2nd Floor, Chancery Exchange
10 Furnival Street
London
EC4A 1AB

T : +44 (0) 20 7148 6290
E : info@eb7.co.uk
W: www.eb7.co.uk

DAYLIGHT & SUNLIGHT ADDENDUM REPORT

Hayes Town Centre

Hayes

16 October 2025

Contents

Report details

Client:	Higgins Partnership 1961 PLC
Date of issue:	October 2025

1 Introduction

1.1.1 eb7 were instructed to provide daylight consultancy advice in support of the proposed redevelopment of the Hayes Town Centre Estate in Hayes. These assessments considered the PRP Architects scheme proposals and were submitted in support of the Hybrid planning application 76550/APP/2021/4499, comprising of the following:

> *OUTLINE permission (with all matters reserved) for residential floorspace (Class C3) including demolition of all existing buildings and structures; erection of new buildings; provision of a community centre (up to 140sq.m of Use Class F2(b) floorspace); new pedestrian and vehicular access; associated amenity space, open space, landscaping; car and cycle parking spaces; plant, refuse storage, servicing area and other works incidental to the proposed development; and FULL planning permission for Blocks A and B comprising 80 residential units (Class C3); new pedestrian and vehicular access; associated amenity space and landscaping; car and cycle parking; refuse storage, servicing area, and other associated infrastructure to include temporary highways and landscaping works).*

1.1.2 This Section 73 application seeks to revise specific conditions of the original planning consent (reference 76550/APP/2021/4499), including but not limited to conditions 3 (approved plans), 4 (approved documents), 5 (land use/quantum), 6 (housing mix), 7 (phasing plan), 9 (density), and 10 (building heights).

1.1.3 The proposed Section 73 amendments encompass the following key changes to the outline area:

- An increase of 62 residential units overall, including an uplift of 32 affordable homes.
- The joining of blocks to create a more coherent street pattern, enhanced security, a larger podium amenity space, and more efficient podium parking.
- A reduction in on-street parking provision to facilitate the creation of additional green spaces.
- An improvement to the scale of the streetscape, with 2-3 storey houses proposed on both sides of Austin Road to establish a mews character.
- Relocation of the community facility to enable its delivery in an earlier phase, thereby precluding the need for a temporary facility.

1.1.4 In view of the proposed changes encompassing the Section 73 application it has been necessary to review and assess the sunlight and overshadowing within the proposal itself as well as any changes in the impacts to the neighbouring residential properties when compared to the consented scenarios of both the outline and illustrative schemes dated 2021.

1.1.5 In this case, for our technical assessments we have been instructed to compare two

scheme scenarios for our daylight and sunlight testing against the consented position. Firstly, the outline scheme which provides a maximum design envelope and secondly, the illustrative scheme which represents a refined /articulated scheme which is more likely to be built out.

1.1.6 The methodology and criteria used for these assessments is provided by Building Research Establishment's (BRE) guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (BRE 209 2nd edition, 2022). In both scenarios, we have compared the impacts of the proposals on the neighbouring residential properties against the consented scheme(s) in accordance with Appendix F of the BRE guidelines.

1.1.7 In order to carry out an assessment, we have updated the original 3D computer model (Test Environment) of the existing site, the surrounding properties and the proposed scheme.

1.1.8 The numerical criteria suggested within the BRE guidelines has been applied to the assessment mentioned above. It is important to note that these guidelines are not a rigid set of rules but are advisory and need to be applied flexibly according to the specific context of a site.

2 Guidance

2.1 Daylight & sunlight for planning

'Site layout planning for daylight and sunlight: A guide to good practice', BRE 2022

2.1.1 The Building Research Establishment (BRE) Report 209, *'Site layout planning for daylight and sunlight: A guide to good practice'*, is the reference document used by most local authorities for assessing daylight and sunlight in relation to new developments. Commonly referred to as 'the BRE guidelines', it provides various testing methodologies to calculate the potential light levels provided within proposed new development.

2.1.2 The guidance given within the BRE document makes direct reference to the British Standard BS EN17037 (2018) and the CIBSE (Chartered Institute of Building Services Engineers) guide LG10: Daylighting – a guide for designers (2014). It is intended to be used in conjunction with these documents, which provide guidance on the assessment of daylight and sunlight within new buildings.

2.2 Detailed daylight assessments (neighbouring properties)

2.2.1 The guidance outlines detailed methods for calculating daylight to neighbours - the Vertical Sky Component (VSC) and the No-Skyline (NSL).

2.2.2 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.

2.2.3 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.

2.2.4 Where rooms are greater than 5m in depth and lit from only one side, the guidance recognises that *"a greater movement of the no skyline may be unavoidable"* (page 16, paragraph 2.2.12).

2.3 Detailed sunlight assessments (neighbouring properties)

2.3.1 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.

2.3.2 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, with bedrooms and kitchens deemed less important.

2.3.3 The guidelines suggest that the main living rooms within new buildings should achieve at least 25% of annual sunlight hours, with 5% during the winter period. For neighbouring buildings, 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%, to less than 0.8 times its former value.

Sunlight to gardens and outdoor spaces

2.3.4 The impact to overshadowing and the provision of sunlight to open spaces is assessed using the Sunlight Amenity test. This looks at the proportion of an amenity area that receives at least 2 hours of sun on the 21st of March in the present condition and compares this with the proportion of the area that receives at least 2 hours of sun on the 21st of March with the proposal in place.

2.3.5 For an amenity space within a proposal to be considered well sunlit throughout the year, the BRE guide suggests that at least 50% of the space should enjoy at least 2 hours of direct sunlight on March 21st.

2.4 Daylight to new buildings or consented developments (BRE2022)

2.4.1 The 2022 update to the BRE 209 document was published on June 9th, 2022. The new guidance reflects the UK National Annex of the British Standard: BS EN17037 (2018) and provides two methodologies for assessing the internal daylight amenity to new or consented residential properties. These assessment methods are known as 'Daylight Illuminance' or 'Daylight Factor' and either can be applied.

Daylight Illuminance Assessment

2.4.2 The Daylight Illuminance method utilises climactic data for the location of the site, based on a weather file for a typical or average year, to calculate the illuminance at points within a room on at least hourly intervals across a year. The illuminance is calculated across an assessment grid sat at the reference plane (usually desk height).

2.4.3 The guidance provides target illuminance levels that should be achieved across at least half of the reference plane for half of the daylight hours within a year.[1] The targets set out within the national annex are as follows:

- Bedrooms – 100 Lux
- Living Rooms – 150 Lux

2.4.4 For spaces with a shared use the higher target would generally apply such that it would be appropriate to adopt a target of 150 lux for a student bed sitting room if students would often spend time in their room during the day. The guidance notes

[1] The European Standard also includes a minimum illuminance target to be achieved over 95% of the reference plane however this need not apply to dwellings in the UK.

that discretion should be used and, for example, a target of 150 lux may be appropriate in a Living / Kitchen / Dining Room within a modern flatted development where the kitchens are not 'habitable' space and small separate kitchens are to be avoided. These assessments are however reserved for the detailed design phase where the internal layouts, apartment distribution and window placement is known.

VSC Façade Study

2.4.5 At the very early stages in design, room layouts and window locations may be undecided. In this situation, one approach is to calculate the VSC at a series of points on each main face of the building 1.6 m above the ground (or lowest storey base) and no more than 5 m apart. Where the VSC is found to change rapidly along a façade it is worthwhile, if possible, to site windows where most daylight is available.

2.4.6 This situation often occurs at the internal corners of courtyards or L-shaped blocks. If windows are sited close to these corners they will result in poor levels of daylight as well as potential lack of privacy.

2.4.7 Living rooms and kitchens need more daylight than bedrooms, so where there is a choice, it is best to site the living room or kitchen away from obstructions. Dual-storey maisonette-type apartments may be planned with the main living rooms on the upper storey and the bedrooms on the lower floor for this reason. Areas without a special requirement for daylight, like bathrooms, stairwells, garages, and storage areas, can occupy the most obstructed areas such as internal corners of buildings. In mixed use developments commercial uses may occupy the less well daylit areas, allowing residential parts to have better access to light.

3 Application of the guidance

3.1 Scope of assessment

Impact analysis for neighbouring buildings

3.1.1 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."*

3.1.2 As with the consented proposals, our assessments therefore consider the 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, stores etc.) as per BRE guidance.

3.2 Application of the numerical criteria

3.2.1 The opening paragraphs of the BRE guidelines state:

> *"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… In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".*

3.2.2 It is therefore very important to apply the BRE guidance sensibly and flexibly, with careful consideration of the specific site context. Its numerical targets theoretically apply to any built environment, from city centres to rural villages. However, in more tightly constrained environments, achieving the default BRE targets can be very challenging and conflict with other beneficial factors of site layout design.

3.2.3 With the above in mind, rigid adherence to the BRE in certain situations could easily result in an inappropriate form of development. In which case it may be appropriate to adopt lower target values more appropriate to the location concerned. This is acknowledged in the BRE guidance at paragraph 2.2.3 (page 7):

"Note that numerical values given here are purely advisory. Different criteria maybe used, based on the requirements for daylighting in an area viewed against other site layout constraints.

3.2.4 For buildings that neighbour a new development, the guidance suggests that daylight will be adversely affected by the development, if either; its windows achieve a VSC below 27% and have their levels reduced to less than 0.8 times their former value, or the levels of NSC within rooms are reduced to less than 0.8 times their former values.

3.2.5 Some recent planning decisions by the Mayor of London[2] and Planning Inspectorate[3] have suggested that retained levels of daylight (VSC) between 10% and 20% can be considered acceptable for residential properties neighbouring new developments in Central London. Further to these decisions, recent guidance from the Mayor of London (Draft SPG 'Good Quality Homes for all Londoners') suggests that residential properties in Central London can typically expect VSC values of between 13% and 18%. We have therefore assessed the severity of impacts to the neighbouring residential properties in light of this guidance.

Appendix F – Setting alternative target values

3.2.6 In certain situations, the BRE guidance suggests that alternative target values may be set for the assessment of daylight and sunlight to neighbouring buildings.

"F1 Sections 2.1, 2.2 and 2.3 give numerical target values in assessing how much light from the sky is blocked by obstructing buildings. These values are purely advisory, and different targets may be used based on the special requirements of the proposed development or its location. Such alternative targets may be generated from the layout dimensions of existing development, or they may be derived from considering the internal layout and daylighting needs of the proposed development itself."

