

Kensington Forum

QUEENSGATE
INVESTMENTS

Rockwell



TRIUM
ENVIRONMENTAL CONSULTING

Kensington Forum Hotel – London

ENVIRONMENTAL IMPACT ASSESSMENT | APRIL 2019

ENVIRONMENTAL STATEMENT ADDENDUM | VOLUME 1

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Chapter 1: Introduction, Proposed Design Amendments and ES Addendum Approach

INTRODUCTION

- 1.1 This Environmental Statement Addendum ('ES Addendum') has been prepared on behalf of Queensgate Bow UK Holdco Limited ('the Applicant'), to accompany post submission proposed amendments to a hotel led scheme (the 'Proposed Development') on land to the south of Cromwell Road ('the site'), which was subject to a detailed planning application (PP/18/03461) submitted to the Royal Borough of Kensington and Chelsea ('the RBKC') on the 18 June 2018. An Environmental Statement (ES) accompanied this application ('the June 2018 ES').
- 1.2 The ES Addendum has been undertaken in accordance with the statutory procedures set out in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017¹ ('the EIA Regulations').
- 1.3 The detailed planning application for the Proposed Development submitted to the RBKC in June 2018, which was the subject of the June 2018 ES, was for the:
- 'Comprehensive redevelopment and erection of a part 30, part 22 and part 7 storey building comprising hotel bedrooms and serviced apartments (Class C1) with ancillary bar, restaurants, conferencing and dining areas, leisure facilities and back of house areas; residential accommodation (Class C3); with associated basement, energy centre, plant, car parking, cycle parking, refuse stores, servicing areas; associated highway works and creation of new publicly accessible open space with associated hard and soft landscaping.'*
- 1.4 Figure 1.1 presents the Proposed Development assessed for the June 2018 ES.
- 1.5 On 25th October 2018, at the RBKC October Planning Committee, the RBKC resolved to refuse planning permission for the Proposed Development.
- 1.6 On the 23rd April 2019, the Mayor of London directed the RBKC (under the powers of Section 2A of the Town & Country Planning Act (as amended)²) that he would act as the local planning authority for determining this planning application, and thereby 'calling in' the planning application. The letter from the Mayor of London to the RBKC stipulated that:
- the development was of such a nature and scale that it would have a significant impact on the implementation of the local plan;
 - the development has significant effects on more than one borough; and
 - that there were sound planning reasons for issuing a direction.
- 1.7 A number of proposed design changes (hereinafter referred to as the 'Proposed Amendments') have been made to the Proposed Development to address the reasons for refusal.

SCOPE OF PROPOSED AMENDMENTS

- 1.8 The Proposed Amendments now sought for approval can be summarised as follows:
- Increase of residential units by 16, from 46 to 62 units;
 - All residential units have become affordable i.e. social rented, therefore a total of 62 affordable units are now proposed;
 - An additional two storeys on top of the podium to accommodate the additional residential units;
 - Internal reconfigurations to the residential dwellings;
 - The residential garden and terrace previously on level 7 has moved up by two storeys, now being located on level 9. This area has been amended to include an increase in playspace to a total of 530m² playspace now provided;
 - The bay windows on the southern-most façade of the podium has been expanded out by 750mm;
 - A number of balconies have been proposed on the podium's southern façade and set-back roof terraces at the upper levels along the podium's south western edges;

- Wind mitigation measures tested as part of the June 2018 ES have been fully integrated into the Proposed Amendments;
 - The ground floor residential lobbies have been consolidated into one entrance space and the cycle store has increased in size; and
 - The bike store and refuse store in the basement level B1 have been amended, with the separate refuse stores being consolidated into a single large space to accommodate three additional bins, with the bike stores also increasing in size so that 34 additional cycle parking spaces are accommodated across all residential bike stores. No further amendments to the basements are proposed.
- 1.9 These amendments are all predominantly focused around increasing the number of residential units proposed, and the provision of all units being affordable rent, to address the draft reasons for refusal. When these Proposed Amendments are considered in line with the Proposed Development, it results in the new 'Amended Proposed Development', shown in Figure 1.2.

Figure 1.1 Original Scheme and Podium



- 1.10 As summarised above the area required for children's play, refuse storage and cycle parking have all been slightly affected by the change to the residential quantum and so revisions to these functions have been integrated into the Amended Proposed Development.
- 1.11 The Proposed Amendments do not affect the majority of the landscaping and public realm proposals, including the size or design of Ashburn Garden Square or the wider public realm. Amendments only relate to the resident's areas to ground floor and level 9 (previously level 7) with an increase in playspace being provided.
- 1.12 Brick materiality along Courtfield Road is proposed to be replaced with stone cladding to remain in-keeping with the wider scheme aesthetic.
- 1.13 The updated areas of the Amended Proposed Development are provided in Table 1.1 below, side by side with the June 2018 areas, while Table 1.2 shows the breakdown of the amended residential units and tenure.

¹ Statutory Instruments, 2017, No. 571, Town and Country Planning (Environmental Impact Assessment) Regulations 2017

² The Stationary Office. Town and Country Planning Act 1990. TSO.

Table 1.1 Amended Proposed Land Uses and Amount of Development

Land Use (Use Class)	GEA (m ²)		GIA (m ²)	
	June 2018 Proposed Development	Amended Proposed Development	June 2018 Proposed Development	Amended Proposed Development
Hotel Accommodation (C1)	21, 531	(no change)	20,282	(no change)
Serviced Apartments Accommodation (C1)	13,026	(no change)	12,329	(no change)
Hotel Ancillary Spaces (C1)	40,239	40,250	38,764	(no change)
Residential Accommodation (C3)	4,092	5,282	3,947	5,171
Residential Ancillary Spaces (C3)	2,088	2,346	2,006	2,264

Table 1.2 Amended Number of Units by Residential Tenure

Tenure	Total Unit no.	% of total residential area
Private	0	0%
Affordable	62	100%
Total	62	100%

- 1.14 There is now a total of 62 affordable units as part of the Amended Proposed Development, with a breakdown of:
- 6 - 1 Bed Studio apartments;
 - 19 - 1 Bed (2 people) apartments;
 - 26 - 2 Bed (4 people) apartments; and
 - 11 - 3 Bed (4-6 people) apartments.

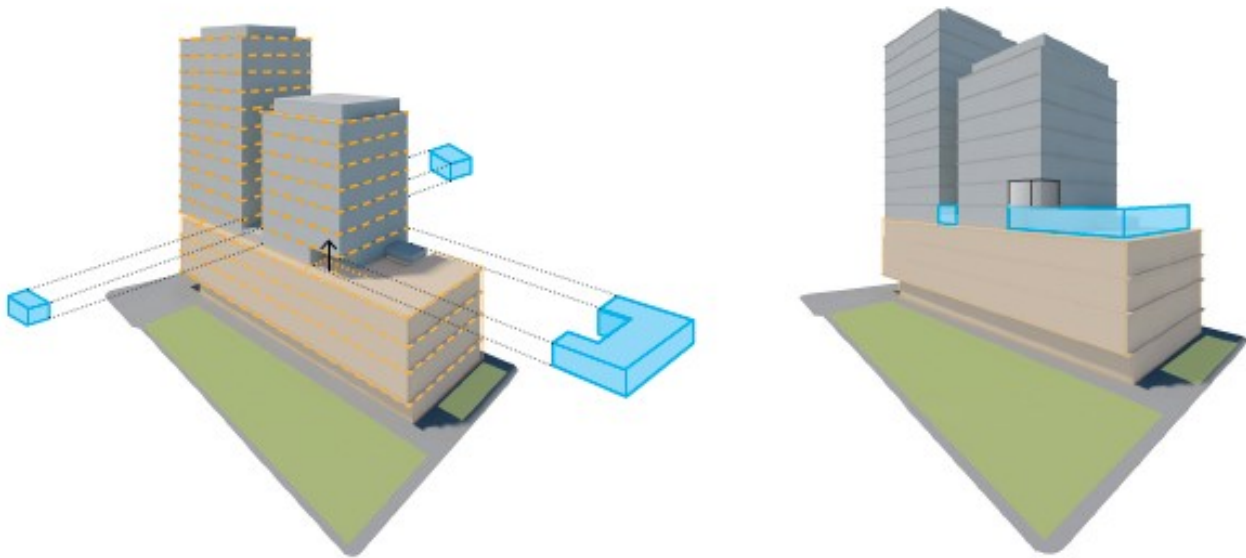
Figure 1.2 Amended Proposed Development



DESIGN EVOLUTION OF THE AMENDMENTS

- 1.15 As discussed above the key changes are all predominantly focused around increasing the number of residential units proposed, and the provision of all units being affordable rent.
- 1.16 The design of the additional 16 apartments was extensively considered with two more floors of eight apartments each above the proposed location of the residential accommodation at the Courtfield Road end of the podium deemed the most appropriate approach in design terms.
- 1.17 The principle behind the proposed amendment to the massing is not to raise the level of the podium but to set the additional two storeys above it in alignment with the towers so that the additional floors become a part of the tower components. This would maintain the height of the podium which respects the height of the neighbouring terrace's roof lines. The set back of the additional massing minimises the apparent height of the additional storeys and reduces impacts upon surrounding existing daylight and sunlight receptors.
- 1.18 To complete the additional massing the two towers have been joined at their base, incorporating the independent external plant into the main massing, as shown in Figure 1.3.

Figure 1.3 Additional Residential Storeys of the Amended Proposed Development



APPROACH TO THE ES ADDENDUM

- 1.19 This ES Addendum builds on the analysis and assessments presented in the June 2018 ES to provide information necessary to assess the likely significant effects of not only the Proposed Amendments in isolation, but also the Amended Proposed Development as a whole (i.e. the complete scheme with all design changes incorporated).
- 1.20 While considering the Amended Proposed Development as a whole, the assessment presented in this ES Addendum is focused on updating the June 2018 ES to reflect the Proposed Amendments and any changes to the conclusions of the June 2018 ES that may result. All elements of the June 2018 ES not covered in the ES Addendum are considered to remain valid.
- 1.21 For ease of reading and reference, in assessing the Proposed Amendments and Amended Proposed Development, the technical chapters within this ES Addendum follow the same structure, format and chapter order presented within the June 2018 ES, with the same chapter volume and technical chapter numbers used throughout.
- 1.22 The EIA specialists who contributed to the June 2018 ES have reviewed the Proposed Amendments and Amended Proposed Development as a whole and its potential to generate any materially new or different environmental effects or changes to the conclusions of the June 2018 ES.
- 1.23 Consideration has been given to the validity of baseline data and policy updates since June 2018, as appropriate.

1.24 Where it has been considered that no material or significant changes to an assessment or the conclusions of an ES Technical Chapter would occur, a statement confirming this has been provided for the relevant assessment within this ES Addendum. The whole of the relevant June 2018 assessment has been taken into consideration within the statements of conformity, and these should be read in conjunction with the corresponding June 2018 ES Chapters. This has been undertaken for:

- ES Volume 1, Chapter 7: Traffic and Transport;
- ES Volume 1, Chapter 8: Noise and Vibration;
- ES Volume 1, Chapter 9: Air Quality; and
- ES Volume 1, Chapter 11: Wind Microclimate.

