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Daylight, Sunlight & Overshadowing Proof of Evidence

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Report details

Client: Railpen
(Railway Pension Trustee Company Ltd)
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Prepared by: JL

Date of issue: 23rd May 2025

1 Qualifications and Experience

- 1.1 My name is Jonathan Anthony Lonergan MRICS. I am a chartered surveyor specialising in daylight and sunlight with 20 years of experience in my area of practice. I am a Senior Director at eb7 Limited, an RICS regulated practice, founded in 2007 and where I have practiced for the past 12 years.
- 1.2 I hold a Master of Science in Surveying from the University of Reading and a degree in Law from Queen Mary, University of London. Prior to joining eb7 I was previously employed as a daylight and sunlight consultant at GIA (Gordon Ingram Associates) and was a Director and founding member of the daylight and sunlight team at Savills (UK) Ltd.
- 1.3 During my career I have advised a wide variety of clients including major property companies, housebuilders and pension funds on the daylight and sunlight effects of large schemes throughout the UK. In addition, I have undertaken academic research in respect of the regulatory framework governing the planning matters of daylight and sunlight and have lectured extensively on these subjects.
- 1.4 I deal with well in excess of 100 matters each year and have prepared expert evidence for a number of planning appeals and leading legal cases. Major schemes and projects I have advised upon include:
- **Watford Riverwell Regeneration:** Advising the Local Authority and their joint venture partners over a period of c.10 years to regenerate c.70 acres of former brownfield and commercial land for major residential led development.
 - **Wellington Place, Leeds:** Phased development of a city centre retail park to deliver over 1.9 million sq ft of commercial, retail and leisure accommodation.
 - **Chrisp Street Market:** Advising Poplar HARCA and Telford Homes major regeneration providing c.650 new homes and 200,000 sq ft of retail, commercial and community space in East London.
 - **Temple Quay, Bristol:** Detailed design advice on Reserved Matters proposals in respect of city centre regeneration project comprising mix of office and residential uses.
 - **Lambeth Small Sites:** Advising the Local Authority across 11 constrained sites to optimise the land use for housing delivery.
 - **Addlestone Town Centre Regeneration:** Mixed-use town-centre scheme comprising c.300 residential units, hotel, office and leisure uses.
- 1.5 I confirm that I am aware of my duties as an expert witness and have prepared this report in accordance with the requirements of RICS – Royal Institution of Chartered Surveyors, as set down in the RICS practice statement Surveyors acting as expert witnesses. Expanded declarations and a Statement of Truth are set out at section 17 of my evidence.
- 1.6 Where referencing Core Documents within my evidence these will be noted in brackets utilising the 'CD' bundle reference as agreed with the LPA.

2 Introduction

- 2.1.1 I have been instructed to by the applicant, Railway Pension Nominees Limited to respond to the daylight, sunlight and shading related matters raised by Cambridge City Council (the LPA) in respect of the proposed development of the Beehive Centre, Coldhams Lane, Cambridge.
- 2.1.2 I have advised the client in respect of daylight, sunlight and related considerations on the application site since February 2021. My instruction has included a number of site visits to understand the site context and relationship of the proposal to neighbouring properties. My advice on daylight and sunlight effects has informed the design evolution of the scheme including the height and mass of the proposed parameter plans.
- 2.1.3 My evidence relates to the Leonard Design Architects scheme proposals which are the subject of the call in. These comprise:
- Outline application (with all matters reserved) for the demolition of existing buildings and structures and
- 'Redevelopment of the site for a new local centre (E (af), F1(b-f), F2(b,d)), open space and employment (office and laboratory) floorspace (E(g)(i)(ii) to the ground floor and employment floorspace (office and laboratory) (E(g)(i)(ii) to the upper floors, along with supporting infrastructure, including pedestrian and cycle routes, vehicular access, car and cycle parking, servicing areas, landscaping and utilities.'*
- 2.1.4 Eb7 prepared a detailed daylight, sunlight and overshadowing report, dated August 2023, which was submitted in support of the initial scheme application.
- 2.1.5 After the formal submission of the Application in August 2023 the scheme underwent significant development of the masterplan following extensive engagement with Officers at the LPA.
- 2.1.6 These changes resulted in material shifts to the parameter massing of the proposals. From a neighbouring amenity perspective the key moves were the reduction in height of plots 8, 9 and 10 compared to plots K, L and M the original submission scheme. Plot J and I were removed from the western boundary with the updated plots 7 and 8 incorporating setbacks to the lower levels responding to the neighbouring York Street residential properties.
- 2.1.7 This design development from the August 2023 submission scheme to the current proposals reflects collaborative work undertaken with LPA officers and was informed by daylight and sunlight analysis. This resulted in a total of 47 properties, including some blocks of flats containing multiple addresses, experiencing improved amenity levels and meeting the BRE guideline targets. This beneficial effect extended to neighbours along York Street, St Matthew's Gardens and Silverwood Close.
- 2.1.8 A second daylight, sunlight and overshadowing report was submitted in respect of the amended scheme in August 2024 (CD2.31). This updated the technical assessments and conclusions to reflect the revised scheme proposals.
- 2.1.9 Finally, an addendum to the earlier daylight and sunlight reports was prepared in November 2024 (CD2.63). This responded to queries raised by LPA officers in respect of potential effects to properties at Silverwood Close and St Matthews Gardens providing further details of the degree of

light loss to these properties and their gardens.

- 2.1.10 It is agreed with the LPA expert that our assessments have considered all relevant aspects of daylight, sunlight and shading amenity. These earlier comprehensive studies found daylight / sunlight and shading effects to neighbours as well as those within the proposed residential accommodation to be acceptable when considered against the nationally applied BRE document 209: Site Layout Planning a Guide to Good Practice (2022) (the BRE Guide) (CD8.01). Where relevant I refer to these reports within my evidence.

3 Pre-Committee Engagement with LPA

- 3.1.1 Neighbouring amenity and the daylight, sunlight and shading effects of the scheme have been a material consideration in the development of the proposals. Both myself and the wider applicant team have sought to constructively engage with the LPA throughout the application process. The LPA statement of case (CD6.07) sets out some detail of these discussions since late October 2024. It is useful to also summarise the significant amount of earlier dialogue as well as the technical daylight, sunlight and shading information provided to the LPA from very early in the application process.
- 3.1.2 Initial technical analysis of the daylight and sunlight effects of the scheme was presented at the early pre-application stage in 2021. In March 2022 a more detailed pre-application note was submitted to the LPA which included comprehensive results quantifying the effect of the scheme to all relevant residential neighbours. Both of these pre-application documents included analysis identifying some areas of loss beyond the BRE targets that were likely to result from the proposals. The documents also considered the adequacy of retained amenity levels by reference to VSC levels in the mid to high 'teens' and early 20%+ range. The LPA did not raise any queries or concerns following their review of this material.
- 3.1.3 A detailed daylight and sunlight report accompanied the submission scheme in August 2023. No specific concerns were raised and the LPA did not appoint an expert to review the submission materials.
- 3.1.4 As noted at 2.1.5 the scheme underwent subsequent design development prior to resubmission in August 2024. The changes were informed by eb7 advice in order to limit amenity effects to neighbours. Additional site research was also undertaken in response to neighbour feedback where concern had been raised that not all windows had been captured within our analysis. This was due to the laser scan survey not having had 'line of sight' to those windows. The issue was addressed with amendments made to our 3d modelling in advance of the updated August 2024 daylight and sunlight report (CD2.31).
- 3.1.5 Following submission of the August 2024 report there was little feedback until late October when some queries were raised regarding potential effects to Silverwood Close. Formal comments from the LPA officer were received on 5th November 2024 providing a breakdown of results extracted from our report. This identified areas of impact outside of the BRE target values in respect of St Matthew's Gardens and Silverwood Close which were already acknowledged in our assessment.
- 3.1.6 The LPA Design Officer suggested on November 7th that a design code insertion could be utilised to control effects on the basis that "Reserved matters must demonstrate that adequate daylight and sunlight of existing properties can be achieved".
- 3.1.7 In response to the LPA comments I attended a meeting with them on 13th November. At this meeting I advised that the acceptability of neighbouring amenity effects was a multi-faceted question rather than simply a numerical exercise. I provided examples of areas around the scheme, such as particularly deep rooms or windows recessed alongside extensions, where constraints are inevitable and directed officers to the specific chapters of the relevant BRE guidance dealing with the assignment of significance and the flexible application of numerical target values.

- 3.1.8 Following the meetings we issued an addendum on 29th November 2024 (CD2.63) further explaining our conclusions as to the acceptability of effects to Silverwood Close and St Mathews Gardens. This included identifying a number of rooms where the application of a 'weighted VSC' analysis indicated compliance with the BRE targets.
- 3.1.9 The LPA subsequently raised the possibility of a 'cutback' model being provided to show areas of the scheme which resulted in deviations from the BRE targets. On 5th December the LPA changed their request from a 'cutback' to wishing to review our 3d CAD model. This was not immediately provided as the LPA were understood not to have copies of the specialist software required to interrogate the results of our assessments. Rather than send a model without context we suggested a peer review may be useful and that the LPA work collaboratively with the applicant on the scope and content of the review.
- 3.1.10 No further updates were provided until the 23rd January 2025. The applicant's planning consultant, Bidwells, were contacted by the LPA who advised that a peer review had taken place and that a draft report had been provided to the LPA. A meeting was suggested to take place on Tuesday 28th January.
- 3.1.11 There was no dialogue during the preparation of the peer review and the draft report was not provided for review until c.45 minutes before the meeting on Tuesday 28th January.
- 3.1.12 At the meeting it was discussed that LPA officers and their expert were not comfortable with the acceptability of effects of the outline parameters scheme. The LPA expert requested NSC 'contour plots' to further illustrate the effects of the proposal and suggested that the LPA could provide further assistance in sourcing planning or building control records where layout plans for neighbours had not been identified.
- 3.1.13 The information requested by the LPA expert was provided to him following the meeting of the 28th. I subsequently met with the LPA expert in the morning of the 31st January. At that time the LPA expert had not reviewed the additional information received. The LPA expert had no instruction to discuss anything around 'acceptability' however the call was collaborative and we immediately started to prepare further supplementary drawings and technical information requested by the LPA expert to assist his review and the presentation of his findings to the LPA. At around lunchtime that same day, and prior to this additional information being provided, the LPA wrote to the applicant stating their intention to refuse the Application. This letter was issued unilaterally to the Applicant despite the outstanding actions agreed between the experts.
- 3.1.14 Whilst the above timeline does not directly address questions of the acceptability of the scheme, I consider it important to set out the detailed engagement that the applicant has sought to have with the LPA and the early stage at which daylight and sunlight information was prepared.
- 3.1.15 In particular there should not be any suggestion that the applicant, or myself, have been uncooperative in sharing information. We have prepared detailed reports / addendums and attended multiple meetings to address queries raised by the LPA. I consider that the compressed timeline of the LPA's decision, and lack of meaningful discussion in the week following their expert review, illustrates the limited depth of the engagement with relevant factors informing the decision as to the acceptability of the daylight and sunlight effects. This is explored further in my evidence below.

4 The Site and Proposal

- 4.1.1 The development site is located at the Beehive Centre, a retail park in Cambridge. The site layout is shown in image 1 below with boundaries to Sleaford Street to the south west, York Street to the west, St Matthew's Gardens to the north and the properties of Silverwood Close to the north west.
- 4.1.2 The existing entrance to the site is from Coldhams Lane to the east with the south-eastern boundary of the site adjoining railway lines and the Coldhams Lane depot and sidings.
- 4.1.3 The closest residential properties are situated along York Street as well as to St Matthew's Gardens and Silverwood Close. There are also residential properties to Sleaford Street where the main elevations are more oblique to the proposal. To the east of the railway are properties to Hampden Gardens, The Terrace and at Pym Court which are more distant from the application site.
- 4.1.4 The properties of St Matthew's Gardens were constructed around 2000 on the site of former industrial land. The western units of St Matthew's Gardens, between 203 and 221, were therefore already constructed with a close relationship between those properties and the existing north western units of the Beehive Centre (the current Pets at Home and Hobbycraft). This is reflected in some lower existing daylight levels particularly to the lower ground floor of 207 St Matthew's Gardens.
- 4.1.5 The properties between 169 to 207 St Matthew's Gardens, a mixture of townhouses and flats at 177-201, also have a sunken lower ground floor which was constructed alongside the retaining wall to the Beehive Centre car park. This retaining wall as well as the mature trees and shrubs planted to this boundary lead to more limited pre-existing outlook and quality of external amenity to areas of these properties.
- 4.1.6 This site is currently occupied by a number of commercial retail units, broadly the equivalent of two storeys in height, which have their footprints extending along the southern and western site boundaries in proximity to York Street, Sleaford Street and the railway tracks. As illustrated below the northern part of the site closest to the neighbouring residential properties of St Matthew's Garden's and Silverwood Close is predominantly an open surface carpark with the exception of the Pets at Home / Hobbycraft units to the north-western corner of the site.
- 4.1.7 When considering the perceived impact of the proposals it is important to understand the existing boundary conditions. There are boundary walls / fencing as well as mature trees and bushes extending along the principal boundaries to Sleaford Street, York Street, St Matthew's Gardens and Silverwood Close. As noted above there is also a level change and retaining wall between the site and the sunken gardens / terraces of the properties at 169 to 207 St Matthew's Gardens.



Image 1 - Plan of the existing site and the neighbouring properties

- 4.1.8 The Development comprises nine commercial buildings (for office, laboratory or local centre uses) and one building (plot 10) forming a multi-storey car park with accommodation for community and local centre uses at its ground floor. There are several elements that define the maximum parameter volumes of the proposals as well as additional controls which are set out within the Maximum Building Heights and Plots Parameter Plan and Design Code.
- 4.1.9 These controls are fully described in the Masterplanning evidence of Mr Leonard (CD7.08) and have been used to inform our modelling of the maximum parameter scheme as illustrated below:

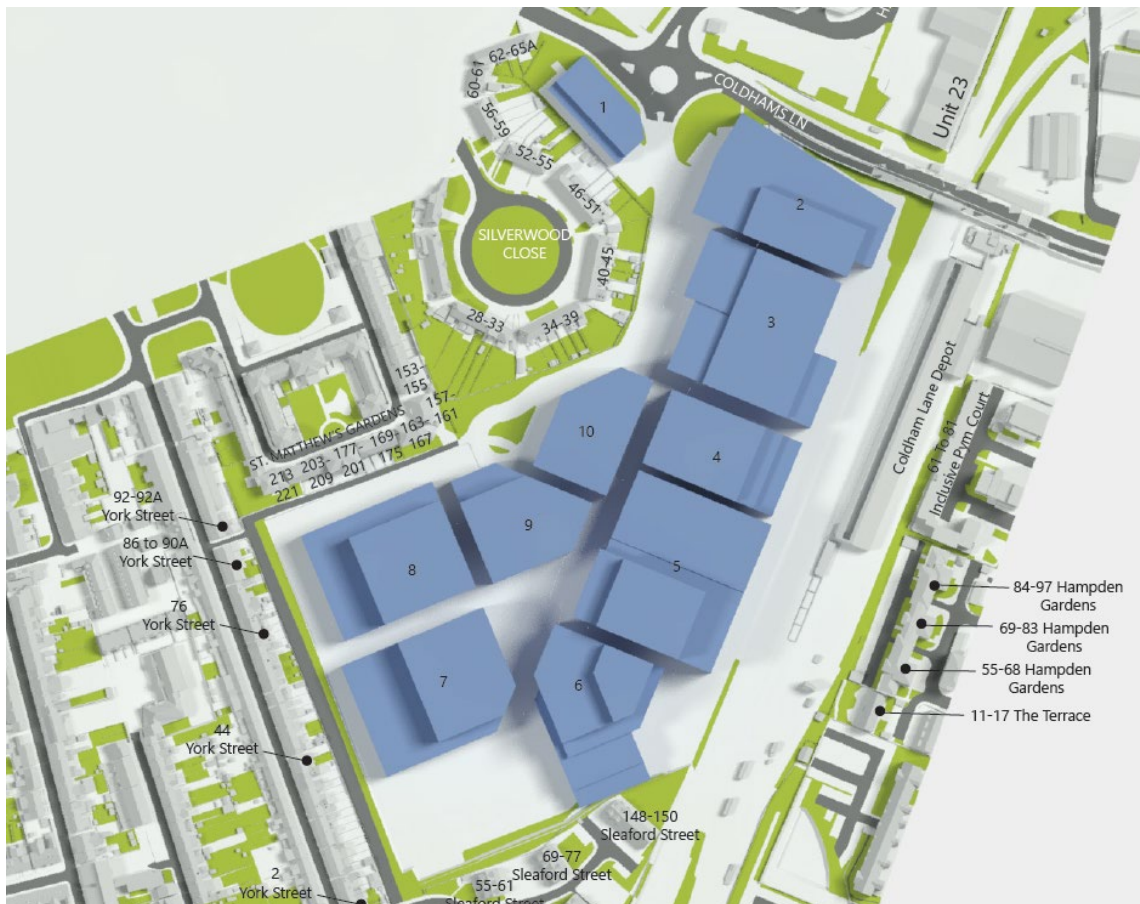


Image 2 - Plan of the maximum parameter scheme and the neighbouring properties



Image 3 - Oblique view of maximum parameters proposals

4.1.10 Each plot is governed by site-wide and plot specific Design Code requirements which, together

with the parameter plans, define the location, heights and separation between buildings as well as the plot coverage. This results in a theoretical GEA maximum of 166,685 sq.m limiting the extent to which future Reserved Matters submissions may develop within the Parameter scheme.

