eb7 ltd
2nd Floor, Chancery Exchange
10 Furnival Street, EC4A 1AB
+44 (0)20 7148 6290
info@eb7.co.uk
www.eb7.co.uk

29 November 2024

Re: The Beehive Redevelopment – Daylight and Sunlight Addendum

1 Introduction

1.1.1 This practice has been advising on the daylight and sunlight effects of the proposed development at the Beehive Centre. An assessment was undertaken of the original form of the planning application submission (Ref: 23/03204/OUT) and subsequently a further full assessment of the Amended Scheme was undertaken as submitted to the LPA in August 2024.

1.1.2 This addendum report has been prepared to add further detail in respect of the potential effects to the nearby neighbouring properties to add further understanding and assessment and which has added to the findings that the proposals are acceptable in regard to daylight and sunlight.

1.1.3 This report, and our August 2024 study, consider the effects of the proposals against the relevant BRE guideline document BR209: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (the BRE guide).

1.1.4 The conclusions of this letter should be read in conjunction with our August 2024 report. This earlier report included detail in respect of the methodology for the assessment of daylight and sunlight in relation to new developments provided by the building research establishment's (BRE) guidance 'site layout planning for daylight and sunlight: a guide to good practice.' (2022).

1.1.5 As stated within our submission report it is important to note that the BRE guidelines are not a rigid set of rules but are advisory and need to be applied flexibly according to the specific context of a site.

2 Flexible Application of the BRE guidance

2.1.1 In respect of the Beehive Centre site the main deviations occur to neighbours across St Matthews Gardens and Silverwood Close that face undeveloped areas of the site, such that a change from the pre-existing condition is inevitable and to be anticipated. The question therefore is one of acceptability which may be addressed considering the application guidance in Appendix F and H of the BRE guidance as well as on the wider question of planning balance and optimising the use of the site.

Appendix F – Setting Alternative Targets

2.1.2 Appendix F of the BRE guide provides some guidance for setting alternate target values and suggests that the application of alternate values should be 'self-consistent'. This principle is illustrated in the Whitechapel Estate appeal referenced in our report and the concept still applies that acceptability may be considered by reference to pre-existing amenity levels in the vicinity of the site or in respect of other schemes that have been deemed acceptable notwithstanding a degree of effect to the neighbours.

2.1.3 Paragraph F1 of Appendix F in the BRE guidance, suggests that change is expected from pre-existing levels when developing a site with low rise and that alternative targets may be set based on the proposed development and local context.

2.1.4 In addition to this, paragraph F3 demonstrates the importance of applying daylight and sunlight targets flexibly and by stressing the need for targets to be 'self-consistent' with the pre-existing local context. The application of such 'self-consistent' targets recognises that the degree of expectation of daylight / sunlight amenity is related to the site context. This expectation will differ between locations.

Appendix H – Significance Criteria

2.1.5 The acceptability of deviations is somewhat dependant on both their extent and severity of the effects. Appendix H of the BRE Guidelines gives advice for the application of significance criteria in respect of effects on daylight, sunlight and overshadowing. Whilst the significance criteria are most commonly used where such matters are scoped into an Environmental Statement they are useful in assessing the acceptability of any major scheme. Appendix H provides the following:

"The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied.

Where the loss of skylight or sunlight does not meet the guidelines in this book, the impact is assessed as minor, moderate or major adverse. Factors tending towards minor adverse impact would include:

- *Only a small number of windows or limited area or open space are affected;*
- *The loss is only marginally outside the guidelines;*
- *The affected room has other sources of skylight or sunlight;*
- *The affected building or open space only has a low-level requirement for skylight or sunlight and*
- *There are particular reasons why an alternative, less stringent guidelines should be applied."*

2.1.6 Beyond the 20% reduction target value recommended by the BRE guidance, the following significance criteria are commonly applied in respect of Environmental Impact Assessments (EIA) / major schemes:

- 20.1-30% reduction would result in minor adverse impact;
- 30.1-40% reduction would result in moderate adverse impact; and
- Above 40% reduction would result in a major adverse impact.

3 Daylight and Sunlight Effects

3.1.1 In response to comments raised by the planning officers, we have updated our site research of the affected properties across St Mathew's Gardens and Silverwood Close in order to provide further context to the effects noted.

3.1.2 Our further consideration of the proposals will be based on both the proposed 'maximum parameter' and 'illustrative' proposals to maintain consistency with our previous submission report.

3.1.3 Full results of the daylight and sunlight effects of the proposed scheme upon all the neighbouring properties based on our updated due diligence / site research are attached within Appendix 2 of this report.

Effects categorised in significance criteria in line with Appendix H

3.1.4 In the following tables below, we have categorised the effects of both the 'maximum parameter' and 'illustrative' proposals into a significance criterion based on the application of Appendix H of the BRE guidance.

3.1.5 The below tables focus on St Matthews Gardens and 33-40 Silverwood Close, given the effects to these are properties have attracted particular further understanding.

Methodology	Total no. of deviations identified – illustrative scheme:	Minor Adverse Effect – 0-10% Deviation	Moderate Adverse Effect 10-20% deviation	Major Adverse Effect – >40% Deviation
VSC to windows	119	34	60	25
NSL to rooms	48	9	11	28
Total APSH and WPSH to rooms	12	0	0	12

Table 1 - 'Maximum parameter' effects categorised into significance criteria based on Appendix H

3.1.6 While there are more moderate / major adverse changes under the 'maximum parameter' scheme, this presents a 'worst case' and the illustrative scheme is considered more realistic representation of the likely impacts under future Reserved Matters submissions. The Parameter Plan envelope represents a maximum envelope which could not be fully realised because the Parameter Plans set

in a condition that the footprint of the larger proposed buildings cannot fill the full footprint area denoted for each of the buildings on the Parameter Plan drawings. This is confirmed by the design code which would enforce articulation of the proposed blocks and prevent the detailed scheme occupying the full extent of the maximum parameter.

