1.5	PASS
				1.25		
				1.88		
First	R20	Living room	W32 W33	1.71	1.5	PASS
				0.76		
				2.47		
First	R21	Living room	W32 W33	1.23	1.5	PASS
				0.54		
				1.78		
First	R22	Bedroom	W34	2.67	1.0	PASS
				2.67		
Second	R23	Bedroom	W36 W37	0.57	1.0	PASS
				0.53		
				1.10		
Second	R24	Bedroom	W39 W38	0.61	1.0	PASS
				0.58		
				1.19		

APPENDIX 2

Location drawing with window numbers

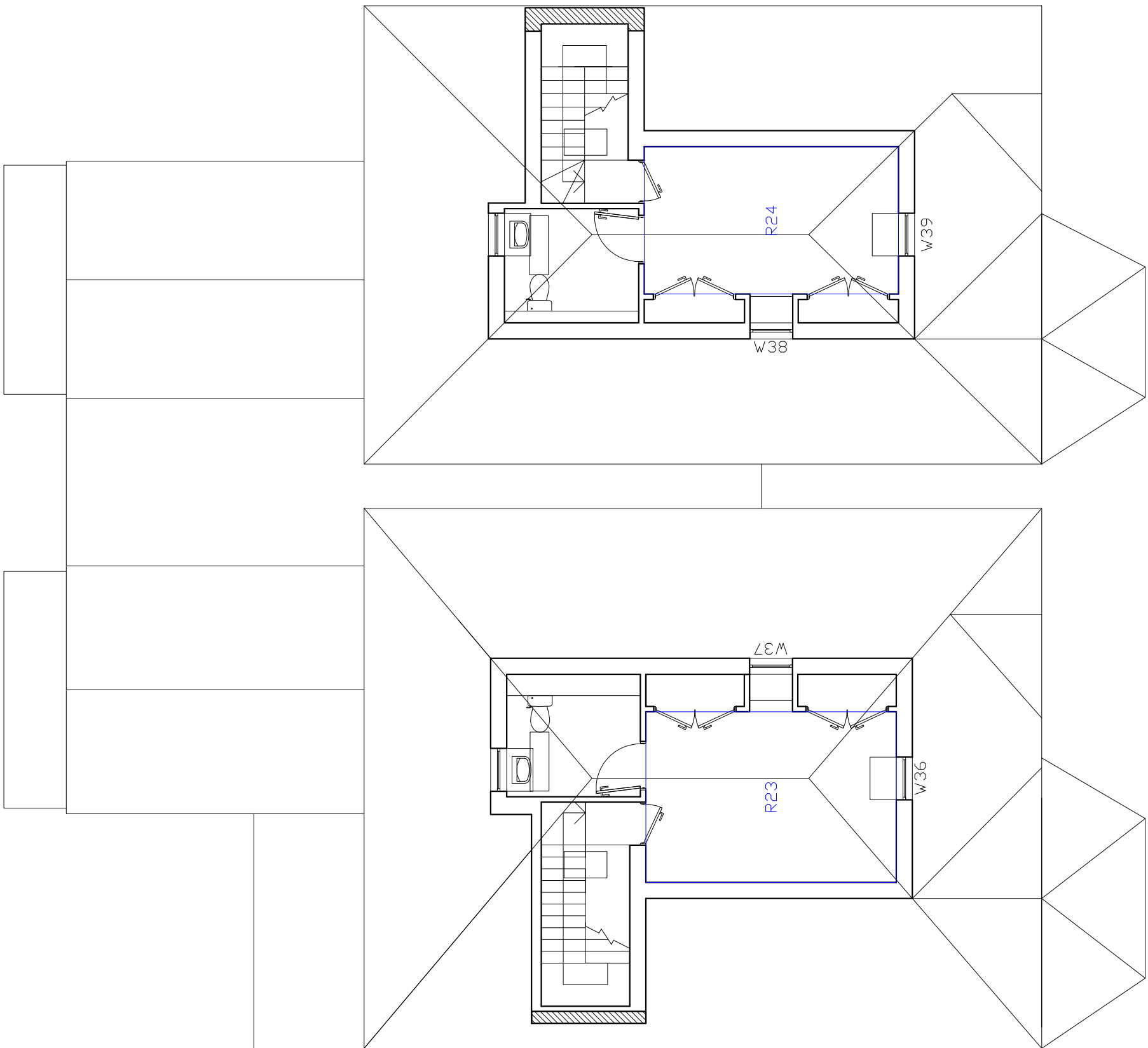
SOURCES



FIRST FLOOR



GROUND FLOOR



SECOND FLOOR

Notes:



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DRAWN	-
CHECKED	-

SCALE	
NTS (A3 Sheet)	

Greenwood Place

Shoot-up Hill
Internal Room Map

Job No	Rev	Drawing Number
1056C	-	02
Date : 060813		