

DAYLIGHT & SUNLIGHT -INDEPENDENT REVIEW

relating to the proposed development at

BEEHIVE CENTRE, COLDHAMS LANE, CAMBRIDGE CB1 3ET

PLANNING APPLICATION REF: 23/03204/OUT

**STATUS: Issued** 

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### 1.0 **EXECUTIVE SUMMARY**

- 1.1 This report represents an independent review of the Daylight & Sunlight Report dated 16<sup>th</sup> August 2024 for neighbouring review prepared by eb7, relating to planning application 23/0324/OUT which considers the development proposal at the Beehive Centre, Coldhams Lane, Cambridge CB1 3ET. A subsequent Daylight & Sunlight Addendum report dated 29<sup>th</sup> November 2024 was also submitted by eb7; this also includes updated analysis and consideration on the effect of the proposal upon neighbouring properties at St Matthew's Gardens and Silverwood Close. We summarise our main peer review comments as follows (applicable up to 28<sup>th</sup> January 2025 and comments are not deemed to be exhaustive);
- 1.2 We have no significant adverse comments on the methodology utilised by eb7 within this report (with the extent of existing neighbouring properties reviewed considered appropriate); the updated and supplementary analysis dated 29<sup>th</sup> November 2024 has sought to address some initial comments upon the original analysis submitted.
- 1.3 However, we note that no daylight distribution contour plots are provided, so we are unable to understand the room layouts assumed by eb7 within the analysis provided. These should be provided along with supporting property research to understand as to how internal layouts have been configured for analysis. We also note a small number of possible analysis errors which should be corrected (albeit these are not considered to significantly alter the outcome of this peer review).
- 1.4 It is recognised that the current massing on site is retail style commercial warehouse units and with a large associated car parking area thus, massing is fairly limited on the application site. For meaningful re-development, there is the potential that some reductions in daylight and sunlight may not meet BRE Guide default target criteria; as background, alternative target values can be set if considered appropriate (as set by the Local Planning Authority (LPA).
- 1.5 For the application massing i.e. Maximum Parameter Scheme, in terms of the effect of the proposal upon existing neighbouring properties, losses in daylight and sunlight have been considered. For daylight, this has been considered in reference to both the vertical sky component (VSC) and daylight distribution i.e. no sky line / NSL (where room layouts are known / reasonably inferred) as per the BRE Guide.
- 1.6 There will be some noticeable impacts to daylight to a number of neighbouring properties with reductions not meeting BRE Guide default target criteria.



- 1.7 In terms of both Daylight VSC and Daylight Distribution, properties with reductions not meeting BRE Guide default target criteria primarily relate to a number of windows / rooms within properties on St Matthew's Gardens and Silverwood Close and generally, lesser extent on York St, Sleaford St, Hampden Gardens & The Terrace.
- In consideration of both the quantum of windows / rooms having reductions not meeting BRE Guide default target criteria, the extent of reduction (some significant reduction adversity noted; especially 'moderate' and 'major' adversity) and in consideration of retained values, room uses, etc, we consider overall, such noticeable effects upon daylight to neighbouring properties may not be possible to support.
- 1.9 In consideration of sunlight to existing neighbouring property living rooms / sun important rooms, we conclude that for applicable reductions in sunlight to these particular room uses (living rooms), such reductions would meet BRE Guide target criteria except for 4 No. instances for winter hours. Whilst these particular reductions will be 'major adverse' and noticeable, in 2 No. instances, the retained levels are still relatively close to target criteria; for the remaining 2 No. instances, the retained values are worse and in one instance, the retained level is significantly low.
- 1.10 For sunlight to existing neighbouring amenity areas, we conclude that for any applicable reductions in sunlight to such amenity area, such reductions would meet BRE Guide target criteria except for 5 No. instances. Whilst these particular reductions will be 'major adverse' and noticeable, in 4 No. instances, the retained levels are still relatively close to target criteria; for the remaining 1 No. instance, the retained value is significantly low.
- 1.11 Given the aforementioned outcome, in order to assist matters, especially in respect of the effects to daylight to neighbouring properties, we have also provided initial commentary on the Illustrative Scheme (please see **Section 4.0** of this report) which may generally be more favourable (as feedback only as mindful that this is not the actual planning application scheme).
- 1.12 We are pleased to discuss any aspects in further detail.



### 2.0 INTRODUCTION TO REVIEW APPROACH

- 2.1 The application is accompanied by a Daylight and Sunlight Report prepared by the applicant's consultant (eb7). This provides an assessment of the potential impact of the development on daylight, sunlight and overshadowing to neighbouring residential properties based on the approach set out in the Building Research Establishment's (BRE) 'Site Layout Planning for Daylight and Sunlight: A Good Practice Guide'.
- 2.2 To highlight, new BRE Guide (Site Layout Planning for Daylight and Sunlight a Guide to Good Practice) has been revised with the 3<sup>rd</sup> edition released on 8<sup>th</sup> June 2022; this latest revision has been considered for the application submission and this review.
- 2.3 The BRE guidelines are not mandatory; they do however, act as a guide to help understand the impact of a development upon neighbouring properties, while acknowledging that in some circumstances, such as that of an urban environment or where the existing site is only previously partially developed some impact may be unavoidable to some extent (appropriate flexibility of the BRE Guide).
- 2.4 In accordance with the BRE Guide, as background, alternative target values can be set to those presented within the main body of the BRE Guide, if considered appropriate to do so by the Local Planning Authority (LPA). Such alternative target approaches are referenced within Appendix F of the BRE Guide and often sought for agreement with the local authority prior to submission if being utilised.
- 2.5 We note that eb7 have suggested from a limited sample review of 'pre-existing' VSC range of 18% to 24%; it unclear whether eb7 are suggesting a particular value as a possible Alternative Target (AT)? There seems to be no other possible AT review for Daylight Distribution or Sunlight. In summary, it appears no AT set / not agreed.
- 2.6 More commonly, the standard BRE Guide target criteria is utilised but with appropriate judgement made in respect of departures to that target criteria; the BRE Guide supports a suitable and flexible approach is made for applicable site development and context.
- 2.7 This independent review is based upon consideration of the report and supporting analysis provided as part of the planning application with consideration in the first instance to the standard BRE Guide target criteria. To highlight, this peer review excludes for any verification of the analysis presented by eb7.
- 2.8 The process of overall review follows a 2 stage approach;
  - Stage 1) To establish those reductions which depart / do not meet the BRE Guide default target criteria and;
  - Stage 2 To then consider the acceptability of such departures



