



Greyfriars
Church,
Friar Street,
Reading,
RG1 1EH

Maximum Envelope Analysis Report

September
2017

Ref: 16-2774



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<i>Revision</i>	-	<i>Rev A</i>	<i>Rev B</i>
Date	25/11/2016	02/12/2016	08/09/2017
Prepared by	J. Lee	J. Lee	S. Lee
Checked by	A. Brooke-Thorne	Y. Choi	S. Mistry
Authorised by	Y. Choi	A. Brooke-Thorne	Y. Choi

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Forecast cost estimates do not include such costs associated with any negotiations, appeals or other non-technical actions associated with the agreement on measures to meet the requirements of the authorities, nor are potential business loss and interruption costs considered that may be incurred as part of any technical measures.

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1 EXECUTIVE SUMMARY

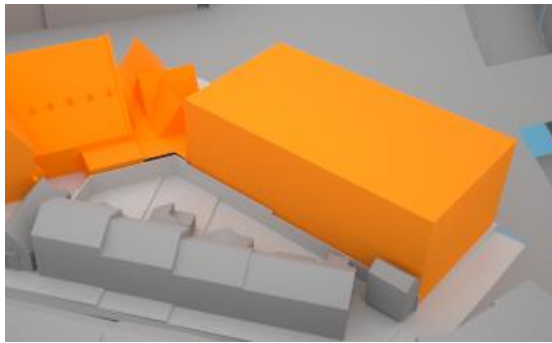
The maximum envelope analysis has been carried out in order to advise on the massing available to which the proposed building located at Greyfriars Church, Friar Street, Reading without obstructing daylight and sunlight to the surrounding properties at 5-12,14,16,18 Sackville Street and Tanfields located at the North of the proposed site.

The report consists of 2 parts for the Site A and Site B annotated below. The volume analysis for Site A will include the impacts on the properties at 6,8,10,12,14,16,18 Sackville Street and Tanfields. And, the volume analysis for Site B will include the impacts on the properties at 5,6,7,8,9,11 Sackville Street.

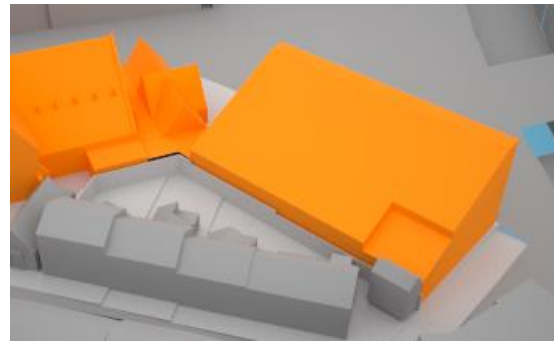


Figure 1 Assessed sites and surrounding buildings

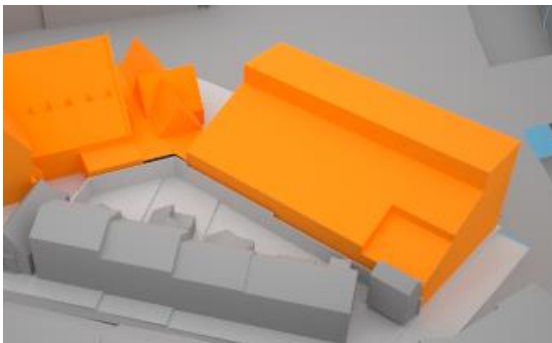
1.1 Site A



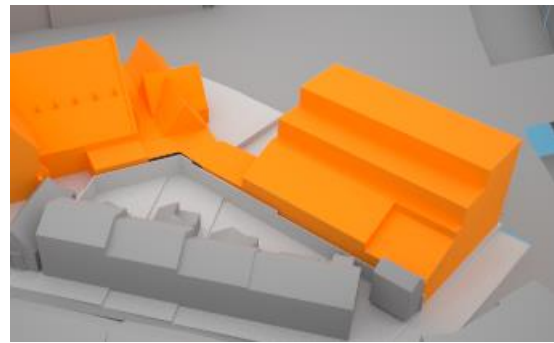
Option 1



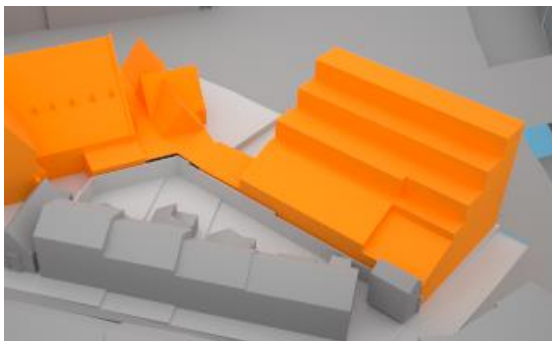
Option 2



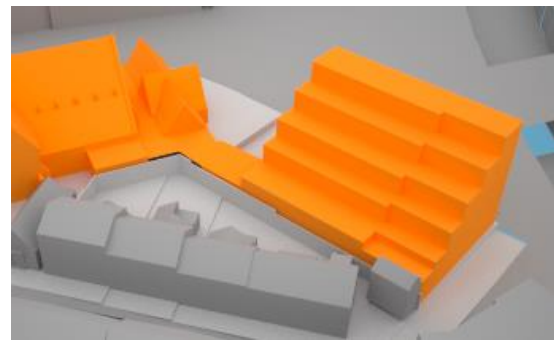
Option 3



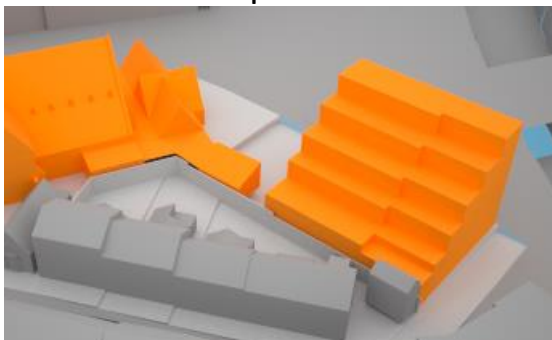
Option 4



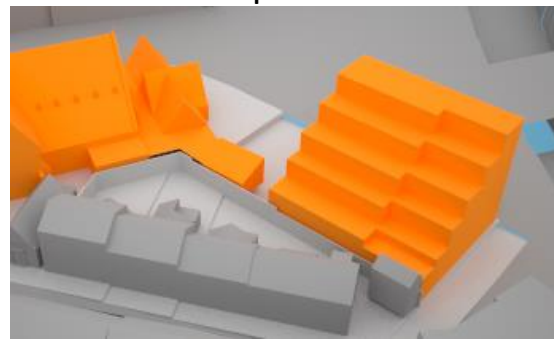
Option 5



Option 6



Option 7



Option 8

8 options have been analysed starting from the maximum volume defined by the site boundary, then trimmed by the 25-degree rule, and refined cubic masses which have 3m high. The pictures above show each option.

The results of the assessment can be summarised as follows.

- **OPTION 1**

Daylight: Some of the surfaces at Tanfields and 6,8,10,12,14,16,18 Sackville Street will be adversely impacted by the option 1.

Sunlight: Some of the surfaces at Tanfields and 10,12,14,16 Sackville Street will be adversely impacted by the Option 1.

- **OPTION 2**

Daylight: None of the surfaces at Tanfields and 6,8,10,12,14,16,18 Sackville Street will be adversely impacted by the option 2.

Sunlight: None of the surfaces at Tanfields and 6,8,10,12,14,16,18 Sackville Street will be adversely impacted by the option 2

- **OPTION 3**

Daylight: One surface on the ground floor at 12 Sackville Street will be adversely impacted by option 3.

Sunlight: One surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 3.

- **OPTION 4**

Daylight: 2 surfaces at 12,18 Sackville Street will be adversely impacted by the option 4.

Sunlight: One surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 4.

- **OPTION 5**

Daylight: One surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 5.

Sunlight: Only one surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 5.

- **OPTION 6**

Daylight: One surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 6.

Sunlight: One surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 6.

- **OPTION 7**

Daylight: None of the surfaces at Tanfields and 6,8,10,12,14,16,18 Sackville Street will be adversely impacted by the option 7.

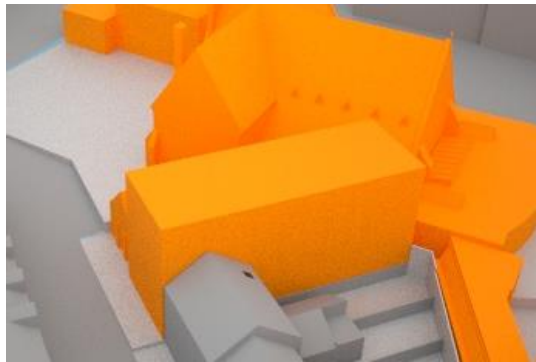
Sunlight: Only one surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 7.

- **OPTION 8**

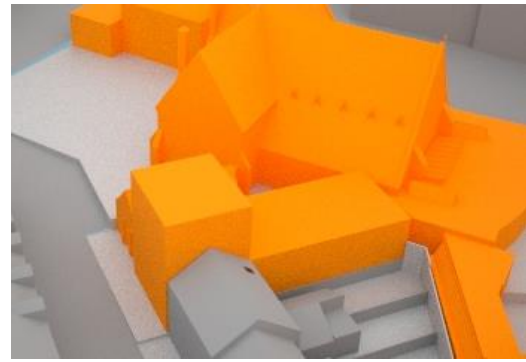
Daylight: One surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 8.

Sunlight: Only one surface on the ground floor at 12 Sackville Street will be adversely impacted by the option 8.

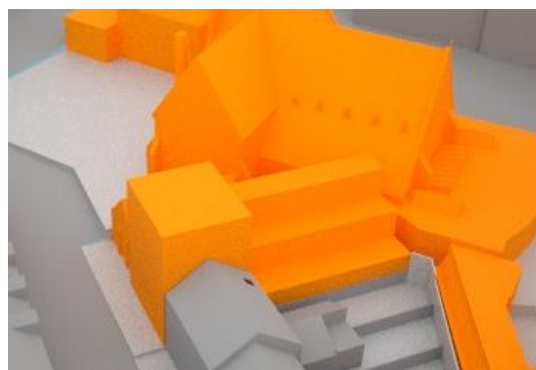
1.2 Site B



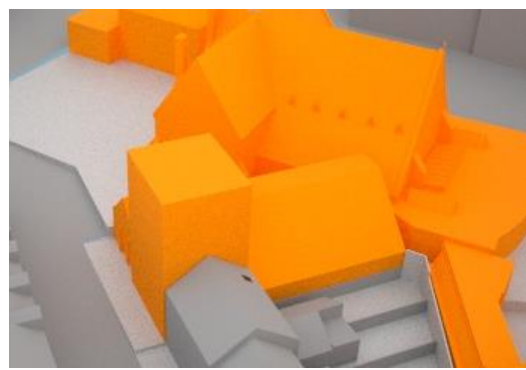
Option 1



Option 2



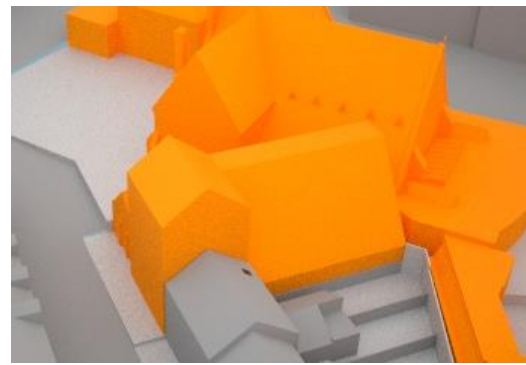
Option 3



Option 4



Option 5



Option 6

It has been analysed for 6 options started from the maximum volume defined by the site boundary, and cut out to reduce the negative impacts on the surrounding buildings and then add additional volumes to identify the optimum volume available. The pictures above show the each option.

The results of the assessment can be summarised as follows.

- **OPTION 1**

Daylight: 4 surfaces at 6 Sackville Street will be adversely impacted by the option 1.

Sunlight: 2 surfaces at 6 Sackville Street will adversely impacted by the option 1.

- **OPTION 2**

Daylight: One surface at 6 Sackville Street will be adversely impacted by the option 2.

Sunlight: One surface at 6 Sackville Street will be adversely impacted by the option 2.

- **OPTION 3**

Daylight: None of the surfaces at 5,6,7,8,9,11 Sackville Street will be adversely impacted by option 3.

Sunlight: None of the surfaces at 5,6,7,8,9,11 Sackville Street will be adversely impacted by option 3.

- **OPTION 4**

Daylight: 4 surfaces at 7 and 9 Sackville Street will be adversely impacted by the option 4.

Sunlight: None of the surfaces at 5,6,7,8,9,11 Sackville Street will be adversely impacted by option 4.

- **OPTION 5**

Daylight: None of the surfaces at 5,6,7,8,9,11 Sackville Street will be adversely impacted by option 5.

Sunlight: None of the surfaces at 5,6,7,8,9,11 Sackville Street will be adversely impacted by option 5.

- **OPTION 6**

Daylight: None of the surfaces at 5,6,7,8,9,11 Sackville Street will be adversely impacted by option 6.

Sunlight: None of the surfaces at 5,6,7,8,9,11 Sackville Street will be adversely impacted by option 6.

2 INTRODUCTION

2.1 General

This report has been prepared to support the maximum design for the proposed development at **Greyfriars Church, Friar Street, Reading, RG1 1EH**.

The report assesses the daylight and sunlight effect of the proposal volumes on the surrounding buildings and specifically focuses on the windows of the residential buildings at **5-12,14,16,18 Sackville Street and Tanfields located at the north of the proposed site**. The assessment is undertaken in accordance with "BRE 209 Digest: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice".

The existing and proposed drawings (in AutoCAD format) of the project were provided by JBKS Architects on the 09th November 2016 and 18th August 2017 have been used for this report. Please note that site survey drawings for the surrounding properties have not been provided, and therefore the size/location of the surrounding buildings and windows have been modelled based on other information provided, Google Maps, Bing Maps and assumptions.

The study has been undertaken by constructing a 3D Sketchup/IES model of the proposed maximum volumes available. All images used in this report are technical 3D models created using 2D AutoCAD Drawings (floor plans, sections and elevations) and not 3D visualisation images.

2.2 Site Level

The site levels for this assessment are indicated in the image below. The main church building is located on the level of +44.0 and the existing café and bookshop are currently located on the level of +43.0. The properties at 2,4,6,8,10,12,14,16,18 Sackville are located on the level of +43.5, +43.8, and +44.0. The properties at 5,7,9,11 Sackville are placed on the level of +44.1 to +43.6 for this assessment.

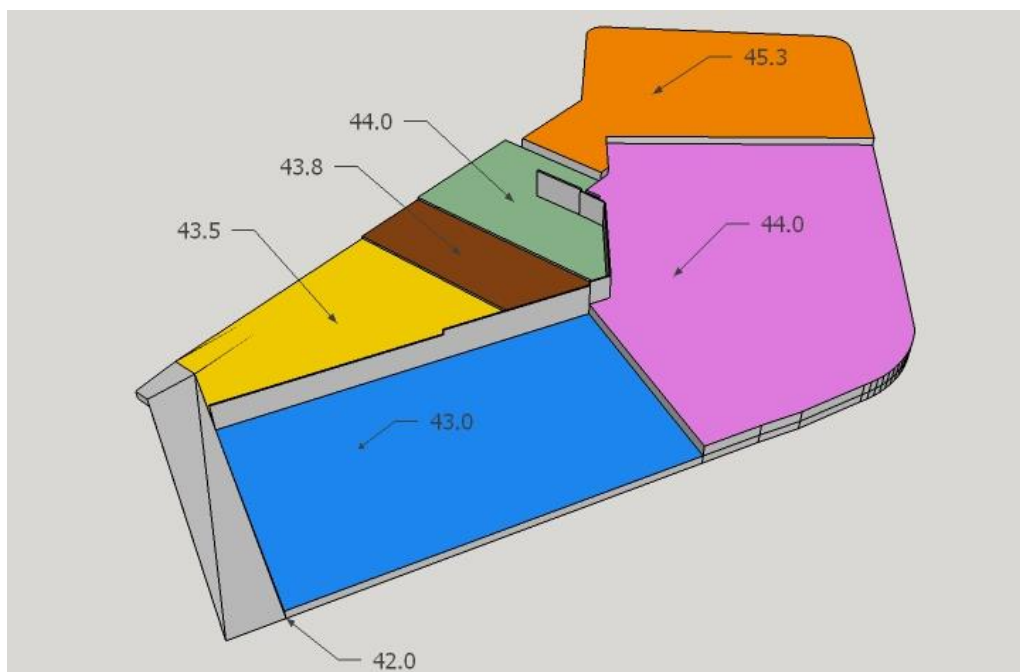


Figure 2 Site level diagram

3 PLANNING POLICY

Where the proposed development has the potential to negatively impact the existing levels of daylight or sunlight on neighbouring properties, a daylight and sunlight assessment has to accompany the planning application.

The daylight and sunlight assessment includes the necessary information to meet the criteria outlined in the Site layout planning for daylight and sunlight: a guide to good practice published by the Building Research Establishment (BRE).

4 GUIDANCE DOCUMENT

4.1 Building Research Establishment report (BRE 209): "Site layout planning for daylight and sunlight: A guide to good practice" Second Edition (2011)

The Second Edition of the report replaces the 1991 document of the same name and came into effect from October 2011.

It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict and rigid set of rules. It also recommends that it may be appropriate to adopt a flexible approach and alternative target values in dealing with "special circumstances" for example "in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings". This is amplified by the following extracts from the introduction (p1, para. 6) and Section 2.2:

"The advice given here is not mandatory and this document 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 because natural lighting is only one of many factors in site layout design". (p1, para. 1.6)

"In special circumstances the Developer or Planning Authority may wish to use different target values". (p1, para. 1.6)

"Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylight in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light". (p7 para. 2.2.3)

The examples given in the report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.

5 ASSESSMENT METHODOLOGY

5.1 General

When assessing any potential effects on the surrounding properties, the BRE guidelines suggest that only those windows that have a reasonable expectation of daylight or sunlight need be assessed. In particular the BRE guidelines at paragraph 2.2.2 state:

"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic buildings where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices."

Further to the above statement, it is considered that the vast majority of commercial properties do not have a reasonable expectation of daylight or sunlight. This is because they are generally designed to rely on electric lighting rather than natural daylight or sunlight.

This report assesses the potential impact of the proposed development in relation to daylight, sunlight and overshadowing on the surrounding properties. Specifically, it takes into consideration the possible effect and influence that the new development would have on the surrounding properties.

30 surfaces for Site A and 26 surfaces for Site B have been selected to assess external levels of daylight VSCs (Vertical Sky Components) and sunlight availability based on the BRE guidelines *"Site layout planning for daylight and sunlight"*. The location of the assessed windows can be found in section 8 of this report.

The IES Virtual Environment modelling software utilised for the compilation of this report has been accredited by CIBSE and acknowledged by the BRE as a suitable software tool for undertaking daylight, sunlight and overshadowing assessments in accordance with the BRE Good Practice guidelines. The specific IES software modules utilised for this assessment are the following:

- ☐ ModelIT: enables you to create a 3D "Virtual Environment" model without CAD data, or alternatively allows you to create a 3D model from 2D CAD data. Interfaces with AutoCAD and Google Sketchup.
- ☐ Radiance: is a detailed 3D simulation tool designed to predict daylight and electric light levels, and the appearance of a space prior to construction. Vertical Sky Components (VSC) and Average Daylight Factors (ADF) can be simulated using Radiance.
- ☐ SunCast: produces visual, graphical and numerical information that can be used to explain to colleagues, clients and planning authorities how the sun impacts on and inside the building, and on the site.

If a property is considered to have a reasonable expectation of daylight or sunlight the following methodology to assess the impacts has been used.

5.2 BRE 209: "Site layout planning for daylight and sunlight"

This section provides a brief description of the calculating methods for the daylight, sunlight and overshadowing to gardens and open spaces criteria presented in BRE Digest 209.

5.2.1 Daylight

The BRE guidelines "Site layout planning for daylight and sunlight" incorporate two main methods of calculating daylight: The Vertical Sky Component (VSC) method and the No-Sky Line (NSL) method.

The VSC method measures the amount of light available on the outside plane at the centre of a window, as a ratio (expressed as a percentage) of the amount of total unobstructed sky visible following the introduction of visible barriers such as buildings.

The daylight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

"The daylighting is not considered to be substantially affected when the Vertical Sky Component (VSC) measured at the centre of a window is >27%. A window may be adversely affected if the VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value".

In the assessment, the reduction between existing and proposed situations is expressed as a percentage, where a change in daylight levels above 20% equates to a figure of less than 0.8 times its former value.

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

The No-Sky Line method of assessment is a simple test to establish where within the proposed room the sky will be visible through the windows, taking into account external obstructions. Rooms connected to the windows assessed will not experience a noticeable reduction in daylight if the percentage of the room's working plane with view of the sky is over 0.8 of its former value (with the existing development in place). The detailed method of calculation is set out in Appendix D of the BRE handbook.

5.2.2 Sunlight

The BRE guidelines "Site layout planning for daylight and sunlight" recommend that access to sunlight is assessed with a development proposal. Potential impacts on available sunlight were assessed using the BRE's Annual Probable Sunlight Hours (APSH) method. This method involves the forecasting of sunlight availability throughout the year and in the winter months, for the main window of each habitable room that faces within 90° of due south. The buildings surrounding the site that do not contain windows that face within 90° of due south has been excluded from the sunlight assessment.

The sunlight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

"A window may be adversely affected if a point at the centre of the window receives in the year less than 25% of the Annual Probable Sunlight Hours (APSH) including at least 5% of the APSH during the winter months (21st October to 21st March)".

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

To provide a concise and comprehensive indicative analysis, the closest surfaces within the surrounding properties were analysed for both daylight and sunlight.

5.2.3 Overshadowing to gardens and open spaces

The BRE guidelines "Site layout planning for daylight and sunlight" provide sunlight availability criteria for open spaces. In particular it gives guidance for calculating any areas of open space that may be in permanent shadow on 21st March.

In summary the BRE document states:

"It is suggested that, for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21st March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".

For this assessment the IES "Virtual Environment" SunCast software package has been used. A 3D model of the proposed and surrounding buildings was first modelled and the sunlight-tracking feature within the software used to view the shadow results. The study illustrated the extent of the shadow on one key date:

- March 21 (Spring Equinox)

5.2.4 Criteria for assessing daylight, sunlight and overshadowing effects

The table below is a summary of the criteria to assess daylight, sunlight and overshadowing impacts as per the BRE 209 guidance. Based on that Syntegra classifies the magnitude of effect according to the ratio.

Magnitude of effect	Criteria		
Beneficial	An improvement ratio > 1.3 of the baseline value		
Negligible (BRE 209)	Daylight	Sunlight	Overshadowing
	A VSC of 27% or above in the proposed scenario with adequate daylight distribution Or A reduction ratio <1.0 and ≥ 0.8 of the baseline value	An APSH of 25%, of which 5% are in the winter months Or A reduction ratio <1.0 and ≥ 0.8 of the baseline value	50% of any amenity areas receiving at least 2 hours of direct sunlight on 21st March Or A reduction ratio <1.0 and ≥ 0.8 of the baseline value
Minor adverse	A reduction ratio <0.8 and ≥ 0.7 of the baseline value		
Moderate adverse	A reduction ratio <0.7 and ≥ 0.6 of the baseline value		
Major adverse	A reduction ratio <0.6 of the baseline value		

Table 1 Criteria for assessing daylight, sunlight and overshadowing effects

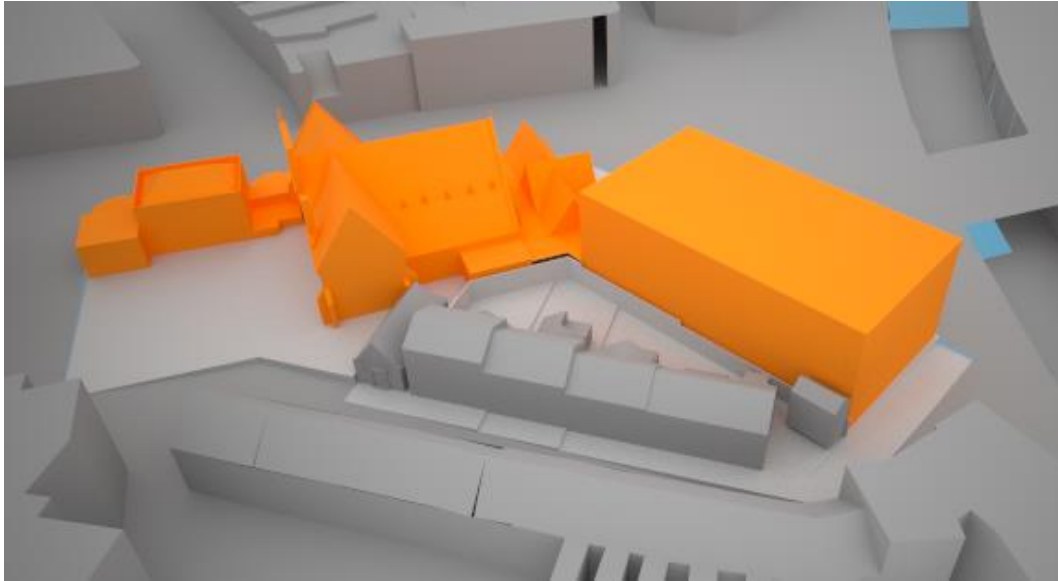
6 ASSESSMENT – SITE A

6.1 Option 1

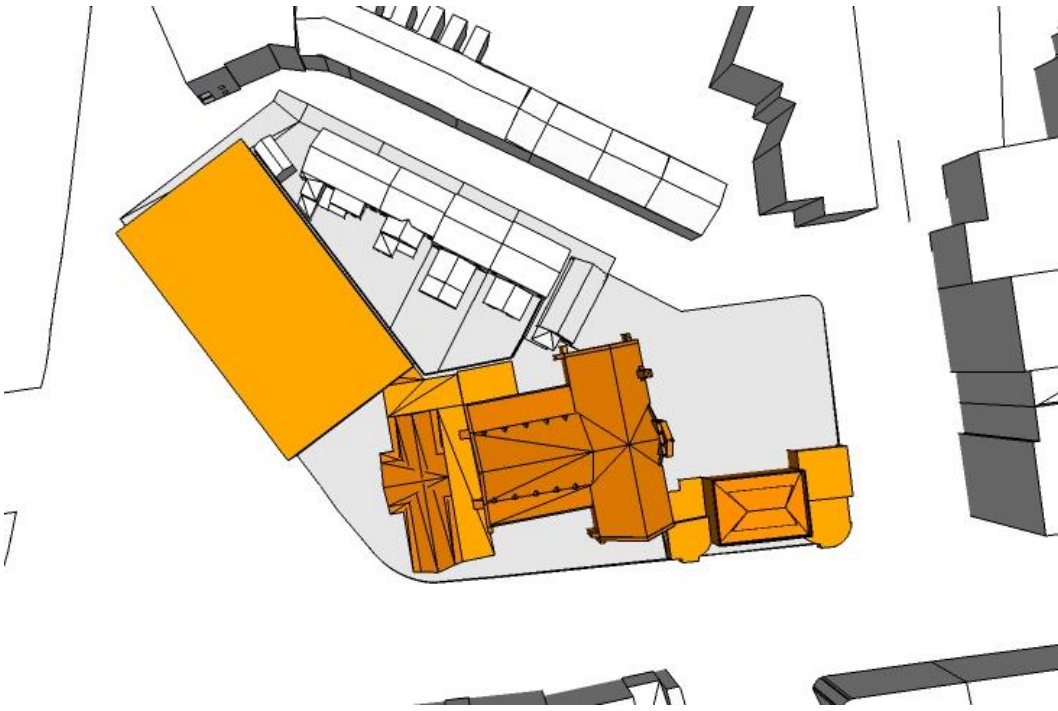
6.1.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

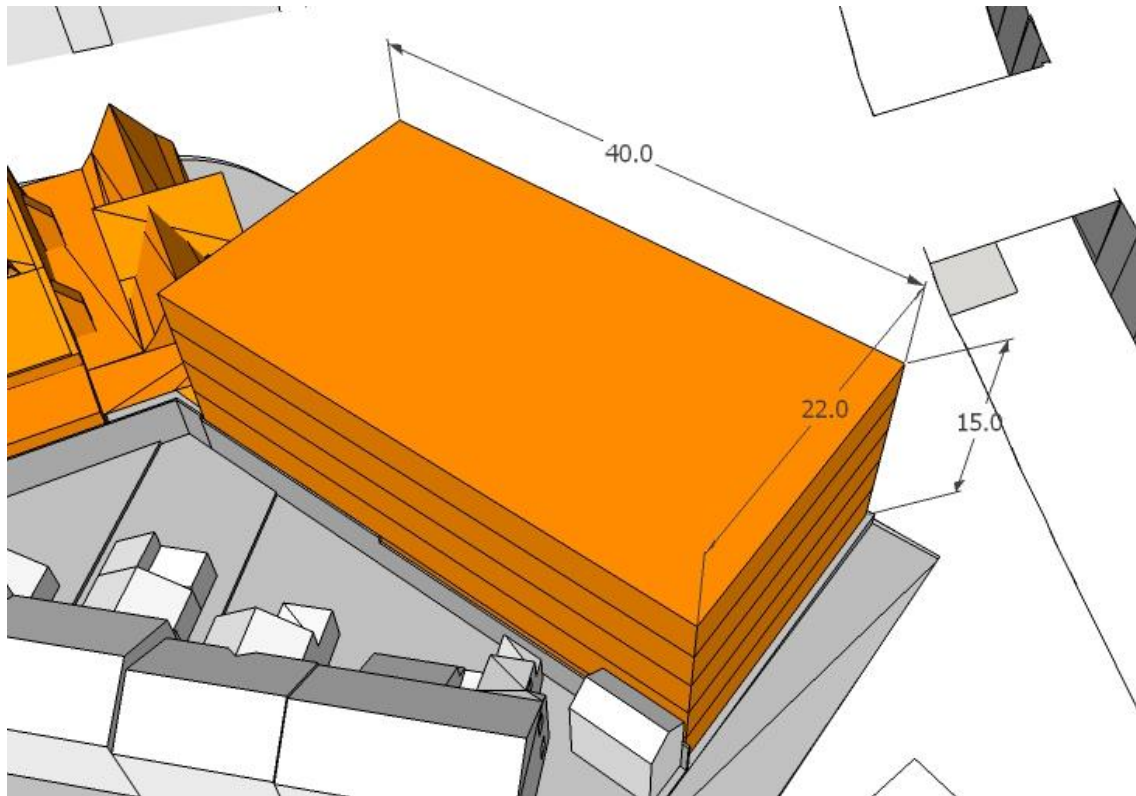
- **Height:** The height of each floors is assumed 3m. The total height is **15m (5 storey)**.
- **Building Size:** The building size is designed by site boundary with **22m x 40m**
- Initial assessment for benchmark



Option 1 – Bird's-eye view



Option 1 – Plan view



Option 1 - Dimensions

6.1.2 Results for Option 1

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Daylight assessment (Surrounding buildings)					Sunlight assessment (Surrounding buildings)						
	Building Target surface	VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	9.55	0.77	Minor Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	2.71	0.24	Major Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	15.96	0.70	Minor Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	7.94	0.37	Major Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	8.10	0.30	Major Adverse	62	23	0.37	18	4	0.22	Major Adverse
S6	14 Sackville Street	21.01	8.56	0.41	Major Adverse	43	17	0.40	14	1	0.07	Major Adverse
S7	12 Sackville Street	18.21	5.94	0.33	Major Adverse	29	4	0.14	6	0	0.00	Major Adverse
S8	12 Sackville Street	27.62	7.95	0.29	Major Adverse	64	23	0.36	15	4	0.27	Major Adverse
S9	12 Sackville Street	28.21	8.92	0.32	Major Adverse	66	26	0.39	16	4	0.25	Negligible
S10	10 Sackville Street	21.82	10.68	0.49	Major Adverse	50	29	0.58	17	6	0.35	Negligible

S11	10 Sackville Street	17.66	11.06	0.63	Moderate Adverse	30	20	0.67	11	4	0.36	Moderate Adverse
S12	16 Sackville Street	27.20	8.66	0.32	Major Adverse	52	16	0.31	18	2	0.11	Major Adverse
S13	14 Sackville Street	22.48	19.51	0.87	Negligible	49	34	0.69	17	4	0.24	Negligible
S14	14 Sackville Street	32.13	15.48	0.48	Major Adverse	70	38	0.54	23	8	0.35	Negligible
S15	12 Sackville Street	34.30	17.36	0.51	Major Adverse	76	41	0.54	23	8	0.35	Negligible
S16	12 Sackville Street	34.51	15.01	0.43	Major Adverse	76	37	0.49	23	8	0.35	Negligible
S17	10 Sackville Street	34.58	17.26	0.50	Major Adverse	76	39	0.51	23	8	0.35	Negligible
S18	10 Sackville Street	30.06	18.62	0.62	Moderate Adverse	53	32	0.60	19	8	0.42	Negligible
S19	8 Sackville Street	24.71	13.89	0.56	Major Adverse	46	26	0.57	11	3	0.27	Negligible
S20	8 Sackville Street	17.13	10.06	0.59	Major Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	12.00	0.43	Major Adverse	59	27	0.46	14	8	0.57	Negligible
S22	6 Sackville Street	27.66	15.89	0.57	Major Adverse	59	28	0.47	14	8	0.57	Negligible
S23	6 Sackville Street	23.55	20.83	0.88	Negligible	54	47	0.87	15	12	0.80	Negligible
S26	8 Sackville Street	34.06	22.47	0.66	Moderate Adverse	73	50	0.68	22	11	0.50	Negligible
S27	8 Sackville Street	34.26	24.29	0.71	Minor Adverse	76	56	0.74	22	14	0.64	Negligible
S28	6 Sackville Street	33.96	25.11	0.74	Minor Adverse	72	55	0.76	19	12	0.63	Negligible

Syntegra House, 63 Milford Road, Reading RG1 8LG
Registered Company No. 06408056

Telephone: 0118 4028520

Email: mail@syntegragroup.com
VAT Registration No. 980016044

S33	Tanfields - GF	28.19	19.46	0.69	Moderate Adverse	68	52	0.76	16	7	0.44	Negligible
S34	Tanfields - GF	28.21	20.44	0.72	Minor Adverse	71	53	0.75	19	7	0.37	Negligible
S35	Tanfields - 1F	33.12	23.42	0.71	Minor Adverse	78	60	0.77	24	10	0.42	Negligible
S36	Tanfields - 1F	33.29	24.66	0.74	Minor Adverse	78	61	0.78	24	10	0.42	Negligible

Table 2 Option1 - Daylight and Sunlight Results

The location of the assessed windows can be found in section 8 of this report.

