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Daylight and Sunlight Study Hampstead School, Westbere Road, London NW2 3RT

25 March 2015



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CONTENTS

1 EX	ECUTIVE S	UMMARY	
1.1	Overview		2
o INII		I SOURCES	
2.1	Documen	ts Considered	3
3 ME	ETHODOLOG	3Y OF THE STUDY	4
3.1		de: Site Layout Planning for Daylight and Sunlight	
3.2		o Windows	
3.3		availability to Windows	
3.4		lowing to Gardens and Open Spaces	
• • •	0.0.0	or and or an or	
4 RE	SULTS OF	THE STUDY	7
4.1	Windows	& Amenity Areas Considered	7
4.2		l Results	
4.3		o Windows	
4.4		o Windows	
4.5		lowing to Gardens and Open Spaces	
4.6		on	
5 CL	ARIFICATIO	NS	8
5.1	General		8
5.2	Project S	pecific	
APPE	NDICES		
APPE	NDIX 1	WINDOW & GARDEN KEY	
APPE	ENDIX 2	DAYLIGHT AND SUNLIGHT RESULTS	
ΔΡΡΕ	NDIX 3	OVERSHADOWING TO GARDENS AND OPEN SPACES	

1 EXECUTIVE SUMMARY

1.1 Overview

- 1.1.1 Right of Light Consulting has been commissioned to undertake a daylight and sunlight study of the proposed development at Hampstead School, Westbere Road, London NW2 3RT.
- 1.1.2 The aim of the study is to assess the impact of the development on the light receivable by the neighbouring properties at 6 to 18 Menelik Road and 34 to 48 Horton Avenue. The study 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' by P J Littlefair 2011.
- 1.1.3 The window key in Appendix 1 identifies the windows analysed in this study. Appendix 2 gives the numerical results of the various daylight and sunlight tests. The results confirm that all neighbouring windows pass the BRE diffuse daylight and direct sunlight tests. The development also satisfies the BRE overshadowing to gardens and open spaces requirements.
- 1.1.4 In summary, the proposed development will have a low impact on the light receivable by its neighbouring properties. Right of Light Consulting confirms that the development design satisfies all of the requirements set out in the BRE guide 'Site Layout Planning for Daylight and Sunlight'.

2 INFORMATION SOURCES

2.1 Documents Considered

2.1.1 This report is based on drawings:

gleeds Building Surveying Ltd

GASA0165_T01	Topographical Survey	Rev –
<u>Wates</u>		
1.1-PLL0220-001 2657-GA-100	Site Master Plan New Teaching Building	Rev 02 Rev P01
2657-GA-101	Ground Floor Plan New Teaching Building	Rev P01
	First Floor Plan	
2657-GA-102	New Teaching Building Second Floor Plan	Rev P01
2657-GA-103	New Teaching Building Roof GA Plan	Rev P01
2657-GA-110	New Sports Building Ground Floor GA Plan	Rev P02
2657-GA-111	New Sports Building Roof GA Plan	Rev P01
2657-EL-100	New Teaching Building	Rev P01
2657-EL-101	External Elevations Sheet 1 of 2 New Teaching Building	Rev P01
2657-EL-102	External Elevations Sheet 2 of 2 New Sports Building	Rev P01
2657-EL-111	External Elevations Sheet 1 of 2 New Sports Building	Rev P01
2657-OV-900	External Elevations Sheet 2 of 2 3D View Aerial View Looking North	Rev P01
2657-OV-901	3D View Aerial View Looking West	Rev P01
2657-OV-901 2657-OV-902	3D Approach to New Teaching	Rev P01
2007-0-902	Building	Nev FOT
2657-OV-905	3D View Courtyard by Assembly Hall	Rev P01
2657-SC-100	New Teaching Building GA Section	Rev P01
2657-SC-110	New Sporting Building GA Section	Rev P02

3 METHODOLOGY OF THE STUDY

3.1 BRE Guide: Site Layout Planning for Daylight and Sunlight

- 3.1.1 The study 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' by P J Littlefair 2011. In general, the BRE tests are based on the requirements of the British Standard, BS 8206 Part 2.
- 3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The following statement is quoted directly from the BRE guide:
- 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 Daylight to Windows

3.2.1 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.

Diffuse daylight calculations should be undertaken to all rooms where daylight is required, including living rooms, kitchens and bedrooms. Usually, if a kitchen is less than 13m², it is considered to be a non-habitable room and the daylight tests need not be applied. The BRE guide states that windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.