1.25 Where changes are considered to impact on the assessment and potentially affect the reported environmental effects and conclusions of the ES Chapter, a full replacement assessment and ES chapter has been undertaken for the Amended Proposed Development. This has been undertaken for:

- ES Volume 1 Chapter 6: Socio Economics; and
- ES Volume 1 Chapter 10: Daylight, Sunlight, Overshadowing and Solar Glare.

1.26 These ES Chapters supersede the relevant ES Chapters in the June 2018 ES.

1.27 The Townscape, Visual and Heritage Impact Assessment (TVHIA) presented in the June 2018 ES has been reviewed along with all Accurate Visual Representations (AVRs) of the Proposed Development. Where it has been considered that the Proposed Amendments would be potentially visible, updated AVRs have been undertaken, with the addition of updated wirelines and renders of the Amendment Proposed Development as a whole where relevant, and presented in the form of a TVHIA Addendum (ES Addendum Volume 2, TVHIA Addendum).

1.28 In addition to a review of Volumes 1 and 2 of the June 2018 ES, the Technical Appendices (Volume 3) have also been taken into consideration, and where relevant appendices have been updated in line with the Proposed Amendments.

1.29 A chapter providing an overview of the conclusions of the ES Addendum has been provided, and includes updates to Chapter 12 Effect Interactions, Chapter 13: Likely Significant Effects, and Chapter 14: Mitigation & Monitoring Schedule of the June 2018 ES where relevant.

1.30 The ES Addendum therefore comprises:

ES Addendum Volume 1: ES Addendum Main Report:

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ES Addendum Volume 2: Townscape, Visual and Heritage Impact Assessment Addendum (TVHIAA)

ES Addendum Volume 3: ES Addendum Technical Appendices

Appendix Introduction, Proposed Design Amendments and ES Addendum Approach

- Annex 1 Greenhouse Gas Emissions (Replacement Assessment)

Appendix Socio Economics (Replacement Appendix)

- Annex 1: Planning Policy

Appendix Traffic and Transport (Replacement Appendix)

- Annex 1 Transport Assessment (Replacement Assessment)

Appendix Daylight, Sunlight, Overshadowing and Solar Glare (Replacement Appendix)

- Annex 1: Legislative and Planning Policy Context;
- Annex 2: Drawings of the existing and proposed situations;
- Annex 3: Daylight and sunlight analysis results for surrounding residential properties;
- Annex 4: Sun on Ground and Transient overshadowing analysis results for surrounding areas of amenity space;
- Annex 5: Solar Glare analysis results; and
- Annex 6: Daylight and Sunlight amenity within the proposed residential accommodation and shadow upon proposed areas of amenity space.

Non-Technical Summary

1.31 A separate document is presented, referred to as the Non-Technical Summary (NTS) and which provides a concise summary of the ES Addendum written in non-technical language. The NTS presents a summary of the Proposed Amendments and the likely significant environmental effects.

Planning Context

1.32 The ES Addendum considers relevant legislation and relevant national, regional and local planning policy guidance and consider any updates to planning policy since the June 2018 ES.

1.33 Whilst the June 2018 ES considered the Draft Revised NPPF³, this has now been published⁴, in addition a revised version of the NPPF has been published in February 2019⁵ and the ES Addendum will take account of the 2019 updated NPPF which sets out the Government's economic, environmental and social planning policies for England. The policies contained within the NPPF articulate the Government's vision of sustainable development, which are intended to be interpreted at a local level, to meet the requirements of local aspirations.

Climate Change

1.34 Since the 2018 June ES, the Met Office have published new and updated future climate projections. The new data, Met Office UKCP18 Projections, consider the climate effects arising from a series of 'Representative Concentration Pathways' (RCP) emissions scenarios.

1.35 In general, the predicted future climate change, and effects on developments, does not change from that presented in the June 2018 ES. There will be: a move towards warmer, wetter winters and hotter, drier summers; the probability of wet summers reduces only slightly; trends indicate drier summers, with reductions in rainfall largest in the south of England; cloud cover is expected to reduce slightly; and any increases in wind speeds are modest with a slight increase in likelihood of storms.

1.36 There is no significant change to the climate change predictions presented in the June 2018 ES from the new UKCP18 data and therefore the climate change assessments undertaken for the June 2018 ES remain valid.

Cumulative Schemes

1.37 No new or additional cumulative schemes within the thresholds presented in the June 2018 ES have come forward and therefore no additional cumulative schemes have been considered within this ES Addendum.

³ DCLG, 2018; 'Draft Revised National Planning Policy Framework, March 2018

⁴ DCLG, 2018; National Planning Policy Framework, 2018.

⁵ DCLG, 2019; National Planning Policy Framework, 2019.

ES ADDENDUM AVAILABILITY AND COMMENTS

- 1.38 The ES Addendum is available for viewing by the public at the GLA, City Hall and is viewable online at the GLA's Planning Application Website.
- 1.39 Comments on the Planning Application should be forwarded to the GLA at the following address:
Greater London Authority
City Hall, The Queen's Walk
London, SE1 2AA
- 1.40 Electronic Copies of the NTS are available free of charge. To request a copy please contact:
Trium Environmental Consulting LLP
69-85 Tabernacle Street
London, EC2A 4BD

Chapter 6: Socio-Economics (Replacement Chapter)

TOPIC	SOCIO-ECONOMICS
AUTHOR	Quod
SUPPORTING APPENDIX	ES Addendum Volume 3: Appendix: Socio-Economics Annex 1: Planning Policy Context
KEY CONSIDERATIONS	This chapter presents an assessment of the socio-economic effects of the Amended Proposed Development. In particular, this chapter presents the result of the assessment of the effects related to net employment generation (during construction and operation), loss of existing employment, housing delivery, new residential population (i.e. demand for social infrastructure (including health, education, open space, and playspace)) and indirect economic benefits.
KEY LEGISLATION	There is no legislation of relevance to socio-economics.
KEY NATIONAL PLANNING POLICY	<ul style="list-style-type: none"> The National Planning Policy Framework (NPPF) (2019)¹ Planning Practice Guidance (Live Document)²
KEY REGIONAL PLANNING POLICY	<ul style="list-style-type: none"> The London Plan (2016)³ The New Draft London Plan 2018⁴ London Housing Strategy (2014)⁵ Draft Housing Strategy (2017)⁶
KEY LOCAL PLANNING POLICY	<ul style="list-style-type: none"> Royal Borough of Kensington and Chelsea (RBKC) Consolidated Local Plan (2015)⁷ RBKC Local Plan Partial Review (Regulation 22) (2017)⁸ RBKC Unitary Development Plan Extant Policies (2007)⁹ RBKC Planning Obligations Supplementary Planning Document (SPD) (2010)¹⁰
OTHER RELEVANT STANDARDS & GUIDANCE	<ul style="list-style-type: none"> Greater London Authority (GLA) Housing Supplementary Planning Guidance (SPG) (2016)¹¹ GLA Social Infrastructure SPG (2015)¹² GLA Shaping Neighbourhoods: Play and Informal Recreation SPG (2012)¹³
CONSULTATION	The EIA Scoping Opinion is presented in ES Volume 3 Appendix: EIA Methodology Annex 1 of the June 2018 ES which confirmed acceptability of the scope and method proposed for the socio-economic assessment.

6.1 This ES Chapter provides a complete updated assessment of the socio-economic effects of the Amended Proposed Development and the corresponding proposed design amendments. Further details on the Proposed Amendments are provided in ES Addendum Chapter 1 Introduction, Proposed Design Amendments and ES Addendum Approach.

ASSESSMENT METHODOLOGY

Defining the Baseline

Current Baseline Conditions

6.2 The baseline assessment for this ES chapter considers the current social and economic conditions at different spatial levels (i.e. study area) as defined below:

- Site level – the site (where data is available at this spatial level);
- Local Area – Courtfield ward;
- Borough – RBKC; and
- Regional – London.

¹ Ministry of Housing, Communities and Local Government (MHCLG) (2019) National Planning Policy Framework

² MHCLG (Live Document) Planning Practice Guidance [online]. Available: <http://planningguidance.communities.gov.uk/>

³ GLA (2016) London Plan – The Spatial Development Strategy for London Consolidated with Alterations since 2011.

⁴ GLA (2018) The New Draft London Plan with minor alterations from the Mayor, 2018.

⁵ GLA (2014) London Housing Strategy, April 2014.

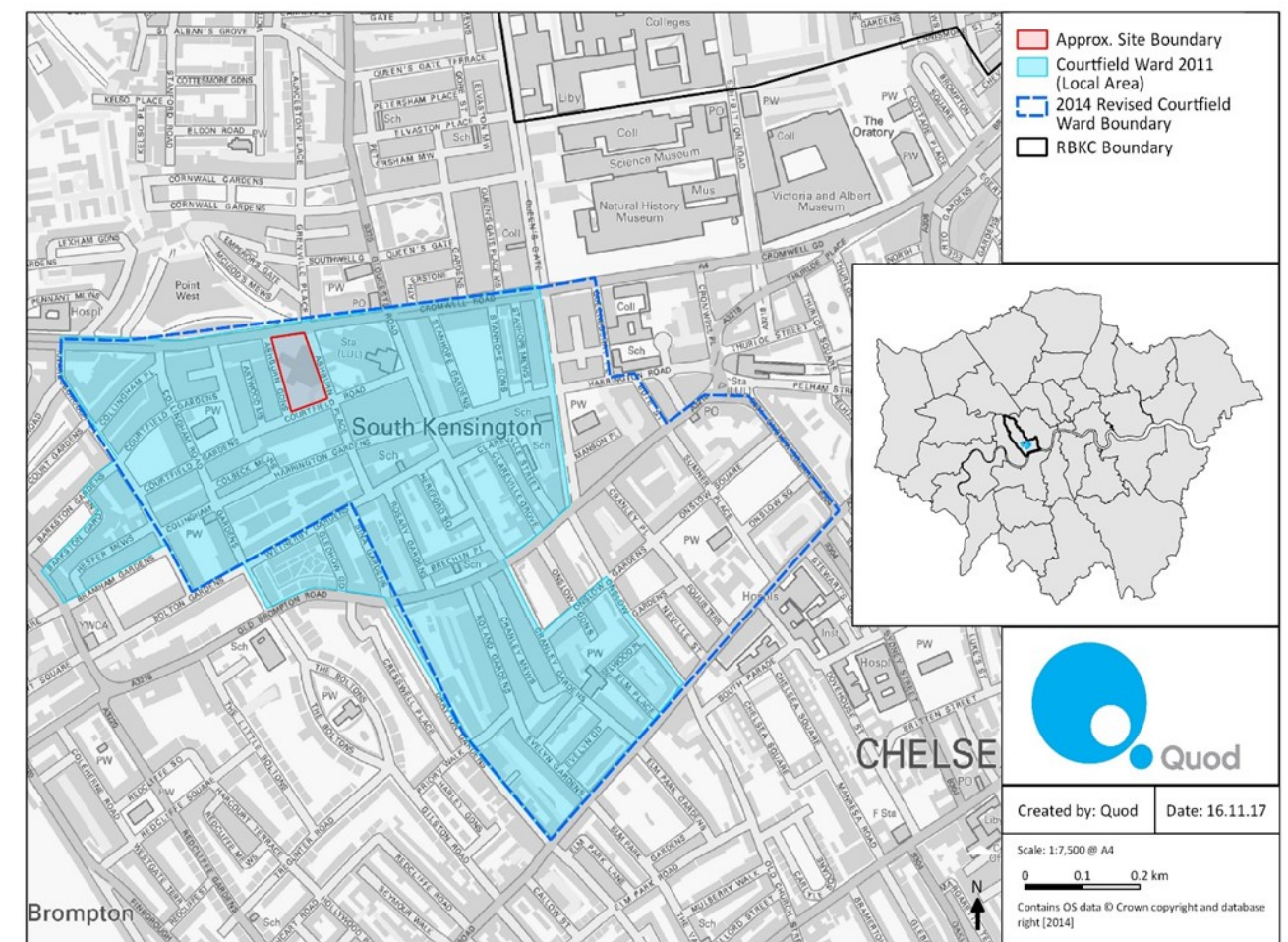
⁶ GLA (2017) London Housing Strategy, Draft for Public Consultation, September 2017.