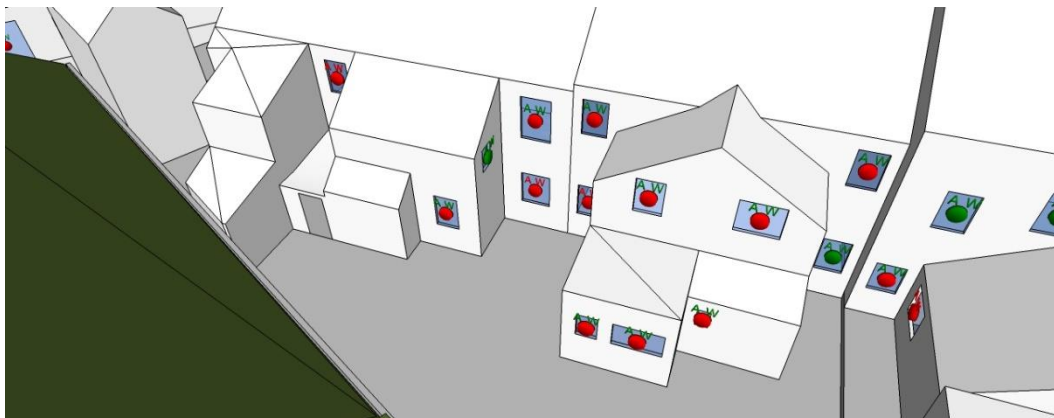
The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

As can be seen in the above table, some of the surfaces at **Tanfields and 6-18 Sackville Street located at the north of the Greyfriars Church** will be adversely impacted by the proposed massing.

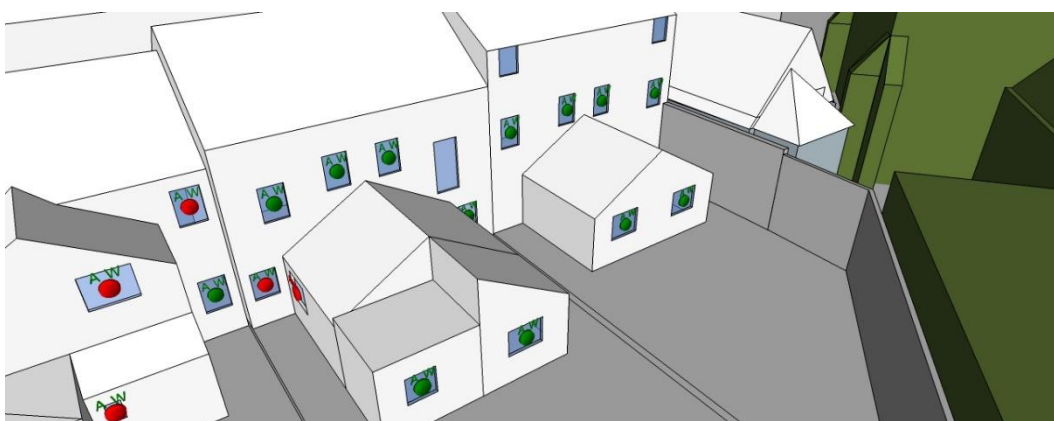
- **Daylight**

6-18 Sackville Street

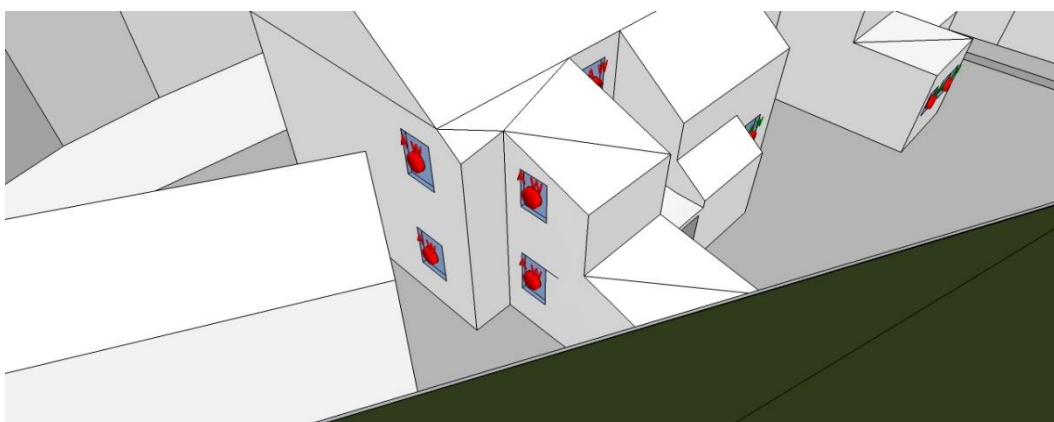
24 surfaces will be adversely impacted by the option 1 because of the location of the buildings in terms of daylight.



Windows at 10-16 Sackville Street – option 1



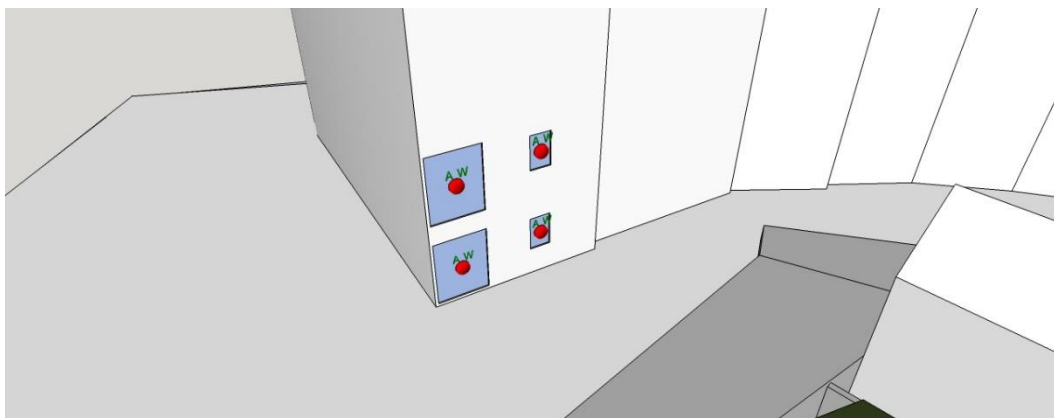
Windows at 6-8 Sackville Street – option 1



Windows at 18 Sackville Street – option 1

Tanfields

All of the windows at the Tanfields will be adversely impacted by the option 1 in terms of daylight.



Windows at Tanfields – option 1

- **Sunlight**

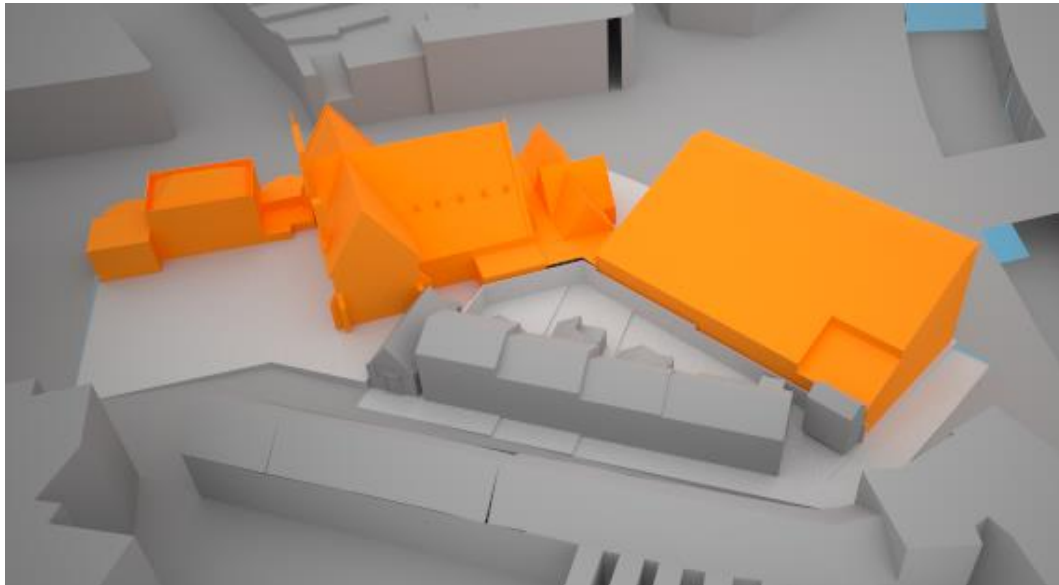
In terms of sunlight, 4 out of 31 surfaces will be adversely impacted by the option 1.

6.2 Option 2

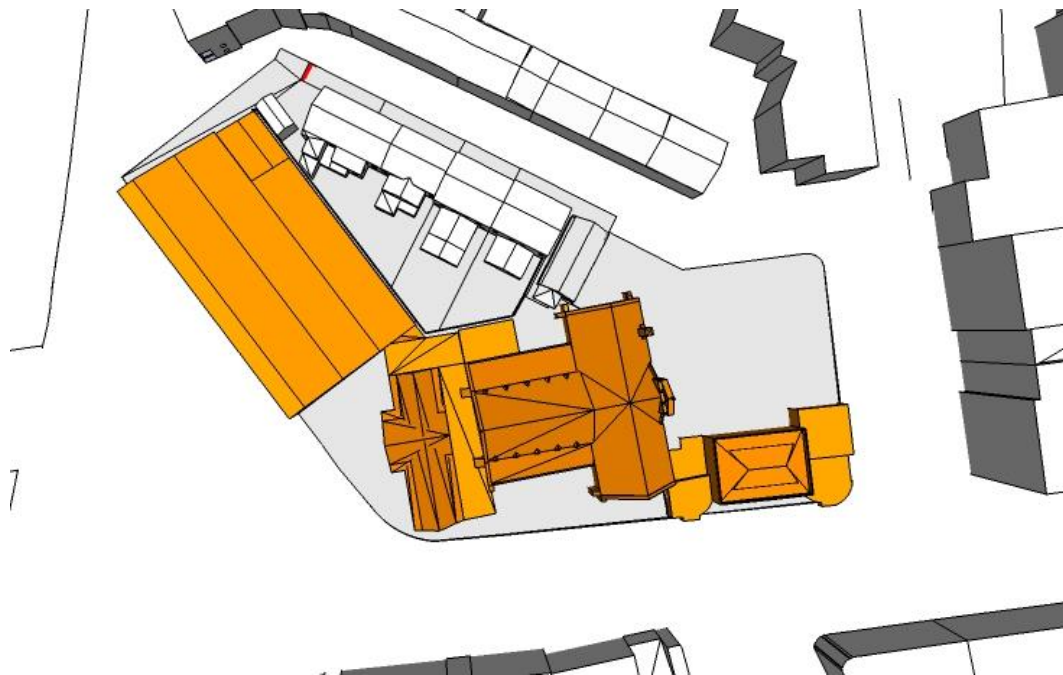
6.2.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

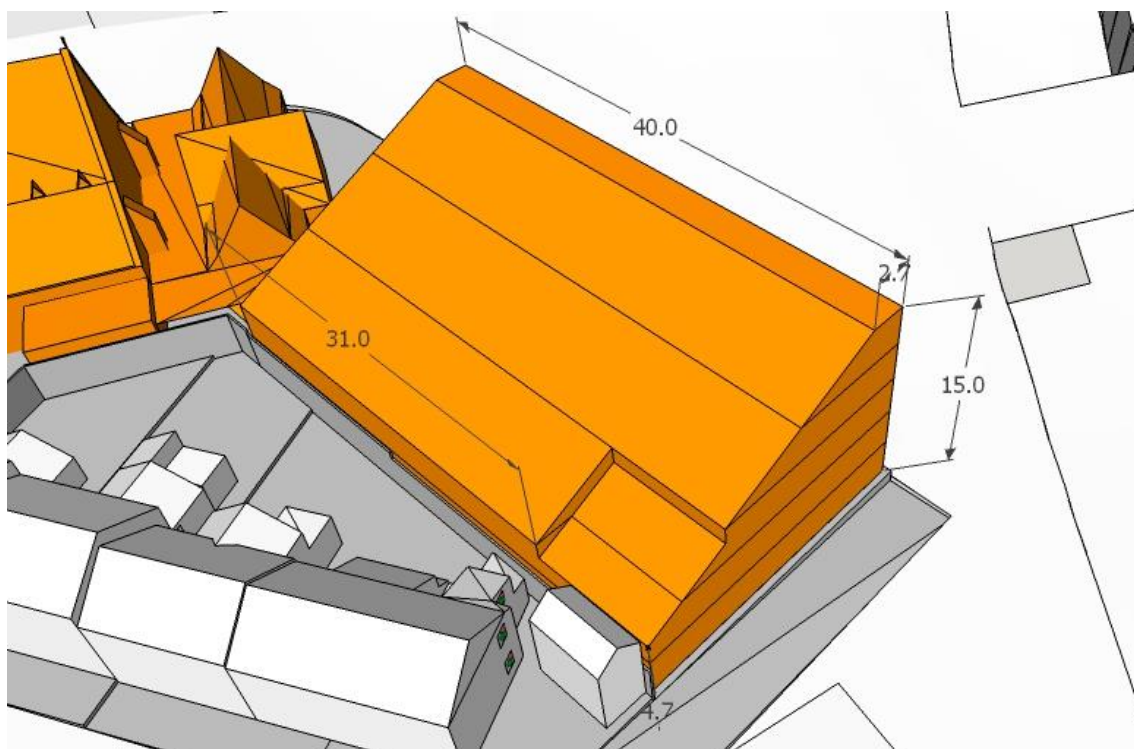
- **Height:** The height of each floors is assumed 3m. The total height is 15m (5 storey).
- **Building Size:** The building size is designed by site boundary with 22m x 40m
- **25° rule:** The massing has been chopped by the 25° sloped planes from the centre of affected windows at 6-18 Sackville Street on ground floor.



Option 2 – Bird's-eye view



Option 2 – Plan view

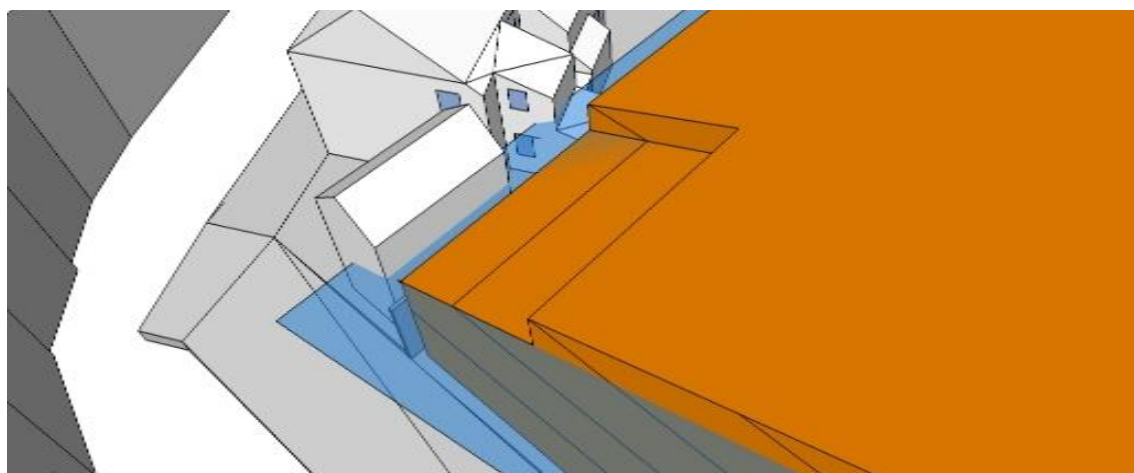


Option 2 - Dimensions



Overlapping 25° planes with the option 1

Cutting massing



Cutting massing for the surfaces on the side of 18 Sackville Street

6.2.2 Results Option 2

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	11.97	0.96	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	9.03	0.80	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	22.14	0.97	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	19.82	0.93	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	22.85	0.85	Negligible	62	53	0.85	18	12	0.67	Negligible
S6	14 Sackville Street	21.01	18.84	0.90	Negligible	43	39	0.91	14	10	0.71	Negligible
S7	12 Sackville Street	18.21	15.88	0.87	Negligible	29	26	0.90	6	4	0.67	Negligible
S8	12 Sackville Street	27.62	22.72	0.82	Negligible	64	53	0.83	15	11	0.73	Negligible
S9	12 Sackville Street	28.21	23.89	0.85	Negligible	66	56	0.85	16	13	0.75	Negligible
S10	10 Sackville Street	21.82	19.86	0.91	Negligible	50	46	0.92	17	15	0.76	Negligible
S11	10 Sackville Street	17.66	16.27	0.92	Negligible	30	30	1.00	11	11	1.00	Negligible
S12	16 Sackville Street	27.20	24.58	0.90	Negligible	52	48	0.92	18	14	0.78	Negligible

S13	14 Sackville Street	22.48	22.12	0.98	Negligible	49	47	0.96	17	15	0.88	Negligible
S14	14 Sackville Street	32.13	28.95	0.90	Negligible	70	67	0.96	23	21	0.87	Negligible
S15	12 Sackville Street	34.30	30.65	0.89	Negligible	76	72	0.95	23	20	0.87	Negligible
S16	12 Sackville Street	34.51	29.97	0.87	Negligible	76	70	0.92	23	20	0.83	Negligible
S17	10 Sackville Street	34.58	30.26	0.88	Negligible	76	72	0.95	23	19	0.83	Negligible
S18	10 Sackville Street	30.06	27.09	0.90	Negligible	53	49	0.92	19	17	0.79	Negligible
S19	8 Sackville Street	24.71	21.97	0.89	Negligible	46	43	0.93	11	11	0.82	Negligible
S20	8 Sackville Street	17.13	15.68	0.91	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	24.68	0.89	Negligible	59	53	0.90	14	16	0.79	Negligible
S22	6 Sackville Street	27.66	25.16	0.91	Negligible	59	52	0.88	14	12	0.71	Negligible
S23	6 Sackville Street	23.55	23.22	0.99	Negligible	54	53	0.98	15	16	0.93	Negligible
S26	8 Sackville Street	34.06	30.76	0.90	Negligible	73	69	0.95	22	20	0.82	Negligible
S27	8 Sackville Street	34.26	31.26	0.91	Negligible	76	72	0.95	22	21	0.86	Negligible
S28	6 Sackville Street	33.96	31.12	0.92	Negligible	72	68	0.94	19	18	0.84	Negligible
S33	Tanfields - GF	28.19	24.82	0.88	Negligible	68	61	0.90	16	8	0.56	Negligible
S34	Tanfields - GF	28.21	25.97	0.92	Negligible	71	65	0.92	19	11	0.68	Negligible
S35	Tanfields - 1F	33.12	30.37	0.92	Negligible	78	73	0.94	24	18	0.79	Negligible
S36	Tanfields - 1F	33.29	31.42	0.94	Negligible	78	75	0.96	24	21	0.88	Negligible

Table 3 Option2- Daylight and Sunlight Results

Syntegra Consulting Ltd, Syntegra House, 63 Milford Road, Reading, Berkshire, RG1 8LG

T: 0845 0091625

E: mail@syntegra-epc.co.uk

Registered Company No. 06408056

VAT Registration No. 980016044



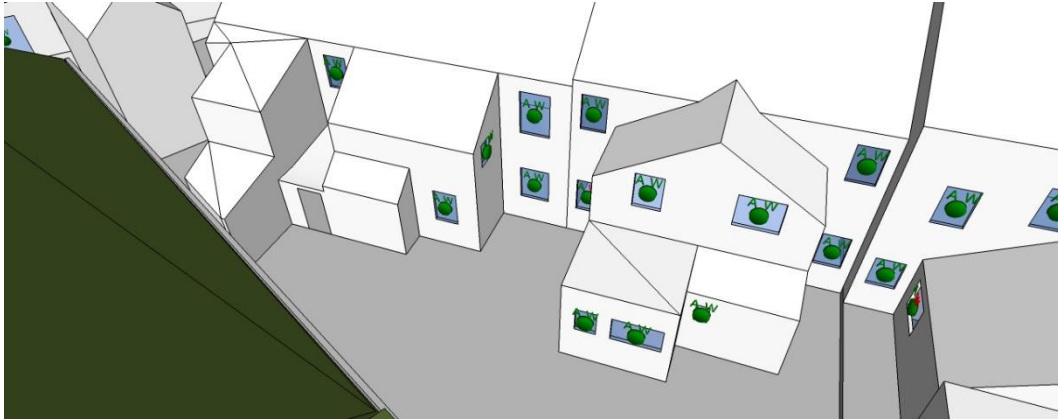
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

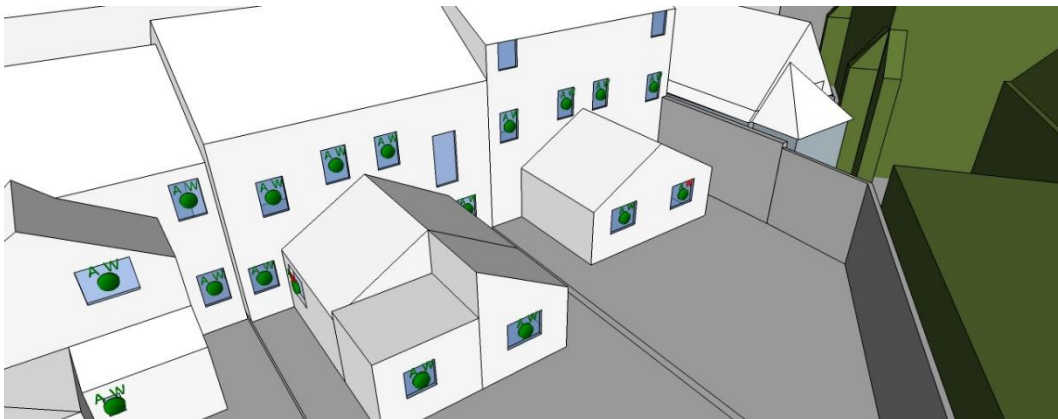
- Daylight

6-18 Sackville Street

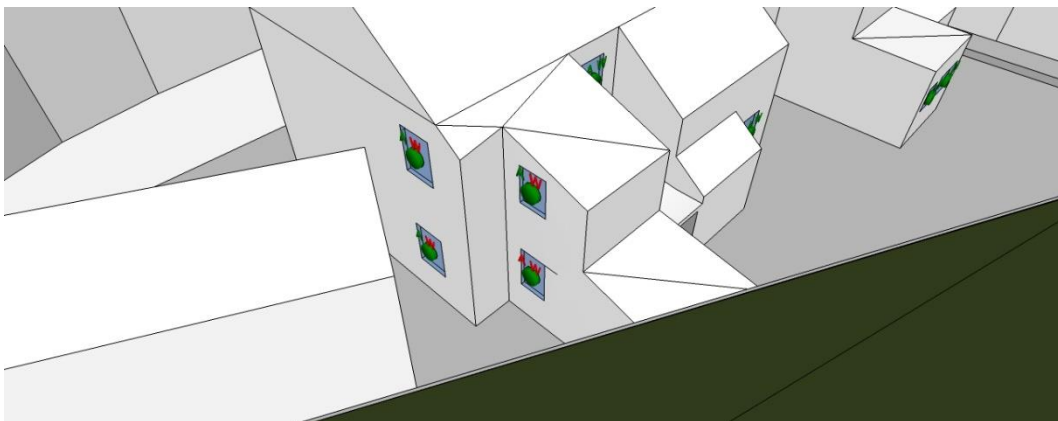
None of the surfaces will be adversely impacted by the option 2 regarding daylight.



Windows at 10-16 Sackville Street – option 2



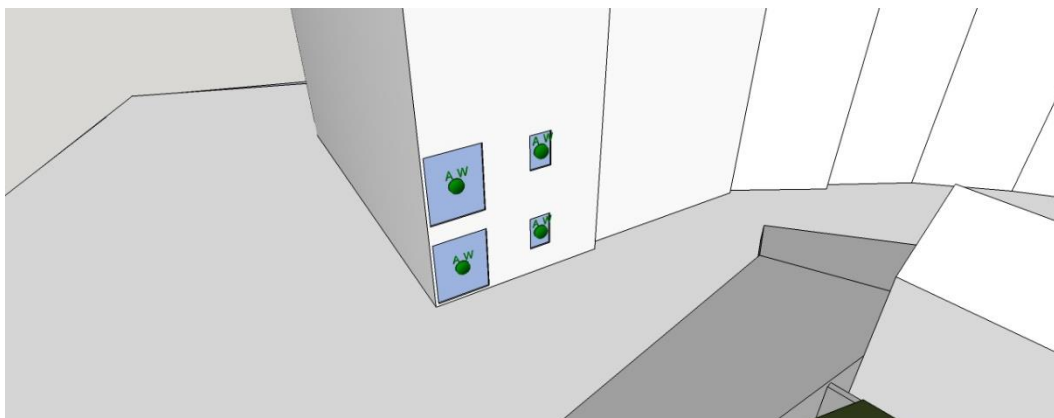
Windows at 6-8 Sackville Street – option 2



Windows at 18 Sackville Street – option 2

Tanfields

None of the surface at Tanfields will be adversely impacted by the option 2 in terms of daylight.



Windows at Tanfields – option 2

- **Sunlight**

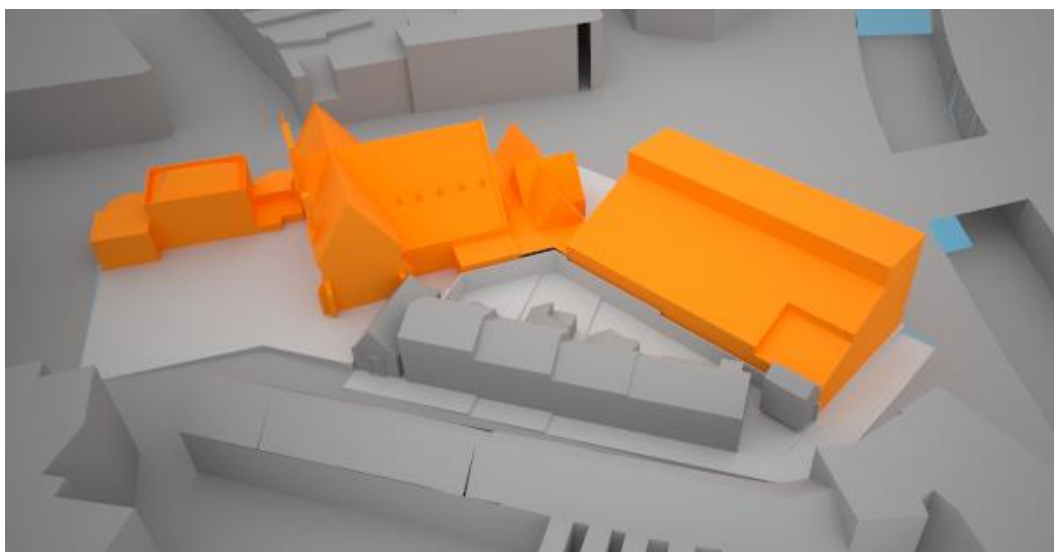
In terms of sunlight, none of the surfaces will be adversely impacted by the option 2.

