

Alford Mews Daylight & Sunlight Report



February 2023



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1.0 Introduction and Methodology

1.1 Generally

We have examined the impact of the proposed scheme on both the daylight and sunlight amenity enjoyed by the neighbouring residential properties and within the scheme.

It is usual to assess Daylight and Sunlight in relation to the guidelines set out in the Building Research Establishment (BRE) report 'Site layout planning for daylight and sunlight - A guide to good practice, by P. J. Littlefair.

For the impact on neighbours, we examine two measures of diffuse daylight in this study – namely Vertical Sky Component (VSC) and No-Sky Line (NSL). In terms of Sunlight, we examine the BRE Annual Probable Sunlight Hours (APSH). For the assessment of light with the new development we examine Daylight Illuminance (DI). These measures of Daylight and Sunlight are discussed in the following paragraphs.

The BRE guidelines are not mandatory, and they explicitly state that the numerical target values should be interpreted flexibly. While local planning authorities will consider the acceptability of a proposed scheme in relation to BRE guidance, consideration will be given to the context within which a scheme is located, and daylight and sunlight will be one of a number of planning considerations.

1.2 Diffuse Daylight

1.2.1 Vertical Sky Component (VSC)

VSC is a measure of the skylight reaching a point from an overcast sky. For existing buildings, the BRE guideline is based on the loss of VSC at a point at the centre of a window, on the outer plane of the wall. The BRE guidelines state that if the VSC at the centre of a window is more than 27%, or if not, then it is more than 0.8 times its former value, then the diffuse daylighting of the existing building will not be adversely affected.

The presence of balconies or recessed windows can dramatically reduce the VSC measured at the windows centre. For example, in the situation shown in the photograph opposite, the VSC on the façade is 22% (which corresponds to a uniform, and this case reciprocal, development angle of 34 degrees) but the presence of the access decks reduces the VSC at the window centre to only 5%. This shows that the substantial effects of balcony overhangs (or recessed windows) means that the VSC figures in such cases should not be used to judge the acceptability of the massing opposite.



1.2.2 No-Sky Line (NSL)

NSL is a measure of the distribution of diffuse daylight within a room. The No-Sky Line simply follows the division between those parts of a room that can receive some direct skylight from those that cannot. If from a point in a room on the working plane (a plane 850mm above the floor) it is possible to see some sky, then that point will lie inside the No-Sky Line contour. Conversely, if no sky is visible from that point then it would lie outside the contour.

The BRE state the following for the criterion to be used in comparing the No-Sky Line for the existing buildings with that for proposed development:

'If, following construction of a new development, the no-sky line moves so that the area of the existing room which does receive direct skylight is reduced to less than 0.8 times its former value, then this will be noticeable to the occupants, and more of the room will appear poorly lit.'

1.3 Sunlight

1.3.1 Annual Probable Sunlight Hours (APSH)

In relation to sunlight, the BRE recommends that the Annual Probable Sunlight Hours (APSH) received at a given window in the proposed case should be at least 25% of the total available including at least 5% in winter. Where the proposed values fall short of these, and the loss is greater than 4%, then the proposed values should not be less than 0.8 times their previous value in each period. For new build, the guidelines are based on achieving a target value of 25% of the total available, and 5% in winter. We also note that the BRE guidelines state that *'all main living rooms of dwellings ... should be checked if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block out too much sun'.*

1.3.2 Overshadowing

Section 3.3 of the BRE guidelines describes the method of assessment of the availability of sunlight within garden/amenity spaces. This relates to the proportion of shading on March 21st.

The BRE criterion for garden or amenity areas is as follows:

'It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity space should receive at least two hours of sunlight on 21 March. If as a result of a new development an existing garden or amenity space 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 amenity is likely to be noticeable.'

Driveways and hard standing for cars should be omitted from the analysis; only the main back garden should be considered. Walls or fences less than 1.5m high should be excluded from the calculation; and sunlight with an altitude of less than 10 degrees above the horizon should not be counted.

1.4 Daylight and Sunlight within Proposed Development

1.4.1 Climate Based Daylight Modelling (CBDM) – Daylight Illuminance (DI)

The new CBDM methodology is based on the British Standard 'Daylight in Buildings'(BS EN17037). This contains advice and guidance on interior daylighting for all buildings across Europe but also has a UK National Annex which provides suggested targets for dwellings in the UK.

BS EN17037 supersedes BS 8206 Part 2 which was based on Average Daylight Factor (ADF) and is no longer recommended.

The CBDM methodology is based on target illuminances from daylight, to be achieved over half the area of the room (measured on a reference plane at tabletop level) for at least half of the daylight hours in a typical year. The calculations are based on weather data files which cover different regions of the UK. The calculations are done for each hour of the day for every day of the year. There are 8760 hours in the year, of which 4380 are daylight hours, and therefore the targets should be achieved for 2190 hours in the year. The methodology uses a more accurate sky

model which simulates the movement of the sun throughout the day and accounts for the weather conditions at the time. As a result, CBDM accounts for the presence of sunlight and therefore the orientation of the rooms/windows is accounted for. A south facing room is likely to have access to higher levels of natural light than a north facing room and as a result, in order to comply a north facing room would typically need larger windows.

The UK National Annex gives illuminance recommendations of 100 Lux in bedrooms, 150 Lux in living rooms and 200 Lux in kitchens. These are median illuminances to be achieved over 50% of the assessment grid for at least half of the daylight hours.

Where a room has a shared use, the highest target should apply. However, it also says that Local Authorities could use discretion here and that a living room target of 150 Lux could be used for combined living/kitchen/dining room if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in the design. Following this advice, we have adopted a 150 Lux target for LKD’s since their principal use is as a living space.

There is a further simplistic methodology based on daylight factors (not the same as the old ADF methodology), which does not use climate-based data but uses a simple fixed sky model. However, since this alternative simplistic methodology does not account for the effect of sunlight, or the orientation of the room, it has not been used in our assessment.

Section 5 below provides details of the parameters used in the assessment.

1.4.2 Sunlight within Proposed Development

For new buildings, the BRE guidelines refer to BS EN 17037 which says that a space should receive a minimum of 1.5 hours of sunlight on a selected date between 1st February and 21st March with cloudless conditions. The BRE document suggests 21st March be used. For dwellings, at least one habitable room, preferably a main living room, should achieve at least this minimum criterion and that at least one main window faces within 90 degrees of south. Whilst BS EN 17037 applies to all orientations, the BRE guidelines say that if the room faces significantly north of due east or west, the criterion is unlikely to be met.

2.0 Sources of Information

Erbar Mattes
Proposed Info (received 13/12/21)
141_AFM_CD_50.skp

Proposed Scheme (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

3.0 Properties Considered

In assessing the impact of a new development on neighbouring properties it is usual to only consider main habitable spaces (i.e. living rooms, bedrooms and kitchens) within residential properties. As such the following properties have been considered:

- 1-16 Alford House
- 17-32 Alford House
- 16-20 Pastor Court, 56 Stanhope Road

4.0 Drawings Attached

Drawing Number:	Title:
W1303_04-05	Site Plan and 3D Views as Existing
W1303_06-07	Site Plan and 3D Views as Proposed
W1303_WM_01-03	Window Locations
W1303_S_01	BRE 2hr Overshadowing Assessment
W1303_CBDM_01	CBDM Internal Assessment

5.0 Calculations and Assumptions

In order to calculate the various measures of daylight and sunlight it is necessary to construct a 3D computer model. The model is then analysed using proprietary software to calculate the various measures of daylight and sunlight. Our model of the neighbouring properties and proposed scheme was based on the Architect’s 3D model. Further contextual surrounding properties were estimated from site and aerial photography.

In assessing the impact of a new development on neighbouring properties, it is usual to only consider main habitable spaces (i.e. living rooms, bedrooms and kitchens) within residential properties. In accordance with the BRE and British Standard guidance, VSC and APSH values have been calculated at the window centre, on the outside wall face. For windows with a cill below working plane level, the window area above and below the working plane has been considered separately and weighted in accordance with the latest BRE guidance.

In relation to the CBDM assessment of the daylight and sunlight within the proposed scheme, the following assumptions and parameters have been used. The design team have specified light-coloured internal finishes and therefore, in accordance with paragraph C24 of Appendix C of the new BRE guidelines, the following Reflectance values have been used: light pastel walls with a reflectance of 0.7, light wood veneer floors/ cream carpets with a reflectance of 0.4, and white ceilings with a reflectance of 0.8. All external reflectance’s have been set as 0.2, as per the guidelines.

As per the guidelines, for most windows a transmittance factor of 0.68 has been used. A maintenance factor of 8% has been allowed to account for the effect of dirt on the glass in an urban environment. The room assessment grid area excludes a 300mm band around the perimeter of the room, as per the paragraph C28 of the guidelines.