Methodology	Total no. of deviations identified – illustrative scheme:	Minor Adverse Effect – 0-10% Deviation	Moderate Adverse Effect 10-20% deviation	Major Adverse Effect – >40% Deviation
VSC to windows	82	43	38	1
NSL to rooms	35	16	15	4
Total APSH and WPSH to rooms	0	0	0	2

Table 2 - 'Illustrative' effects categorised into significance criteria based on Appendix H

3.1.7 When applying the significance criteria based on Appendix H, the effects of the 'illustrative' proposals to the majority of relevant windows understood to serve habitable rooms either meet the BRE targets or limited to minor deviations from the recommendations.

3.1.8 These minor deviations (between 20%-30% reductions) recorded from the BRE criteria are consistent with our August 2024 report. Such marginal changes beyond the recommendations are to be anticipated when developing underutilised / lower rise sites and are considered acceptable given the BRE guidance is intended to be interpretated sensibly and flexibly in line with other site constraints.

4 Commentary on relevant property specific considerations

4.1.1 We have considered the daylight and sunlight effects to 163-203 St Matthew's Gardens and 33-43 Silverwood Close in further detail below, focusing on deviations based on the 'illustrative' proposal given this is more representative of the scheme that will be delivered in line with the design code.

4.1.2 Where more moderate / major adverse Vertical Sky Contour (VSC) and No-Sky Line (NSL) changes have been recorded in our assessment of the 'illustrative proposal', the tables below show the daylight reductions and retained levels extracted from our results alongside our commentary to provide more context to the deviations in respect of both room uses and neighbouring constraints.

4.1.3 Our previous report included a number of assumed layouts and so we have undertaken updated site research identifying room layouts from estate agent plans / planning drawings to further inform our consideration of these properties and provide context to the effects of the scheme. Where plans have been unavailable for specific properties, we have replicated layouts obtained from neighbours with a similar external appearance and typology.

4.1.4 To help illustrate the effects of the illustrative scheme, we have also provided 'colour coded' window maps, showing minor adverse effects in green, moderate adverse in amber and major adverse in red. Windows that meet the BRE targets or understood to serve non-habitable rooms are shown in grey. These drawings are attached in Appendix 3.

163-203 St Matthew's Gardens – VSC table:

Address	Room	Window	Room use	Vertical Sky Component (VSC)			
				Existing VSC	Proposed VSC	Proportion Retained	Eb7 Comments
203 St Matthew's Gardens							
Ground	R1	W1	Living Room	31.5	26.9	0.86	Paragraph 2.2.6 within the guidance states that the principle central window of bay windows can be considered as the main window. VSC effect to the central window (W2) meets the BRE targets.
		W2		30.2	27.8	0.92	
		W3		31.3	26.2	0.84	
		W4		22.6	17.2	0.76	
177-201 Odd St Matthew's Gardens							
Ground	R3	W3	Stairwell	33.1	24.6		Updated site research show this window to serve non-habitable space not relevant for assessment
Ground	R5	W5	Bedroom	27.6	21.2	0.77	Minor VSC effect
First	R1	W1	Bedroom	32.6	25.5	0.78	Minor VSC effect
First	R3	W3	Stairwell	37.0	26.7		Updated site research show this window to serve non-habitable space not relevant for assessment
First	R5	W5	Bedroom	33.6	23.1	0.69	VSC effect considered minor given VSC proportional change of 31.1% and retained absolute VSC value of 23.1%, marginal difference of 3.9% below absolute BRE target of 27%.
Second	R3	W3	Stairwell	38.3	28.6		Updated site research show this window to serve non-habitable space not relevant for assessment
Second	R5	W5	Bedroom	34.9	25.4	0.73	Minor VSC effect

Third	R3	W3	Stairwell	31.8	23.5	0.74	Updated site research show this window to serve non-habitable space not relevant for assessment
Third	R5	W5	Bedroom	30.4	22.2	0.73	Minor VSC effect
175 St Matthew's Gardens							
Lower Ground	R1	W1	Kitchen	13.1	9.5	0.72	Minor VSC effect to principle central window 'W2' within bay.
		W2		23.7	18.2	0.77	
		W3		20.6	16.2	0.78	
		W4		19.7	15.2	0.77	
		W5		26.3	26.3	1.00	
Ground	R1	W1	Living Room	24.4	17.3	0.71	VSC effect to central bay window 'W2' considered minor, given marginal absolute difference of 3.3% below absolute target of 27%.
		W2		34.5	23.7	0.69	
		W3		34.9	23.3	0.67	
		W4		35.3	24.1	0.68	
First	R1	W1	Bedroom	35.7	25.2	0.71	Minor VSC effect
		W2		36.5	25.7	0.71	
173 St Matthew's Gardens							
Lower Ground	R1	W1	Dining Room	15.0	11.0	0.73	Minor VSC effect to principle central window 'W2' within bay.
		W2		26.1	19.7	0.75	
		W3		21.5	16.6	0.77	
		W4		21.2	15.9	0.75	
Ground	R1	W1	Living Room	30.8	22.2	0.72	VSC effect to central bay window 'W2' considered minor, given marginal absolute difference of 2.5% below absolute target of 27%.
		W2		36.4	24.5	0.67	
		W3		35.1	23.2	0.66	
		W4		36.4	24.5	0.67	
First	R1	W1	Bedroom	37.5	26.5	0.71	Minor VSC effects
		W2		37.4	26.2	0.70	
171 St Matthew's Gardens							
Lower Ground	R1	W1	Dining Room	14.8	11.3	0.76	Minor VSC effect to principle central window 'W2' within bay.
		W2		24.4	18.9	0.77	
		W3		18.4	14.1	0.77	
		W4		20.2	14.9	0.74	
Ground	R1	W1	Living Room	32.8	23.6	0.72	VSC effect to central bay window 'W2' considered minor, given marginal absolute difference of 2.4% below absolute target of 27%.
		W2		37.0	24.6	0.67	
		W3		34.8	22.8	0.65	
		W4		36.5	24.3	0.67	
First	R1	W1	Bedroom	37.9	26.6	0.70	Minor VSC effects
		W2		37.7	26.4	0.70	