- 2.9 In terms of 'acceptability', eb7 have made reference to some historic planning application references granted consent. We would also highlight, conversely, a recent Appeal Decision where the appeal was dismissed relating to 27-29 Clayton Hotel, Station Road, Cambridge CB1 2FB (Appeal Ref: APP/Q0505/W/24/3347091. Obviously, each case is on their own merits in terms of context, level of harm, consideration on retained levels as appropriate, scheme benefits etc
- 2.10 We would also highlight Policies 56 and 60 (part d) of the CLP (2018);

## Policy 56: Creating successful places

Development that is designed to be attractive, high quality, accessible, inclusive and safe will be supported. Proposals should:

- a. provide a comprehensive design approach that achieves the successful integration of buildings, the routes and spaces between buildings, topography and landscape;
- b. create streets that respond to their levels of use while not allowing vehicular traffic to dominate;
- c. create attractive and appropriately-scaled built frontages to positively enhance the townscape where development adjoins streets and/or public spaces;
- d. ensure that buildings are orientated to provide natural surveillance;
- e. create active edges on to public space by locating appropriate uses, as well as entrances and windows of habitable rooms next to the street;
- f. create clearly defined public and private amenity spaces that are designed to be inclusive, usable, safe and enjoyable;
- g. be designed to remove the threat or perceived threat of crime and improve community safety;
- use materials, finishes and street furniture suitable to the location and context;
- create and improve public realm, open space and landscaped areas that respond to their context and development as a whole and are designed as an integral part of the scheme;
- j. embed public art as an integral part of the proposals as identified through the Council's Public Art Supplementary Planning Document; and
- k. ensure that proposals meet the principles of inclusive design, and in particular meet the needs of disabled people, the elderly and those with young children.





#### Policy 60: Tall buildings and the skyline in Cambridge

Any proposal for a structure that breaks the existing skyline and/or is significantly taller than the surrounding built form will be considered against the following criteria:

- a. location, setting and context applicants should demonstrate through visual assessment or appraisal with supporting accurate visual representations, how the proposals fit within the existing landscape and townscape;
- b. impact on the historic environment applicants should demonstrate and quantify the potential harm of proposals to the significance of heritage assets or other sensitive receptors (view of, backdrop and setting), assessed on a site-by-site basis but including impact on key landmarks and viewpoints, as well as from the main streets, bridges and open spaces in the city centre and from the main historic approaches, including road and river, to the historic core. Tall building proposals must ensure that the character or appearance of Cambridge, as a city of spires and towers emerging above the established tree line, remains dominant from relevant viewpoints as set out in Appendix F;
- scale, massing and architectural quality applicants should demonstrate through the use of scaled drawings, sections, accurate visual representations and models how the proposals will deliver a high quality addition to the Cambridge skyline and clearly demonstrate that there is no adverse impact;
- d. amenity and microclimate applicants should demonstrate that there
  is no adverse impact on neighbouring buildings and open spaces in
  terms of the diversion of wind, overlooking or overshadowing, and
  that there is adequate sunlight and daylight within and around the
  proposals; and
- e. public realm applicants should show how the space around tall buildings will be detailed, including how a human scale is created at street level.

Further advice on tall buildings and the skyline and the requirements of the assessment criteria for proposals is set out in Appendix F and further guidance is contained in 'The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition)' published by Historic England in December 2017 (or its successor document).



### 3.0 NEIGHBOURING PROPERTIES - IMPACT TO DAYLIGHT & SUNLIGHT

## **Background to analysis**

- 3.1 The impact of the proposal upon loss of daylight to neighbouring properties is primary considered in reference to vertical sky component (VSC) and daylight distribution (usually abbreviated to NSL / no sky line as this represents the point / the contour within the room which divides the room area into able and not able to receive direct skylight at the working plane, where room layouts are known, as per the BRE Guide). Given that there is relatively limited / low rise existing massing on site, whilst reductions in daylight require due consideration, given that some of the surrounding neighbouring properties may have benefitted from higher levels of daylight then perhaps initially anticipated for an urban location, some consideration may also be appropriate as applicable in some instances, to retained values of daylight in the proposed scenario i.e. retained values with the proposed development insitu.
- 3.2 For background on daylight and sunlight analysis review, we provide the following definitions;

**Daylight VSC**: The Guide considers that in terms of vertical sky component (VSC), as a target value, if the VSC with the new development in place is both, less than 27% and less than 0.8 times its former value, occupants of the existing building will notice the reduction in the amount of skylight. The maximum value obtainable at a flat window in a vertical wall is effectively 40%. For rooms served by more than one window, if there is a significant loss of light to the main window, an overall VSC for the room may be derived by weighting each VSC element in accordance with the proportion of the total glazing area represented by its window; thus a VSC considered for the room as a whole (although application of this is really more to where windows light the same areas of the room).

VSC represents a ratio of the part of illuminance at a point on a given vertical plane (usually the centre point of window on the window wall face), that would be received directly from an overcast sky (CIE standard overcast sky) to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The VSC does not include reflected light, either from the ground or from other buildings.

**Daylight Distribution :** The Guide considers that in terms of daylight distribution, as a target value, if the daylight distribution with the new development in place is less than 0.8 times its former value, occupants of the existing building will notice the reduction in the amount of daylight distribution within the room.

## Appendix E Beehive Centre, Coldhams Lane, Cambridge CB1 3ET



Beenive Centre, Coldnams Lane, Cambridge CB1 3E1 Daylight and Sunlight – Independent Review

3.3 The review has focused upon the conventional BRE Guide analysis of VSC and daylight distribution review. However, given that there are some properties with analysis results not meeting BRE Guide target criteria (especially, given relatively limited / low rise existing massing on site), it is common for the industry to consider initial adversity in reference to the numerical loss only, broadly as follows; (albeit subsequent interpretation on such initial numeric categorisation is usually then needed overall for any applicable judgement required based upon EIA review of the greater definition within Appendix H of the BRE Guide / where considered as useful reference);

<u>Minor Adverse</u>: Reductions in VSC or NSL of >20% to 30%; <u>Moderate Adverse</u>: Reductions in VSC or NSL of >30% to 40; and <u>Major Adverse</u>: Reductions in VSC or NSL of greater than 40%.

- 3.4 In terms of sunlight, losses are reviewed in respect of neighbouring habitable rooms with main emphasis upon living rooms (and conservatories if applicable). The BRE recommendation is that windows facing within 90° of South should have 25% of annual probable hours with 5% in the winter months (from the autumn equinox to the spring equinox). Where reductions below the recommended levels are contemplated, these should be targeted so that the proposed value is 0.8 times former value or above (unless a reduction of sunlight received over the whole year is not greater than 4% of annual probable sunlight hours).
- 3.5 In addition, losses in sunlight to amenity area is also considered. The BRE Guide states that the garden (amenity space) of an existing property, it is recommended that for it to appear adequately sunlit throughout the year;
  - 1) at least half of a garden or amenity area should receive at least two hours of sunlight on 21<sup>st</sup> March.
  - 2) If as a result of a new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on 21<sup>st</sup> March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least two hours of sunlight on 21<sup>st</sup> March.