- 4.1.11 As the design is developed through future Reserved Matters applications it would be usual for daylight, sunlight and shading effects to be retested to ensure their acceptability. The application goes further by mandating such testing for plots 6-10 as follows:

*'Consideration of daylighting and amenity for neighbouring properties must be demonstrated at reserved matters application stage.'*¹

- 4.1.12 Such further testing at Reserved Matters stage will confirm that the effects of the proposal do not significantly shift through design development. This is however not considered to be a significant risk given the development controls enshrined within the application.
- 4.1.13 Whilst the Plot Parameter Plans illustrate the maximum extents of the proposals the application also provides an Illustrative Scheme (IS) as a representation of how the Development could come forward at reserved matters stage. In practical terms this is the maximum floorspace that could be delivered on site within the constraints of the design code and the overall maximum GEA.
- 4.1.14 The IS has been the subject of much pre-application consultation with the LPA and is referenced multiple times within the application documents including within our daylight and sunlight assessments.
- 4.1.15 The extents of the IS are a relevant consideration in terms of daylight and sunlight effects as presenting an illustration of the likely 'real world' effects of the scheme when reserved matters applications are brought forward. This is particularly the case as the restrictions on development set out in the Design Code, and wider parameter controls, have the effect that the full extent of the parameters scheme could not be delivered through reserved matters. As such our assessment of the effects based on the maximum parameter scheme somewhat overstates the neighbouring amenity impact of the scheme that could practically delivered under the application.
- 4.1.16 This is expanded upon at 7.1.3 of Mr Leonard's evidence (CD7.08):

'The Illustrative Scheme represents the consistent likely scenario for the development of the site pursuant to the Parameter Plans and Design Code. The Illustrative Scheme represents the likely maximum scale of the proposals, being the embodiment of the maximum floorspace (166,685m² gross external area) of the overall development that could be delivered within the controls of the Parameter Plans and Design Code as a mixed-use laboratory and office led-scheme, with Plots 2, 3, 5 and 6 designed as wet-lab buildings. Plots 2, 3, 5 and 6 are allocated as laboratory buildings within the Illustrative Scheme as this is the likely scenario under which they will be brought forward and also represents the largest scale of these buildings as a result of the increased storey heights, plant allocation and extract flues.'

- 4.1.17 In respect of Plot 10 only, it is noted that lift overruns may exceed the maximum parameter height by a maximum of 1250mm. Whilst theoretically such overruns may exceed the parameter heights they would be of limited footprint and inset from the perimeter of the Plot. These overruns are

¹ Design code references 5.6.8, 5.7.12, 5.8.4, 5.9.5 and 5.10.17

already accounted for in the modelling of the illustrative scheme and I understand are very likely to be located in the southern corner of the building so that they may discharge into the central street.

4.1.18 Regardless of their location it is agreed between myself and Mr Dias, acting for the LPA, that the limited height and footprint, alongside the wider controls for future RM schemes, means that such overruns would not lead to any material additional effects over and above those currently reported.

4.1.19 The extents of the Illustrative Scheme developed by Leonard Design Architects is shown below:

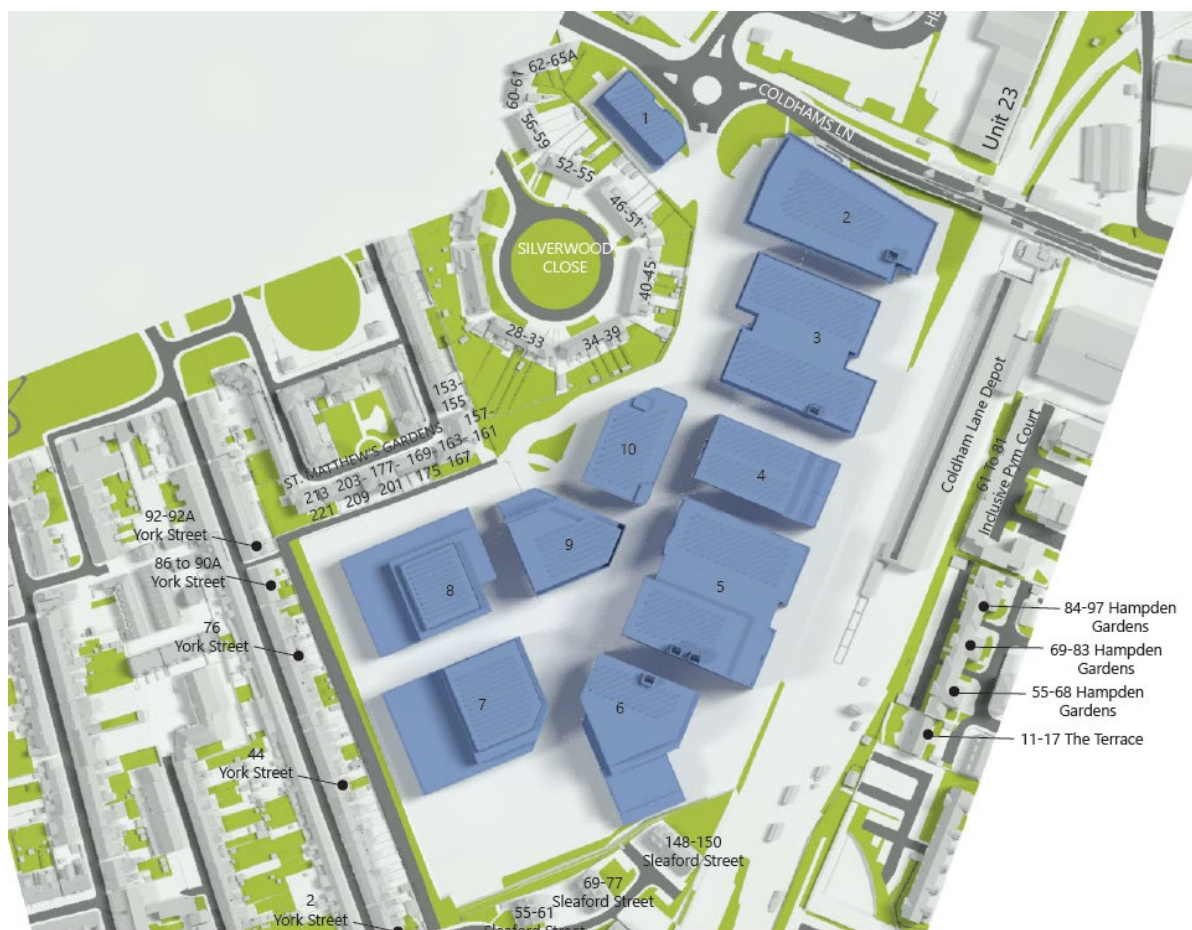


Image 4 - Plan of the illustrative scheme and the neighbouring properties



Image 5 - Oblique view of illustrative scheme

- 4.1.20 Trees and vegetation are generally omitted from the technical assessment of daylight and sunlight effects due to their irregular shapes and the fact that some light will pass through the crown.
- 4.1.21 Notwithstanding this, it is clear that the existing boundary conditions and presence of mature trees to the perimeter of the application site affect the perception of light loss resulting from the scheme. I have noted specific areas where the boundary conditions may affect the perception of impacts resulting from the proposals within my evidence below.

5 Reasons for Refusal

5.1.1 The Application was called-in for determination by the Secretary of State prior to the scheduled Planning Committee on 12th February 2025. The Planning Committee Meeting proceeded and determined that the City Council would have been refused the application in line with the officer's report.

5.1.2 The sole reason for refusal that the committee would have imposed was:

"By virtue of the scale, massing, and positioning of the maximum building parameters, the proposed development fails to keep potential reductions in daylight and sunlight to a minimum in St Matthew's Gardens, Silverwood Close and other adjacent properties and gardens. The extent and degree of harm would be both wide ranging, significantly adverse and acutely felt by existing occupants. Many habitable rooms would feel poorly lit, colder, and gloomier, particularly where living rooms are concerned. Multiple gardens would also feel less pleasant and enjoyable, due to the significant increase in overshadowing that would be experienced. Moreover, the proposed development would be overly dominant and imposing on neighbouring properties, particularly in St Matthew's Gardens and Silverwood Close, resulting in an oppressively enclosed outlook. The overall harm to residential amenity would be significantly adverse and permanent, contrary to policies 55, 56, 57 and 60 of the Cambridge Local Plan (2018) and paragraph 135 (f) of the National Planning Policy Framework (2024)."

6 Planning Policy

6.1 I am solely giving evidence in respect of my expertise in daylight, sunlight and overshadowing and Mr Guy Kaddish will provide evidence in respect of wider planning considerations including the City Council's allegation that the proposed buildings would be over-dominant when seen from some neighbouring premises. It is however, useful to restate elements of local and national planning policy insofar as it relates to daylight and sunlight and the matters in dispute.

6.2 The LPA reason for refusal cites a number of relevant Local Plan (CD4.04) policies. Policies 56, 57 and 60 are cited in the minded reason for refusal with policy 60 specifically including micro-climate considerations related to daylight, sunlight and overshadowing as follows:

Policy 60: Tall buildings and the skyline in Cambridge

6.2.1 Policy 60 addresses the potential amenity effects upon neighbouring properties as follows:

"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:

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;"

6.3 This policy does not require full compliance with the numerical targets set out in the BRE guidance and it is common ground between myself and Mr Dias that deviations from these targets are to be anticipated given the lower rise nature of the existing buildings on site and large areas of open surface car park.

6.4 Policy 60 requires an appraisal of the adequacy of sunlight and daylight. This appraisal of adequacy should involve consideration of a number of relevant factors, that I have set out at section 8 below, as well as the wider planning balance.

6.5 Appendix F of the Local Plan provides additional guidance to assist in the interpretation of Policy 60. F44 notes that buildings defined as 'tall' in this guidance should 'minimise' any potential negative impacts.

6.6 This appraisal of adequacy required under Policy 60 is not apparent in the reason for refusal which is broad in its scope and does not provide evidence in support of the suggestion that spaces, and in particular living rooms, would 'feel poorly lit, colder, and gloomier' or that multiple gardens would also feel less pleasant and enjoyable.

6.7 The reason for refusal and the LPA expert review (CD11.04) primarily focus on the numerical daylight and sunlight reductions resulting from the proposals without any indication of the adequacy of retained amenity or detailed consideration of the overall planning balance.

6.8 This focus on numerical reductions is also evident in the LPA officer's Planning Committee Report (CD3.01).

6.9 Paragraph 24.7 notes that there are 'some additional considerations when interpreting any numerical reductions in daylight, sunlight, or increases in overshadowing' and identifies that harm may be inevitable due to the low-rise nature of the existing site. There is however no assessment

of the adequacy of retained amenity to the neighbours or consideration of the wider factors that may inform the final view on acceptability such as those set out at 8 below.

- 6.10 The LPA expert peer review (CD11.04) acknowledges at para 2.8 that a two-stage approach is appropriate. This firstly requires identifying deviations from the BRE targets and subsequently considering the acceptability of these departures. Notwithstanding this there is a significant focus in that document on numerical changes with the bulk of the report, from paragraphs 3.9 – 4.13, summarising areas of technical deviation from the numerical target values in the BRE guidance.
- 6.11 Again it should be understood that the target values set out in the BRE are suggested figures with the BRE guide noting the requirement for flexible application of the targets.
- 6.12 Within the LPA expert review there is no detailed appraisal of the adequacy of the retained amenity position. The 'acceptability' of the effects of the application scheme is dealt with summarily in a single sentence at 1.8 (and repeated at 3.33) noting:

'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.'
- 6.13 I have provided further detail regarding the correct two-stage approach in respect of the daylight, sunlight and shading effects at section 8 below. This approach has subsequently informed my conclusions as to the adequacy and acceptability of retained amenity levels.

7 Technical Guidance

7.1.1 Daylight / sunlight and shading effects are assessed against the nationally applied BRE document 209: Site Layout Planning a Guide to Good Practice (2022) (the BRE Guide) (CD8.01). The BRE guide provides both numerical and contextual guidance as a starting point for the assessment of the acceptability of such effects.

7.1.2 The BRE guidelines advise that, when assessing any potential effects on surrounding properties, only those windows and rooms that have a 'reasonable expectation' of daylight and sunlight need to be considered. At paragraph 2.2.2 it states: -

"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed."

7.1.3 Our assessments therefore consider neighbouring residential properties only, which the BRE recognises have the highest expectation for natural light. We have tested the impact on the main rooms in each residential property and ignored non-habitable space (e.g. staircases, hallways, bathrooms, toilets, utility stores etc.) as per the BRE guidance.

7.1.4 Sections 2 and 3 of our August 2024 (CD2.31) report sets out the relevant technical guidance in respect of the assessment of daylight and sunlight and shading.

7.1.5 Of particular relevance are the methodologies prescribed in the BRE document assessing effects to pre-existing neighbouring buildings as well as the sun on ground / shading effects to neighbouring gardens and amenity space. These are summarised below:

Detailed daylight assessments to neighbours

7.1.6 The BRE guidance outlines two detailed methods for calculating daylight within properties neighbouring a proposed development: the Vertical Sky Component (VSC) and the No-Sky Line (NSL) tests.

7.1.7 The VSC test measures the amount of sky that is visible to a specific point on the outside of a property which is directly related to the amount of daylight that can be received. It is measured on the outside face of the external walls, usually at the centre point of a window.

7.1.8 The NSL test calculates the distribution of daylight within rooms by determining the area of the room at desk / work surface height (the 'working plane') which can and cannot receive a direct view of the sky and hence 'sky light'. The working plane height is set at 850mm above floor level within residential property. Accurate calculation of the NSL requires an understanding of the layout of the property being assessed.

7.1.9 For the above methods, the guidance suggests that existing daylight may be noticeably affected by new development if: -

- Windows achieve a VSC below 27% and are reduced to less than 0.80 times their former value; and / or:
- Levels of NSL within rooms are reduced to less than 0.80 times their former value.

7.1.10 Where Vertical Sky Component losses are recorded to the main window but a room is served by

other windows an 'area-weighted' Vertical Sky Component may be derived for the room based on the size of each window². This assessment has been undertaken for the relevant neighbouring spaces and presents a weighted VSC to the room as a whole.

- 7.1.11 Accurate assessment of NSL requires an understanding of the layouts of the affected properties and so may be less reliable where planning drawings cannot be obtained for neighbours and room layouts are estimated.

Detailed sunlight assessments to neighbours

- 7.1.12 For sunlight, the Annual Probable Sunlight Hours (APSH) test calculates the percentage of probable hours of sunlight received by a window or room over the course of a year.
- 7.1.13 In assessing sunlight effects to existing properties surrounding a new development, only those windows orientated within 90° of due south and which overlook the site, require assessment. The main focus is on living rooms and conservatories, with bedrooms and kitchens deemed less important.
- 7.1.14 The guide suggests that occupiers will notice the loss of sunlight if the APSH to main living rooms is both less than 25% annually (with 5% during winter) and that the amount of sunlight, following the proposed development, is reduced by more than 4% and to less than 0.80 times its former value.

Sunlight to gardens and outdoor spaces

- 7.1.15 Where sunlight to an amenity space may be affected by new development, the BRE guidelines recommend that an overshadowing assessment is conducted. The technical analysis is a '2hr sun on ground' test, which quantifies the proportion of an amenity area (e.g. rear gardens, parks and playing fields, public squares etc.) receiving at least 2hrs of sun on the 21st of March.
- 7.1.16 The BRE guidance recognises that different types of amenity space may have different sunlighting requirements. Generally, the guidelines suggest that if at least 50% of an amenity area receives at least 2hrs of sun on 21st March, then it is likely to be adequately lit throughout the year. If an existing neighbouring open space receives less than 50%, then the guidelines suggest that the loss in sunlight may be noticeable if it is reduced below 0.80 times its former value.
- 7.1.17 In addition to the guideline targets noted above, section 3.3.1 of the BRE guide notes the differing value placed on sun on ground for different purposes at different times of year. In respect of areas for 'sitting out' and 'child play' there is particular value noted in the 'mainly warmer months'.

² BRE guide Para 2.2.8 (CD8.01)

8 Application of the Technical Guidance

8.1.1 The BRE guide is not a rigid set of rules or an instrument of planning policy but is to be applied flexibly taking into account the site context and other relevant design factors.

8.1.2 The opening paragraphs of the BRE guide state at 1.6 that:

"The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer.

Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design... "

8.1.3 Relevant considerations may relate to the site context, relevant comparative typologies and, where appropriate, consideration of alternative targets and any other source documents considered to be applicable.

Two-stage approach to acceptability

8.1.4 The approach to the acceptability of daylight and sunlight issues has been explored in recent cases and appeal decisions. A two-stage process is to be adopted following the judgment in *Rainbird, R (on the application of) v The Council of the London Borough of Tower Hamlets* [2018] EWHC 657 (Admin) (CD10.03). This was also examined more recently at the appeal at Goldsworth Road, Woking with the Inspector endorsing the two-stage approach (PINS Ref: APP/A3655/W/21/3276474) (CD10.07).³

8.1.5 Under this two-stage approach the questions to be addressed are a) whether or not the proposals would result in a "material deterioration" of daylight and sunlight conditions b) whether or not any such deterioration would be "unacceptable".

Assessment of deterioration of daylight / sunlight conditions

8.1.6 The first limb of the two-stage test requires the identification of areas of material deterioration in amenity levels. Such effects may be identified by respect of numerical reductions beyond the base 20% reduction target set out in the BRE guide. Where reductions go beyond this base target they may be further classified against significance criteria which provide 'bandings' of numerical loss and are commonly applied in respect of Environmental Impact Assessments (EIA).