169 St Matthew's Gardens							
Lower Ground	R1	W1	Living Room	11.1	8.4	0.75	Minor VSC effect to principle central window 'W2' within bay.
		W2		20.8	16.4	0.79	
		W3		17.3	13.8	0.80	
		W4		19.7	15.0	0.76	
Ground	R1	W1	Living Room	32.9	23.4	0.71	VSC effect to central bay window 'W2' considered minor, given marginal absolute difference of 2.9% below absolute target of 27%.
		W2		36.7	24.1	0.66	
		W3		30.2	18.9	0.63	
		W4		32.7	21.2	0.65	
First	R1	W1	Bedroom	37.7	26.4	0.70	Minor VSC effects
		W2		35.4	25.1	0.71	
163-167 St Matthew's Gardens							
Ground	R1	W1	Residential	37.2	24.2	0.65	Windows appear to serve either bathrooms / kitchens / bedrooms and therefore non-habitable or secondary less sensitive room uses
Ground	R2	W2	Residential	37.2	24.4	0.66	
Ground	R3	W3	Residential	36.7	24.7	0.68	
Ground	R4	W4	Residential	34.9	24.6	0.70	
Ground	R5	W5	Living Room	32.4	25.9	0.80	VSC effect to windows that appear to serve main living room meet BRE targets
		W6		30.2	25.0	0.83	
		W7		31.1	25.3	0.81	
First	R1	W1	Residential	30.5	18.4	0.60	Again, windows appear to serve either bathrooms / kitchens / bedrooms and therefore non-habitable or secondary less sensitive room uses
First	R2	W2	Residential	31.4	19.5	0.62	
First	R3	W3	Residential	30.5	18.9	0.62	
First	R4	W4	Residential	30.6	18.9	0.62	
First	R5	W5	Residential	34.8	24.4	0.70	Minor VSC effect to windows that appear to serve primary main living space
		W6		35.8	25.4	0.71	
		W7		34.8	24.6	0.71	

163-203 St Matthew's Gardens – NSL table:

Address	Room	Window	Room use	No-Sky Line (NSL)			
				Existing NSL	Proposed NSL	Proportion	Eb7 Comments
				%	%	Retained	
177-201 Odd St Matthew's Gardens							
Ground	R5	W5	Bedroom	92%	62%	0.68	Broadly minor NSL effect to 'less sensitive' room use and good levels of retained daylight penetration

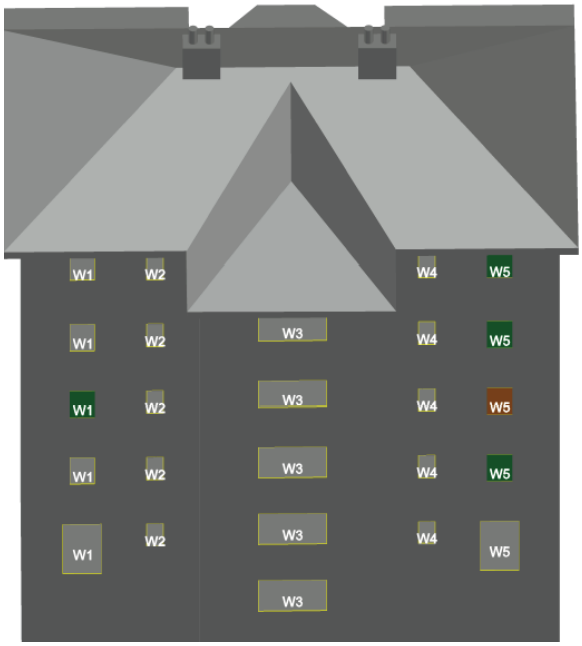
First	R5	W5	Bedroom	92%	68%	0.75	Minor NSL effect
175 St Matthew's Gardens							
Lower Ground	R1	W1	Kitchen				
		W2					Effects to secondary room use somewhat exacerbated due pre-existing constraint of lower ground location
		W3					
		W4					
		W5		95%	62%	0.65	
Ground	R1	W1	Living Room				
		W2					
		W3					NSL to main living space meets BRE targets
		W4		98%	98%	1.00	
173 St Matthew's Gardens							
Lower Ground	R1	W1	Dining Room				
		W2					
		W3					
		W4		97%	74%	0.76	Minor NSL effect
171 St Matthew's Gardens							
Lower Ground	R1	W1	Dining Room				
		W2					
		W3					
		W4		97%	73%	0.75	Minor NSL effect
163-167 St Matthew's Gardens							
Ground	R1	W1	Residential	97%	65%	0.67	Deviations limited to non-habitable or secondary room uses considered less sensitive. NSL effect to primary living space meet BRE targets
Ground	R2	W2	Residential	96%	47%	0.50	
Ground	R3	W3	Residential	98%	73%	0.74	
Ground	R4	W4	Residential	98%	73%	0.75	
Ground	R5	W5	Living Room				
		W6					
		W7		100%	94%	0.95	
First	R1	W1	Residential	97%	74%	0.76	
First	R2	W2	Residential	98%	72%	0.74	
First	R3	W3	Residential	97%	76%	0.78	
First	R4	W4	Residential	97%	76%	0.79	

First	R5	W5	Residential				
		W6					
		W7		100%	95%	0.95	

Daylight Commentary for 163-201 St Matthew's Gardens:

177-201 St Matthew's Gardens

4.1.5 From our updated site research / due diligence across 177-201 St Matthew's Gardens, window 'W3' across all floors appear to serve a stairwell which is not considered relevant for assessment given its non-habitable use.