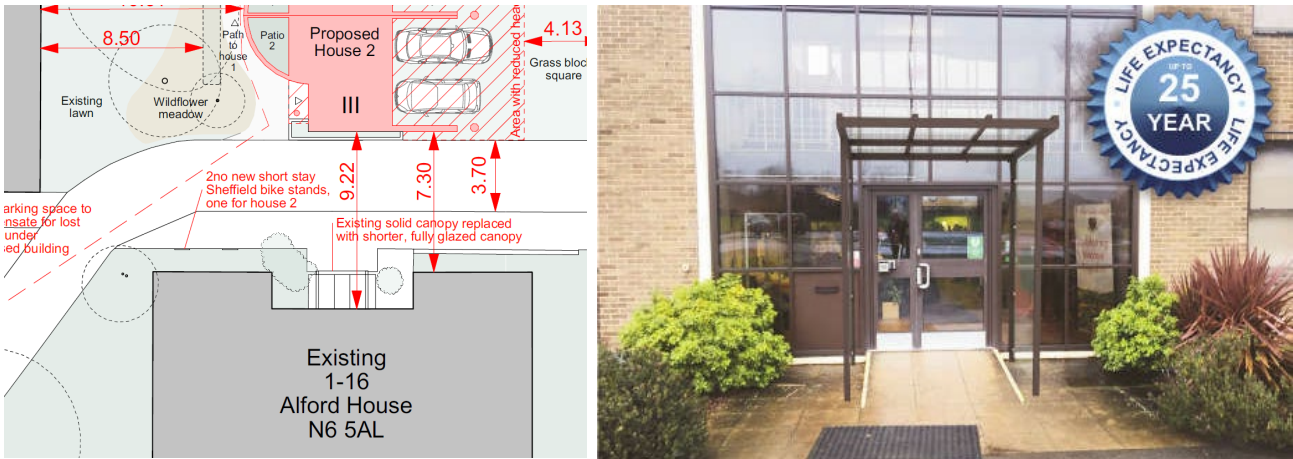
6.0 The Existing Site



Existing Buildings – Drawing W1303_05

We refer to attached drawings W1303/04-05 which illustrate the site in plan and 3D prior to development.

We understand that part of the proposal includes replacing the substantial existing canopy structure to the entrance of 1-16 Alford House with an unobstructive glazed canopy, similar to that shown in the image below but sized as depicted in the extract below from the architects’ drawings. Therefore, for the purposes of this daylight and sunlight assessment, we have included the current canopy in the existing scenario and then removed it in the proposed situation.



7.0 Impact of the Proposed Scheme

Drawings W1303/06-07 illustrate the proposed development. Drawings W1303/WM/01-03 show the window locations and labels of the neighbouring residential properties that face the site. For the purpose of this analysis, each window and room is given a unique reference. This is necessary to track the windows through the various calculations. These labels appear in the tables of results, titled ‘DAYLIGHT ANALYSIS’ which summarise the daylight and sunlight results for all main windows serving habitable rooms.

7.1 1-16 Alford House

1-16 Alford House is located to the south of the site. We understand that the site facing windows either serve kitchens or dual aspect living rooms.

At ground level, there will be a proportional VSC reduction of 0.66 (34%) to a small secondary window (W3/10), serving a dual aspect living room. The principal windows (W1/10 & W2/10) that face north-east onto Stanhope Road, are not impacted by the proposed development and will retain very high VSC’s of around 36%. Furthermore, the impact to this living room in relation to NSL is negligible. Therefore, the room this window serves will not be materially impacted by the proposed scheme.

A ground floor kitchen window (W4/10) will experience a proportional VSC reduction of 0.69 (31%) and will retain a VSC of around 15%. However, this window is in a constrained location, recessed behind the main building line by circa 2 metres, and is therefore flanked by protruding massing on either side. As a result, this window has lower daylight levels, in both the existing and proposed situations, than the windows on the main façade. Overall, whilst there will be an impact to a small ground floor kitchen, the impact to the main living area will be negligible. Therefore, the impact to the unit as a whole, should be considered as acceptable in an urban location.



At first floor, the reductions to the secondary living room window (W3/11) and the kitchen window (W4/11) of 0.79 (21% loss) will be borderline compliant with the default BRE criteria. Furthermore, the retained VSC’s of 24% and 26% remain good for an urban location. As with the ground floor unit, the principal living room windows (W1/11 & W2/11) will not be impacted by the proposed scheme and will retain good daylight amenity in the proposed situation.

In relation to sunlight, the BRE guidelines suggest that all main living rooms of dwellings should be assessed if they have a window facing within 90 degrees of south. Since the site facing windows have a northerly aspect (face within 90 degrees of north), they do not need to be assessed. The principal living room windows with a southerly aspect, will retain excellent levels of sunlight in the proposed situation.

7.2 17-32 Alford House



This building is located south west of the site. We understand that the site facing windows serve living rooms and bedrooms.

The ground floor windows will experience proportional VSC reductions of up to 0.82 (18% loss) and therefore the reductions will be minimal and compliant with the BRE guidelines.

Two ground floor bedrooms will experience borderline proportional NSL reductions of up to 0.73 (27%). However, since VSC is considered to be the principal measure of daylight, the impact to this property should be regarded as minimal.

In relation to sunlight, the site facing windows have a northerly aspect, and are therefore not an issue.

7.3 16-20 Pastor Court, 56 Stanhope Road

This building is located north of the site. The daylight and sunlight impact to this property will be minimal and fully compliant with the default BRE criteria.

8.0 Overshadowing

Section 3.3 of the BRE guidelines describes the method of assessment of the availability of sunlight within garden/amenity spaces. This relates to the proportion of shading on March 21st.

The BRE criterion for garden or amenity areas is as follows:

‘It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity space should receive at least two hours of sunlight on 21 March. If as a result of a new development an existing garden or amenity space 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 amenity is likely to be noticeable.’

In accordance with the BRE recommendations, any walls or fences less than 1.5m high are excluded from the calculation, and sunlight with an altitude of less than 10 degrees above the horizon should not contribute.

We have undertaken an overshadowing assessment of the external amenity area of 16-20 Pastor Court. Drawing W1303_S_01 shows that the rear garden will remain well sunlight in the proposed situation.

9.0 Daylight and Sunlight within the Proposed Development

Drawing W1303_CBDM_01 shows the internal arrangements within the proposal, together with daylight illuminance (Lux level) contours are achieved for 50% of daylight hours. The drawings also show the median daylight illuminance figure for each room.

Out of the 8 habitable rooms within this development, 6 rooms will far exceed the minimum Lux levels stated in the BRE guidelines. These rooms which include the bedrooms and principal living areas, will achieve median Lux levels of over double their respective targets.

The ground floor rooms within these two properties will serve secondary accommodation such as a spare bedroom, study, or secondary living room. These rooms will achieve median Lux levels of 97 lux and 130 lux. These daylight levels are compliant or very close to compliance for a bedroom but would be below target for a living room or study. Nevertheless, these rooms also have access to an external patio area which will receive good levels of daylight.

In relation to sunlight, we have calculated the Sunlight Exposure for each living room. The updated BRE guidelines (2022) refer to BS EN 17037 and state that *a ‘space should receive a minimum of 1.5 hours of direct sunlight on a selected date between 1 February and 21 March with cloudless conditions.’*

The attached sunlight results table shows that the access to sunlight for each house will comply with the BRE guidelines.

Overall, the principal habitable rooms will experience excellent levels of daylight and sunlight.