6.3 Option 3

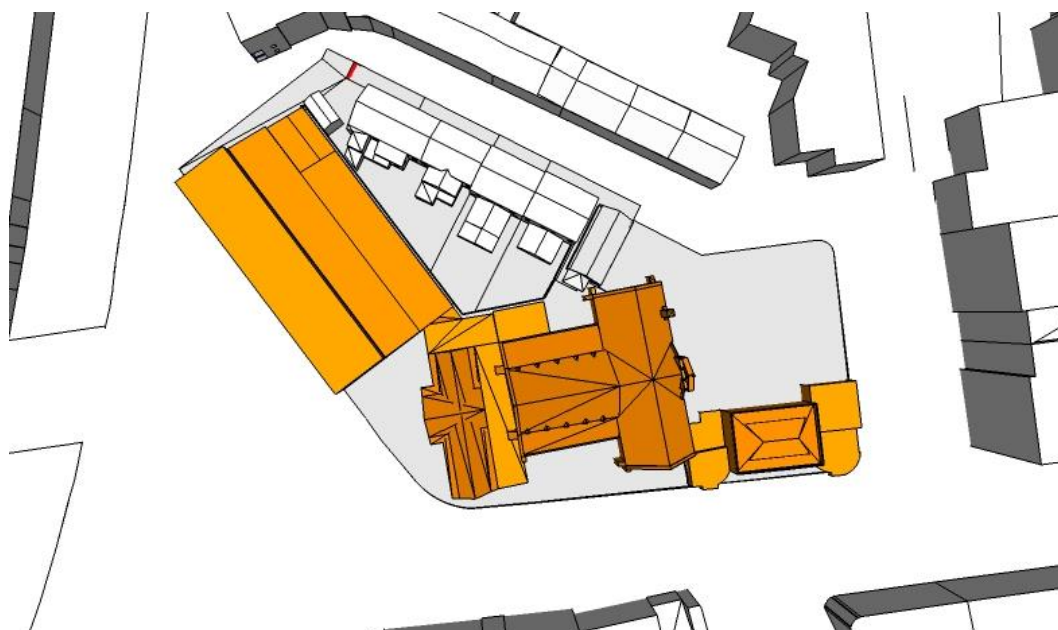
6.3.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

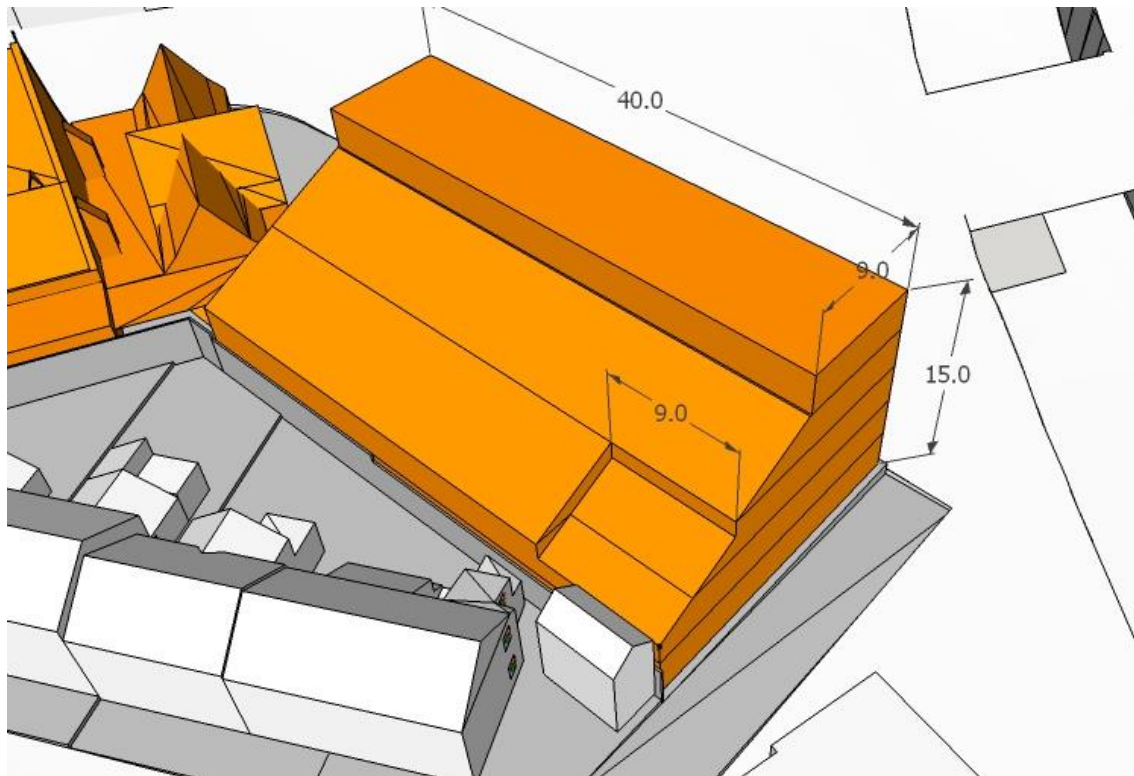
- **Height:** The height of each floors is assumed 3m. The total height is 15m (5 storey).
- **Building Size:** The building size is designed by site boundary with 22m x 40m
- **25° rule:** The massing has been chopped by the 25° sloped planes from the centre of affected windows at 6-18 Sackville Street on ground floor.
- Enlarge the 4th floor by 9 meters.



Option 3 – Bird's-eye view



Option 3 – Plan view



Option 3 - Dimensions

6.3.2 Results for Option 3

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	11.63	0.94	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	9.03	0.80	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	21.49	0.95	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	18.71	0.88	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	22.07	0.82	Negligible	62	52	0.84	18	12	0.67	Negligible
S6	14 Sackville Street	21.01	17.24	0.82	Negligible	43	36	0.84	14	8	0.57	Negligible
S7	12 Sackville Street	18.21	13.91	0.76	Minor Adverse	29	21	0.72	6	2	0.33	Minor Adverse
S8	12 Sackville Street	27.62	22.24	0.81	Negligible	64	53	0.83	15	11	0.73	Negligible
S9	12 Sackville Street	28.21	22.76	0.81	Negligible	66	53	0.80	16	11	0.69	Negligible
S10	10 Sackville Street	21.82	18.79	0.86	Negligible	50	45	0.90	17	12	0.71	Negligible
S11	10 Sackville Street	17.66	15.70	0.89	Negligible	30	30	1.00	11	11	1.00	Negligible
S12	16 Sackville Street	27.20	22.39	0.82	Negligible	52	46	0.88	18	12	0.67	Negligible

S13	14 Sackville Street	22.48	22.00	0.98	Negligible	49	46	0.94	17	14	0.82	Negligible
S14	14 Sackville Street	32.13	27.09	0.84	Negligible	70	64	0.91	23	18	0.78	Negligible
S15	12 Sackville Street	34.30	28.85	0.84	Negligible	76	68	0.89	23	17	0.74	Negligible
S16	12 Sackville Street	34.51	27.93	0.81	Negligible	76	66	0.87	23	16	0.70	Negligible
S17	10 Sackville Street	34.58	28.54	0.83	Negligible	76	68	0.89	23	17	0.74	Negligible
S18	10 Sackville Street	30.06	26.04	0.87	Negligible	53	48	0.91	19	15	0.79	Negligible
S19	8 Sackville Street	24.71	20.77	0.84	Negligible	46	42	0.91	11	8	0.73	Negligible
S20	8 Sackville Street	17.13	14.62	0.85	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	22.90	0.82	Negligible	59	49	0.83	14	11	0.79	Negligible
S22	6 Sackville Street	27.66	23.73	0.86	Negligible	59	47	0.80	14	9	0.64	Negligible
S23	6 Sackville Street	23.55	23.10	0.98	Negligible	54	52	0.96	15	13	0.87	Negligible
S26	8 Sackville Street	34.06	29.64	0.87	Negligible	73	66	0.90	22	17	0.77	Negligible
S27	8 Sackville Street	34.26	30.32	0.88	Negligible	76	70	0.92	22	18	0.82	Negligible
S28	6 Sackville Street	33.96	30.29	0.89	Negligible	72	67	0.93	19	15	0.79	Negligible
S33	Tanfields - GF	28.19	24.47	0.87	Negligible	68	60	0.88	16	9	0.56	Negligible
S34	Tanfields - GF	28.21	25.61	0.91	Negligible	71	64	0.90	19	12	0.63	Negligible
S35	Tanfields - 1F	33.12	29.75	0.90	Negligible	78	72	0.92	24	18	0.75	Negligible
S36	Tanfields - 1F	33.29	30.41	0.91	Negligible	78	73	0.94	24	19	0.79	Negligible

Table 4 Option3 - Daylight and Sunlight Results

Syntegra Consulting Ltd, Syntegra House, 63 Milford Road, Reading, Berkshire, RG1 8LG

T: 0845 0091625

E: mail@syntegra-epc.co.uk

Registered Company No. 06408056

VAT Registration No. 980016044



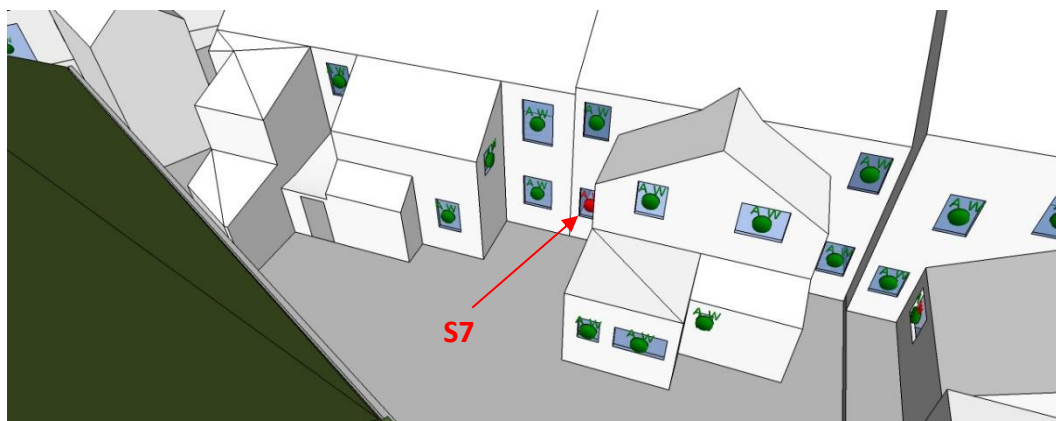
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

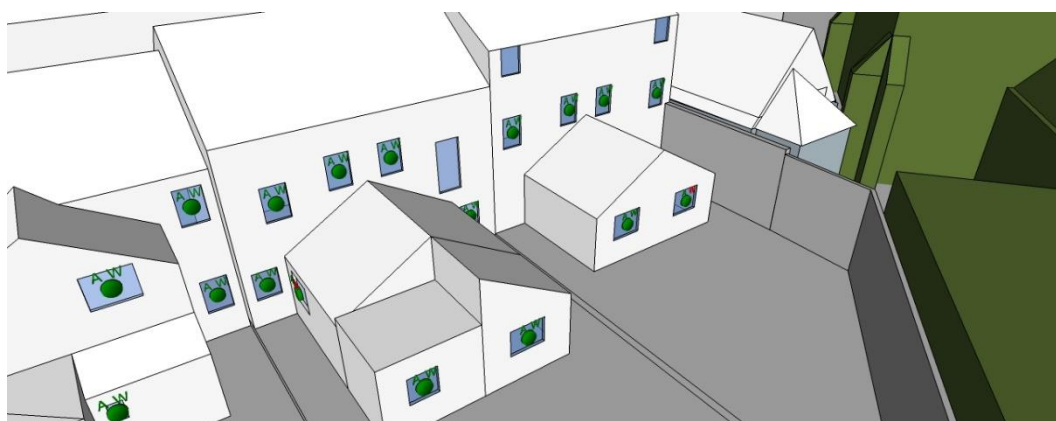
- Daylight

6-18 Sackville Street

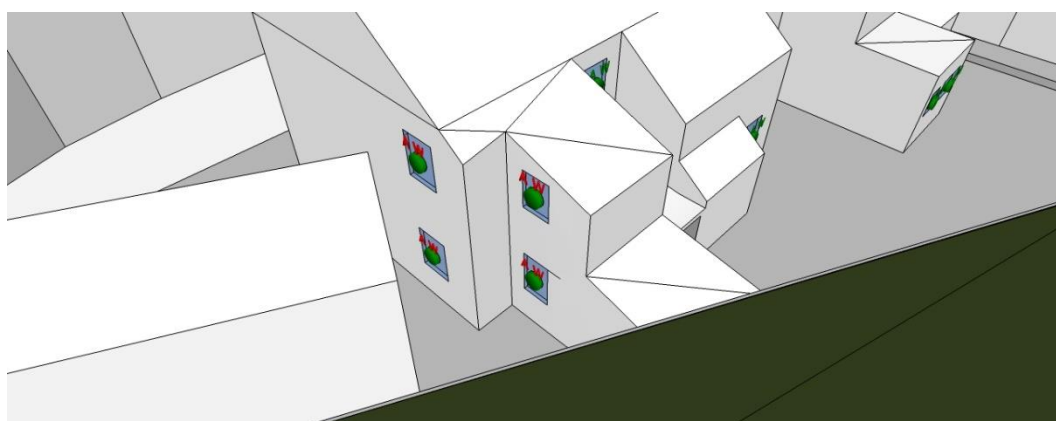
Only one surface (S7) on the ground floor will be adversely impacted by the option 3. However, the S7 surface at 12 Sackville Street has already experienced a poor level of VSC value (18.21) and the loss of VSC value is less than 30%. Therefore, it can be considered that the impact of the option 3 on 12 Sackville Street will be minimal.



Windows at 10-16 Sackville Street – option 3



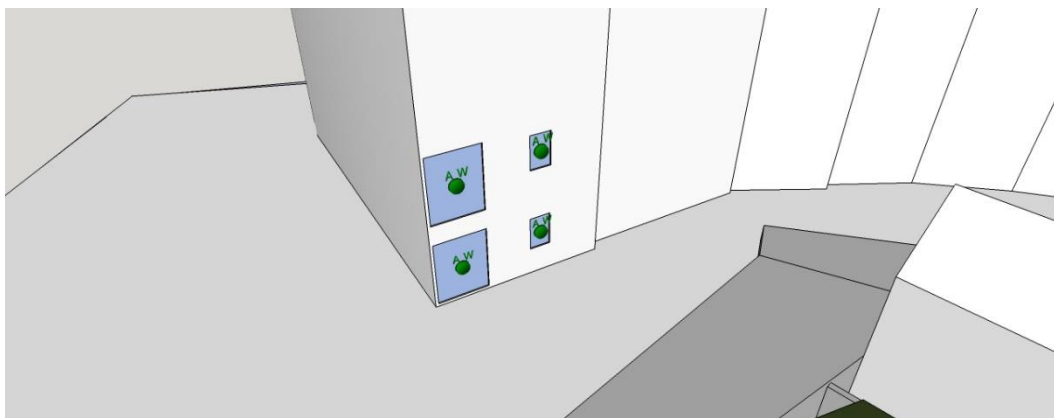
Windows at 2-8 Sackville Street – option 3



Windows at 18 Sackville Street – option 3

Tanfields

None of the surfaces at the Tanfields will be majorly impacted by the option 3 in terms of daylight.



Windows at Tanfields – option 3

- **Sunlight**

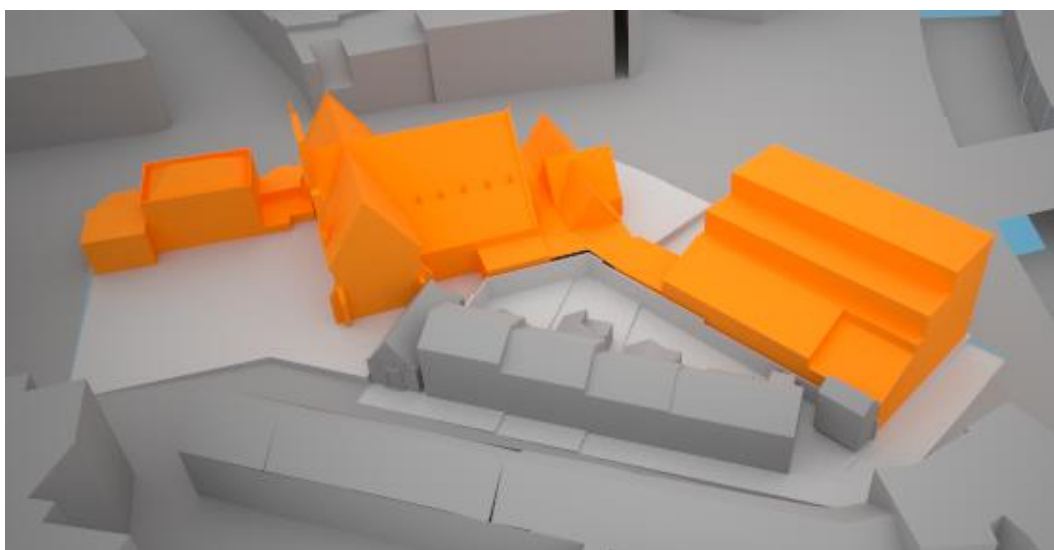
In terms of the sunlight, only one surface (S7) on the ground floor will be adversely impacted by the option 3. However, the surface has achieved more than 20% (21%) of APSH value and this value is quite close the BRE criteria. Therefore, it can be considered that the impact of the option 3 on 12 Sackville Street will be minimal.

6.4 Option 4

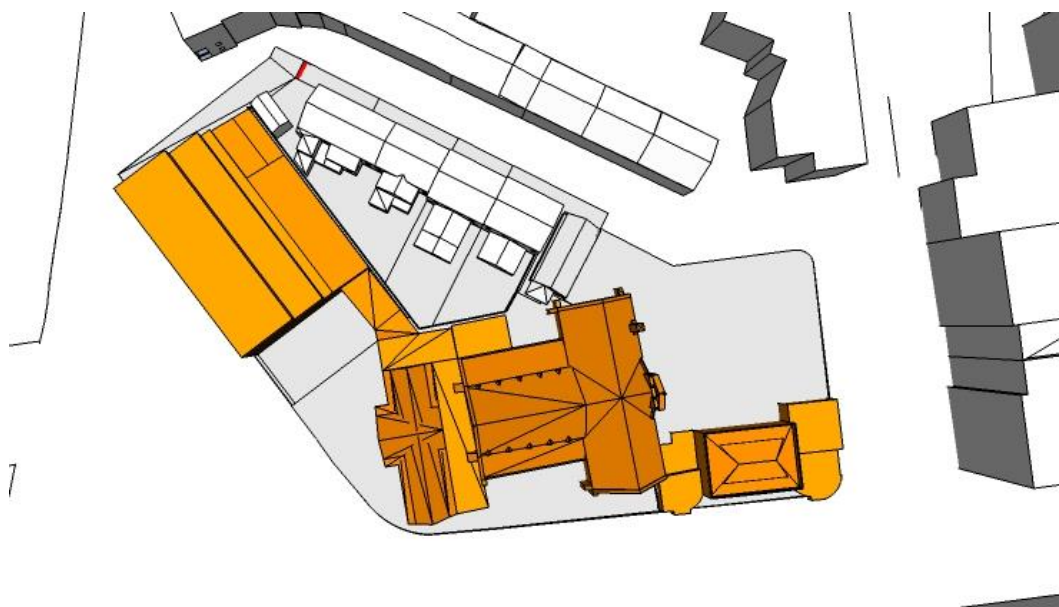
6.4.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

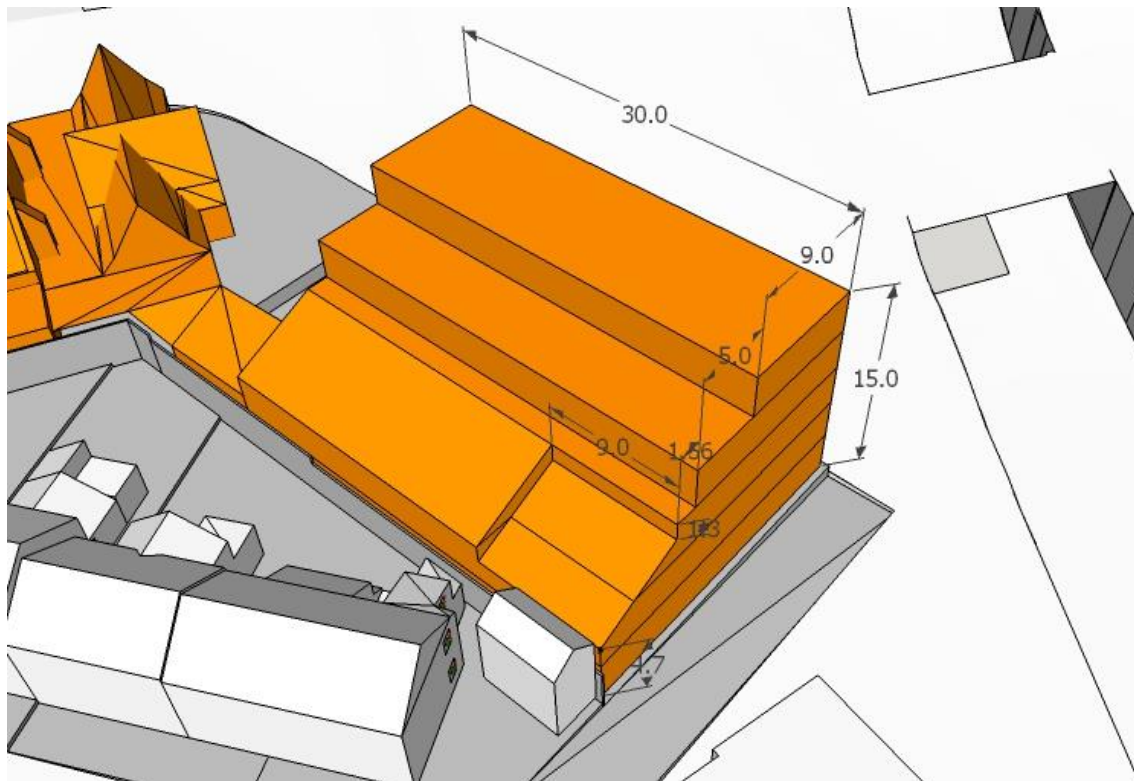
- **Height:** The height of each floors is assumed 3m. The total height is **15m (5 storey)**.
- **Building Size:** The building size is designed by site boundary with **22m x 30m**
- **25° rule:** The massing has been chopped by the 25° sloped planes from the centre of affected windows at 6-18 Sackville Street on ground floor.
- Sloped surfaces have been trimmed with 3m high.



Option 4 - Bird's-eye view



Option 4 – Plan view



Option 4 - Dimensions

6.4.2 Results for Option 4

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	11.49	0.93	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	8.67	0.77	Minor Adverse	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	21.49	0.95	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	18.21	0.85	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	21.80	0.81	Negligible	62	50	0.81	18	11	0.61	Negligible
S6	14 Sackville Street	21.01	17.58	0.84	Negligible	43	37	0.86	14	9	0.64	Negligible
S7	12 Sackville Street	18.21	14.18	0.78	Minor Adverse	29	22	0.76	6	3	0.50	Minor Adverse
S8	12 Sackville Street	27.62	22.43	0.81	Negligible	64	51	0.80	15	10	0.67	Negligible
S9	12 Sackville Street	28.21	23.50	0.83	Negligible	66	55	0.83	16	13	0.81	Negligible
S10	10 Sackville Street	21.82	20.21	0.93	Negligible	50	48	0.96	17	15	0.88	Negligible
S11	10 Sackville Street	17.66	17.37	0.98	Negligible	30	30	1.00	11	11	1.00	Negligible
S12	16 Sackville Street	27.20	22.58	0.83	Negligible	52	46	0.88	18	12	0.67	Negligible

S13	14 Sackville Street	22.48	22.17	0.99	Negligible	49	47	0.96	17	15	0.88	Negligible
S14	14 Sackville Street	32.13	27.74	0.86	Negligible	70	65	0.93	23	19	0.83	Negligible
S15	12 Sackville Street	34.30	29.62	0.86	Negligible	76	69	0.91	23	19	0.83	Negligible
S16	12 Sackville Street	34.51	29.12	0.84	Negligible	76	68	0.89	23	18	0.78	Negligible
S17	10 Sackville Street	34.58	30.11	0.87	Negligible	76	69	0.91	23	18	0.78	Negligible
S18	10 Sackville Street	30.06	27.50	0.91	Negligible	53	50	0.94	19	17	0.89	Negligible
S19	8 Sackville Street	24.71	22.54	0.91	Negligible	46	44	0.96	11	10	0.91	Negligible
S20	8 Sackville Street	17.13	14.97	0.87	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	26.15	0.94	Negligible	59	55	0.93	14	16	1.14	Negligible
S22	6 Sackville Street	27.66	26.27	0.95	Negligible	59	51	0.86	14	12	0.86	Negligible
S23	6 Sackville Street	23.55	23.36	0.99	Negligible	54	55	1.02	15	16	1.07	Negligible
S26	8 Sackville Street	34.06	31.42	0.92	Negligible	73	69	0.95	22	20	0.91	Negligible
S27	8 Sackville Street	34.26	32.13	0.94	Negligible	76	73	0.96	22	21	0.95	Negligible
S28	6 Sackville Street	33.96	31.99	0.94	Negligible	72	70	0.97	19	18	0.95	Negligible
S33	Tanfields - GF	28.19	24.13	0.86	Negligible	68	60	0.88	16	9	0.56	Negligible
S34	Tanfields - GF	28.21	25.19	0.89	Negligible	71	63	0.89	19	11	0.58	Negligible
S35	Tanfields - 1F	33.12	29.19	0.88	Negligible	78	70	0.90	24	16	0.67	Negligible
S36	Tanfields - 1F	33.29	30.12	0.90	Negligible	78	73	0.94	24	19	0.79	Negligible

Table 5 Option4 - Daylight and Sunlight Results

Syntegra Consulting Ltd, Syntegra House, 63 Milford Road, Reading, Berkshire, RG1 8LG

T: 0845 0091625

E: mail@syntegra-epc.co.uk

Registered Company No. 06408056

VAT Registration No. 980016044



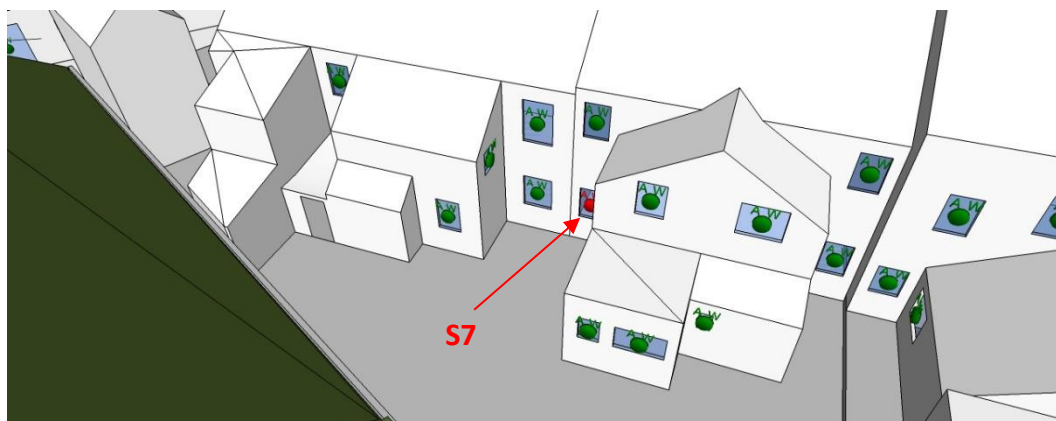
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

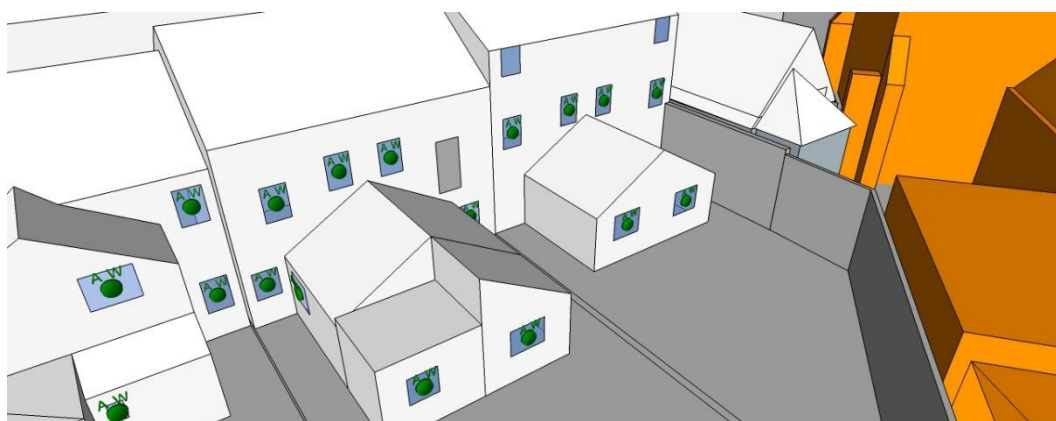
- Daylight

6-18 Sackville Street

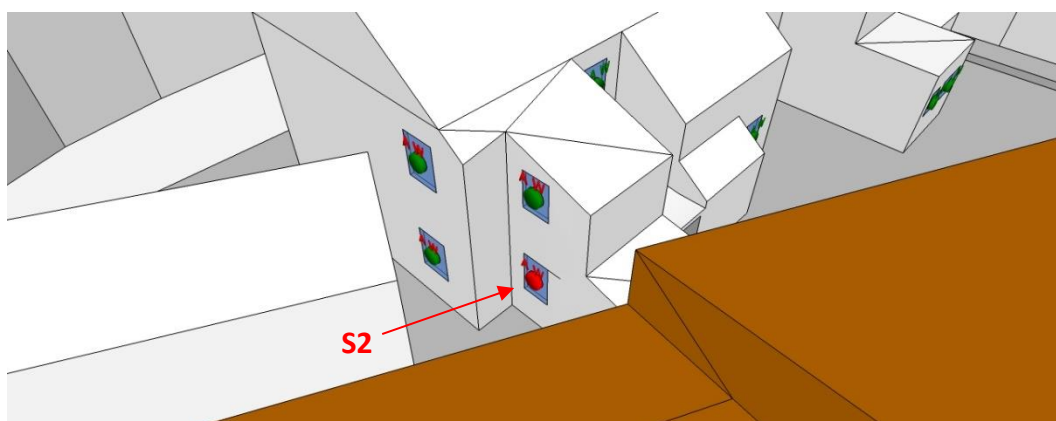
2 surfaces (S2 and S7) at 6-18 Sackville Street will be adversely impacted by the option 4. However, they have already experienced a poor level of VSC values (11.24 and 18.21 respectively) and the loss of VSC value is less than 30%. Therefore, it can be considered that the impact of the option 4 on 12 Sackville Street will be minimal.



Windows at 10-16 Sackville Street – option 4



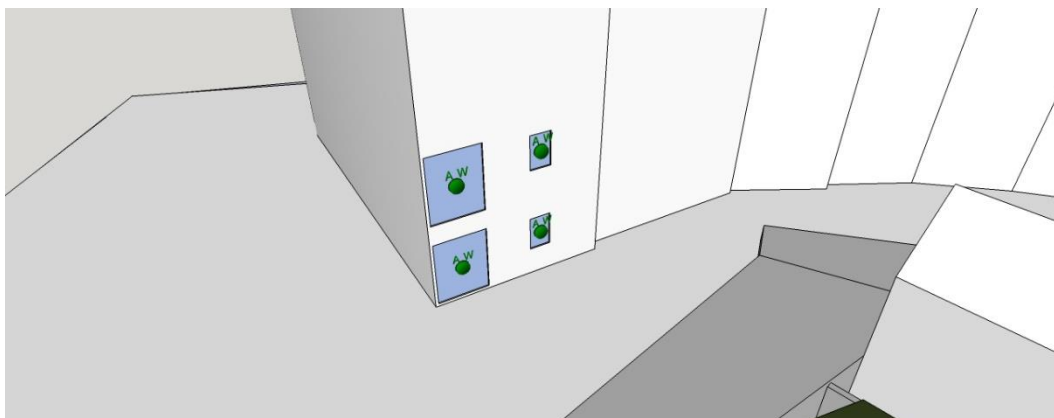
Windows at 6-8 Sackville Street – option 4



Windows at 18 Sackville Street – option 4

Tanfields

None of the surfaces at the Tanfields will be impacted by the option 4 in terms of daylight.