⁷ RBKC (2015) Consolidated Local Plan.

⁸ RBKC (2017) Local Plan Partial Review (Regulation 22), May 2017.

6.3 The RBKC redefined its ward boundaries in 2014, as shown in the RBKC's ward boundaries map¹⁴ and in Figure 6.1. Census 2011 data is not available for the redefined Courtfield ward area, therefore the boundary of Courtfield ward as it existed prior to 2014 has been used as the Local Area for the purpose of this assessment.

Figure 6.1 Local and Borough Context



6.4 The potential effects on existing socio-economic conditions varies by spatial scale. This is due to the sensitivity of conditions. A table outlining the spatial scales where the effect is most sensitive of each socio-economic condition assessed is provided in Table 6.1 below. However, the assessment considers the potential socio-economic effects at all spatial scales.

Table 6.1 Spatial Sensitivity of Socio-Economic Conditions

Condition	Spatial Level
Employment	Local, Borough, Regional
Housing	Local, Borough, Regional
Education	Local (primary), Borough (secondary)
Healthcare	Local
Open Space and Playspace	Site, Local
Additional Spending	Local, Borough, Regional

⁹ RBKC (2007) Unitary Development Plan Extant Policies.

¹⁰ RBKC (2010) Planning Obligations Supplementary Planning Document.

¹¹ GLA (2016) Housing Supplementary Planning Guidance.

¹² GLA (2015) Social Infrastructure Supplementary Planning Guidance.

¹³ GLA (2012) Shaping Neighbourhoods: Play and Informal Recreation Supplementary Planning Guidance.

¹⁴ RBKC (2014) Ward Boundaries Map. Available Online: <https://www.rbkc.gov.uk/PDF/Ward%20boundaries%20map.pdf>

6.5 Baseline socio-economic conditions that are of relevance to the assessment contained within this ES chapter have been established through analysis of nationally recognised research and survey information and datasets including:

- Census data (2011)¹⁵;
- Business Register and Employment Survey (BRES) data (2017)¹⁶;
- Indices of Multiple Deprivation (IMD) (2015)¹⁷;
- Claimant Count Data (2018)¹⁸;
- Annual School Census data (2018)¹⁹;
- Published Admissions Numbers (PAN) for state-funded schools in RBKC (2018/19)²⁰;
- NHS data on local services and capacity (2018)²¹;
- Open space information from Ordnance Survey data has been reviewed alongside desk-based analysis to identify existing open space and play spaces in the area surrounding the site²².

Likely Evolution of the Baseline Conditions

6.6 The baseline of the site and surrounding area has been qualitatively considered in the context of the Amended Proposed Development not being delivered.

Impact Assessment

Demolition and Construction

Loss of Existing Employment

6.7 The number of full time equivalent (FTE) jobs currently accommodated by the site has been provided by the Applicant. An FTE is defined as the hours worked by one employee on a full-time basis.

Construction Employment

6.8 Construction related employment expected to be generated by the Amended Proposed Development is assessed using the Construction Industry Training Board (CITB) Labour Forecasting Tool²³. This tool calculates an estimated average number of FTE jobs over the duration of the construction phase based on the total floor area, duration/ start/ finish dates, location and type of construction.

6.9 Construction supply chain effects are considered in a qualitative manner.

Completed Development

Employment Creation

6.10 The number of jobs that would be generated by the hotel and supporting services uses (restaurant/bar; conference/function space; and gym/spa) and the serviced apartments have been calculated by applying the standard job density ratios based on the Homes and Communities Agency Employment Density Guide (2015)²⁴. For the new hotel, two employment density calculations have been undertaken as the future occupier is unknown at this stage. A lower range of one employee per two beds for upscale hotels and an upper range of one employee per one bed for luxury hotels has been applied. For employment associated with the serviced apartments a density of one employee per five units has been applied.

Housing Delivery and Population

6.11 Estimates of the population expected to be living in the Amended Proposed Development have been modelled based on the proposed housing quantum and mix, including unit size, type and tenure.

6.12 The total population expected to be living in the Amended Proposed Development has been calculated using the Quod population model (hereafter “the Quod Model”) which is based on Census data¹⁵ and CORE Lettings Data²⁵. This model takes into account various industry standard data sources:

- The Wandsworth New Housing Survey²⁶ (This is a survey which has been widely adopted across London, including by the GLA, for assessment of household occupation);
- London CORE Lettings Data²⁵;
- Census Moving Groups¹⁵; and
- the population gain factor from the Healthy Urban Development Unit²⁷.

6.13 The child yield used to assess demand for school places has been estimated using the RBKC’s child yield methodology as set out in their Planning Obligations SPD (2010)¹⁰ (hereafter “the RBKC Model”).

6.14 The child yield used to assess the quantum of playspace required for the Amended Proposed Development has been estimated using the GLA Child Yield Methodology, 2012²⁸ (hereafter “the GLA Model”).

Demand for Social Infrastructure

6.15 This chapter includes an audit of existing community facilities (set out in the *Baseline Conditions* section) and an assessment of the potential level of demand for community facilities resulting from the Amended Proposed Development. This is based on a range of data sources, including:

- State-funded education facilities: Baseline has been established using information from RBKC Schools Admissions documents (RBKC, 2018/19), and School Census data (2018). The RBKC Model has been used to calculate the number of children expected to live in the Amended Proposed Development;
- Primary healthcare facilities (General Practitioner (GP) surgeries, pharmacies, dentists and opticians): The baseline has been established using NHS data (NHS Choice, 2018). The capacity of local GPs has been assessed using the Health Urban Development Unit (HUDU)²⁹ benchmark of 1,800 registered patients per NHS GP. The local provision of dentists has been qualitatively considered within this assessment. The capacity of dental practices cannot be assessed in the same manner as GPs as people can choose to attend a dental practice at their own discretion and are not limited to being close to their home. By contrast, in the case of NHS GPs, residents must register with a GP within the catchment area of where they live; and
- Open space and playspace: The assessment of the Amended Proposed Development’s resident population on existing provision of children’s playspace has been assessed based on the number of children likely to be living in the Amended Proposed Development. This assessment takes into account the level of provision that would be made on-site and existing provision in line with the GLA’s SPG on Play and Informal Recreation³⁰.

Additional Spending

6.16 An assessment of the level of spending likely to occur in the Local Area once the Amended Proposed Development is complete, and the impact of the additional expenditure on the local economy, has also been carried out. This includes an assessment of:

¹⁵ Office for National Statistics (2011) Census.

¹⁶ Office for National Statistics (2017) Business Register and Employment Survey.

¹⁷ DCLG (2015) Indices of Multiple Deprivation.

¹⁸ Office for National Statistics (2018) Claimant Count.

¹⁹ Department for Education (2018) Schools, Pupils and their Characteristics. (Annual School Census Data, 2018).

²⁰ RBKC (2018) Your choice for primary education and your choice of secondary education (2018/19).

²¹ National Health Service (2018) NHS Choices. Available Online: <https://www.nhs.uk/service-search>

²² Ordnance Survey, Live Data Source. OS Open Greenspace. Available Online: https://www.ordnancesurvey.co.uk/business-and-government/products/os-open-greenspace.html?utm_source=Greenspace%2520OS%2520openspace%2520-%2520%2520Fopengreenspace&utm_campaign=Greenspace%20

²³ Construction Industry Training Board (CITB) (2017) Labour Forecasting Tool (Accessed online by subscription: www.labourforecastingtool.com)

²⁴ Homes and Communities Agency (2015) Employment Density Guide.

²⁵ DCLG. (2007-2012) Social housing lettings in England (CORE Lettings Data).

²⁶ London Borough of Wandsworth (2007) New Housing Survey 2007.

²⁷ Healthy Urban Development Unit (2017) HUDU Planning Contributions Model 2017: Guidance Notes, Page 20.

²⁸ GLA (2012) Population Yield Calculator. Available Online: <https://data.london.gov.uk/dataset/population-yield-calculator>

²⁹ Healthy Urban Development Unit (2009) HUDU Model.

³⁰ GLA (2012) Shaping Neighbourhoods: Play and Informal Recreation Supplementary Planning Guidance.

- Household expenditure generated by new households buying goods and services locally based on the average household expenditure of £280 per week derived from the ONS Family Spending Survey, 2018³¹;
- Visitor expenditure based on London and Partners data on tourism and spending in London (£149 average spend per day)³²; and
- Expenditure by employees in the Local Area based on survey information carried out by research agency Loudhouse for Visa Europe which identifies an average spend per day of £10.59 per employee in the UK³³.

Assumptions

- 6.17** There are no technical significance criteria relating to the assessment of socio-economic effects. Therefore, the assessment is made against a benchmark of current socio-economic baseline conditions prevailing at and within the study area of the site.
- 6.18** As with any dataset, baseline data will change over time. The most recent published data sources have been used in this assessment; however, it should be noted that in some instances this data may not be up-to-date. For example, the latest Census data available is from 2011. This is an unavoidable limitation that is not expected to affect the magnitude of effects.
- 6.19** The occupier of the hotel is not yet known; however, the hotel is expected to be at least 4-5*. In calculating employment generated by the hotel and supporting services, a minimum and maximum job density has been applied based on the lower job density of one employees per two beds for upscale hotels and one employee per one bed for luxury hotels providing a potential range in employment creation. The actual employment yield is likely to fall somewhere between this range.
- 6.20** For calculating visitor expenditure, it is assumed that the hotel rooms and serviced apartments are occupied at a rate of 82%³². It is assumed that the hotel rooms will accommodate an average of 1.5 persons per room, serviced apartment studio units will accommodate one person per unit and one bed, two bed and penthouse serviced apartment units will accommodate an average of 1.5 persons per unit. A 50/50 split between business and holiday visits, and domestic and overseas visits has been assumed for average spend per day (£149).

Defining Significance

- 6.21** There is no published or formalised technical guidance or criteria available relating to the assessment of socio-economic effects. Professional judgement and experience have therefore been drawn upon to assess the significance of the Amended Proposed Development's socio-economic effects.

Receptor Sensitivity

- 6.22** Receptor sensitivity is based on a scale of:
- High: local population and economy, and social infrastructure with no surplus capacity;
 - Medium: borough and regional population and economy, and social infrastructure operating close to capacity or with limited surplus capacity;
 - Low: national population and economy, and social infrastructure with surplus capacity; and
 - Negligible: no receptor sensitivity.