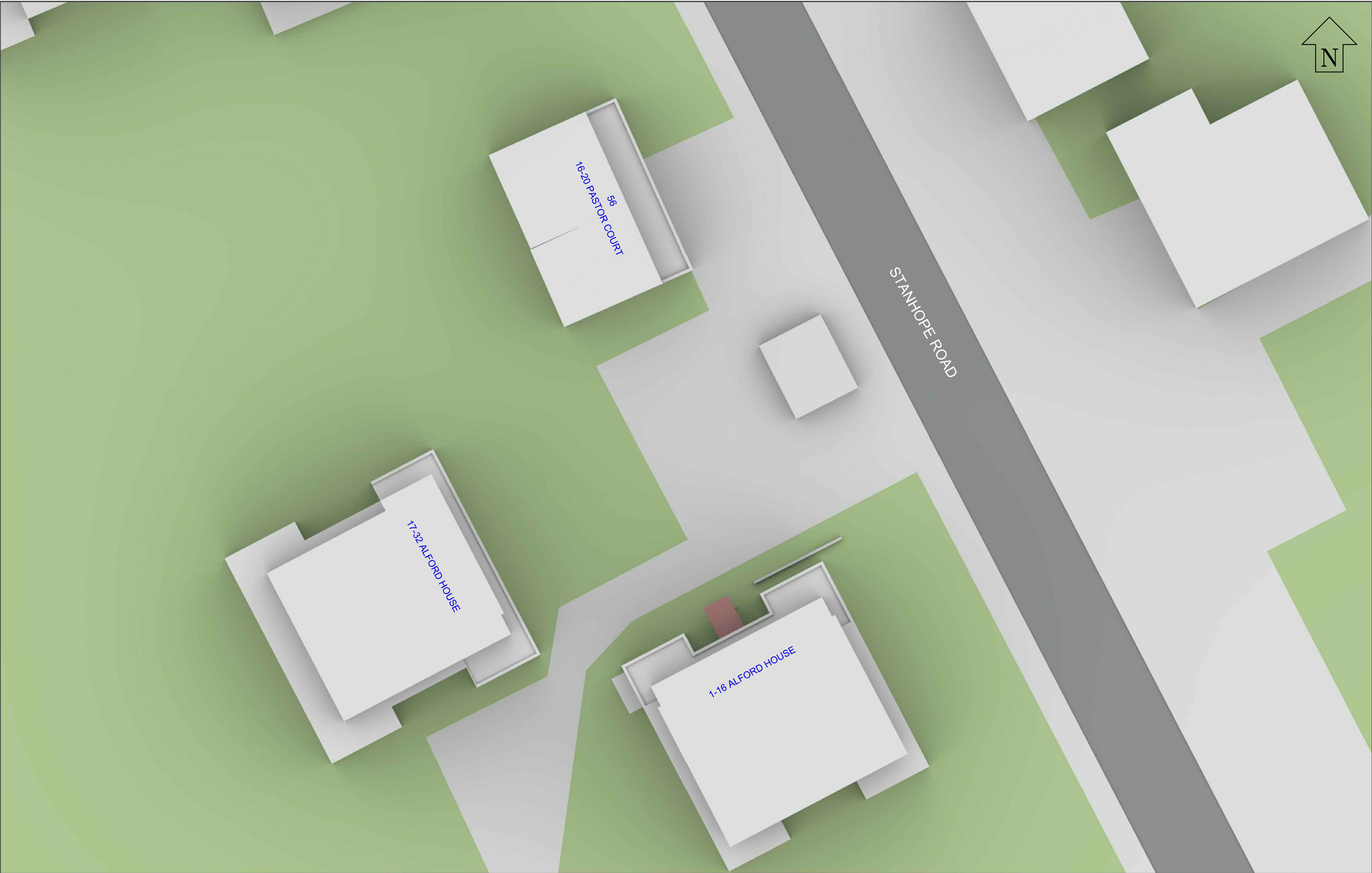
10.0 Conclusions

We have considered the proposed development in relation to the new BRE guidelines on daylight and sunlight. The impact of the proposed massing largely complies with the default BRE criteria. Whilst there will be a localised a daylight impact to a small ground floor kitchen in 1-16 Alford Mews, the principal living space within this unit will not be materially impacted by the proposed scheme and will retain very high daylight and sunlight amenity.

The sunlight impact will be minimal and fully complaint with the BRE guidelines and the overshadowing impact will be negligible.

The daylight to the principal rooms within the proposed dwellings will be very good and is fully compliant in relation to sunlight.

Overall, the daylight and sunlight impact of the proposed development should be regarded as acceptable.



Sources: Erbar Mattes
Proposed Info (received 13/12/21)
141_AFM_CD_50.skp

Proposed Info (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

Key: — Existing Buildings
— Proposed Scheme

Project: **Alford Mews**
London

Drawing Title: **Site Plan**
Existing Buildings

Drawn By: **OA**

Date: **Feb 23**

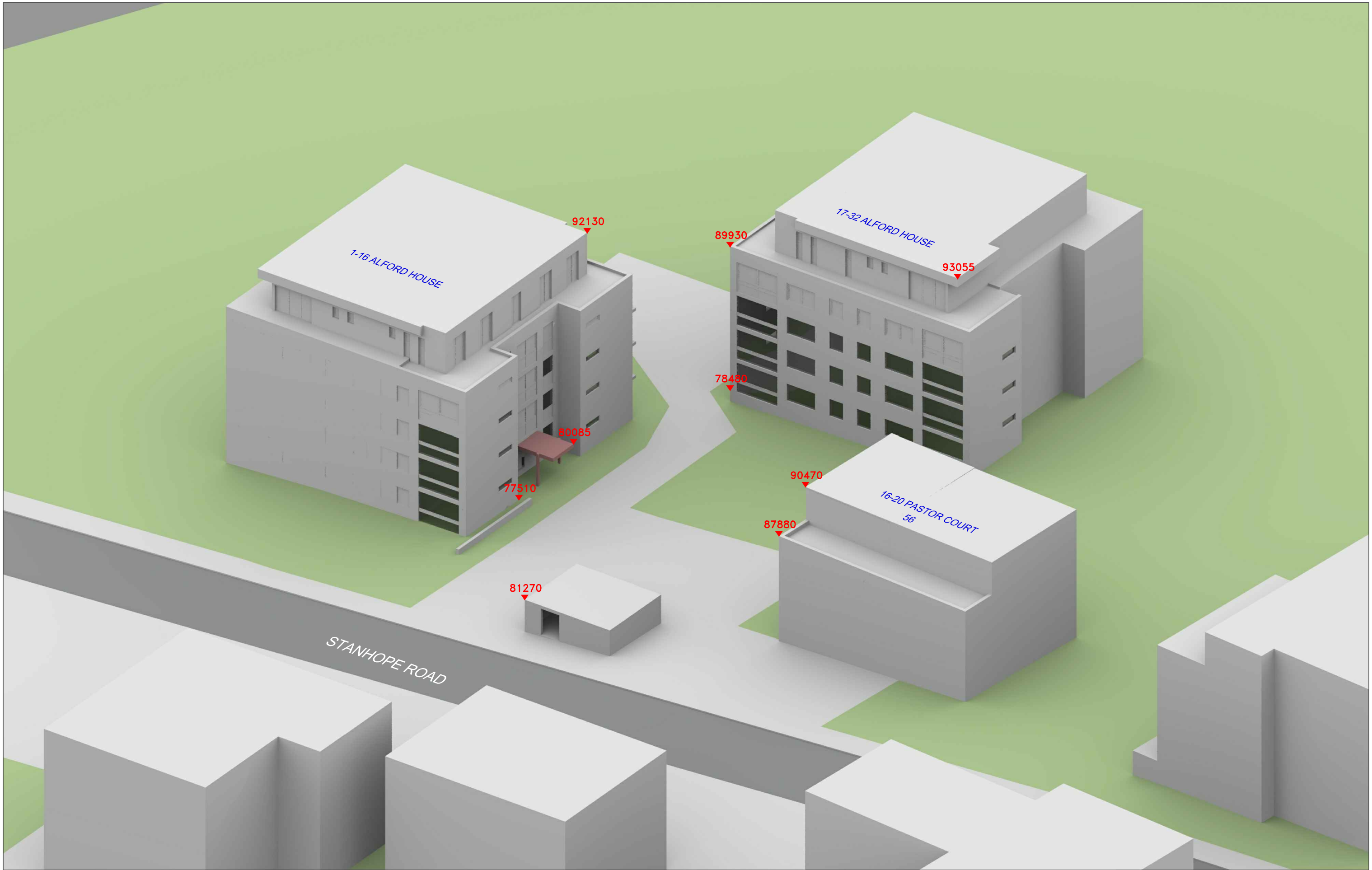
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Drawing No: **W1303_04**