Windows at Tanfields – option 4

- **Sunlight**

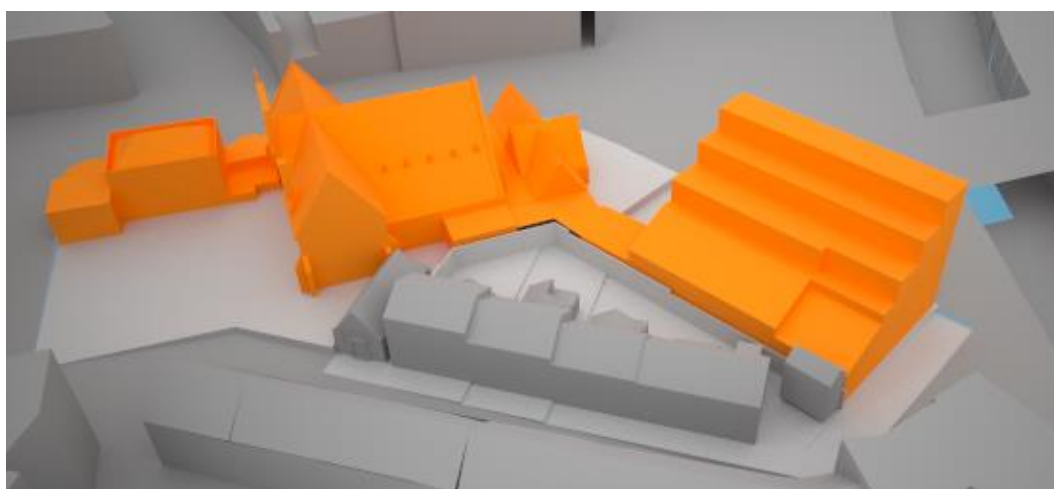
In terms of the sunlight, only one surface (S7) on the ground floor at 12 Sackville Street will be adversely impacted by the option 4. However, the surface has achieved more than 20% (22%) of APSH value and value is quite close the BRE criteria. Therefore, it can be considered that the impact of the option 4 on 12 Sackville Street will be minimal.

6.5 Option 5

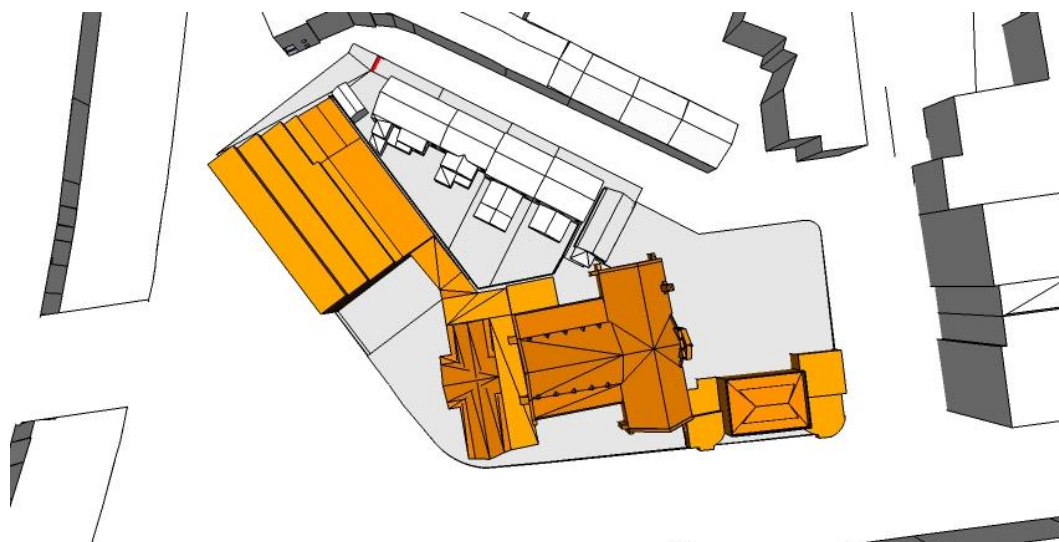
6.5.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

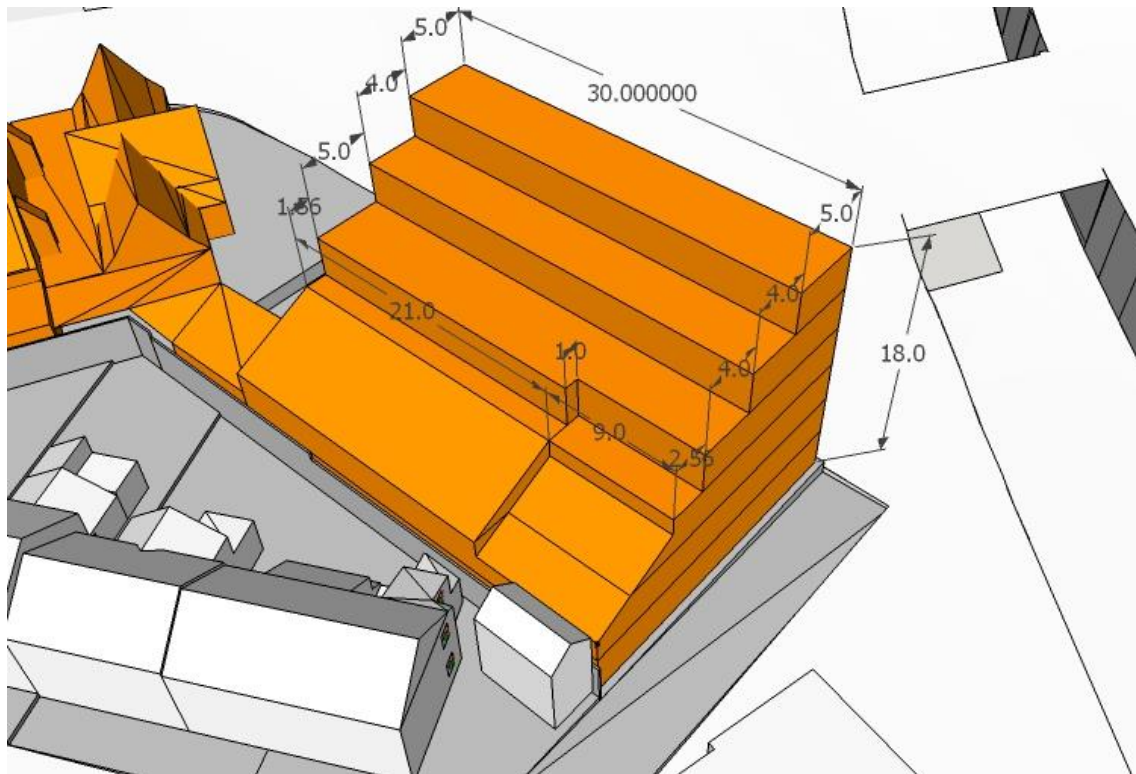
- **Height:** The height of each floors is assumed 3m. The total height is **18m (6 storey)**.
- **Building Size:** The building size is designed by site boundary with **22m x 30m**
- **25° rule:** The massing has been chopped by the 25° sloped planes from the centre of affected windows at 2-18 Sackville Street on ground floor.
- Sloped surfaces have been trimmed with 3m high.
- 5th floor is added.



Option 5 – Bird's-eye view



Option 5 – Plan view



Option 5 - Dimensions

6.5.2 Results for Option 5

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	11.60	0.93	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	9.02	0.80	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	21.35	0.94	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	18.39	0.86	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	21.81	0.81	Negligible	62	50	0.81	18	11	0.61	Negligible
S6	14 Sackville Street	21.01	17.40	0.83	Negligible	43	37	0.86	14	9	0.64	Negligible
S7	12 Sackville Street	18.21	13.87	0.76	Minor Adverse	29	22	0.76	6	3	0.50	Minor Adverse
S8	12 Sackville Street	27.62	22.45	0.81	Negligible	64	51	0.80	15	10	0.67	Negligible
S9	12 Sackville Street	28.21	23.52	0.83	Negligible	66	55	0.83	16	13	0.81	Negligible
S10	10 Sackville Street	21.82	20.18	0.92	Negligible	50	48	0.96	17	15	0.88	Negligible
S11	10 Sackville Street	17.66	17.36	0.98	Negligible	30	30	1.00	11	11	1.00	Negligible
S12	16 Sackville Street	27.20	22.06	0.81	Negligible	52	44	0.85	18	11	0.61	Negligible

S13	14 Sackville Street	22.48	22.17	0.99	Negligible	49	47	0.96	17	15	0.88	Negligible
S14	14 Sackville Street	32.13	27.16	0.85	Negligible	70	64	0.91	23	18	0.78	Negligible
S15	12 Sackville Street	34.30	29.01	0.85	Negligible	76	68	0.89	23	18	0.78	Negligible
S16	12 Sackville Street	34.51	28.61	0.83	Negligible	76	67	0.88	23	18	0.78	Negligible
S17	10 Sackville Street	34.58	29.62	0.86	Negligible	76	68	0.89	23	17	0.74	Negligible
S18	10 Sackville Street	30.06	27.05	0.90	Negligible	53	49	0.92	19	16	0.84	Negligible
S19	8 Sackville Street	24.71	22.30	0.90	Negligible	46	43	0.93	11	10	0.91	Negligible
S20	8 Sackville Street	17.13	14.67	0.86	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	26.00	0.93	Negligible	59	55	0.93	14	16	1.14	Negligible
S22	6 Sackville Street	27.66	26.07	0.94	Negligible	59	50	0.85	14	12	0.86	Negligible
S23	6 Sackville Street	23.55	23.36	0.99	Negligible	54	55	1.02	15	16	1.07	Negligible
S26	8 Sackville Street	34.06	30.98	0.91	Negligible	73	69	0.95	22	20	0.91	Negligible
S27	8 Sackville Street	34.26	31.71	0.93	Negligible	76	72	0.95	22	21	0.95	Negligible
S28	6 Sackville Street	33.96	31.60	0.93	Negligible	72	68	0.94	19	18	0.95	Negligible
S33	Tanfields - GF	28.19	24.12	0.86	Negligible	68	61	0.90	16	10	0.63	Negligible
S34	Tanfields - GF	28.21	25.25	0.90	Negligible	71	62	0.87	19	10	0.53	Negligible
S35	Tanfields - 1F	33.12	29.16	0.88	Negligible	78	72	0.92	24	18	0.75	Negligible
S36	Tanfields - 1F	33.29	30.09	0.90	Negligible	78	72	0.92	24	18	0.75	Negligible

Table 6 Option5 - Daylight and Sunlight Results

Syntegra Consulting Ltd, Syntegra House, 63 Milford Road, Reading, Berkshire, RG1 8LG

T: 0845 0091625

E: mail@syntegra-epc.co.uk

Registered Company No. 06408056

VAT Registration No. 980016044



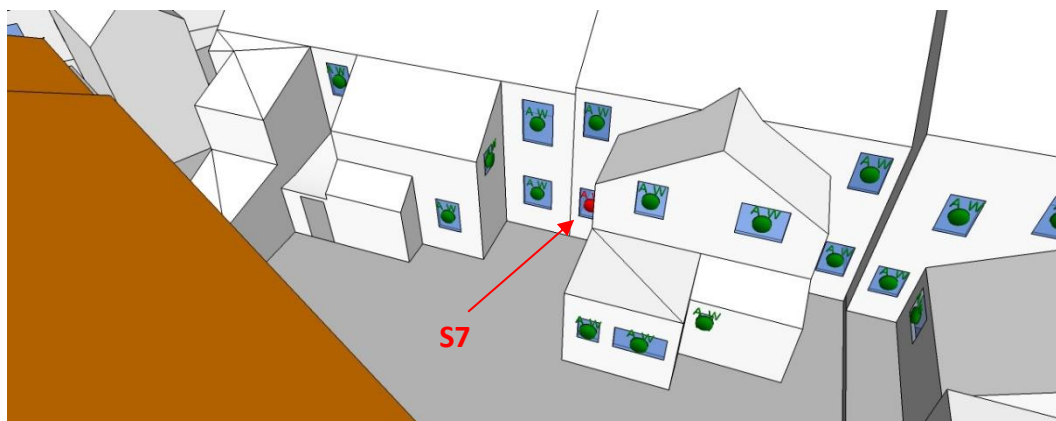
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

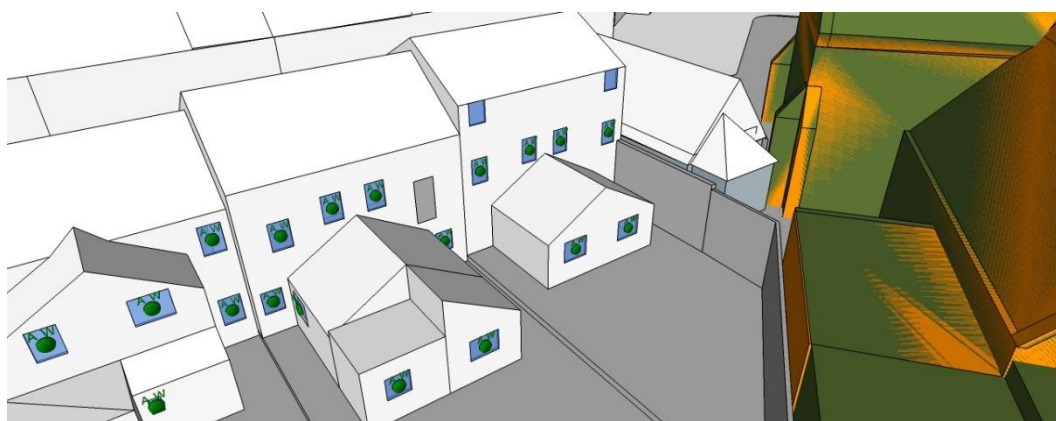
- Daylight

6-18 Sackville Street

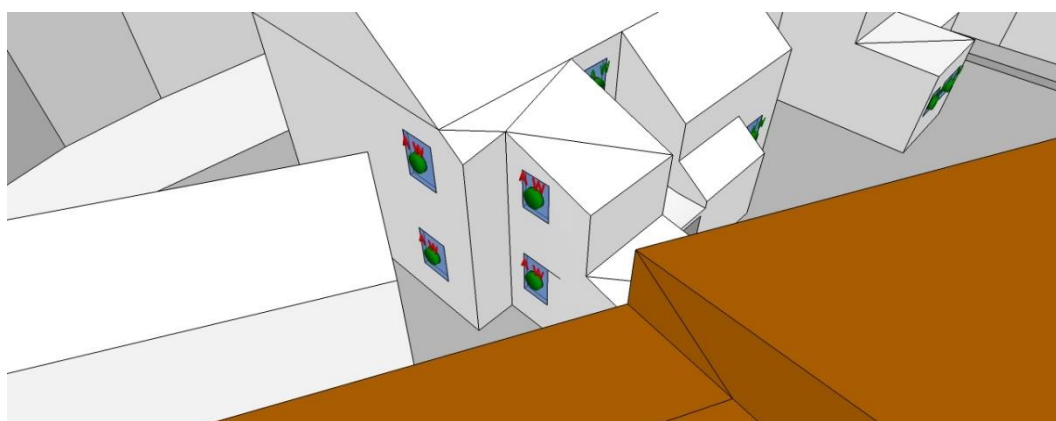
Only one surface (S7) on the ground floor at 12 Sackville Street will be adversely impacted by the option 5. However, the surface has already experienced a poor level of VSC value (18.21) and the loss of VSC value is less than 30%. Therefore, it can be considered that the impact of the option 5 on 12 Sackville Street will be minimal.



Windows at 10-16 Sackville Street – option 5



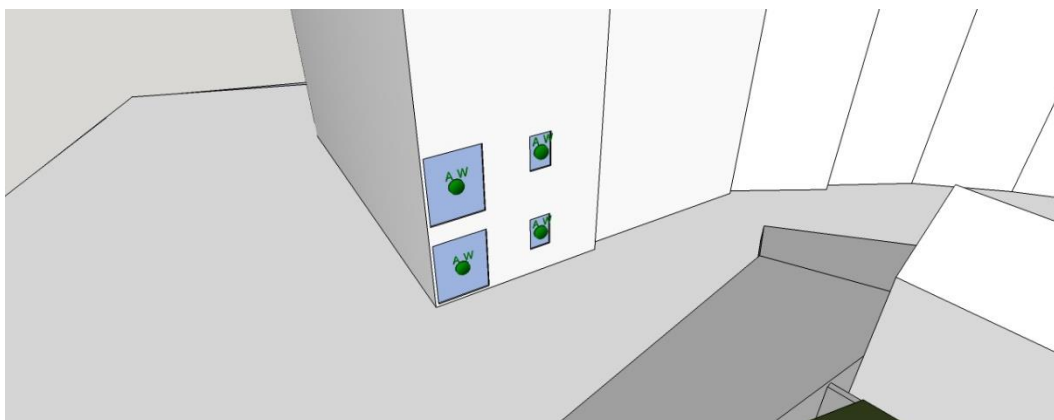
Windows at 2-8 Sackville Street – option 5



Windows at 18 Sackville Street – option 5

Tanfields

None of the surfaces at Tanfields will be impacted by the option 5 in terms of daylight.



Windows at Tanfields – option 5

- **Sunlight**

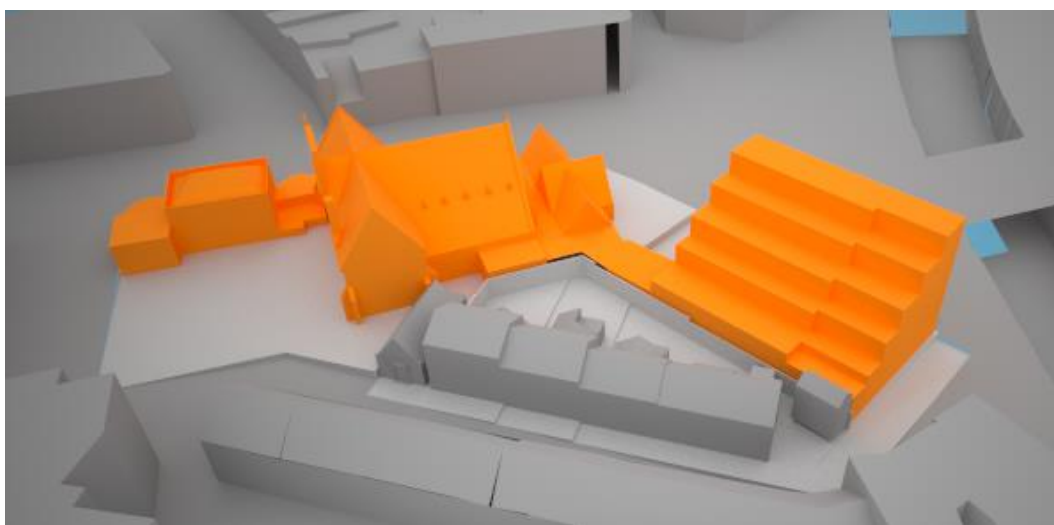
In terms of the sunlight, only one surface (S7) on the ground floor at 12 Sackville Street will be adversely impacted by the option 5. However, the surface has achieved more than 20% (22%) of APSH value and value is quite close the BRE criteria. Therefore, it can be considered that the impact of the option 5 on 12 Sackville Street will be minimal.

6.6 Option 6

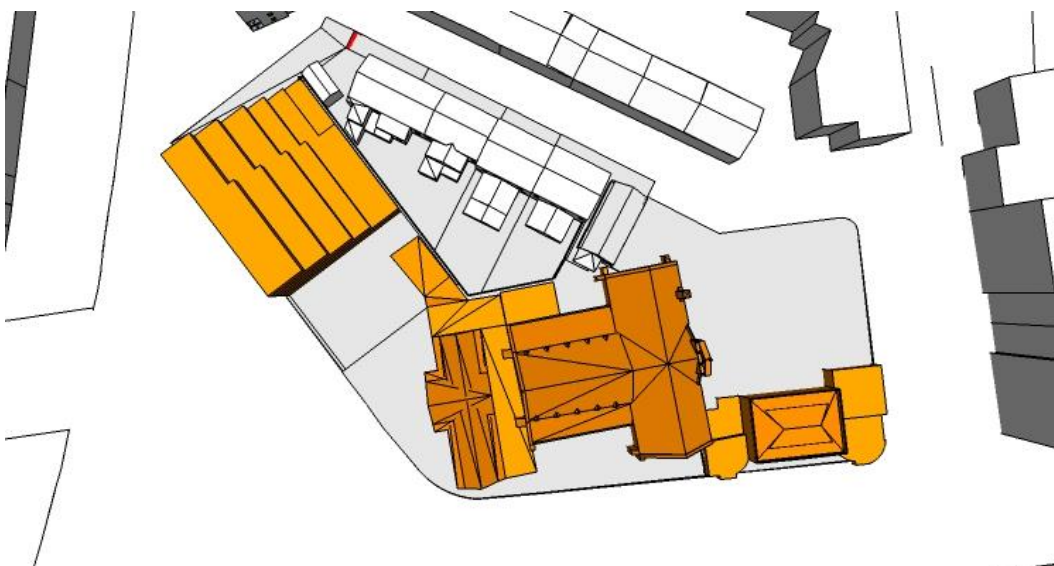
6.6.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

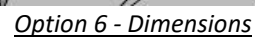
- **Height:** The height of each floors is assumed 3m. The total height is **18m (6 storey)**.
- **Building Size:** The building size is designed by site boundary with **22m x 30m**
- **25° rule:** The massing has been chopped by the 25° sloped planes from the centre of affected windows at 2-18 Sackville Street on ground floor.
- Sloped surfaces have been trimmed with 3m high.
- 1 more story (5th floor) is added.



Option 6 – Bird's-eye view



Option 6 – Plan view



6.6.2 Results for Option 6

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	11.59	0.93	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	9.03	0.80	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	21.33	0.94	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	18.36	0.86	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	21.58	0.80	Negligible	62	49	0.79	18	11	0.61	Negligible
S6	14 Sackville Street	21.01	17.16	0.82	Negligible	43	36	0.84	14	8	0.57	Negligible
S7	12 Sackville Street	18.21	13.57	0.74	Minor Adverse	29	22	0.76	6	3	0.50	Minor Adverse
S8	12 Sackville Street	27.62	22.29	0.81	Negligible	64	49	0.77	15	10	0.67	Negligible
S9	12 Sackville Street	28.21	23.27	0.82	Negligible	66	53	0.80	16	12	0.75	Negligible
S10	10 Sackville Street	21.82	20.07	0.92	Negligible	50	48	0.96	17	15	0.88	Negligible
S11	10 Sackville Street	17.66	17.36	0.98	Negligible	30	30	1.00	11	11	1.00	Negligible
S12	16 Sackville Street	27.20	21.69	0.80	Negligible	52	44	0.85	18	11	0.61	Negligible

S13	14 Sackville Street	22.48	22.19	0.99	Negligible	49	46	0.94	17	14	0.82	Negligible
S14	14 Sackville Street	32.13	26.92	0.84	Negligible	70	63	0.90	23	18	0.78	Negligible
S15	12 Sackville Street	34.30	28.78	0.84	Negligible	76	68	0.89	23	18	0.78	Negligible
S16	12 Sackville Street	34.51	28.45	0.82	Negligible	76	67	0.88	23	18	0.78	Negligible
S17	10 Sackville Street	34.58	29.52	0.85	Negligible	76	68	0.89	23	17	0.74	Negligible
S18	10 Sackville Street	30.06	26.97	0.90	Negligible	53	49	0.92	19	16	0.84	Negligible
S19	8 Sackville Street	24.71	22.19	0.90	Negligible	46	43	0.93	11	10	0.91	Negligible
S20	8 Sackville Street	17.13	14.55	0.85	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	25.84	0.93	Negligible	59	53	0.90	14	16	1.14	Negligible
S22	6 Sackville Street	27.66	25.96	0.94	Negligible	59	50	0.85	14	12	0.86	Negligible
S23	6 Sackville Street	23.55	23.36	0.99	Negligible	54	55	1.02	15	16	1.07	Negligible
S26	8 Sackville Street	34.06	30.89	0.91	Negligible	73	69	0.95	22	20	0.91	Negligible
S27	8 Sackville Street	34.26	31.62	0.92	Negligible	76	72	0.95	22	21	0.95	Negligible
S28	6 Sackville Street	33.96	31.52	0.93	Negligible	72	68	0.94	19	18	0.95	Negligible
S33	Tanfields - GF	28.19	24.34	0.86	Negligible	68	61	0.90	16	10	0.63	Negligible
S34	Tanfields - GF	28.21	25.34	0.90	Negligible	71	62	0.87	19	10	0.53	Negligible
S35	Tanfields - 1F	33.12	29.23	0.88	Negligible	78	72	0.92	24	18	0.75	Negligible
S36	Tanfields - 1F	33.29	30.00	0.90	Negligible	78	72	0.92	24	18	0.75	Negligible

Table 7 Option6 - Daylight and Sunlight Results

Syntegra Consulting Ltd, Syntegra House, 63 Milford Road, Reading, Berkshire, RG1 8LG

T: 0845 0091625

E: mail@syntegra-epc.co.uk

Registered Company No. 06408056

VAT Registration No. 980016044



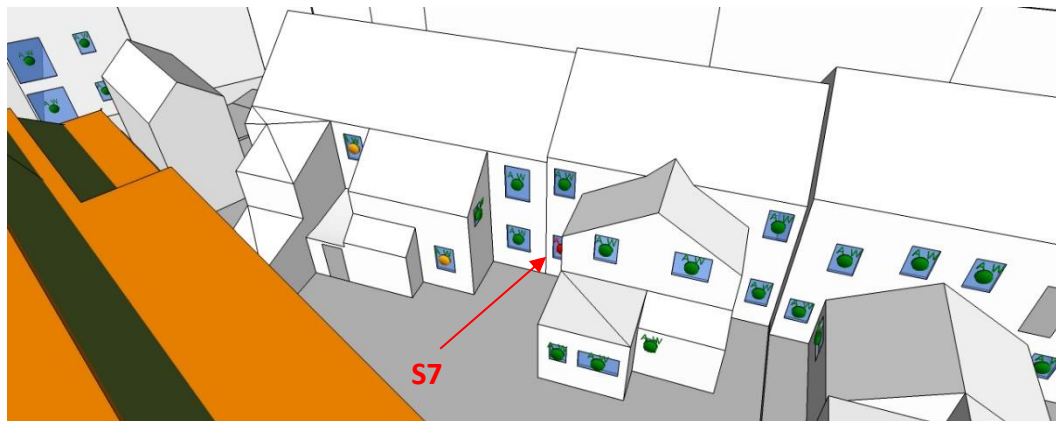
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

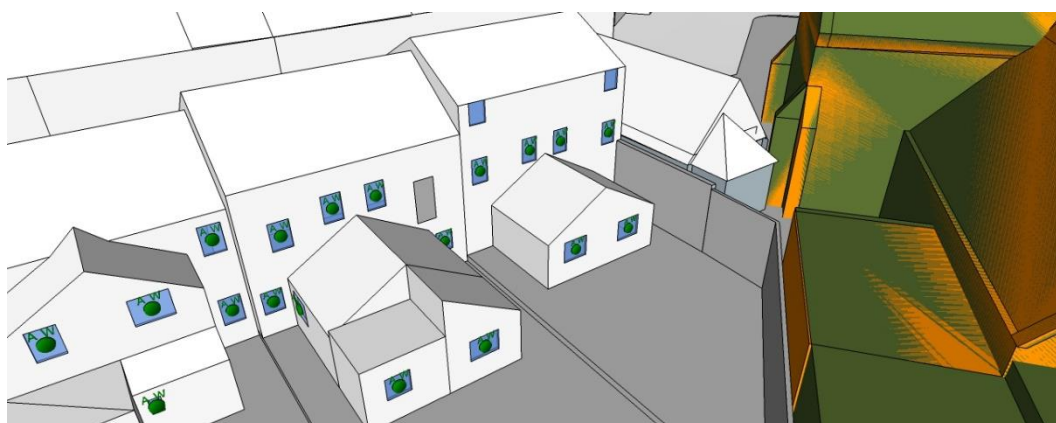
- Daylight

6-18 Sackville Street

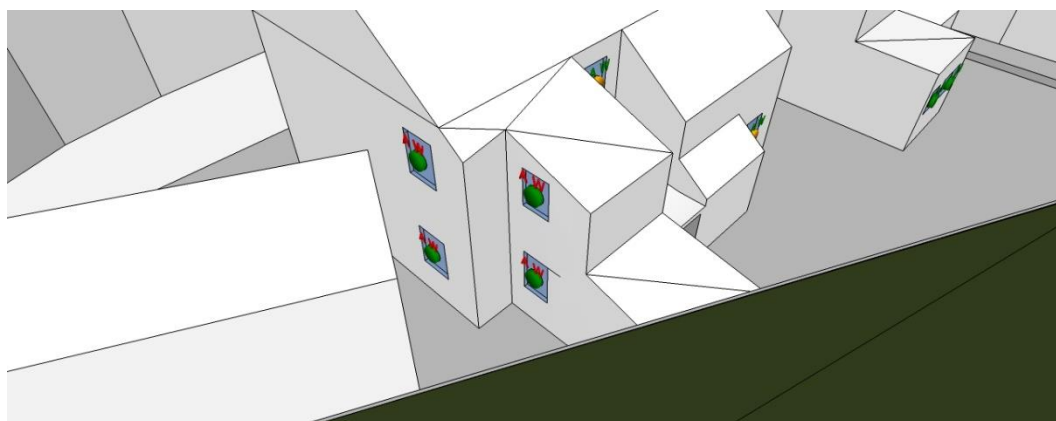
Only one surface (S7) on the ground floor will be adversely impacted by the option 6. However, the S7 surface at 12 Sackville Street has already experienced a poor level of VSC value (18.21) and the loss of VSC value is less than 30%. Therefore, it can be considered that the impact of the option 6 on 12 Sackville Street will be minimal.



Windows at 10-16 Sackville Street – option 6



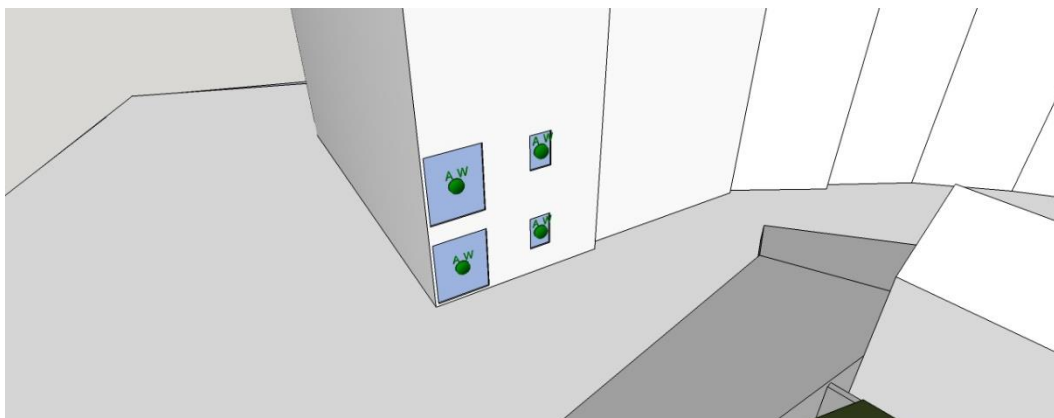
Windows at 2-8 Sackville Street – option 6



Windows at 18 Sackville Street – option 6

Tanfields

None of the surfaces at the Tanfields will be impacted by the option 6 in terms of daylight.