3.2.7 As suggested above, alternative target values may be set where the context of development is of a dense urban scale, where new buildings need to match the height and proportions of other existing buildings or where neighbouring buildings are set very close to the boundary.

Comparing existing planning consents

3.2.8 Where a site benefits from an extant but unimplemented planning permission, as is the scenario here, it is reasonable to refer to the daylight and sunlight performance of the consented scheme as a contextual benchmark. This assists in establishing whether a revised proposal would give rise to any material change in impact relative to development that has already been deemed acceptable in planning terms.

[2] Monmouth House, Islington (Ref.: D&P/3698/02)

[3] Whitechapel Estate (Ref: APP/E5900/W/17/3171437)

3.2.9 However, as clarified in Appendix F2 of the BRE Guide, the "0.8 times former value" test applies only to existing buildings and windows that experience a reduction due to a new obstruction. The consented scheme, being an unbuilt and theoretical form, does not constitute an existing scenario and therefore cannot be assessed using this target. Applying the 0.8 multiplier to the consented scheme would not accord with the intent of the BRE methodology.

3.2.10 The appropriate approach is to undertake a direct comparison between the results for the consented and revised schemes, considering the absolute differences in Vertical Sky Component (VSC) and Annual Probable Sunlight Hours (APSH). This allows the assessment to determine whether the revised design introduces any additional or material loss beyond that already established through the extant permission.

3.2.11 It is also helpful to include a comparison of No-Skyline (NSL) results between the consented and proposed schemes. NSL provides an additional layer of insight into how the distribution of daylight within affected rooms may change, offering a useful barometer of the relative impact on internal daylight amenity. When considered alongside VSC and APSH, the NSL comparison supports a balanced understanding of whether the revised design would materially alter the quality of daylight available compared with the consented scheme.

3.2.12 Where such differences are negligible, the revised proposal can reasonably be regarded as having no materially greater impact than the consented scheme.

4 Sources of Information & Assumptions

4.1.1 A 3d measured survey has been used to create and update the 3D computer model of the proposed development in the context of the existing site and surrounding buildings.

4.1.2 As before, where survey or planning information was unavailable, the position of the neighbouring property elevations has been estimated based upon brick counts from site photographs. Window positions and dimensions used directly affect the results of all assessment methods.

4.1.3 The full list of sources of information used in this assessment is as follows: -

4.2 Survey Solutions

3D Laser Scan

31651IPLS01-03.dwg

Received 02/08/2021

3105-DGM-ZZ-3D-X-M3-X-0001-001.rvt

Received 03/08/2021

31651CVLS-04-07.dwg

31651CVLS-04-09.dwg

31651CVLS-04-11.dwg

Received 07/10/2021

4.3 PRP Architects

3D model

HTC S73 Updated.dwg

Received 18/09/2025.

5 The Site and Proposal

5.1.1 The Hayes Town Centre Estate is centrally located in Hayes, adjacent to the Grand Union Canal. It benefits from excellent connectivity, being within walking distance of Hayes & Harlington Station, which offers direct connections to Central London and Heathrow via the Elizabeth Line. The approved redevelopment proposals include the demolition of the existing estate and the construction of approximately 500 new homes, alongside a new community Centre and associated landscaping.

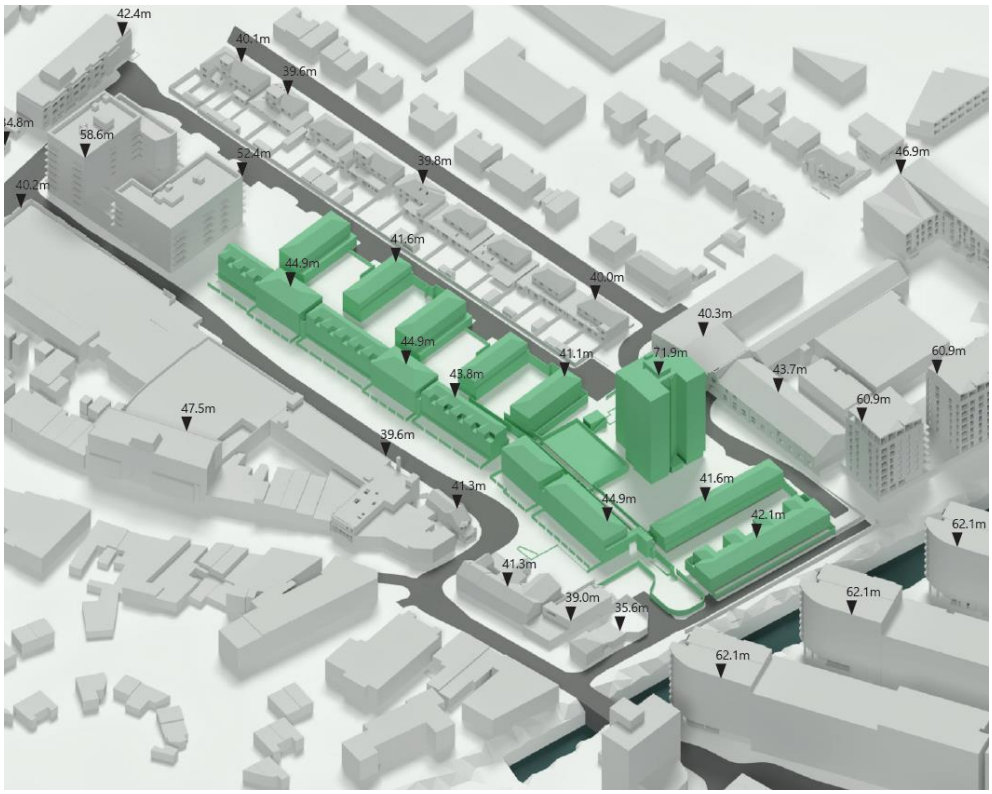

Image 1 - 3D view of the existing site within the surrounding context

5.1.2 The extant consent is a hybrid planning permission, with a detailed element (Phase 1) comprising 80 homes across two blocks (Blocks A and B) an outline element (Phase 2-5) with all matters reserved. Following the discharge of relevant planning conditions and the approval of previous amendment applications, Blocks A and B are currently under construction, with completion and handover anticipated in early 2026.

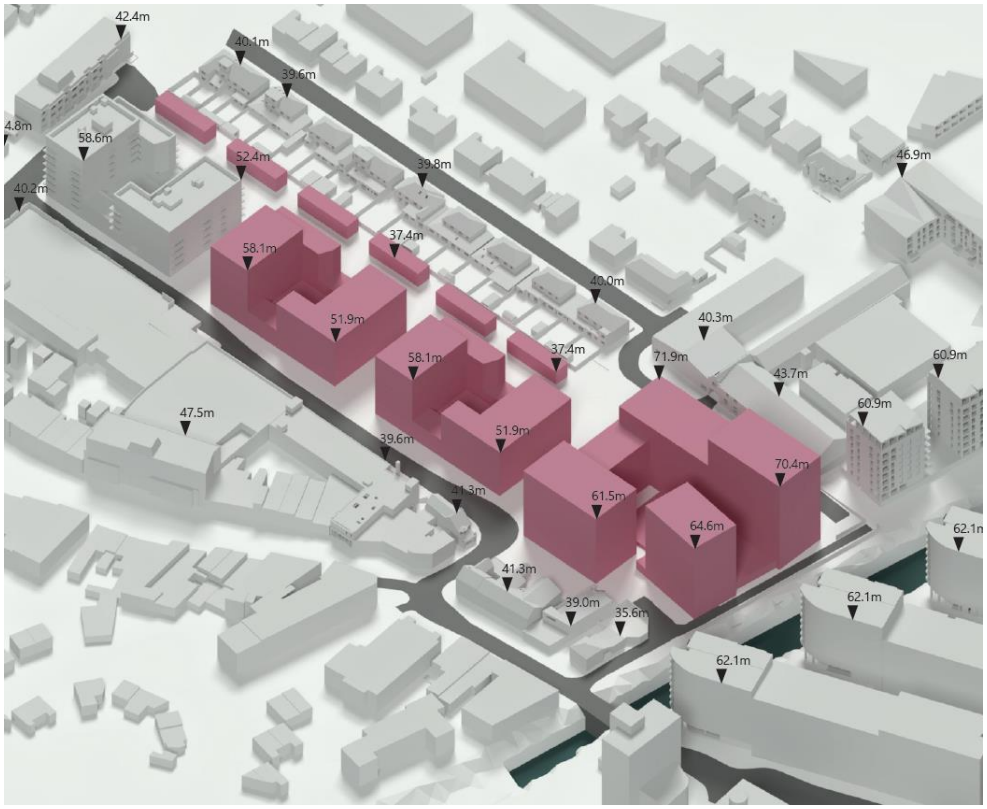

Image 2 - 3D view of the consented 2021 illustrative development and context

5.1.3 This Section 73 application seeks to revise specific conditions of the original planning consent (reference 76550/APP/2021/4499), including but not limited to conditions 3 (approved plans), 4 (approved documents), 5 (land use/quantum), 6 (housing mix), 7 (phasing plan), 9 (density), and 10 (building heights).

5.1.4 The proposed Section 73 amendments encompass the following key changes to the outline area:

- An increase of 62 residential units overall, including an uplift of 32 affordable homes.
- The joining of blocks to create a more coherent street pattern, enhanced security, a larger podium amenity space, and more efficient podium parking.
- A reduction in on-street parking provision to facilitate the creation of additional green spaces.
- An improvement to the scale of the streetscape, with 2-3 storey houses proposed on both sides of Austin Road to establish a mews character.
- Relocation of the community facility to enable its delivery in an earlier phase, thereby precluding the need for a temporary facility.