Magnitude of Impact

- 6.23** The magnitude of impact is based on a scale of:
- High: substantial change to one or more of the following receptors: employment levels, the local economy, population and/or demand for social infrastructure;
 - Medium: noticeable change to one or more of the following receptors: employment levels, the local economy, population and/or demand for social infrastructure;
 - Low: hardly perceptible change to one or more of the following receptors: employment levels, the local economy, population and/or demand for social infrastructure; and

- Negligible: no perceptible change to one or more of the following receptors: employment levels, the local economy, population and/or demand for social infrastructure.

Effect Significance

- 6.24** The significance of effects has been determined by reference to the following criteria:

- Whether the effect is direct/indirect and temporary/permanent;
- The geographic extent/context of the potential effect: site, local, borough, regional;
- The nature of the effect, based on the following:
 - Adverse: a negative effect to a socio-economic resource or receptor;
 - Neutral: an effect that on balance, is neither beneficial nor adverse to a socio-economic resource or receptor; and
 - Beneficial: an advantageous effect to a socio-economic resource or receptor.
- The scale of the effect, based on a scale of:
 - Negligible: effects beneath levels of perception;
 - Minor: slight or highly localised effects;
 - Moderate: limited effects; and
 - Major: considerable effect.

- 6.25** Categorising/determining the scale and so significance of socio-economic effects has been based on existing best practice guidance where available; where not available professional judgement has been applied, taking into account the receptor sensitivity and magnitude of impact (as set out in Table 6.2 below), and duration, extent and context of the effect. This requires some flexibility as set out in Table 6.2 to allow for consideration of the magnitude of the effects with respect to the sensitivity of the receptor.

Table 6.2 Matrix to Determine the Scale of Effect

Receptor Sensitivity	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Major	Major/Moderate	Moderate/Minor	Negligible
Medium	Major/Moderate	Moderate/Minor	Minor/Negligible	Negligible
Low	Moderate/Minor	Minor/Negligible	Negligible	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

- 6.26** Effects have been defined as either 'significant' or 'not significant'. Significant effects would be material to the planning decision making process. Based on the above, effects of moderate and major scale may be considered significant.
- 6.27** Following identification of the significance of the potential or 'unmitigated' effects, the requirement for any mitigation to either eliminate or reduce likely significant adverse effects is identified.
- 6.28** Where mitigation measures have been identified to either eliminate or reduce likely significant adverse effects, these have been incorporated into the Amended Proposed Development, for example either through the design, or will be translated into demolition and construction commitments; or operational or managerial standards / procedures.
- 6.29** The assessment then highlights whether the 'residual' effects remain significant following the implementation of suitable mitigation measures and, classifies these in accordance with the terminology defined above.

³¹ Office for National Statistics (2018) Household Expenditure Survey 2015-2017.

³² London and Partners (2016) Tourism Report 2015-2016.

³³ Visa Europe (2014) UK Working Day Spending Report.

BASELINE CONDITIONS

- 6.30** This section summarises the characteristics of the existing socio-economic conditions of the site and within the study area. These conditions are considered in the context of wider local, borough, regional and national socio-economic climates. The information provides the baseline against which the potential significant effects of the Amended Proposed Development have been assessed.

Current Baseline Conditions

- 6.31** The 0.76 hectare (ha) site is located in Courtfield ward of the RBKC. The site is bound by Cromwell Road to the north, Ashburn Place to the east, Courtfield Road to the south and Ashburn Gardens to the west.
- 6.32** The site is currently occupied by the Kensington Forum Holiday Inn hotel and associated uses include a bar and restaurant, with open space to the south of the site for use by hotel guests and the general public. The site accommodates 200 FTE jobs.
- 6.33** The surrounding area supports a varied mix of uses including residential and commercial units. The Gloucester Road (south) neighbourhood centre is located approximately 100m east of the site and the Gloucester Road (north) neighbourhood centre is located approximately 50m north-west of the site.

Demographic Baseline

- 6.34** Data from the 2011 census indicates a total resident population of 8,930 within the Local Area, with 158,650 residents in the RBKC, and 8,173,940 in London overall.
- 6.35** The total population of the Local Area declined between 2001 and 2011 by 7%, compared to the population remaining steady within the RBKC (0% growth) and a population increase of 14% across London as a whole over the same period. This equates to a total decrease of 650 people in the Local Area over the 10 year period; approximately half of which were age 25 to 29.
- 6.36** According to GLA household-based projections, population at the Local Area level is projected to continue to decline (by approximately 6%) over the 20 years period 2011-2031. By contrast, population is projected to increase in the RBKC and London as a whole, by 7% and 20% by 2031 respectively.
- 6.37** The age profile of residents within the Local Area reveals a higher proportion of the local population (83%) are of working age (16-74) compared to RBKC (79%) and London (75%).
- 6.38** BAME groups (Black, Asian and Minority Ethnic) represent 25% of residents of the Local Area, 29% of residents in the RBKC, and 40% of London residents. The largest BAME group in the Local Area is Asian/Asian British (13% of Local Area residents) with residents of Chinese ethnicity accounting for approximately half of the Asian/Asian British group (44%).
- 6.39** A summary of the demographic baseline is set out in Table 6.3.

Table 6.3 Demographic Baseline Summary

Measure	Local Area	RBKC	London
Population			
Total Population	8,930	158,650	8,173,940
Population Growth 2001-2011	-7%	0%	14%
Population Projections 2011-2031	-6%	7%	20%
Age Profile			
0-15	13%	15%	20%
16-74	83%	79%	75%
75+	4%	5%	5%
Self-Identified Ethnicity			
White	75%	71%	60%
Mixed/Multiple	5%	6%	5%
Asian/Asian British	13%	10%	18%

Measure	Local Area	RBKC	London
Black/Black British	2%	7%	13%
Other	5%	7%	3%

Source: 2011 Census; 2001 Census; GLA Round Demographic Projections, 2014. Note: figures may not sum due to rounding.

Economic and Employment Baseline

- 6.40** There are 4,960 working-age residents living in the Local Area. Census data (2011) records levels of economic activity and shows working-age residents of the Local Area are less likely to be economically active (67%) than working age residents in the RBKC (69%) and London (72%). The Local Area has a large student population (53% of economically inactive residents are students compared to 29% in RBKC and 28% in London), which accounts for the higher levels of economic inactivity within the Local Area.
- 6.41** The unemployment rate in the Local Area was 4.8% at the time of the 2011 Census, lower than average rates for RBKC (6.2%) and London (7.3%).
- 6.42** More recent data is available for the proportion of residents claiming unemployment-related benefits in an area. This Claimant Count data is calculated for residents aged 16-64. However, the way benefits are paid is changing with the roll out of Universal Credit, replacing Jobseeker's Allowance (JSA); Income Support; Employment and Support Allowance; Working Tax Credit; Child Tax Credits; and Housing Benefit.
- 6.43** The RBKC began rolling out Universal Credit for households in November 2015; Universal Credit is being introduced gradually and initially only applied to single unemployed people. However, during July 2016 it started to be introduced to a wider range of people. The Claimant Count rate represents the number of residents who are claiming Universal Credit principally for the reason of being unemployed, and those still claiming JSA.
- 6.44** This is currently considered an experimental data set. The Claimant Count does not capture all unemployment in an area such as those unwilling or unable to claim JSA or Universal Credit.
- 6.45** The most recent Claimant Count data available is for October 2018 which indicates a claimant rate of 1.6% of Local Area residents, compared to 1.9% in RBKC and 2.3% in London.

Qualifications

- 6.46** The Local Area has a highly-qualified population, 2011 Census data indicates that a higher proportion of residents in the Local Area (59%) hold degree-level qualifications, compared to 53% in the RBKC and 38% in London. 4% of residents in the Local Area hold no formal qualifications, compared to 10% in the RBKC and 18% in London.

Occupation of Residents

- 6.47** Of employed, working-age residents in the Local Area, 83% work in high-skilled occupations (managerial, professional or technical positions); this is a higher rate than in the RBKC (72%) and across London as a whole (50%). By contrast, a lower proportion of working-age residents work in low-skilled occupations (sales, process and elementary positions) (6%) compared to 11% in the RBKC and 22% in London.

Business Structure

- 6.48** There are approximately 4,750 jobs located in the Local Area. The largest sector in the Local Area is accommodation and food services, comprising 32% of the Local Area jobs compared to 13% in the RBKC and 8% in London. Education is the second largest sector in the Local Area supporting 15% of jobs compared to 6% in the RBKC and 8% in London.
- 6.49** Jobs within the property sector also account for a larger proportion of jobs in the Local Area (8%) when compared to the RBKC (4%) and London (2%).
- 6.50** Retail jobs are lower in the Local Area (8%) compared to the average in the RBKC (16%) but are in line with the average number of jobs across London (8%).
- 6.51** A summary of the economic baseline is presented in Table 6.4.

Table 6.4 Economic Baseline Summary

Measure	Local Area	RBKC	London
Working Age Residents			
Total Number of Working Age Residents	4,960	126,080	6,117,480
Economic Activity (residents)			
Economically Active	67%	69%	72%
Unemployed	4.8%	6.2%	7.3%
Claimant Count (residents)			
Claimant Rate	1.6	1.9	2.3
Total Claimants	105	1,980	137,045
Highest Level of Qualification (residents)			
No Formal Qualifications	4%	10%	18%
GCSEs and A Level equivalent	24%	24%	35%
Further and Higher Education	59%	53%	38%
Other Qualifications	14%	13%	10%
Occupation (residents)			
Management / Professional / Technical	83%	72%	50%
Admin / Skilled Trades / Services	11%	17%	28%
Sales / Process / Elementary	6%	11%	22%
Key Employment Sectors (jobs)			
Accommodation and Food Services	32%	13%	8%
Education	15%	6%	8%
Property	8%	4%	2%
Retail	8%	16%	8%

Source: 2011 Census; ONS Claimant Count, October 2018; Business Register and Employment Survey, 2017. Note: figures may not sum due to rounding.

Housing Baseline

- 6.52** The housing stock of the Local Area is primarily comprised of flats (88%), 54% of which are purpose built flats, 44% are converted flats and 2% are in commercial buildings. The proportion of flats is slightly higher than the average for the RBKC (83%) and significantly higher than London (52%).
- 6.53** There are 4,570 households in the Local Area. The largest tenure type in the Local Area is the private rented sector, which accounts for 48% of local households. This is a higher proportion than in the RBKC (36%) and London (25%). The proportion of owner-occupied housing in the Local Area (39%) is broadly in line with the RBKC (36%) but lower than in London (48%). The proportion of social rented housing in the Local Area (9%) is significantly lower than in RBKC (25%) and London (24%).
- 6.54** Overcrowding is lower among social rented households in the Local Area (12%) than in the RBKC (15%) and in London (17%). Overcrowding in private rented households is lower in both Local Area (7%) and the RBKC (7%) when compared to London (18%).
- 6.55** A summary of the housing baseline is presented in Table 6.5.