8.1.7 It should be understood that the significance banding relates solely to the extent of numerical reductions and provide no indication of the quality or adequacy of the retained amenity levels.

8.1.8 Whilst it may be useful to categorise significance to distinguish effects which are more noticeable this relates only to identification of BRE deviations under the first stage of the 2-stage test:

- 0% - 20% reduction (or VSC / APSH meeting absolute targets) – BRE compliant / negligible effect

³ See also the use of the two-stage approach in the appeal decision at *Enterprise House, 21 Buckle Street* APP/E5900/W/17/3191757

- 20.1-30% reduction may be reported as a minor adverse effect
- 30.1-40% reduction may be reported as a moderate adverse effect; and
- Above 40% reduction may be reported as a major adverse effect

8.1.9 The second part of the 2-stage test requires balancing any numerical impacts against the other contextual factors that may indicate greater or lesser harm and the overall adequacy of retained amenity.

Relevant considerations as to acceptability – alternative target values for VSC

8.1.10 The question of the acceptability of effects under the second stage of the test may be informed by a number of relevant factors. This would usually include the degree of numerical effect, the site context, specific sensitivities affecting individual rooms or windows, the adequacy of retained amenity levels and alternative target values informed by reference to comparable schemes and, where appropriate, consideration of alternative targets and any other source documents such as planning precedent and appeal decisions. A number of these considerations are explicitly referenced with the BRE document as follows:

8.1.11 Section 2.2.12 of the BRE guide notes that shifts in the No-Sky Line may be unavoidable to rooms lit from one side and more than 5m deep.

8.1.12 Sections 2.2.13 and 2.2.14 note the effect of the design of neighbouring properties such that larger changes in Vertical Sky Component may be unavoidable to windows that are restricted by balconies or inset to projecting wings.

8.1.13 Paragraph F1 of Appendix F in the BRE guidance notes the numerical target values as being purely advisory such that different target values may be used based on the special requirements of the proposed development or its location.

8.1.14 Appendix H of the BRE Guidelines gives further advice for the application of significance criteria in respect of effects on daylight, sunlight and overshadowing which assist when considering the severity and acceptability of impacts. Whilst the significance criteria are most commonly used where such matters are scoped into an Environmental Statement, they may be useful in assessing the acceptability of any major scheme.

8.1.15 Appendix H states the following:

H4 The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied.

H6 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 of open space are affected;*
- *the loss is only marginally outside the guidelines;*
- *an 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, for example an overhang above a window or a window standing unusually close to the boundary.*

H7 Factors tending towards a major adverse impact include:

- *a large number of windows or large area of open space are affected*
- *the loss of light is substantially outside of the guidelines*
- *all of the windows of a particular property are affected*
- *the affected indoor or outdoor spaces have a particularly strong requirement for skylight or sunlight e.g. a living room in a dwelling or a children's playground.*

8.1.16 In respect of the application site the relatively low-rise nature of the pre-existing buildings and large areas of undeveloped car park in proximity to the neighbouring properties leads to effects beyond the BRE targets being unavoidable. When deviations from the numerical targets are anticipated it is appropriate to consider the acceptability of retained daylight and sunlight levels. Precedent relating to the application of such alternative values and adequate retained target values is noted at section 9.

8.1.17 The peer review prepared by the LPA notes that the applicant did not seek to agree alternate target values with the LPA in advance of submission. There is no requirement within the BRE guide to do so and nor is it common practice⁴. Our earlier reports and pre-application submissions highlighted the relevant factors informing the conclusions reached as to the adequacy of retained amenity and the acceptability of the effects of the proposals.

8.1.18 Detailed technical analysis and commentary on the effects of the proposals has been provided to the LPA since our pre-application document of 30th May 2022. This included reference to the consideration of retained values in the mid-teens and twenties in instances where the numerical reduction factors fell outside of the suggested target values. This approach was restated in our detailed reports of August 2023 and 2024. The LPA did not raise the potential need to have pre-emptively agreed such alternatives at any time in the determination of the application until the meeting of 28th January 2025.

⁴ I am aware of a single London Borough who have recently started to give pre-application advice as to what alternative targets they would support.

9 Relevant Local and Appeal Comparables

- 9.1.1 A flexible approach to the acceptability of daylight and sunlight effects and the adequacy of retained amenity may be particularly relevant in respect of major schemes in a regeneration context. It is common ground that areas of the application site are currently less developed such that a reduction from the pre-existing daylight levels may be inevitable.
- 9.1.2 In such circumstances the acceptability of reductions beyond the BRE guidance may be informed by the factors set out at 8.1.10 – 8.1.16 (above) and assessing the adequacy of retained daylight levels. This echoes the requirement for ‘adequate’ daylight and sunlight to be maintained in policy 60 of the Local Plan.
- 9.1.3 In the instant case much of the application site is underdeveloped open car park land with the existing buildings being 1-2 storey commercial retail units. Any material development, particularly to the areas of the site neighbouring St Matthew’s Gardens and Silverwood Close will result in some deviations from the base reduction targets set out in the BRE document.
- 9.1.4 On the basis that a reduction outside of the base BRE target values is likely to be inevitable it is unrealistic to achieve the absolute VSC figure 27% or meet the 20% reduction target. In such circumstances it is appropriate to consider the acceptability of a proposal by reference to the amenity retained rather than solely the numerical reduction factor.
- 9.1.5 Planning and appeal precedent has supported the application of VSC values in the ‘mid-teens’ as an alternative guideline indicating the adequacy of retained amenity. It is also likely that optimisation of the use of the site may lead to some localised more significant numerical deviations below any alternative values. This may particularly be the case for those neighbouring properties that enjoy very high existing daylight / sunlight levels or where there are more specific constraints, such as recessed windows or particularly deep rooms to neighbours.
- 9.1.6 Whether an alternative guideline figure is appropriate should be informed by consideration of the local context as well as wider appeal precedent. The greater incidence of urban development and optimisation of previously developed land in London leads to a higher number of planning and appeal decisions relating to development in the capital. The principles of deviations from the BRE targets being inevitable when seeking to optimise land use are however more widely applicable.
- 9.1.7 Relevant appeal precedent supporting a focus on retained VSC values is noted below. The inspector’s reasoning in each decision noted below illustrates these general principles as well as considering site-specific factors.
- 9.1.8 In forming a view on the adequacy of retained amenity I have also referred to examples within Cambridge where effects fall outside the BRE base target reduction values or where lower retained amenity levels are evident (see 9.1.21 onwards below).
- The Whitechapel Estate (Ref: APP/E5900/W/17/3171437) - The Planning Inspectorate (2017) (CD10.02)**
- 9.1.9 In a decision to overturn the Local Authority’s reasons for refusal and to grant planning permission, the inspector commented on daylight and sunlight as follows:

"112. The figures show that a proportion of residual Vertical Sky Component ('VSC') values in the mid-teens have been found acceptable in major developments across London. This echoes the mayor's endorsement in the pre-SPG decision at Monmouth House, Islington that VSC values in the mid-teens are acceptable in an inner urban environment. They also show a smaller proportion in the bands below 15%."

"125. I conclude that the proposal would result in some significant individual reductions in daylight and sunlight levels, but that this is almost unavoidable in achieving the policy requirement for high density development in a confined urban setting. The new buildings would for the most part be comparable in height with the existing and would re-define traditional street frontages. Retained levels of daylight and sunlight would be adequate and comparable with existing and emerging urban conditions."

Woodlands Nursing Home (APP/ N5660/W/20/3248960) (CD10.05)

- 9.1.10 The inspector in the Woodlands Nursing Home appeal noted the inability to develop and optimise urban sites whilst applying the base BRE target values and stated:

'Retaining a VSC level of 27% in neighbouring properties is unrealistic; as has been recognised in many appeal decisions and other documents. Even retaining 20% VSC is considered, generally, to be reasonably good. Maintaining satisfactory levels of daylight in neighbouring properties and preventing unacceptable harm must take into account the context of the surroundings of the site and the Appellant has assessed existing VSC levels in certain parts of the surrounding area using 'façade mapping' techniques.'

- 9.1.11 The inspector refined his view as to the detail of the 'mid-teens' VSC approach and stated:

'A mid-teen VSC benchmark of 16% is appropriate for bedrooms but a VSC benchmark of 18% must be applied to living rooms and combined living/kitchen/dining rooms. It is also necessary to consider the percentage reduction in daylight distribution in a room, the NSL test, in an assessment of the degree to which there would be harm to residential amenity.'

40-46 Harleyford Road, London SE11 5AY (APP/N5660/W/24/3345872) (CD10.09)

- 9.1.12 A similar conclusion was reached in respect of the Harleyford Road appeal with benchmark of 16% VSC adopted for bedrooms and 18% for living and dining rooms. In considering the acceptability of retained daylight levels the inspector stated:

'the appeal scheme would result in noticeable effects on the daylight received by the aforementioned residential properties. However, noticeable does not necessarily mean unacceptable. The BRE Guide makes clear that its values are advisory and should be considered flexibly. The appeal involves a brownfield site within a highly accessible location and the application of the default values in terms of VSC would not allow a development that would optimise the land resource. For this reason, I have taken a flexible approach to considering an alternative target value that is also appropriate to the local context.'

- 9.1.13 The inspector considered the application of a 'mid-teens' alternative VSC target and, based on local context, applied a higher target with a priority to main living spaces. A VSC benchmark of 16% was utilised for bedrooms and a benchmark of 18% to living rooms and combined living/ kitchen/dining rooms:

'I agree with the Council and the Appellant that the BRE default value of 27% for VSC would

not be appropriate in this particular case, for the reasons I have already given. If this were to be observed, it would unacceptably constrain what could be done with the land. On the other hand, account must be taken of the townscape context and character. In such circumstances I agree with the Council that a VSC value of 18% for living and dining rooms and a VSC value of 16% for bedrooms, would be appropriate and reasonable in this case.'

- 9.1.14 In each case the inspector acknowledged that it was unrealistic for all daylight effects to accord with the BRE numerical targets and adopted alternative VSC benchmarks. A degree of consensus was formed around targets of c.16% and 18% VSC although these should be considered against local context.

Graphite Square Development (App/N5660/W/18/3211223) (CD10.04)

- 9.1.15 Separately to the adoption of alternative target values the Inspector in the Graphite Square appeal considered the specific site conditions and design of affected neighbouring properties when assessing the acceptability of daylight and sunlight effects. The design factors considered in that appeal included the use and size of rooms affected, i.e. bedrooms and smaller 'non-habitable' galley kitchens being less important than main living spaces.

- 9.1.16 Other contextual factors included the presence of access decks / balconies limiting pre-existing daylight / sunlight levels and resulting in neighbouring units being particularly sensitive. Areas were also noted where the site context led to unusually high levels of daylight and sunlight in the existing situation which were higher than would reasonably be expected.

- 9.1.17 Where properties had an existing open outlook, the Inspector stated:

"As a result, the flats affected receive much higher levels of daylight and sunlight than one might reasonably expect, in such an urban location. Any reduction in daylight and sunlight entering the flats as a result of either of the schemes at issue must be seen in that context."

- 9.1.18 In respect of units that were already constrained the nature of this design, sensitivity of the affected properties and site context was noted:

"It is clear then that the way the building has been designed contributes to the impact and I must say that whoever was responsible must have (or certainly ought to have) considered the strong likelihood that the appeal site, given its central London location, and obvious potential, would not remain underused."

- 9.1.19 The design of the affected neighbours also impacted on the existing use of the property with the inspector concluding:

"The loss of even the relatively significant amounts of daylight calculated would make little difference to their pattern of use, or the manner in which residents enjoy them."

- 9.1.20 This decision acknowledges that the design and situation of a neighbouring property can increase the sensitivity to daylight / sunlight losses from development. This may however be a function of the form or character of properties in the area such that further effects, including those significantly outside of the standard BRE target values, may be acceptable as not particularly affecting the use of the neighbouring property.

Local Planning Precedent and Comparators:

- 9.1.21 The appeal decisions above support a judgement on acceptability based on the adequacy of retained amenity levels rather than solely focusing on the extent of numerical reductions. Furthermore they apply 'mid -teens' alternative value to indicate the adequacy of retained amenity to neighbours with an aspiration that higher figures of c.18% being more appropriate in terms of retained values to main living spaces and 16% to bedrooms.
- 9.1.22 Even where such alternative targets are applied it is to be anticipated that some neighbouring windows may also fall below these thresholds.
- 9.1.23 Section F3 of the BRE guide states that:
- "Whatever the targets chosen for a particular development, it is important that they should be self-consistent."*
- 9.1.24 It is therefore instructive to check the adequacy of such values against local comparators within Cambridge.
- 9.1.25 The planning precedents identified below provides information as to daylight and sunlight conditions to residential neighbours affected by other schemes in Cambridge and the extent to which these were considered to be acceptable / adequate by the LPA.
- 9.1.26 These examples identify both pre-existing values around or below the 'mid teens' for habitable rooms as well as numerical reductions being accepted despite being within the bands that may be considered 'moderate' or 'major' against the significance criteria outlined at 8.1.8 above.



Image 6 - Location of Comparators Across Cambridge

137 And 143 Histon Road (24/01354/FUL) (CD10.10)

Primary Comparables:

- VSC reductions between c.25%-34%
- Pre-existing VSC levels of c.14%
- Wider pre-existing VSC values between c.17%-23%

- 9.1.27 137-143 Histon Road is a brownfield site situated c.2.5 miles northwest of the Beehive Centre. It was occupied by four commercial buildings arranged between 1 to 2-storeys in height and is being developed to provide 70 new homes as a mix of houses and flats of up to ground plus 3 storeys in height.
- 9.1.28 The context of a mix of Victorian Terraces and more modern flatted development has some similarities with the Beehive Centre site. As a predominantly low-level housing scheme the effects of the proposal to neighbours was generally limited. The flats at 1-15 Greengates Court did however have pre-existing VSC levels of c.14% - 15% for main living areas despite facing a currently open car park area. Under the proposals these experience 'moderate' numerical impacts of up to 34% reductions and were left with more limited retained VSC values of c.11% to main living spaces.
- 9.1.29 Daylight and sunlight effects were dealt with summarily in the officer's report noting only that the effects were acceptable. This provides an example of sensitivities to specific neighbours resulting in lower existing amenity to neighbours. Additional moderate harm and more limited levels of retained VSC to main living space were considered to be acceptable.

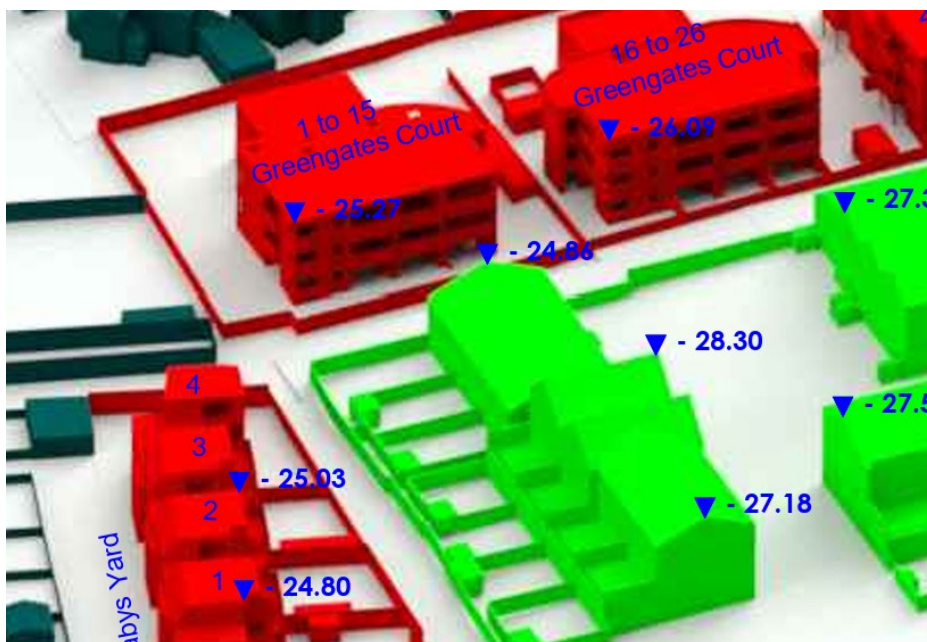


Image 7 - Histon Road scheme (green) and relationship with Greengates Court

Pembroke College, Mill Lane (18/1930/FUL) (CD10.06)

Primary Comparables:

- Deviations from the BRE targets with VSC changes between c.20%-40%
- Examples of pre-existing VSC levels between c.15%-23% and as low as 4.5%
- Moderate and major reductions to VSC and NSL

- 9.1.30 The Pembroke College site is located within Cambridge's historic city core and is predominantly surrounded by university buildings and a historic terrace of 2-3 storey residential properties of Little St Mary's Lane to the south of the site.
- 9.1.31 The proposals comprised the repurposing of existing buildings and construction of new residential buildings in close proximity to the southern boundary with Little St Mary's Lane. There were existing residential windows within between c.1m – 3m of this boundary.
- 9.1.32 The accompanying daylight and sunlight report found some improvements as a result of the changes to the arrangement of development on the boundary. It also noted a number of material impacts to Little St Mary's Lane.
- 9.1.33 Whilst the context of Cambridge's historic centre may be distinguished from the application site, the intensification resulting from consecutive development illustrates how reductions in neighbouring amenity are to be anticipated over time as land is developed and optimised.
- 9.1.34 The residential properties neighbouring the Pembroke College site included a number of existing VSC levels to neighbouring windows at c.14% VSC and some main living rooms with their only window having existing VSC levels at only 4.5% VSC.
- 9.1.35 The proposals resulted in effects that reduced two windows serving main habitable rooms by moderate to major reduction factors. Retained VSC levels were c.10.5% VSC for the main living room window with the secondary window to that space achieving c.5.5% VSC.
- 9.1.36 Additionally, the report identified multiple reductions of c.30% - 40% in respect of the No-Sky Line with impacts affecting main living rooms and bedrooms.
- 9.1.37 The officer's report acknowledged the effects to amenity but considered both the nature of the rooms affected, central context of the site and improvements to daylight levels to some windows in concluding:⁵
- 'This would make the room noticeably less light, but in a context where the constrained urban environment already limits light to many surrounding rooms, including this one, I do not consider this reduction to be unacceptable.'*
- 9.1.38 I consider this to be an example of the appropriate application of the two-stage approach to reach an on-balance conclusion of the acceptability of the effects when a material noticeable effect had been identified.