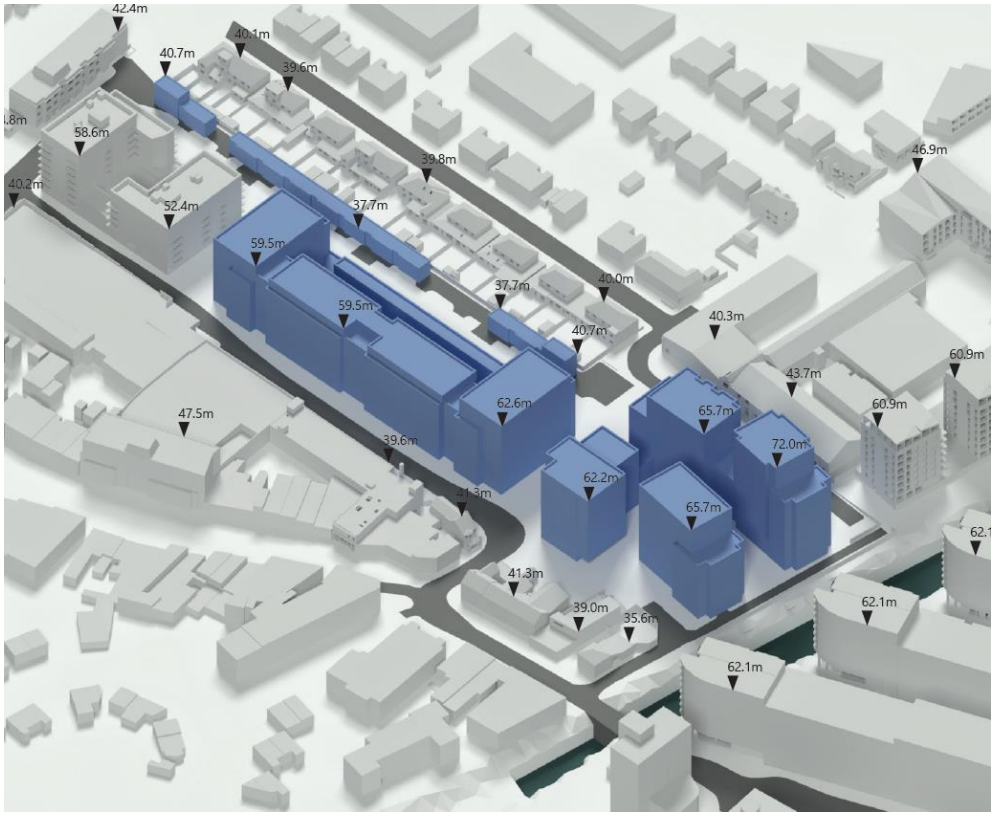

Image 3 - 3D view of the proposed illustartive development and context

5.1.5 As with the current consent the outline scheme is being submitted with all matters reserved. Notwithstanding this, an illustrative scheme has been prepared across the outline area to demonstrate one way in which the outline components could come forward in future. This is being submitted as part of the application for indicative purposes only and is based upon the proposed parameters.

5.1.6 For our daylight and sunlight assessments, we have considered the potential impacts based on a comparison of both submitted outline and the illustrative scheme which is purely indicative but serves as a demonstration of how the regeneration of the estate could be delivered in the future in line with the parameter plans.

6 Assessment results

6.1 Daylight and sunlight to neighbouring buildings

6.1.1 Full results of the daylight and sunlight assessments are attached within Appendix 2. Drawings to show the existing and proposed buildings in the context of the neighbouring properties as well as window maps showing individual window references are attached within Appendix 1.

6.1.2 Our assessment has considered all of the closest neighbouring residential properties with windows overlooking the proposed development. These are shown on the following image: -

Image 4 - Plan of the existing site and the neighbouring properties considered for daylight and sunlight

18-22 Pump Lane	2-38 Little Road (evens)
Unit 8 Crauford Business Park	Navigation, Cardinal & Vantage Building
Brickfield Building B	81 Station Road, The Old Crown Pub
75 Station Road	63-73 Station Road (odds)
1A Crown Close	

6.1.3 The following assessments have considered two options, a Maximum Parameter outline scheme and an Illustrative Masterplan Scheme, each of these assessments considers the impacts of the proposed scheme compared to the impacts of the consented scheme; thus illustrating any positive or negative shifts in retained daylight/sunlight when compared to what has already been consented in accordance with Appendix F of the BRE guidelines.

6.1.4 The illustrative scheme is a defined proposal which has carefully considered the scale and massing of the scheme whilst the Maximum Parameter scheme illustrates a maximum extent which is a monolithic block massing, each of these in the consented and proposed scenarios are shown in the images below.