Table 6.5 Housing Baseline Summary

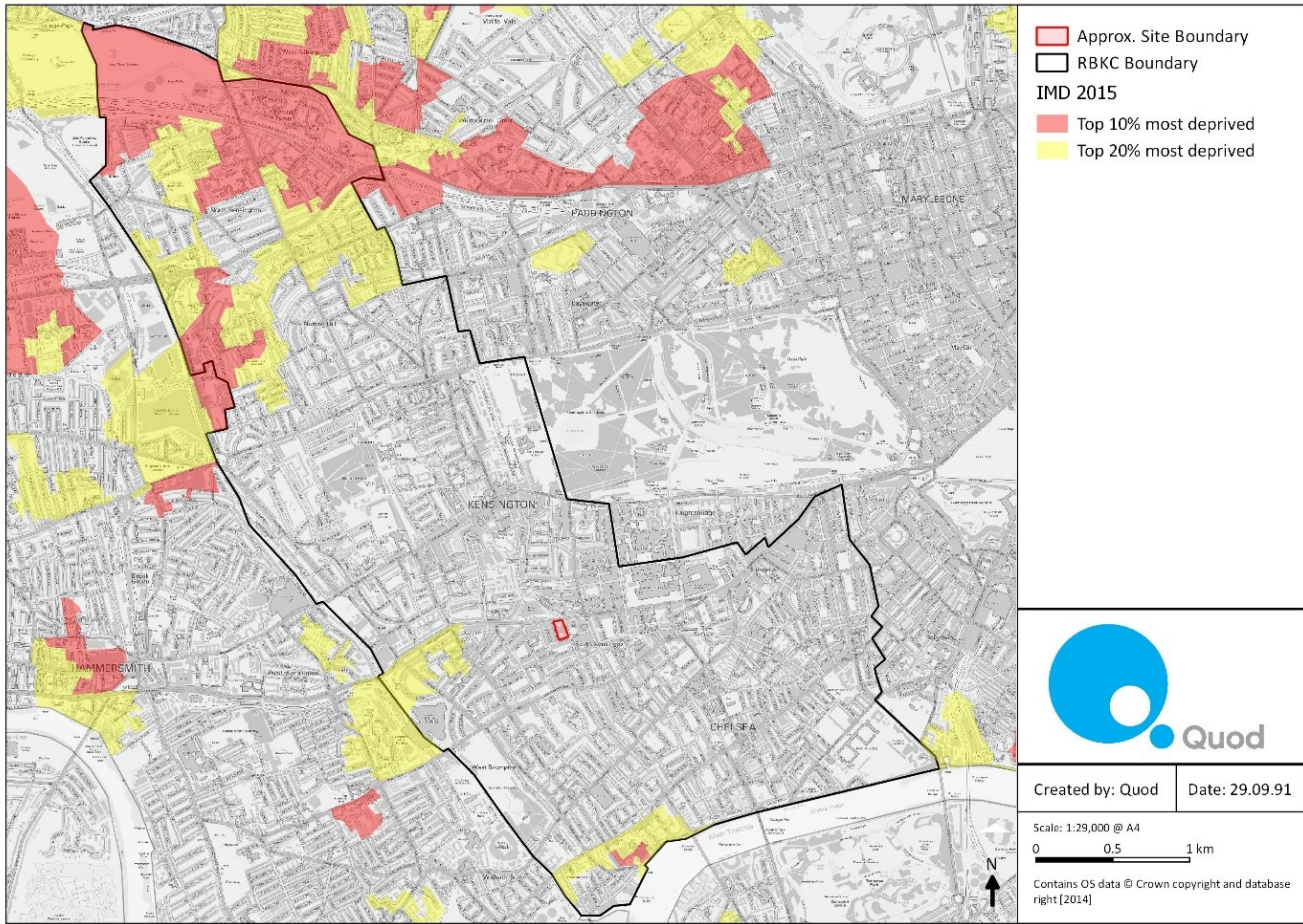
Measure	Local Area	RBKC	London
Households			
Total Number of Households	4,570	78,536	3,266,170
Accommodation Type			
House	12%	17%	48%
Purpose Built Flats	48%	52%	38%
Other Flats (conversions)	40%	31%	15%
Accommodation Tenure			
Owner-Occupied	39%	36%	48%
Social Rented	9%	25%	24%
Privately Rented	48%	36%	25%
Shared Ownership	0%	1%	1%
Living Rent Free	4%	3%	1%
Levels of Over-Crowding (bedrooms, occupancy rating of -1 of less)			
All Tenures	7%	8%	11%
Owner-Occupied	5%	5%	5%
Privately Rented	7%	7%	18%
Social Rented	12%	15%	17%

Source: 2011 Census. Note: figures may not sum due to rounding.

Deprivation

- 6.56** The Government's Indices of Multiple Deprivation (2015) measures deprivation by combining indicators including a range of social, economic and housing factors to give a single deprivation score for each small area across England. These factors are divided among seven domains of deprivation as outlined below:
- Income Deprivation;
 - Employment Deprivation;
 - Education, Skills and Training Deprivation;
 - Health Deprivation and Disability;
 - Crime;
 - Barriers to Housing and Services; and
 - Living Environment Deprivation.
- 6.57** All areas are ranked relative to one another according to their level of deprivation. Figure 6.2 shows the relative levels of deprivation across the RBKC – areas shown in red are within the 10% most deprived in England, and those in yellow are within the 20% most deprived.
- 6.58** The site and surrounding area do not fall within a neighbourhood which is among the 20% most deprived areas in England. Deprivation within the RBKC largely falls within the north of the borough.

Figure 6.2 Indices of Multiple Deprivation, 2015



Community Infrastructure

Education Facilities

Primary Schools

- 6.59 There are six primary schools within 1km of the site. The location of these schools is shown in Figure 6.3.
- 6.60 Based on the Annual Schools Census Data (2018) and Local Education Authority (RBKC) published admissions numbers (PANs), the current combined surplus capacity of the primary schools within 1km of the site is approximately 5% (or 72 places). The two nearest schools to the site are Our Lady of Victories RC Primary School, located approximately 350m to the south-east of the site, which currently has 1 surplus place; and Bousfield Primary School, located approximately 370m to the south-west of the site, which currently has 3% surplus (equivalent to 13 places).
- 6.61 Details of the existing capacity of these primary schools are set out in Table 6.6.

Figure 6.3 Primary School Locations within 1km of the site

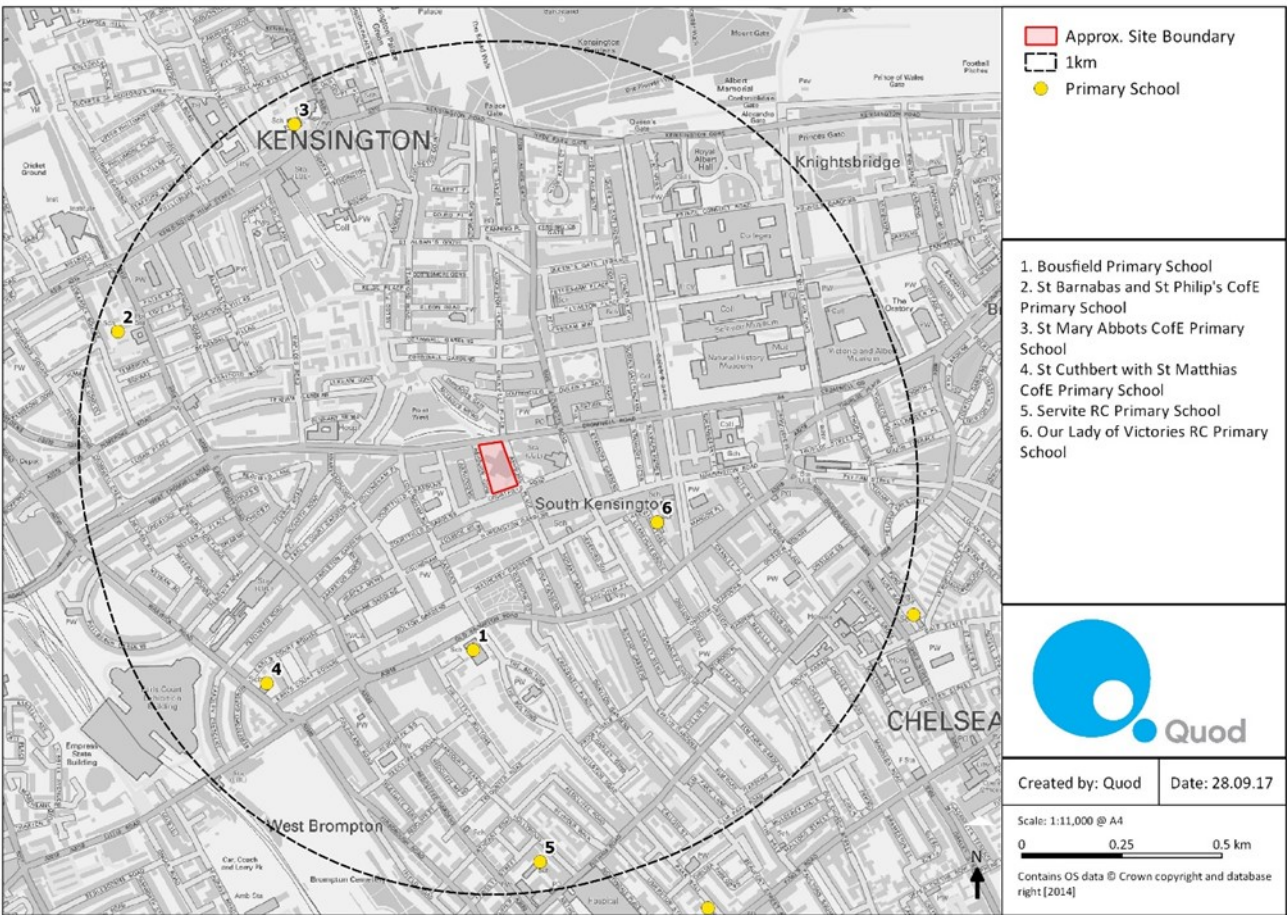


Table 6.6 Primary School Capacity

Map Ref.	School Name	Number on Roll	Capacity	Surplus Places (no.)	Surplus Capacity (%)
1	Bousfield Primary School	407	420	13	3%
2	St Barnabas and St Philip's CofE Primary School	206	210	4	2%
3	St Mary Abbots CofE Primary School	209	210	1	0%
4	St Cuthbert with St Matthias CofE Primary School	159	210	51	24%
5	Servite RC Primary School	208	210	2	1%
6	Our Lady of Victories RC Primary School	209	210	1	0%
Total		1,398	1,470	72	5%

Secondary Schools

- 6.62 Analysis of secondary provision (for academic years 7 – 11) is carried out at the Borough wide level. This approach allows for pupil preference / school specialisms to be taken into account and reflects the fact that secondary-age pupils tend to travel further than primary age pupils to attend school.
- 6.63 According to the Annual School Census Data (2018) there are six secondary schools within the RBKC, with surplus capacity of 235 places, equivalent to 5% - as detailed in Figure 6.4 and Table 6.7.