⁵ Para 8.84

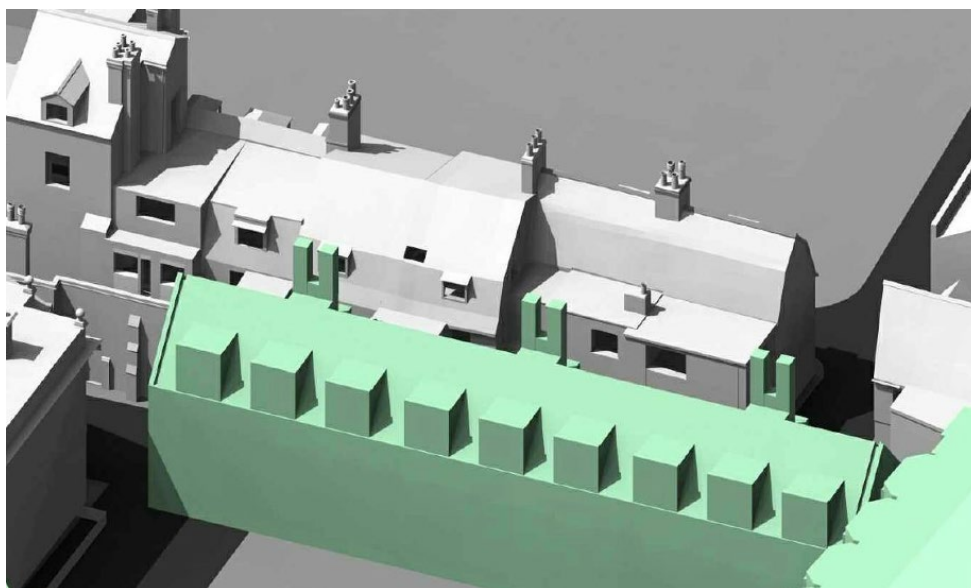


Image 8 - Pembroke College scheme (green) and relationship with Little St Mary's Lane residential properties

Grafton Centre (23/02685/FUL) (CD10.11)

Primary Comparables:

- Deviations from the BRE targets, with VSC reductions between c.20%-30%.
- Instances of pre-existing VSC levels between c.8%-10.5%.

- 9.1.39 The Grafton Centre development is to the eastern side of Cambridge city centre c.0.5. miles from the site of the Beehive Centre proposals. The original shopping centre, constructed in the early 1980s, is predominantly two storeys in height.
- 9.1.40 Neighbouring properties include a mix of flats and older housing stock.
- 9.1.41 There is generally good separation to the neighbouring properties but the results of the daylight / sunlight assessment identified areas of particular constraint. These constraints affected both the pre-existing amenity levels to neighbours prior to the proposed Grafton Centre development and instances of numerical reductions outside of the BRE targets caused by the proposal leading to lower retained amenity.
- 9.1.42 Examples include the flats at 1 Hilderstone House which, despite a separation of c.40m-50m from the Grafton Centre proposals, included examples of existing VSC levels of c.8% and 10.5% affecting two habitable rooms. These would be further reduced to c.6% and 8% respectively as a result of the proposals.



Image 9 - Grafton Centre proposals (red) and relationship with Hilderston House properties (circled green)

- 9.1.43 The officer's report in respect of the Grafton Centre noted the numerical extent of these deviations. They concluded that the proposed works would inevitably have a degree of impact on surrounding properties in terms of the levels of light and the perception of feeling enclosed, but that the effects would not be significant enough as to pose any harm to neighbour amenity.
- 9.1.44 The above comparators illustrate examples of different residential typologies and forms of development around Cambridge where numerical impacts beyond the BRE guidance have been accepted.
- 9.1.45 These examples also identify multiple instances where both pre-existing and post-development amenity will be somewhat compromised with VSC levels as low as 10% or below but still considered to be acceptable.
- 9.1.46 In addition to the examples set out above there are also pre-existing daylight levels at or below the 'mid-teens' level to a number of pre-existing windows in close proximity to the Beehive Centre site.
- 9.1.47 The examples noted below can be identified in our 'existing' VSC levels set out in our technical results. These reflect the presence of pre-existing constraints in respect of the design of neighbouring buildings. A number of York Street windows are inset between consecutive rear extensions and the St Matthew's Gardens windows are positioned at lower ground floor level within an enclosed sunken terrace.

Property	Existing VSC
6 York Street	Ground Floor Living Room (W1) – 12.4%
8 York Street	Ground Floor Living Room (W5) – 9.8%
28 York Street	Ground Floor Kitchen (W1/W2) – 14.3% /13.0%
38 York Street	Ground Floor Kitchen (W2) – 9.5%

52 York Street	Ground Floor Dining Room (W3) – 10.9%
177 /179 St Matthews Gardens	Lower Ground Floor Living Rooms (W1/2/5/6) – c.12%-13%

Table 1: Lower existing VSC levels in proximity to site⁶

- 9.1.48 Based on the above I would consider a 16%-18% retained VSC value to be suitable as a benchmark when assessing the adequacy of retained amenity levels with perhaps the slightly higher target adopted for main living space in line with the Woodlands Nursing Home and 40-46 Harleyford Road appeals.
- 9.1.49 Whilst such targets are considered appropriate it is also likely that one will find some reductions to below these values. More limited amenity levels may be anticipated particularly where neighbours are in very close proximity to the boundary or have specific constraints such as low-level, overhung / inset windows. This is illustrated by the properties around the application site where existing VSC levels are more constrained. It is also evident in the examples extracted from other Cambridge planning decisions noted above.
- 9.1.50 In considering the acceptability of the effects of the scheme and adequacy of retained daylight amenity I have placed some focus on the post-development VSC levels as an indicator of the adequacy of retained amenity. This is in line with the appeal precedents above and within Appendix F of the BRE guide on setting alternate VSC values. This reflects the fact that VSC is assessed at the window face and is therefore not affected by room layouts such that it can be easily compared for different properties.
- 9.1.51 No alternate targets have developed for the NSL test which is affected by room layout although I have considered the significance of NSL changes when reflecting on the adequacy and acceptability of retained values.⁷
- 9.1.52 In addition to the retained VSC levels I have also considered the question of the acceptability of the effects by reference to the wider factors identified in the BRE document and set out at 8.1.10 to 8.1.15 of my evidence.

27-29 Clayton Hotel, Station Road, Cambridge CB1 2FB (APP/Q0505/W/24/3347091)
(CD10.08)

- 9.1.53 The peer review report in relation to the Beehive application proposals by the LPA expert includes reference to a single decision relating to 27-29 Clayton Hotel, Station Road, Cambridge CB1 2FB (APP/Q0505/W/24/3347091) where an appeal against refusal on grounds of daylight and sunlight effects was dismissed despite limited and very localised impacts to windows which were already constrained.
- 9.1.54 Whilst the LPA expert acknowledges that each case should be decided on its merits, I would note

⁶ See Appendix 4 pp176-179 for existing York Street results and Appendix 2 pp 36-37 for St Matthew's Gardens

⁷ This approach is confirmed within the Harleyford Road appeal where the inspector noted at para.97:

'Although no specific alternative targets are recommended, the BRE Guide does envisage that such may be applied in certain circumstances to VSC. Practitioners do not generally advocate setting a target value for NSL, but it is likely that if a lower alternative VSC target is applied, NSL values will be less meaningful.'

the facts of the Clayton Hotel decision that differentiate it from the current application.

- 9.1.55 In particular, the Clayton Hotel application sought to achieve 37 additional rooms to extend a hotel that had only been constructed within the last 10 years. The relationship between the pre-existing hotel and the neighbouring apartments already led to lower pre-existing daylight levels with a number of neighbouring windows serving main living space achieving less than 10% VSC.
- 9.1.56 This was therefore a case where the inspector was being asked to allow additional harm to properties that had already experienced material daylight and sunlight effects and lower amenity levels from the construction of the original hotel.
- 9.1.57 In dismissing the application, the inspector noted that the applicant had already secured consent to extend the hotel by 30 rooms in a manner that would not affect neighbouring amenity. The particular circumstances of the case did not therefore justify departure from the BRE guidance.
- 9.1.58 In those circumstances the land use could be intensified without causing further harm in addition to that considered acceptable in respect of the original hotel development. This may be contrasted with the Beehive Centre proposals which seek to optimise the land via comprehensive redevelopment rather than incremental uplift.

10 Summary of Agreed Technical Position

- 10.1.1 Since the preparation of our earlier submitted reports and addendum we have had the opportunity to undertake check measurements during inspections within a number of neighbouring properties. This has resulted to some limited changes to the technical results which are now agreed between the experts.
- 10.1.2 The full results of the daylight and sunlight assessments in respect of the parameter scheme and illustrative proposal are attached at Appendices 2 to 5. The detail of the effects to the properties at St Matthew's Gardens and Silverwood Close are discussed below. Summary notes in respect of the remaining properties are attached at Appendices 6-9.
- 10.1.3 It is also agreed between the experts that all relevant properties, that are sufficiently close to the site as to potentially experience material effects, have been considered within the technical analysis.
- 10.1.4 My commentary and conclusions below are intended to clearly assess the effect to each property against the two-stage approach discussed at 8.1.4. I have firstly summarised any area of numerical deviation from the BRE targets and then considered wider factors that inform the adequacy and acceptability of the changes.

11 Daylight Effects to St Matthew's Gardens

- 11.1.1 The effects on daylight to the properties at St Matthew's Gardens has been identified as of specific concern of the LPA in the reasons for refusal. These properties are a mix of flats and townhouses which are located to the north / north west of the site and adjoin the boundary footpath to the north of the Beehive Centre car park.
- 11.1.2 The detailed technical effects in respect of the St Matthew's Gardens properties are set out in the results at Appendix 2.
- 11.1.3 Light loss resulting to the properties at St Matthew's Gardens is directly affected by the relationship of these properties to the Beehive Centre site as well as the design /arrangement of a number of the flats which have lower ground floors set within sunken terrace spaces. This results from a level change between the neighbours at 171 – 203 St Matthew's Gardens towards the centre of the terrace.
- 11.1.4 The effects of the proposals upon the properties to St Matthew's Gardens are summarised below and should be read alongside the results at Appendix 2.

Reduction to Daylight / Adequacy of Retained Amenity to St Matthew's Gardens

- 11.1.5 All relevant properties that could be affected by the proposals were assessed to St Matthew's Gardens. This totals 27 properties, a mix of the flats and townhouses.
- 11.1.6 9 properties were found not to experience any deviations from the BRE targets under the maximum parameter scheme. Under the illustrative scheme a further 2 properties would fully meet the BRE guidance as follows:

<u>Meets BRE Guidelines – Parameters</u>	<u>Meets BRE Guidelines – Illustrative</u>
153 St Matthew's Gardens	153 St Matthew's Gardens
155 St Matthew's Gardens	155 St Matthew's Gardens
205 St Matthew's Gardens	157 -161 St Matthew's Gardens
207 St Matthew's Gardens	203 St Matthew's Gardens
209 St Matthew's Gardens	205 St Matthew's Gardens
211 St Matthew's Gardens	207 St Matthew's Gardens
213-221 St Matthew's Gardens (3x flats)	209 St Matthew's Gardens
	211 St Matthew's Gardens
	213-221 St Matthew's Gardens (3x flats)

Table 2: St Matthew's Gardens properties meeting BRE base targets

- 11.1.7 There are numerical impacts to the remaining St Matthew's Gardens properties beyond the BRE targets. In my tables below I have summarised the effects to each such property identifying the significance of any numerical deviation from the BRE targets by reference to the numerical significance explained at 8.1.8 above. This represents stage 1 of the 2-stage test.
- 11.1.8 Were reductions are within the BRE guidelines they are not considered likely to be noticeable.

- 11.1.9 Where changes occur beyond the BRE targets but I consider they are less likely to be noticed by the occupants I have identified them as potentially being 'perceptible'. This may apply in instances where transgressions occur against only one of the metrics, affect localised constrained windows or where high levels of retained amenity or boundary conditions mean that the change is less likely to be apparent.
- 11.1.10 Where there is a more significant shift in the pre / post development position, particularly affecting primary windows to the main habitable spaces, I have considered this may result in 'noticeable' change.
- 11.1.11 My tables also note retained VSC levels which provide an indication of the adequacy of retained amenity. Specific sensitivities in the design of neighbouring properties are also noted. These are a material consideration in respect of the stage 2 of the test and inform the assessment of adequacy and acceptability of the overall impacts and retained amenity.
- 11.1.12 Following consideration of the effects of the parameter scheme I have also summarised the changes under the illustrative scheme. This provides an indication of the reduced effects secured by the controls within the application which will be evident under future reserved matters schemes.
- 11.1.13 For ease I have dealt with properties in groups aligned with the various flats and houses along St Matthew's Gardens

Flats at 157 / 161 St Matthew's Gardens

157 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	L/K/D	Minor	25.3%	Negligible	Negligible	>27%	Negligible
G	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
161 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
1	L/K/D	Moderate	26.1%	Negligible	Negligible	>27%	Negligible
1	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
1	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
1	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
1	Unknown	Negligible	>27%	Negligible	Negligible	>27%	Negligible
Impacts							

Ground and first floor flats to eastern end of St Matthew's Gardens terrace.

157 experiences a minor VSC deviation to a single ground floor living space and no material effect on NSL.

161 experiences a moderate VSC deviation to a single first floor living space. No material effect on NSL.

Acceptability / Adequacy

Retained amenity levels of over 25% VSC are very good. All other rooms meet absolute target of over 27% VSC.

Overall use and amenity of the space will not be materially impacted.

Trees / bushes to the boundary will reduce the perception of light loss.

Not all rooms to this property experience change as a result of the proposals with the northern elevation being unaffected.

Sunlight levels fully meet the APSH sunlight test.

Retained amenity resulting from the parameter scheme is considered to be adequate. No material harm under illustrative scheme demonstrates effectiveness of design controls in further minimising effects.

Table 3: Summary of effects – 157 / 161 St Matthew's Gardens

Flats at 163 / 165 St Matthew's Gardens

163 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	L/K/D	Minor	22.5%	Negligible	Moderate	24.7%	Negligible
G	Bedroom	Major	20.2%	Major	Major	25.1%	Minor
165 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
1 st	L/K/D	Moderate	21.1%	Negligible	Moderate	24%	Negligible
1 st	Bedroom	Major	14.4%	Moderate	Moderate	18.9%	Minor
Impacts							
Ground and first floor flats to the eastern end of the St Matthew's Gardens terrace. The properties enjoy higher existing VSC levels due to the relationship with the open car park and experience more significant numerical reductions to VSC which may be noticeable as a result of this higher starting point. NSL changes don't affect main living spaces and are limited to bedrooms. NSL based on assumed room layouts so may be less accurate.							
Acceptability / Adequacy							

Retained amenity levels of c.20 - 23% to living / kitchen / dining space is appropriate and will not affect the use of this area. Only minor shifts in NSL to the living spaces.

The retained VSC to the ground floor bedroom remains good at c.20% and is less sensitive room use.

The retained VSC to the first floor bedroom is lower at 14.4% but affects a single, less sensitive room use. The first floor window is more sensitive compared to the neighbouring properties due to being closer to deep eaves above.

Not all rooms to this property experience change as a result of the proposals with the northern elevation being unaffected.

Retained levels adequate such that use of spaces unlikely to be materially affected.

Sunlight levels fully meet the APSH sunlight test.

There remain numerical effects under the illustrative scheme but improved retained levels of c.24% VSC and for living space and c.19% for bedroom are appropriate and demonstrate the effectiveness of design controls in further minimising effects.

Mature trees and bushes to the boundary will reduce the perception of light loss and limit the effect on the pattern of use of these properties.

Table 4: Summary of effects – 163 / 165 St Matthew's Gardens

Townhouse at 167 St Matthew's Gardens

167 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Kitchen	Major	19.8%	Major	Major	24.2	Minor
1 st	Bedroom	Major	14.1%	Major	Major	18.4%	Major
Impacts							
Two-storey house to the eastern end of the St Matthew's Gardens terrace. The property enjoys higher existing VSC levels due to the relationship with the open car park and experiences greater levels of numerical reductions to VSC from this higher starting point.							
VSC and NSL changes may be noticeable. NSL based on assumed room layouts (uses identified from on-site inspection) so may be less accurate.							
Acceptability / Adequacy							
Retained amenity levels of c.20% to kitchen space is good for the habitable room use and will not affect the use of the spaces. The NSL changes are more significant although are based on assumed layouts that may overstate effects.							
The retained VSC to the bedroom is lower at 14.1% but affects a single, less sensitive room use. The first floor bedroom window is more sensitive compared to the neighbouring townhouses at 169 – 175 due to being closer to deeper eaves above.							
Bedroom window is in close proximity to mature tree and additional trees / bushes to the boundary which will reduce the perception of light loss and limit the effect on the pattern of use of this property.							
Not all rooms to this property experience change as a result of the proposals with the northern elevation, including main living space, being unaffected.							
Sunlight levels fully meet the APSH sunlight test.							
Retained amenity resulting from the parameter scheme is considered to be adequate.							
There remain numerical deviations under the illustrative scheme but improved retained levels of over c.24% VSC for living space and c.18.4% for bedroom are appropriate and demonstrate the effectiveness of the design controls in further minimising effects.							