3.2.2 The BRE guide contains two tests which measure diffuse daylight:

3.2.3 Test 1 Vertical Sky Component

The percentage of the sky visible from the centre of a window is known as the Vertical Sky Component. 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.

3.2.4 Test 2 Daylight Distribution

The BRE guide states that where room layouts are known, the impact on the daylighting distribution can be found by plotting the 'no sky line' in each of the main rooms. The no sky line 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 Sunlight availability to Windows

- 3.3.1 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.
- 3.3.2 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.

3.4 Overshadowing to Gardens and Open Spaces

- 3.4.1 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.

3.4.2 The BRE 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 STUDY

4.1 Windows & Amenity Areas Considered

4.1.1 Appendix 1 provides a plan and photographs to indicate the positions of the windows and gardens analysed in this study.

4.2 Numerical Results

4.2.1 Appendix 2 lists the detailed numerical daylight and sunlight test results. The results are interpreted below.

4.3 Daylight to Windows

4.3.1 All windows pass the Vertical Sky Component test. The proposed development therefore satisfies the BRE daylight requirements.

4.4 Sunlight to Windows

4.4.1 All windows which face within 90 degrees of due south have been tested for direct sunlight. All windows pass both the total annual sunlight hours test and the winter sunlight hours test (annual probable sunlight hours between 21 September and 21 March). The proposed development therefore satisfies the BRE direct sunlight to windows requirements.

4.5 Overshadowing to Gardens and Open Spaces

4.5.1 The proposed development will not create any new areas which receive less than two hours of sunlight on 21 March. The before/after ratios are 1 (no loss) and the proposed development therefore passes the BRE overshadowing to gardens and open spaces test.

4.6 Conclusion

4.6.1 The proposed development will have a low impact on the light receivable by its neighbouring properties. Right of Light Consulting confirms that the development design satisfies all of the requirements set out in the BRE guide 'Site Layout Planning for Daylight and Sunlight'.

5 CLARIFICATIONS

5.1 General

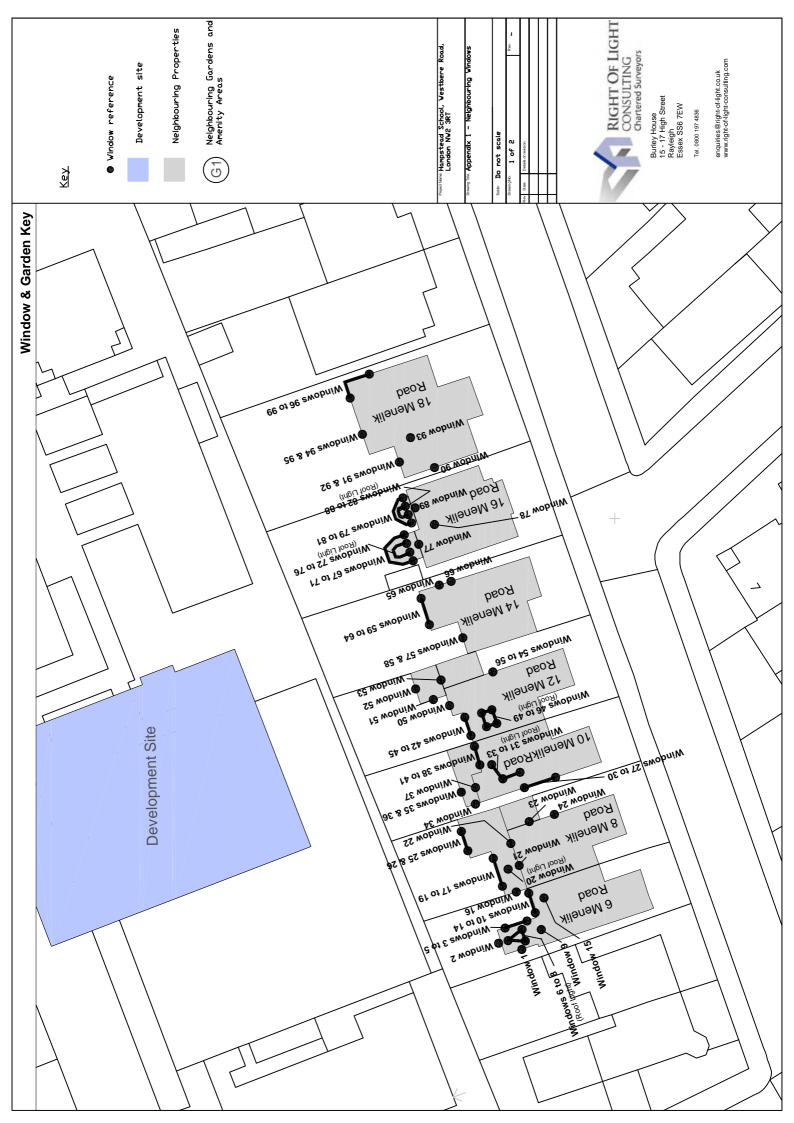
- 5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.
- 5.1.2 We have undertaken the survey following the guidelines of the RICS publication "Surveying Safely".
- 5.1.3 We have used our best endeavours to ensure all relevant windows within the neighbouring properties have been identified.
- 5.1.4 Where limited access is available, reasonable assumptions will have been made.
- 5.1.5 We have adopted the conventional approach of assessing all habitable rooms within domestic properties.
- 5.1.6 Right of Light Consulting have endeavoured to include in the report those matters, which they have knowledge of or of which they have been made aware, that might adversely affect the validity of the opinion given.