## **Neighbouring properties for review**

3.6 We concur with the extent of existing neighbouring properties analysed which in the main are residential properties.

## Neighbouring Daylight analysis review

- 3.7 There are a number of properties with reductions in daylight, that do not meet the BRE Guide default target criteria for the <u>Maximum Parameter Scheme</u> (i.e. the planning application volume massing). Such reductions will ordinarily be noticeable to the occupant.
- 3.8 A significant number of these neighbouring properties (where reductions to daylight do not meet BRE Guide default target criteria) are located on St Matthew's Gardens and Silverwood Close (updated daylight & sunlight analysis within eb7 Addendum report dated 29<sup>th</sup> November 2024). We will examine those first and then other remaining properties where such reductions also do not meet BRE Guide default target criteria;

### St Matthew's Gardens

- 3.9 **Background:** These generally comprise terrace townhouses and low-rise apartment blocks. In the absence of daylight distribution contour plots, we do not know the room arrangements utilised for analysis (these should be provided). It is noted that the majority of rooms analysed have a specified rooms use so the assumption is that some information on the internal arrangement of these properties has been utilised (eb7 to confirm).
- 3.10 In respect of the updated eB7 analysis, we summarise the effects as follows;
- 3.11 <u>Daylight VSC:</u> VSC reductions for main windows not meeting BRE Guide default target criteria for habitable rooms for properties on St Matthew's Gardens is presented within **Table 1** for living rooms, kitchens and dining rooms, bedrooms and habitable rooms of unknown room use.



Table 1 – VSC – Properties on St Matthew's Gardens with main windows having reductions not meeting BRE Guide default target – serving habitable rooms

Property.	Floor /	Window	Existing	Proposed	Reduction	Reduction				
No.	Room	Ref.	vsc	vsc	%	Adversity				
	Ref.									
Living Rooms										
205	GF-R1	W3*	32.0	25.3	21%	Minor				
203	GF-R1	W3*	31.3	23.3	25%	Minor				
177-201	LGF-R1	W1*	19.3	14.8	24%	Minor				
175	GF-R1	W2*	34.5	20.1	42%	Major				
173	GF-R1	W2*	36.4	20.9	43%	Major				
171	GF-R1	W2*	37.0	20.9	44%	Major				
169	LGF-R1	W2*	20.8	13.8	34%	Moderate				
169	GF-R1	W2*	36.7	20.3	45%	Major				
163-167	GF-R5	W6*	30.2	22.7	25%	Minor				
163-167	1 <sup>st</sup> -R5	W6*	35.8	22.7	37%	Moderate				
157-161	GF-R1	W2*	32.2	25.3	21%	Minor				
157-161	GF-R1	W2*	32.2	25.3	21%	Minor				
157-161	1 <sup>st</sup> -R1	W2*	38.1	26.1	31%	Moderate				
	<u> </u>	<u> </u>	Kitchens	S	l	<u> </u>				
175	LGF-R1	W2*	23.7	15.7	34%	Moderate				
			Dining Roc	oms						
173	LGF-R1	W2*	26.1	16.6	37%	Moderate				
171	LGF-R1	W2*	24.4	15.9	35%	Moderate				
	<u>I</u>	I	Bedroom	ns	l					
203	1 <sup>st</sup> -R1	W2*	33.7	24.8	27%	Minor				
177-201	GF-R1	W1	29.3	20.4	30%	Minor				
177-201	GF-R5	W5	27.6	17.8	35%	Moderate				
177-201	1 <sup>st</sup> -R1	W1	32.6	22.5	31%	Moderate				
177-201	1 <sup>st</sup> -R5	W5	33.6	19.8	41%	Major				
177-201	2 <sup>nd</sup> -R1	W1	34.9	25.0	28%	Minor				
177-201	2 <sup>nd</sup> -R5	W5	34.9	22.1	37%	Moderate				
177-201	3 <sup>rd</sup> -R1	W1	30.4	22.1	27%	Minor				
177-201	3 <sup>rd</sup> -R5	W5	30.4	19.1	37%	Moderate				
175	1 <sup>st</sup> -R1	W1*	35.7	21.7	39%	Moderate				
173	1 <sup>st</sup> -R1	W1*	37.5	22.9	39%	Moderate				
171	1 <sup>st</sup> -R1	W1*	37.9	22.9	40%	Moderate				
169	1 <sup>st</sup> -R1	W1*	37.7	22.7	40%	Moderate				



	Residential (room use not stated)									
163-167	GF-R1	W1	37.2	19.8	47%	Major				
163-167	GF-R2	W2	37.2	19.8	47%	Major				
163-167	GF-R3	W3	36.7	20.2	45%	Major				
163-167	GF-R4	W4	34.9	20.5	41%	Major				
163-167	1 <sup>st</sup> -R1	W1	30.5	14.1	54%	Major				
163-167	1 <sup>st</sup> -R2	W2	31.4	15.0	52%	Major				
163-167	1 <sup>st</sup> -R3	W3	30.5	14.4	53%	Major				
163-167	1 <sup>st</sup> -R4	W4	30.6	14.8	51%	Major				

Please note: \*denotes main window only

3.12 In terms of the reduction adversity presented within **Table 1**, this is summarised within the following **Table 2**;

Table 2 – VSC – Properties on St Matthew's Gardens with main windows having reductions not meeting BRE Guide default target – Summary on reduction Adversity

Habitable Room use	No. of Main Windows with	Main windows - VSC reduction adversity				
Room use	VSC reduction	Minor Moderate Major				
	not meet BRE			,		
	Guide target					
Living rooms	13	6	3	4		
Kitchens	1	-	1	-		
Dining rooms	2	-	2	-		
Bedrooms	13	4	8	1		
Unknown use	8	-	-	8		
Total	37	10	13	13		

- 3.13 From **Table 2**, it can be seen 37 No. main windows serving habitable rooms would have an adverse reduction including 26 No. with either a 'moderate' or 'major' adverse reduction (for which 7 No. relate to living rooms as 'moderate' or 'major').
- 3.14 <u>Daylight Distribution:</u> Daylight Distribution reductions not meeting BRE Guide default target criteria for habitable rooms for properties on St Matthew's Gardens is presented within **Table 3**;



Table 3 – Daylight Distribution – Properties on St Matthew's Gardens with habitable rooms having reductions not meeting BRE Guide default target