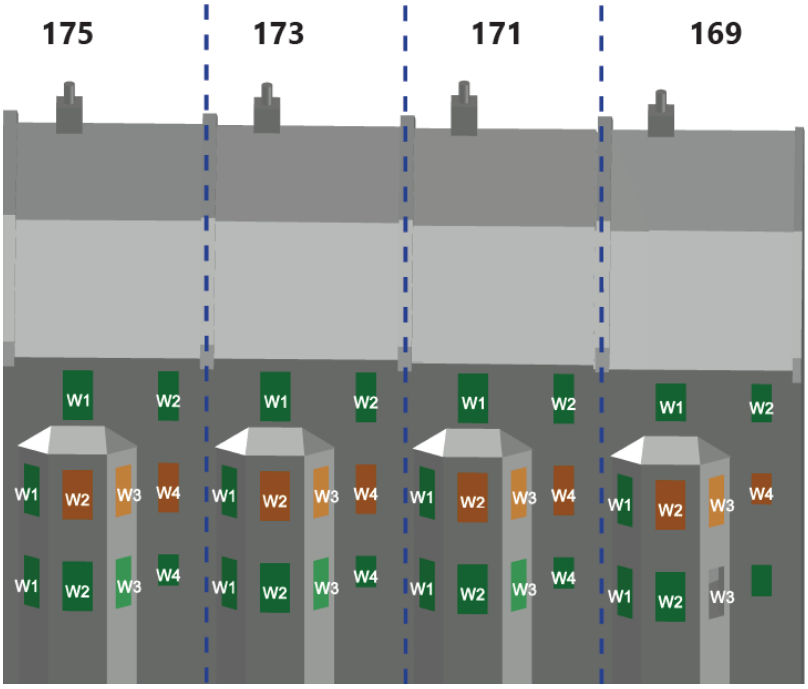


4.1.6 While there are moderate VSC change to a 1st floor bedroom window (W5) at 177-201 St Matthew's Gardens, this is considered a minor deviation given the retained VSC value is within a marginal absolute difference of c.3.9% from the BRE target value of 27% VSC.

4.1.7 Moderate NSL effect isolated to single window serving a bedroom which is considered 'less important' for daylight. This is considered a minor deviation given the room retains good levels of daylight penetration with c.62% of its room area maintaining sky visibility and the majority of remaining habitable rooms comply with the BRE targets.

169-175 St Matthew's Gardens

4.1.8 Where there are ground floor bay windows across 169-175 St Matthew's Gardens, paragraph 2.2.6 within the BRE guidance state that the principal central window of the bay may be considered as the main window. Although there are moderate VSC shifts to the main bay windows (W2) serving the 4x living rooms, again these are considered as minor deviations on the basis their retained VSC values are within marginal absolute differences between 2.4%-3.3% below the 27% VSC target value.

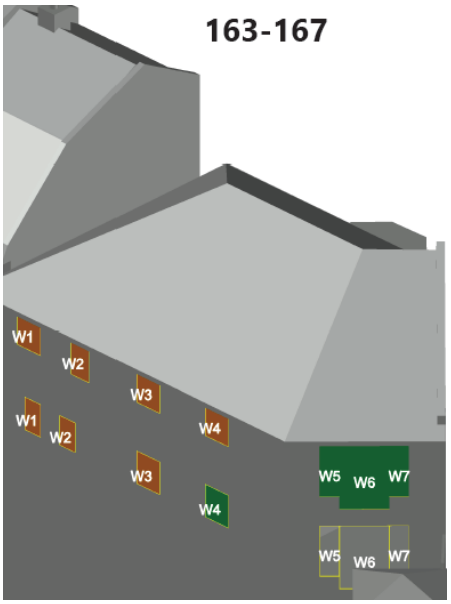


4.1.9 The limited effect on daylight amenity to the ground floor living rooms across no.169-175 is confirmed by the NSL analysis which demonstrate that the retained daylight penetration levels meet the BRE targets.

4.1.10 NSL assessment show a moderate effect isolated to a single kitchen at no.175, which is somewhat exacerbated due to pre-existing constraint of lower ground location. Despite the proportional shift and secondary room use, the retained daylight penetration level is considered good given c.62% of the kitchen maintains sky visibility. The NSL effect to the ground floor living room within this property meets the BRE targets and therefore the illustrative scheme is not considered to materially impact its amenity / pattern of use.

<u>163-167 St Matthew's Gardens</u>

4.1.11 We have been unable to obtain layouts that relate to the property typology across 163-167 St Matthew's Gardens, however the ground and first floor windows 'W1' to 'W4' appear to serve bathrooms / kitchens / bedrooms, such that the moderate VSC changes to these properties are limited to non-habitable and secondary 'less sensitive' room uses.



4.1.12 Ground and first floor windows 'W5' to 'W7' across no.163-167 appear to be the primary windows serving the main living spaces based on their external appearance. The VSC reductions to these windows meet the BRE targets / limited to very minor deviations, such that the effects to 'W1' to 'W4' are not considered to significantly effect the overall amenity / pattern of use of these properties.

4.1.13 NSL deviations limited to the non-habitable / secondary room uses and the NSL effect to the primary living spaces accord with the BRE criteria. As such, the illustrative scheme is not considered to significantly impact the amenity / pattern of use of the properties across 163-167 St Matthew's Gardens.

