



DAYLIGHT & SUNLIGHT REPORT

OCTOBER 2019, REF: 1926/LIGHT

CLIENT:

Mr J Spencer

SITE ADDRESS:

226 Finchley Road
London NW3 6DH

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Introduction

This Daylight and Sunlight Report has been commissioned by Mr J Spencer and produced by The Daylight Lab to provide detailed information on the impact of the proposed rear upper ground floor extension at 226 Finchley Road on the amount of light received by the neighbouring ground floor property at 228 Finchley Road.

The approach is based on the BRE's "Site Layout Planning for Daylight and Sunlight, a Guide to Good Practice", Second Edition, PJ Littlefair 2011, which is generally accepted as good practice by Town and Country Planning authorities.

Site Description

The existing property comprises a single storey flat on the upper ground floor of a large detached part 3/4 storey converted Victorian house. The rear of the site faces approximately North East. Existing and proposed drawings can be found in Appendix 1.



Fig 1. Aerial view of site with North to top. Number 228 to the left as viewed from front elevation.

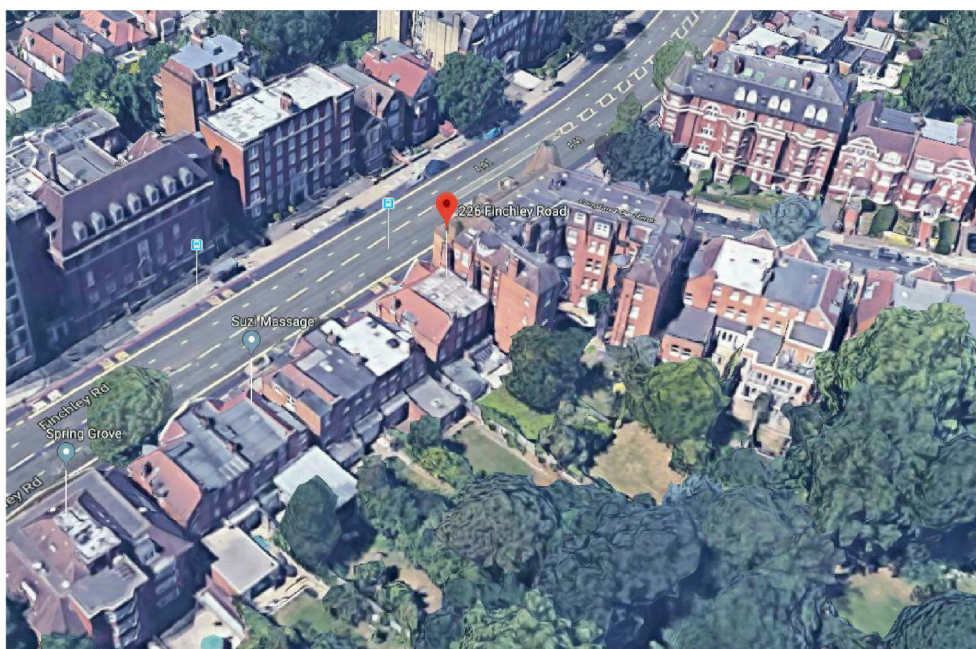


Fig 2. Aerial view from East with site in centre. Number 228 to the right as viewed from rear elevation.

Methodology

Daylight and sunlight provision has been measured using the following methods:

Daylight - Vertical Sky Component (VSC)

The impact of a development on daylight levels received by a neighbouring property can be tested by measuring the Vertical Sky Component, which is the ratio of the direct sky illuminance falling on the vertical wall at a reference point, to the simultaneous horizontal illuminance under an unobstructed sky. To maintain good levels of daylight, the Vertical Sky Component of a window needs to be 27% or greater. If the VSC is less than 27%, then a comparison of “existing” and “proposed” levels of VSC need to be calculated. Good daylighting can still be achieved if levels are within 0.8 of their former value.

Sunlight - Annual Probable Sunlight Hours (APSH/WPSH)

A dwelling will appear reasonably sunlit provided that at least one main window to a living room faces within 90° of due South and receives at least 25% of the annual probable sunlight hours (APSH), including at least 5% during the winter (WPSH), between the 21st of September and 21st of March. APSH refers to the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question (in this case the data used was for the Greater London area).

Existing and proposed 3D CAD models of the application site and surrounding properties were constructed using dimensions supplied by the client and historic planning drawings. Specialist daylight

modelling software (MBS Daylight) was then used to measure the VSC and APSH/WPSH at the centre of the opposing ground floor side facing rear bedroom window at Number 228 Finchley Road. No other windows are within close enough distance to the proposed extension that they might be affected.

The following figures 4-5 show the existing and proposed 3D models as tested. Figure 6 shows shows the window tested with reference number given.