Figure 6.4 Secondary School Locations within RBKC

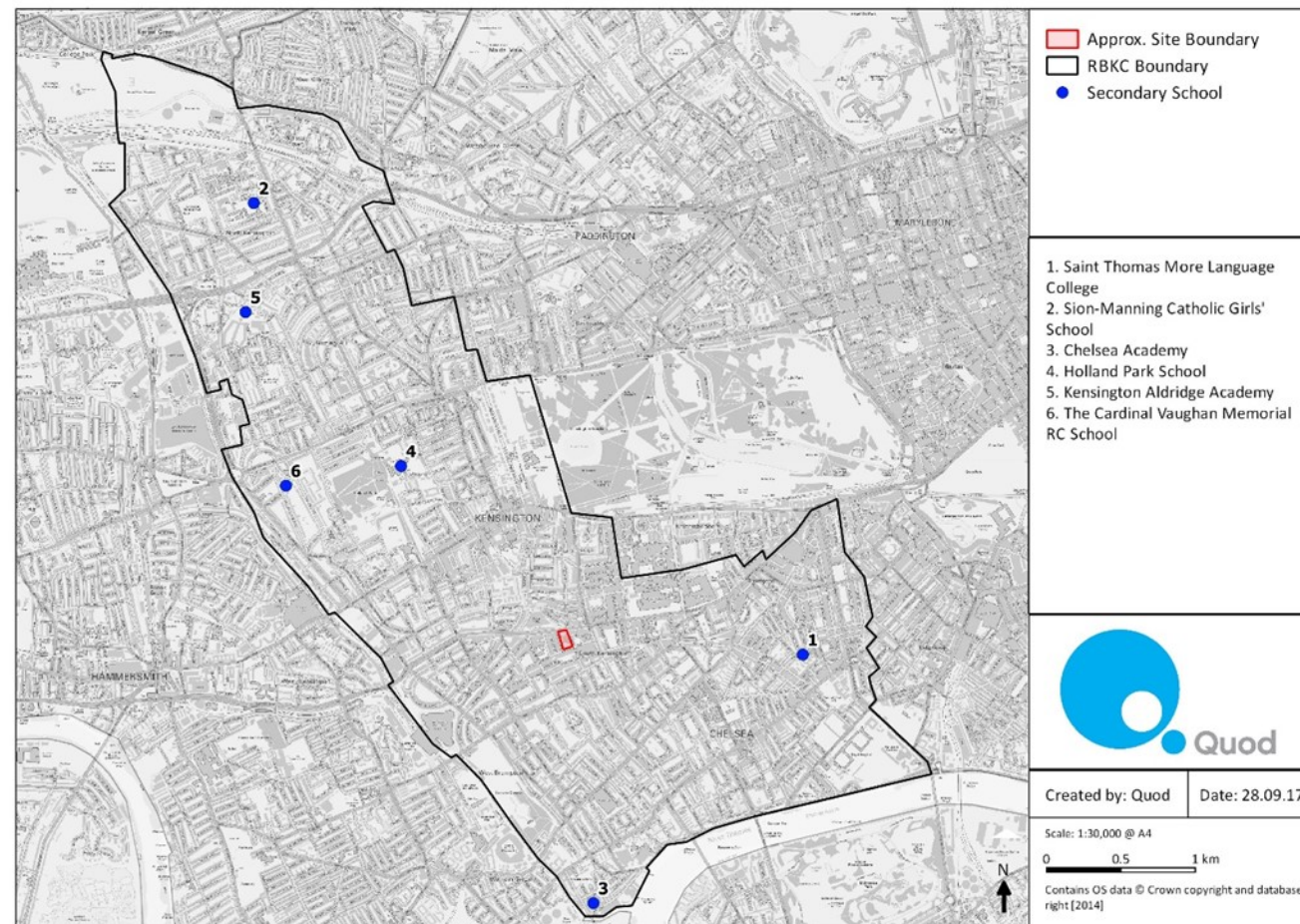


Table 6.7 Secondary School Capacity

Map Ref.	School Name	Number on Roll	Capacity	Surplus Places (no.)	Surplus Capacity (%)
1	Saint Thomas More Language College	605	600	0	0%
2	Sion-Manning Catholic Girls' School	408	600	192	32%
3	Chelsea Academy	885	900	15	2%
4	Holland Park School	1,182	1,200	18	2%
5	Kensington Aldridge Academy*	718	720	2	0%
6	The Cardinal Vaughan Memorial RC School	612	620	8	1%
Total		4,410	4,640	235	5%

* This school has recently opened – these capacities represent capacity for 2016/17 entry and are likely to be lower than the capacity of the school when fully occupied.

- 6.64** The closest secondary school to the site is Holland Park School, located approximately 1.5km to the north-west, which currently has 2% surplus (equivalent to 18 places).
- 6.65** Kensington Aldridge Academy opened in September 2014. The school reached full operational capacity in September 2018 with provision for 900 places, providing an additional 180 places to the existing capacity of 4,640 reported in Table 6.7.

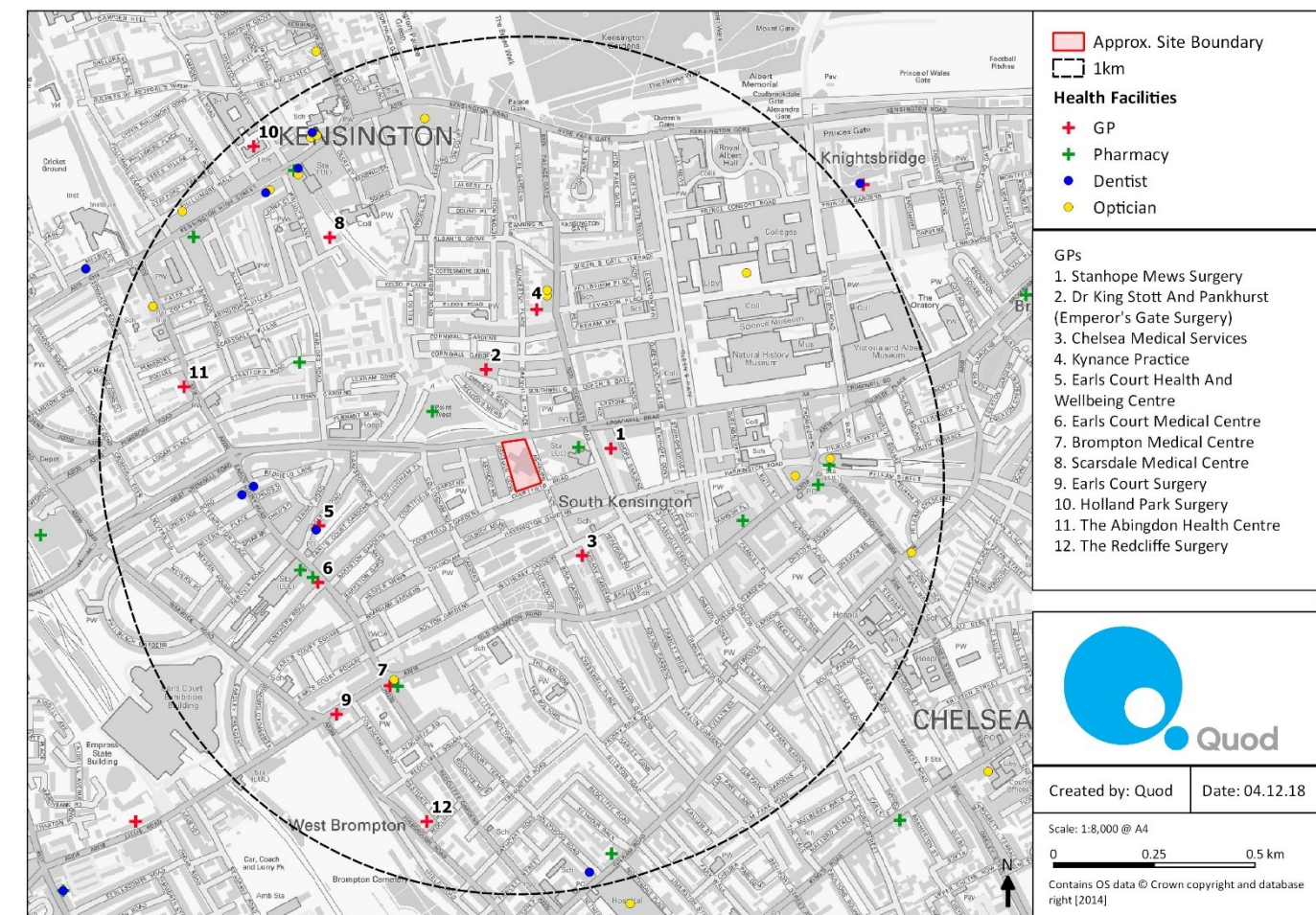
³⁴ RBKC (2017) School Organisation and Investment Strategy.

- 6.66** The RBKC's School Organisation and Investment Strategy³⁴ reports the borough has sufficient planned capacity to meet projected increased future demand for spaces. The strategy will be revised annually to address changes in need.

Healthcare Facilities

- 6.67** Existing healthcare facilities within 1km of the site are shown in Figure 6.5.

Figure 6.5 Primary Healthcare Facilities within 1km of the Site



- 6.68** There are 12 GP surgeries within approximately 1km of the site, the closest of which is Dr King, Stott and Pankurst known as Emperor's Gate Surgery, located approximately 170m north of the site. NHS data shows that the 12 GP surgeries have an average of 1,163 registered patients per GP (NHS Choices, 2018), which is lower than the Healthy Urban Development Unit (HUDU) suggested benchmark provision of 1,800 patients per GP. This indicates that there is surplus GP capacity available locally.

- 6.69** There are also 12 pharmacies, seven dentists and 14 opticians within 1km of the site.

Open Space and Playspace

- 6.70** An assessment of existing open space has been undertaken for an area of 800m from the site in line with the GLA Guidance (SPG Play and Informal Recreation, 2012).
- 6.71** Figure 6.6, sets out the open space and playspace within 800m of the site. There are eight open spaces within 800m of the site as shown in Table 6.8. The closest open space to the site is Courtfield Gardens (East) located approximately 100m west of the site.
- 6.72** The largest areas of open space within 800m of the site are Brompton Cemetery and Kensington Gardens/Hyde Park. Brompton Cemetery, located approximately 770m to the south-west of the site, provides approximately 16.5 ha of open space. The entrance to Kensington Gardens / Hyde Park falls 780m to the north of the site; the metropolitan park provides approximately 249 ha of open space.

- 6.73 There is one playground within 800m of the site, located within Redcliffe Square Gardens approximately 600m to the south-west of the site boundary. There are no public sports facilities within 800m of the site. The nearest public sports facilities are located within Holland Park, approximately 1km north-west of site, which provides a full-size grass football pitch, three cricket nets, six golf nets, four tennis courts and an outdoor gym.
- 6.74 Courtfield ward falls within an area of open space deficiency and playspace deficiency as identified in the RBKC Open Space Audit³⁵ (2004).