Table 5: Summary of effects – 167 St Matthew's Gardens

Townhouse at 169 St Matthew's Gardens

169 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Living	Major	18.4%	Minor	Moderate	21.8%	Negligible
1 st	Bedroom	Major	21.6%	Negligible	Minor	25.6%	Negligible
Impacts							
Two-storey house to the eastern end of the St Matthew's Gardens terrace. The property enjoys higher existing VSC levels due to the relationship with the open car park and experiences moderate to major numerical reductions to VSC as a result of this higher starting point. VSC shifts may be noticeable. NSL changes are limited to a minor deviation to the ground floor living space.							
Acceptability / Adequacy							
Retained amenity levels of c.18.5% - c.21.5% are good for the habitable room uses and will not affect the use of the spaces. No material change to daylight penetration to the bedroom spaces and limited impact to the living room. Mature trees / bushes to the southern and eastern boundary will reduce the perception of light loss and limit the effect on the pattern of use of this property. Not all rooms to this property experience change as a result of the proposals with the northern elevation being unaffected. Sunlight levels fully meet the APSH sunlight test. Retained amenity resulting from the parameter scheme is considered to be adequate. The more limited harm and improved retained levels of c.22% VSC and above under the illustrative scheme demonstrates effectiveness of design controls in further minimising effects.							

Table 6: Summary of effects – 169 St Matthew's Gardens

Townhouses at 171 – 175 St Matthew's Gardens

171 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
LGF	Dining	Moderate	12.6%	Major	Minor	15%	Moderate
G	Living	Major	20.5%	Negligible	Moderate	24%	Negligible
1 st	Bedroom	Moderate	22.6%	Negligible	Minor	26.4%	Negligible
173 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
LGF	Dining	Moderate	15%	Moderate	Minor	17.8%	Minor
G	Living	Major	20.4%	Negligible	Moderate	23.8%	Negligible

1st	Bedroom	Moderate	22.6%	Negligible	Minor	26.3%	Negligible
175 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
LGF	LKD	Moderate	12.4%	Major	Minor	14.7%	Moderate
G	Living	Major	19.1%	Negligible	Moderate	22.4%	Negligible
1st	Bedroom	Moderate	21.7%	Negligible	Minor	25.3%	Negligible
Impacts							
The townhouses between 171 – 175 St Matthew's Gardens terrace have a sunken lower ground floor adjacent to the retaining wall of the Beehive Centre car park. The rooms enjoy higher existing VSC levels, particularly to the upper floors, due to the relationship with the open car park and experience moderate to major numerical reductions to VSC as a result of this higher starting point. The lower ground floor level of 175 has been altered following construction to provide a dual aspect combined living / kitchen / dining space. Whilst VSC shifts may be noticeable the NSL changes only affect the lower ground floor sunken levels with the upper floor living spaces and bedrooms fully meeting the BRE targets.							
Acceptability / Adequacy							
Retained amenity levels of c.19% - c.20% are good for the main living rooms at ground floor and will not affect the use of the spaces. No material change to daylight penetration to the living room or bedroom spaces. The lower ground level dining rooms / kitchens experience moderate effects to VSC but retain similar VSC levels to the pre-existing condition neighbouring lower ground floor living space at 177 /179 St Matthew's Gardens (c.12 – 13% VSC) as well as other examples of lower pre-existing levels around the application site and elsewhere in Cambridge (see 9.1.47). Mature trees / bushes to the boundary and the level change / enclosure to the lower ground floor space will reduce the perception of light loss and limit the effect on the pattern of use of these properties. Not all rooms to any one property experience change as a result of the proposals with the northern elevation being unaffected. Sunlight levels fully meet the APSH sunlight test. Retained amenity resulting from the parameter scheme is considered to be adequate. The more limited effect of the illustrative scheme results in VSC changes to the constrained lower ground rooms being minor. Improved retained amenity levels demonstrate the effectiveness of design controls in further minimising effects.							

Table 7: Summary of effects – 171-175 St Matthew's Gardens

Flats at 177 – 201 St Matthew's Gardens

177-201 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
LGF – 177	Living	Negligible	11.4%	Moderate	Negligible	12.2%	Negligible

LGF – 179	Living	Negligible	11.3%	Major	Negligible	11.8 %	Minor
G – 183	Bedroom	Minor	20.4%	Major	Negligible	23.5%	Minor
G – 185	Bedroom	Major	17.8%	Major	Minor	21.2%	Moderate
1 – 189	Bedroom	Moderate	22.5%	Minor	Minor	25.5%	Negligible
1- 191	Bedroom	Major	19.8%	Major	Moderate	23.1%	Minor
2- 195	Bedroom	Minor	25%	Negligible	Negligible	>27%	Negligible
2- 197	Bedroom	Moderate	22.1%	Moderate	Minor	25.4%	Negligible
3 – 201	Bedroom	Minor	22.1%	Negligible	Negligible	24.6%	Negligible
3- 201	Bedroom	Moderate	19.1%	Minor	Minor	22.2%	Negligible

Impacts

The flats at 177 – 201 St Matthew's Gardens are positioned to the centre of the terrace. They have a sunken lower ground floor with the living space of 177 and 179 facing into this sunken terrace. The upper floor flats have bedrooms facing the site but no main living rooms.

The lower ground floor living spaces already experience lower VSC levels of between 12% and c.13%. The additional VSC reductions resulting from the scheme are negligible. NSL changes are exacerbated in percentage terms by this lower starting point and sunken position of these rooms.

The bedrooms at ground floor and above have higher pre-existing amenity and so experience greater and more noticeable potential change to VSC and NSL levels.

Acceptability / Adequacy

Retained amenity levels of c.18% and higher are appropriate for the bedroom uses at ground floor and above. Whilst there are NSL changes to these bedrooms, they are a more secondary space and this will not affect the enjoyment / pattern of use of these rooms.

The lower ground floor rooms are already somewhat compromised both in outlook and quality. Further VSC changes are compliant with BRE base targets and unlikely to have a material effect on the use of these spaces.

The mature trees and structures bin stores / structures within the terrace limit outlook from these lower ground floor units which will reduce the perception of light loss and limit the effect on the pattern of use of these properties.

The majority of sunlight levels fully meet the APSH sunlight test (see 14 below).

Retained amenity resulting from the parameter scheme is considered to be adequate. The majority of effects are to bedroom spaces whilst the lower ground floor living spaces are already somewhat constrained.

The more limited effects under the illustrative scheme demonstrates effectiveness of design controls in further minimising changes resulting in only minor to moderate changes in effects.

Table 8: Summary of effects – 177-201 St Matthew's Gardens

Townhouse at 203 St Matthew's Gardens

203 St Matthew's Gardens							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
LGF	Dining	Negligible	16.8%	Negligible	Negligible	18.9%	Negligible
G	Living	Minor	22%	Negligible	Negligible	24.6%	Negligible
1st	Bedroom	Minor	25.1%	Negligible	Negligible	>27%	Negligible
Impacts							
This property is situated to the western end of St Matthew's Gardens. Effects are very limited with only minor VSC deviations to two rooms and no material change in NSL.							
Acceptability / Adequacy							
The VSC impacts are minor in nature and retained levels, of over 20% VSC in respect of the rooms that experience harm under the parameter scheme, are acceptable for their specific room use. The lower ground floor has a lower retained VSC of c.17% but the reduction to this room fully meets the BRE guidance so is not considered to be material. Mature trees / bushes to the boundary and the level change / enclosure to the lower ground floor space will reduce the perception of light loss. Not all rooms experience daylight loss to this property. Sunlight levels fully meet the APSH sunlight test. Retained amenity resulting from the parameter scheme is considered to be adequate. The full compliance under illustrative scheme demonstrates effectiveness of design controls in further minimising changes under future reserved matters applications.							

Table 9: Summary of effects – 203 St Matthew's Gardens

- 11.1.14 The tables above show that the greatest effect of the proposals is to the properties between 163 and 201 St Matthew's Gardens. These properties currently adjoin the open car park of the Beehive Centre. Notwithstanding this there are also mature trees and bushes to the boundary which will have an effect to limit the perception of any light loss.



Image 10 - Application site boundary to St Matthew's Gardens (March 2025)

11.1.15 A number of the St Matthew's Gardens properties have sunken lower ground floor levels as a result of the level change to the Beehive Centre car park and the retaining wall. The numerical VSC effects to these lowest floors are generally lower than those to the ground floor rooms due to the more limited sky view from these sunken spaces. Retained VSC levels are also reduced given the lower starting point and more constrained position of these windows.



Image 11 - Google earth image showing lower ground floor rooms



Image 12 - Application site boundary and retaining wall from 173 St Matthew's Gardens

- 11.1.16 The ground floor spaces to these properties experience generally the largest numerical change as a result of their currently more open aspect. This affects a mix of bedrooms to the flats at 177 – 201 St Matthew's Gardens and living rooms to the townhouses at 167 – 175. Despite this change the retained VSC levels are 19-20% VSC or above for the living spaces.
- 11.1.17 The only main living rooms that experience lower retained VSC levels are the lower ground floor flats at 177 and 179 St Matthew's Gardens however the change here is limited. VSC reductions meet the BRE targets although there are more significant NSL deviations under the parameter scheme.
- 11.1.18 The dining and combined dining / kitchen spaces at 171,173 and 175 St Matthew's gardens are within the more constrained lower ground floor terraces and are limited by both the existing garden fences and retaining wall to the application site.
- 11.1.19 These areas already have lower existing VSC levels which increases the subsequent percentage VSC reduction. The impacts of the parameter scheme are 'moderate' in terms of the VSC reduction significance. The retained values of between c.12.5% - 15% VSC fall below the alternative levels of 16% - 18% and may be noticeable to the residents. These impacts are however very localised affecting three rooms and resulting from the specific constraints to the sunken windows.
- 11.1.20 I do not consider these retained levels to be inadequate given the presence of similar pre-existing VSC levels to the properties at 177 / 179 St Matthew's Gardens, other precedent identified around the site at 9.1.47 and the other examples from Cambridge noted at section 9. These confirm instances of similar or lower retained amenity which is already evident in properties around the site and across Cambridge.
- 11.1.21 Other areas of greater numerical impacts include the upper floor bedrooms of 165 and 167 St Matthew's Gardens which retain VSC of c.14%. These windows have a more direct view of the

proposal and are somewhat sensitive due to the design of these properties which positions the windows closer to the overhanging eaves which blocks some sky visibility due to the proximity to the roof soffit above.



Image 13 - Upper floor windows of 165 / 167 St Matthew's Gardens

- 11.1.22 A degree of change is to be anticipated where properties have a currently open outlook. Whilst the shift in daylight levels will be noticeable to a number of properties, the retained amenity, indicated by VSC levels, predominantly in the high teens to mid 20% levels, is considered to be adequate and will not materially impact the use of the spaces.
- 11.1.23 The isolated effects below this level affect more constrained lower ground floor spaces at 171, 173, 175, 177 and 179 St Matthew's Gardens - all of which are enclosed within sunken terraces. Having inspected these properties I consider the retained amenity will be adequate and is unlikely to have a material impact on the pattern of use or enjoyment of the spaces. The adequacy of these retained levels is also supported by the fact that a number of properties neighbouring the application site, both to York Street and St Matthew's Gardens, already have windows that have similar VSC levels. These townhouses also retain higher VSC levels to the ground floor main living spaces.
- 11.1.24 In considering the acceptability of the proposals I have had regard to a number of other factors alongside the adequacy of retained amenity. In particular:
- None of the affected properties experience changes to all of their windows. The majority of units have an elevation to the north that is not affected by the proposals.
 - The most significant impacts are highly localised with the primary effects impacting lower ground floor spaces at 171-175 St Matthew's Gardens under the maximum parameters scheme. This represents a very small proportion of the total properties tested around the site.
 - The arrangement of lower ground floor units as well as the relationship to the boundary trees

will limit the perception of light loss resulting from the proposals.

- There is very high compliance in respect of both direct sunlight to main living spaces to the St Matthew's Gardens properties as well as only very limited deviations from the 2+ hour sun on ground targets.
- The additional articulation of the illustrative scheme results in reduced technical effects and the removal of all 'major' numerical losses. The retained amenity to the most constrained lower ground floor spaces under the illustrative scheme would increase to c.15% VSC. This indicates the additional design controls within the application will minimise any harm as a result of subsequent reserved matters schemes and ensure the continued adequacy of the retained amenity.

11.1.25 The above factors align with the considerations set out within the body of the BRE guide identifying where flexibility may be appropriate and at Appendix H in terms of effects that trend towards more limited significance. This supports my conclusions as the acceptability of the proposals in relation to the BRE guide and adequacy of retained amenity.

12 Daylight Effects to Silverwood Close

- 12.1.1 The Properties at Silverwood Close are predominantly two storey houses with some having been extended to include a third floor in dormer arrangement. The houses are arranged as short terraces comprising between four and six properties.
- 12.1.2 The detailed technical effects in respect of the Silverwood Close properties are set out in the results at Appendix 3.
- 12.1.3 As with St Matthew's Gardens these properties predominantly face the existing open car park of the Beehive Centre. There are a mix of trees, shrubs and hedging to the boundary (both within the private gardens and to the application site) which varies in density however there is no level change or retaining wall to these properties.
- 12.1.4 A number of the properties include rear extension elements that somewhat enclose on the older windows to the original building line. Some of the older extensions are single storey brick built structures and 'lean-to' conservatories. In some cases the window apertures to the original building are retained and are effectively positioned within these structures such that they 'borrow' light through the extensions. Due to the heavily enclosed nature of these original windows, they have little or no 'outlook' and existing VSC levels are very low thus making them particularly sensitive to additional losses.
- 12.1.5 This arrangement is evident to the ground floor dining room of the larger property at 49/50 Silverwood Close. Given these low existing VSCs and enclosed nature of the windows there will be no noticeable effects as a result of any technical reductions to these spaces.
- 12.1.6 The properties with more modern extension elements tend to have larger open plan living /kitchen / dining spaces at ground floor. They generally have multiple windows and include rooflights which limits the potential for material adverse effects to these spaces.

Reduction to Daylight / Adequacy of Retained Amenity to Silverwood Close

- 12.1.7 39 properties along Silverwood Close were relevant for assessment. 20 properties would remain fully compliant in respect of the BRE daylight targets with the parameter scheme in place and a further 8 properties would be fully compliant under the illustrative scheme:

<u>Meets BRE Guidelines – Parameters</u>	<u>Meets BRE Guidelines – Illustrative</u>
28 – 33 (Inclusive) Silverwood Close	28 – 33 (Inclusive) Silverwood Close
46-48 (Inclusive) Silverwood Close	40-45 (Inclusive) Silverwood Close
52-61 (Inclusive) Silverwood Close	46-48 (Inclusive) Silverwood Close
62-64 (Inclusive) Silverwood Close	52-61 (Inclusive) Silverwood Close
	62-64 (Inclusive) Silverwood Close
	65 & 65A Silverwood Close

Table 10: Silverwood Close properties meeting BRE base targets

- 12.1.8 The numerical significance of the effects beyond the BRE base targets is most evident to the properties at 34-39 Silverwood Close that have the most direct aspect towards the application site.
- 12.1.9 I have provided commentary on the numerical reductions to each property in respect of the parameter scheme below alongside a breakdown of factors that are relevant to the acceptability of the effects and adequacy of retained amenity levels. This follows the same approach outlined at 11.1.7 – 11.1.12.
- 12.1.10 I have also summarised the effects of the illustrative scheme as an indication of the likely more limited effects of the proposal under future reserved matter applications based on the controls within the design code.

Central Terrace - 34-39 Silverwood Close

<i>34 Silverwood Close</i>							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Living Room	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Kitchen	Moderate	21.6%	Moderate	Minor	22.9%	Moderate
1 st	Bedroom	Moderate	24.39%	Major	Minor	26.6%	Moderate
<i>35 Silverwood Close</i>							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Kitchen	Moderate	19.5%	Moderate	Minor	21.1%	Minor
G	Living Room	Minor	24.8%	Negligible	Negligible	>25.7%	Negligible
1 st	Bedroom	Moderate	24.8%	Major	Moderate	26.3%	Moderate
<i>36 Silverwood Close</i>							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Dining	Major	21.3%	Major	Moderate	23.1%	Moderate
G	Kitchen	Moderate	17.8%	Major	Minor	18.7%	Major
1 st	Bedroom	Moderate	21.7%	Major	Moderate	26.2%	Moderate
<i>37 Silverwood Close</i>							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Kitchen / Dining	Moderate	21.9%	Moderate	Moderate	23.1%	Minor

1 st	Bedroom	Moderate	24.7%	Major	Moderate	26.2%	Moderate
38 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			- Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Kitchen Dining	Negligible	>27%	Negligible	Negligible	>27%	Negligible
1 st	Bedroom	Moderate	24.7%	Major	Moderate	26.3%	Moderate
39 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Living / Kitchen / Dining	Negligible	>27%	Negligible	Negligible	>27%	Negligible
1 st	Bedroom	Moderate	24.7%	Moderate	Moderate	26.5%	Minor
2 nd	Bedroom	Negligible	>27	Negligible	Negligible	>27	Negligible
Impacts							
These are two and three storey houses to the central terrace of Silverwood Close. The properties have an existing view to the open car park and experience predominantly minor to moderate numerical reductions to VSC as a result of the higher starting point. The more noticeable changes in respect of 36 Silverwood Close affect windows that are alongside an extension or are NSL changes within the deeper plan extension itself. The properties at 38 and 39 Silverwood Close have extended living / kitchen / dining space at ground floor. Whilst individual windows experience change, the spaces are heavily glazed and include rooflights such that overall amenity remains high.							
Acceptability / Adequacy							
Retained amenity levels of c.18% to kitchen and dining spaces and c.25% to bedrooms are appropriate for use of these spaces. Main living rooms retain compliant VSC in excess of 27%. Mature trees to the boundary will reduce the perception of light loss and limit the effect on the pattern of use of this property. There are less trees to the boundary of 39 Silverwood Close but this property has a larger garden enjoying light and outlook from multiple aspects. Not all rooms to the properties experience change as a result of the proposals with the northern elevation, including main living spaces, being unaffected. Sunlight levels fully meet the APSH sunlight test and the majority of gardens meet the 2+ hours sun on ground test. Retained amenity resulting from the parameter scheme is considered to be adequate. Impacts reduce under the illustrative scheme with retained VSC of generally in the mid 20%_s. This illustrates the effectiveness of design controls in further minimising effects under future reserved matters applications.							