33-40 Silverwood Close – VSC table:

Address	Room	Window	Room use	Vertical Sky Component (VSC)			
				Existing VSC	Proposed VSC	Proportion Retained	Comments
33 Silverwood Close							
Ground	R3	W2	Living Room	16.0	16.0	1.00	Minor VSC effects to Windows 'W7'-'W9' that serve rooms with multiple windows. Paragraph 2.2.8 states that weighted VSC can be considered in such instances. Weighted VSC effect meets BRE targets.
		W3		16.9	16.8	1.00	
		W4		19.9	19.9	1.00	
		W5		35.4	29.9	0.85	
		W6		36.7	31.0	0.84	
		W7		34.6	26.5	0.77	
		W8		33.0	25.7	0.78	
		W9		29.4	22.6	0.77	
34 Silverwood Close							
Ground	R1	W1	Living Room	33.2	31.2	0.94	

		W2		33.9	23.3	0.69	Minor/moderate VSC effects to Windows 'W2'-'W4' that serve rooms with multiple windows. Paragraph 2.2.8 states that weighted VSC can be considered in such instances. Weighted VSC effect meets BRE targets.
		W3		32.7	23.0	0.71	
		W4		36.0	24.1	0.67	
		W5		22.9	19.5	0.85	
		W6		84.5	77.9	0.92	
		W7		80.0	73.4	0.92	
Ground	R2	W8	Kitchen	31.8	22.0	0.69	VSC effect to secondary room use exacerbated by location behind conservatory. Paragraph 2.2.12 of BRE states that a larger relative reduction in VSC may also be unavoidable if the existing window has projecting wings on one or both sides of it. Retained VSC value of 22% considered typical of pre-existing levels
First	R1	W1	Bedroom	38.3	26.6	0.69	Minor VSC effect given absolute retained VSC values are within a marginal difference of c.0.4%-0.6% from the BRE target value 27%.
First	R2	W2	Bedroom	38.3	26.4	0.69	
35 Silverwood Close							
Ground	R1	W1	Kitchen	32.7	22.2	0.68	VSC effect to secondary room use exacerbated by location behind conservatory. Again, larger relative reduction in VSC considered unavoidable given the projecting wing nature of conservatory. Retained VSC value of c.22% considered typical of pre-existing levels
Ground	R2	W2	Living Room	26.6	23.7	0.89	Again, as per paragraph 2.2.8 weighted VSC can be considered where rooms contain multiple windows. Minor VSC effect based on weighted calculation.
		W3		36.0	23.4	0.65	
		W4		31.2	21.6	0.69	
		W5		29.7	18.8	0.63	

		W6		7.9	7.4	0.94	
First	R2	W2	Bedroom	38.3	26.3	0.69	VSC effect minor, given retained VSC value within technical difference of c.0.7% in absolute levels below BRE target 27% VSC.
36 Silverwood Close							
Ground	R1	W1	Dining Room	37.6	23.1	0.61	VSC effect considered more minor given retained VSC value is within marginal absolute difference of c.3.9%.
		W2		37.8	23.2	0.61	
Ground	R2	W3	Kitchen	26.4	18.7	0.71	Minor VSC effect
First	R1	W1	Bedroom	38.3	26.2	0.69	VSC effect minor, given retained VSC value within technical difference of c.0.8% in absolute levels below BRE target 27% VSC.
37 Silverwood Close							
Ground	R1	W1	Kitchen	33.5	23.5	0.70	VSC effect to secondary room use exacerbated by location behind adjacent extensions. BRE recognise that larger relative VSC reduction unavoidable given the projecting wing nature of adjacent extensions. Retained VSC value of c.23% considered typical of pre-existing levels
		W2		33.7	22.9	0.68	
First	R2	W2	Bedroom	38.3	26.2	0.68	VSC effect minor, given retained VSC value within technical difference of c.0.6% in absolute levels below BRE target 27% VSC.
38 Silverwood Close							
Ground	R1	W1	Dining Room	33.8	21.6	0.64	Again, as per paragraph 2.2.8 weighted VSC can be considered where rooms contain multiple windows. Weighted VSC effect meets BRE target.
		W2		70.7	65.9	0.93	
		W3		84.2	79.0	0.94	
		W4		80.1	74.8	0.93	
		W5		66.5	61.9	0.93	
First	R1	W1	Bedroom	38.3	26.2	0.69	VSC effect minor, given retained VSC value within technical difference of c.0.8% in absolute levels below BRE target 27% VSC.
39 Silverwood Close							

Ground	R1	W1	Living Room	36.6	22.9	0.62	Again, as per paragraph 2.2.8 weighted VSC can be considered where rooms contain multiple windows. Weighted VSC effect meets BRE target.
		W2		31.8	18.3	0.57	
		W3		35.5	30.3	0.85	
		W4		66.0	61.7	0.93	
		W5		67.8	63.5	0.94	
Ground	R2	W6	Kitchen	16.8	11.9	0.71	Minor VSC effect considered unavoidable given location of window between adjacent extensions
First	R2	W2	Bedroom	38.3	26.5	0.69	VSC effect minor, given retained VSC value within technical difference of c.0.5% in absolute levels below BRE target 27% VSC.
40 Silverwood Close							
Ground	R1	W1	Kitchen	29.3	21.3	0.73	Weighted VSC effect meets BRE targets
		W2		73.6	67.6	0.92	
		W3		85.0	78.7	0.93	
		W4		38.0	29.0	0.76	

33-40 Silverwood Close – NSL table:

Address	Room	Window	Room use	No-Sky Line (NSL)			
				Existing NSL	Proposed NSL	Proportion	Eb7 Comments
				%	%	Retained	
34 Silverwood Close							
Ground	R2	W8	Kitchen	99%	61%	0.61	Moderate NSL effects exacerbated by pre-existing constraint Good levels of retained daylight penetration NSL effect to living room meets BRE target
First	R1	W1	Bedroom	99%	63%	0.64	Moderate / major adverse NSL effects to bedrooms, considered 'less important' for daylight, good levels of retained daylight penetration
First	R2	W2	Bedroom	99%	59%	0.59	
35 Silverwood Close							

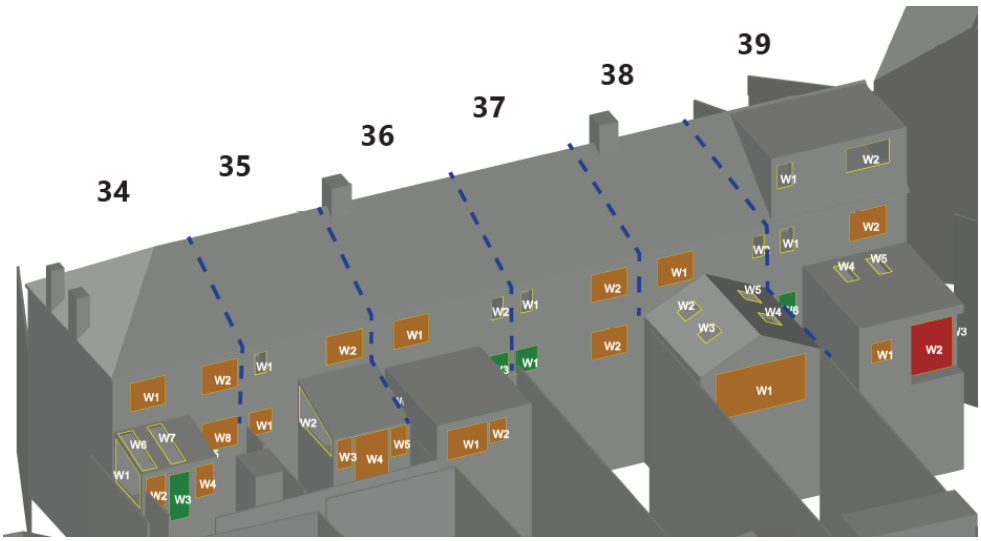
Ground	R1	W1	Kitchen	98%	60%	0.61	Moderate NSL effects exacerbated by pre-existing constraint Good levels of retained daylight penetration NSL effect to living room meets BRE target
First	R2	W2	Bedroom	98%	64%	0.65	Bedrooms considered 'less important' for daylight Good levels of retained daylight penetration.
36 Silverwood Close							
Ground	R1	W1	Dining Room				Deviations limited to secondary room uses, main living spaces remain unaffected. Rooms maintain good levels of daylight penetration.
		W2		99%	61%	0.62	
Ground	R2	W3	Kitchen	95%	56%	0.59	
First	R1	W1	Bedroom	98%	61%	0.63	
37 Silverwood Close							
Ground	R1	W1	Kitchen	98%	70%	0.72	Minor NSL effect
		W2					
First	R2	W2	Bedroom	98%	66%	0.67	Moderate NSL effect to bedroom, considered 'less important' for daylight. Good levels of retained daylight penetration.
38 Silverwood Close							
First	R1	W1	Bedroom	98%	61%	0.62	Moderate NSL effect to bedroom, considered 'less important' for daylight. Good levels of retained daylight penetration.
39 Silverwood Close							
Ground	R2	W6	Kitchen	95%	57%	0.60	Moderate effect somewhat exacerbated due to pre-existing constraint. NSL to living room meets BRE targets
First	R2	W2	Bedroom	99%	72%	0.73	Minor NSL effect

Daylight Commentary for 33-40 Silverwood Close:

4.1.14 Where there are moderate / major adverse effects to individual ground floor windows across 34, 35, 38 and 39 Silverwood Close, these serve rooms within rear extensions and conservatories that contain multiple windows. Paragraph 2.2.8 states that weighted VSC can be considered in such circumstances.

4.1.15 On this basis, the weighted VSC effects to the ground floor rear extension /conservatory windows across these properties either meet the BRE targets or are limited to minor deviations from the recommendations. Non-material effect to these spaces is confirmed by NSL study which verifies that the daylight penetration levels remain unchanged and thus accord with BRE targets.

4.1.16 As shown in the above VSC table, there are minor/moderate VSC effects to windows serving kitchens across 34, 35, 37 and 39 Silverwood Close. Notwithstanding the secondary room use of the kitchens, the effects are somewhat exacerbated due to their location between the adjacent extensions / conservatories.



4.1.17 Paragraph 2.2.12 of BRE states that a larger relative reduction in VSC may also be unavoidable if the existing window has projecting wings on one or both sides of it. As such, these design features are specifically acknowledged by the BRE as an area where flexibility is appropriate.

4.1.18 While there are moderate VSC changes to windows serving bedrooms / dining rooms across 34-39 Silverwood Close, these are driven by the underdeveloped areas of the site opposite these properties such that a higher proportional change is somewhat inevitable with the delivery of any meaningful development. When referring to the absolute retained daylight, these deviations are considered wholly minor given the good levels of retained VSC which are within marginal absolute differences between c.0.4%-0.8% and c.3.9% from the BRE target of 27% VSC.

4.1.19 In terms of the NSL assessment of daylight penetration to rooms, moderate changes are isolated to secondary room uses (kitchens, dining rooms and bedroom) with a lower requirement for daylight across no.34-39 and all primary main living spaces remain completely unaffected.

4.1.20 Despite the pre-existing constraints of kitchens situated between projecting elements and the underdeveloped areas of the site opposite the bedrooms / dining room across no.34-39, these secondary rooms retain good levels of daylight penetration with c.57%-70% of their floor area maintaining sky visibility.