Windows at Tanfields – option 6

- **Sunlight**

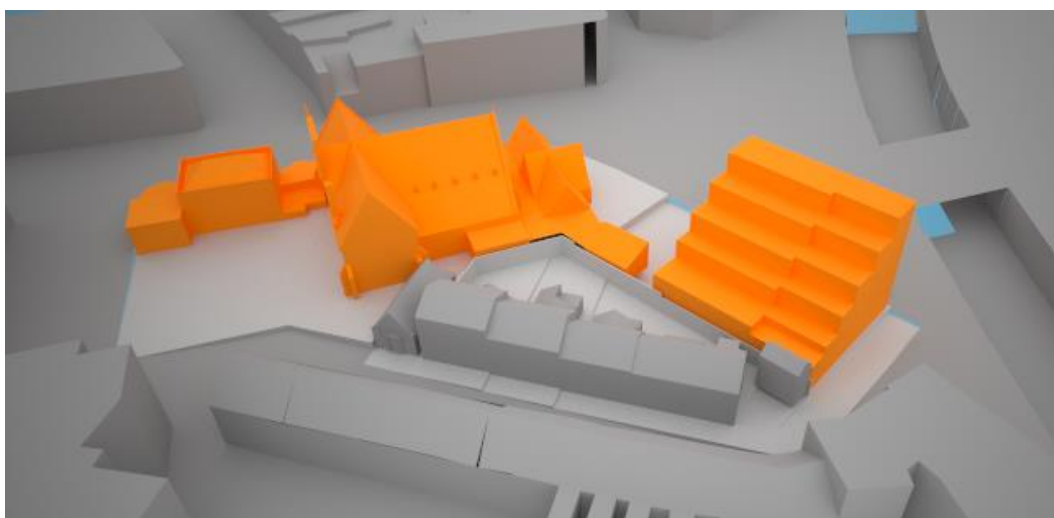
In terms of the sunlight, only one surface (S7) on the ground floor at 12 Sackville Street will be adversely impacted by the option 6. However, the surface has achieved more than 20% (22%) of APSH value and value is quite close the BRE criteria. Therefore, it can be considered that the impact of the option 6 on 12 Sackville Street will be minimal.

6.7 Option 7

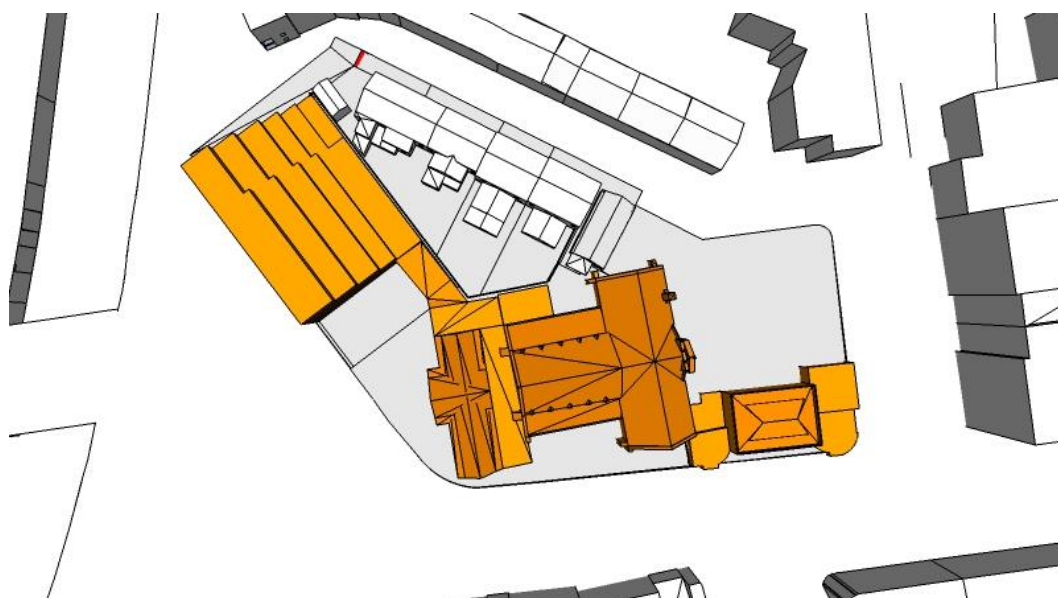
6.7.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

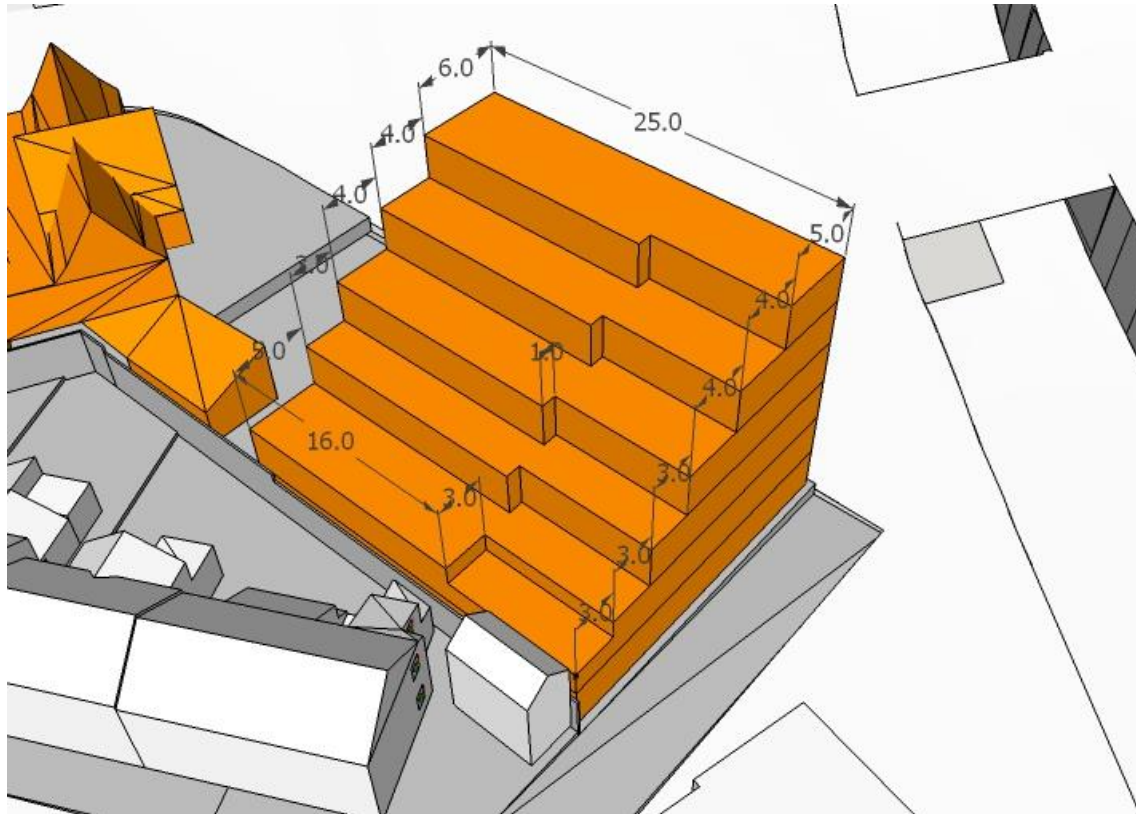
- **Height:** The height of each floors is assumed 3m. The total height is **18m (6 storey)**.
- **Building Size:** The building size is designed by site boundary with **22m x 25m**
- **25° rule:** The massing has been chopped by the 25° sloped planes from the centre of affected windows at 2-18 Sackville Street on ground floor.
- Sloped surfaces have been trimmed with 3m high.
- 5th floor is added.



Option 7 – Bird's-eye view



Option 7 – Plan view



Option 7 - Dimensions

6.7.2 Results for Option 7

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	11.59	0.93	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	9.03	0.80	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	21.33	0.94	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	18.36	0.86	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	22.19	0.82	Negligible	62	50	0.81	18	12	0.67	Negligible
S6	14 Sackville Street	21.01	18.23	0.87	Negligible	43	38	0.88	14	10	0.71	Negligible
S7	12 Sackville Street	18.21	14.54	0.80	Negligible	29	23	0.79	6	4	0.67	Minor Adverse
S8	12 Sackville Street	27.62	24.76	0.90	Negligible	64	55	0.86	15	15	1.00	Negligible
S9	12 Sackville Street	28.21	26.19	0.93	Negligible	66	59	0.89	16	17	1.06	Negligible
S10	10 Sackville Street	21.82	22.34	1.02	Negligible	50	51	1.02	17	18	1.06	Negligible
S11	10 Sackville Street	17.66	17.70	1.00	Negligible	30	31	1.03	11	12	1.09	Negligible
S12	16 Sackville Street	27.20	22.24	0.82	Negligible	52	46	0.88	18	13	0.72	Negligible

S13	14 Sackville Street	22.48	22.36	0.99	Negligible	49	48	0.98	17	16	0.94	Negligible
S14	14 Sackville Street	32.13	28.12	0.88	Negligible	70	64	0.91	23	19	0.83	Negligible
S15	12 Sackville Street	34.30	30.06	0.88	Negligible	76	68	0.89	23	18	0.78	Negligible
S16	12 Sackville Street	34.51	30.34	0.88	Negligible	76	69	0.91	23	20	0.87	Negligible
S17	10 Sackville Street	34.58	31.77	0.92	Negligible	76	73	0.96	23	22	0.96	Negligible
S18	10 Sackville Street	30.06	28.44	0.95	Negligible	53	51	0.96	19	18	0.95	Negligible
S19	8 Sackville Street	24.71	23.51	0.95	Negligible	46	44	0.96	11	11	1.00	Negligible
S20	8 Sackville Street	17.13	15.15	0.88	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	26.70	0.96	Negligible	59	54	0.92	14	16	1.14	Negligible
S22	6 Sackville Street	27.66	26.65	0.96	Negligible	59	52	0.88	14	12	0.86	Negligible
S23	6 Sackville Street	23.55	23.36	0.99	Negligible	54	55	1.02	15	16	1.07	Negligible
S26	8 Sackville Street	34.06	32.02	0.94	Negligible	73	70	0.96	22	21	0.95	Negligible
S27	8 Sackville Street	34.26	32.45	0.95	Negligible	76	72	0.95	22	21	0.95	Negligible
S28	6 Sackville Street	33.96	32.27	0.95	Negligible	72	68	0.94	19	18	0.95	Negligible
S33	Tanfields - GF	28.19	24.34	0.86	Negligible	68	61	0.90	16	10	0.63	Negligible
S34	Tanfields - GF	28.21	25.34	0.90	Negligible	71	62	0.87	19	10	0.53	Negligible
S35	Tanfields - 1F	33.12	29.24	0.88	Negligible	78	72	0.92	24	18	0.75	Negligible
S36	Tanfields - 1F	33.29	30.01	0.90	Negligible	78	72	0.92	24	18	0.75	Negligible

Table 8 Option7 - Daylight and Sunlight Results

Syntegra Consulting Ltd, Syntegra House, 63 Milford Road, Reading, Berkshire, RG1 8LG

T: 0845 0091625

E: mail@syntegra-epc.co.uk

Registered Company No. 06408056

VAT Registration No. 980016044



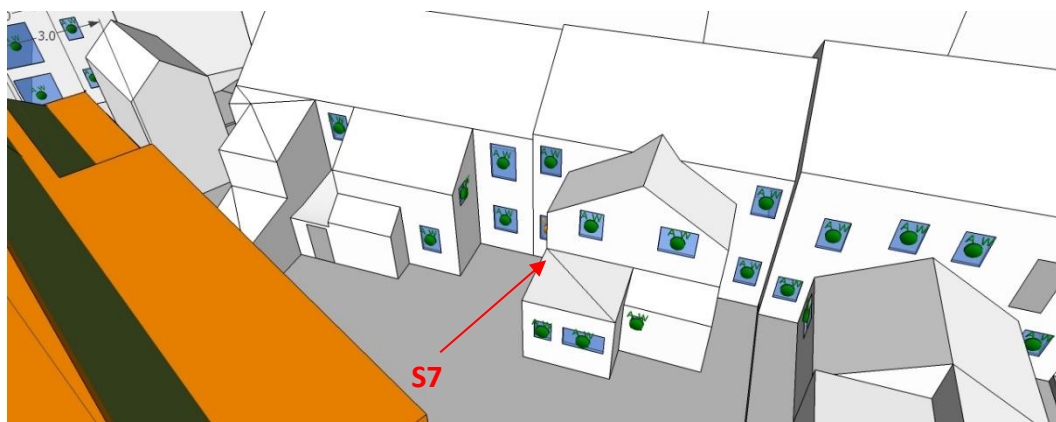
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

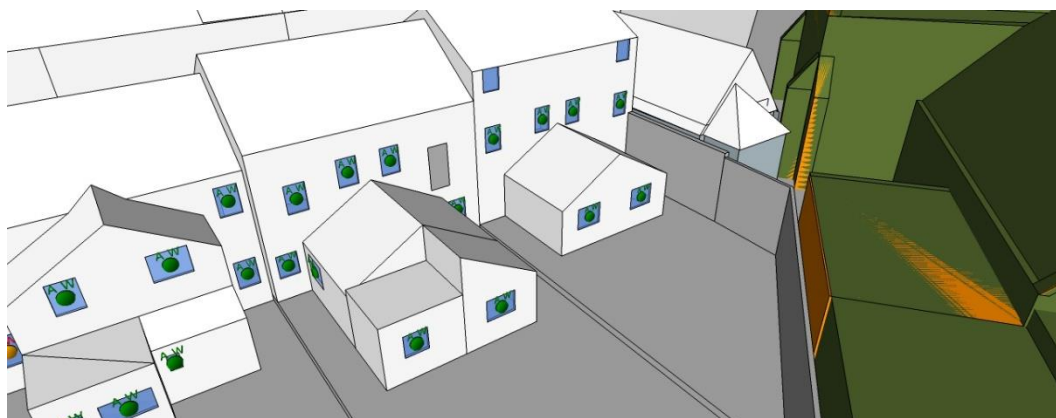
- Daylight

6-18 Sackville Street

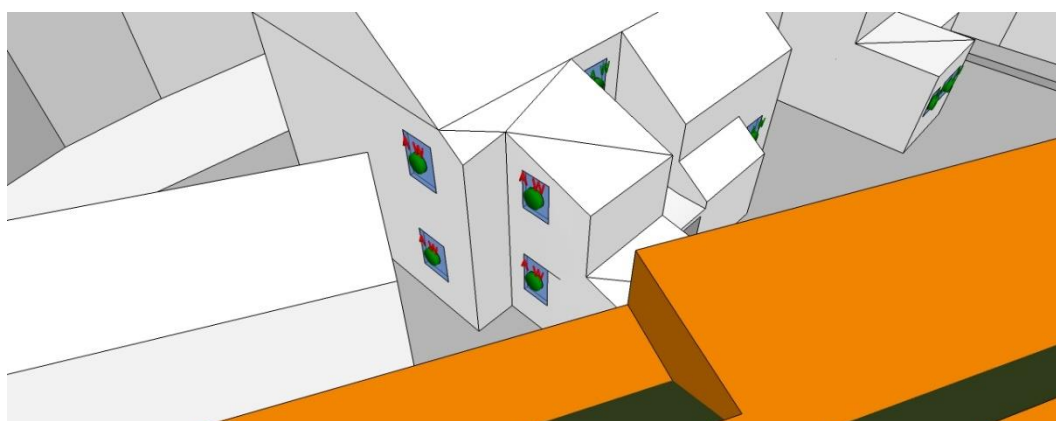
None of the surfaces will be adversely impacted by the option 7 regarding daylight.



Windows at 10-16 Sackville Street – option 7



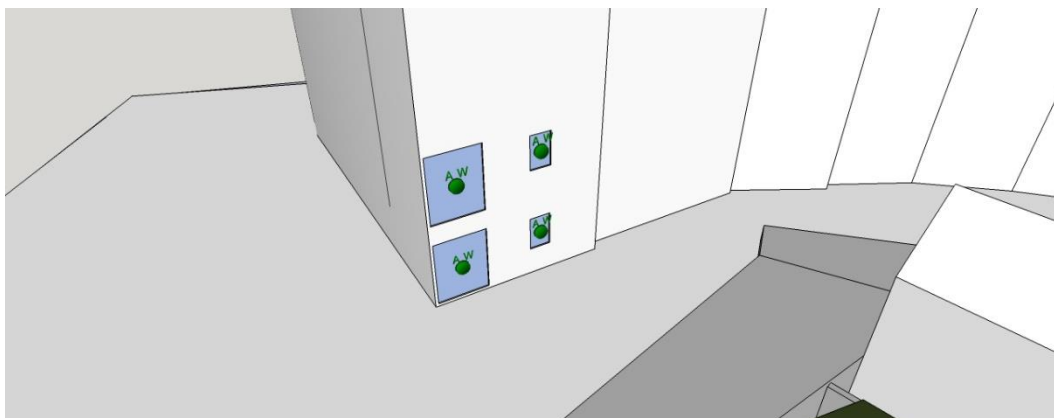
Windows at 2-8 Sackville Street – option 7



Windows at 18 Sackville Street – option 7

Tanfields

None of the surfaces on the ground and first floor at Tanfields will be impacted by the option 7.



Windows at Tanfields – option 7

- **Sunlight**

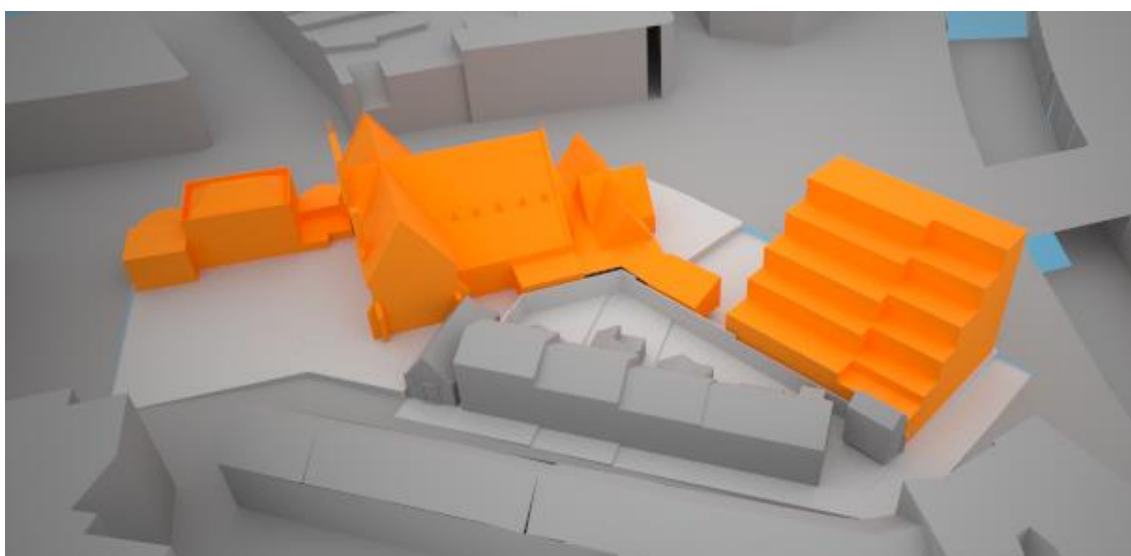
In terms of the sunlight, only one surface (S7) on the ground floor at 12 Sackville Street will be adversely impacted by the option 7. However, the surface has achieved more than 20% (23%) of APSH value and value is quite close the BRE criteria. Therefore, it can be considered that the impact of the option 7 on 12 Sackville Street will be minimal.

6.8 Option 8

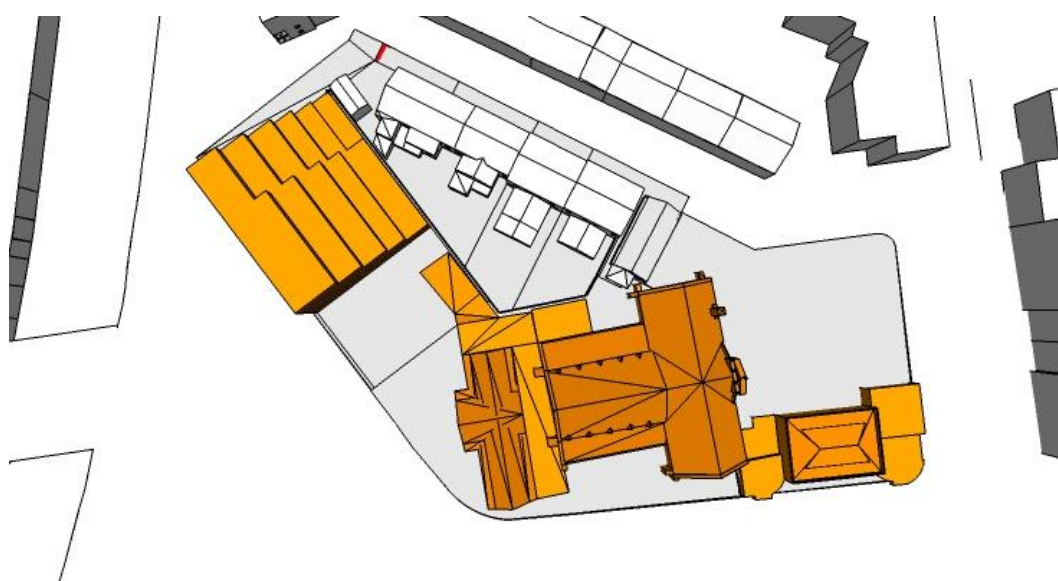
6.8.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

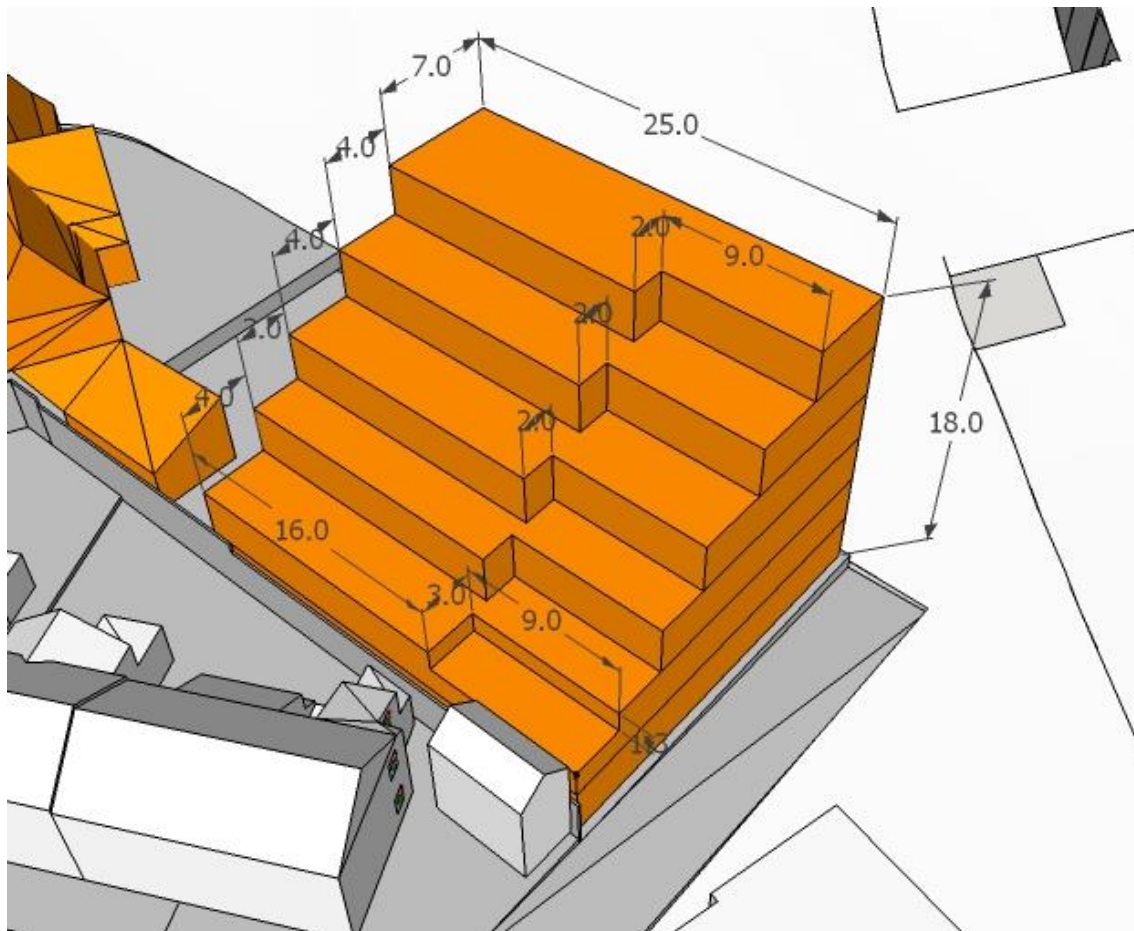
- **Height:** The height of each floors is assumed 3m. The total height is **18m (6 storey)**.
- **Building Size:** The building size is designed by site boundary with **22m x 30m**
- **25° rule:** The massing has been chopped by the 25° sloped planes from the centre of affected windows at 2-18 Sackville Street on ground floor.
- Sloped surfaces have been trimmed with 3m high.
- 1 more story (5th floor) is added.
- **Increase 1 meter** of the width from the second floor to the fifth floor.



Option 8 – Bird's-eye view



Option 8 – Plan view



Option 8 - Dimensions

6.8.2 Results for Option 8

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **6,8,10,12,14,16,18 Sackville Street and Tanfields** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	18 Sackville Street	12.41	11.55	0.93	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S2	18 Sackville Street	11.24	9.01	0.80	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S3	18 Sackville Street	22.74	21.30	0.94	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S4	18 Sackville Street	21.33	18.32	0.86	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S5	14 Sackville Street	26.99	21.63	0.80	Negligible	62	49	0.79	18	12	0.67	Negligible
S6	14 Sackville Street	21.01	17.94	0.85	Negligible	43	38	0.88	14	10	0.71	Negligible
S7	12 Sackville Street	18.21	14.20	0.78	Minor Adverse	29	23	0.79	6	4	0.67	Minor Adverse
S8	12 Sackville Street	27.62	24.37	0.88	Negligible	64	55	0.86	15	15	1.00	Negligible
S9	12 Sackville Street	28.21	25.91	0.92	Negligible	66	57	0.86	16	17	1.06	Negligible
S10	10 Sackville Street	21.82	22.34	1.02	Negligible	50	51	1.02	17	18	1.06	Negligible
S11	10 Sackville Street	17.66	17.70	1.00	Negligible	30	31	1.03	11	12	1.09	Negligible
S12	16 Sackville Street	27.20	21.67	0.80	Negligible	52	43	0.83	18	10	0.56	Negligible

S13	14 Sackville Street	22.48	22.34	0.99	Negligible	49	48	0.98	17	16	0.94	Negligible
S14	14 Sackville Street	32.13	27.71	0.86	Negligible	70	63	0.90	23	19	0.83	Negligible
S15	12 Sackville Street	34.30	29.73	0.87	Negligible	76	67	0.88	23	18	0.78	Negligible
S16	12 Sackville Street	34.51	30.04	0.87	Negligible	76	67	0.88	23	19	0.83	Negligible
S17	10 Sackville Street	34.58	31.63	0.91	Negligible	76	72	0.95	23	22	0.96	Negligible
S18	10 Sackville Street	30.06	28.34	0.94	Negligible	53	51	0.96	19	18	0.95	Negligible
S19	8 Sackville Street	24.71	23.43	0.95	Negligible	46	44	0.96	11	11	1.00	Negligible
S20	8 Sackville Street	17.13	15.04	0.88	Negligible	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S21	8 Sackville Street	27.82	26.59	0.96	Negligible	59	54	0.92	14	16	1.14	Negligible
S22	6 Sackville Street	27.66	26.57	0.96	Negligible	59	51	0.86	14	12	0.86	Negligible
S23	6 Sackville Street	23.55	23.36	0.99	Negligible	54	55	1.02	15	16	1.07	Negligible
S26	8 Sackville Street	34.06	31.94	0.94	Negligible	73	70	0.96	22	21	0.95	Negligible
S27	8 Sackville Street	34.26	32.38	0.95	Negligible	76	72	0.95	22	21	0.95	Negligible
S28	6 Sackville Street	33.96	32.21	0.95	Negligible	72	68	0.94	19	18	0.95	Negligible
S33	Tanfields - GF	28.19	24.29	0.86	Negligible	68	61	0.90	16	10	0.63	Negligible
S34	Tanfields - GF	28.21	25.15	0.89	Negligible	71	62	0.87	19	10	0.53	Negligible
S35	Tanfields - 1F	33.12	28.98	0.88	Negligible	78	71	0.91	24	17	0.71	Negligible
S36	Tanfields - 1F	33.29	29.73	0.89	Negligible	78	71	0.91	24	17	0.71	Negligible

Table 9 Option9 - Daylight and Sunlight Results

Syntegra Consulting Ltd, Syntegra House, 63 Milford Road, Reading, Berkshire, RG1 8LG

T: 0845 0091625

E: mail@syntegra-epc.co.uk

Registered Company No. 06408056

VAT Registration No. 980016044



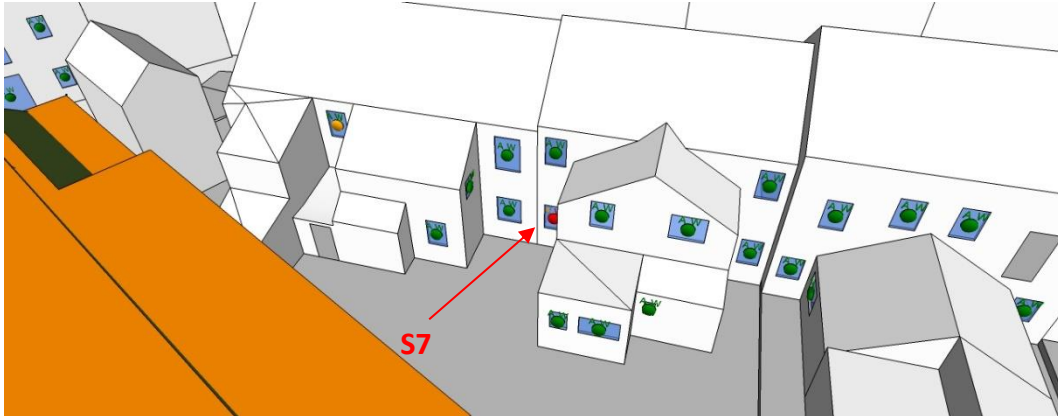
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered of concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

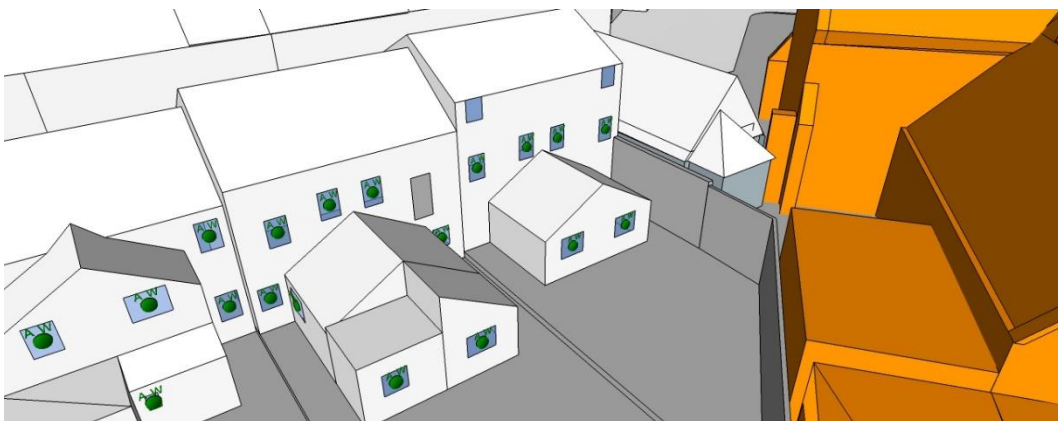
- Daylight

6-18 Sackville Street

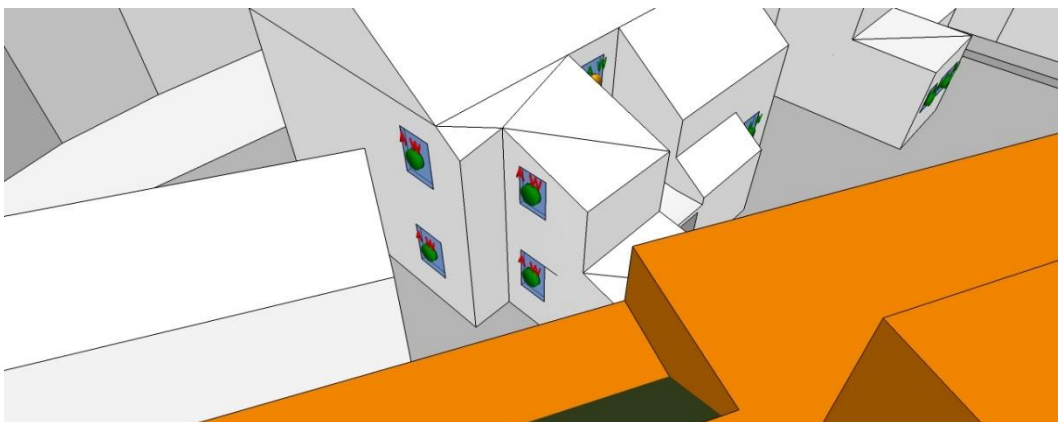
One surface (S7) on the ground floor at 12 Sackville Street will be adversely impacted by the option 8. However, the S7 surface at 12 Sackville Street has already experienced a poor level of VSC value (18.21) and the loss of VSC value is less than 30%. Therefore, it can be considered that the impact of the option 8 on 12 Sackville Street will be minimal.