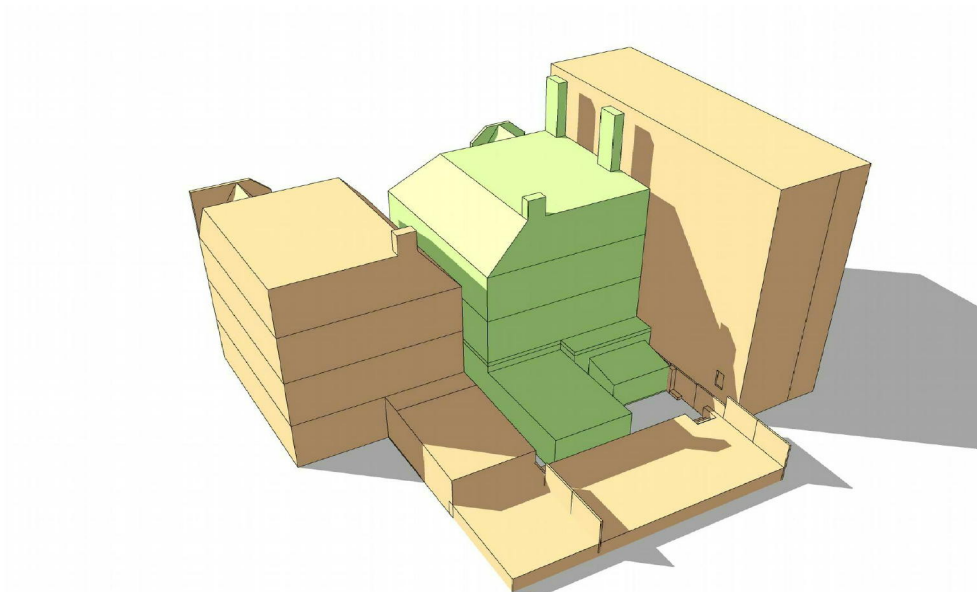


Fig 4. As existing 3D model viewed from East with shadows set to 12pm, 21st March.

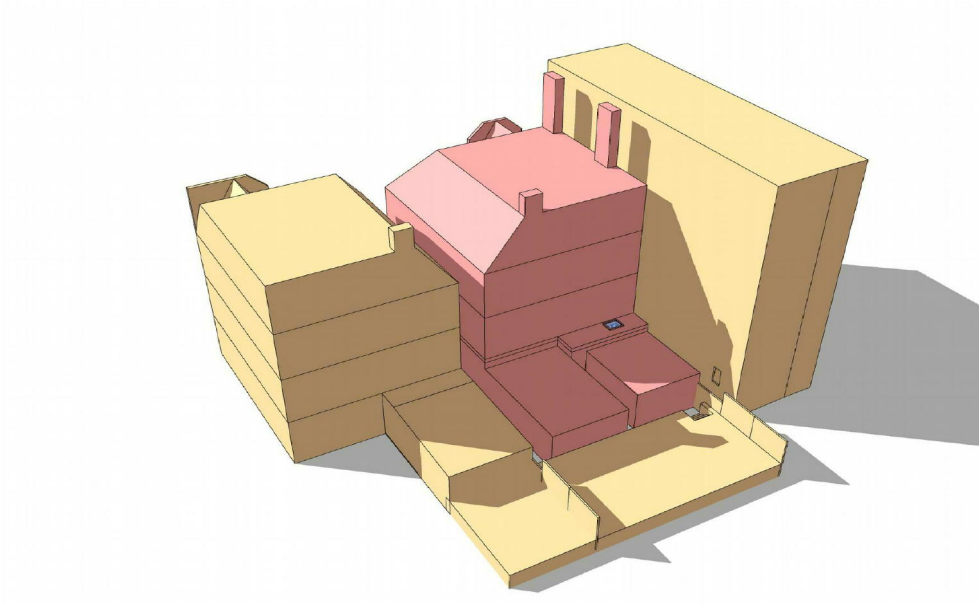


Fig 5. As proposed 3D model viewed from East with shadows set to 12pm, 21st March.



Fig 6. As existing side view of 228 Finchley Road showing window to be tested with reference number indicated.

Data

Daylight - Vertical Sky Component (VSC)

The following table compares existing and proposed VSC results. A Waldrum Diagram can be seen in Appendix 2.

Window	Room Type	Vsc Ex (%)	Vsc Prop (%)	Pr/Ex	Meets BRE Criteria
1	Bedroom	26.89	25.41	0.94	YES

Sunlight - Annual Probable Sunlight Hours (APSH/WPSH)

The following table compares existing and proposed APSH/WPSH results.