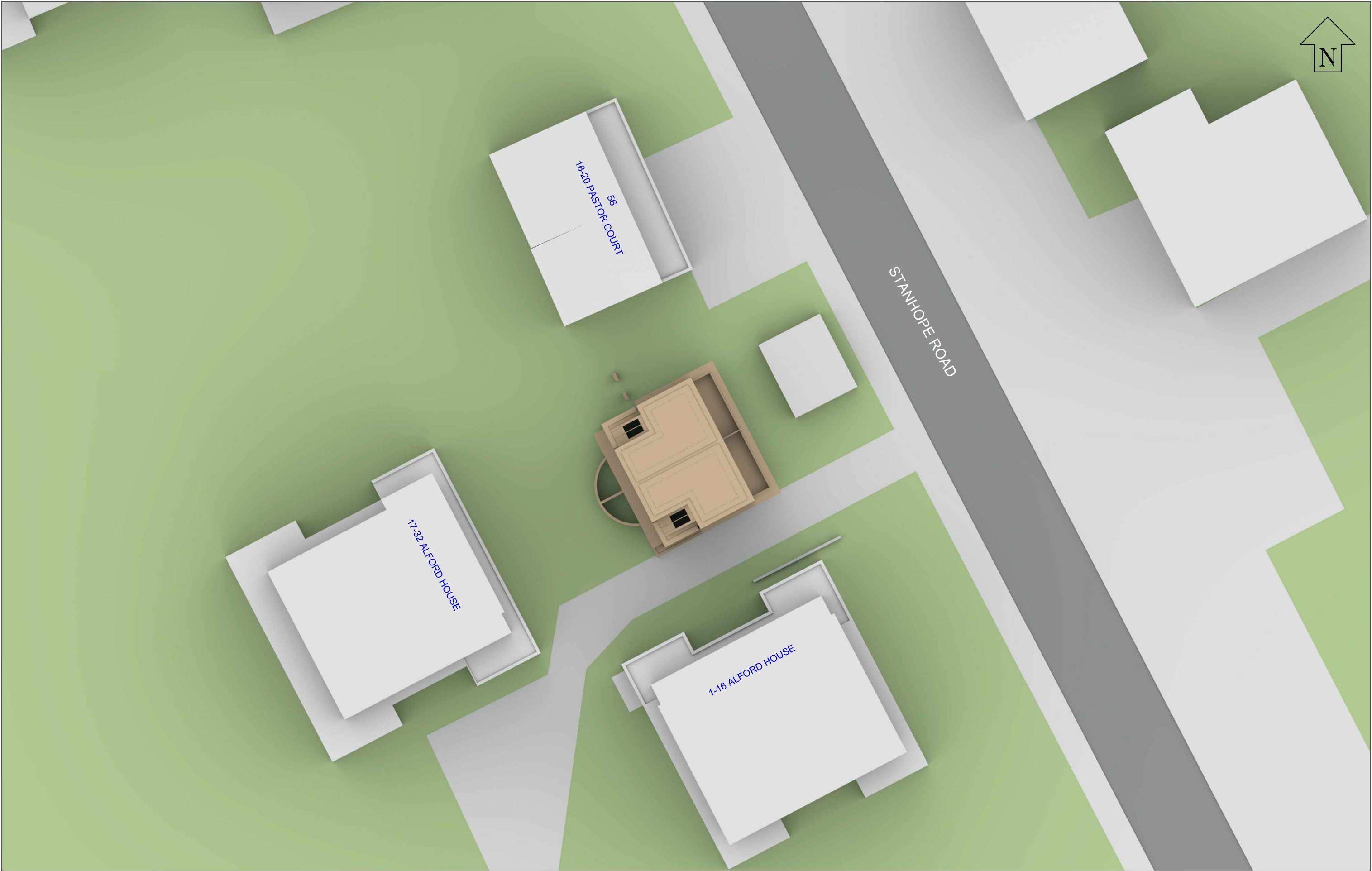


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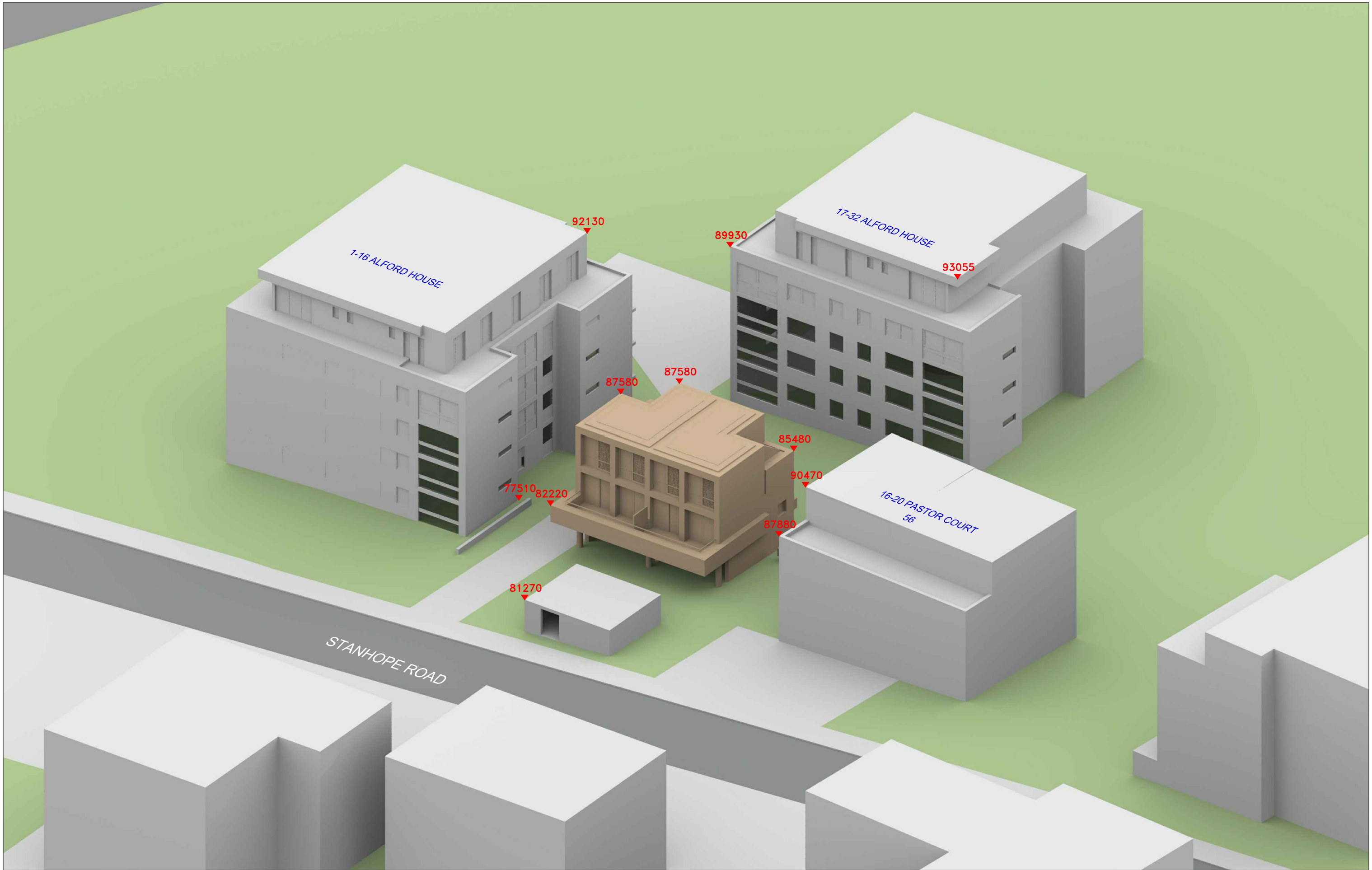
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Sources: Erbar Mattes Proposed Info (received 13/12/21) 141_AFM_CD_50.skp Proposed Info (received 14/02/23) 141_AFM_DD_Planning Appl_230214.skp	Key: — Existing Buildings — Proposed Scheme All Heights in mm AOD	Project: Alford Mews London Drawn By: OA Date: Feb 23	Drawing Title: 3D View Existing Buildings Scale: NTS Drawing No: W1303_05	WATERSLADE 7 Oasis Park, Eynsham, Oxford, OX29 4TP t: 01865 881882 f: 01865 881891 @: www.waterslade.com
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Sources: Erbar Mattes Proposed Info (received 13/12/21) 141_AFM_CD_50.skp Proposed Info (received 14/02/23) 141_AFM_DD_Planning Appl_230214.skp	Key: Existing Buildings Proposed Scheme	Project: Alford Mews London	Drawing Title: Site Plan Proposed Scheme received 14/02/23	WATERSLADE 7 Oasis Park, Eynsham, Oxford, OX29 4TP t: 01865 881882 f: 01865 881891 @: www.waterslade.com
		Drawn By: OA	Date: Feb 23	Scale: NTS



Sources: Erbar Mattes Proposed Info (received 13/12/21) 141_AFM_CD_50.skp Proposed Info (received 14/02/23) 141_AFM_DD_Planning Appl_230214.skp	Key: — Existing Buildings — Proposed Scheme All Heights in mm AOD	Project: Alford Mews London Drawn By: OA Date: Feb 23	Drawing Title: 3D View Proposed Scheme received 14/02/23 Scale: NTS Drawing No: W1303_07	WATERSLADE 7 Oasis Park, Eynsham, Oxford, OX29 4TP t: 01865 881882 f: 01865 881891 @: www.waterslade.com
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Sources: Erbar Mattes
Proposed Info (received 13/12/21)
141_AFM_CD_50.skp

Proposed Info (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

Key:

- Area analysed
- Area with more than 2 hours of direct sunlight
- Area with less than 2 hours of direct sunlight