Windows at 10-16 Sackville Street – option 8



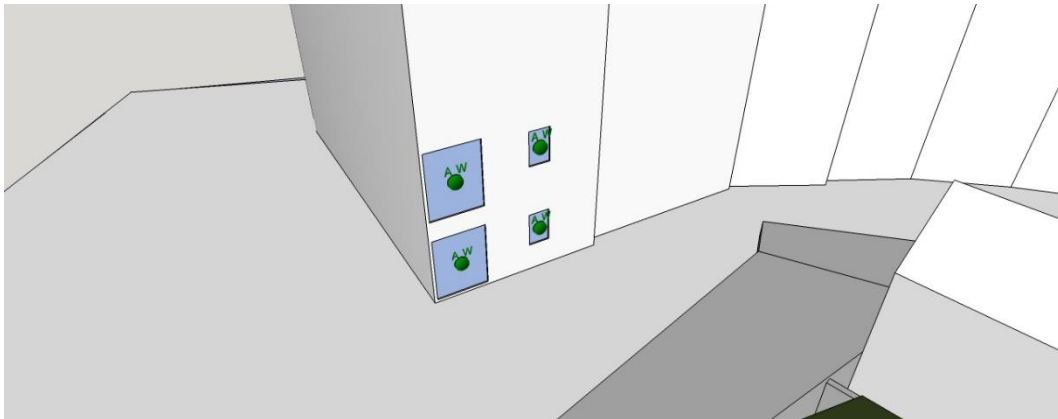
Windows at 2-8 Sackville Street – option 8



Windows at 18 Sackville Street – option 8

Tanfields

None of the surfaces on the ground and first floor at Tanfields will be impacted by the option 8.



Windows at Tanfields – option 8

- **Sunlight**

In terms of the sunlight, only one surface (S7) on the ground floor at 12 Sackville Street will be adversely impacted by the option 8. However, the surface has achieved more than 20% (23%) of APSH value and value is quite close the BRE criteria. Therefore, it can be considered that the impact of the option 8 on 12 Sackville Street will be minimal.

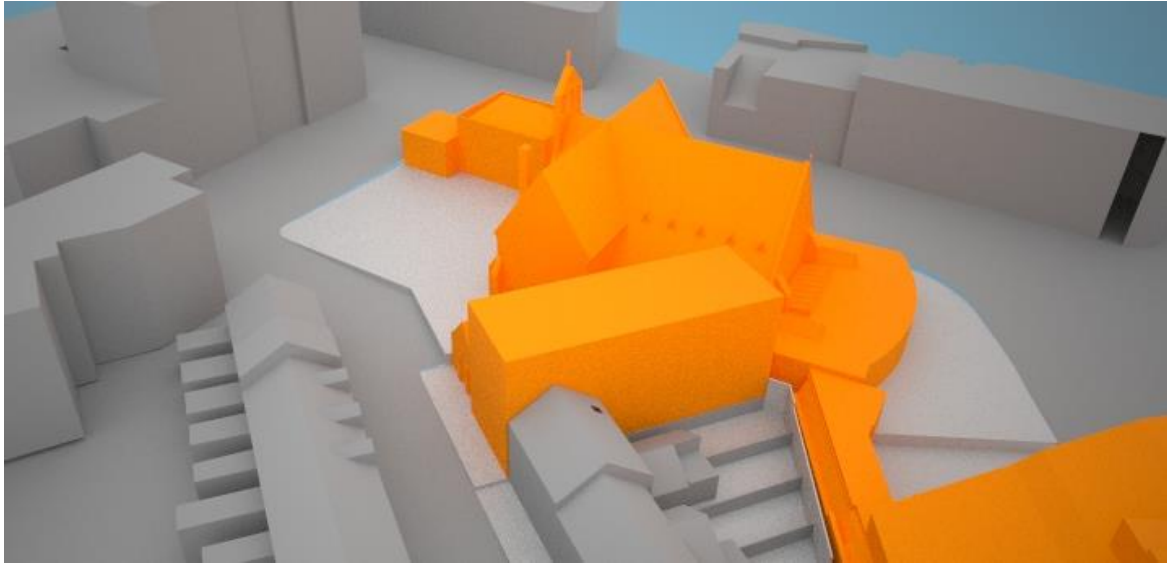
7 ASSESSMENT – SITE B

7.1 Option 1

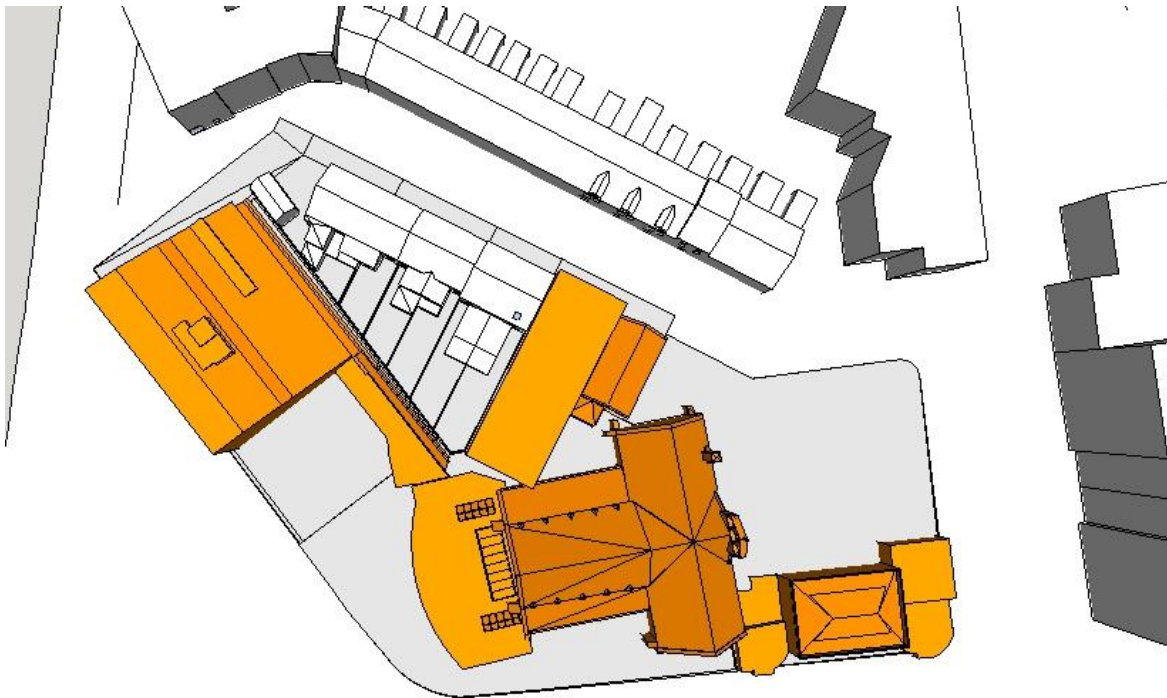
7.1.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

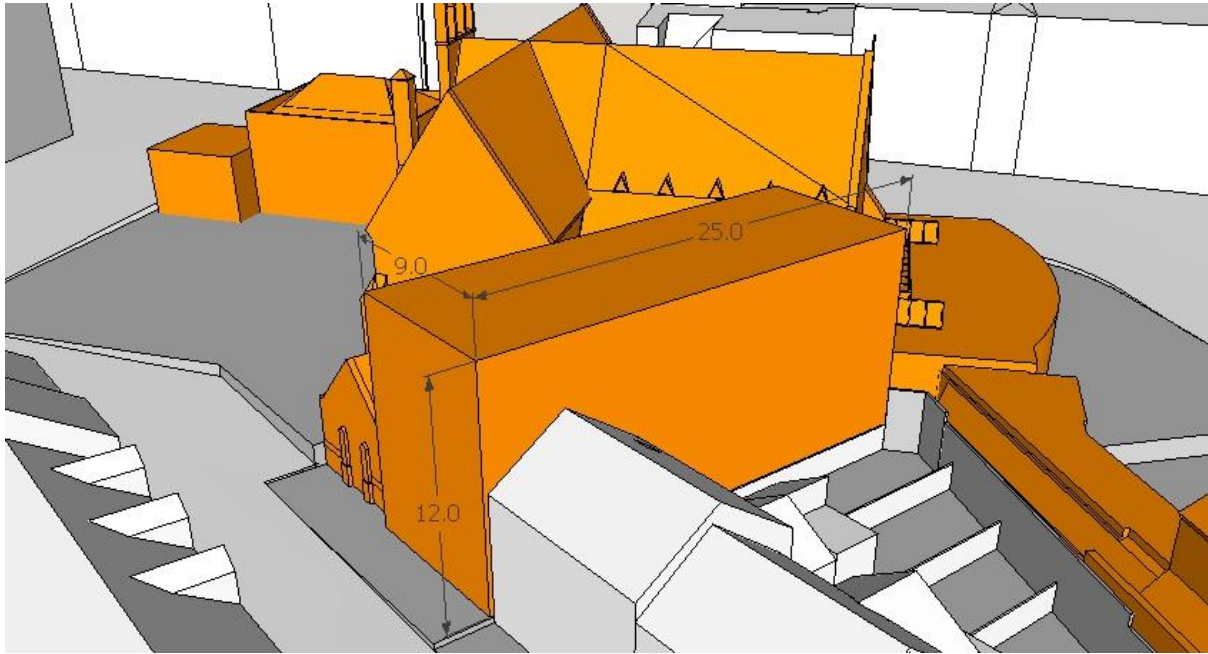
- **Height:** The height of each floors is assumed 3m. The total height is **12m (4 storey)**.
- **Building Size:** The building size is designed by site boundary with **9m x 25m**
- Initial assessment for benchmark



Option 1 – Bird's-eye view



Option 1 – Plan view



Option 1 – Dimensions

7.1.2 Results for Option 1

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **5,6,8,7,9,11 Sackville Street** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	8 Sackville Street	28.28	24.31	0.86	Negligible	64	43	0.67	14	11	0.79	Negligible
S2	8 Sackville Street	23.78	23.02	0.97	Negligible	42	42	1.00	9	10	1.11	Negligible
S3	8 Sackville Street	34.41	29.54	0.86	Negligible	73	55	0.75	22	14	0.64	Negligible
S4	8 Sackville Street	34.49	28.32	0.82	Negligible	76	53	0.70	22	12	0.55	Negligible
S5	6 Sackville Street	28.13	20.97	0.75	Minor Adverse	64	37	0.58	14	9	0.64	Negligible
S6	6 Sackville Street	22.75	12.09	0.53	Major Adverse	51	19	0.37	13	3	0.23	Major Adverse
S7	6 Sackville Street	23.97	13.88	0.58	Major Adverse	54	23	0.43	17	8	0.47	Major Adverse
S8	6 Sackville Street	34.17	26.05	0.76	Minor Adverse	72	46	0.64	19	10	0.53	Negligible
S9	11 Sackville Street	26.80	23.55	0.88	Negligible	66	60	0.91	14	9	0.64	Negligible
S10	11 Sackville Street	31.75	28.26	0.89	Negligible	71	65	0.92	19	13	0.68	Negligible
S11	11 Sackville Street	31.62	27.76	0.88	Negligible	71	64	0.90	19	12	0.63	Negligible
S12	11 Sackville Street	34.98	31.75	0.91	Negligible	78	71	0.91	25	18	0.72	Negligible

S13	9 Sackville Street	26.52	22.28	0.84	Negligible	64	55	0.86	13	9	0.69	Negligible
S14	9 Sackville Street	31.35	26.59	0.85	Negligible	71	64	0.90	19	13	0.68	Negligible
S15	9 Sackville Street	31.28	26.49	0.85	Negligible	70	62	0.89	18	11	0.61	Negligible
S16	9 Sackville Street	34.56	30.17	0.87	Negligible	77	70	0.91	24	17	0.71	Negligible
S17	7 Sackville Street	26.97	23.11	0.86	Negligible	64	55	0.86	14	12	0.86	Negligible
S18	7 Sackville Street	31.26	27.06	0.87	Negligible	72	66	0.92	19	15	0.79	Negligible
S19	7 Sackville Street	31.31	27.53	0.88	Negligible	73	68	0.93	20	18	0.90	Negligible
S20	7 Sackville Street	34.29	30.51	0.89	Negligible	76	72	0.95	23	19	0.83	Negligible
S21	5 Sackville Street	27.61	24.63	0.89	Negligible	64	59	0.92	14	14	1.00	Negligible
S22	5 Sackville Street	31.54	28.22	0.89	Negligible	74	68	0.92	21	18	0.86	Negligible
S23	5 Sackville Street	31.44	28.64	0.91	Negligible	71	65	0.92	18	15	0.83	Negligible
S24	5 Sackville Street	34.21	31.12	0.91	Negligible	76	70	0.92	23	18	0.78	Negligible
S25	5 Sackville Street	34.17	31.44	0.92	Negligible	74	72	0.97	21	20	0.95	Negligible
RL1	6 Sackville Street	86.40	41.60	0.48	Negligible	75	51	0.67	24	14	0.58	Negligible

Table 10 Option1 - Daylight and Sunlight Results

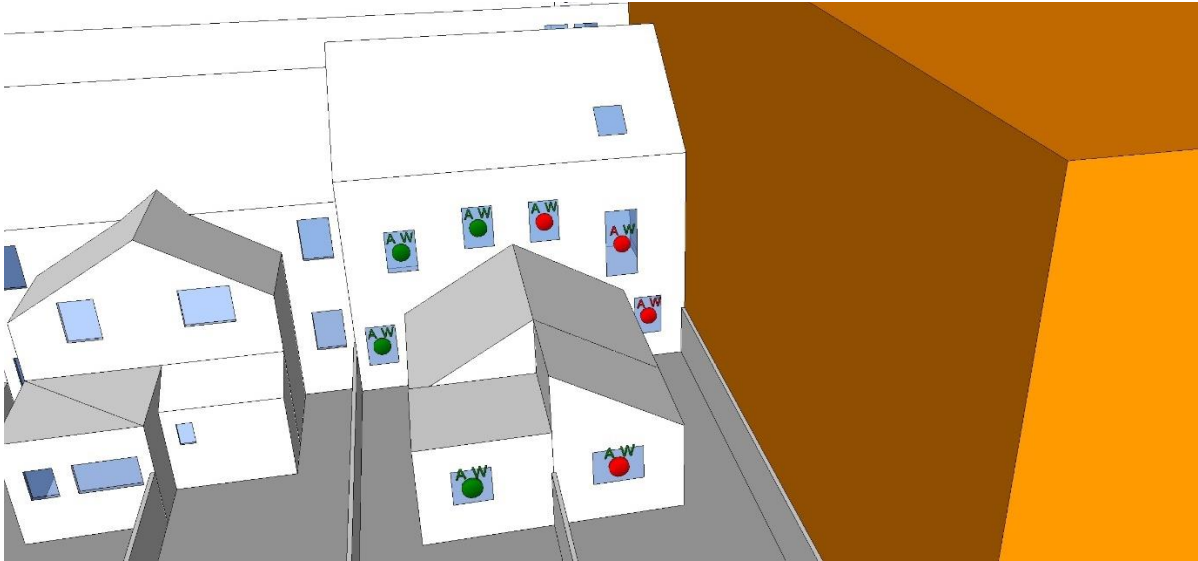
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered a concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

- Daylight

6 and 8 Sackville Street

4 surfaces (S5-S8) at 6 Sackville Street will be adversely impacted by the option 1 in terms of daylight.



Windows at 6 and 8 Sackville Street – option 1

5,7,9,11 Sackville Street

None of the surface will be adversely impacted by the option 1 in terms of daylight.



Windows at 5,7,9,11 Sackville Street – option 1

- Sunlight

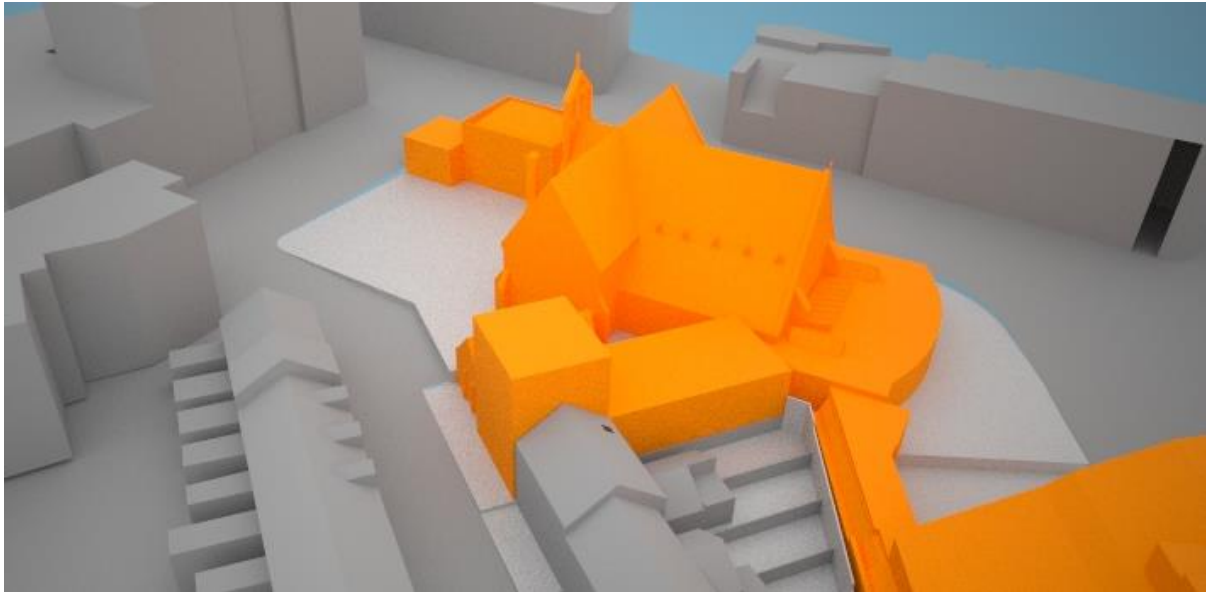
In terms of the sunlight, 2 surfaces (S6 and S7) at 6 Sackville Street will be adversely impacted by the option 1.

7.2 Option 2

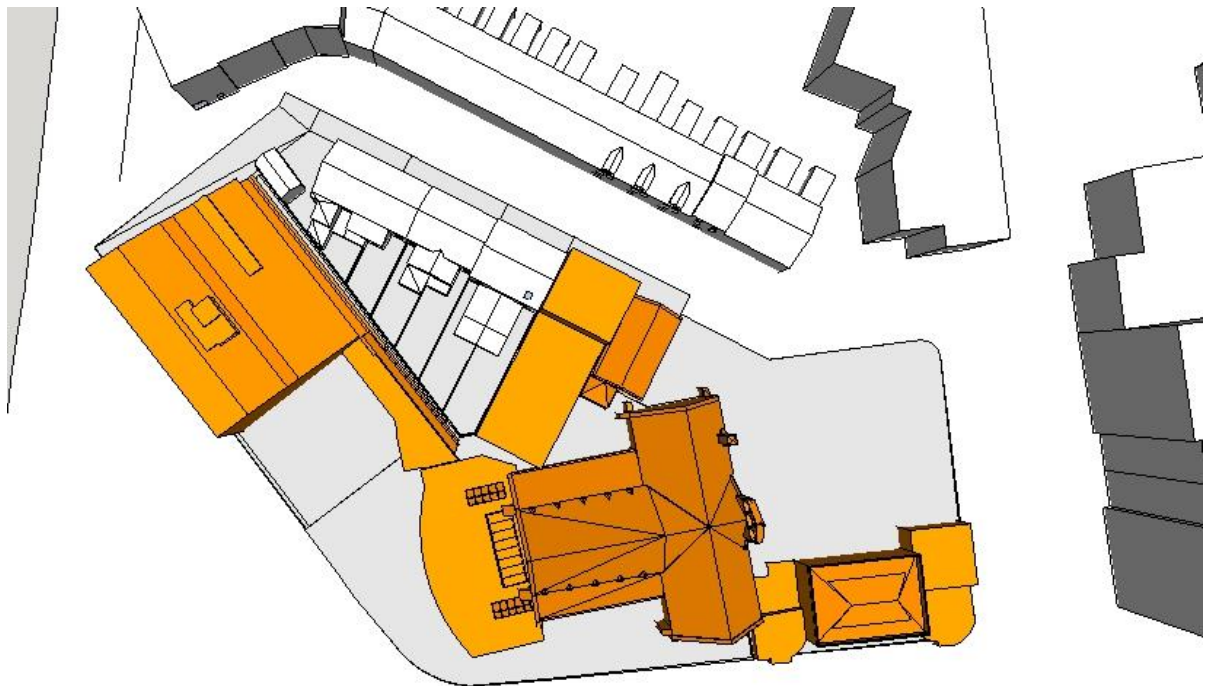
7.2.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

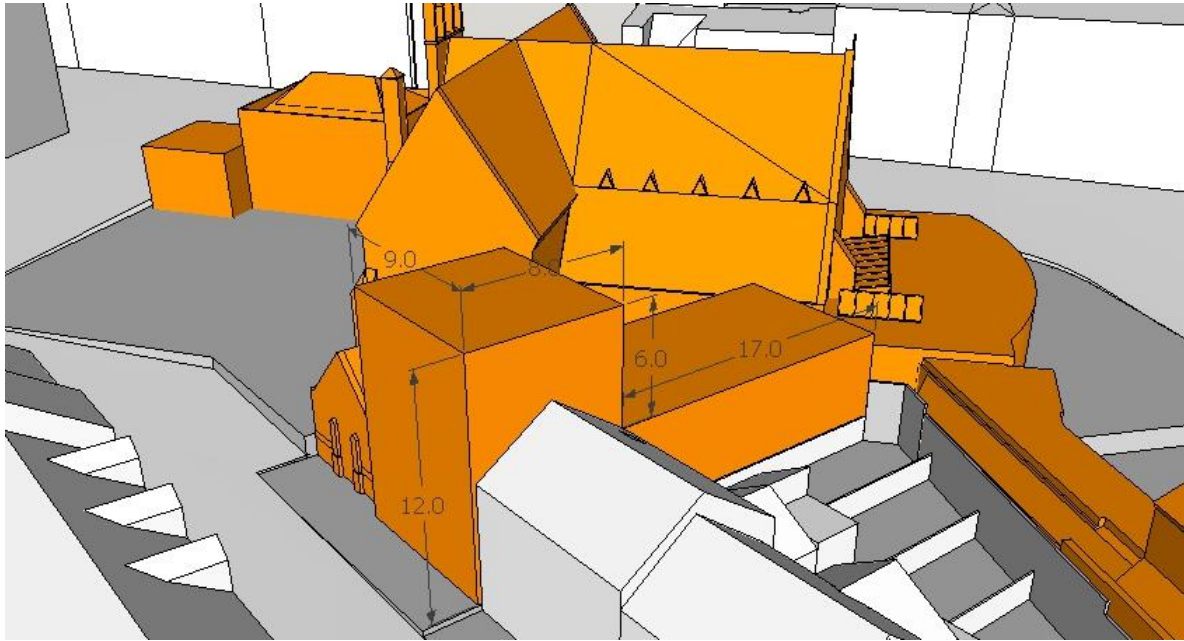
- **Height:** The height of each floors is assumed 3m. The total height is **12m (4 storey)**.
- **Building Size:** The building size is designed by site boundary with **9m x 25m**
- **Height of the rear volume has been cut out (6m)** to reduce the negative impacts on windows at 6 Sackville Street.



Option 2 – Bird's-eye view



Option 2 – Plan view



Option 2 – Dimensions

7.2.2 Results for Option 2

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **5,6,8,7,9,11 Sackville Street** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	8 Sackville Street	28.28	27.75	0.98	Negligible	64	58	0.91	14	15	1.07	Negligible
S2	8 Sackville Street	23.78	23.02	0.97	Negligible	42	42	1.00	9	10	1.11	Negligible
S3	8 Sackville Street	34.41	33.17	0.96	Negligible	73	70	0.96	22	21	0.95	Negligible
S4	8 Sackville Street	34.49	33.43	0.97	Negligible	76	74	0.97	22	21	0.95	Negligible
S5	6 Sackville Street	28.13	24.71	0.88	Negligible	64	46	0.72	14	11	0.79	Negligible
S6	6 Sackville Street	22.75	13.98	0.61	Moderate Adverse	51	20	0.39	13	3	0.23	Major Adverse
S7	6 Sackville Street	23.97	20.16	0.84	Negligible	54	37	0.69	17	11	0.65	Negligible
S8	6 Sackville Street	34.17	33.22	0.97	Negligible	72	70	0.97	19	18	0.95	Negligible
S9	11 Sackville Street	26.80	23.56	0.88	Negligible	66	60	0.91	14	9	0.64	Negligible
S10	11 Sackville Street	31.75	28.27	0.89	Negligible	71	65	0.92	19	13	0.68	Negligible
S11	11 Sackville Street	31.62	27.76	0.88	Negligible	71	64	0.90	19	12	0.63	Negligible
S12	11 Sackville Street	34.98	31.76	0.91	Negligible	78	71	0.91	25	18	0.72	Negligible
S13	9 Sackville Street	26.52	22.28	0.84	Negligible	64	55	0.86	13	9	0.69	Negligible

S14	9 Sackville Street	31.35	26.59	0.85	Negligible	71	64	0.90	19	13	0.68	Negligible
S15	9 Sackville Street	31.28	26.49	0.85	Negligible	70	62	0.89	18	11	0.61	Negligible
S16	9 Sackville Street	34.56	30.17	0.87	Negligible	77	70	0.91	24	17	0.71	Negligible
S17	7 Sackville Street	26.97	23.11	0.86	Negligible	64	55	0.86	14	12	0.86	Negligible
S18	7 Sackville Street	31.26	27.06	0.87	Negligible	72	66	0.92	19	15	0.79	Negligible
S19	7 Sackville Street	31.31	27.56	0.88	Negligible	73	68	0.93	20	18	0.90	Negligible
S20	7 Sackville Street	34.29	30.51	0.89	Negligible	76	72	0.95	23	19	0.83	Negligible
S21	5 Sackville Street	27.61	24.81	0.90	Negligible	64	59	0.92	14	14	1.00	Negligible
S22	5 Sackville Street	31.54	28.54	0.90	Negligible	74	69	0.93	21	19	0.90	Negligible
S23	5 Sackville Street	31.44	28.94	0.92	Negligible	71	66	0.93	18	16	0.89	Negligible
S24	5 Sackville Street	34.21	31.38	0.92	Negligible	76	71	0.93	23	19	0.83	Negligible
S25	5 Sackville Street	34.17	31.85	0.93	Negligible	74	72	0.97	21	20	0.95	Negligible
RL1	6 Sackville Street	86.40	47.30	0.55	Negligible	75	64	0.85	24	21	0.88	Negligible

Table 11 Option1 - Daylight and Sunlight Results

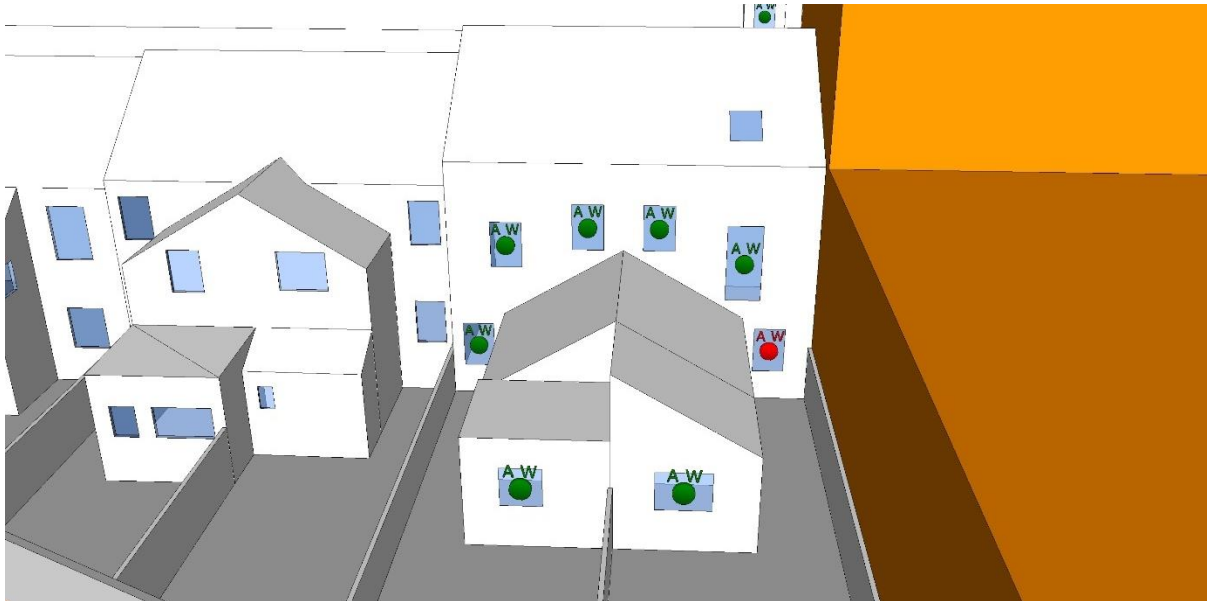
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered a concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

- **Daylight**

6 and 8 Sackville Street

One surface (S6) at 6 Sackville Street will be adversely impacted by the option 2 in terms of daylight.



Windows at 6 and 8 Sackville Street – option 2

5,7,9,11 Sackville Street

None of the surface will be adversely impacted by the option 2 in terms of daylight.