Image 5 - Consented outline scheme

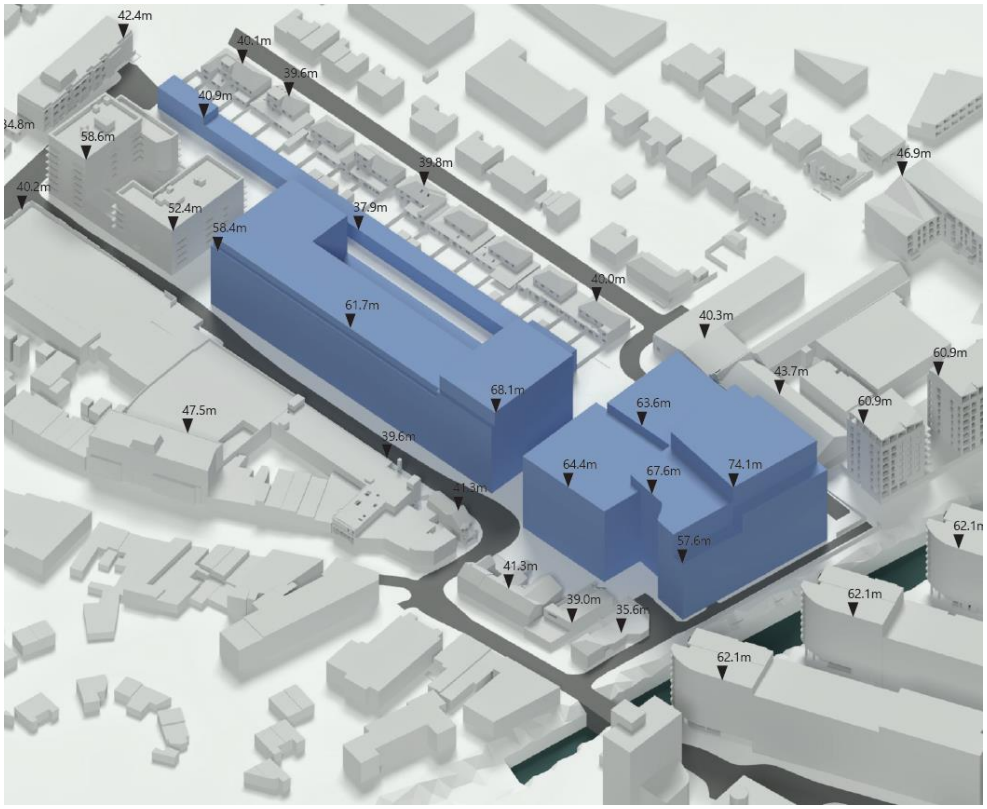

Image 6 - Proposed outline scheme

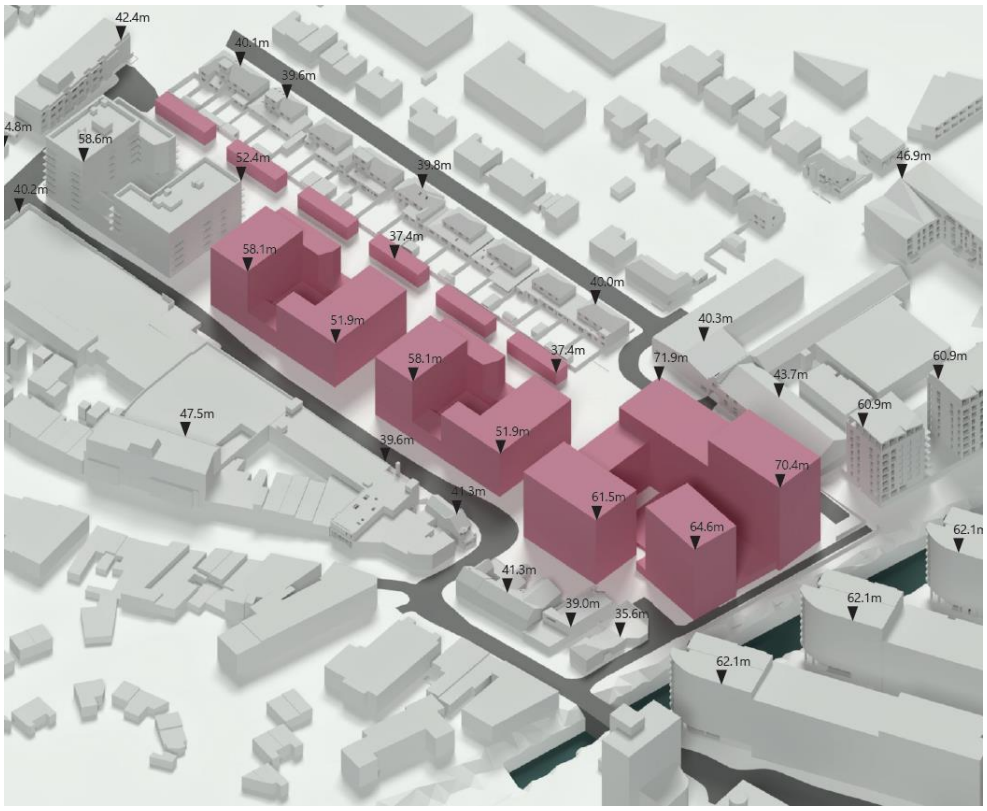

Image 7 - Consented illustrative scheme

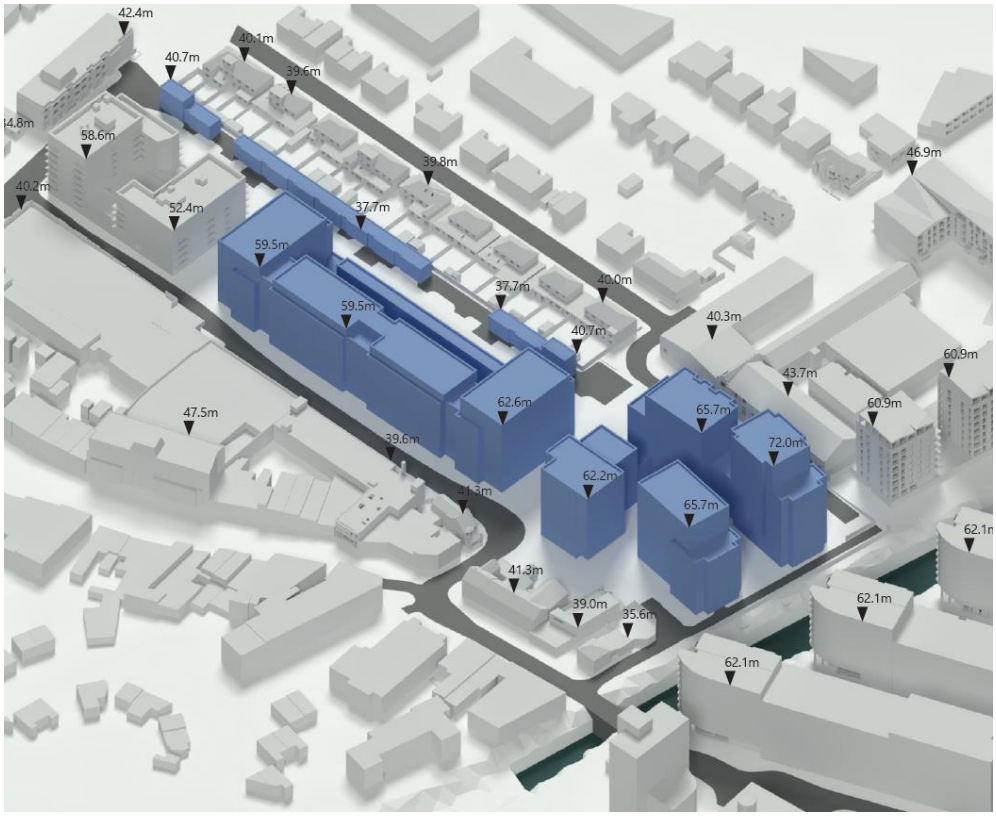

Image 8 - Proposed Illustrative scheme

6.1.5 The maximum parameters is unlikely to be delivered to the full extents of the development zone as block separation distances and other planning considerations would need to be adhered to.

6.1.6 The Illustrative Masterplan presents a more 'real world' picture of the daylight and sunlight amenity to the neighbouring properties, accordingly the comparison focuses primarily on the impacts of the revised illustrative scheme.

6.2 18-22 Pump Lane (Airlink Hotel)

Image 9 - Site photo of 18-22 Pump Lane. Front elevation

6.2.1 This 3-storey building is a hotel situated to the north of the site, approximately c.20m across Pump Lane.

6.2.2 We have used drawings obtained from the local planning authority (LPA Ref: 5505APP20151546) to inform our understanding of the internal arrangement within the hotel.

6.2.3 The BRE guidelines are principally intended for habitable rooms within adjoining dwellings. As this is a hotel and a commercial / transient use, a degree of flexibility should be applied when considering the amenity effects to this building.

6.2.4 As the BRE guidelines recommend that living rooms within adjoining dwellings are tested for sunlight effects, it has not been necessary to consider this property for sunlight impacts under the Annual Probable Sunlight Hours (APSH) criteria.

Daylight – Illustrative Masterplan Scheme

6.2.5 Based on the Illustrative Masterplan scheme, our Vertical Sky Component (VSC) results show that the vast majority of the rooms will experience very little change in retained VSC when compared to the consented scenario. Most rooms will retain absolute VSC levels equal to or in excess of the 27% BRE target and where reductions do occur, they are limited to 0.5% VSC and below and thus unnoticeable.

6.2.6 With respect to the No-Sky Line (NSL), our results show no changes between the consented and proposed scenarios thus confirming the acceptability of the proposals with regards to daylight distribution.

6.2.7 Overall, given the isolated effects and the use of the property, these effects are considered fully acceptable and in line with the intentions of the BRE guidelines for VSC and NSL daylighting.

Daylight – Maximum Parameter Scheme

6.2.8 Marginal reductions in VSC are noted to affect the ground floor rooms in the hotel

when compared to the consented outliem scheme. However, these are limtied to under 1% VSC and absolute VSC levels remain above 21%. The introduction of an additional storey on top of the northern end of the terrace will result in a degree of change although it is likley that the delivery of the terraced houses will be capped at two storeys such that good daylight levels to the hotel will be maintined.

6.2.9 We are recording no change in NSL when comparing the consented and proposed outline scheme.

6.3 2-38 (evens) Little Road

Image 10 - Google maps 3D aerial view of 2-38 Little Road

6.3.1 These semi-detached houses are located to the east of the proposed scheme and are arranged over two to three storeys. There are a number of windows across the rear elevations that overlook the development site to the west and specifically what will form the new terrace of houses on Austin Road.

6.3.2 Where planning drawings were available for the properties (at 8A, 12-18, 24, 30-32 & 38 Little Road) the internal configurations have been informed from the respective floorplans. For the remaining properties where planning information was limited, we have assumed the internal layouts from external inspection of the property.

6.3.3 The rear elevations of these neighbouring properties which face the scheme are not within 90º of north such that they are not relevant for sunlight assessment under the BRE guidelines. Our assessments are therefore limited to the potential daylighting effects to these properties as a result of the changes to the consent.

Daylight – Illustrative Masterplan Scheme

6.3.4 Our VSC results for the proposed illustrative scheme demonstrate that the majority of windows along Little Road will continue to fully achieve the BRE recommendations for VSC. Where reductions do occur, they are generally limited to 1.7% VSC or less with most windows retaining absolute VSC levels of 24% and above which in the context of urban regeneration is considered acceptable.

6.3.5 Our No Sky Line (NSL) analysis shows that the majority of habitable rooms experience little to no change in daylight distribution when comparing the consented and proposed illustrative scenarios.

6.3.6 Where changes in daylight distribution are being recorded, they affect the southern end of the street and the rooms in 2-16 Little Road. Generally, the reductions in daylight distribution between the consented and proposed illustrative scenario for these properties is shown to be 20% or less although there are instances of more distinct reductions towards the very southern end of the street where these do breach 30%.

6.3.7 This is primarily as a result of the changes to the massing of the blocks which have become more defined with the removal of the breaks between the blocks in the centre of the site. However, the majority of the impacts will affect bedrooms which are naturally less reliant on daylight distribution and will, in most circumstances, continue to enjoy sky visibility across at least 50% of the floor area.

Daylight – Maximum Parameter Scheme

6.3.8 When comparing the daylight effects of the consented and proposed Maximum Parameter scheme, the results are broadly the same in terms of the VSC compliance when compared to the illustrative schemes.

6.3.9 Only a small number of windows are reduced below 20% absolute VSC when comparing the consented and proposed outline schemes which would indicate that whilst the more defined massing of the proposed outline scheme does have an effect on these properties to a degree, the taller element of the outline scheme now steps further back from Little Road than in the consented scenario.

6.3.10 The additional height and removal of the breaks between the blocks does lead to some further reductions when compared to the consented position however the retained levels of VSC as discussed all remain high for an urban context.

6.3.11 For the NSL to the rooms, 2-18 Little Road will experience reductions in daylight distribution when compared to the consented outline scheme. The additional effects generally impact rooms across the ground level such as deep living / kitchen / dining spaces however the results indicate that each of these properties will also experience alterations to first level rooms given their relationship with the taller canal side block and the removal of the breaks between the blocks which was a feature of the consented scheme.

6.3.12 Whilst there is a slight increase in No-Sky Line effects to the rooms along Little Road, given the comparable levels of compliance with the VSC to the windows, it is clear that the depths of the rooms are a contributor to these additional reductions.

6.3.13 Despite this, the majority of the rooms maintain sky visibility to over half the depth of the space under the revised outline proposals. Given the properties maintain VSC levels upwards to 20%, retained daylight under the 'worst case' Maximum Parameters is considered to remain good for an urban location and is therefore acceptable.

6.4 Unit 8 Crauford Business Park

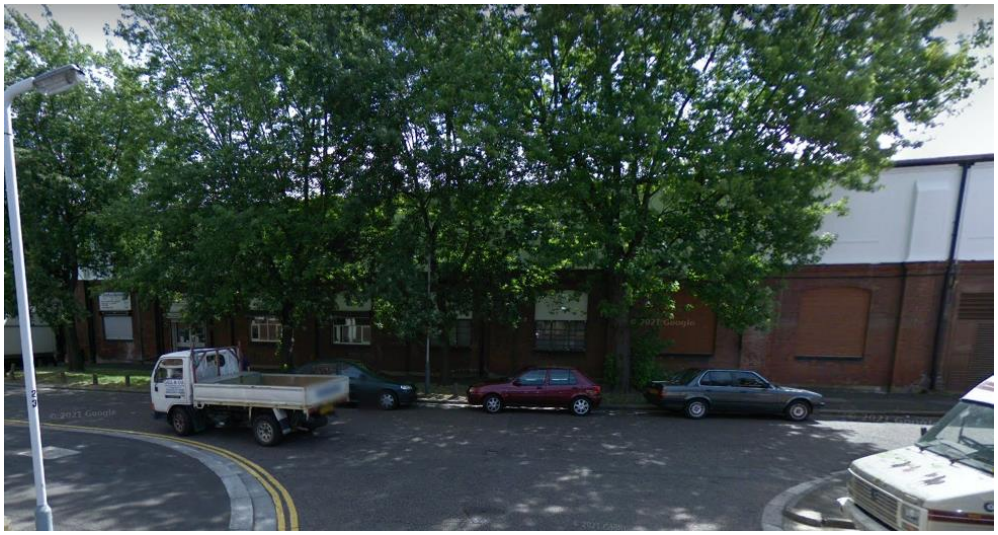

Image 11 - Unit 8 grade II listed façade, front elevation

6.4.1 Unit 8 Crauford Business Park is situated to the south-east of the site, across Silverdale Road. Whilst this neighbouring site is currently in commercial occupancy, the council have made us aware that this property may be developed to residential use in the future. As the front façade of the building is locally listed, this will likely be retained as part of any future development.

6.4.2 Whilst the current commercial / industrial use is not strictly relevant for daylight / sunlight assessment under the BRE guidelines, we have considered the potential daylight provision to future residential spaces using hypothetical single-aspect layouts at a depth of 4.27m. The width of the rooms has been informed by the position of the external columns and the neighbouring window apertures that overlook the Hayes Town Centre site.

6.4.3 In accordance with the previous daylight/sunlight report, our assessment also includes the potential daylight provision to the existing blocked up windows as requested by the Local Authority to understand the position if these areas were to be utilised as part of a future development.

6.4.4 As the locally listed façade overlooking the site is orientated to the northwest, these room are not considered relevant for sunlight testing under the Annual Probable Sunlight Hours (APSH) criteria. We have therefore focused on the daylight levels to these spaces.