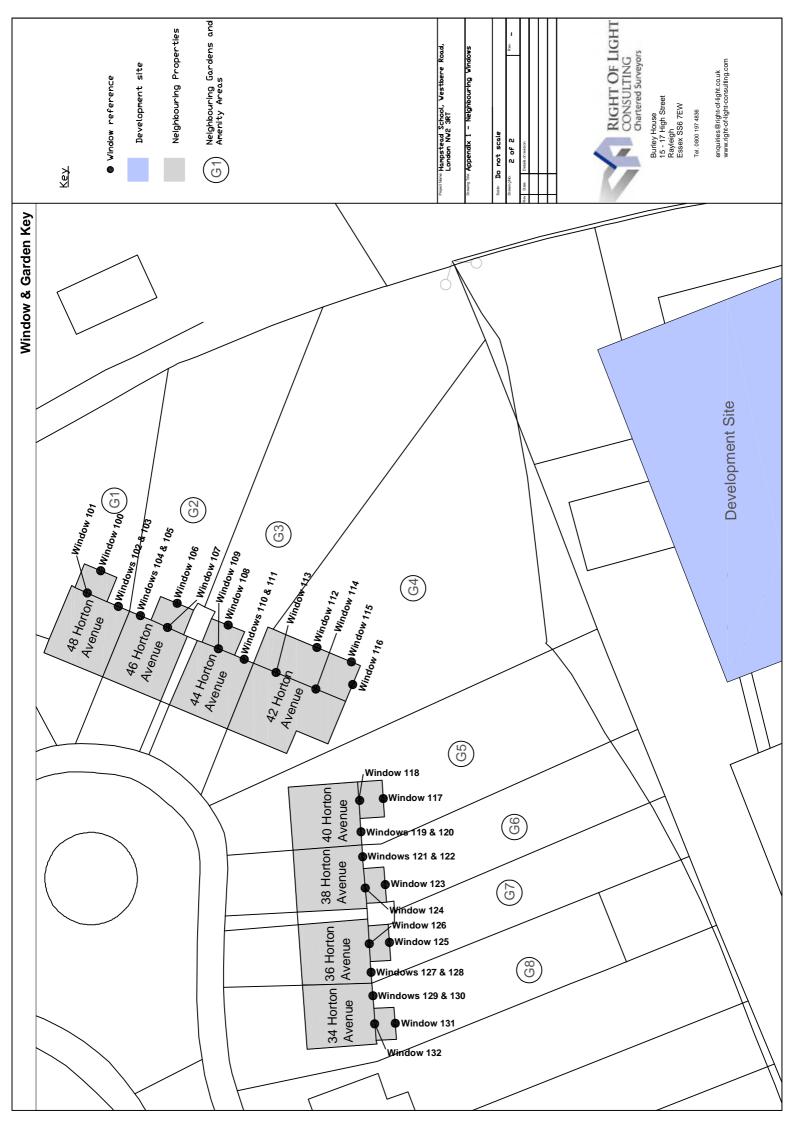
5.2 Project Specific

5.2.1 None



APPENDIX 1	
WINDOW & GARDEN KEY	





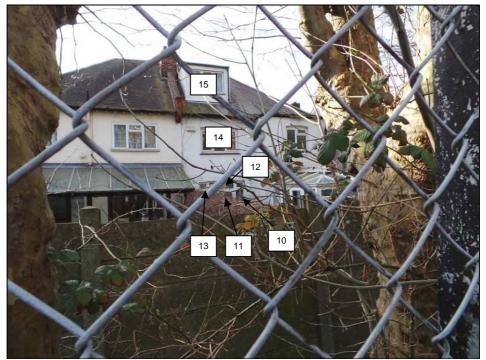
Neighbouring Windows



6 Menelik Road



6 Menelik Road



6 Menelik Road



8 Menelik Road



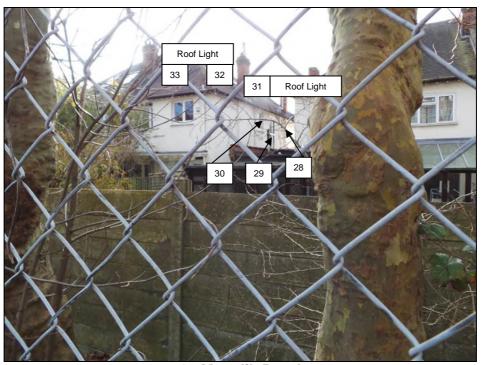
8 Menelik Road



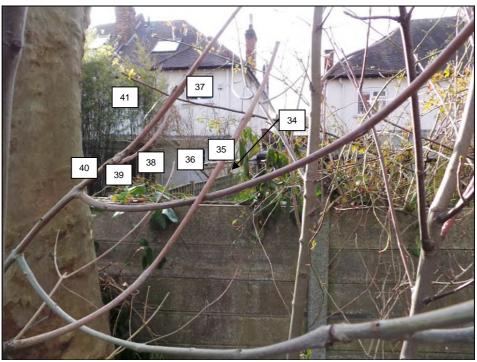
8 Menelik Road



10 Menelik Road



10 Menelik Road



10 Menelik Road



12 Menelik Road



12 Menelik Road



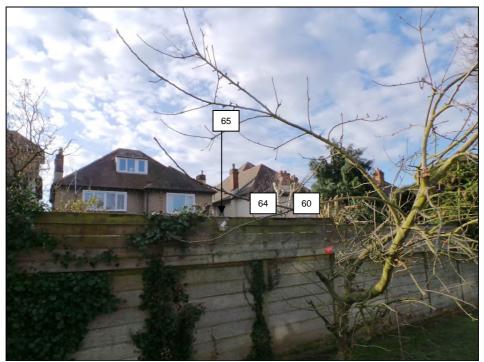
12 Menelik Road



12 Menelik Road



14 Menelik Road



14 Menelik Road



14 Menelik Road



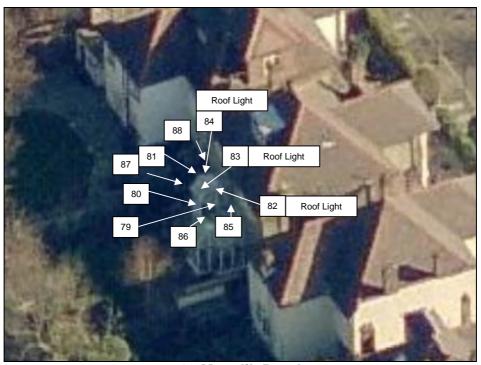
16 Menelik Road



16 Menelik Road



16 Menelik Road



16 Menelik Road



18 Menelik Road



18 Menelik Road



48 Horton Avenue



46 Horton Avenue



44 Horton Avenue



42 Horton Avenue



40 Horton Avenue



38 Horton Avenue



36 Horton Avenue



34 Horton Avenue



Appendix 2 - Vertical Sky Component Hampstead School, Westbere Road, London NW2 3RT