Property	Room	Window	Existing	Proposed	Reduction	Reduction				
No.	Ref.	Ref.	NSL %	NSL %	%	Adversity				
Living Rooms										
177-201	LG-R5	W1,W2	83	47	43%	Major				
177-201	LG-R3	W4,W5	75	36	52%	Major				
169	LG-R1	W1-W4	97	48	51%	Major				
169	GF-R1	W1-W4	98	69	30%	Minor				
			Kitchens	S						
175	LG-R1	W1-W5	95	52	45%	Major				
			Dining Roo	ms						
173	LG-R1	W1-W4	97	56	43%	Major				
171	LG-R1	W1-W4	98	55	44%	Major				
		l	Bedroom	is	L	L				
177-201	G-R1	W1	91	52	43%	Major				
177-201	G-R5	W5	91	46	49%	Major				
177-201	1 <sup>st</sup> -R1	W1	92	67	27%	Minor				
177-201	1 <sup>st</sup> -R5	W5	92	53	42%	Major				
177-201	2 <sup>nd</sup> -R5	W5	92	59	36%	Moderate				
177-201	3 <sup>rd</sup> -R5	W5	92	67	27%	Minor				
		Residen	tial (room us	se not stated)						
163-167	GF-R1	W1	96	32	67%	Major				
163-167	GF-R2	W2	95	27	71%	Major				
163-167	GF-R3	W3	98	58	41%	Major				
163-167	GF-R4	W4	98	60	39%	Moderate				
163-167	1 <sup>st</sup> -R1	W1	98	43	56%	Major				
163-167	1 <sup>st</sup> -R2	W2	97	41	57%	Major				
163-167	1 <sup>st</sup> -R3	W3	97	58	40%	Moderate				
163-167	1 <sup>st</sup> -R4	W4	96	60	38%	Moderate				

3.15 In terms of the reduction adversity presented within **Table 3**, this is summarised within the following **Table 4**;



Table 4 – Daylight Distribution – Properties on St Matthew's Gardens with habitable rooms having reductions not meeting BRE Guide default target – Summary on reduction Adversity

Habitable Room use	No. of Habitable Rooms with NSL	Room NSL reduction adversity		
	reduction not meet BRE Guide target	Minor	Moderate	Major
Living rooms	4	1	-	3
Kitchens	1	-	-	1
Dining rooms	2	-	-	2
Bedrooms	6	2	1	3
Unknown use	8	-	3	5
Total	21	3	4	14

3.16 From Table 4, it can be seen 21 No. habitable rooms have an adverse reduction including 18 No. with either a 'moderate' or 'major' adverse reduction (for which 3 No. relate to living rooms).

## **Silverwood Close**

- 3.17 <u>Background:</u> This predominantly comprise terrace houses. In the absence of daylight distribution contour plots, we do not know the room arrangements utilised for analysis (these should be provided). It is noted that the majority of rooms analysed have a specified rooms use so the assumption is that some information on the internal arrangement of these properties has been utilised (eb7 to confirm).
- 3.18 In respect of the updated eB7 analysis, we summarise the effects as follows;
- 3.19 <u>Daylight VSC:</u> VSC reductions to main windows not meeting BRE Guide default target criteria for habitable rooms for properties on Silverwood Close is presented within Table 5.



Table 5 - VSC - Properties on Silverwood Close with main windows having reductions not meeting BRE Guide default target - serving habitable rooms

Property	Floor /	Window	Existing	Proposed	Reduction	Reduction			
No.	Room	Ref.	vsc	vsc	%	Adversity			
	Ref.								
Living Rooms									
34	GF-R1	W3*	32.7	21.6	34%	Moderate			
35	GF-R2	W4*	31.2	20.2	35%	Moderate			
39	GF-R1	W2*	31.8	16.1	49%	Major			
40	GF-R2	W5	38.0	26.5	30%	Minor			
45	GF-R2	W4*	37.3	26.9	28%	Minor			
45	GF-R3	W10*	37.5	26.7	29%	Minor			
49-50	GF-R2	W4*	37.4	26.1	30%	Minor			
		l	Kitchen	S	L				
34	GF-R2	W8	31.8	20.8	34%	Moderate			
35	GF-R1	W1	32.7	21.1	36%	Moderate			
36	GF-R2	W3	26.4	17.8	32%	Moderate			
37	GF-R1	W2*	33.7	21.8	35%	Moderate			
39	GF-R2	W6	16.8	11.7	30%	Minor			
40	GF-R1	W4*	38.0	26.3	31%	Moderate			
43	GF-R1	W1	31.7	25.0	21%	Minor			
46	GF-R1	W1*	31.5	25.0	21%	Minor			
		l	Dining Roo	oms					
36	GF-R1	W1*	37.6	21.3	43%	Major			
38	GF-R1	W1*	33.8	20.2	40%	Moderate			
44	GF-R1	W1	33.0	26.1	21%	Minor			
51	GF-R2	W2	37.1	25.7	31%	Moderate			
		l	Bedroom	is					
34	1 <sup>st</sup> -R1	W1	38.3	24.9	35%	Moderate			
34	1 <sup>st</sup> -R2	W2	38.3	24.8	35%	Moderate			
35	1 <sup>st</sup> -R2	W2	38.3	24.8	35%	Moderate			
36	1 <sup>st</sup> -R1	W1	38.3	24.7	35%	Moderate			
37	1 <sup>st</sup> -R2	W2	38.3	24.7	36%	Moderate			
38	1 <sup>st</sup> -R1	W1	38.3	24.6	36%	Moderate			
39	1 <sup>st</sup> -R2	W2	38.3	24.7	35%	Moderate			

Please note: \*denotes main window only



3.20 In terms of the reduction adversity presented within **Table 5**, this is summarised within the following **Table 6**;

Table 6 – VSC – Properties on Silverwood Close with main windows having reductions not meeting BRE Guide default target – Summary on reduction Adversity

Habitable Room use	No. of Main Windows with VSC reduction not meet BRE Guide target	Main windows - VSC reduction adversity		
		Minor	Moderate	Major
Living rooms	7	4	2	1
Kitchens	8	3	5	-
Dining rooms	4	1	2	1
Bedrooms	7	-	7	-
Total	26	8	16	2

- 3.21 From **Table 6**, it can be seen 26 No. main windows serving habitable rooms would have an adverse reduction including 18 No. with either a 'moderate' or 'major' adverse reduction (for which 3 No. relate to living rooms).
- 3.22 <u>Daylight Distribution:</u> Daylight Distribution reductions not meeting BRE Guide default target criteria for habitable rooms for properties on Silverwood Close is presented within **Table 7**;



Table 7 – Daylight Distribution – Properties on Silverwood Close with habitable rooms having reductions not meeting BRE Guide default target