Window	Room Type	Orientation	Annual Ex	Annual Pr	Pr/Ex	Meets BRE Criteria	Winter Ex	Winter Pr	Pr/Ex	Meets BRE Criteria
1	Bedroom	135°	43	43	0.98	YES	7	6	0.86	YES

Conclusion

The window tested exceeded BRE guidelines for loss of daylight using the VSC method with the proposed result exceeding 0.8 of the existing.

The window tested exceeded BRE guidelines for loss of sunlight using the APSH/WPSH method with the proposed result exceeding 0.8 of the existing.

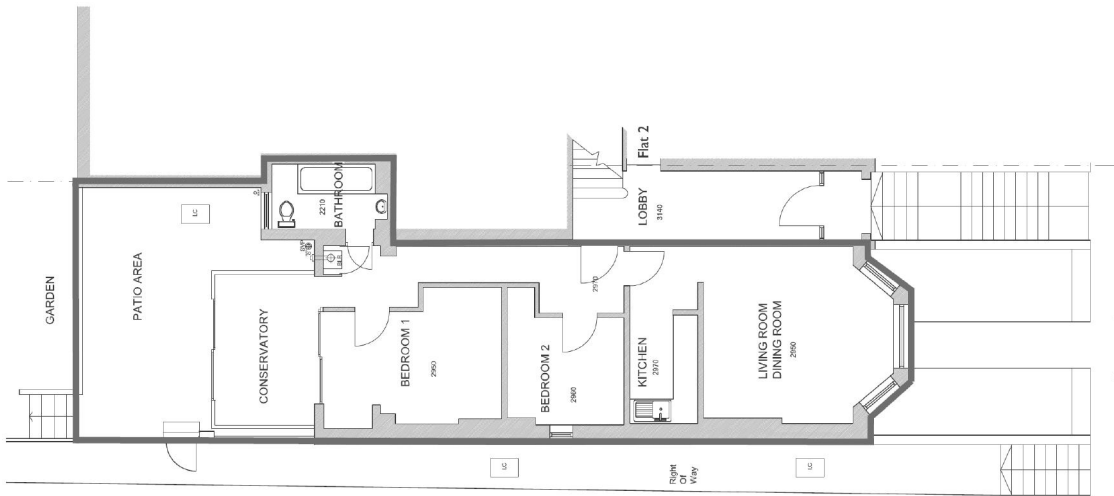
It is therefore the conclusion of The Daylight Lab that the proposed rear ground floor extension at 226 Finchley Road will have no adverse effect on the daylight or sunlight levels received by neighbouring properties and that the proposal satisfies the relevant BRE and CIBSE requirements for daylight and sunlight.



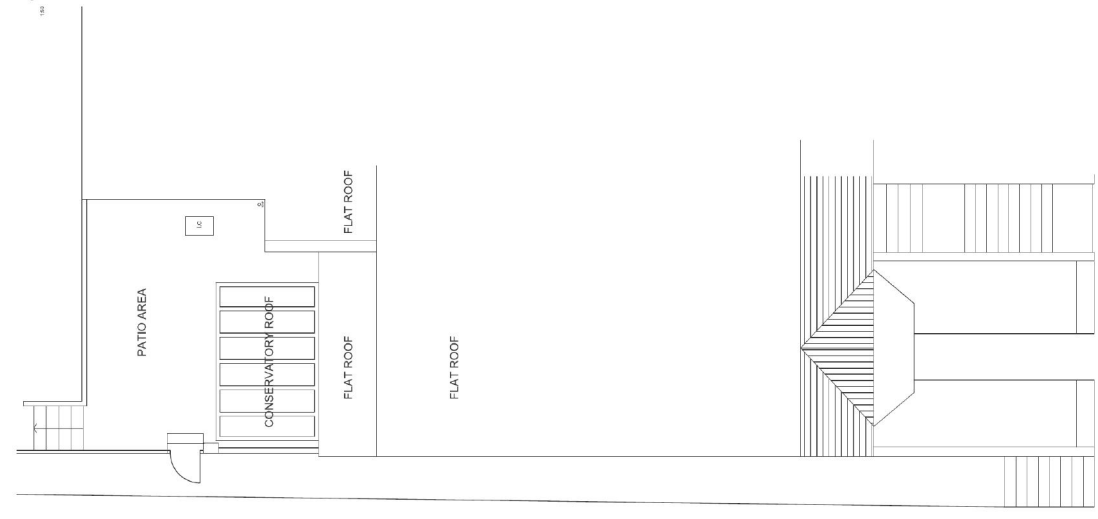
William Pottinger, for The Daylight Lab, October 2019

APPENDIX 1

Existing and proposed drawings, not to scale.