Sunlight Commentary for 33-44 Silverwood Close:

4.1.21 The potential sunlight effects to no.36, 39 and 44 have been raised by the planning officers and therefore we have considered sunlight to these specific properties only where deviations occur, given the remaining neighbours across St Matthew's Gardens and Silverwood Close demonstrate BRE compliance for sunlight.

4.1.22 The below results extract shows the Annual Probable Sunlight Hours (APSH) deviations recorded across no.36, 39 and 44 Silverwood Close:

Address	Room	Window	Room use	Annual Probable Sunlight Hours (APSH) by Room					
				Existing APSH		Proposed APSH		Retained	
				Total	Winter	Total	Winter	Total	Winter
36 Silverwood Close									
Ground	R2	W3	Kitchen	50	10	39	1	0.78	0.10
39 Silverwood Close									
Ground	R2	W6	Kitchen	30	7	23	0	0.77	0.00
44 Silverwood Close									
Ground	R1	W1	Dining Room	42	3	38	2	0.91	0.67

4.1.23 Whilst these sunlight results show deviations from the BRE targets, these are isolated to 3 rooms situated between adjacent extensions which again, is a pre-existing constraint of the neighbouring design and exacerbates changes in sunlight. Given such inherent neighbouring design constraints are acknowledged by the BRE, flexibility is considered appropriate in this regard.

4.1.24 Nevertheless, the sunlight effects are considered as minor deviations on the basis that the kitchen at no.39 is marginally below the 25% absolute target and annual sunlight levels across 36 and 44 Silverwood Close significantly exceed the BRE target achieving 38%-39% total APSH.

4.1.25 In addition to this, the remaining ground and first floor rooms across these 3 properties retain APSH and WPSH levels are materially in excess of the BRE criteria and therefore the overall effect on sunlight to 36, 39 and 44 Silverwood Close are considered minimal.

5 Acceptability of BRE Deviations and Local Context Study

5.1.1 When considering acceptability of the daylight effects noted above, it is appropriate to consider alternate target values in respect of whether the absolute retained amenity to the neighbours is 'self-consistent' and characteristic of the local area.

5.1.2 The most relevant effects relate to 163-201 St Matthew's Gardens and 33-39 Silverwood Close, and we consider that two primary factors are relevant when assessing the acceptability of these effects:

1) Whether the impacts are considered to exceed minor adverse (20% - 30% reductions) or moderate adverse (30%-40% reductions) impacts by reference to the commonly adopted classification of effects beyond the base targets.

2) Whether there is 'self- consistent' evidence suggesting that the retained levels are acceptable as being typical to the local context and typologies.

Significance of Daylight Reductions

5.1.3 To demonstrate the effect of the illustrative proposals against the first two of the above criteria we have tabulated the impacts the neighbouring properties across 163-201 St Matthew's Gardens and 34-39 Silverwood Close.

Address	No. of rooms with moderate adverse 10%-20% deviations	No. of rooms with major Adverse >20% deviations	Retained VSC range across moderate / major adverse
177-201 St Matthew's Gardens	1	0	23.1%
169-175 St Matthew's Gardens	4	0	23.7% - 24.6%
163-167 St Matthew's Gardens	7	0	18.4%-24.7%
34- 39 Silverwood Close	11	0	22% - 26.6%

5.1.4 As shown in the above table, none of the rooms across the properties in question experience major adverse effects as a result of the 'illustrative' proposals. Where there are moderate adverse VSC changes, the retained VSC values across the majority of windows along 163-201 St Matthew's Gardens St and 34-39 Silverwood Close are between c.22%-26.6%.

5.1.5 The 1st floor windows across 163-167 St Matthew's Gardens retain VSC values between 18.4%-19.5%. While this VSC range is below the retained VSC values along the ground floor windows on the same elevation, this is due to overhanging eaves. Overhanging design features are specifically acknowledged as an area of flexibility by the BRE. Without the presence of the eave overhangs, the retained VSC values across these 1st floor windows would be comparable to the ground floor windows and thus marginally below the 27% VSC target.

Acceptability of retained levels against 'self-consistent' typologies

5.1.6 A further key indicator of the acceptability of retained amenity levels is to consider the pre-existing amenity levels to comparable existing residential typologies.

5.1.7 In assessing against such comparators Section F3 of the BRE guide states:

"Whatever the targets chosen for a particular development, it is important that they should be self-consistent."

5.1.8 The application of such 'self-consistent' targets recognises that the degree of expectation of daylight / sunlight amenity is related to the site context. This expectation will differ between locations.

5.1.9 Regardless of the reduction factor between pre-existing and proposed levels retained amenity may be acceptable if it reflects that commonly found in comparable locations.

5.1.10 Such alternative target levels of amenity may be evidenced by the existing daylight / sunlight achieved by properties within an area of a comparable 'typology' to the affected neighbours.

Comparison with Pre-Existing Daylight levels across site

5.1.11 A key indicator of the acceptability of these retained levels is illustrated within our analysis of pre-existing daylight levels to the nearby properties in close vicinity across York Street and Hampden Gardens that also neighbour the Beehive Centre. These properties also share similar design features in respect of overhanging eaves and rear extensions.

5.1.12 The below table sets out the number of rooms with pre-existing VSC levels within the same VSC range of the retained values across the St Matthew's Gardens and Silverwood Close windows noted

above. These pre-existing VSC values are shown in Appendix 2 of this addendum, as well as our August 2024 report.

Address	No. of rooms	Pre-existing VSC range
2-6, 36, 44, 50-52, 80, 84 and 92 York Street	18	18%-24%
55-68 and 84-97 Hampden Gardens	5	

5.1.13 This comparison exercise demonstrates that there are a number of neighbouring rooms along York Street / Hampden Gardens with pre-existing VSC values that are typical of the retained levels (c.18%-24%) across 163-201 St Matthew's Gardens and 34-39 Silverwood Close.