50% Percentage of area with more than 2 hours of direct sunlight

Project: **Alford Mews**
London

Drawn By: **OA**

Date: **Feb 23**

Drawing Title: **BRE 2 Hour Overshadowing Assessment**
March 21st

Proposed Scheme received 14/02/23

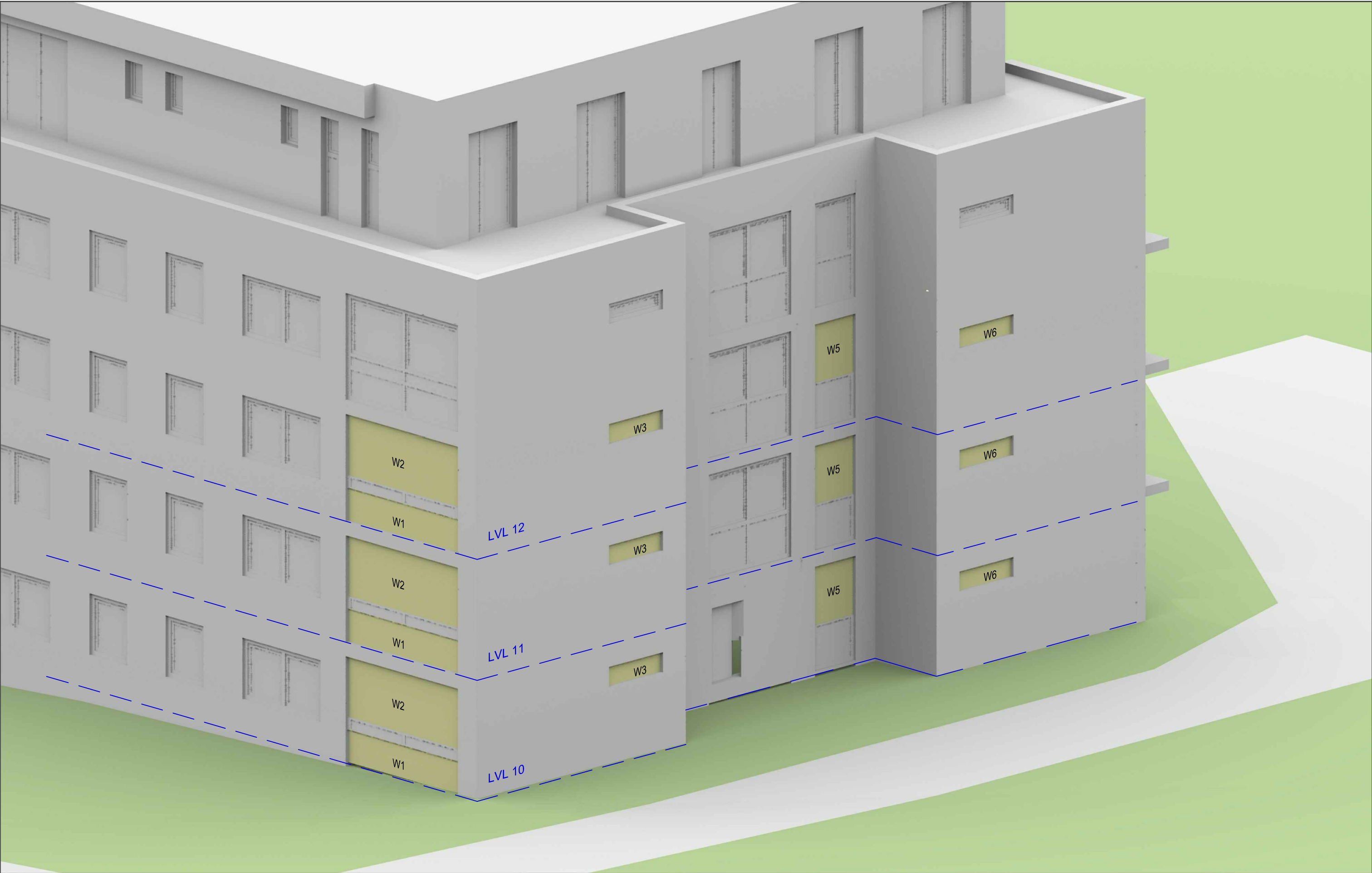
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Drawing No: **W1303_S_01**



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Sources: Erbar Mattes
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141_AFM_CD_50.skp

Proposed Info (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

Key:

Project: **Alford Mews**
London

Drawn By: **OA** Date: **Feb 23**

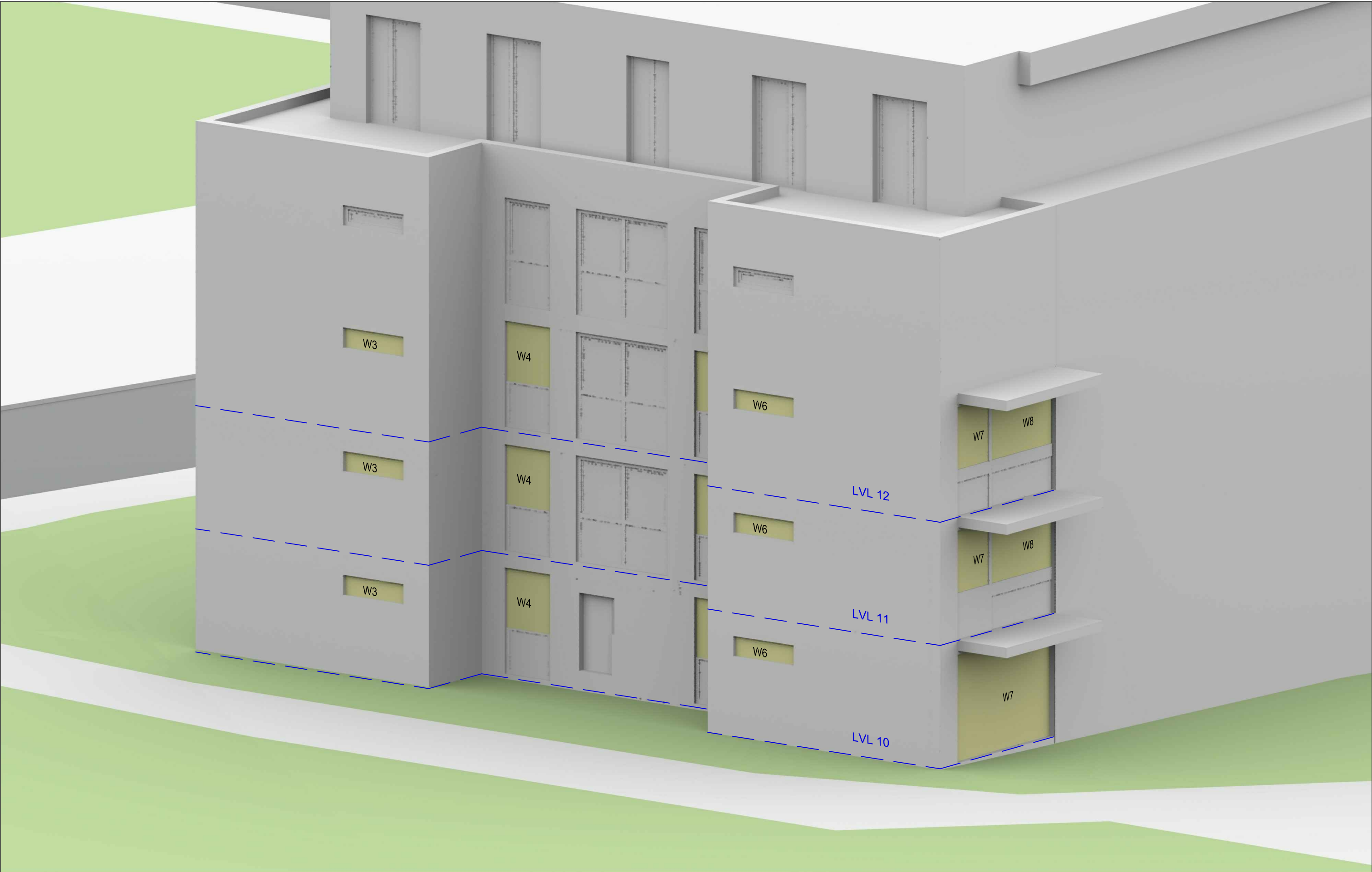
Drawing Title: **Window Locations**
1-16 Alford House

Scale: **NTS** Drawing No: **W1303_WM_01**



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Sources: Erbar Mattes
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141_AFM_CD_50.skp

Proposed Info (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

Key:

Project: **Alford Mews**
London

Drawing Title: **Window Locations**
1-16 Alford House

Drawn By: **OA**

Date: **Feb 23**

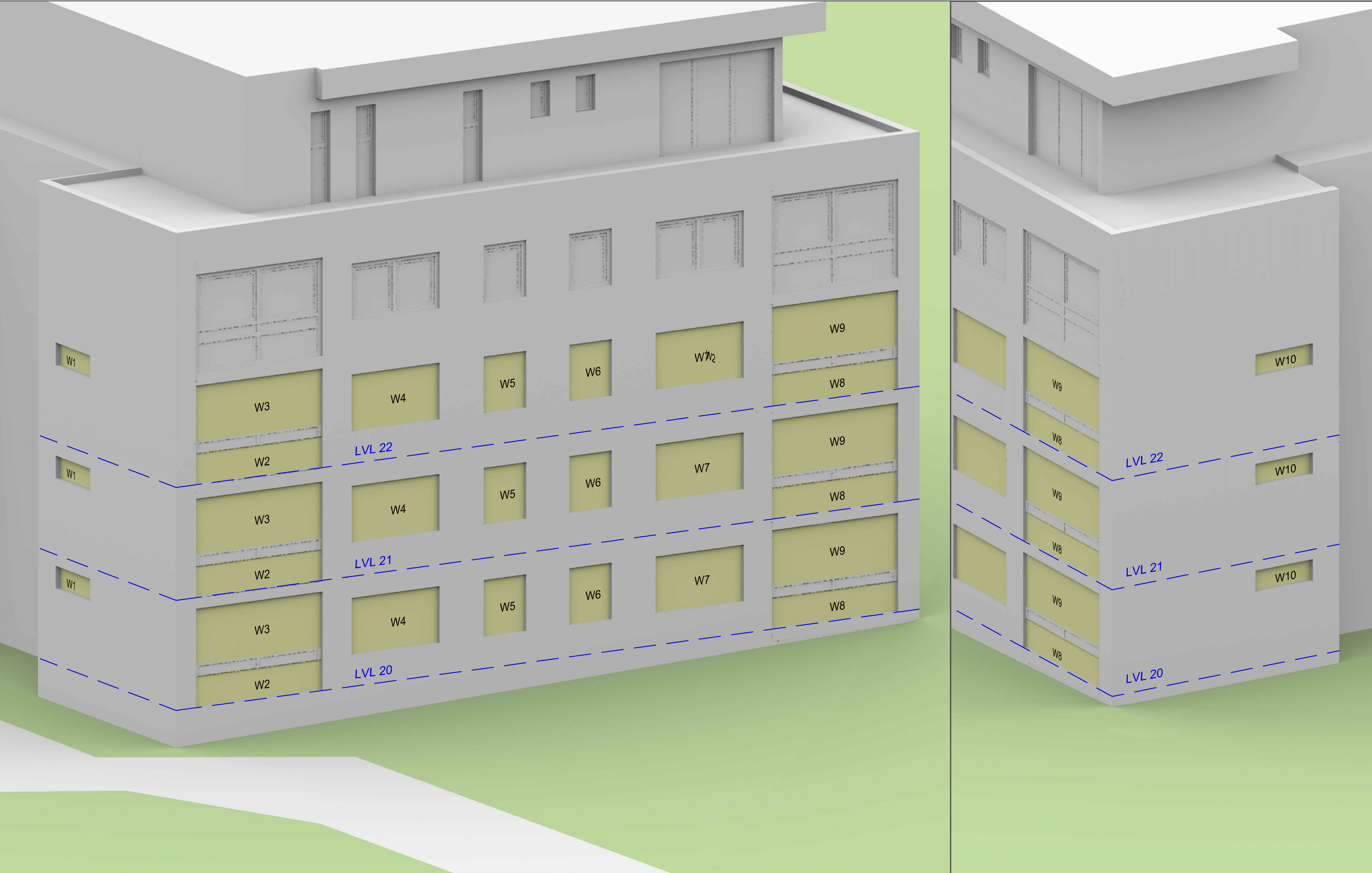
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Drawing No: **W1303_WM_02**



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Sources: Erbar Mattes
Proposed Info (received 13/12/21)
141_AFM_CD_50.skp

Proposed Info (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

Key:

Project: **Alford Mews**
London

Drawing Title: **Window Locations**
17-32 Alford House

Drawn By: **OA**

Date: **Feb 23**

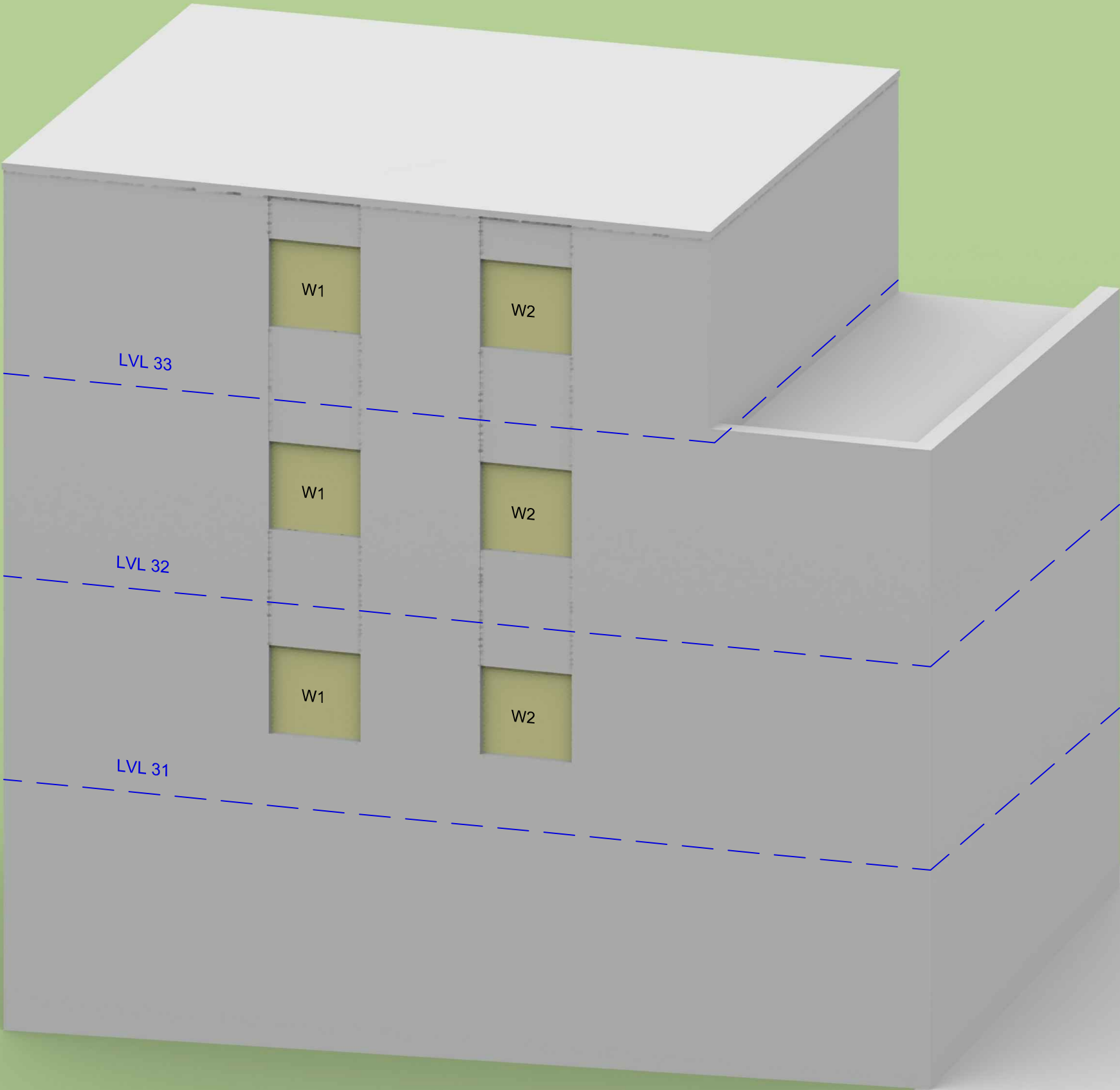
Scale: **NTS**

Drawing No: **W1303_WM_03**



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Sources: Erbar Mattes
Proposed Info (received 13/12/21)
141_AFM_CD_50.skp

Proposed Info (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

Key:

Project: **Alford Mews**
London

Drawing Title: **Window Locations**
16-20 Pastor Court
56 Stanhope Road

Drawn By: **OA**

Date: **Feb 23**

Scale: **NTS**

Drawing No: **W1303_WM_04**

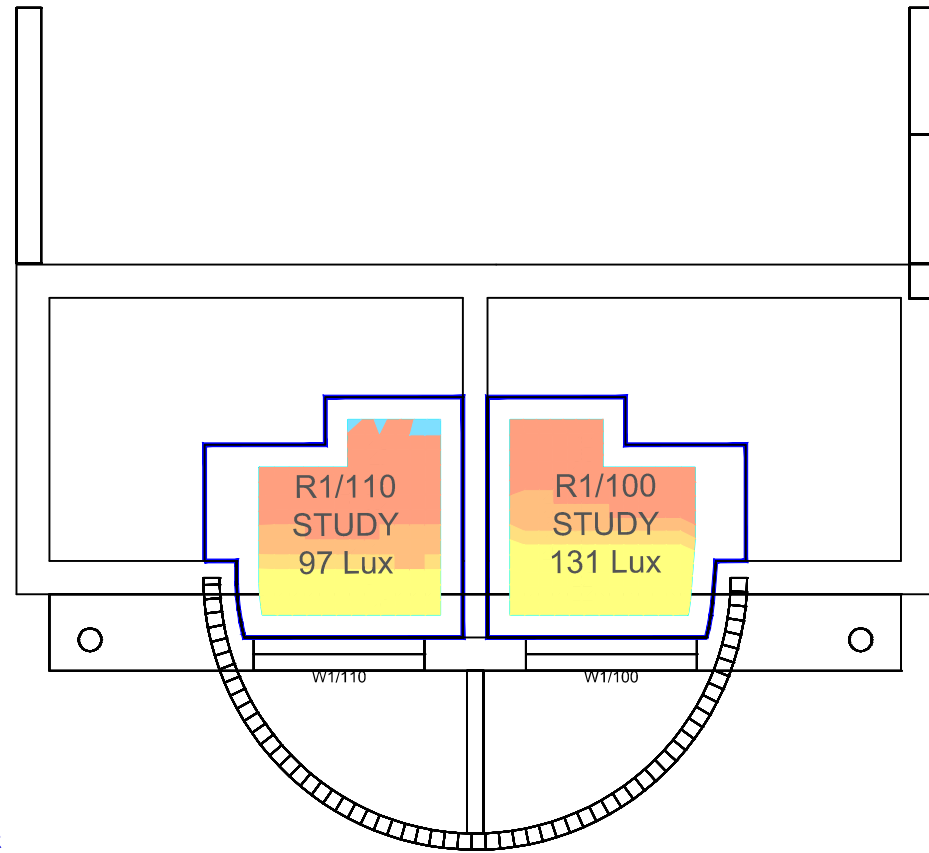


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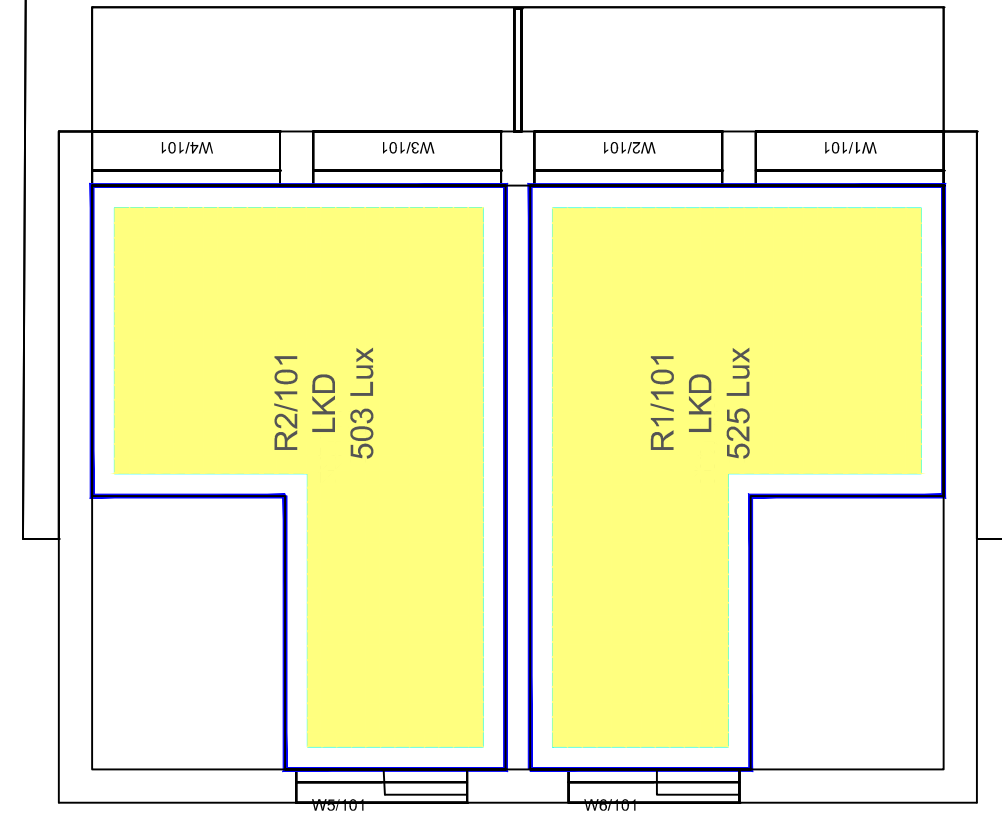
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Location			Vertical Sky Component (VSC)			No-Sky Line (NSL)				Window		Annual Probable Sunlight Hours (APSH) (window)					Annual Probable Sunlight Hours (APSH) (room)				
Room	Room Use	Window	EXISTING VSC	PROPOSED VSC	Reduction Factor	Whole Room	EXISTING sq ft	PROPOSED sq ft	Reduction Factor	Angle from South	Aspect	EXISTING Winter %	PROPOSED Annual %	Reduction Winter %	Annual %	Factor	Existing Winter %	Proposed Annual %	Reduction Winter %	Annual %	Factor
1-16 Alford House, Stanhope Road																					
R1/10	LIVINGROOM	W1/10	35.7	35.7	1.00	229.4	228.6	228.6	1.00												
R1/10	LIVINGROOM	W2/10	36.2	36.2	1.00																
R1/10	LIVINGROOM	W3/10	31.1	20.5	0.66																
R2/10	KITCHEN	W4/10	21.6	14.8	0.69	98.0	94.9	77.7	0.82												
R3/10	KITCHEN	W5/10	21.3	18.7	0.88	97.8	93.9	85.7	0.91												
R4/10	LIVINGROOM	W6/10	27.3	22.5	0.82	229.2	229.0	229.0	1.00	152.4°W	Northerly	1	5	1	6	1.20					
R4/10	LIVINGROOM	W7/10	17.5	17.5	1.00					62.2°W	Southerly	22	36	22	36	1.00	22	36	22	37	1.03
R1/11	LIVINGROOM	W1/11	36.7	36.7	1.00	229.4	228.6	228.6	1.00												
R1/11	LIVINGROOM	W2/11	37.1	37.1	1.00																
R1/11	LIVINGROOM	W3/11	33.1	26.0	0.79																
R2/11	KITCHEN	W4/11	24.1	18.9	0.79	98.0	95.2	84.4	0.89												
R3/11	KITCHEN	W5/11	25.2	21.9	0.87	97.8	93.9	93.0	0.99												
R4/11	LIVINGROOM	W6/11	29.8	26.6	0.89	229.2	229.0	229.0	1.00	152.4°W	Northerly	1	8	1	8	1.00					
R4/11	LIVINGROOM	W7/11	11.6	11.6	1.00					62.2°W	Southerly	10	14	10	14	1.00					
R4/11	LIVINGROOM	W8/11	12.7	12.7	1.00					62.2°W	Southerly	20	24	20	24	1.00	20	28	20	28	1.00
R1/12	LIVINGROOM	W1/12	37.5	37.5	1.00	229.4	228.6	228.6	1.00												
R1/12	LIVINGROOM	W2/12	37.9	37.9	1.00																
R1/12	LIVINGROOM	W3/12	35.0	32.0	0.91																
R2/12	KITCHEN	W4/12	26.1	24.0	0.92	98.0	95.4	95.4	1.00												
R3/12	KITCHEN	W5/12	26.8	25.6	0.95	97.8	94.4	94.4	1.00												
R4/12	LIVINGROOM	W6/12	32.4	31.3	0.97	229.2	229.0	229.0	1.00	152.4°W	Northerly	1	10	1	10	1.00					
R4/12	LIVINGROOM	W7/12	13.2	13.2	1.00					62.2°W	Southerly	10	15	10	15	1.00					
R4/12	LIVINGROOM	W8/12	13.2	13.2	1.00					62.2°W	Southerly	20	25	20	25	1.00	20	31	20	31	1.00
17-32 Alford House, Stanhope Road																					
R1/20	LIVINGROOM	W1/20	33.6	33.6	1.00	231.4	228.6	228.6	1.00	27.5°E	Southerly	25	66	25	66	1.00					
R1/20	LIVINGROOM	W2/20	26.9	22.9	0.85					117.6°E	Northerly	2	12	2	12	1.00					
R1/20	LIVINGROOM	W3/20	28.1	24.7	0.88					117.6°E	Northerly	2	14	2	14	1.00	25	68	25	68	1.00
R2/20	BEDROOM	W4/20	29.6	24.9	0.84	143.0	142.8	136.7	0.96												
R3/20	BEDROOM	W5/20	30.4	25.1	0.83	128.2	126.1	91.6	0.73												
R4/20	BEDROOM	W6/20	30.6	25.3	0.82	127.9	126.7	95.4	0.75												
R5/20	BEDROOM	W7/20	30.5	25.8	0.84	149.9	149.5	142.9	0.96												
R6/20	LIVINGROOM	W8/20	29.0	24.7	0.85	232.4	229.6	229.6	1.00												
R6/20	LIVINGROOM	W9/20	30.2	26.6	0.88																
R6/20	LIVINGROOM	W10/20	33.3	33.3	1.00																
R1/21	LIVINGROOM	W1/21	35.0	35.0	1.00	231.4	228.6	228.6	1.00	27.5°E	Southerly	25	69	25	69	1.00					
R1/21	LIVINGROOM	W2/21	29.4	26.7	0.91					117.6°E	Northerly	3	18	3	18	1.00					
R1/21	LIVINGROOM	W3/21	30.7	28.8	0.94					117.6°E	Northerly	3	22	3	22	1.00	25	74	25	74	1.00
R2/21	BEDROOM	W4/21	32.0	29.2	0.91	143.0	142.8	142.8	1.00												