Property	Room	Window	Existing	Proposed	Reduction	Reduction				
No.	Ref.	Ref.	NSL %	NSL %	%	Adversity				
	Living Rooms									
			n/a							
			Kitchens	S						
34	GF-R2	W8	99	53	46%	Major				
35	GF-R1	W1	98	53	46%	Major				
36	GF-R2	W3	94	48	49%	Major				
37	GF-R1	W1,W2	98	62	36%	Moderate				
39	GF-R2	W6	95	52	45%	Major				
41	GF-R1	W1	98	70	29%	Minor				
42	GF-R3	W4	98	70	29%	Minor				
43	GF-R1	W1	73	29	60%	Major				
44	GF-R2	W2	99	71	28%	Minor				
45	GF-R1	W1, W7	100	60	39%	Moderate				
		ı	Dining Roo	oms						
36	GF-R1	W1,W2	99	53	46%	Major				
44	GF-R1	W1	95	69	27%	Minor				
51	GF-R2	W2	98	50	49%	Major				
			Bedroom	is						
34	1 <sup>st</sup> -R1	W1	99	55	45%	Major				
34	1 <sup>st</sup> -R2	W2	99	52	48%	Major				
35	1 <sup>st</sup> -R2	W2	98	56	42%	Major				
36	1 <sup>st</sup> -R1	W1	98	52	47%	Major				
37	1 <sup>st</sup> -R2	W2	98	58	41%	Major				
38	1 <sup>st</sup> -R1	W1	98	52	47%	Major				
39	1 <sup>st</sup> -R2	W2	99	61	38%	Moderate				
40	1 <sup>st</sup> -R1	W1	98	64	35%	Moderate				
41	1 <sup>st</sup> -R2	W2	98	68	30%	Minor				
42	1 <sup>st</sup> -R1	W5	97	65	33%	Moderate				
43	1 <sup>st</sup> -R2	W2	98	68	31%	Moderate				
44	1 <sup>st</sup> -R1	W1	90	66	26%	Minor				
45	1 <sup>st</sup> -R2	W2	98	65	34%	Moderate				
51	1 <sup>st</sup> -R3	W3	99	45	55%	Major				



3.23 In terms of the reduction adversity presented within **Table 7**, this is summarised within the following **Table 8**;

Table 8 – Daylight Distribution – Properties on Silverwood Close with habitable rooms having reductions not meeting BRE Guide default target – Summary on reduction Adversity

Habitable Room use	No. of Habitable Rooms with NSL	Room NSL reduction adversity		
	reduction not meet	Minor	Moderate	Major
	BRE Guide target			
Living rooms	-	-	-	-
Kitchens	10	3	2	5
Dining rooms	3	1	-	2
Bedrooms	14	2	5	7
Total	27	6	7	14

3.24 From **Table 8**, it can be seen 27 No. habitable rooms have an adverse reduction including 21 No. with either a 'moderate' or 'major' adverse reduction.

### Remaining properties (other than St Mathew's Gardens and Silverwood Close).

- 3.25 Properties not located on St Matthes's Gardens or Silverwood Close with reductions not meeting BRE Guide default target criteria for daylight VSC and / or Daylight Distribution can be summarised as follows;
- 3.26 <u>Daylight VSC:</u> VSC reductions for main windows not meeting BRE Guide default target criteria for habitable rooms for remaining properties is presented within **Table 9**.



Table 9 – VSC – Remaining Properties with main windows having reductions not meeting BRE Guide default target – serving habitable rooms

Prop.	Floor /	Window	Existing	Proposed	Reduction	Reduction
No.	Room	Ref.	VSC	VSC	%	Adversity
	Ref.					
			Sleaford	Street		
150	1 <sup>st</sup> -R2	W2	33.8	19.9	41%	Major
	kitchen					
148	GF -R1	W1	32.8	16.7	49%	Major
	bedroom					
			York S	treet		I
74	GF -R1	W1	31.8	24.9	22%	Minor
	unknown					
			Hampden (	Gardens		
84-97	4 <sup>th</sup> -R3	W3	18.8	14.3	24%	Minor
	bedroom					
55-68	3 <sup>rd</sup> -R7	W8	23.3	17.8	23%	Minor
	kitchen					
55-68	4 <sup>th</sup> -R2	W3	23.6	18.5	21%	Minor
	bedroom					
55-68	4 <sup>th</sup> -R3	W4	18.2	13.1	28%	Minor
	bedroom					

- 3.27 From Table 9, it can be seen 7 No. habitable rooms have an adverse reduction which are typically 'minor adverse' except 2 No. 'major adverse' reductions (potentially, the VSC reduction to No. 74 York Street may meet BRE Guide target on a 'room-weighted' VSC).
- 3.28 <u>Daylight Distribution:</u> For Daylight Distribution reductions not meeting BRE Guide default target criteria for habitable rooms for remaining properties is presented within Table 10A (York St) and 10B (Sleaford St, Hampden Gardens & The Terrace);



Table 10A – Daylight Distribution – Properties on York St with habitable rooms having reductions not meeting BRE Guide default target

Prop.	Room	Window	Existing	Proposed	Reduction	Reduction					
No.	Ref.	Ref.	NSL %	NSL %	%	Adversity					
	Living/K/D Rooms										
48	GF-R1	W1,2,3&4	88	54	38%	Moderate					
	1		Kitche	ens		I					
34	GF-R1	W1	98	75	24%	Minor					
52	GF-R1	W1&2	93	50	46%	Major					
76	GF-R2	W2	100	57	42%	Major					
	•		Dining R	ooms							
52	GF-R2	W3	48	34	30%	Minor					
			Bedro	oms							
42	1 <sup>st</sup> -R1	W1	83	64	23%	Minor					
44	1st -R2	W2	95	72	25%	Minor					
	•	U	nknown - r	esidential							
54	GF-R1	W1	97	64	34%	Moderate					
56	GF-R2	W2	100	59	41%	Major					
56	1st -R2	W2	100	73	27%	Minor					
72	GF-R1	W1	94	70	26%	Minor					
72	1st -R1	W1	98	77	22%	Minor					
74	1 <sup>st</sup> -R1	W1	92	31	66%	Major					
74	1 <sup>st</sup> -R2	W2	94	65	31%	Moderate					
78	1 <sup>st</sup> -R2	W2	99	73	26%	Minor					
86	1 <sup>st</sup> -R1	W1	98	74	25%	Minor					
86	1 <sup>st</sup> -R2	W2	98	76	22%	Minor					



Table 10B – Daylight Distribution – Properties on Sleaford St, Hampden Gardens & The Terrace with habitable rooms having reductions not meeting BRE Guide default target