Reference	Use Class		Vertical Sky	Component	
		Before	After	Loss	Ratio
6 Menelik Road					
Window 1	Habitable	22.1%	22.1%	0.0%	1.0
Window 2	Habitable	29.0%	27.6%	1.4%	0.95
Window 3	Habitable	27.1%	25.7%	1.4%	0.95
Window 4	Habitable	24.4%	23.1%	1.3%	0.95
Window 5	Habitable	19.9%	18.8%	1.1%	0.94
Window 6	Habitable	75.3%	75.2%	0.1%	1.0
Window 7	Habitable	82.4%	82.0%	0.4%	1.0
Window 8	Habitable	73.6%	73.2%	0.4%	0.99
Window 9	Habitable	34.5%	33.7%	0.8%	0.98
Window 10	Habitable	22.5%	22.1%	0.4%	0.98
Window 11	Habitable	23.8%	23.7%	0.1%	1.0
Window 12	Habitable	20.7%	19.9%	0.8%	0.96
Window 13	Habitable	27.8%	27.1%	0.7%	0.97
Window 14	Habitable	33.4%	32.5%	0.9%	0.97
Window 15	Habitable	37.1%	36.7%	0.4%	0.99
8 Menelik Road					
Window 16	Habitable	17.5%	17.5%	0.0%	1.0
Window 17	Habitable	31.4%	29.5%	1.9%	0.94
Window 18	Habitable	31.2%	29.5%	1.7%	0.95
Window 19	Habitable	26.8%	25.5%	1.3%	0.95
Window 20	Habitable	64.0%	63.5%	0.5%	0.99
Window 21	Habitable	35.1%	34.0%	1.1%	0.97
Window 22	Habitable	35.2%	34.0%	1.2%	0.97
Window 23	Habitable	22.8%	22.2%	0.6%	0.97
Window 24	Habitable	20.7%	20.3%	0.4%	0.98
Window 25	Habitable	24.9%	24.9%	0.0%	1.0
Window 26	Habitable	30.5%	27.4%	3.1%	0.9
10 Menelik Road					
Window 27	Habitable	15.0%	15.0%	0.0%	1.0
Window 28	Habitable	23.4%	23.4%	0.0%	1.0
Window 29	Habitable	22.6%	22.6%	0.0%	1.0

Appendix 2 - Vertical Sky Component Hampstead School, Westbere Road, London NW2 3RT

Reference	Use Class		Vertical Sky	Component	
		Before	After	Loss	Ratio
Window 30	Habitable	23.5%	23.5%	0.0%	1.0
Window 31	Habitable	78.9%	78.9%	0.0%	1.0
Window 32	Habitable	79.3%	79.3%	0.0%	1.0
Window 33	Habitable	76.7%	76.5%	0.2%	1.0
Window 34	Habitable	31.0%	27.7%	3.3%	0.89
Window 35	Habitable	32.3%	28.8%	3.5%	0.89
Window 36	Habitable	33.8%	30.9%	2.9%	0.91
Window 37	Habitable	36.1%	34.3%	1.8%	0.95
Window 38	Habitable	26.5%	22.8%	3.7%	0.86
Window 39	Habitable	29.3%	25.8%	3.5%	0.88
Window 40	Habitable	27.9%	25.2%	2.7%	0.9
Window 41	Habitable	33.2%	31.3%	1.9%	0.94
12 Menelik Road					
Window 42	Habitable	27.2%	23.6%	3.6%	0.87
Window 43	Habitable	28.6%	24.4%	4.2%	0.85
Window 44	Habitable	25.7%	22.0%	3.7%	0.86
Window 45	Habitable	34.0%	31.9%	2.1%	0.94
Window 46	Habitable	74.8%	74.5%	0.3%	1.0
Window 47	Habitable	76.6%	76.3%	0.3%	1.0
Window 48	Habitable	72.9%	72.7%	0.2%	1.0
Window 49	Habitable	76.7%	76.5%	0.2%	1.0
Window 50	Habitable	30.7%	25.6%	5.1%	0.83
Window 51	Habitable	23.9%	23.5%	0.4%	0.98
Window 52	Habitable	33.3%	27.1%	6.2%	0.81
Window 53	Habitable	36.3%	33.9%	2.4%	0.93
Window 54	Habitable	21.9%	22.1%	-0.2%	1.01
Window 55	Habitable	19.2%	19.3%	-0.1%	1.01
Window 56	Habitable	32.2%	32.3%	-0.1%	1.0
14 Menelik Road					
Window 57	Habitable	21.6%	19.9%	1.7%	0.92
Window 58	Habitable	28.7%	27.2%	1.5%	0.95
Window 59	Habitable	34.1%	31.2%	2.9%	0.91

Appendix 2 - Vertical Sky Component Hampstead School, Westbere Road, London NW2 3RT