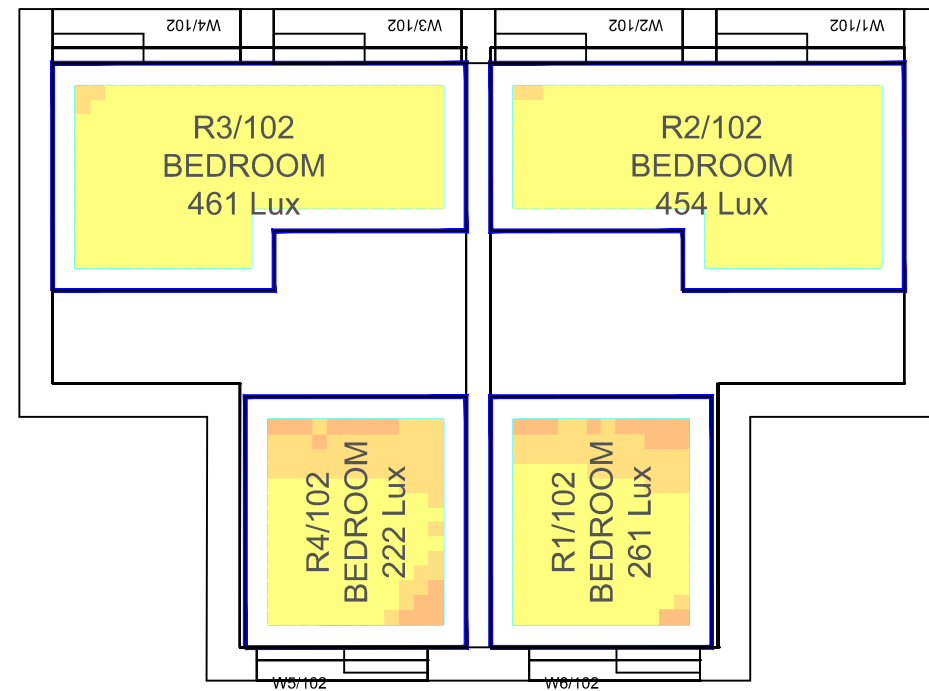
Location			Vertical Sky Component (VSC)			No-Sky Line (NSL)				Window		Annual Probable Sunlight Hours (APSH) (window)					Annual Probable Sunlight Hours (APSH) (room)				
Room	Room Use	Window	EXISTING VSC	PROPOSED VSC	Reduction Factor	Whole Room	EXISTING sq ft	PROPOSED sq ft	Reduction Factor	Angle from South	Aspect	EXISTING Winter %	PROPOSED Annual %	Reduction Winter %	Annual %	Factor	Existing Winter %	Proposed Annual %	Reduction Winter %	Annual %	Factor
R3/21	BEDROOM	W5/21	32.7	29.6	0.90	128.2	126.5	120.1	0.95												
R4/21	BEDROOM	W6/21	32.9	29.7	0.90	127.9	126.7	122.9	0.97												
R5/21	BEDROOM	W7/21	32.8	29.9	0.91	149.9	149.5	149.5	1.00												
R6/21	LIVINGROOM	W8/21	31.4	28.4	0.91	232.4	229.6	229.6	1.00												
R6/21	LIVINGROOM	W9/21	32.6	30.3	0.93																
R6/21	LIVINGROOM	W10/21	34.6	34.6	1.00																
R1/22	LIVINGROOM	W1/22	36.5	36.5	1.00	231.3	228.5	228.5	1.00	27.5°E	Southerly	25	76	25	76	1.00					
R1/22	LIVINGROOM	W2/22	32.1	30.9	0.96					117.6°E	Northerly	4	26	4	25	0.96					
R1/22	LIVINGROOM	W3/22	33.5	32.9	0.98					117.6°E	Northerly	4	31	4	30	0.97	25	78	25	77	0.99
R2/22	BEDROOM	W4/22	34.4	33.5	0.97	143.0	142.8	142.8	1.00												
R3/22	BEDROOM	W5/22	35.0	33.9	0.97	128.2	126.5	126.5	1.00												
R4/22	BEDROOM	W6/22	35.2	34.0	0.97	127.9	126.7	126.7	1.00												
R5/22	BEDROOM	W7/22	35.1	34.0	0.97	149.9	149.5	149.5	1.00												
R6/22	LIVINGROOM	W8/22	33.9	32.4	0.96	232.4	229.6	229.6	1.00												
R6/22	LIVINGROOM	W9/22	35.1	34.2	0.98																
R6/22	LIVINGROOM	W10/22	36.0	36.0	1.00																
16-20 Pastor Court, 56 Stanhope Road																					
R1/31		W1/31	34.5	31.8	0.92	238.1	221.0	213.3	0.97	23.8°E	Southerly	23	77	18	72	0.94	23	77	18	72	0.94
R2/31		W2/31	35.1	32.7	0.93	157.1	152.6	145.5	0.95	23.8°E	Southerly	24	78	20	74	0.95	24	78	20	74	0.95
R1/32		W1/32	36.4	36.1	0.99	238.1	221.0	221.0	1.00	23.8°E	Southerly	25	79	25	79	1.00	25	79	25	79	1.00
R2/32		W2/32	36.7	36.6	1.00	157.1	152.6	152.6	1.00	23.8°E	Southerly	26	80	26	80	1.00	26	80	26	80	1.00
R1/33		W1/33	38.0	38.0	1.00	238.1	221.0	221.0	1.00	23.8°E	Southerly	27	81	27	81	1.00	27	81	27	81	1.00
R2/33		W2/33	38.3	38.3	1.00	157.1	152.6	152.6	1.00	23.8°E	Southerly	27	81	27	81	1.00	27	81	27	81	1.00



GROUND FLOOR



FIRST FLOOR



SECOND FLOOR

Sources: Erbar Mattes
Proposed Info (received 13/12/21)
141_AFM_CD_50.skp

Proposed Info (received 14/02/23)
141_AFM_DD_Planning Appl_230214.skp

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

<50 Lux	Median Illuminance (Lux) Levels shown for each room.
>50 Lux	Recommended Targets:
>100 Lux	Bedroom 100 Lux
>150 Lux	Living Room 150 Lux
>200 Lux	Kitchen 200 Lux

Project: Alford Mews
London

Drawn By: OA

Date: Feb 23

Drawing Title: Internal CBDM Assessment
Median Illuminance (Lux) Levels

Scale: NTS

Drawing No: W1303_CBDM_01



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Unit	Room	Room Use	Date	Sunlight Exposure (Hours)	Room Complies?	Unit Complies?
HOUSE 1	R1/110	STUDY	21-Mar	2.0	✓	✓
	R2/101	LKD	21-Mar	4.8	✓	
	R3/102	BEDROOM	21-Mar	1.1	✗	
	R4/102	BEDROOM	21-Mar	3.2	✓	
HOUSE 2	R1/100	STUDY	21-Mar	0.0	✗	✓
	R1/101	LKD	21-Mar	5.0	✓	
	R1/102	BEDROOM	21-Mar	3.2	✓	
	R2/102	BEDROOM	21-Mar	1.1	✗	
					62.5%	100.0%