EXISTING GROUND FLOOR PLAN

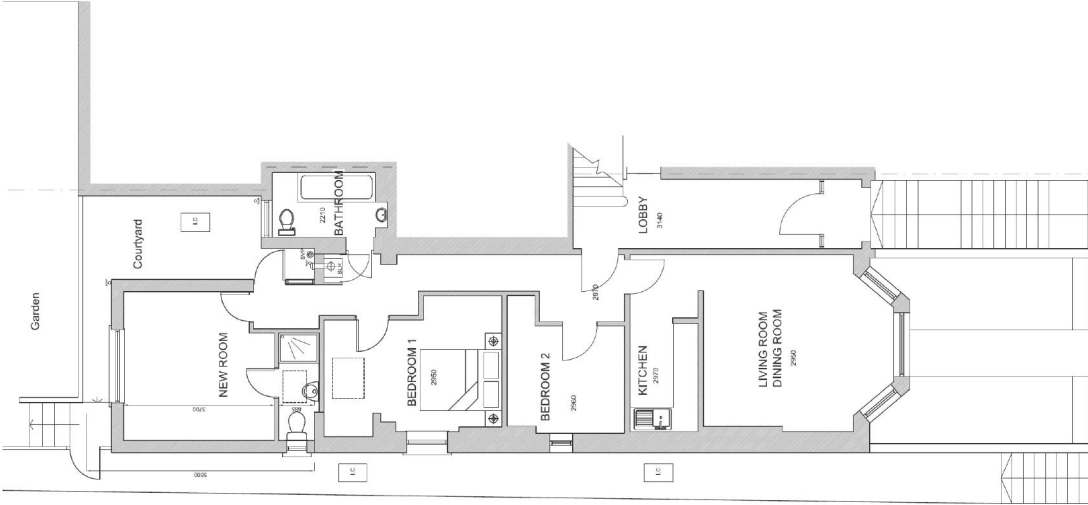


EXISTING ROOF PLAN

GENERAL
CONTRACTOR TO CHECK DIMENSIONS ON SITE BEFORE COMMENCEMENT OF WORK.
 All materials and workmanship to be in accordance with current British Standards and Codes of Practice and comply fully with the Building Regulations.
 All existing timbers to be inspected and replaced as necessary.
 Electrical Services installations to be carried out in accordance with current British Standards, Engineers specifications and British Standards.
 Plumbing installations to be carried out in accordance with the Chartered Institute of Building Services Engineers.
 All distributed services to be made good prior to completion and handover of Contract.

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<input checked="" type="checkbox"/> PLANNING	<input type="checkbox"/> NOT FOR CONSTRUCTION
<input type="checkbox"/> BUILDING CONTROL	
Project address 206 FINCHLEY ROAD FINCHLEY N12 8JH	
Client JOHN and SUSAN SPENCER	
Title EXISTING GROUND FLOOR PLAN & ROOFS	
Format A1	Scale 1:50
Date AUGUST 2009	Drawn RH
Drawing No. LI 09-142-101	Rev B
Scale 13.10.09	Rev RH
Drawing updated 05.02.10	Rev RH B
<p>DO NOT SCALE FROM THIS DRAWING This drawing is for reference purposes only. It is not to be used for construction purposes. The drawing is to be used in accordance with the Building Regulations and Part A of the Building Act 1984.</p>	



Pavement
EXISTING ROOF PLAN

Pavement
PROPOSED GROUND FLOOR PLAN

GENERAL

CONTRACTOR TO CHECK DIMENSIONS ON SITE BEFORE COMMENCEMENT OF WORK.

All materials and workmanship to be in accordance with current British Standards and Regulations. All work to be carried out in accordance with the Building Regulations.

All existing fixtures to be inspected and replaced as necessary.

Electricity, Gas, Water and Drainage to be installed in accordance with the Institute of Electrical Engineers specifications and British Standards.

Plumbing installations to be carried out in accordance with the Chartered Institute of Building Services Engineers.

All distributed surfaces to be made good prior to completion and handover of Contract.

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SURVEYING

BUILDING SURVEYS - PARTY WALL MATTERS
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PLANNING - NOT FOR CONSTRUCTION

BUILDING CONTROL

Project address: 2201 INCHLEY ROAD
LONDON
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Client: JOHN and SUSAN SPENCER

Title: PROPOSED GROUND FLOOR PLAN
& ELEVATIONS
OPTION 1

Format: A1 Scale: 1:50

Date: AUGUST 2008 Drawn: RH

Drawing No.: L1103-143-201 Rev: E

Revision

Rev.	Date	Drawn	Checked
1	27.10.09	RH	JB
2	22.02.10	RH	JB
3	22.02.10	RH	JB
4	22.02.10	RH	JB
5	22.02.10	RH	JB

NOT SCALE FROM THIS DRAWING

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APPENDIX 2

VSC Waldrum Diagrams.

Drawing Ref: model1
Window Ref: _1

VSC Existing: 26.89
Proposed: 25.41