Windows at 5,7,9,11 Sackville Street – option 2

- **Sunlight**

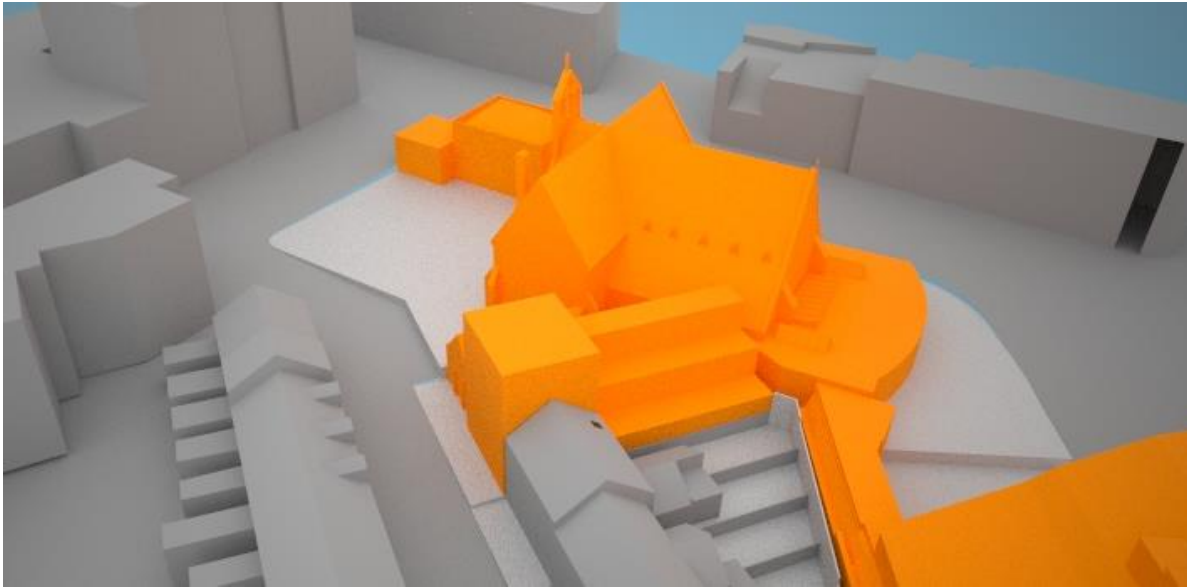
In terms of the sunlight, one surface (S6) at 6 Sackville Street will be adversely impacted by the option 2.

7.3 Option 3

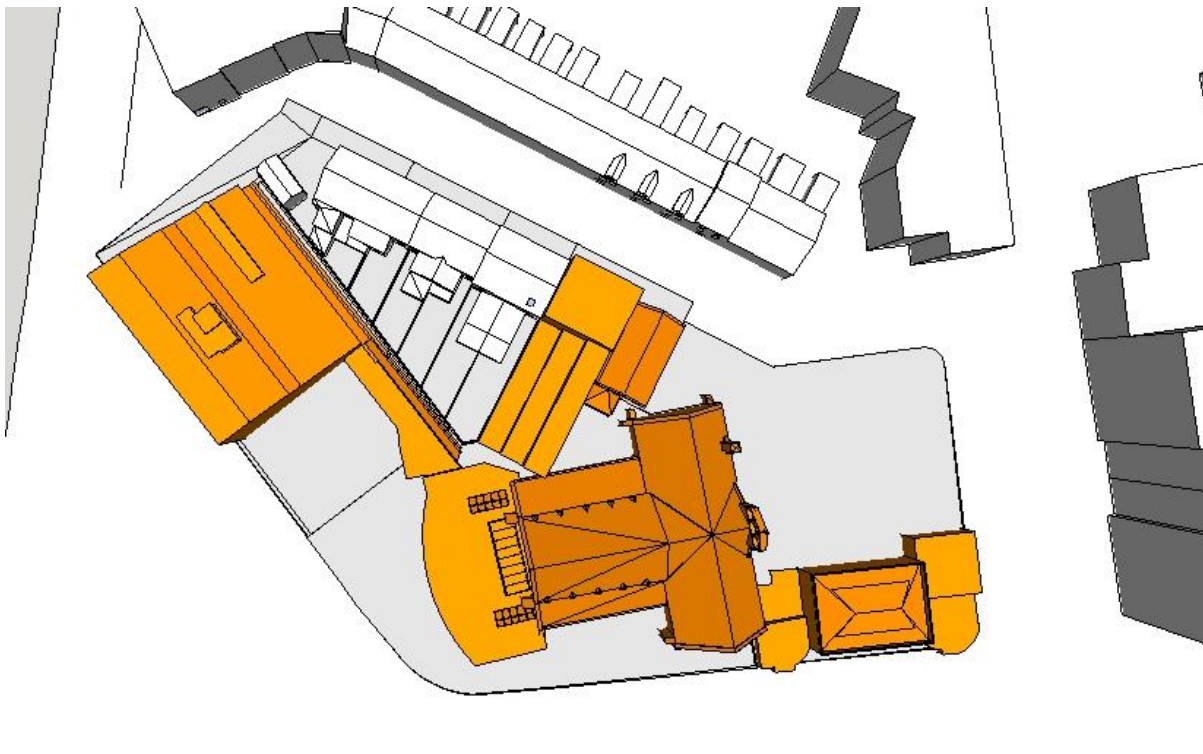
7.3.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

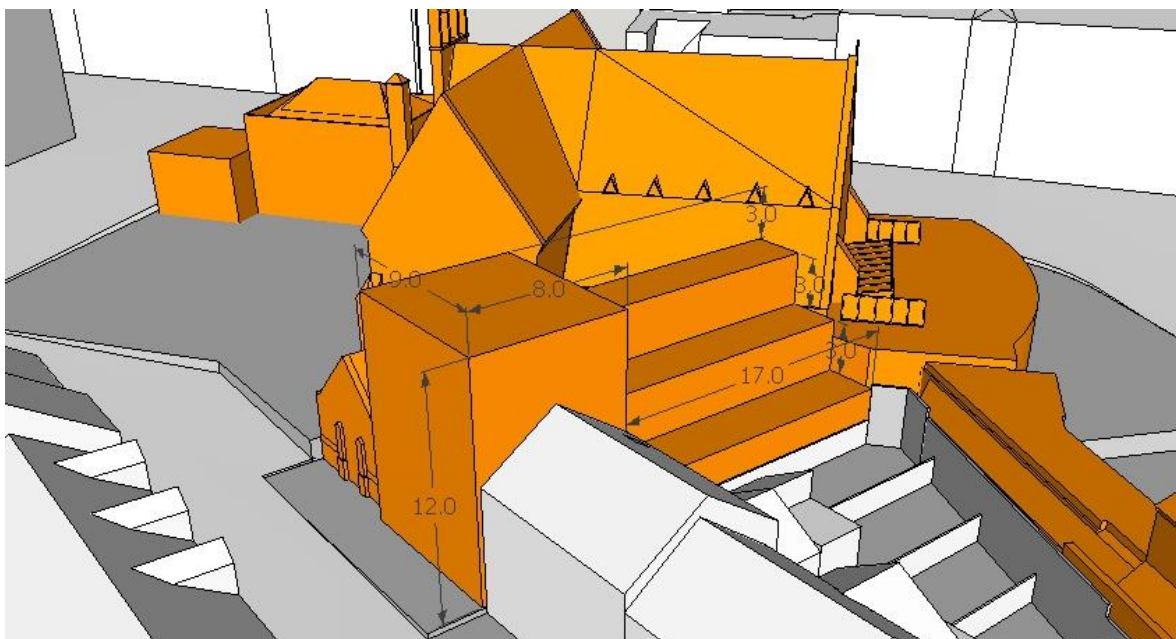
- **Height:** The height of each floors is assumed 3m. The total height is **12m (4 storey)**.
- **Building Size:** The building size is designed by site boundary with **9m x 25m**
- **The rear volume has been stepped down with 3m height** to reduce the negative impacts on windows at 6 Sackville Street.



Option 3 – Bird's-eye view



Option 3 – Plan view



Option 3 – Dimensions

7.3.2 Results for Option 3

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **5,6,8,7,9,11 Sackville Street** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	8 Sackville Street	28.28	28.32	1.00	Negligible	64	61	0.95	14	17	1.21	Negligible
S2	8 Sackville Street	23.78	23.02	0.97	Negligible	42	42	1.00	9	10	1.11	Negligible
S3	8 Sackville Street	34.41	33.17	0.96	Negligible	73	70	0.96	22	21	0.95	Negligible
S4	8 Sackville Street	34.49	33.43	0.97	Negligible	76	74	0.97	22	21	0.95	Negligible
S5	6 Sackville Street	28.13	27.90	0.99	Negligible	64	60	0.94	14	15	1.07	Negligible
S6	6 Sackville Street	22.75	18.74	0.82	Negligible	51	33	0.65	13	7	0.54	Negligible
S7	6 Sackville Street	23.97	23.78	0.99	Negligible	54	52	0.96	17	17	1.00	Negligible
S8	6 Sackville Street	34.17	33.20	0.97	Negligible	72	70	0.97	19	18	0.95	Negligible
S9	11 Sackville Street	26.80	23.56	0.88	Negligible	66	60	0.91	14	9	0.64	Negligible
S10	11 Sackville Street	31.75	28.27	0.89	Negligible	71	65	0.92	19	13	0.68	Negligible
S11	11 Sackville Street	31.62	27.76	0.88	Negligible	71	64	0.90	19	12	0.63	Negligible
S12	11 Sackville Street	34.98	31.76	0.91	Negligible	78	71	0.91	25	18	0.72	Negligible
S13	9 Sackville Street	26.52	22.28	0.84	Negligible	64	55	0.86	13	9	0.69	Negligible

S14	9 Sackville Street	31.35	26.59	0.85	Negligible	71	64	0.90	19	13	0.68	Negligible
S15	9 Sackville Street	31.28	26.49	0.85	Negligible	70	62	0.89	18	11	0.61	Negligible
S16	9 Sackville Street	34.56	30.17	0.87	Negligible	77	70	0.91	24	17	0.71	Negligible
S17	7 Sackville Street	26.97	23.11	0.86	Negligible	64	55	0.86	14	12	0.86	Negligible
S18	7 Sackville Street	31.26	27.06	0.87	Negligible	72	66	0.92	19	15	0.79	Negligible
S19	7 Sackville Street	31.31	27.55	0.88	Negligible	73	68	0.93	20	18	0.90	Negligible
S20	7 Sackville Street	34.29	30.51	0.89	Negligible	76	72	0.95	23	19	0.83	Negligible
S21	5 Sackville Street	27.61	24.77	0.90	Negligible	64	59	0.92	14	14	1.00	Negligible
S22	5 Sackville Street	31.54	28.41	0.90	Negligible	74	68	0.92	21	18	0.86	Negligible
S23	5 Sackville Street	31.44	28.86	0.92	Negligible	71	66	0.93	18	16	0.89	Negligible
S24	5 Sackville Street	34.21	31.30	0.91	Negligible	76	71	0.93	23	19	0.83	Negligible
S25	5 Sackville Street	34.17	31.71	0.93	Negligible	74	72	0.97	21	20	0.95	Negligible
RL1	6 Sackville Street	86.40	75.20	0.87	Negligible	75	60	0.80	24	18	0.78	Negligible

Table 12 Option3 - Daylight and Sunlight Results

The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered a concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

- **Daylight**

6 and 8 Sackville Street

None of the surface will be adversely impacted by the option 3 in terms of daylight.



Windows at 6 and 8 Sackville Street – option 3

5,7,9,11 Sackville Street

None of the surface will be adversely impacted by the option 3 in terms of daylight.



Windows at 5,7,9,11 Sackville Street – option 3

- **Sunlight**

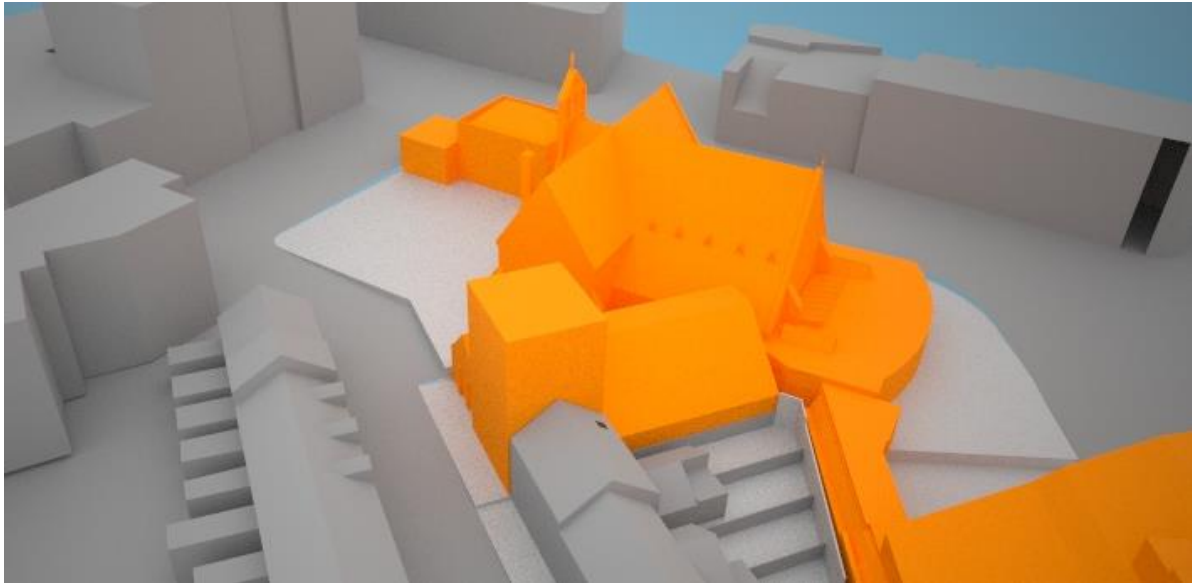
None of the surface will be adversely impacted by the option 3 in terms of sunlight.

7.4 Option 4

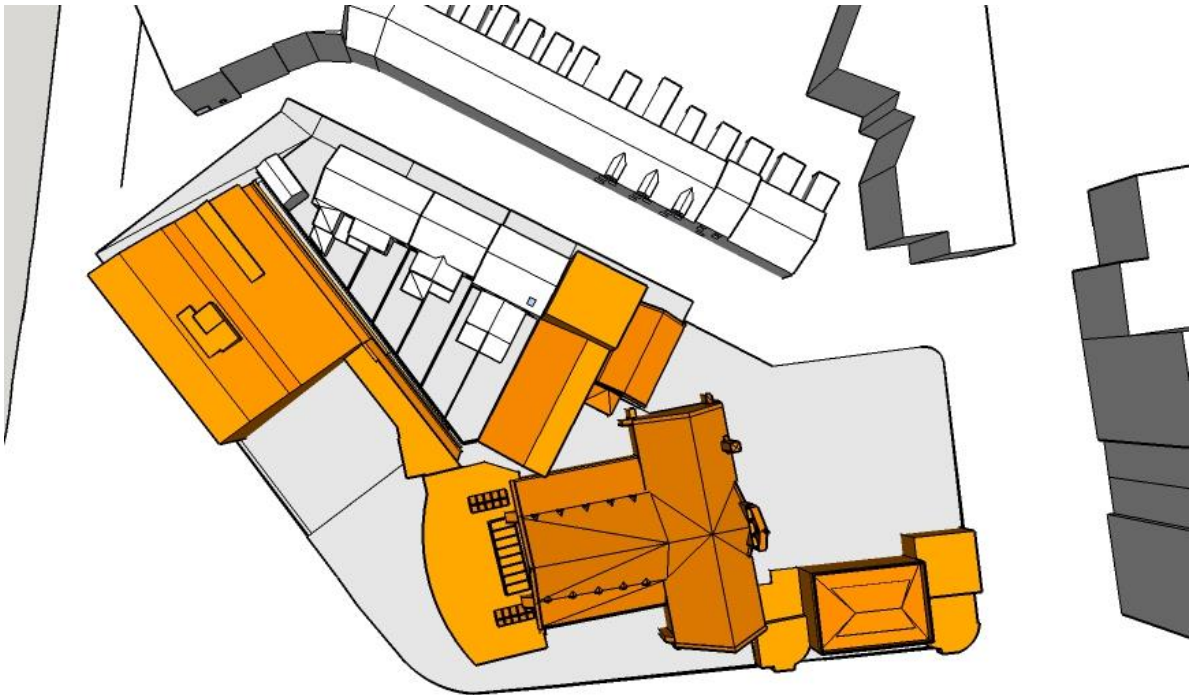
7.4.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

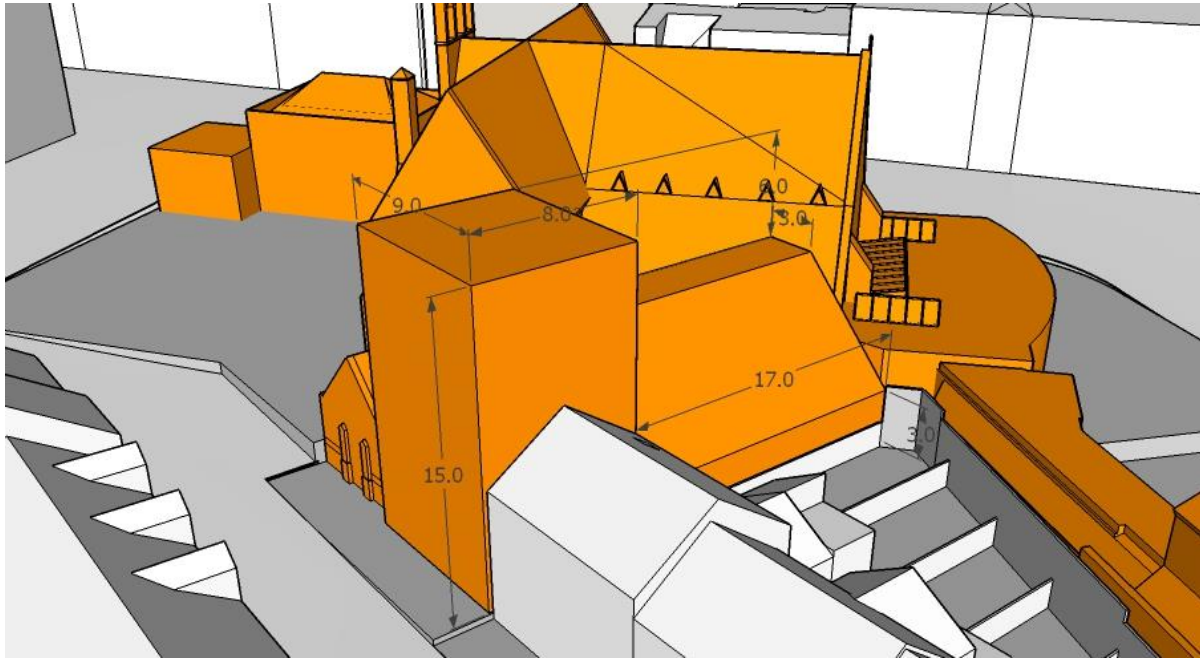
- **Height:** The height of each floors is assumed 3m.
- **Building Size:** The building size is designed by site boundary with **9m x 25m**
- **The rear volume has been sloped** to secure more volume.
- **The front volume of 3m height has been added on the top** to secure more volume.



Option 4 – Bird's-eye view



Option 4 – Plan view



Option 4 – Dimensions

7.4.2 Results for Option 4

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **5,6,8,7,9,11 Sackville Street** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	8 Sackville Street	28.28	28.30	1.00	Negligible	64	61	0.95	14	17	1.21	Negligible
S2	8 Sackville Street	23.78	23.02	0.97	Negligible	42	42	1.00	9	10	1.11	Negligible
S3	8 Sackville Street	34.41	33.17	0.96	Negligible	73	70	0.96	22	21	0.95	Negligible
S4	8 Sackville Street	34.49	33.43	0.97	Negligible	76	74	0.97	22	21	0.95	Negligible
S5	6 Sackville Street	28.13	27.71	0.99	Negligible	64	60	0.94	14	15	1.07	Negligible
S6	6 Sackville Street	22.75	18.74	0.82	Negligible	51	33	0.65	13	7	0.54	Negligible
S7	6 Sackville Street	23.97	23.72	0.99	Negligible	54	52	0.96	17	17	1.00	Negligible
S8	6 Sackville Street	34.17	33.19	0.97	Negligible	72	70	0.97	19	18	0.95	Negligible
S9	11 Sackville Street	26.80	22.23	0.83	Negligible	66	57	0.86	14	9	0.64	Negligible
S10	11 Sackville Street	31.75	26.37	0.83	Negligible	71	62	0.87	19	11	0.58	Negligible
S11	11 Sackville Street	31.62	25.76	0.81	Negligible	71	60	0.85	19	11	0.58	Negligible
S12	11 Sackville Street	34.98	29.28	0.84	Negligible	78	66	0.85	25	13	0.52	Negligible
S13	9 Sackville Street	26.52	20.75	0.78	Minor Adverse	64	51	0.80	13	9	0.69	Negligible

S14	9 Sackville Street	31.35	24.25	0.77	Minor Adverse	71	60	0.85	19	13	0.68	Negligible
S15	9 Sackville Street	31.28	24.15	0.77	Minor Adverse	70	57	0.81	18	11	0.61	Negligible
S16	9 Sackville Street	34.56	27.08	0.78	Negligible	77	64	0.83	24	12	0.50	Negligible
S17	7 Sackville Street	26.97	21.68	0.80	Negligible	64	49	0.77	14	12	0.86	Negligible
S18	7 Sackville Street	31.26	24.95	0.80	Minor Adverse	72	60	0.83	19	15	0.79	Negligible
S19	7 Sackville Street	31.31	25.60	0.82	Negligible	73	64	0.88	20	18	0.90	Negligible
S20	7 Sackville Street	34.29	27.96	0.82	Negligible	76	67	0.88	23	18	0.78	Negligible
S21	5 Sackville Street	27.61	23.49	0.85	Negligible	64	53	0.83	14	14	1.00	Negligible
S22	5 Sackville Street	31.54	26.65	0.84	Negligible	74	65	0.88	21	18	0.86	Negligible
S23	5 Sackville Street	31.44	27.28	0.87	Negligible	71	62	0.87	18	16	0.89	Negligible
S24	5 Sackville Street	34.21	29.17	0.85	Negligible	76	68	0.89	23	19	0.83	Negligible
S25	5 Sackville Street	34.17	29.86	0.87	Negligible	74	68	0.92	21	18	0.86	Negligible
RL1	6 Sackville Street	86.40	35.00	0.41	Negligible	75	63	0.84	24	21	0.88	Negligible

Table 13 Option4 - Daylight and Sunlight Results

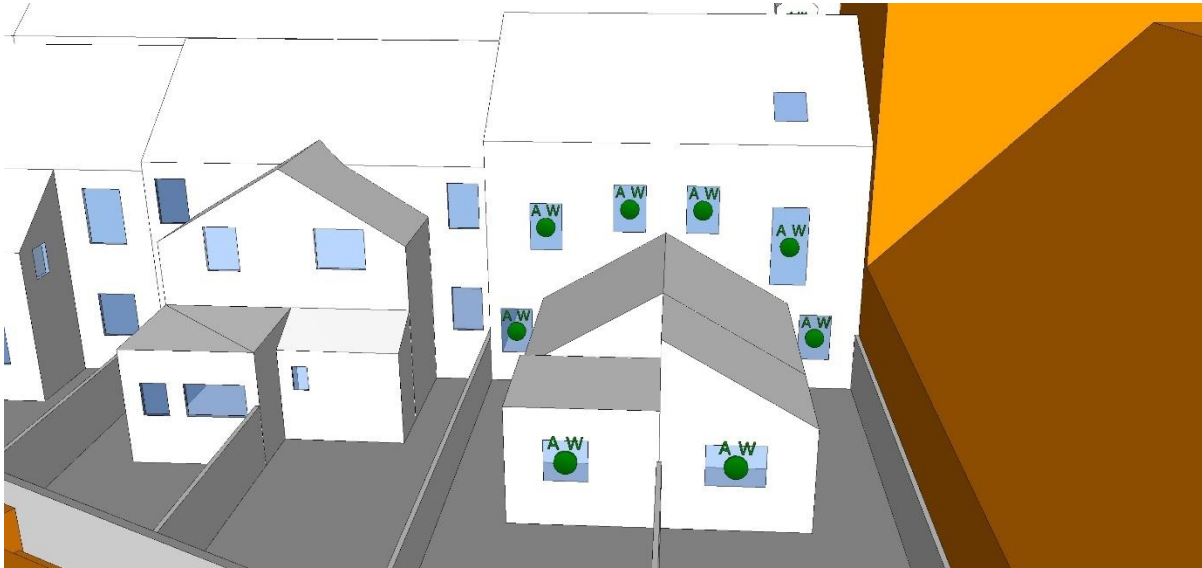
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered a concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

- **Daylight**

6 and 8 Sackville Street

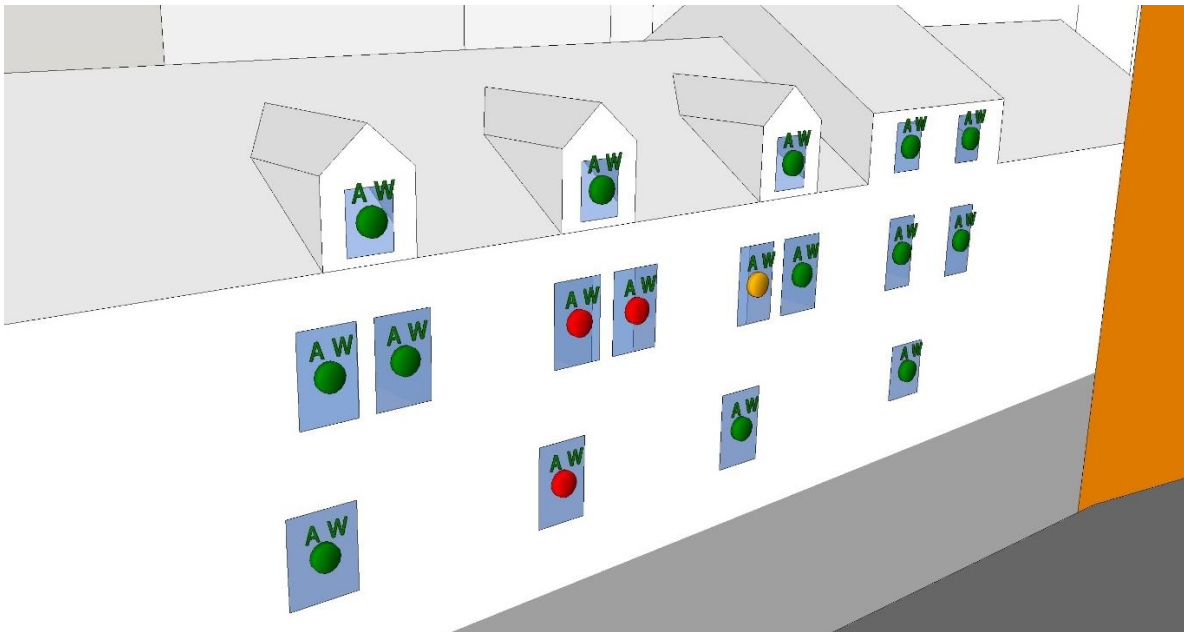
None of the surface will be adversely impacted by the option 4 in terms of daylight.



Windows at 6 and 8 Sackville Street – option 4

5,7,9,11 Sackville Street

4 surfaces (S13-S15 and S18) at 7 and 9 Sackville Street will be adversely impacted by the option 4 in terms of daylight.



Windows at 5,7,9,11 Sackville Street – option 4

- **Sunlight**

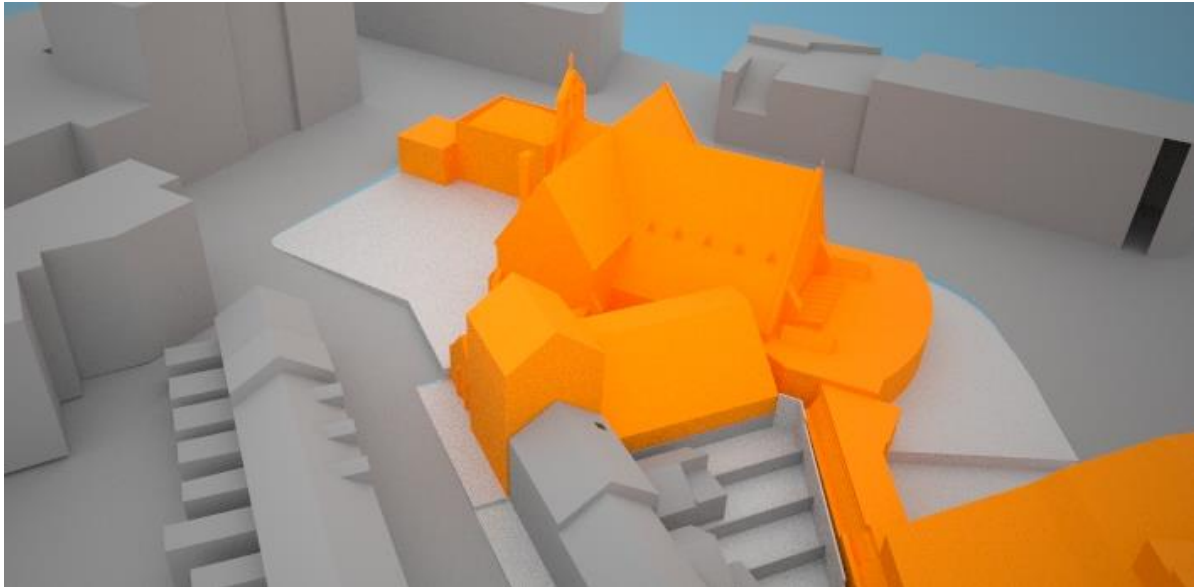
None of the surface will be adversely impacted by the option 4 in terms of sunlight.