Table 11: Summary of effects – 34-39 Silverwood Close

South eastern Terrace - 40-45 Silverwood Close

40 Silverwood Close							
Floor	Use	Harm - Parameter Scheme			Harm - Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Kitchen / Dining	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Living	Minor	26.5%	Minor	Negligible	>27%	Negligible
1 st	Bedroom	Negligible	>27%	Moderate	Negligible	>27%	Negligible
2 nd	Bedroom	Negligible	>27	Negligible	Negligible	>27	Negligible
41 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Kitchen	Negligible	23.3%	Minor	Negligible	24.5%	Negligible
G	Conservatory	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Dining	Moderate	23.3%	Negligible	Negligible	24.9%	Negligible
1 st	Bedroom	Negligible	>27%	Minor	Negligible	>27%	Negligible
42 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Dining	Negligible	21.8%	Negligible	Negligible	23.1%	Negligible
G	Conservatory	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Kitchen	Negligible	25.2%	Minor	Negligible	26.8%	Negligible
1 st	Bedroom	Negligible	>27%	Moderate	Negligible	>27%	Negligible
43 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Dining	Minor	22.2%	Moderate	Negligible	23.4%	Negligible
G	Conservatory	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Kitchen	Minor	25.9%	Minor	Negligible	>27%	Negligible
1 st	Bedroom	Negligible	>27%	Moderate	Negligible	>27%	Negligible
2 nd	Bedroom	Negligible	>27%	Negligible	Negligible	>27%	Negligible
44 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		

		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Dining	Minor	26.6%	Minor	Negligible	>27	Negligible
G	Kitchen	Minor	26.8%	Minor	Negligible	>27	Negligible
1 st	Bedroom	Negligible	>27	Minor	Negligible	>27	Negligible
45 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Unknown	Minor	22.8%	Minor	Negligible	24.2%	Negligible
G	Kitchen / Dining	Minor	25%	Negligible	Negligible	26.3%	Negligible
G	Living	Minor	24.9%	Negligible	Negligible	>27%	Negligible
1 st	Bedroom	Negligible	>27%	Moderate	Negligible	>27%	Negligible
Impacts							
These are two and three-storey houses to the south-eastern terrace of Silverwood Close. Each property currently has aspect to an open car park. Effects beyond the BRE targets are localised and predominantly minor shifts of 20-30%. 43 Silverwood Close has an internal window to a kitchen set behind a glazed conservatory leading to a greater effect to the NSL levels of this deeper plan space.							
Acceptability / Adequacy							
Impacts are predominantly minor with high retained levels of close to 27% VSC for the majority of rooms. Limited NSL harm to deeper plan space or bedrooms. Mature trees to the boundary as will reduce the perception of light loss and limit the effect on the pattern of use of these properties. Not all rooms to the property experience change as a result of the proposals. Sunlight levels fully meet the APSH sunlight test and the garden meets the 2+ hours sun on ground test. Retained amenity resulting from the parameter scheme is considered to be adequate. Potentially noticeable effects are fully removed under illustrative scheme and design controls are effective in further minimising impacts.							

Table 12: Summary of effects – 40-45 Silverwood Close

Eastern Terrace – 49-51 Silverwood Close

49/50 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Dining	Major	0.1%	Major	Major	0.2%	Minor
G	Living / Kitchen / Dining	Negligible	23.9%	Moderate	Negligible	26.4%	Negligible
1 st	Bedroom	Negligible	>27%	Negligible	Negligible	>27%	Negligible
2 nd	Bedroom	Negligible	>27%	Negligible	Negligible	>27%	Negligible
51 Silverwood Close							
Floor	Use	Numerical Reduction Parameter Scheme			Illustrative Scheme		
		VSC Impact	Retained VSC	NSL Impact	VSC Impact	Retained VSC	NSL Impact
G	Kitchen	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Dining	Minor	25.8%	Major	Negligible	>27%	Minor
1 st	Bedroom	Negligible	>27%	Negligible	Negligible	>27%	Negligible
2 nd	Bedroom	Negligible	>27%	Major	Negligible	>27%	Moderate
Impacts							
Three-storey extended houses to the eastern terrace of Silverwood Close. Properties have existing aspect to an open car park of Porcelanosa unit. The effects to the larger property at 49/50 are very limited with the exception of an internal dining-room window that borrows light through an extension. The location of this 'internal' window limits outlook and exacerbates the percentage change. There are minor VSC effects to the dining space at 51 Silverwood Close with major changes to NSL to a dining space and a bedroom within a deeper rear extension.							
Acceptability / Adequacy							
Impacts to 49/50 affect internal window. Has low existing VSC and change is highly limited. NSL shift may be noticeable / but have no effect on the use of the space. Changes beyond targets to 51 results from high starting position and relate to ground floor kitchen space in a deeper plan extension where the BRE guidance recognises effects may be inevitable Not all rooms to these properties experience change as a result of the proposals. Gardens meet 2+ hours sun on ground test. Retained amenity resulting from the parameter scheme is considered to be adequate. Effects are further limited illustrative under illustrative scheme with all rooms retaining high VSC levels with many exceeding 27%.							

Table 13: Summary of effects – 49-51 Silverwood Close

Eastern Terrace – 65/65A Silverwood Close

<i>65 / 65A Silverwood Close</i>							
<i>Floor</i>	<i>Use</i>	<i>Numerical Reduction Parameter Scheme</i>			<i>Illustrative Scheme</i>		
		<i>VSC Impact</i>	<i>Retained VSC</i>	<i>NSL Impact</i>	<i>VSC Impact</i>	<i>Retained VSC</i>	<i>NSL Impact</i>
G	Kitchen / Dining	Negligible	>27%	Negligible	Negligible	>27%	Negligible
G	Living	Negligible	17.0%	Negligible	Negligible	18.7%	Negligible
1 st	Bedroom	Negligible	>27%	Minor	Negligible	>27%	Negligible
1 st	Bedroom	Negligible	>27%	Negligible	Negligible	>27%	Negligible
2 nd	Bedroom	Negligible	>27%	Negligible	Negligible	>27%	Negligible
Impacts							
Three-storey extended houses to the eastern terrace of Silverwood Close. 65/65A experiences no material effect to VSC. Exceptionally minor NSL deviation to bedroom.							
Acceptability / Adequacy							
No effects to main living space of 65/65A. Minimal nature of shift of NSL to more secondary use. Not all rooms experience change as a result of the proposals. Gardens meet 2+ hours sun on ground test. Retained amenity resulting from the parameter scheme is considered to be adequate. BRE deviations fully removed under illustrative scheme.							

Table 14: Summary of effects – 65/65A Silverwood Close

- 12.1.11 The majority of the Silverwood Close properties face the undeveloped open car park element of the existing Beehive Centre or car park adjacent to the Porcelanosa unit. A degree of change is to be anticipated in respect of the currently open site, however the shift in daylight levels is generally limited. The vast majority of the numerical effects to VSC at Silverwood Close are negligible with only localised minor or moderate deviations from the numerical targets.
- 12.1.12 The only exception where greater numerical reductions in VSC are identified relates an 'internal' windows set within rear extensions at 49/50 Silverwood Close. The low existing VSC levels would mean this further shift is unnoticeable.
- 12.1.13 The main living spaces do not experience material deviations from the targets and all of the properties have multiple rooms that will not be materially affected by the proposals. The front elevations do not face the application site and will be unaffected.
- 12.1.14 NSL changes may be more noticeable to the central units between 34-39 Silverwood Close. However, whilst the changes may be perceptible, the retained amenity levels of c.18% VSC or over are adequate and will not materially impact the use of the spaces. The majority of rooms retain VSC levels of c.25% of above and main living spaces in particular either meet the BRE targets or retain VSC levels close to the 27% target.
- 12.1.15 In considering the acceptability of the proposals I have also had regard to a number of other

factors. In particular:

- None of the affected properties experience changes to all of their windows. All units have a front elevation and main living spaces that are not affected by the proposals.
- The relationship to the boundary trees will limit the perception of light loss to a number of properties.
- There is very high compliance in respect of both direct sunlight to main living spaces as well as the 2+ hour sun on ground targets.
- The additional articulation of the illustrative scheme results in reduced technical effects and a high number of properties which fully meet the BRE targets. This indicates the design controls within the application which will minimise any harm as a result of subsequent reserved matters schemes and ensure the continued adequacy of the retained amenity.

12.1.16 The above factors align with the considerations set out within the body of the BRE guide identifying where flexibility may be appropriate and at Appendix H in terms of effects that trend towards more limited significance. This supports my conclusions as the acceptability of the proposals in relation to the BRE guide and adequacy of retained amenity.

13 Daylight Effects to Other Neighbouring Properties

- 13.1.1 The LPA have not raised the harm any other specific properties within the reasons for refusal but note the general concern regarding *'other adjacent properties and gardens'*.
- 13.1.2 The daylighting effects to the other neighbouring receptors are very limited and I consider them to be wholly acceptable. Detailed technical appendices are attached at Appendix 4. I have however, summarised any technical deviations from the BRE targets as well as the adequacy of retained amenity below.

Sleaford Street

- 13.1.3 The 3-storey properties at Sleaford Street are situated to the south-west of the site and contain windows to their eastern elevations that have an oblique view of plot 6 of the proposals. The relationship with the Sleaford Street properties and a summary explanation of the technical effects are described at Appendix 6.
- 13.1.4 The 6 Sleaford Street properties closest to the site boundary were tested as the only ones that are sufficiently proximate as to be potentially affected by the proposals.
- 13.1.5 2 properties show a degree of deviation from the BRE targets. No properties suffer reductions to all of their rooms / windows.
- 13.1.6 The affected space at 148 Sleaford Street ground floor R1 is a bedroom. This is a less sensitive use but maintains a VSC of c.17% which is considered to be adequate for a bedroom use. The window is positioned close to the site boundary alongside the extended porch of the property increasing sensitivity however the main living room window at ground floor maintains an excellent VSC of 31.5%.



Image 14 - Location of windows deviating from BRE targets to Sleaford Street

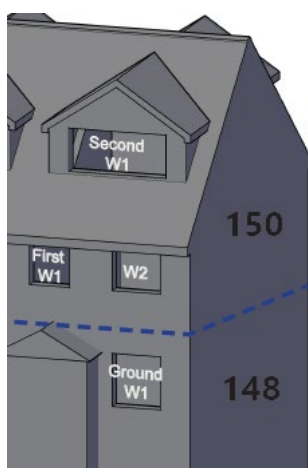


Image 15 - Window map extract of 148 / 150 Sleaford Street

- 13.1.7 The bedroom also experiences a deviation in NSL however again this is exacerbated by the recessed nature of the window and position close to the boundary. The main living space to 148 Sleaford Street experiences minimal change from the pre-existing position and meets the BRE targets.
- 13.1.8 The affected first floor window R2 at 150 Sleaford Street serves a small 'non-habitable' galley kitchen to the unit and is more sensitive to the change due to the result of the overhanging eaves directly above. The room maintains a good overall VSC of 20% and fully meets the NSL targets.
- 13.1.9 Whilst the impacts to the Sleaford Street properties are highly localised the presence of significant mature trees to the boundary will also limit the perceived effect of the proposals as is evident in image 14 above.
- 13.1.10 Overall the proposals are considered to be acceptable in maintaining adequate daylight to the Sleaford Street properties. Adverse effects are very localised and limited to more secondary uses where the design of the neighbouring building leads to an additional sensitivity to the proposals. The changes may be perceptible but the overall use and amenity of the space will not be materially impacted given the specific room uses and adequate retained VSC levels.
- 13.1.11 Whilst I consider the retained amenity to be adequate under the parameter plan scheme, the illustrative scheme results show further reductions in effects with the kitchen at 150 becoming fully compliant. Whilst residual impacts remain to the bedroom at 148 the retained VSC of 24.8% is considered to be high and demonstrates the additional effectiveness of the design code in maintaining adequate amenity to these neighbours.

York Street

- 13.1.12 The 2-storey Victorian terraces on York Street are located directly to the west of the site. Summary commentary as to the effects of the proposals is attached at Appendix 7.
- 13.1.13 49 properties are relevant for assessment and, with the parameter plans in place, 37 are fully compliant with the BRE daylight targets in respect of both VSC and NSL.
- 13.1.14 12 properties experience some shifts in NSL outside of the numerical targets but meet the VSC

target⁸.

- 13.1.15 The full compliance with the guideline VSC targets levels is illustrative of the adequacy of retained amenity. Where deviations from the NSL targets are evident these solely affect spaces where the design of neighbouring properties increases sensitivity due to the depth of the rooms and / or windows that are inset between neighbouring extensions as set out at Appendix 7.
- 13.1.16 These changes may be slightly perceptible but the overall use and amenity of the space will not be materially impacted given the very localised changes and adequate retained VSC levels. The changes are unlikely to affect the use of the affected spaces and the BRE guide explicitly notes the inevitable sensitivity of windows that are constrained in this manner.
- 13.1.17 Under the illustrative scheme the reduced height of plots 7 and 8 and the greater articulation of the upper floor setbacks further reduce the effects to the No Sky Line. Impacts remain to four properties however the only impact that experiences a numerical 'major' adverse reduction appears to serve a non-habitable space lit by a small window at York Street 74.



Image 16 - Location of residual NSL effect to 74 York Street

- 13.1.18 I therefore consider the effects of the proposal to be acceptable under the BRE guidelines and adequate in accordance with local policy. This conclusion is reinforced by the reduced effects under the illustrative scheme indicating the controls which virtually remove the effects that fall more significantly beyond the BRE targets with the exception of the single small window which is not likely to serve a habitable space.

Pym Court

- 13.1.19 The 20 flats of Pym Court are situated to the south east of the site beyond the railway depot. The properties have a distant view of the proposed plots 5 and 6 which are separated by some c.70m.
- 13.1.20 Our studies confirm there are no deviations from the BRE targets in respect of daylight, sunlight or overshadowing effects to this property and the effects are therefore likely to be unnoticeable and are fully acceptable.

⁸ A single window at 74 York Street (ground floor W1) experiences a minor reduction beyond the base targets however the room as a whole meets the weighted VSC criteria

Hampden Gardens

- 13.1.21 The flats of Hampden Gardens are arranged over ground plus three to ground plus four storeys. They are situated to the east of the railway line and there is separation of approximately 80m to Plot 5 of the proposals. A summary of the effects to these properties is attached at Appendix 8.
- 13.1.22 Of 57 windows across the Hampden Gardens there are four localised and exceptionally minor deviations from the BRE base VSC targets. Each of these effects is to windows to upper floors where there are greater sensitivities resulting from the position of windows relative to the eaves of this property. Minor NSL reductions affect two spaces but are unlikely to be noticeable and will not affect the use of the spaces given the separation to the proposals.
- 13.1.23 Overall the changes may be slightly perceptible to the low number of affected rooms but the overall use and amenity of the space will not be materially impacted.
- 13.1.24 These effects are fully resolved under the illustrative scheme which achieves full compliance with the BRE targets. This demonstrates the additional limits to neighbouring amenity effects resulting from the design controls within the application.
- 13.1.25 Overall the effects of the proposals are extremely limited and retained amenity considered to be wholly adequate.

11-17 The Terrace

- 13.1.26 The flats of 'The Terrace' are situated to the east of the railway line and are arranged across 3-5 storeys in height. There is separation of approximately 80m to Plot 5 and 6 of the proposals. A summary of the effects to these properties is attached at Appendix 9.
- 13.1.27 There is no material adverse effect to any of the properties within the Terrace in respect of the VSC daylight metric as a result of the parameter proposals.
- 13.1.28 6 windows experience minor adverse NSL effects under the parameter scheme with a single room experiencing a moderate change to NSL.
- 13.1.29 These NSL shifts are modest and, as some layouts have been estimated, the effects may be overstated. These are fully resolved under the illustrative scheme which results in full compliance with the BRE targets demonstrating the further limits to neighbouring amenity effects resulting from the design controls in the application.
- 13.1.30 The adequacy of the retained amenity is demonstrated by the high retained VSC levels with all windows maintaining in excess of the 27% target with the maximum parameters scheme in place.
- 13.1.31 The Beehive Centre proposals are considered to be successful in limiting potential daylight effects. Whilst a degree of change from the pre-existing condition is inevitable the majority of effects to neighbours under the maximum parameter scheme are unlikely to be perceptible to the occupiers.
- 13.1.32 More noticeable changes are limited to the north of the site at St Matthew's Gardens and Silverwood Close which are in close proximity to the boundary and predominantly face the existing open car park. Whilst a number of reductions exceed the base BRE targets retained amenity remains generally high for the specific room uses. Lower retained values affect 5 rooms to St Matthew's Gardens however retained amenity is similar to pre-existing levels in close proximity to the site and evidenced in other local and appeal precedent.