Figure 6.6 Open Space and Playspace within 800m of the Site

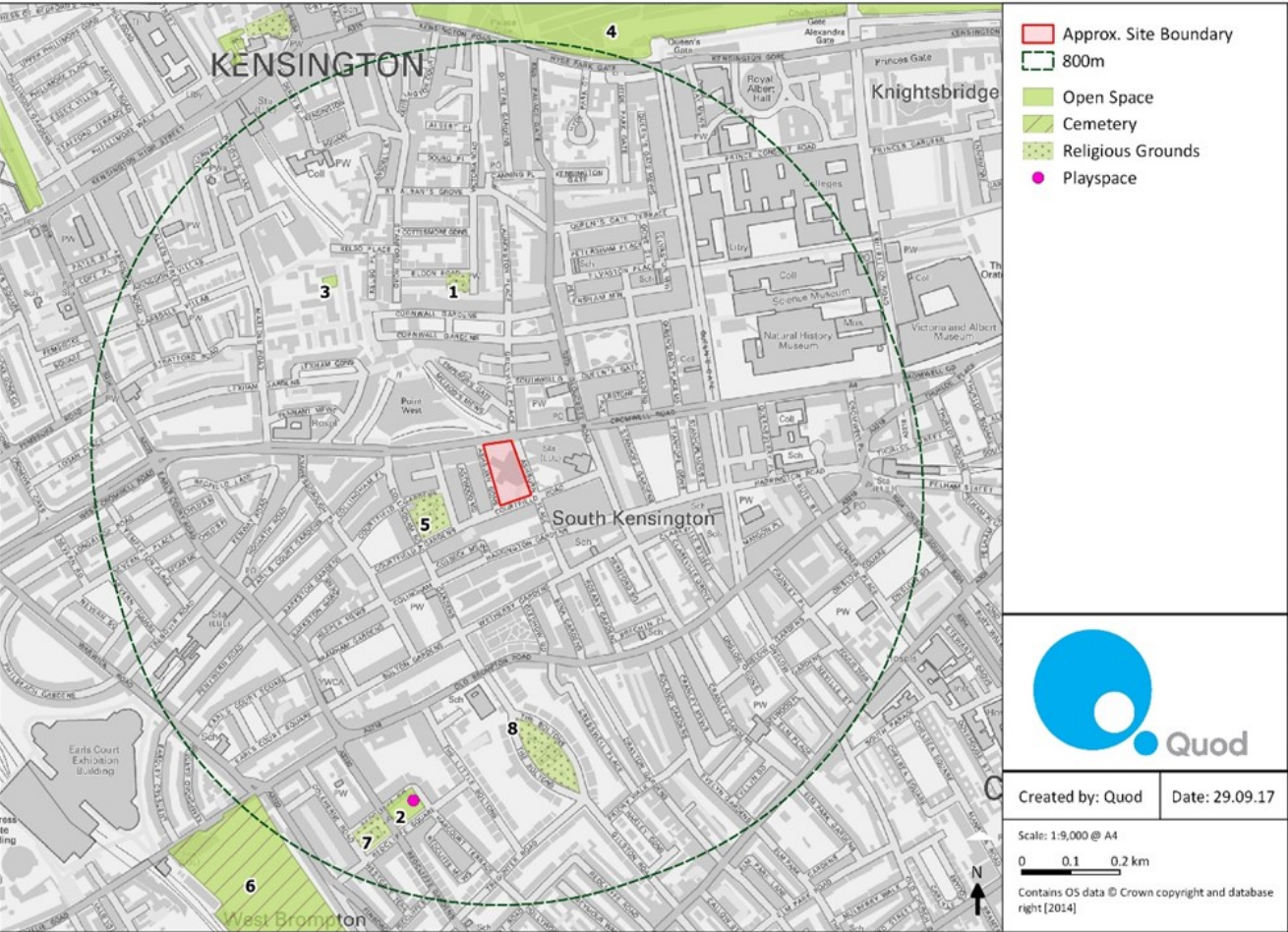


Table 6.8 Public Open Space within approximately 800m of the Site

Map Ref.	Name	Description of Facilities
1	Christ Church Kensington Churchyard	N/A
2	Redcliffe Square Gardens	Playspace
3	St Mary's Place Open Space	N/A
4	Kensington Gardens/Hyde Park	Playspace, toilets, mobility scooters, lido
5	Courtfield Gardens (East)	N/A
6	Brompton Cemetery	N/A
7	St Luke's Earls Court Church Yard	N/A
8	St Mary the Boltons Church Yard	N/A

Future Baseline Conditions

- 6.75 If the Amended Proposed Development was not delivered, the site would remain in its existing use and the opportunity to deliver net additional jobs and new homes would not be realised.
- 6.76 The future baseline of the surrounding area will evolve, with a range of uses including residential, commercial, community and leisure floorspace coming forward, particularly from consented cumulative schemes. Taking into account these schemes, the future baseline of the surrounding area would also experience increased job creation, housing provision, which could bring additional demand for social infrastructure and community facilities. Further details analysis of these changes is provided in the Cumulative Effect Assessment section below.

RECEPTORS AND RECEPTOR SENSITIVITY

- 6.77 Tables 6.9 and 6.10 below set out existing and future receptors, respectively, and their sensitivity.

Existing

Table 6.9 Existing Receptors

Receptor		Sensitivity
The construction industry and its employees		Low
Existing local residents		High
Housing need within the borough		Medium
Existing businesses and employees within the site and Local Area (local economy)		High
Local Social Infrastructure	Primary Schools	Medium
	Secondary Schools	Medium
	Healthcare	Low
	Open Space	Medium
	Playspace	High

Introduced

Table 6.10 Introduced Receptors

Receptor	Sensitivity
New employees working within the Amended Proposed Development	High
New proposed open space, playspace, public realm and amenity space	High
New residents living within the homes	High
Visitors accommodated by the hotel	High

POTENTIAL EFFECTS

Demolition and Construction

Loss of Existing Employment

- 6.78 The site currently accommodates 200 FTE jobs within the existing hotel (high sensitivity receptor). The Amended Proposed Development includes a hotel which will accommodate jobs of a similar nature within the sector at this site, therefore the only adverse effect associated with the Amended Proposed Development would be the temporary displacement of existing jobs (low magnitude of impact). This is assessed to be a temporary, minor adverse (and not significant) effect at the site level.

³⁵ RBKC, 2004. Kensington and Chelsea 2004 Open Space Audit.

Construction Employment

- 6.79** The demolition and construction stage of the Amended Proposed Development would generate employment within the construction industry. It is estimated that there would be an approximate monthly average of 604 Full Time Equivalent (FTE) jobs over the duration of the 60 month construction period.
- 6.80** Construction employment is highly mobile and therefore consideration of the construction works is best considered at the regional (i.e. London) level. In a regional context, an effect of this relatively low magnitude of impact on the construction industry (low sensitivity receptor) would be negligible (and not significant).

Construction Supply Chain

- 6.81** The Amended Proposed Development would result in indirect benefits including supply chain effects and spending by construction workers in the Local Area. As the number of construction workers on-site would fluctuate over the course of the construction programme, it is not possible to quantify the level of spending captured locally. Supply chain and procurement varies depending on the project. This level of information is not available at this time. These effects cannot be quantified but would be beneficial. The spatial context of supply chain effects could range from local to national and even international depending on the supply and sourcing of construction materials and other supplies.

Completed Development

Employment Creation

- 6.82** The Amended Proposed Development would deliver a new hotel with 749 rooms and supporting services including a restaurant/bar, conference/event space and gym/spa, and 340 serviced apartments which would all generate employment. The occupier of the hotel is not yet known, however the hotel is expected to be at least 4-5*, therefore the assessment has considered a potential range in employment creation.
- 6.83** The level of employment generated by the hotel and supporting services, and the serviced apartments has been calculated based on the application of the HCA Employment Density Guide.
- 6.84** For employment associated with the hotel, the HCA Employment Density Guide assumes one job per two hotel rooms for upscale hotels (4/5*) and one job per hotel room for luxury hotels (5*+). The job density for upscale hotels accounts for some supporting services e.g. conferencing facilities whilst the density for luxury hotels accounts for a range of services e.g. (restaurant, spa and other facilities). Based on this approach, the hotel uses would accommodate between 375 and 749 FTE jobs.
- 6.85** Serviced apartments have a lower employment density. Based on the HCA Employment Density Guidance assuming one employee per five apartments, the serviced apartments would accommodate 68 FTE jobs.
- 6.86** The Amended Proposed Development would therefore accommodate 443 to 817 (gross) FTE jobs. Taking into consideration existing jobs that would be lost, the Amended Proposed Development would deliver a net increase of between 243 and 617 FTE jobs (low magnitude of impact).
- 6.87** Each of the separate uses of commercial floorspace have also been considered separately, modelled as serviced apartments, and upscale hotel (use class C1) alongside restaurant/bar (use class A3/A4), conference/function space (use class D2), and gym/spa (use class D2) floorspace in line with HCA standard employment densities to sense check the employment yield. This approach yielded a figure midway between 443 and 817 jobs. Therefore, given the occupier is unknown, net employment creation of 243 to 617 is considered an appropriate approach to calculate the employment effect.
- 6.88** The effect of the Amended Proposed Development in relation to employment (high sensitivity at the local level) would be direct, permanent and minor beneficial (and not significant) at the local level and negligible (and not significant) at the all other spatial scales.

Housing Delivery

- 6.89** The London Plan 2016 has set the RBKC a minimum target of 7,330 new homes to be delivered by 2025. The draft London Plan 2018 sets RBKC a target of 4,880 new homes to be delivered by 2028/29. The Amended Proposed Development would make a positive contribution towards this target by delivering 62 new homes – 0.8% of the target (or 1.3% of the draft London Plan target) (low magnitude of impact at the local level). The effect upon housing provision (medium sensitivity receptor) would be direct, permanent, minor beneficial (and not significant) at the local and borough level; and negligible (and not significant) at the regional level.

Population

- 6.90** Using the Quod Model, the estimated future population of the Amended Proposed Development would be 134 residents as set out in Table 6.11.
- 6.91** This new resident population would create demand for community facilities, particularly primary healthcare and education, both of which are considered below.

Table 6.11 Amended Proposed Development Population

Variable	Number
Number of Homes	62
Total Population (Quod Model)	134
Early Years (0-3 years) (RBKC Model)	11
Primary School Children (4-10 years) (RBKC Model)	20
Secondary School Children (11-15 years) (RBKC Model)	14

Demand for Social Infrastructure

Education

- 6.92** The increased population on-site would result in increased demand for school places. A breakdown of the estimated child yield for the Amended Proposed Development is shown in Table 6.11. These figures have been calculated using the RBKC Model.
- 6.93** Table 6.11 indicates a yield of 20 primary age children and 14 secondary age children. In line with RBKC's Planning Obligations SPD¹⁰, this would equate to additional demand of 16 primary school places and three secondary school places (low magnitude of impact). As set out in the baseline section of this chapter, there is sufficient surplus capacity available within both primary and secondary schools locally (medium sensitivity receptor) to accommodate this demand. The effect would therefore be negligible (and not significant) at all spatial scales.

Healthcare

- 6.94** An additional 134 residents accommodated by the Amended Proposed Development would result in a need for the equivalent of 0.1 GPs (low magnitude of impact). There is surplus GP capacity within the Local Area (low receptor sensitivity), therefore the effect would be negligible (and not significant) at all spatial scales.

Open Space and Playspace

- 6.95** As set out in the *Baseline Conditions* section there is one playspace (high sensitivity receptor) and eight open spaces (medium sensitivity receptor) within 800m of the site.
- 6.96** Table 6.12 outlines the child yield from the Amended Proposed Development using the benchmarks outlined in the GLA's SPG on Play and Informal Recreation. This shows that a demand of 520m² of playable space would be generated by the Amended Proposed Development, this is considered a medium magnitude of impact.
- 6.97** The Amended Proposed Development includes a series of open spaces, amenity spaces, public realm and playspace. Across the site as a whole there will be 3,982m² of publicly accessible open space including a garden square (2,702m²) and 1,280m² of public realm, residents will also have access to a communal garden (200m²) and private amenity space (595m²) (medium magnitude of impact). The play strategy for the Amended Proposed Development includes 530m² of playspace (medium magnitude of impact). Table 6.12 also sets out how the playspace is broken down for each age bracket.