7.5 Option 5

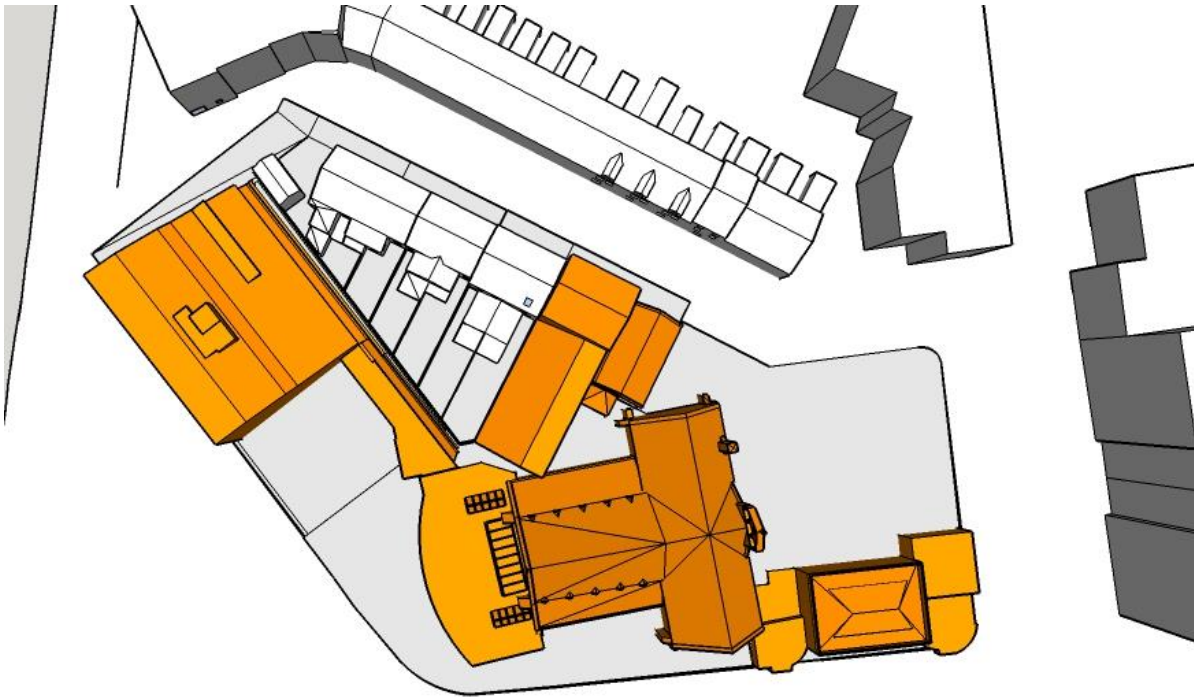
7.5.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

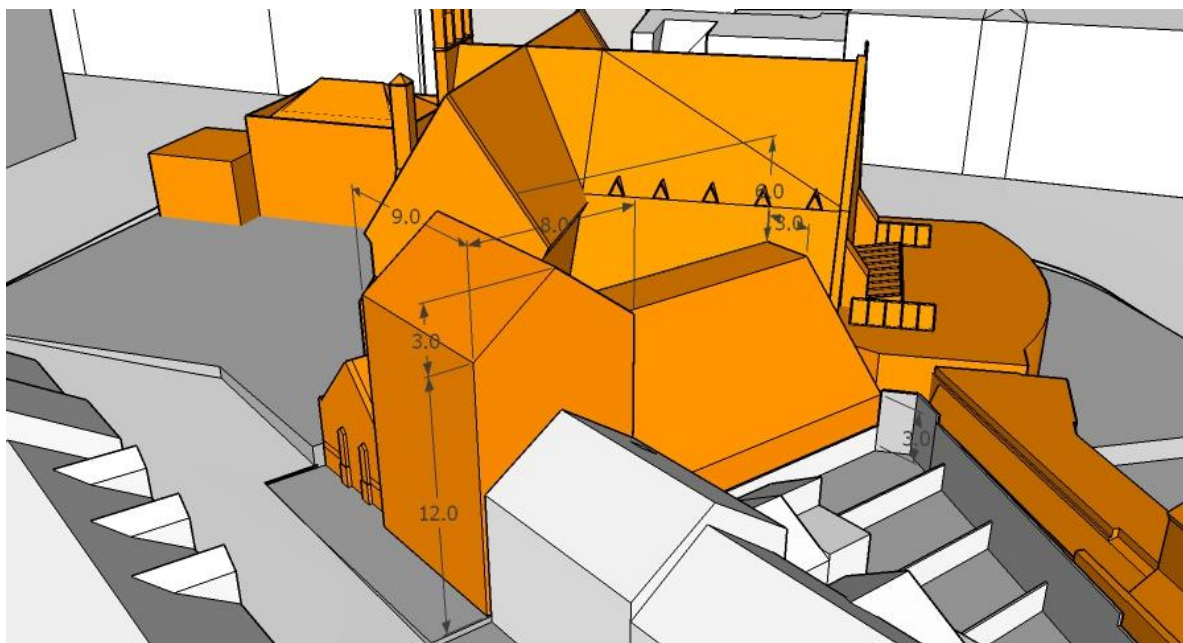
- **Height:** The height of each floors is assumed 3m.
- **Building Size:** The building size is designed by site boundary with **9m x 25m**
- **The top floor at front has got a pitched roof** to reduce the negative impacts on 7 and 9 Sackville Street.



Option 5 – Bird's-eye view



Option 5 – Plan view



Option 5 – Dimensions

7.5.2 Results for Option 5

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **5,6,8,7,9,11 Sackville Street** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	8 Sackville Street	28.28	28.30	1.00	Negligible	64	61	0.95	14	17	1.21	Negligible
S2	8 Sackville Street	23.78	23.02	0.97	Negligible	42	42	1.00	9	10	1.11	Negligible
S3	8 Sackville Street	34.41	33.17	0.96	Negligible	73	70	0.96	22	21	0.95	Negligible
S4	8 Sackville Street	34.49	33.43	0.97	Negligible	76	74	0.97	22	21	0.95	Negligible
S5	6 Sackville Street	28.13	27.71	0.99	Negligible	64	60	0.94	14	15	1.07	Negligible
S6	6 Sackville Street	22.75	18.74	0.82	Negligible	51	33	0.65	13	7	0.54	Negligible
S7	6 Sackville Street	23.97	23.72	0.99	Negligible	54	52	0.96	17	17	1.00	Negligible
S8	6 Sackville Street	34.17	33.19	0.97	Negligible	72	70	0.97	19	18	0.95	Negligible
S9	11 Sackville Street	26.80	23.50	0.88	Negligible	66	60	0.91	14	9	0.64	Negligible
S10	11 Sackville Street	31.75	28.12	0.89	Negligible	71	64	0.90	19	12	0.63	Negligible
S11	11 Sackville Street	31.62	27.66	0.87	Negligible	71	64	0.90	19	12	0.63	Negligible
S12	11 Sackville Street	34.98	31.13	0.89	Negligible	78	70	0.90	25	17	0.68	Negligible
S13	9 Sackville Street	26.52	22.28	0.84	Negligible	64	55	0.86	13	9	0.69	Negligible

S14	9 Sackville Street	31.35	26.47	0.84	Negligible	71	64	0.90	19	13	0.68	Negligible
S15	9 Sackville Street	31.28	26.38	0.84	Negligible	70	62	0.89	18	11	0.61	Negligible
S16	9 Sackville Street	34.56	29.42	0.85	Negligible	77	68	0.88	24	15	0.63	Negligible
S17	7 Sackville Street	26.97	23.11	0.86	Negligible	64	55	0.86	14	12	0.86	Negligible
S18	7 Sackville Street	31.26	26.96	0.86	Negligible	72	66	0.92	19	15	0.79	Negligible
S19	7 Sackville Street	31.31	27.45	0.88	Negligible	73	68	0.93	20	18	0.90	Negligible
S20	7 Sackville Street	34.29	29.88	0.87	Negligible	76	72	0.95	23	19	0.83	Negligible
S21	5 Sackville Street	27.61	24.60	0.89	Negligible	64	59	0.92	14	14	1.00	Negligible
S22	5 Sackville Street	31.54	28.15	0.89	Negligible	74	68	0.92	21	18	0.86	Negligible
S23	5 Sackville Street	31.44	28.54	0.91	Negligible	71	66	0.93	18	16	0.89	Negligible
S24	5 Sackville Street	34.21	30.64	0.90	Negligible	76	71	0.93	23	19	0.83	Negligible
S25	5 Sackville Street	34.17	31.07	0.91	Negligible	74	70	0.95	21	18	0.86	Negligible
RL1	6 Sackville Street	86.40	46.55	0.54	Negligible	75	64	0.85	24	21	0.88	Negligible

Table 14 Option5 - Daylight and Sunlight Results

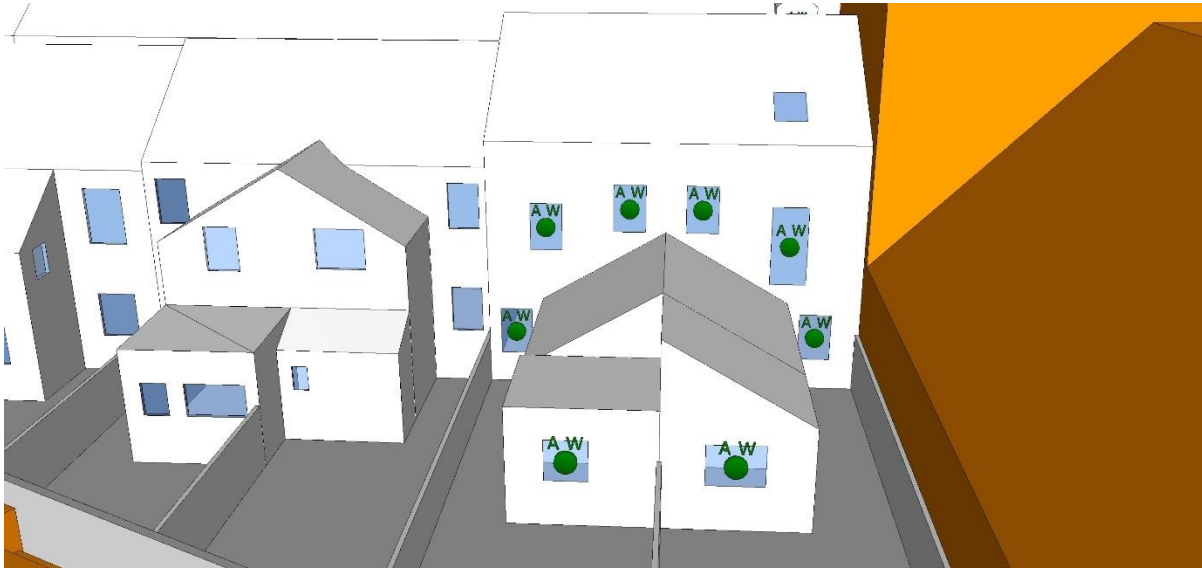
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered a concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

- Daylight

6 and 8 Sackville Street

None of the surface will be adversely impacted by the option 5 in terms of daylight.



Windows at 6 and 8 Sackville Street – option 5

5,7,9,11 Sackville Street

None of the surface will be adversely impacted by the option 5 in terms of daylight.



Windows at 5,7,9,11 Sackville Street – option 5

- Sunlight

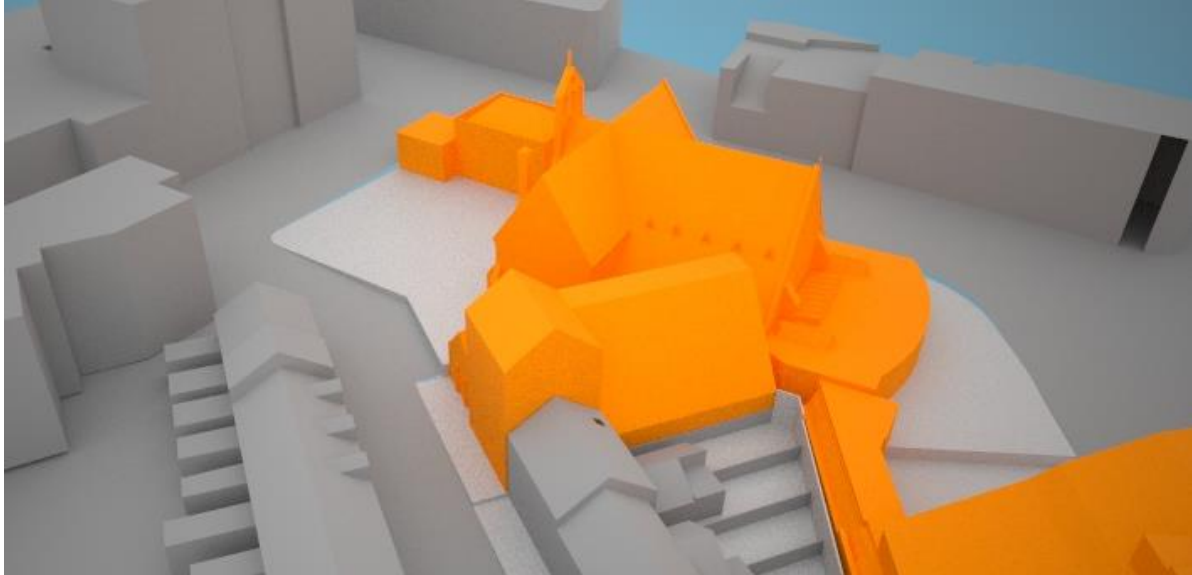
None of the surface will be adversely impacted by the option 5 in terms of sunlight.

7.6 Option 6

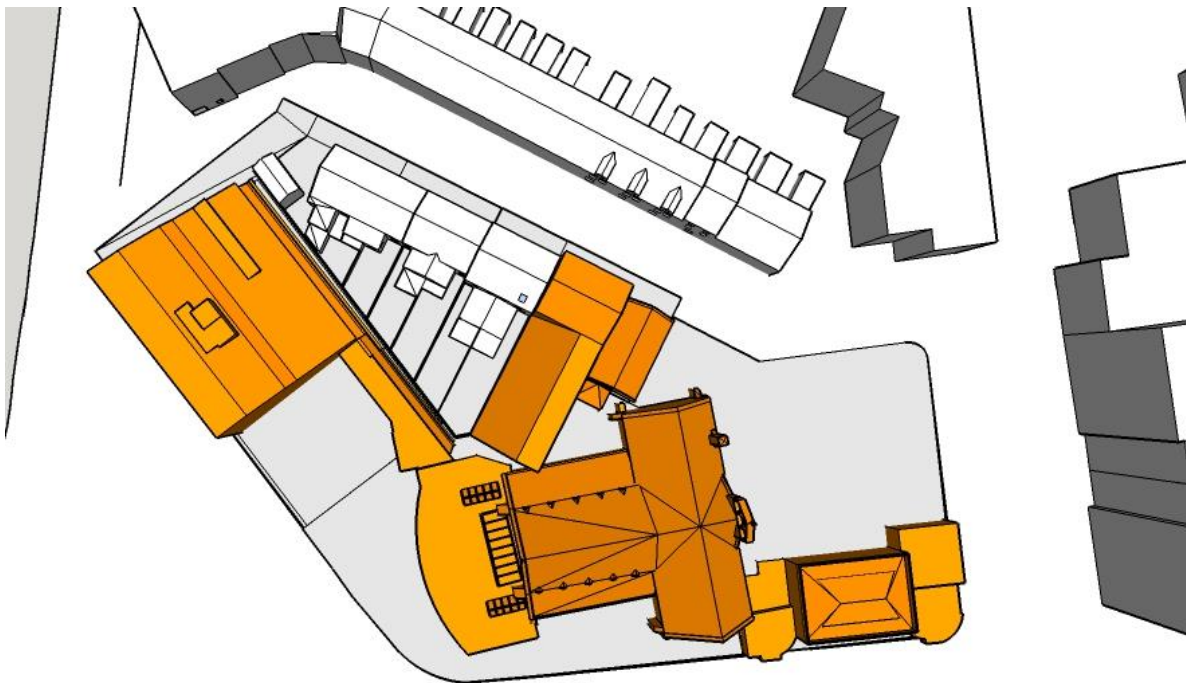
7.6.1 Introduction

The following option will be assessed in accordance with BRE guidelines.

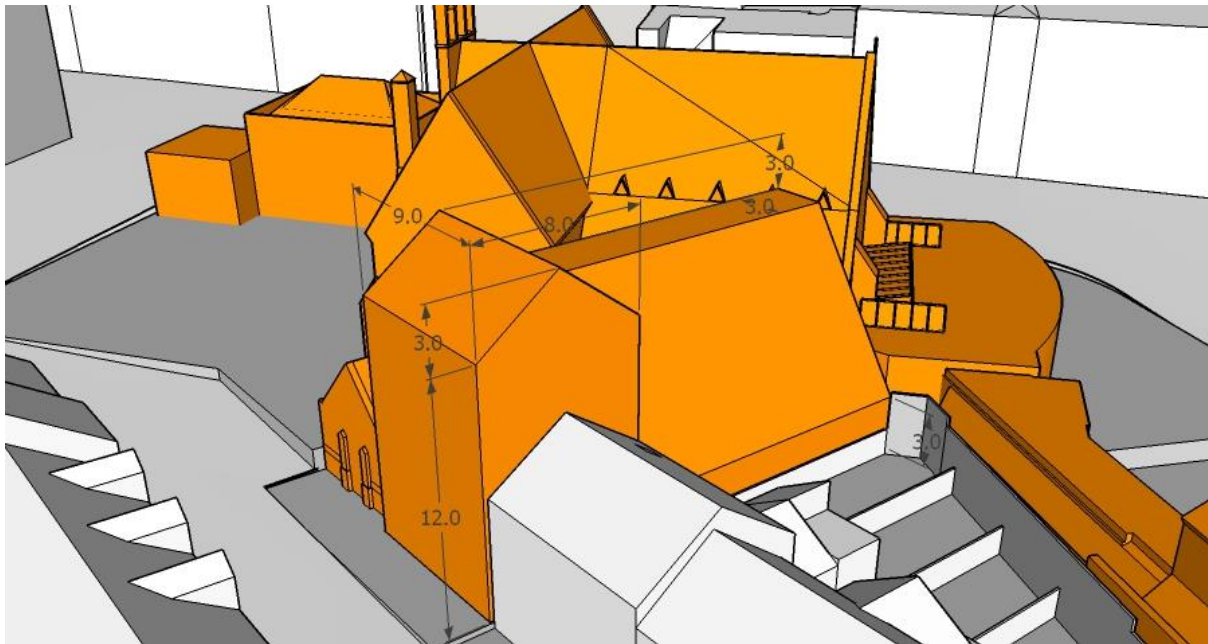
- **Height:** The height of each floors is assumed 3m.
- **Building Size:** The building size is designed by site boundary with 9m x 25m
- **The top floor at rear has been added** to secure more volume.



Option 6 – Bird's-eye view



Option 6 – Plan view



Option 6 – Dimensions

7.6.2 Results for Option 5

The daylight results show and compare the external levels of daylight (VSC – Vertical Sky Components and APSH – Annual Probable Sunlight Hours) on the assessed surfaces at **5,6,8,7,9,11 Sackville Street** with and without the proposed development. A summary of results is displayed in the table below.

Window reference	Building Target surface	Daylight assessment (Surrounding buildings)				Sunlight assessment (Surrounding buildings)						
		VSC (existing) >27%	VSC (proposed) >27%	Ratio	Result	Total APSH >25%		Ratio	Winter APSH >5%		Ratio	Result
						Existing	Proposed		Existing	Proposed		
S1	8 Sackville Street	28.28	27.74	0.98	Negligible	64	57	0.89	14	16	1.14	Negligible
S2	8 Sackville Street	23.78	23.02	0.97	Negligible	42	42	1.00	9	10	1.11	Negligible
S3	8 Sackville Street	34.41	32.63	0.95	Negligible	73	66	0.90	22	19	0.86	Negligible
S4	8 Sackville Street	34.49	32.60	0.95	Negligible	76	70	0.92	22	19	0.86	Negligible
S5	6 Sackville Street	28.13	26.45	0.94	Negligible	64	53	0.83	14	14	1.00	Negligible
S6	6 Sackville Street	22.75	18.74	0.82	Negligible	51	33	0.65	13	7	0.54	Negligible
S7	6 Sackville Street	23.97	21.63	0.90	Negligible	54	42	0.78	17	13	0.76	Negligible
S8	6 Sackville Street	34.17	31.90	0.93	Negligible	72	66	0.92	19	16	0.84	Negligible
S9	11 Sackville Street	26.80	23.50	0.88	Negligible	66	60	0.91	14	9	0.64	Negligible
S10	11 Sackville Street	31.75	28.12	0.89	Negligible	71	64	0.90	19	12	0.63	Negligible
S11	11 Sackville Street	31.62	27.66	0.87	Negligible	71	64	0.90	19	12	0.63	Negligible
S12	11 Sackville Street	34.98	31.13	0.89	Negligible	78	70	0.90	25	17	0.68	Negligible
S13	9 Sackville Street	26.52	22.28	0.84	Negligible	64	55	0.86	13	9	0.69	Negligible

S14	9 Sackville Street	31.35	26.47	0.84	Negligible	71	64	0.90	19	13	0.68	Negligible
S15	9 Sackville Street	31.28	26.38	0.84	Negligible	70	62	0.89	18	11	0.61	Negligible
S16	9 Sackville Street	34.56	29.42	0.85	Negligible	77	68	0.88	24	15	0.63	Negligible
S17	7 Sackville Street	26.97	23.11	0.86	Negligible	64	55	0.86	14	12	0.86	Negligible
S18	7 Sackville Street	31.26	26.96	0.86	Negligible	72	66	0.92	19	15	0.79	Negligible
S19	7 Sackville Street	31.31	27.42	0.88	Negligible	73	68	0.93	20	18	0.90	Negligible
S20	7 Sackville Street	34.29	29.88	0.87	Negligible	76	72	0.95	23	19	0.83	Negligible
S21	5 Sackville Street	27.61	24.47	0.89	Negligible	64	59	0.92	14	14	1.00	Negligible
S22	5 Sackville Street	31.54	27.97	0.89	Negligible	74	68	0.92	21	18	0.86	Negligible
S23	5 Sackville Street	31.44	28.33	0.90	Negligible	71	65	0.92	18	15	0.83	Negligible
S24	5 Sackville Street	34.21	30.47	0.89	Negligible	76	70	0.92	23	18	0.78	Negligible
S25	5 Sackville Street	34.17	30.81	0.90	Negligible	74	70	0.95	21	18	0.86	Negligible
RL1	6 Sackville Street	86.40	54.50	0.63	Negligible	75	61	0.81	24	19	0.80	Negligible

Table 15 Option6 - Daylight and Sunlight Results

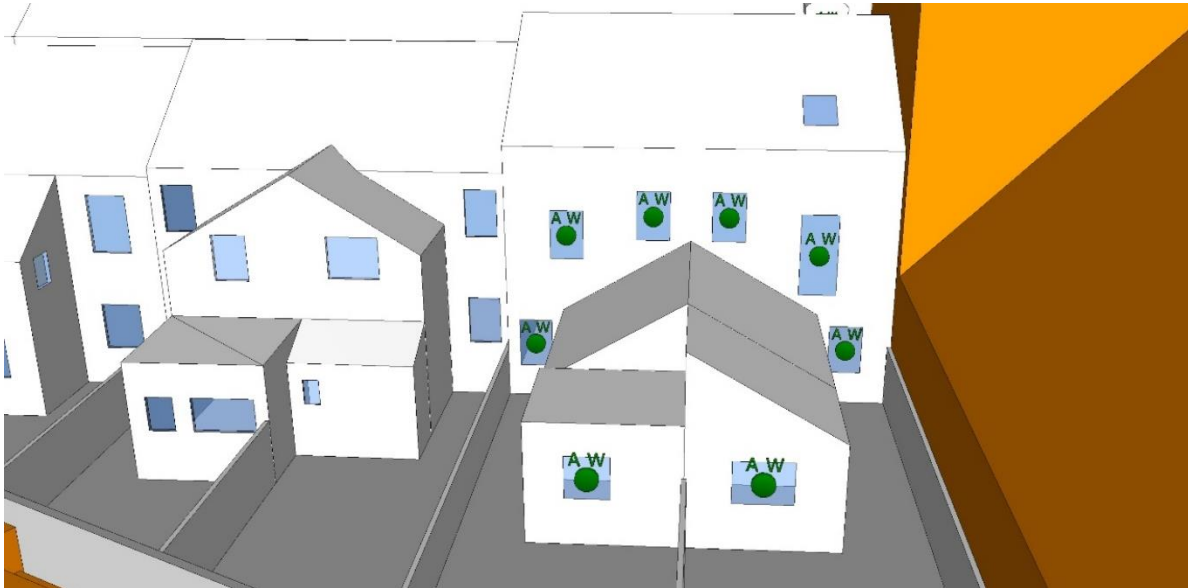
The location of the assessed windows can be found in section 8 of this report.

The slight loss in daylight for the other surfaces are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight. The slight loss in sunlight for the other surfaces are not considered a concern as the proposed total APSH are either above >25% more than 0.8 times their former values and will provide adequate levels of sunlight.

- Daylight

6 and 8 Sackville Street

None of the surface will be adversely impacted by the option 6 in terms of daylight.



Windows at 6 and 8 Sackville Street – option 6

5,7,9,11 Sackville Street

None of the surface will be adversely impacted by the option 6 in terms of daylight.



Windows at 5,7,9,11 Sackville Street – option 6

- Sunlight

None of the surface will be adversely impacted by the option 6 in terms of sunlight.

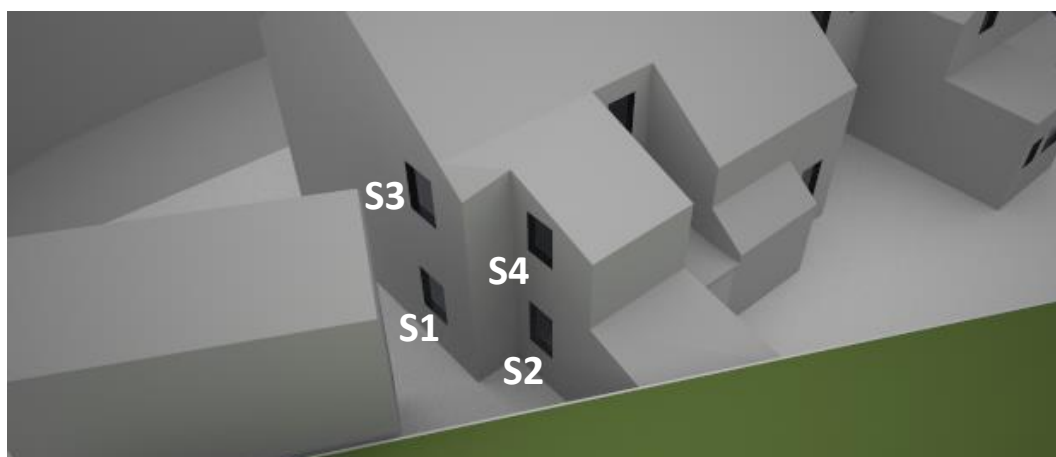
8 SITE PLAN AND LOCATION

8.1 Existing site layout

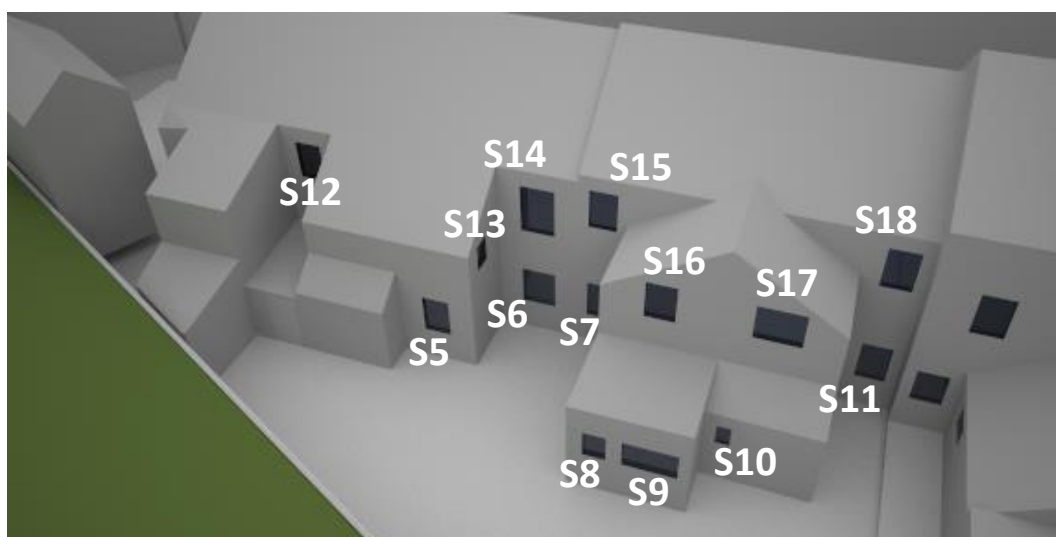


Location	Greyfriars Church, Friar Street, Reading, RG1 1EH
Latitude (°)	51.46 N
Longitude (°)	0.98 W

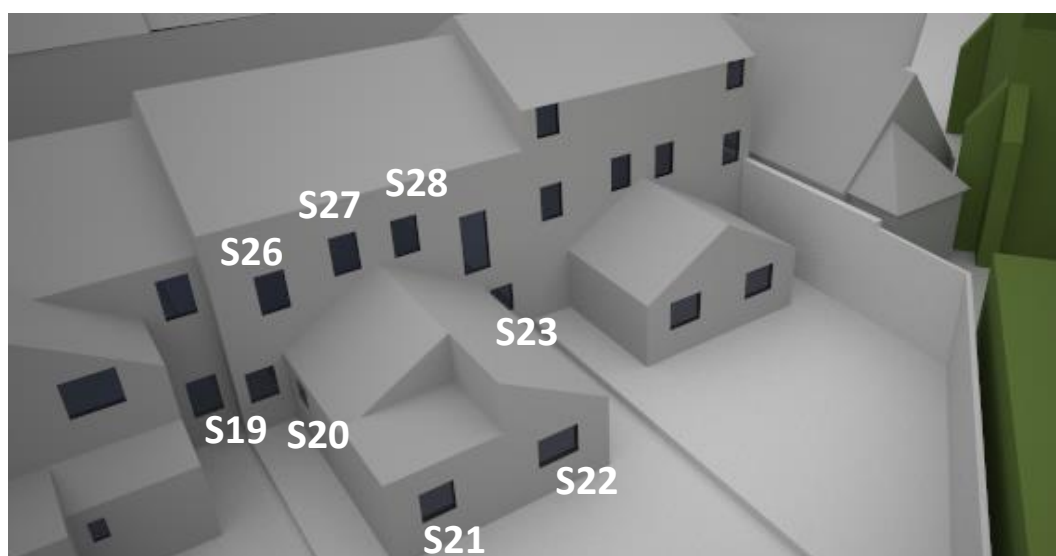
8.2 Location of Assessed Surfaces - SITE A



18 Sackville Street – North-west Elevation



10-16 Sackville Street – South Elevation

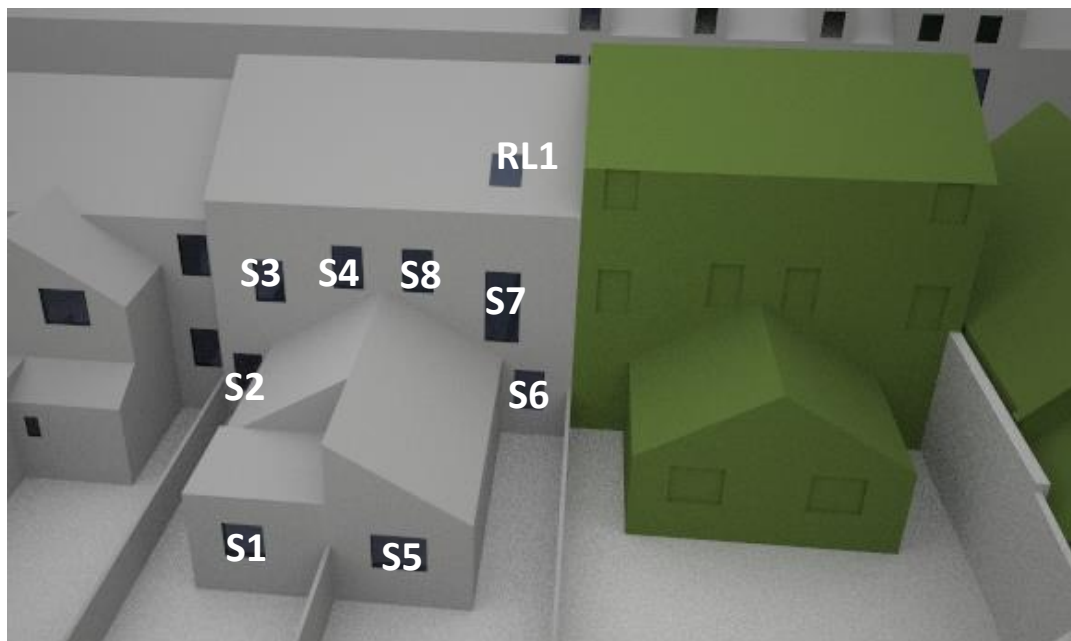


6,8 Sackville Street – South Elevation



Tanfields – South Elevation

8.3 Location of Assessed Surfaces - SITE B



6,8 Sackville Street – South Elevation



5,7,9,11 Sackville Street – South Elevation