Prop.	Room	Window	Existing	Proposed	Reduction	Reduction				
No.	Ref.	Ref.	NSL %	NSL %	%	Adversity				
	Sleaford Street									
148	GF-R1	W1	97	55	44%	Major				
	bedroom									
			Hampden (	Gardens		1				
69-83	GF-R4	W5&6	90	69	24%	Minor				
	unknown									
69-83	GF-R5	W7	94	68	28%	Minor				
	unknown									
			The Ter	race		1				
11-17	GF -R1	W1	99	71	28%	Minor				
	kitchen									
11-17	GF -R2	W2	97	70	28%	Minor				
	unknown									
11-17	GF -R3	W3	99	68	32%	Moderate				
	unknown									
11-17	GF -R5	W7	99	71	29%	Minor				
	unknown									
11-17	GF -R6	W8	97	71	27%	Minor				
	unknown									
11-17	1 <sup>st</sup> -R1	W1	99	73	26%	Minor				
	kitchen									
11-17	1 <sup>st</sup> -R4	W4	94	74	22%	Minor				
	unknown									

3.29 In terms of the reduction adversity presented within **Tables 10A & 10B**, this is summarised within the following **Table 11**;



Table 11 – Daylight Distribution – Properties on York St, Sleaford St, Hampden Gardens & The Terrace with habitable rooms having reductions not meeting BRE Guide default target – Summary on Reduction Adversity

Habitable Room use	No. of Habitable Rooms with NSL	Room NSL reduction adversity				
	reduction not meet BRE Guide target	Minor	Moderate	Major		
Living rooms	1	-	1	-		
Kitchens	5	3	-	2		
Dining rooms	1	1	-	-		
Bedrooms	3	2	-	1		
Unknown	17	12	3	2		
Total	27	18	4	5		

3.30 From **Table 11**, it can be seen 27 No. habitable rooms have an adverse reduction including 9 No. with either a 'moderate' or 'major' adverse reduction (for which 1 No. relate to living rooms and 5 No. unknown room uses).

### **Summary on Daylight**

- 3.31 There will be some noticeable impacts to daylight to a number of neighbouring properties / properties with reductions not meeting BRE Guide default target criteria.
- 3.32 In terms of both Daylight VSC and Daylight Distribution, properties with reductions not meeting BRE Guide default target criteria primarily relate to a number of windows / rooms within properties on St Matthew's Gardens and Silverwood Close and generally to a lesser extent on York St, Sleaford St, Hampden Gardens & The Terrace.
- 3.33 In consideration of both the quantum of windows rooms having reductions not meeting BRE Guide default target criteria, the extent of reduction (some significant reduction adversity noted; especially 'moderate' and 'major' adversity) and in consideration of retained values, room uses, etc, we consider in some instances, such noticeable effects upon daylight to neighbouring properties may not be possible to support. Given this outcome, in order to assist matters, we have also provided some commentary on the Illustrative Scheme (please see Section 4.0 of this report).



## Neighbouring Sunlight analysis review (Maximum Parameter Scheme)

## <u>Sunlight – Effect upon neighbouring habitable rooms (main focus upon living rooms):</u>

- 3.34 Neighbouring properties have been considered in terms of sunlight reductions. It is accepted that the main focus for analysis review is upon living rooms (and conservatories where applicable), served by windows facing within 90° of south although the BRE Guide highlights that whilst consideration of kitchens and bedrooms is less important, care should be taken not to block too much sunlight.
- 3.35 For any applicable reductions in Annual Probable Sunlight Hours (APSH) to living room use, these meet BRE Guide default target criteria. However, for winter hours, there are 4 No. living rooms with reductions not meeting BRE Guide default target criteria which are summarised in **Table 12** below;

Table 12 - Maximum Parameter Scheme - St. Matthew's Gardens - Sunlight Winter House to Living Rooms not meeting BRE Guide target

Property.	Floor /	Window	Existing	Proposed	Reduction	Reduction		
No.	Room	Ref.	Winter	Winter	%	Adversity		
	Ref.		Hours %	Hours %				
	Living Rooms							
177-201	LGF-R3	W4, 5	10	4	60%	Major		
169	LGF-R1	W1-4	18	1	94%	Major		
163-167	GF-R5	W5-7	21	3	86%	Major		
163-167	1 <sup>st</sup> -R5	W5-7	21	4	81%	Major		

3.36 From the aforementioned **Table 12**, it can now be seen that for the 4 No. reductions in Sunlight Winter Hours to living rooms not meeting BRE Guide default target criteria, these are all 'major' adverse reductions. However, given that the threshold for consideration on reduction is only once the sunlight winter hours falls below 5%, it can be seen in terms of retained values, for 2 No. living rooms with a retained value of 4%, this is still close to target. For the remaining 2 No. living rooms, these are further away and for one in particular, with a retained value of just 1% winter hours (existing 18%), there is a very significant loss.



## Sunlight - Effect upon neighbouring amenity:

3.37 102 No. amenity areas have been reviewed for sunlight availability, in terms of the BRE Guide 2 hour test. From the eb7 analysis, applicable reductions relating to the 2 hour analysis review (21st March), these would meet BRE Guide target criteria with the isolated exception of 5 No. amenity areas for which the results are summarised in **Table 13**;

Table 13 – Maximum Parameter Scheme – Sunlight Availability to Amenity Area (21st March) - not meeting BRE Guide target

Property.	Amenity	Existing	Proposed	Reduction	Reduction
No.	Ref.	Area for sun	Area for sun	%	Adversity
		(2 hours) %	(2 hours) %		
	1	St Matthey	v's Gardens	<u> </u>	
175	56	88	48	46%	Major
163-167	60	77	47	39%	Major (as
					retained
					below 50%)
		Silverwo	ood Close		
36	72	83	49	42%	Major
37	73	79	46	42%	Major
38	74	77	26	66%	Major

3.38 From the aforementioned **Table 13**, it can now be seen that for the 5 No. reductions in Sunlight Availability to Amenity areas (2 hours – 21st March test) that are not meeting BRE Guide default target criteria, these are all 'major' adverse reductions. However, given that the threshold for consideration on reduction is only once the sunlit area falls below 50%, it can be seen in terms of retained values, 4 No. have a retained value ranging 46% to 49% thus, still fairly close to target (but significant reduction). However, for the remaining amenity area not meeting target, this would only have a retained value of 26% thus, significantly below target / a significantly noticeable reduction.

### Sunlight Summary (Maximum parameter Scheme)

3.39 In consideration of sunlight to existing neighbouring property living rooms / sun important rooms, we conclude that for any applicable reductions in sunlight to these rooms, such reductions would meet BRE Guide target criteria except for 4 No. instances for winter hours. Whilst these particular reductions will be major adverse and noticeable, in 2 No. instances, the retained levels are still relatively close to target



### Appendix E

## Beehive Centre, Coldhams Lane, Cambridge CB1 3ET Daylight and Sunlight – Independent Review

criteria; for the remaining 2 No. instances, the retained values are worse and in one instance, the retained level is significantly low.