Reference	Use Class		Vertical Sky	Component	
	000 0.000	Before	After	Loss	Ratio
Window 60	Habitable	36.6%	35.5%	1.1%	0.97
Window 61	Habitable	34.0%	31.2%	2.8%	0.92
Window 62	Habitable	33.7%	31.0%	2.7%	0.92
Window 63	Habitable	33.2%	30.3%	2.9%	0.91
Window 64	Habitable	36.7%	35.9%	0.8%	0.98
Window 65	Habitable	26.0%	26.2%	-0.2%	1.01
Window 66	Habitable	26.3%	26.4%	-0.1%	1.0
16 Menelik Road					
Window 67	Habitable	17.1%	16.1%	1.0%	0.94
Window 68	Habitable	28.6%	26.3%	2.3%	0.92
Window 69	Habitable	34.2%	33.4%	0.8%	0.98
Window 70	Habitable	32.1%	33.8%	-1.7%	1.05
Window 71	Habitable	19.7%	20.7%	-1.0%	1.05
Window 72	Habitable	63.5%	62.9%	0.6%	0.99
Window 73	Habitable	75.6%	74.9%	0.7%	0.99
Window 74	Habitable	81.9%	81.5%	0.4%	1.0
Window 75	Habitable	78.2%	78.2%	0.0%	1.0
Window 76	Habitable	67.4%	67.7%	-0.3%	1.0
Window 77	Habitable	36.3%	36.3%	0.0%	1.0
Window 78	Habitable	37.4%	37.6%	-0.2%	1.01
Window 79	Habitable	10.3%	9.7%	0.6%	0.94
Window 80	Habitable	25.7%	24.7%	1.0%	0.96
Window 81	Habitable	33.6%	33.7%	-0.1%	1.0
Window 82	Habitable	31.7%	33.2%	-1.5%	1.05
Window 83	Habitable	16.9%	17.8%	-0.9%	1.05
Window 84	Habitable	44.9%	44.5%	0.4%	0.99
Window 85	Habitable	64.2%	64.0%	0.2%	1.0
Window 86	Habitable	70.1%	70.1%	0.0%	1.0
Window 87	Habitable	66.0%	66.1%	-0.1%	1.0
Window 88	Habitable	49.8%	50.3%	-0.5%	1.01
Window 89	Habitable	35.5%	35.8%	-0.3%	1.01

Appendix 2 - Vertical Sky Component Hampstead School, Westbere Road, London NW2 3RT

Reference	Use Class		Vertical Sky	Component	
		Before	After	Loss	Ratio
18 Menelik Road					
Window 90	Habitable	26.1%	26.0%	0.1%	1.0
Window 91	Habitable	26.2%	26.5%	-0.3%	1.01
Window 92	Habitable	32.6%	33.1%	-0.5%	1.02
Window 93	Habitable	36.4%	37.0%	-0.6%	1.02
Window 94	Habitable	34.2%	35.5%	-1.3%	1.04
Window 95	Habitable	35.6%	36.6%	-1.0%	1.03
Window 96	Habitable	32.6%	33.8%	-1.2%	1.04
Window 97	Habitable	12.2%	12.3%	-0.1%	1.01
Window 98	Habitable	35.7%	37.1%	-1.4%	1.04
Window 99	Habitable	23.5%	23.8%	-0.3%	1.01
48 Horton Avenue					
Window 100	Habitable	38.6%	38.9%	-0.3%	1.01
Window 101	Habitable	36.3%	36.4%	-0.1%	1.0
Window 102	Habitable	33.5%	33.7%	-0.2%	1.01
Window 103	Habitable	37.0%	37.2%	-0.2%	1.01
46 Horton Avenue					
Window 104	Habitable	33.6%	33.7%	-0.1%	1.0
Window 105	Habitable	37.0%	37.2%	-0.2%	1.01
Window 106	Habitable	38.1%	38.5%	-0.4%	1.01
Window 107	Habitable	35.5%	35.7%	-0.2%	1.01
44 Horton Avenue					
Window 108	Habitable	37.7%	38.2%	-0.5%	1.01
Window 109	Habitable	35.2%	35.4%	-0.2%	1.01
Window 110	Habitable	25.4%	25.5%	-0.1%	1.0
Window 111	Habitable	36.6%	36.9%	-0.3%	1.01
42 Horton Avenue					
Window 112	Habitable	37.2%	37.8%	-0.6%	1.02
Window 113	Habitable	36.4%	36.7%	-0.3%	1.01
Window 114	Habitable	35.7%	35.9%	-0.2%	1.01
Window 115	Habitable	35.4%	36.1%	-0.7%	1.02