Daylight – Illustrative Masterplan

6.4.5 The previous report authored in 2021 applied the Average Daylight Factor (ADF) metric in analysing the hypothetical impacts to this property. Since the report was submitted the ADF metric is no longer considered as an appropriate criterion for assessing light loss and no longer forms part of the BRE guidelines.

6.4.6 As outlined earlier in the report, Appendix F of the guidelines suggests that when comparing the impacts of an extant and revised planning consent, it is appropriate

to compare the VSC results of the consented and proposed scenarios in order to identify if the changes to the scheme do result in negative or positive shifts in daylight. Whilst this building does not yet exist as residential accommodation, we have continued to apply the same assessment logic here.

6.4.7 Whilst the majority of the ground floor windows have been sealed we have assessed these as open apertures as before. When compared to the consented scenario reductions in VSC are noted at ground and first floor level although the retained VSC levels are all within 3.6% of the consented scenario. However, there are also three openings which would experience positive shifts in VSC when compared to the consented scenario with improvements of up to 0.5% VSC.

6.4.8 Given that the internal layouts we have modelled here are purely hypothetical it would not be appropriate to apply much credence to the NSC results. Notwithstanding, 8 of the 17 rooms assessed in fact experience improvements in daylight distribution when comparing the consented and proposed scenarios. Where reductions do occur, sky visibility is maintained across over 50% of the floor area such that the normal use of the 'rooms' would not be materially affected.

Daylight– Maximum Parameter Scheme

6.4.9 Based on the Maximum Parameter Scheme, our assessments demonstrate that there would be changes in hypothetical VSC levels when comparing the consented and the proposed outline scheme. Whilst the analysis indicates reductions in VSC of up to 7% when comparing the two outline schemes, the results are based on a hypothetical scenario where a maximum parameters scheme is being delivered alongside a residential neighbour that does not yet exist and therefore discretion should be applied when considering the principles of these results.

6.5 Navigation Building, Cardinal Building and Vantage Building

Image 12 - View of Navigation, Cardinal and Vantage Building from the site

6.5.1 These 3 residential apartment blocks are between 7 and 9-storeys in height and located to the south of the development site, approximately c.32m across the canal. The articulation of the buildings means that these neighbouring windows predominantly face to the north-east and south-west away from the site.

6.5.2 Whilst reasonably offset from the site, the design of this neighbouring elevation is somewhat 'self-limiting' with some windows overhung by balconies. Whilst these balconies provide valuable private amenity space for the neighbouring residents, they do exacerbate daylight effects where they are reliant on low levels sky views.

6.5.3 We have used planning drawings (LPA Ref: 10057/APP/2005/1620) to inform our understanding of the internal arrangement across these residential buildings.

Daylight – Illustrative Masterplan Scheme

6.5.4 Of the 180 windows assessed for VSC effects excluding the commercial and non-habitable rooms, all 180 will experience either no change when compared to the consented proposals or improvements in daylight as a result of the amendments. Positive shifts of up to 1.7% VSC in some circumstances confirm that the principles of the changes to the illustrative scheme will result in improved daylight levels to all three apartment buildings.

Daylight – Maximum Parameter Scheme

6.5.5 Based on the comparison against the consented and proposed outline scheme the results are very similar. The massing to the southern part of the site has not been altered significantly and remain broadly similar to the consented proposals. As such the changes in VSC between the consented and proposed scheme are very limited with retained VSC values all within 0.6% of the consented scenario. Retained VSC

levels to the Cardinal Building which is in the centre of the three blocks are shown to improve under the proposed outline scenario.

6.5.6 Changes to retained NSC levels are noted to be exceptionally limited with the majority of room experiencing no change at all between the consented and proposed scenarios. Where shifts do occur as a result of the changes to the outline scheme the rooms will generally continue to meet or exceed the BRE targets.

Sunlight – Illustrative Masterplan Scheme

6.5.7 In terms of direct sunlight, most of windows face north towards the site such that they are not relevant for assessment under the BRE guidelines. There are some windows marginally within 90° of south, though predominantly east facing, which will have oblique views of the scheme. These have therefore been considered for potential sun lighting effects.

6.5.8 Our APSH results show that all rooms will either experience improvements in APSH or see no change when compared to the consented proposals where all of the relevant windows met the BRE targets.

Sunlight – Maximum Parameter Scheme

6.5.9 When considering the APSH effects to these neighbouring properties based on the Maximum Parameter scheme, our results show only positive change from the consented scheme with all retaining sunlight levels fully meeting the BRE targets.

6.5.10 The changes to the outline proposals would not result in any material effects upon sunlight to the neighbouring properties at Navigation, Cardinal and Vantage Buildings.

6.6 Brickfields Building B

Image 13 - Consented development to the south east of the site along the canal

6.6.1 This neighbouring site is located to the south-east of the scheme, across Silverdale Road is currently occupied by industrial / commercial units. The site received planning consent in 2016 (planning ref: 71374/APP/2016/4027) for a residential-led development between four to 9-storeys in height known as Brickfields.

6.6.2 The western elevation of this proposed development has west facing windows looking towards the Hayes Town Centre site which have therefore been considered for daylight effects.

6.6.3 Where a new development is proposed but not yet built, the BRE suggest that the daylight illuminance is the appropriate assessment criteria as there are no occupants to experience a change in light levels. During the design of these neighbouring apartments, the ADF test, which includes the assessment of reflected light, was used to establish whether a suitable amount of daylight would be provided and therefore is the appropriate measure to assess the future daylight provision with the Hayes Town Centre proposals in place.

6.6.4 As this consented elevation fronting Silverdale Road faces the scheme is orientated to the northwest, the neighbouring scheme is not relevant for sunlight assessment under the APSH criteria.

Daylight – Illustrative Masterplan Scheme

6.6.5 Our daylight illuminance analysis of this consented scheme with the illustrative scheme in place show that all of the consented habitable rooms of the Brickfields scheme overlooking the site would surpass the daylight illuminance recommendations of at least 150lux for a main living space and 100lux for a bedroom.

6.6.6 The assessments therefore demonstrate that the neighbouring scheme would

maintain sufficient levels of daylight with the HTC proposals in place.

Daylight – Maximum Parameter Scheme

6.6.7 The daylight illuminance results based on the Maximum Parameter scheme are comparable with the Illustrative Masterplan scheme with all of the assessed habitable rooms in this building meeting the relevant illuminance targets.

6.6.8 The Maximum Parameter scheme is therefore not considered to materially affect the daylight provision to this neighbouring scheme.

6.7 81 Station Road – The Old Crown Pub

Image 14 - Site photo of the rear view of 81 Station Road

6.7.1 The Old Crown Pub is located at the south-west corner of the proposal fronting Station Road. The pub itself occupies the ground level however there is one window at first level overlooking the site which is likely to be ancillary accommodation / bedroom space.

6.7.2 Information was limited for this building therefore have modelled the first level room from external inspection and assumed a room depth of 4.2m.

6.7.3 Although the window at first level is orientated within 90° of south and faces towards the scheme, the room is likely to serve a bedroom. As such, it is not relevant for sunlight assessment under the BRE criteria.

Daylight – Illustrative Masterplan Scheme

6.7.4 The results of our VSC assessments based on the Illustrative Masterplan show that the first level window will experience a marginal improvement in VSC when compared with the consented scenario.

6.7.5 With respect to daylight distribution, there is a small shift in the No-Sky Line contour to the room from the consented condition. The room retains sky visibility to well over 70% of the room as such the change would not be noticeable.

6.7.6 Given the space is ancillary accommodation to the pub and likely to be a bedroom which the BRE recognise as less sensitive for daylight, this effect is considered to be minor and would not have a significant impact on the use of the space.

Daylight – Maximum Parameter Scheme

6.7.7 When considering the changes in VSC effects to the first level room between the consented and proposed outline scheme, the retained VSC level is similar. There is a minimal shift from the consented position of only 1.2% VSC which is unlikely to be noticeable to the occupants.

6.7.8 Whilst there are additional reductions in respect of the NSL to the room based on the revised Maximum Parameter scheme, retained daylight levels remain good with over 60% of the room enjoying sky visibility at the relevant working plane height.

6.7.9 The high retained VSC level exceeds that typically accepted for urban locations the effects are unlikely to materially affect the amenity to the property and are therefore considered acceptable in the context of the site.

6.8 75 Station Road

Image 15 - Site photos of the rear view of 75 Station Road

6.8.1 This two-storey property is currently mixed use, with retail across the ground floor and residential accommodation located at the first floor. From external inspection of the property, the nearest rooms with high level windows facing the site are likely to serve a bathroom and a dual aspect kitchen. There are 2 further windows set back at first level which serve circulation and dual aspect space lit by windows overlooking

Station Road.

6.8.2 Non-habitable uses such as bathrooms and circulation spaces are not relevant for assessment under the BRE criteria therefore we have focussed on the effects to the dual aspect kitchen (R2) and the habitable space set back at the rear entrance terrace (R3).

6.8.3 Given we were unable to confirm the use of Room 3 we have included this space within our consideration of potential sunlight effects.

Daylight – Illustrative Masterplan Scheme

6.8.4 Based on the comparison against the consented illustrative scheme, all of the habitable rooms in this property will experience positive shifts in retained VSC when compared to the consented scenario. The revisions to the consent indicate that daylight levels will improve by up to 2.4% VSC.

Daylight - Maximum Parameter Scheme

6.8.5 The results for the Maximum Parameter scheme comparison show a marginal shift in retained VSC although the proposed VSC levels are within 2.2% of the consented outline scheme and such limited changes are unlikely to have a material impact on the use of the spaces.

6.8.6 Similarly, these habitable rooms will experience no material change in daylight penetration to the room where they retain at least 0.8 times their former NSL level.

Sunlight – Illustrative Masterplan Scheme

6.8.7 Based on the Illustrative Masterplan scheme, our APSH results for First floor level R3 confirm a 30% increase in APSH when compared to the consented position.

Sunlight – Maximum Parameter Scheme

6.8.8 When considering the sunlight levels to First R2 based on the Maximum Parameter scheme our assessments show a reduction in APSH to first floor room R2 when compared to the consented scenario by 30%. This is predominantly driven by the additional height being introduced to the southern block however the results of the comparison between the illustrative schemes, which are more in accordance with what will be delivered show good levels of compliance with the BRE guidelines for both VSC and APSH.

6.9 63-73 Station Road (odds)

Image 16 - Rear views of 63-73 Station Road

6.9.1 These mixed-use properties are located to the south-west corner of the site and are under commercial occupancy at the ground floor with residential accommodation located at the upper floors.