3.40 For sunlight to existing neighbouring amenity areas, we conclude that for any applicable reductions in sunlight to such amenity area, such reductions would meet BRE Guide target criteria except for 5 No. instances. Whilst these particular reductions will be major adverse and noticeable, in 4 No. instances, the retained levels are still relatively close to target criteria; for the remaining 1 No. instance, the retained value is significantly low.



#### 4.0 ILLUSTRATIVE SCHEME

- 4.1 It is important to highlight that the <u>Illustrative Scheme</u> is not the massing within the planning application scheme; that purely relates to the <u>Maximum Parameter Scheme</u>.
- 4.2 However, the <u>Illustrative Scheme</u> does provide some background as to how one possible alternative scheme (to that of the planning application) could perform.
- 4.3 eb7 have provided analysis for such an <u>Illustrative Scheme</u> and we have considered this and comment as follows;

### Neighbouring Daylight analysis review (Illustrative Scheme)

- 4.4 Similar to the <u>Maximum Parameter Scheme</u>, the effects of the scheme where reductions do not meet BRE Guide default target criteria primarily relates to a number of properties on both St. Matthew's Gardens and Silverwood Close (for the purpose of the Illustrative scheme, we will focus consideration upon St. Matthew's Gardens and Silverwood Close only for efficiency as the Illustrative Scheme is not the planning application scheme).
- 4.5 Both the quantum of such properties and adversity of reduction, is less than that of the Maximum Parameter Scheme.
- 4.6 We summarise, those properties with reductions in daylight not meeting BRE Guide default target criteria for St. Matthew's Gardens within **Table 14** for daylight VSC and **Table 15** for Daylight Distribution;



Table 14 - Illustrative Scheme - St. Matthew's Gardens - Daylight VSC not meeting BRE Guide target

Property.	Floor /	Window	Existing	Proposed	Reduction	Reduction			
No.	Room	Ref.	vsc	vsc	%	Adversity			
	Ref.								
Living Rooms									
175	GF-R1	W2*	34.5	23.7	31%	Moderate			
173	GF-R1	W2*	36.4	24.5	33%	Moderate			
171	GF-R1	W2*	37.0	24.6	33%	Moderate			
169	LGF-R1	W2*	20.8	16.4	21%	Minor			
169	GF-R1	W2*	36.7	24.1	34%	Moderate			
163-167	1 <sup>st</sup> -R5	W6*	35.8	25.4	29%	Minor			
		l	Kitchen	S	l				
175	LGF-R1	W2*	23.7	18.2	23%	Minor			
			Dining Roc	oms					
173	LGF-R1	W2*	26.1	19.7	25%	Minor			
171	LGF-R1	W2*	24.4	18.9	23%	Minor			
			Bedroom	ıs					
177-201	GF-R5	W5	27.6	21.2	23%	Minor			
177-201	1 <sup>st</sup> -R1	W1	32.6	25.5	22%	Minor			
177-201	1 <sup>st</sup> -R5	W5	33.6	23.1	31%	Moderate			
177-201	2 <sup>nd</sup> -R5	W5	34.9	25.4	27%	Minor			
177-201	3 <sup>rd</sup> -R5	W5	30.4	22.2	27%	Minor			
175	1 <sup>st</sup> -R1	W1*	35.7	25.2	29%	Minor			
173	1 <sup>st</sup> -R1	W1*	37.5	26.5	29%	Minor			
171	1 <sup>st</sup> -R1	W1*	37.9	26.5	30%	Minor			
169	1 <sup>st</sup> -R1	W1*	37.7	26.4	30%	Minor			
		Residen	tial (room us	se not stated)					
163-167	GF-R1	W1	37.2	24.2	35%	Moderate			
163-167	GF-R2	W2	37.2	24.4	34%	Moderate			
163-167	GF-R3	W3	36.7	24.7	32%	Moderate			
163-167	GF-R4	W4	34.9	24.6	30%	Moderate			
163-167	1 <sup>st</sup> -R1	W1	30.5	18.4	40%	Major			
163-167	1 <sup>st</sup> -R2	W2	31.4	19.5	38%	Moderate			
163-167	1 <sup>st</sup> -R3	W3	30.5	18.9	38%	Moderate			
163-167	1 <sup>st</sup> -R4	W4	30.6	18.9	38%	Moderate			

Please note: \*denotes main window only



- 4.7 From the aforementioned **Table 14**, it can now be seen that reductions in Daylight VSC not meeting BRE Guide default target criteria are typically having either 'minor' or 'moderate' adverse reductions with the isolated exception of one 'major' adverse reduction relating to a 1<sup>st</sup> floor room within Nos. 163-167 (window ref. W1).
- 4.8 We now consider for Daylight Distribution within **Table 15** as follows;

Table 15 - Illustrative Scheme – St. Matthew's Gardens – Daylight Distribution not meeting BRE Guide target

Property	Room	Window	Existing	Proposed	Reduction	Reduction			
No.	Ref.	Ref.	NSL %	NSL %	%	Adversity			
Living Rooms									
177-201	LG-R5	W1,W2	83	62	25%	Minor			
177-201	LG-R3	W4,W5	75	48	36%	Moderate			
169	LG-R1	W1-W4	97	69	29%	Minor			
	1	l	Kitchens	5					
175	LG-R1	W1-W5	95	62	35%	Moderate			
		I	Dining Roo	ms	I.				
173	LG-R1	W1-W4	97	74	24%	Minor			
171	LG-R1	W1-W4	98	73	25%	Minor			
			Bedroom	ıs					
177-201	G-R1	W1	91	71	23%	Minor			
177-201	G-R5	W5	91	62	32%	Moderate			
177-201	1 <sup>st</sup> -R5	W5	92	68	25%	Minor			
	1	Residen	tial (room us	se not stated)					
163-167	GF-R1	W1	96	65	33%	Moderate			
163-167	GF-R2	W2	95	47	50%	Major			
163-167	GF-R3	W3	98	73	26%	Minor			
163-167	GF-R4	W4	98	73	25%	Minor			
163-167	1 <sup>st</sup> -R1	W1	98	74	24%	Minor			
163-167	1 <sup>st</sup> -R2	W2	97	72	26%	Minor			
163-167	1 <sup>st</sup> -R3	W3	97	76	22%	Minor			
163-167	1 <sup>st</sup> -R4	W4	96	76	21%	Minor			

4.9 From the aforementioned **Table 15**, it can now be seen that reductions in Daylight Distribution not meeting BRE Guide default target criteria are typically 'minor' (12 No.), with the isolated exception of 4 No. 'moderate' adverse reduction and 1 No. 'major'



adverse reduction (the latter relating to ground floor room, room use not stated, within Nos. 163-167 – room ref. GF-R2).