Appendix 2 - Vertical Sky Component Hampstead School, Westbere Road, London NW2 3RT

Reference	Use Class				
Neierence	Use Class	Before	Vertical Sky After	Loss	Ratio
Window 116	Habitable	34.4%	34.9%	-0.5%	1.01
40 Horton Avenue					
Window 117	Habitable	35.6%	36.4%	-0.8%	1.02
Window 118	Habitable	34.5%	35.1%	-0.6%	1.02
Window 119	Habitable	32.3%	33.1%	-0.8%	1.02
Window 120	Habitable	35.3%	35.9%	-0.6%	1.02
38 Horton Avenue					
Window 121	Habitable	32.7%	33.3%	-0.6%	1.02
Window 122	Habitable	35.1%	35.7%	-0.6%	1.02
Window 123	Habitable	35.9%	36.8%	-0.9%	1.03
Window 124	Habitable	34.0%	34.6%	-0.6%	1.02
36 Horton Avenue					
Window 125	Habitable	36.0%	36.9%	-0.9%	1.03
Window 126	Habitable	34.0%	34.6%	-0.6%	1.02
Window 127	Habitable	32.3%	33.5%	-1.2%	1.04
Window 128	Habitable	35.0%	35.7%	-0.7%	1.02
34 Horton Avenue					
Window 129	Habitable	32.6%	33.4%	-0.8%	1.02
Window 130	Habitable	34.9%	35.6%	-0.7%	1.02
Window 131	Habitable	36.0%	37.0%	-1.0%	1.03
Window 132	Habitable	34.1%	34.8%	-0.7%	1.02

Appendix 2 - Sunlight to Windows Hampstead School, Westbere Road, London NW2 3RT

				;	Sunlight to	Windov	vs		
Reference	Use Class	Т	otal Sun	light Ho	urs	W	inter Su	nlight Ho	urs
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
6 Menelik Road									
Window 1	Habitable	30%	30%	0%	1.0	3%	3%	0%	1.0
Window 6	Habitable	36%	36%	0%	1.0	1%	1%	0%	1.0
8 Menelik Road									
Window 16	Habitable	12%	12%	0%	1.0	1%	1%	0%	1.0
Window 25	Habitable	29%	29%	0%	1.0	1%	1%	0%	1.0
10 Menelik Road									
Window 27	Habitable	21%	21%	0%	1.0	7%	7%	0%	1.0
Window 28	Habitable	34%	34%	0%	1.0	12%	12%	0%	1.0
Window 29	Habitable	33%	33%	0%	1.0	12%	12%	0%	1.0
Window 30	Habitable	32%	32%	0%	1.0	9%	9%	0%	1.0
Window 31	Habitable	76%	76%	0%	1.0	23%	23%	0%	1.0
Window 32	Habitable	75%	75%	0%	1.0	23%	23%	0%	1.0
12 Menelik Road									
Window 51	Habitable	21%	21%	0%	1.0	1%	1%	0%	1.0
16 Menelik Road									
Window 67	Habitable	8%	8%	0%	1.0	0%	0%	0%	1.0
Window 72	Habitable	19%	18%	1%	0.95	0%	0%	0%	1.0
Window 79	Habitable	6%	6%	0%	1.0	0%	0%	0%	1.0
Window 84	Habitable	8%	8%	0%	1.0	0%	0%	0%	1.0
18 Menelik Road									
Window 90	Habitable	44%	44%	0%	1.0	14%	14%	0%	1.0
48 Horton Avenue									
Window 100	Habitable	60%	60%	0%	1.0	20%	20%	0%	1.0
Window 101	Habitable	53%	53%	0%	1.0	19%	19%	0%	1.0
Window 102	Habitable	56%	56%	0%	1.0	19%	19%	0%	1.0
Window 103	Habitable	55%	55%	0%	1.0	20%	20%	0%	1.0