6.9.2 There are a number of windows to the rear elevations of these properties overlooking the site however we expect most of these to serve bedrooms or secondary /non-habitable spaces with the main living rooms overlooking Station Road.

6.9.3 We have based the internal modelling of no.71 on layouts obtained from the local planning authority (REF:75848/APP/2020/2745 and REF70288/APP/2015/1089) and assumed layouts have been applied in respect of the remaining residential spaces across 63-69 and 73-75.

6.9.4 As the main living rooms within these properties are likely to be positioned within the front elevations facing away from the scheme there will be no amenity impact to those spaces and no loss of sunlight to any relevant rooms.

Daylight – Illustrative Masterplan Scheme

6.9.5 The VSC and NSL analysis for these properties show that the changes incorporated to the illustrative scheme result in a greater level of retained VSC to the windows serving these properties than under the consented scenario. The refinement and improvements made to the articulation of the blocks in the southern element means that improvements of up to 5% VSC are being recorded.

6.9.6 In terms of NSC, positive changes in daylight distribution are also noted to affect the majority of the residential rooms which confirms the changes to the illustrative scheme will result in greater levels of retained daylight to these properties

Daylight – Maximum Parameter Scheme

6.9.7 The results of our technical assessments based on the comparison between the consented and proposed Maximum Parameter scheme show little difference in the VSC effects to the habitable rooms. The reductions in retained VSCs are limited to 2.1% overall which would not present a materially worse position that the consented scheme. Where reductions go beyond this threshold at 63-65 Station Road the

affected windows serve part of a dual aspect room where the VSC results are otherwise consistent with the BRE guidelines.

6.9.8 As with the Illustrative Masterplan scheme the effects upon daylight distribution are considered to be acceptable and unlikely to significantly impact the use and amenity of the properties where the principal / habitable rooms face away from the scheme. Where reductions are noted beyond those in the consented scenario, they are limited to less than 2 sq metres or less. Notwithstanding, the result of the comparison between the consented and proposed illustrative schemes confirm that within the parameters of what is likely to be delivered, the NSC levels will in fact improve.

6.10 1A Crown Close

Image 17 - Eastern elevation of 1A Crown Close, side elevation

6.10.1 This property is located directly to the west of the proposal, on the eastern side of Crown Close and comprises a commercial unit at ground level and residential accommodation to the upper floors.

6.10.2 The principal windows to the property are located to the front, south facing, elevations however there are windows at ground and second floor overlooking the site to the east. From plans available from the Hillingdon planning portal we understand that the second level room serves a kitchen and has therefore been considered for daylight effects. The ground level aperture is a delivery hatch to the rear of commercial unit at ground level and is not relevant for daylight / sunlight analysis under the BRE criteria.

Daylight – Illustrative Masterplan Scheme

6.10.3 The VSC results based on the comparison between the consented and proposed

illustrative schemes show that the first floor living space R1 will experience an improvement in mean VSC by 0.8%. There are however marginally greater impacts as a result of the changes to the massing to the bedroom and kitchen windows which will experience additional reductions although these are limited to 3.4% and below. Whilst these show that further daylight reductions could be likely the proximity of these windows to the boundary does mean that a degree of change is inevitable. Notwithstanding this, each window will retain an absolute VSC of at least 18.5% which is broadly consistent with urban development.

6.10.4 With regards to the NSL, all rooms with the exception of the second-floor kitchen record no noticeable shift in daylight penetration. The second level kitchen is considered to be a more secondary 'non-habitable' space such that the impact is considered to be acceptable particularly as the No-Sky Line will continue to extend to over half of the room.

Daylight – Maximum Parameter Scheme

6.10.5 Based on the proposed Maximum Parameter scheme, the effects are similar to the consented scheme with absolute shifts in the VSC generally limited. Second floor window W1 which serves a kitchen space will experience a more material reduction under the proposed outline scheme given its direct view towards the southern blocks which have become taller. However, the retained VSC level of 15% under the outline scenario is considered commensurate with urban development and its unusual proximity to the site boundary should not fetter reasonable development of this site.

6.10.6 Overall, there will be a minor isolated effect to a single room of this property which is considered to be fully acceptable in the wider regeneration context of the site.

Sunlight – Illustrative Masterplan Scheme

6.10.7 In respect of direct sunlight, there is 1 main living space at first level with a view of the scheme. We have therefore tested this space for sunlight effects due to its southerly orientation.

6.10.8 The results from our APSH assessments show that the main living space significantly exceeds the targets for sunlight receiving 64% for total annual sunlight levels and 16% for the winter months.

Sunlight – Maximum Parameter Scheme

6.10.9 In respect of direct sunlight to this property, the main living space at first level continues to be in excess of the BRE recommendations with the revised Maximum Parameter scheme in place achieving 63% for total annual levels and 16% during the winter.

6.10.10 The property will therefore not experience any adverse effect in regards to sunlight under the Annual Probable Sunlight Hours (APSH) criteria based on either the Illustrative Masterplan the Maximum Parameter scheme.

6.11 Internal Façade Analysis – Outline Blocks

6.11.1 As the proposed application is for an outline scheme, the detailed design of these blocks are not yet fixed in terms of façade detail and internal room configurations. We have therefore undertaken a façade analysis to demonstrate the daylight potential for the future proposed accommodation at the outline areas of the scheme.

6.11.2 This façade study considers the VSC at points along the outline facades to understand the potential sky visibility in areas where the scheme windows and rooms are yet to be defined. This helps to ensure that good levels of amenity will be enjoyed within the proposed accommodation.

6.11.3 For these assessments we have considered the daylight potential for both the Illustrative Masterplan massing and also the Maximum Parameter scheme.

6.11.4 As the intention of the Maximum Parameters are primarily to fix the extents to which the future phases can be designed within, we have limited the analysis to the outward facing elevations for the Maximum Parameter scheme. This is because further articulation / detailed design of the blocks would be required to open up the courtyards and allow daylight / sunlight to penetrate the courtyards and internal facades. These areas will be subject to further detailed testing at Reserved Matters stage.

6.11.5 The courtyard spaces have been tested in the Illustrative Masterplan scheme as these present a more realistic interpretation of the form of development that may come forward having consideration for both internal daylight potential and sunlight amenity / overshadowing to the courtyards.

6.11.6 The results of our VSC façade analysis are illustrated in Appendix 4.

Illustrative Scheme

6.11.7 The results of our preliminary VSC façade analysis for the Illustrative Masterplan scheme demonstrate that the vast majority of the elevations will enjoy high levels of daylight in excess of 27% VSC – shaded yellow in the diagrams. The inward facing elevations overlooking the courtyards will inevitably be more constrained although this is a common feature of urban development and not dissimilar to the consented scenario.

Central blocks

6.11.8 In the urban blocks, in the central areas of the site, the majority of the elevations are shaded yellow illustrating VSCs will be at 27% or above therefore enjoying high levels of sky light. The deliberate move away from individual courtyard blocks will result in an improved outlook overall with all units now broadly benefitting from an unobstructed view. Those units located in the northern and southern 'shoulders' will have views towards or over the podium however the separation distance is such that both are able to achieve good levels of VSC.

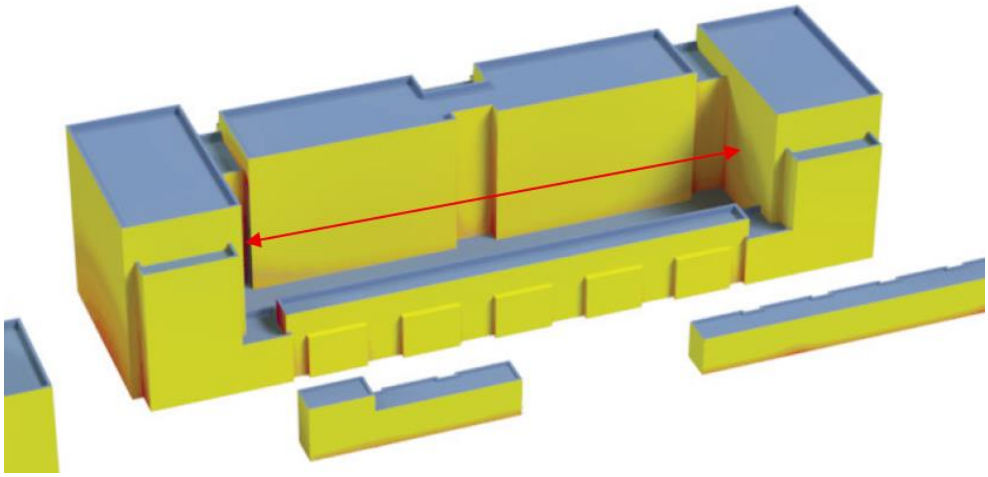

Image 18 - VSC analysis confirming acceptable seperation distances for daylight

6.11.9 Where VSC levels are below this to isolated points in the corners of courtyards, it is typical for circulation space and less sensitive uses to be placed here in order to mitigate these constraints through design.

Canal side blocks

6.11.10 For the canal side block to the south, similarly most of the outward facing elevations enjoy very high levels of daylight with VSCs in excess of 27% due to the limited neighbouring obstruction. The inward facing elevations overlooking the courtyard will be somewhat more constrained due to the increased height of these blocks though again, the principal elevations are in the mid-teens upwards (13-27%) and are in line with that typically accepted for urban locations and allow appropriate internal amenity levels to be achieved at detailed design stage.

6.11.11 The corners of the courtyards are closer to indicate lower levels of daylighting, but these are not considered to significantly constrain the future design where less sensitive / non-habitable spaces could be position in these locations. Where areas of the southern elevation overlooking the courtyard are shaded red / orange, constraints could be mitigated through careful internal design and maximising the glazing areas.

6.11.12 By changing the articulation of these blocks and moving away from a rigid 2 + 2 formation, VSC improvements will be made when compared to the more traditional square courtyard design in the consented scenario as efforst have been made to improve outlook overall.