4.10 In consideration of Silverwood Close properties, we summarise, those properties with reductions in daylight not meeting BRE Guide default target criteria within **Table 16** for daylight VSC and **Table 17** for Daylight Distribution;

Table 16 - Illustrative Scheme – Silverwood Gardens – Daylight VSC not meeting BRE Guide target

Property	Floor /	Window	Existing	Proposed	Reduction	Reduction				
No.	Room	Ref.	VSC	vsc	%	Adversity				
	Ref.									
	Living Rooms									
34	GF-R1	W3*	32.7	23.0	29%	Minor				
35	GF-R2	W4*	31.2	21.6	31%	Moderate				
39	GF-R1	W2*	31.8	18.3	43%	Major				
		l	Kitchens	S						
34	GF-R2	W8	31.8	22.0	31%	Moderate				
35	GF-R1	W1	32.7	22.2	32%	Moderate				
36	GF-R2	W3	26.4	18.7	29%	Minor				
37	GF-R1	W2*	33.7	22.9	32%	Moderate				
39	GF-R2	W6	16.8	11.9	29%	Minor				
			Dining Roc	ms						
36	GF-R1	W1*	37.6	23.1	39%	Moderate				
38	GF-R1	W1*	33.8	21.6	36%	Moderate				
			Bedroom	is						
34	1 <sup>st</sup> -R1	W1	38.3	26.6	31%	Moderate				
34	1 <sup>st</sup> -R2	W2	38.3	26.4	31%	Moderate				
35	1 <sup>st</sup> -R2	W2	38.3	26.3	31%	Moderate				
36	1 <sup>st</sup> -R1	W1	38.3	26.2	31%	Moderate				
37	1 <sup>st</sup> -R2	W2	38.3	26.2	32%	Moderate				
38	1 <sup>st</sup> -R1	W1	38.3	26.2	31%	Moderate				
39	1 <sup>st</sup> -R2	W2	38.3	26.5	31%	Moderate				

Please note: \*denotes main window only

4.11 From the aforementioned **Table 16**, it can now be seen that reductions in Daylight VSC not meeting BRE Guide default target criteria are typically 'moderate' adverse reductions with the isolated exception of 3 No. 'minor' adverse reductions and 1 No.



'major' adverse reduction relating to a ground floor living room within No. 39 Silverwood Close (window ref. W2).

4.12 We now consider for Daylight Distribution within **Table 17** as follows;

Table 17 - Illustrative Scheme - Silverwood Close - Daylight Distribution not meeting BRE Guide target

Property	Room	Window	Existing	Proposed	Reduction	Reduction				
No.	Ref.	Ref.	NSL %	NSL %	%	Adversity				
	Living Rooms									
	n/a									
	Kitchens									
34	GF-R2	W8	99	61	39%	Moderate				
35	GF-R1	W1	98	60	39%	Moderate				
36	GF-R2	W3	94	56	41%	Major				
37	GF-R1	W1,W2	98	70	28%	Minor				
39	GF-R2	W6	95	57	40%	Moderate				
43	GF-R1	W1	73	41	44%	Major				
45	GF-R1	W1, W7	100	77	23%	Minor				
			Dining Roo	ms						
36	GF-R1	W1,W2	99	61	38%	Moderate				
51	GF-R2	W2	98	71	28%	Minor				
		I	Bedroom	ıs	•	l				
34	1 <sup>st</sup> -R1	W1	99	63	36%	Moderate				
34	1 <sup>st</sup> -R2	W2	99	59	41%	Major				
35	1 <sup>st</sup> -R2	W2	98	64	35%	Moderate				
36	1 <sup>st</sup> -R1	W1	98	61	37%	Moderate				
37	1 <sup>st</sup> -R2	W2	98	66	33%	Moderate				
38	1 <sup>st</sup> -R1	W1	98	61	38%	Moderate				
39	1 <sup>st</sup> -R2	W2	99	72	27%	Minor				
51	1 <sup>st</sup> -R3	W3	99	61	38%	Moderate				

4.13 From the aforementioned **Table 17**, it can now be seen that reductions in Daylight Distribution not meeting BRE Guide default target criteria the majority are 'moderate' (10 No.), with then 3 No. 'major' adverse reduction and 4 No. 'minor' adverse reductions. (the latter relating to 2 No. kitchens and 1 No bedroom). To highlight, all livings rooms have reductions that would meet BRE Guide default target.



### **Daylight Summary (Illustrative Scheme)**

- 4.14 Whilst clearly, there are still some reductions to windows / rooms not meeting BRE Guide default target criteria the quantum is less than the Maximum Parameter Scheme. Typically, the Illustrative Scheme has reduction adversity which are generally less and the retained levels generally higher, when compared to the Maximum Parameter Scheme. Although, to highlight, there are still some isolated windows / rooms within the Illustrative Scheme with retained values considered low (further consideration required).
- 4.15 Whilst the Illustrative Scheme would still result in some noticeable reductions to the daylight to neighbouring properties (St Matthew's Garden and Silverwood Close), we consider that in terms of reduction adversity and retained values, these are generally more favourable than the Maximum Parameter Scheme. However, the acceptability of the remaining impacts is a matter of judgement for the local planning authority.

### Neighbouring Sunlight analysis review (Illustrative Scheme)

# <u>Sunlight – Effect upon neighbouring habitable rooms (main focus upon living rooms):</u>

- 4.16 Neighbouring properties have been considered in terms of sunlight reductions to habitable. It is accepted that the main focus for analysis review is upon living rooms (and conservatories where applicable), served by windows facing within 90° of south although the BRE Guide highlights that whilst consideration of kitchens and bedrooms is less important, care should be taken not to block too much sunlight.
- 4.17 For any applicable reductions in both Annual Probable Sunlight Hours (APSH) and winter hours to living rooms only, these all meet BRE Guide default target criteria.

## Sunlight - Effect upon neighbouring amenity:

4.18 102 No. amenity areas have been reviewed for sunlight availability, in terms of the BRE Guide 2 hour test. From the eb7 analysis, applicable reductions relating to the 2 hour analysis review (21st March), these would meet BRE Guide target criteria with the isolated exception of 1 No. amenity area relating to 38 Silverwood Close (property ref. 74) which has a 56% reduction (existing value of 77% reduced to 34%).



## **Sunlight Summary (Illustrative Scheme)**

- 4.19 In consideration of sunlight to existing neighbouring property living rooms / sun important rooms, for any applicable reductions in both Annual Probable Sunlight Hours (APSH) and winter hours to living rooms, these all meet BRE Guide default target criteria.
- 4.20 In consideration of sunlight to existing neighbouring amenity areas, for any applicable reductions in sunlight to such amenity area, such reductions would meet BRE Guide target criteria except for 1 No. isolated instance.