- 13.1.33 The illustrative scheme results in more limited reductions to daylight and further increases to retained amenity of the more affected properties. This indicates how the effects are successfully managed as a result of the design controls within the application.
- 13.1.34 Overall the effects of the scheme are therefore considered to be acceptable under the BRE guidelines and adequate in accordance with policy 60 of the Local Plan.

14 Effects of Proposals –Sunlight within Neighbouring Properties

14.1.1 I have considered the effect on direct sunlight to relevant neighbouring windows and the agreed technical results in respect of the relevant APSH testing is attached split between the various properties at Appendices 2-4. In summary the effects are exceptionally minor.

Technical APSH Effects: All Neighbours – Parameters Scheme

14.1.2 The testing of Annual Probable Sunlight Hours considers the effects to 88 rooms which neighbour the scheme and are within 90° of due south.

14.1.3 The focus of the BRE guide is on sunlight to main living rooms and conservatories. My summary also includes other rooms where the use is unknown and therefore could potentially be a living space. These represent all of the rooms which are relevant for APSH assessment.

14.1.4 A summary of the results in respect of the maximum parameter scheme is set out below:

Property name	No of relevant rooms	Rooms meet BRE targets	APSH reduction adversity		
		No.	Minor	Moderate	Major
Sleaford Street	6	6	0	0	0
York Street	16	16	0	0	0
St Matthew's Gardens	25	24	0	0	1* ⁹
Silverwood Close	23	23	0	0	0
Pym Court	3	3	0	0	0
Hampden Gardens	13	13	0	0	0
11-17 The Terrace	2	2	0	0	0
Total	88	87	0	0	1*

Table 15: Summary of APSH Sunlight Effects

14.1.5 Across all of the relevant neighbouring rooms the only deviation affecting a main living space relates to a single lower ground floor living room at 177 St Matthew's Gardens which is considered in more detail below.

⁹ * Note this change is only 'major' as a result of percentage shift in winter sunlight. Overall annual probable sunlight remains well above guideline targets.

177 St Matthew's Gardens

- 14.1.6 In respect of 177 St Matthew's Garden's the lower ground floor flat is positioned within a sunken terrace enclosed on all sides. There are also mature trees beyond the retaining wall to the application site with the arrangement of the sunken terrace illustrated below:



Image 17 - Position of lower ground floor windows within terrace (image shows 179 St Matthew's Gardens)

- 14.1.7 The sunlight effects to this property are extracted below. The overall sunlight availability is maintained at a good level of 38% APSH for the year compared with the BRE target 25%. Additionally the overall loss across the year is 5%. This only marginally exceeds the 4% figure which is not considered to be noticeable under the guidance¹⁰.

AddressRoomWindowRoom use				Annual Probable Sunlight Hours (APSH) by Room			
				Existing APSH		Proposed APSH	
				Total	Winter	Total	Winter
177-201 Odd St Matthew's Gardens				433		381	
Lower Ground	R1	W1	Living Room				
		W2					

Table 16: APSH Results – 177 St Matthew's Gardens (Maximum Parameter Scheme)

- 14.1.8 The affected room falls below the BRE targets only by virtue of the reduction in low angle winter sunlight. This is already constrained by the position of the window and the lower APSH target in

¹⁰ BRE Guide s.3.2.7

respect of winter sunlight reflects the lower availability and expectation of sunlight at that time of year.

- 14.1.9 Additional losses to winter sunlight are to be anticipated as a result of the constraints to this space and I do not consider the further reductions will have a material impact on the use of the property. The property will maintain good APSH levels across the rest of the year which I consider to be acceptable given the highly localised nature of the effects.

APSH Effects: All Neighbours – Illustrative Scheme

- 14.1.10 When the effects of the Illustrative scheme are considered the affected space at 177 St Matthew's Gardens experiences a reduced effect with only a 2% overall change in APSH levels.

AddressRoomWindowRoom use				Annual Probable Sunlight Hours (APSH) by Room			
				Existing APSH		Proposed APSH	
				Total	Winter	Total	Winter
177-201 Odd St Matthew's Gardens							
Lower Grou	R1	W1	Living Room				
		W2		43	3	41	1

Table 17: APSH Results – 177 St Matthew's Gardens (Illustrative Scheme)

- 14.1.11 Whilst this change reduces the winter sunlight at the same retained level as the parameter scheme the BRE guide states that overall reductions of less than 4% will be unnoticeable and the effects fully comply with the base BRE targets.
- 14.1.12 This compliance with the APSH targets demonstrates that the additional articulation of the proposals controlled by the design code will ensure appropriate direct sunlight amenity to all neighbours.

Adequacy of APSH Sunlight Levels

- 14.1.13 As noted above, potential deviations to sunlight levels in respect of relevant properties are limited to only a single room. In considering the acceptability of these impacts regard should be had to the following:
- The minor level of deviation from the 5% winter target value and the high level of overall sunlight throughout the year.
 - The specific constraints associated with arrangement of this property limiting the availability of low angle winter sunlight.
 - The presence of mature trees to the boundary that are not included in the assessments but will reduce the perception of light loss to this space.
 - Analysis of the illustrative scheme indicates that the design code requirements would lead to the delivery of a scheme that will be fully BRE compliant.
 - The very localised nature of these effects to only a single room of 88 potentially relevant spaces.
- 14.1.14 The Beehive Centre proposals are considered to be successful in limiting potential adverse sunlight effects. The impacts identified above are exceptionally localised and affect a space where there are

limiting factors that will reduce the perceived effect of the scheme.

- 14.1.15 The illustrative scheme indicates that the adverse effects will be successfully managed in future reserved matters applications as a result of the design controls within the application.
- 14.1.16 Overall the effects of the scheme are therefore considered to be acceptable under the BRE guidelines and adequate in accordance with policy 60 of the Local Plan.

15 Effects of Proposals – Sun on Ground / Shading to Neighbouring Amenity

- 15.1.1 The sun on ground test is an assessment of the potential shading effects of a scheme on neighbouring amenity spaces and utilises the BRE recommended '2-hour sun contour' analysis. The guidelines suggest that if at least 50% of an amenity area receives at least 2hrs of sun on 21st March, then it is likely to be adequately lit throughout the year. If an existing neighbouring open space receives less than 50%, then the loss in sunlight may be noticeable if it is reduced below 0.80 times its former value.
- 15.1.2 The results of the Sun on Ground assessments are attached at Appendix 5.
- 15.1.3 Our assessment of sunlight amenity levels considered all of the rear gardens at 2-92A York Street (evens) adjoining the site to the west, as well as 153 – 213 St Matthews Gardens and 28-65A Silverwood Close along the northern boundaries of the site. This is 102 areas of assessment.
- 15.1.4 Of 102 garden areas relevant for assessment our testing identified full compliance to 97 spaces under the maximum parameters scheme. Five properties experience reductions below the 50% 2+ hour sun on ground target as follows:

Property	Sun on Ground Existing	Sun on Ground Proposed	Date space meets the targets
175 St Matthew's Gardens	88%	48%	22 nd March
163- 165 St Mathew's Gardens	77%	47%	23 rd March
36 Silverwood Close	83%	49%	22 nd March
37 Silverwood Close	79%	46%	25 th March
38 Silverwood Close	77%	26%	2 nd April

Table 15: Summary of Sun on Ground (Shading) Effects -Maximum Parameters Scheme

- 15.1.5 Whilst five areas fall below the targets it can be seen that four of these are exceptionally limited deviations from the target that 50% of the space achieve 2+ hours of sun on March 21st.
- 15.1.6 In his review the LPA expert considered that all of the above effects would be major adverse in nature. Whilst this may be reflective of the percentage change between the existing and proposed condition it should be recognised that the retained values for four of the gardens are exceptionally close to the 50% absolute target.
- 15.1.7 A single property at 38 Silverwood Close falls further below the 50% target. Whilst not accounted for in the shading assessment this property has significant cover of mature trees and shrubs to the

boundary which appear to be evergreen in nature. Additionally, there is a mature deciduous tree to the centre of the garden as illustrated in the image below:



Image 1 - Google earth image showing location of mature trees within and to boundary of 38 Silverwood Close

- 15.1.8 The sunlight amenity assessment point of March 21st is adopted as the date when the sun is at its mid-point in the sky. Levels of sunlight availability will increase beyond this date and section 3.3.1 of the BRE guide specifically notes the benefit of sunlight for 'outdoor activities like sitting out and children's play' within the 'warmer months'. ¹¹
- 15.1.9 To further understand the significance of these deviations we have conducted a supplementary assessment to confirm the date at which the garden spaces meet the 2+ hour target. This confirms the limited nature of the deviations. The properties at 36 and 37 Silverwood Close as well as 167 St Matthew's Gardens and 175 St Matthew's Gardens are found to meet the targets within 4 days of the assessment date of March 21st. This confirms the limited nature of the deviations. Over 50% of the area of these spaces would enjoy very close to 2+ hours of sunlight on March 21st and there will be no material effect between the amenity and use of the space under the maximum parameter scheme when compared to compliance with the BRE targets.
- 15.1.10 The garden at 38 Silverwood Close would also meet the target value by 2nd April which is less than 2 weeks after the 21st March target. Again, much of the area will receive only slightly less than 2 hours of sunlight on March 21st. Given the limited deviation from the targets, and effect of the trees to the boundary and within the garden, I consider that any perceived effect on amenity would be extremely minor. The space will benefit from adequate levels of direct sun during the warmer months when it is expected that the space will be most utilised.
- 15.1.11 Under the illustrative scheme only the single garden at 38 Silverwood Close would fall below the

¹¹ BRE Guidelines, Para 3.3.1 (CD 4.17)

21st March target with 34% of the space achieving 2+ hours of sunlight. Our supplementary tests show the garden would meet the targets under the illustrative scheme by 28th March. Again, this is a limited deviation meeting the BRE target only 1 week after the guideline date.

Adequacy of Retained Sun on Ground

15.1.12 Whilst the shading effects of the proposals are noted it is clear that the impacts are very localised.

15.1.13 When assessing against the factors set out in Appendix H of the BRE guidance there are a number of factors tending towards minor significance:

- The effects are very localised with only 5 of 102 gardens tested experiencing shifts beyond the BRE targets.
- The effects to 4 of the 5 areas impacted are within a 5% absolute deviation from the guidance.
- The garden at 38 Silverwood Close is enclosed by existing mature trees such that the shading effects will be less pronounced.
- Each of the gardens is shown to meet the BRE target values by early April, less than 2 weeks after the guideline target date. There will be little, if any, differential in amenity between the effects of the proposals and a fully compliant position.
- The dates at which the gardens meet the target values confirms that the spaces will enjoy appropriate sunlight availability in the 'warmer months' which are specially noted in the BRE document as important when spaces are utilised for 'sitting-out' and child play.
- The illustrative scheme confirms that the design controls within the application will further limit the effects to these properties.

15.1.14 Overall it is considered that the very limited, localised effect to sun on ground will not have a material impact on the use of the affected spaces. Retained levels are therefore considered to be wholly adequate.

16 Summary and Conclusions

Summary

- 16.1.1 The application proposals represent a major regeneration opportunity seeking to optimise the use of the previously developed land. It is agreed between the parties that the nature of the existing site, with large areas of open car park land and the need to optimise the land use, will inevitably lead to some deviations from the numerical targets within the BRE guidance. It is also widely accepted that the BRE targets are to be applied with a degree of flexibility relative to the site context.
- 16.1.2 When preparing my evidence we have revisited the findings of the earlier Daylight and Sunlight studies. This has included some amendments to our earlier site modelling and technical results based on inspections of neighbouring properties. This modelling has been agreed with the LPA expert and the finalised results are attached at Appendices 2-5.
- 16.1.3 When considering the acceptability of daylight and sunlight effects and adequacy of the post-development condition a 2-stage test is to be applied.
- 16.1.4 Firstly, technical effects beyond the BRE guidance are to be identified. Secondly, the acceptability of these deviations is to be assessed.
- 16.1.5 Based on the technical work, agreed between myself and Mr Dias, the point of dispute relates to the second limb of this test and whether the extent of potential change results in levels of daylight, sunlight and sun on ground (shading) levels that are not considered to be adequate.
- 16.1.6 My evidence has applied this two-stage test as follows:

Technical Change: Relating to stage 1 of the 2-stage test identifying effects beyond the standard BRE target reductions. These are subsequently graded against the reduction 'significance' banding commonly applied:

- 0% - 20% reduction (or VSC / APSH meeting absolute targets) – BRE compliant / negligible effect
- 20.1-30% reduction may be reported as a minor adverse effect
- 30.1-40% reduction may be reported as a moderate adverse effect; and
- above 40% reduction may be reported as a major adverse effect

Adequacy of Retained Amenity: Where deviations from the BRE guidelines are identified I have considered the quality and adequacy of retained amenity levels against the resultant VSC levels. Local precedent as well as wider appeals indicates levels of c.16% and above for bedrooms and 18% for living rooms may be adequate.

There will be localised instances where retained levels fall below these figures but are still considered to be adequate due to the particular location or sensitivity of those windows and / or by reference to relevant comparables.

Contextual Factors: Stage 2 of the 2-stage assessment also requires consideration of wider factors such as the number of windows affected within a property and the specific constraints of that property. I have also noted where the design code and wider parameter controls reflected in the

illustrative scheme will further improve retained amenity to neighbours.

- 16.1.7 Summary tables detailing the effects to the neighbours and my conclusions as to the adequacy / acceptability of the identified effects are set out below. This simplifies the more detailed appraisal within sections 11-15 of my evidence above.
- 16.1.8 Were reductions are within the BRE guidelines they are not considered likely to be noticeable.
- 16.1.9 Where changes occur beyond the BRE targets but I consider they are less likely to be noticed by the occupants I have identified them as potentially being 'perceptible'. This may apply in instances where transgressions occur against only one of the metrics, affect localised constrained windows or where high levels of retained amenity or boundary conditions mean that the change is less likely to be apparent.
- 16.1.10 Where there is a more significant shift in the pre / post development position, particularly affecting primary windows to the main habitable spaces, I have considered this may result in 'noticeable' change.
- 16.1.11 I have grouped properties for convenience and cited the lowest retained VSC levels to each group. Where there are specific constraints affecting isolated results this has been noted below. Within my summary I have focused on contextual factors related specifically to daylight / sunlight however the wider planning balance should also factor in an overall conclusion on acceptability.
- 16.1.12 **Sleaford Street:**

Technical change to daylight / sunlight levels				
Maximum Parameters	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	16	0	0	2*
NSL Daylight	17	0	0	1
APSH Sunlight	6	0	0	0
Illustrative	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	17	0	0	1
NSL Daylight	17	1	0	0
APSH Sunlight	6	0	0	0
Adequacy of Retained Amenity				
Minimum retained VSC (where non-compliant)		Bedroom	Kitchen	Living
Max Parameter		16.80%	20.1%	N/A (Fully compliant)
Illustrative		24.2%	N/A (Fully compliant)	N/A (Fully compliant)
Contextual Factors / Acceptability of Impacts				
Localised effect to:				
148 Sleaford Street: Ground floor bedroom				

150 Sleaford Street: First floor kitchen

These windows are inset to rear extensions /under eaves and close to the boundary so they have particular sensitivities. Effects are further reduced under the illustrative scheme.

No material effect to direct sunlight (APSH) or sun on ground (shading).

Changes may be perceptible but the overall use and amenity of the space will not be materially impacted given the specific room uses and adequate retained VSC levels.

Table 16: Sleaford Street- Results and Conclusion Summary

16.1.13 **York Street:**

Technical change to daylight / sunlight levels				
Maximum Parameters	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	146	0	0	0
NSL Daylight	129	10	3	4
APSH Sunlight	16	0	0	0
Illustrative	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	146	0	0	0
NSL Daylight	143	0	3	1
APSH Sunlight	16	0	0	0
Adequacy of Retained Amenity				
Minimum retained VSC (where non-compliant)		Bedroom	Kitchen	Living
Max Parameter		N/A (Fully VSC compliant)	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)
Illustrative		N/A (Fully VSC compliant)	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)
Contextual Factors / Acceptability of Impacts				
VSC daylight and levels are BRE compliant for all properties.				
12 properties experiencing NSL effects to small / constrained windows (see detail at Appendix 7).				
Windows experiencing NSL reductions are inset to rear extensions, appear to serve deeper plan space or are particularly small windows such that a degree of change is acknowledged as more likely under the BRE targets.				
No material effect to direct sunlight (APSH) or sun on ground (shading).				
Changes may be slightly perceptible but the overall use and amenity of the space will not be materially impacted given the very localised changes and adequate retained VSC levels.				
Effects are further reduced under the illustrative scheme.				