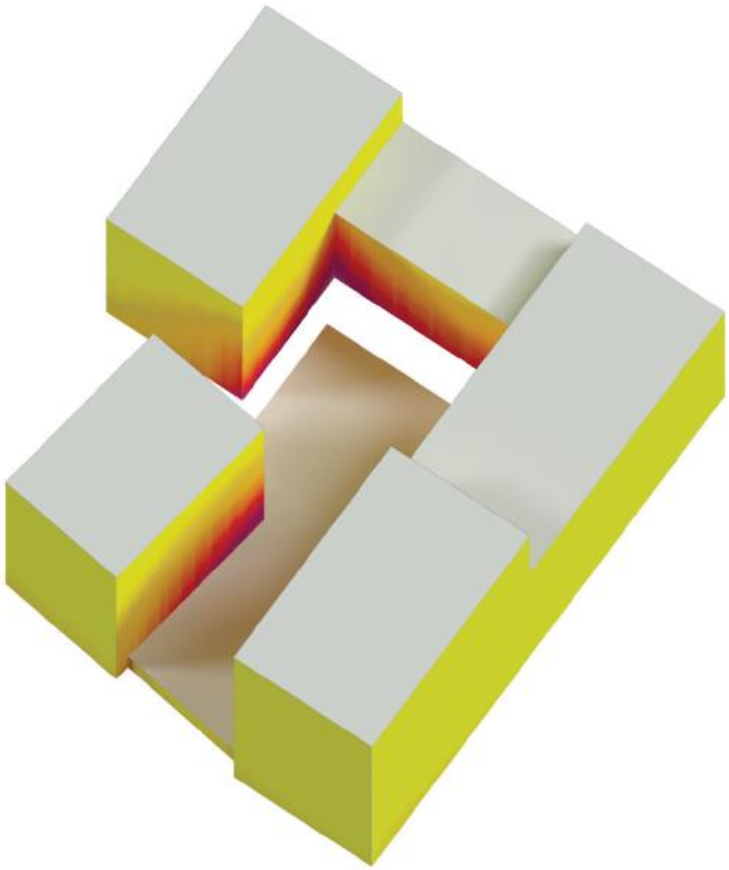

Image 19 - Consented southern courtyard illustarting more constrianed inward facing facades

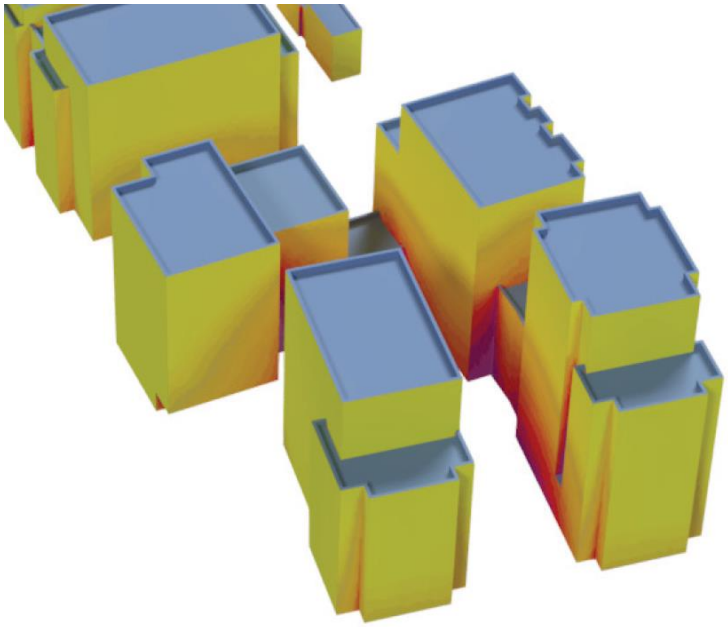

Image 20 - Proposed southern courtyard illustrating more definition in the articulation of the buildings

Mews Houses

6.11.13 With regards to the mews houses, virtually all of the elevations demonstrate good levels of daylight all achieving above 27%. Given the limited obstruction in these areas / high daylight potential, these buildings would not experience material constraints in respect of the future design to achieve good daylight amenity.

Maximum Parameter Scheme

6.11.14 Our VSC façade study for the Maximum Parameter scheme illustrates that the outward facing elevations will generally achieve or exceed 27% VSC such that they would not significantly impact the future design of the units under the reserved matters application.

6.11.15 The only areas where levels fall below the 27% region are the southern elevation of the central urban blocks facing out towards taller canal side blocks and the northern elevation of the canal side block looking towards the same break in the massing.

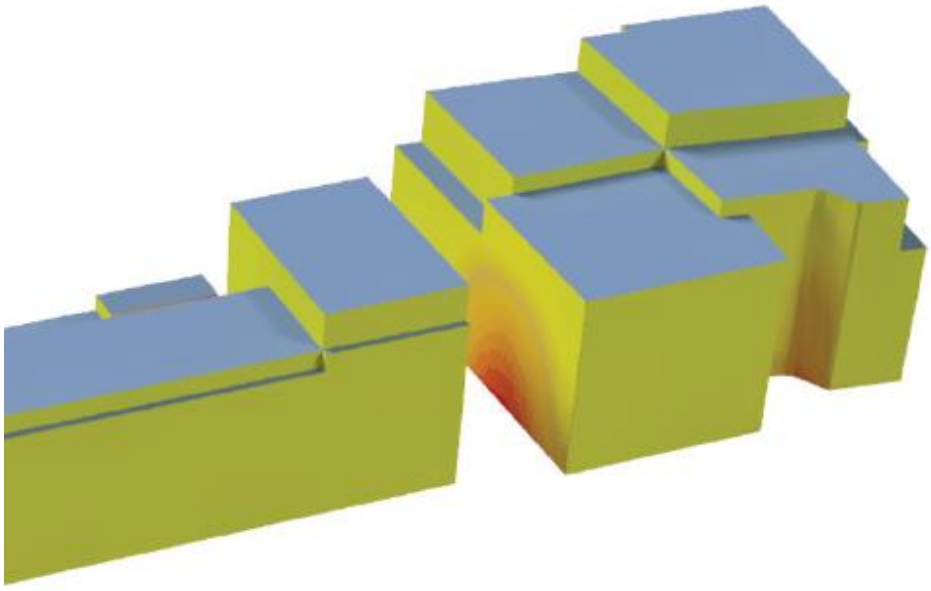

Image 21 - Seperation showing break between southern canal side blocks

6.11.16 VSCs here are generally in the mid-teens upwards and are considered appropriate for an urban location with appropriate amenity achievable through considered urban planning. The lowest levels of this elevation will require appropriate consideration at detailed design stage to ensure that sufficient levels of amenity are achieved although these constraints could be mitigated through maximising the glazing, avoiding overly deep rooms or placing less sensitive and non habitable rooms and spaces in the more constrained areas.

6.11.17 With regards to the eastern elevation of the terraces where there is a strip of blue shaded across the ground level due to the proximity of the existing boundary wall. This is not considered a material constraint as any future scheme would be

appropriately set back from this boundary.

6.11.18 Overall, the majority of the proposed elevations demonstrate appropriate levels of daylight potential across both the Illustrative Masterplan scheme and the Maximum Parameter scheme. Many areas achieve very high VSC levels upward of 27% and there would be minimal constraints in respect of detailed design.

6.11.19 Where daylight levels are lower, these are isolated to pinch points in the corners of courtyards or the lowest levels of the canal side block. Such constraints to the lower floors of buildings and the corners of courtyards are typical and may be addressed through further detailed design.

6.11.20 Given the main elevations to the outline areas generally achieve VSCs in the mid-teens upwards which are typically accepted in urban locations, and we would expect good levels of compliance in detailed design phase.

6.12 Sunlight within the proposed gardens and amenity areas

6.12.1 The changes in the massing to the scheme have resulted in updates to the landscape plan and layout of the external amenity provisions. Accordingly, we have assessed the provision of sunlight to the proposed private amenity and shared communal areas using the BRE's two hours sun contour (sunlight amenity) assessment as before. This has considered the amenity areas and open spaces within the scheme in accordance with the landscape plans as shown in Image 22 below.

6.12.2 The location of the amenity areas and extents have been carefully refined to optimise sunlight to the primary external spaces and moving the articulation and circulation areas to more shaded parts of the public realm.

Image 22 - Ground Level Landscape Design

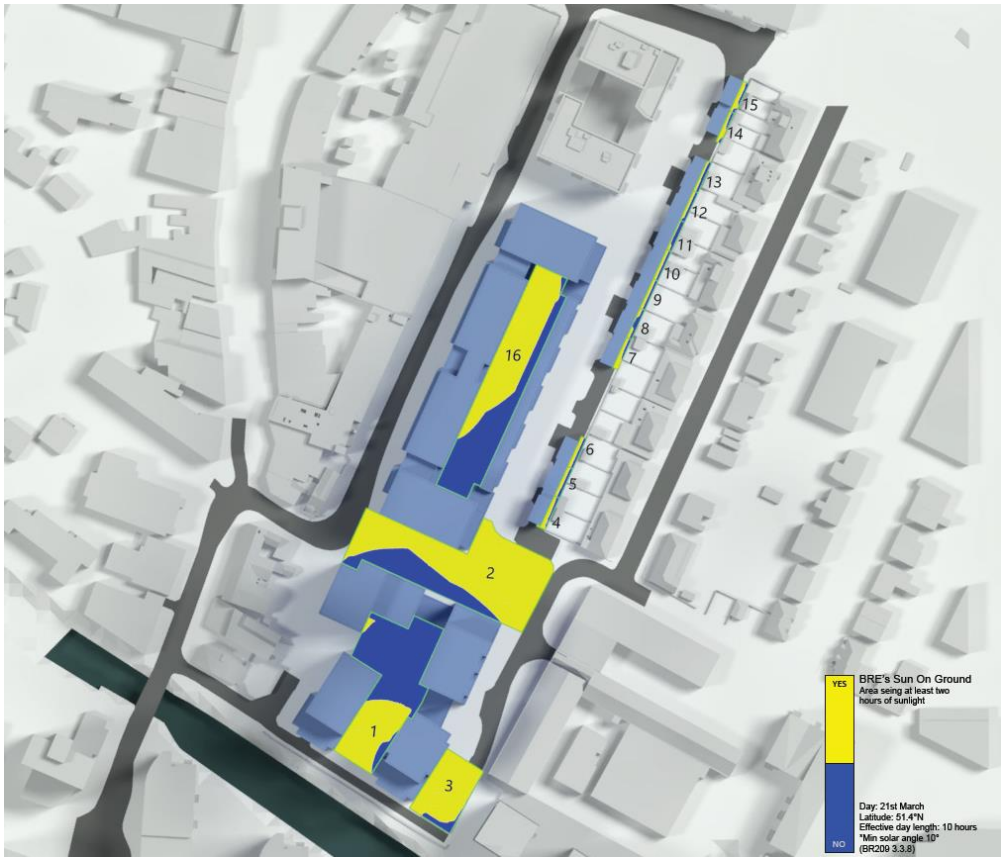

Image 23 - Sunlight amenity provision, March 21st

6.12.3 The results of this analysis are shown on our drawings labelled 4899-R22-SA01 within Appendix 5.

6.12.4 Our sunlight amenity results show three of the four communal amenity spaces within the proposed scheme will exceed the recommended 50% target. Space 1, which is located in the centre of the southern phase adjacent to the canal, will achieve 2 hours of sunlight to 34% of the courtyard space which is not a significant deviation from the 50% target.