Appendix 2 - Sunlight to Windows Hampstead School, Westbere Road, London NW2 3RT

		Sunlight to Windows							
Reference	Use Class	Т	Total Sunlight Hours				inter Su	nlight Ho	ours
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
46 Horton Avenue									
Window 104	Habitable	47%	47%	0%	1.0	8%	8%	0%	1.0
Window 105	Habitable	56%	56%	0%	1.0	20%	20%	0%	1.0
Window 106	Habitable	60%	60%	0%	1.0	20%	20%	0%	1.0
Window 107	Habitable	52%	52%	0%	1.0	18%	18%	0%	1.0
44 Horton Avenue									
Window 108	Habitable	60%	60%	0%	1.0	20%	20%	0%	1.0
Window 109	Habitable	52%	52%	0%	1.0	18%	18%	0%	1.0
Window 110	Habitable	35%	35%	0%	1.0	3%	3%	0%	1.0
Window 111	Habitable	55%	55%	0%	1.0	20%	20%	0%	1.0
42 Horton Avenue									
Window 112	Habitable	58%	60%	-2%	1.03	18%	20%	-2%	1.11
Window 113	Habitable	55%	55%	0%	1.0	20%	20%	0%	1.0
Window 114	Habitable	53%	53%	0%	1.0	19%	19%	0%	1.0
Window 115	Habitable	55%	57%	-2%	1.04	18%	20%	-2%	1.11
Window 116	Habitable	71%	73%	-2%	1.03	26%	28%	-2%	1.08
40 Horton Avenue									
Window 117	Habitable	86%	86%	0%	1.0	29%	29%	0%	1.0
Window 118	Habitable	78%	78%	0%	1.0	29%	29%	0%	1.0
Window 119	Habitable	72%	72%	0%	1.0	26%	26%	0%	1.0
Window 120	Habitable	82%	82%	0%	1.0	29%	29%	0%	1.0
38 Horton Avenue									
Window 121	Habitable	72%	72%	0%	1.0	21%	21%	0%	1.0
Window 122	Habitable	81%	81%	0%	1.0	29%	29%	0%	1.0
Window 123	Habitable	86%	85%	1%	0.99	29%	28%	1%	0.97
Window 124	Habitable	78%	78%	0%	1.0	29%	29%	0%	1.0
36 Horton Avenue									
Window 125	Habitable	85%	86%	-1%	1.01	28%	29%	-1%	1.04
Window 126	Habitable	78%	78%	0%	1.0	29%	29%	0%	1.0
Window 127	Habitable	73%	73%	0%	1.0	25%	25%	0%	1.0

Appendix 2 - Sunlight to Windows Hampstead School, Westbere Road, London NW2 3RT

	Sunlight to Windows									
Reference	Use Class	Т	otal Sur	light Ho	urs	W	Winter Sunlight Hours			
		Before	After	Loss	Ratio	Before	After	Loss	Ratio	
Window 128	Habitable	78%	78%	0%	1.0	29%	29%	0%	1.0	
34 Horton Avenue										
Window 129	Habitable	73%	72%	1%	0.99	22%	21%	1%	0.95	
Window 130	Habitable	80%	79%	1%	0.99	30%	29%	1%	0.97	
Window 131	Habitable	86%	86%	0%	1.0	29%	29%	0%	1.0	
Window 132	Habitable	79%	79%	0%	1.0	30%	30%	0%	1.0	

Appendix 2 - Overshadowing to Gardens and Open Spaces Hampstead School, Westbere Road, London NW2 3RT

Reference	Total Area	Area	Area receiving at least two hours of sunlight on 21st March							
		Before		After		Loss		Ratio		
48 Horton Avenue										
Garden 1 46 Horton Avenue	234.17 m2	197.39 m2	84%	197.39 m2	84%	0.0 m2	0%	1.0		
Garden 2 44 Horton Avenue	247.53 m2	246.96 m2	100%	246.96 m2	100%	0.0 m2	0%	1.0		
Garden 3 42 Horton Avenue	391.24 m2	365.25 m2	93%	381.09 m2	97%	-15.84 m2	-4%	1.04		
Garden 4 40 Horton Avenue	544.57 m2	487.3 m2	89%	506.53 m2	93%	-19.23 m2	-4%	1.04		
Garden 5 38 Horton Avenue	206.96 m2	190.74 m2	92%	190.74 m2	92%	0.0 m2	0%	1.0		
Garden 6 36 Horton Avenue	153.91 m2	141.31 m2	92%	141.31 m2	92%	0.0 m2	0%	1.0		
Garden 7 34 Horton Avenue	149.37 m2	137.67 m2	92%	137.67 m2	92%	0.0 m2	0%	1.0		
Garden 8	197.91 m2	187.05 m2	95%	187.05 m2	95%	0.0 m2	0%	1.0		