5.1.14 These values are therefore useful as an alternative benchmark to the baseline BRE as comparative evidence suggesting that the retained levels are acceptable as being typical to the site-specific context. As such, this demonstrates that such comparable levels are not unacceptable by reference to pre-existing comparators in close vicinity.

Planning Precedents

5.1.15 In addition to the pre-existing daylight levels across nearby properties that also neighbour the site, we have also identified local consents where similar effects and comparable retained levels have been accepted across Greater Cambridge.

Site Address	Planning Ref:	Summary of Daylight & Sunlight impacts to neighbours
137 And 143 Histon Road	(24/01354/FUL)	• This approved application includes a daylight report which demonstrates deviations from the BRE recommendations. • Results show VSC reductions between c.25%-34%, where the pre-existing levels are up to c.16.5%. • The results also include examples of wider pre-existing VSC values between c.17%-23%.
Pembroke College, Mill Lane	(18/1930/FUL)	• The daylight report for this application demonstrates deviations from the BRE targets

		where VSC changes between c.20%-40% are shown. • Results show examples of pre-existing VSC levels between c.15%-23%.
Grafton Centre	(23/02685/FUL)	• The daylight report indicates that the proposal will result in neighbouring deviations from the BRE targets, with VSC reductions between c.20%-30%. • Additionally, the technical results present examples of pre-existing VSC levels between c.18%-24%.

5.1.16 The above examples demonstrate the flexible and proper approach to daylight / sunlight effects accepted by the determining authority in recent decisions by the Greater Cambridge. In particular these schemes demonstrate that deviations from the BRE targets may occur in areas of changing context and be considered acceptable.

5.1.17 In addition to this, the above applications are also indicative of typical pre-existing daylight levels in the local area, which are shown to be comparable to the retained daylight amenity across St Matthew's Gardens and Silverwood Close. Both the broad principles and detailed technical results in respect of these decisions support our view that the Beehive Centre proposals are acceptable within the local site context.

Visual Context of Existing Relationships in the Wider Area

5.1.18 In addition to the technical data of pre-existing levels and local precedent presented above, we have also considered the visual context of the existing relationships between properties in the immediate and wider area. This provides a broader understanding of the typical constraints on daylight and sunlight where there are tight relationships as a result of emerging development within Cambridge.

<u>Pym Court and Hampden Gardens:</u>

75 Cromwell Road and Clara Rackham St:

Vesta development and Ravensworth Gardens:

5.1.19 The above images demonstrate examples of close relationships between previous developments and existing properties within the wider area which inevitably result in constrained retained daylight levels.

5.1.20 Overall, the local typologies and precedents identified reinforce our view that the effects to 163-201 St Matthew's Gardens and 34-39 Silverwood Close are both 'self-consistent' and typical of comparable residential typologies within the local area. As such, these effects are considered to be acceptable within the site context.

6 Conclusions

6.1.1 This practice has undertaken a detailed assessment of the potential daylight and sunlight effects of The Beehive Redevelopment. This report supplements our earlier August 2024 assessment providing further detail in respect of the daylight and sunlight effects to the neighbouring properties across St Matthew's Gardens and Silverwood Close.

6.1.2 Our assessments in this addendum and our previous August 2024 have been undertaken using the VSC and NSL (daylight) and APSH (sunlight) tests set out within the BRE guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (2022). It's important to note that the BRE recommendations are purely guidelines and should be interpreted sensibly and flexibly based on the site-specific context.

6.1.3 The effects of both the maximum parameter proposals and illustrative scheme have been considered in our assessments. The illustrative scheme is considered a more realistic representation of the proposed massing that will be delivered. This is verified by the design code which confirms that the proposed development will not be delivered to the full extent of the maximum parameter.

6.1.4 A degree of change from the pre-existing daylight and sunlight levels should be anticipated with the delivery of meaningful development of an underutilised / low rise site. Notwithstanding this, to demonstrate acceptability, we have categorised the effects of the proposals in line with Appendix H of the BRE guidelines. On this basis, the effects of the illustrative scheme across the majority of neighbours either meet the BRE targets or are limited to minor deviations.

6.1.5 When considering the remaining effects, the significant levels are limited and where they increase, they are localised to areas that are already constrained, or less sensitive room uses such that the modest deviations are considered minor in significance.

6.1.6 Where there are inherent neighbouring constraints, these include windows situated alongside projecting wings or beneath eave overhangs. The BRE acknowledge that flexibility should be applied in such circumstances and should not prejudice the development potential of sites.

6.1.7 The remaining effects are isolated to secondary room uses and are principally driven by their unusually open existing outlook across the underdeveloped / less dense areas of the site, however the retained daylight levels are considered appropriate.

6.1.8 Appendix F of the BRE guide provides guidance for setting alternate target values and suggests that the application of alternate values should be 'self-consistent'. As such, we have considered the acceptability of effects and retained daylight amenity across St Matthew's Gardens and Silverwood Close against appropriate nearby pre-existing typologies, as well as local precedents.

6.1.9 We have identified precedent of approved applications with deviations from the BRE guidance and similar or lower retained levels, as well as comparable pre-existing amenity within the immediate site context. This confirms the effects of the illustrative proposals are acceptable by reference to 'self-consistent' comparators under the BRE guide.

6.1.10 Overall, our further consideration confirms the conclusions of our submission report that the proposal is fully acceptable by reference to the BRE guidance, particularly when considered alongside appropriate local comparators.

Yours sincerely

Bilaal Ali
Senior Surveyor
For and on behalf of eb7 Limited