6.12.5 The improvements to the streetscape along Austin Road have led to some changes in the siting of the houses and gardens. Accordingly, we have updated the analysis of these to consider the sunlight to the private gardens serving these houses.

6.12.6 The result of this analysis is also included in drawing 4899-R22-SA01and indicates that of the 12 gardens assessed, 5 will exceed the 50% target, 5 will achieve at least 40% and above whilst just 2 will experience 2 hours of sunlight to less of the space.

6.12.7 However, the limitations that some of these gardens experience in respect of direct sun is primarily down the position of the existing rear wall and some outbuildings in the gardens serving the houses fronting onto Little Road. These external obstructions partially hinder sunlight to some of the gardens although the majority will still perform well.

6.12.8 Though sunlight levels are below the target levels on the 21st March to courtyard 1 (communal gardens), our sunlight exposure diagrams are useful in illustrating that

the majority of the space is actually only marginally below the recommended 2-hour threshold between 1.6-2 hours where areas are graded yellow to orange (below). Given large areas are on the cusp of the 2-hour threshold, this is unlikely to significantly alter the quality of the space.

6.12.9 The scenario with the private gardens serving the mews houses on Austin Road is similar, as the image below illustrates, all of these gardens in fact achieve good levels of sunlight despite in some cases being below the 50% target.

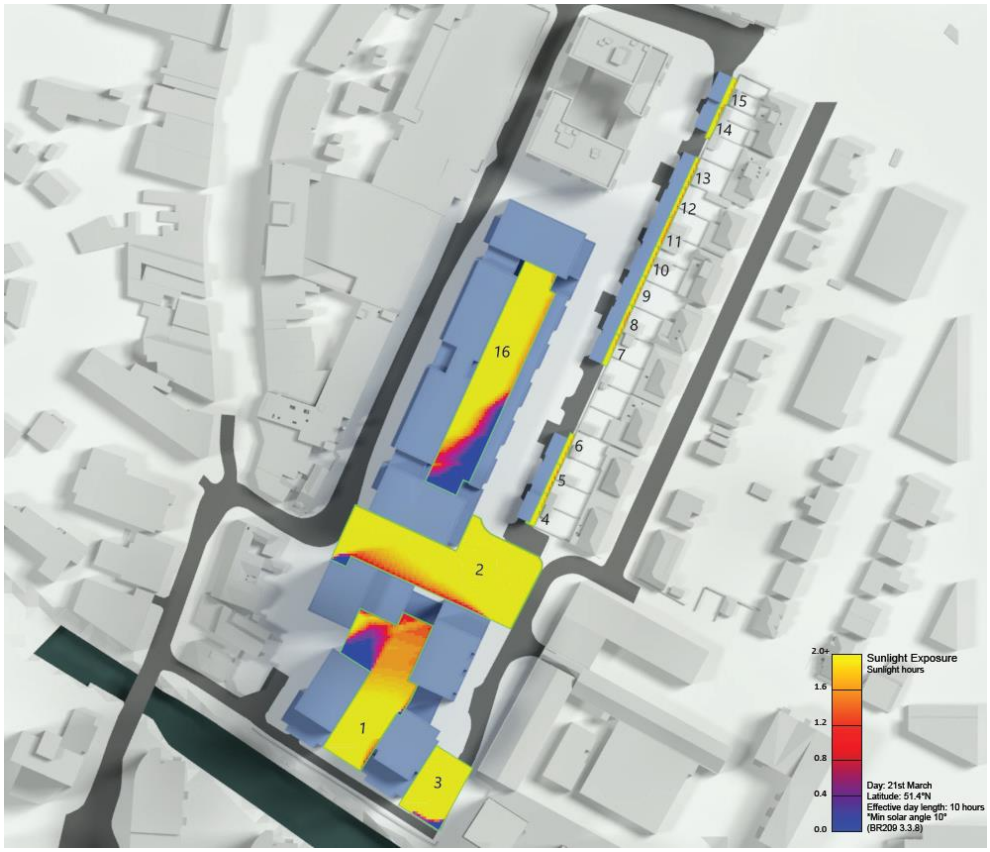

Image 24 - Sunlight exposure diagram on the 21st March

6.12.10 As part of the analysis, we have provided a supplementary assessment showing the relative sunlight to the amenity spaces on the 21st June which is the time when the spaces will invariably be used most. The amenity provision for 21st June is shown in the image below with the full results attached in Appendix 2.

6.12.11 As the image below shows, all of the external amenity spaces will meet the BRE target on 21st June which confirms that all of the external amenity spaces will enjoy very good levels of sunlight during the summer months when the spaces will be enjoyed the most.

Image 25 - Sunlight amenity provision, June 21st

6.12.12 Overall, whilst there will be deviations in terms of sunlight / overshadowing within the scheme, all of of the amenity spaces within the proposed scheme enjoy sunlight levels close or equal to the BRE 2 hour target on the 21st March as shown in our sunlight exposure study.

6.12.13 In addition, where levels are below the recommendations at the courtyard areas, the residents will have access to the wider community amenity and community square at ground level which will provide a variety of amenity spaces and well sunlit areas in the earlier parts of the year.

6.12.14 Finally, almost all of the proposed amenity areas will enjoy more than 2 hours of direct sunlight on the 21st June during the summer when the space will most used.

6.12.15 Given most of the areas will either meet the BRE recommendations or be very close to on the 21st March, and there will be opportunity to enjoy sunlight in the earlier parts of the year across the ground level, the sunlight amenity to the proposed development is considered acceptable and in line with the intentions of the BRE guidelines for sunlight / overshadowing.

7 Conclusions

7.1.1 This practice has undertaken a detailed assessment of the potential overshadowing within the external amenity provision following the adjustments to the massing of the consented scheme. The results of the assessments consider the impacts of the changes to the proposals to neighbouring amenity against the baseline of the consented outline scheme. The overshadowing and VSC façade studies consider the principles of the revised massing in isolation rather than drawing a comparison against the consented baseline.

7.1 Daylight and sunlight impacts to neighbours

7.1.1 The daylight and sunlight analysis has assessed the proposed redevelopment in Hayes against the extant planning consent, considering both the outline maximum parameter envelope and the illustrative scheme. The comparison demonstrates that changes in Vertical Sky Component (VSC) are generally limited, with the majority of windows and rooms showing either negligible variation or modest improvements in daylight availability.

7.1.2 Across the development, the retained VSC, No-Sky Line (NSL), and Annual Probable Sunlight Hours (APSH) values indicate a broadly positive outcome, reflecting that the revised massing does not materially worsen daylight conditions when compared with the consented scheme.

7.1.3 Where small reductions are observed, these fall well within the parameters of acceptability for an urban location and represent a proportionate and reasonable trade-off necessary to enable efficient and balanced site development. The overall results confirm that the proposed design achieves an appropriate relationship with neighbouring properties and should therefore be regarded as compliant with the relevant daylight and sunlight guidance and acceptable in planning terms.

7.2 VSC Façade Study

7.2.1 The façade-based daylight assessments undertaken for both the Illustrative Masterplan and the Maximum Parameter schemes demonstrate that the proposed development has been designed with appropriate consideration for internal daylight amenity. Across the site, the majority of elevations achieve high levels of daylight, with most façades recording Vertical Sky Component (VSC) values of 27% or above. These results confirm that the proposed massing offers strong daylight potential and generally an improved outlook compared with the consented scheme, particularly through the move away from the more enclosed courtyard blocks.

7.2.2 Where lower VSC levels are recorded, these are limited to isolated locations such as the corners of courtyards and the lower storeys of the canal-side buildings. These modest reductions are typical of an urban context and can be effectively mitigated at detailed design stage through measures such as careful internal planning,

optimised glazing, and the placement of less sensitive spaces in more constrained areas.

7.2.3 Overall, the findings confirm that the proposed massing is capable of delivering well-lit accommodation and good levels of amenity throughout. The results are consistent with what would be expected for a high-density urban site and demonstrate that the outline parameters provide a sound framework for achieving appropriate daylight standards at Reserved Matters stage. The scheme therefore performs well in daylight terms and should be regarded as acceptable and in accordance with relevant guidance.

7.3 Overshadowing / sunlight within the proposed amenity areas

7.3.1 The assessment of sunlight (overshadowing) within the proposed areas of shared amenity space have shown that the majority of the key communal amenity spaces we have considered will receive more than two hours of sunlight on 21st March and thereby exceed the BRE targets.

7.3.2 Whilst deviations from the 21st March target affect courtyard 1, this has been specifically designed to provide a more varied amenity experience affording residents the opportunity to use both shaded and well sunlit amenity spaces. Furthermore, our sunlight exposure diagrams on this date illustrate that large areas of this space is in fact on the cusp of the 2 hour threshold and will otherwise enjoy very good levels of direct sun.

7.3.3 The scheme therefore demonstrates very good compliance with the BRE guidelines in respect of sunlight / overshadowing to the external spaces and will enjoy good levels of sunlight throughout the year. Sunlight levels will only increase to the areas during the summer months when the spaces are likely to be used the most and the BRE recognises that sunlight is most important to sitting out / play areas.

7.3.4 As set out in the BRE guidelines, daylight and sunlight availability are just one of the many important factors in site layout design such that flexibility is appropriate in the application of the guidance. This is echoed in the NPPF 2024 and the London Housing Supplementary Planning Guidance 2016 which makes it clear that the efficient use of sites, particularly for housing, should not be hampered by such technical constraints.

7.3.5 Overall, the principles of the Section 73 proposals are considered to respond well to the constraints of the site and is considered to demonstrate appropriate levels of sunlight amenity for its context whilst maintaining the appropriate level of density.

7.3.6 The proposals are therefore considered to continue to be in line with the aspirations of the BRE guidelines and relevant planning policy in respect of daylight and sunlight.