Table 17: York Street - Results and Conclusion Summary

16.1.14 **St Matthew's Gardens**

Technical change to daylight / sunlight levels				
Maximum Parameters	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	34	8	10	11
NSL Daylight	47	3	3	10
APSH Sunlight	18*	0	0	1**
Illustrative	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	42	10	10	0
NSL Daylight	52	7	4	0
APSH Sunlight	19	0	0	0
Adequacy of Retained Amenity				
Minimum retained VSC (where non-compliant)		Bedroom	Kitchen / Dining	Living
Max Parameter		14.1%***	12.4%- LGF units	18.4%
Illustrative		18.4%***	14.7%- LGF units	22%
Contextual Factors / Acceptability of Impacts				
153 – 155 St Matthew’s Gardens: Some change in daylight levels but fully BRE compliant such that are not considered to be noticeable or material.				
157-161 St Matthew’s Gardens: Two living rooms fall below VSC targets but are minor or low moderate in extent of change. NSL is compliant and good retained VSC of 25% - 26% for those rooms. Changes may be slightly perceptible but the overall use and amenity of the space will not be materially impacted.				
163, 165 and 167 St Matthew’s Gardens: Some major numerical changes affecting bedrooms and kitchens at 163 to 167. Bedrooms are constrained by eaves and more minor / moderate impacts to main living space. Adequate retained VSC to living spaces of 22.5% (163) and 21% (165) and kitchen of c.20% (167). Bedroom at 165 / 167 is more limited in retained level of c.14% VSC but more secondary space. Effects may be noticeable but retained levels adequate such that use of spaces unlikely to be materially affected.				
Limited sun-on-ground deviation to garden of 163- 165. Within 3% of target and will not materially impact use of the space.				
169 – 175 St Matthew’s Gardens: Moderate and major changes affect lower ground floor and first floor of townhouses.				
Major NSL reductions to lower ground floor and major VSC changes to ground floor living spaces due to higher starting point. Retained VSC of c.12.5% -15% to lower ground floor dining and kitchen spaces resulting from lower starting point. 19%-c.20%+ retained to ground floor main living areas space and bedrooms above. Effects noticeable but retained levels adequate by comparison to neighbours / wider precedent and good retained amenity to upper floors.				
Limited sun-on-ground deviation to garden at 175. Within 3% of target will not materially impact use of the space.				

177 – 201 St Matthew’s Gardens: Lower ground level living spaces are enclosed within sunken terrace and, whilst they have lower retained VSC levels, experience limited change from the pre-existing position and meet the BRE target VSC reduction factor. Upper floor effects limited to bedrooms which experience generally minor to moderate effects. Changes may be noticeable although boundary condition will limit this. Retained VSCs of 18% - 25% are adequate such that use of spaces not affected. Use unlikely to be affected based on retained amenity.

One living room at 177 St Matthew’s Gardens experiences deviation to low-level winter sunlight that is unlikely to affect the use of the space given position to sunken terrace.

203 St Matthew’s Garden: ‘Minor’ VSC changes affecting a living room and bedroom with no material impact on NSL. Retained VSC is adequate at c.22% for living room and 25% for bedrooms. Changes may be slightly perceptible but the overall use and amenity of the space will not be materially impacted.

205-221 St Matthew’s Gardens: Some change in daylight levels but fully BRE compliant such that are not considered to be noticeable or material.

Illustrative scheme further controls impacts and removes all ‘major’ numerical reductions. Retained levels further improved under illustrative scenario with LGF dining /kitchen spaces at 171 – 175 achieving c.15% and main living rooms at 22%+VSC.

Table 18: St Matthew’s Gardens - Results and Conclusion Summary

*Includes rooms where use not known

**Material change to winter sunlight only

***Lower VSC to overhung windows. Other bedrooms achieve minimum 17.8%

16.1.15 **Silverwood Close**

Technical change to daylight / sunlight levels				
Maximum Parameters	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	96	13	10	2*
NSL Daylight	92	9	10	10
APSH Sunlight	19	0	0	0
Illustrative	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	109	2	9	1*
NSL Daylight	107	5	8	1
APSH Sunlight	19	0	0	0
Adequacy of Retained Amenity				
Minimum retained VSC (where non-compliant)	Bedroom	Kitchen / Dining	Living	
Max Parameter	24.7%	17.8% (0.05% to internal window)	24.8%	
Illustrative	26.2%	18.7% (0.2% to internal window)	N/A (Fully VSC compliant)	

Contextual Factors / Acceptability of Impacts
28-33 Silverwood Close (south west facing): Some change in daylight levels but fully BRE compliant such that are not considered to be noticeable or material. 34-39 Silverwood Close (south facing – central terrace): Impacts beyond BRE targets generally at a moderate VSC level affecting 1-3 rooms per property. NSL effects generally moderate with more significant change to 36 Silverwood Close and upper floor bedrooms where high existing levels. Retained VSC for each room use remain good with living spaces having retained levels of 25% or higher and multiple windows / rooflights at 34,35 38 and 39 Silverwood Close. The changes are likely to be largely unnoticeable to the majority of main living spaces but some noticeable effects to kitchen/ dining and bedrooms. Where perceptible, the overall use and amenity of the space is unlikely to be materially impacted. Shading to gardens of 36, 37 and 38 Silverwood Close with only minor deviations from target to 36 and 37. Effects to 38 Silverwood Close but meets target by 2nd April and trees to boundary and within garden and result in extremely minor effect on amenity / use of space. 40-45 Silverwood Close (south east facing): Isolated rooms affected with generally minor VSC reductions or minor to moderate changes in NSL. Main living rooms are generally west facing and unaffected with kitchen and dining spaces retaining VSC levels in excess of 20% VSC. Changes may be slightly noticeable but limited and retained amenity means the overall use of the space will not be affected. 46-51 Silverwood Close (east facing): Isolated effects beyond BRE targets to living room and internal dining space at 49/50 Silverwood Close and dining / bedroom spaces at 51. May be localised noticeable loss at 49/50 and 51 but adequate retained amenity means use of the space will not be materially impacted. 52-55 Silverwood Close (north east facing): Some change in daylight levels but fully BRE compliant such that are not considered to be noticeable or material. 56-59 Silverwood Close (north east facing): Some change in daylight levels but fully BRE compliant such that are not considered to be noticeable or material. 60-61 Silverwood Close (south east facing): Technical effects only to 'internal windows' which 'borrow light' though extension. Change unlikely to be perceptible and will not affect the use of the space. 65-65A (south facing) Silverwood Close: Bedroom experiences minor deviation in NSL but retains good VSC of c.33%. Effect unlikely to be perceptible and will not affect use of space. APSH sunlight levels meet targets. Illustrative scheme shows improvements in numerical reductions and retained levels.

Table 19: Silverwood Close - Results and Conclusion Summary

*1 deviation relates to constrained 'internal' windows which borrow light through extensions

16.1.16 Pym Court

Technical change to daylight / sunlight levels				
Maximum Parameter / Illustrative Scheme	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	69	0	0	0
NSL Daylight	69	0	0	0
APSH Sunlight	3	0	0	0
Adequacy of Retained Amenity				
Minimum retained VSC (where non-compliant)		Bedroom	Kitchen	Living
Max Parameter / Illustrative		N/A (Fully VSC compliant)	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)
Contextual Factors / Acceptability of Impacts				
Some minor, largely unnoticeable reductions. Fully within the BRE guidelines and not considered material.				

Table 20: Pym Court - Results and Conclusion Summary

16.1.17 Hampden Gardens

Technical change to daylight / sunlight levels				
Maximum Parameters	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	40	4	0	0
NSL Daylight	42	2	0	0
APSH Sunlight	13	0	0	0
Illustrative	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	43	1	0	0
NSL Daylight	44	0	0	0
APSH Sunlight	13	0	0	0
Adequacy of Retained Amenity				
Minimum retained VSC (where non-compliant)		Bedroom	Kitchen	Living
Max Parameter		13.2%	18.0%	N/A (Fully VSC compliant)
Illustrative		14.5%	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)
Contextual Factors / Acceptability of Impacts				
Localised minor deviations to constrained windows. Lower retained levels affect bedrooms where levels are already lower and use is less sensitive. Further increase in retained levels under the illustrative scheme.				

No material effect to direct sunlight (APSH) or sun on ground (shading).

Changes may be slightly perceptible to the low number of affected rooms but the overall use and amenity of the space will not be materially impacted.

Effects are virtually removed under the illustrative scheme with only single minor NSL deviation.

Table 21: Hampden Gardens - Results and Conclusion Summary

16.1.18 **The Terrace**

Technical change to daylight / sunlight levels				
Maximum Parameters	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	16	0	0	0
NSL Daylight	9	6	1	0
APSH Sunlight	2	0	0	0
Illustrative	Negligible (meets BRE)	Minor (20%-30%)	Moderate (30%-40%)	Major (40%+)
VSC Daylight	16	0	0	0
NSL Daylight	16	0	0	0
APSH Sunlight	2	0	0	0
Adequacy of Retained Amenity				
Minimum retained VSC (where non-compliant)	Bedroom	Kitchen	Living	
Max Parameter	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)	
Illustrative	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)	N/A (Fully VSC compliant)	
Contextual Factors / Acceptability of Impacts				
Full compliance to VSC daylight and APSH sunlight. Minor deviations and a single moderate deviation to NSL based on maximum parameters but fully compliant under illustrative scheme.				
Changes less likely to be perceptible and the overall use and amenity of the space will not be materially impacted given the very localised effects and adequate retained VSC levels.				
Effects are fully BRE compliant under the illustrative scheme.				

Table 22: The Terrace - Results and Conclusion Summary

Conclusions

16.1.19 When setting out my evidence I have revisited the early pre-application studies and detailed reports submitted with the planning application. The preservation of appropriate residential amenity has been a key consideration for the design team from an early stage and our approach to this has been consistently communicated to the LPA.

16.1.20 The LPA concerns, expressed in the reason for refusal, do not specify particular properties of

concern but refer to St Matthew's Gardens and Silverwood Close as a whole as well as 'other adjacent properties and gardens'.

- 16.1.21 The officer's report (CD3.01) and LPA expert review (CD11.04) place significant emphasis on the numerical effects of the proposal. These form only one part of the relevant considerations and cannot be viewed in isolation. This is particularly the case when it is accepted that impacts beyond the base BRE targets are inevitable given the relatively low-rise nature of the existing site and large areas of open car park.
- 16.1.22 The BRE targets are to be applied with a degree of flexibility relative to the site context. This is particularly important when considering larger scale regeneration schemes of previously developed but underutilised land. Noticeable impacts are not necessarily unacceptable and again are to be anticipated if the land is to be optimised.
- 16.1.23 This appraisal of daylight and sunlight effects requires a two-stage approach asking a) whether or not the proposals would result in a "material deterioration" of daylight and sunlight conditions and b) whether or not any such deterioration would be "unacceptable". The BRE guide cites multiple factors, both within the body of the document and in Appendices F and H, that may inform that judgment. In addition, there is a body of appeal precedent regarding the application of this judgment.
- 16.1.24 In addition, policy 60 of the Local Plan does not require full compliance with the numerical targets set out in the BRE guidance. Policy 60 requires an appraisal of the adequacy of sunlight and daylight. This requires consideration of both numerical reductions balanced against retained amenity and wider factors including planning balance.
- 16.1.25 My evidence comprises a detailed 2-stage assessment of the effects to each relevant neighbouring property. At a sitewide level I consider the effects of the proposals to be highly localised. The parameter proposals maintain a high level of compliance against the BRE guidelines in respect of both daylight and sunlight to neighbouring windows and the sun-on-ground test to gardens.
- 16.1.26 There is the potential for noticeable reductions in respect of a small number of specific properties to the north at St Matthew's Gardens and Silverwood Close. This affects neighbours that face the currently open car park element of the site and a number of properties with a sunken lower ground floor level. In these areas a degree of change is inevitable. Whilst the extent of some changes may numerically be considered moderate, or even major adverse, such change does not reflect the adequacy of retained amenity which detailed consideration of effects shows will be acceptable.
- 16.1.27 Elsewhere the separation to the south and west results in very limited effects to only the most constrained windows where the BRE guidelines acknowledge a degree of sensitivity. These changes will be broadly unnoticeable to the neighbours and will not materially affect the pattern of use of the properties.
- 16.1.28 Consideration of appeal precedent and local context supports a 'mid-teens' VSC value to indicate the adequacy of retained amenity to neighbours with an aspiration that higher figures of c.18% being more appropriate in terms of retained values to main living spaces and 16% to bedrooms.
- 16.1.29 Even where such alternative targets are applied it is to be anticipated that some neighbouring windows may also fall below these thresholds.
- 16.1.30 Across the 774 windows and 476 habitable rooms tested only three dining / kitchen spaces, at 171

to 175 St Matthew's Gardens, and two bedrooms, at 165 and 167 St Matthew's Gardens, experience reductions beyond the BRE VSC targets and have retained values below this level. In all instances the nature of the affected space and their specific constraints mean that there will be little effect on their use and amenity as a result of the proposals.

- 16.1.31 The retained amenity to these spaces are also in line with, or better than, the pre-existing values identified to other neighbours around the site. I therefore do not consider the retained levels to be inadequate and this is supported by other examples of similar or more significant effects which I have identified in varying contexts across Cambridge.
- 16.1.32 In respect of direct sunlight only a single room, of 88 considered to be relevant, falls below the BRE targets. The affected living room, at 177 St Matthew's Gardens, is positioned within a sunken terrace and only falls below the BRE targets due to a limited reduction in low-angle winter sunlight.
- 16.1.33 The overall effect to this room is only 1% APSH beyond the BRE target level and the room otherwise maintains appropriate levels of overall sunlight throughout the remainder of the year. Given the position of this room, and the boundary condition to the application site, it is questionable whether the effect would be noticeable.
- 16.1.34 Whilst 5 gardens fall below the base BRE sun on ground targets only one of these, 38 Silverwood Close, falls below the guidance by more than 5%. This garden is limited by existing tree cover such that the 'real world' effect of this additional shading is considered to be limited.
- 16.1.35 Supplementary testing confirms the limited deviation from the BRE guidance in respect of the sun-on-ground assessment. All of the affected gardens, including that at 38 Silverwood Close, would meet the BRE targets by 2nd April. This is within 2 weeks of the March target date and ensures that the spaces would retain appropriate levels of amenity. This is particularly the case in the summer months when the BRE guide notes the particular benefits of sun on ground for activities such as sitting out and child play.
- 16.1.36 The acceptability of the effects is further supported by the fact that all of the properties which would experience BRE deviations retain multiple other rooms with high retained amenity including spaces which are completely unaffected by the proposals.
- 16.1.37 My conclusions above relate to the acceptability of the effects, and adequacy of retained amenity, under the maximum parameter massing. This is subsequently reinforced by testing of the illustrative scheme which, as a result of the design controls within the application, represents the practical embodiment of the maximum floorspace that could be delivered.
- 16.1.38 Under the illustrative scheme deviations from the BRE targets in respect of direct sunlight fall away and shading deviations are limited to a single garden.
- 16.1.39 The potential reductions in daylight levels are also effectively managed under the illustrative scheme which removes virtually all of the numerically 'major' reductions with the exception of highly localised areas having specific constraints such as recessed windows which the BRE guide notes as potentially sensitive.
- 16.1.40 This indicates that the additional controls of the scale of development through the design code would ensure that the effects of future Reserved Matters applications would be closely managed and not exceed the effects currently reported. The application also includes a requirement to ensure the continued acceptability of daylight / sunlight effects of key plots in respect of such

Reserved Matters applications.

16.1.41 The reason for refusal states that:

'The extent and degree of harm would be both wide ranging, significantly adverse and acutely felt by existing occupants. Many habitable rooms would feel poorly lit, colder, and gloomier, particularly where living rooms are concerned. Multiple gardens would also feel less pleasant and enjoyable, due to the significant increase in overshadowing that would be experienced.'

16.1.42 I do not consider that these statements, which suggest widespread significant harm, are borne out by the results of the technical assessments or an appropriate 2-stage appraisal of the effects of the scheme.

16.1.43 Whilst a number of rooms experience numerical deviations from the BRE targets but this is to be expected when seeking to optimise previously developed land. Retained amenity levels are considered adequate for urban development as evidenced by pre-existing levels in the immediate site context, elsewhere within Cambridge and wider appeal precedent.

16.1.44 The retained VSC levels do not indicate a significant or widespread risk of cold, gloomy and poorly lit rooms. The very small number of windows that retain lower VSC levels are already somewhat constrained and the boundary conditions of mature trees and shrubs will limit the perceived effects of the proposals.

16.1.45 Five gardens fall below the BRE targets but at least four of these are acknowledged by the LPA expert as being limited deviations from the targets. The limited extent of these deviations, as well as the presence of mature trees within and to the boundary of the most affected space, does not support the conclusion that the spaces would be 'less pleasant and enjoyable'.

16.1.46 Overall the proposals inevitably result in some reductions in daylight and sunlight that exceed the BRE targets as a result of the optimisation of the site. Whilst some of these reductions effects may be noticeable, amenity will remain generally good for an urban location. I am of the firm view that the retained amenity is appropriate and will not materially affect the use and enjoyment of the neighbouring properties. I consider the effects of the scheme are acceptable when assessed against the relevant factors outlined in the BRE guideline and adequate in line with the relevant Local Plan policies.

17 Statement of Truth and Declarations

- 17.1.1 The evidence which I have prepared and provide for this called-in planning application reference APP/Q0505/V/25/3360616 in this proof of evidence is true and has been prepared and is given in accordance with the guidance of my professional institution and I confirm that the opinions expressed are my true and professional opinions.
- 17.1.2 I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.
- 17.1.3 I confirm that my report has drawn attention to all material facts which are relevant and have affected my professional opinion.
- 17.1.4 I confirm that my report complies with the requirements of RICS – Royal Institution of Chartered Surveyors, as set down in the RICS practice statement Surveyors acting as expert witnesses.



Jonathan Lonergan MRICS