Table 6.12 Amended Proposed Development Child Yield, Playspace Demand and Provision

Age Profile	No. Children	Playspace Required	Amended Proposed Development Provision	Typology
Under 5 years	27	270m ²	286.20m ²	Doorstep Playable Space
5 – 11 years	16	160m ²	153.7	Local Playable Space
12 – 18 years	9	90m ²	90.1m ²	Neighbourhood Playable Space
Total	52	520m²	530m²	

6.98 The Amended Proposed Development will provide and exceed the required level of playspace according to the GLA's SPG requirements. The provision of playspace on-site will be designed to cater for a mix of ages and provide each of the typologies as outlined in the GLAs SPG.

6.99 It is therefore assessed that the effect of the Amended Proposed Development would be direct, permanent and minor beneficial (and not significant) at the site level and local level and negligible (and not significant) at all other levels.

Additional Spending

6.100 The Amended Proposed Development would generate economic benefits for the local economy through indirect spending. The 62 new homes would generate approximately £900,000 per annum in additional spending. Given the site's location within 100m of both the Gloucester Road (north) and Gloucester Road (south) neighbourhood centres, it can be expected that a significant proportion of this would be captured locally.

6.101 The spending impact of net new employees accommodated by the Amended Proposed Development would equate to £565,000 to £1.4 million per annum in the local area.

6.102 The guests accommodated by the hotel and serviced apartments could generate approximately £71 million (gross) in visitor spending annually.

6.103 The Amended Proposed Development would also provide new amenities and services including restaurant/bar, leisure and conferencing facilities available for use by new and existing residents and visitors, which would be of benefit to the local economy.

6.104 Collectively the new residents, employees and guests accommodated by the Amended Proposed Development would have a positive impact on the local economy (high sensitivity receptor) through additional spending (medium magnitude effect). The Amended Proposed Development would have an indirect, permanent moderate and beneficial effect at the local (i.e. Courtfield ward) level (significant effect); minor beneficial at the borough (i.e. RBKC) level (not significant); and a negligible effect at the regional (i.e. London) level (not significant).

MITIGATION AND RESIDUAL EFFECTS

Demolition and Construction

6.105 As the likely demolition and construction effect of the Amended Proposed Development have been largely identified as being negligible or beneficial, no mitigation would be required. Effects on loss of employment have been identified as being temporary, minor adverse at the site level. This effect is due to the disruption associated with the temporary displacement of the jobs.

6.106 All residual effects, in terms of the scale and significance will remain as those effects stated above.

Completed Development

6.107 No significant adverse effects have been identified, therefore no mitigation is required.

6.108 All residual effects, in terms of the scale and significance will remain as those effects stated above.

Summary

6.109 Table 6.13 provides a summary of the identified mitigation measures committed to, and Table 6.13 provide a tabulated summary of the outcomes of the Socio-Economic Impact Assessment of the Amended Proposed Development.

Table 6.13 Summary of Proposed Mitigation and Enhancement Measures

Potential Effects Identified	Proposed Mitigation / Enhancement Measures
Demolition and Construction	
Loss of existing employment – minor adverse at the site level	None
Construction employment – negligible at the regional level	None required
Supply chain effects and spending by workers – beneficial (not quantified)	None required
Completed Development	
Employment creation – minor beneficial at the local level; negligible at all other spatial scales	None required

Potential Effects Identified	Proposed Mitigation / Enhancement Measures
Housing delivery – minor beneficial at the local level and borough level; negligible at the regional level	None required
Demand placed on education facilities – negligible at all spatial scales	None required
Demand places on primary healthcare facilities – negligible at all spatial scales	None required
Demand for open space and playspace – minor adverse at the site and local level	Financial contribution may be secured via S106/CIL subject to local planning priorities and viability
Additional spending – moderate beneficial at the local level; minor beneficial at the borough level; negligible at the regional level	None required

Table 6.14 Summary of Residual Effects

Receptor (and Sensitivity)	Description of Residual Effect	Classification of Residual Effect*					
		Nature and Scale**	+	D	P	R	St
			-	I	T	IR	Mt
							Lt
Construction							
Existing employees on site (high)	Disruption associated with displacement of existing employees	Minor adverse at the site level	-	D	T	IR	St
Construction industry (low)	Creation of a monthly average of 604 FTE jobs (over 60 month construction programme)	Negligible	n/a	n/a	n/a	n/a	n/a
Local economy (high)	Economic benefits through supply chain effects and spending by workers	Beneficial (not quantified)	+	I	T	n/a	St
Completed Development							
Local economy and residents (high)	Provision of a new hotel and supporting services, and serviced apartments likely to accommodate 243 to 617 net employees	Minor beneficial at the local level; negligible at all other spatial scales	+	D	P	n/a	Lt
RBKC housing need/demand (medium)	Provision of 62 residential units contribution to policy targets	Minor beneficial at the local and borough level; negligible at the regional level	+	D	P	n/a	Lt
School capacity (low)	Demand placed on education facilities	Negligible	n/a	n/a	n/a	n/a	n/a
GP capacity (low)	Demand placed on primary healthcare facilities	Negligible	n/a	n/a	n/a	n/a	n/a
Local open space and playspace (medium/high)	Demand for open space and playspace on-site	Minor beneficial at the site and local level; negligible at all other spatial scales	+	D	P	n/a	Lt
Local economy (high)	Additional spending by residents, employees and hotel guests	Moderate beneficial at the local level; minor beneficial at the borough level; negligible at the regional level	+	I	P	n/a	Lt
Notes:							
* - = Adverse/ + = Beneficial; D = Direct/ I = Indirect; P = Permanent/ T = Temporary; R=Reversible/ IR= Irreversible; St- Short term/ Mt –Medium term/ Lt –Long term;							
**Nature = Beneficial or Adverse; Scale = Negligible/Minor/Moderate/Major							

LIKELY SIGNIFICANT EFFECTS

- 6.110** Likely significant effects are considered to be effects of a moderate to major scale. No significant adverse effects have been identified. Spending by new residents, employees and guests accommodated by the Amended Proposed Development are considered to be **significant moderate beneficial** effects at the local level.

CLIMATE CHANGE

- 6.111** Several environmental factors are considered to experience potential variations in the future due to climate change:
- The mean average air temperature is projected to increase;
 - Annual average precipitation is due to increase; and
 - Wind speed and total cloud cover are due to slightly decrease.
- 6.112** These changes to future climatic conditions are not considered to have a significant effect upon the sensitive receptors within the socio-economic assessment with respect to the Amended Proposed Development.
- 6.113** Therefore, potential effects related to climate change are not relevant to the assessment of socio-economic effects.

CUMULATIVE EFFECTS ASSESSMENT

- 6.114** The assessment of cumulative effects considers the cumulative schemes which fall within both RBKC and LBHF.

Demolition and Construction

- 6.115** The Amended Proposed Development, together with the cumulative schemes would be expected to generate employment opportunities during demolition and construction. In the absence of detailed or commercially sensitive information, it is not possible to make a quantitative assessment of the employment generated from the demolition and construction stages of the cumulative schemes.
- 6.116** Given the size and mobility of the regional construction labour market, it is not expected that the cumulative schemes would generate any adverse effects with respect to socio-economics. All effects are likely to be negligible or beneficial, and as such no mitigation or monitoring is required.

Completed Development

- 6.117** The cumulative schemes would bring forward a range of uses including residential, commercial, community and leisure floorspace.
- 6.118** The cumulative effects on employment have been assessed through the review of application documentation on employment generation. Where no employment figures were stated a figure based on gross floor area was used to determine additional jobs (not taking into account existing floorspace). Should the identified cumulative schemes come forward, they would generate up to 12,500 gross jobs. The addition of the Amended Proposed Development would result in a figure of approximately 13,000 jobs (high magnitude of effect).
- 6.119** Considered alongside the Amended Proposed Development, the effect of these schemes on employment (high sensitivity at the local level) would be direct, permanent, major beneficial at the local level, moderate beneficial at the borough level; and low beneficial at the regional level.
- 6.120** In terms of effects on housing provision, the cumulative schemes and the Amended Proposed Development would be expected to bring forward up to approximately 10,500 residential units within RBKC and LBHF. These proposed homes comprise over half (60%) of the combined targets for RBKC and LBHF to deliver 7,330 and 10,311 homes respectively over the 10 years 2015-2025, as set out in the London Plan (2016). This is assessed to be a high magnitude of effect. The cumulative effect upon housing provision (medium sensitivity receptor) is therefore assessed to be a direct, permanent, major beneficial effect at the local and borough levels and minor beneficial at the regional level.
- 6.121** These homes can be expected to bring more people to the local area. This could increase demand for community facilities such as schools, healthcare, open space and leisure facilities. Application documentation

for the cumulative schemes indicates that they would accommodate approximately 13,500 residents within RBKC and LBHF.

- 6.122** It is assumed that the applicants of each of the cumulative schemes have undertaken/will undertake the required assessment of the effect on demand for community facilities and should any mitigation be required, this would be agreed with RBKC or LBHF either through CIL, Section 106 contributions or through direct physical provision. For example, the cumulative schemes would bring forward approximately 60,000m² GEA of D1 and D2 floorspace for leisure and/or community use including school and health centre uses. This figure has been derived through summing all D1 and D2 floorspace provision across the cumulative schemes.
- 6.123** Overall these schemes, along with the Amended Proposed Development, would deliver new housing, generate employment, provide new amenities and services (such as new restaurants, and conferencing space) and have a beneficial impact on the local economy through additional spending, which together would have a beneficial effect in terms of socio-economics.

Chapter 7: Traffic and Transport (Statement of Conformity)

INTRODUCTION

- 7.1 The June 2018 Traffic and Transport assessment and corresponding ES chapter has been reviewed in the context of the Proposed Amends and the Amended Proposed Development.

LEGISLATION, PLANNING POLICY AND GUIDANCE

- 7.2 Since the submission of the ES, there have been no changes to legislation, national, regional and local planning policy, and guidance which are directly relevant to the traffic and transport assessment or significance criteria set.
- 7.3 A revised version of the National Planning Policy Framework 2019 has since been published, which has been taken into consideration, as was the Draft 2018 update of this document in the June 2018 ES.
- 7.4 The 2018 Draft New London Plan cycle parking standards have now been used, which require a higher provision of residential cycle parking. Therefore, as presented in the updated Transport Assessment (ES Addendum Volume 3, Appendix Traffic and Transport) an increase of cycle parking provision has been included as part of the Proposed Amendments.

ASSESSMENT METHODOLOGY

- 7.5 No new relevant methodologies pertinent to the undertaking of traffic and transport surveys or the assessment of traffic and transport effects have been published since undertaking the traffic and transport surveys or submitting the June 2018 ES. Consequently, the assessment methodology and significance criteria stated within the June 2018 Traffic and Transport ES Chapter remain applicable and valid.

BASELINE CONDITIONS

- 7.6 The baseline traffic and transport conditions are determined by means of desktop research, site visits and site surveys including Automatic Traffic Counts and Manual Classified Turning Counts of the surrounding highways network.
- 7.7 There have been no material changes to the relevant baseline conditions reported within June 2018 Traffic and Transport ES Chapter.

RECEPTORS AND RECEPTOR SENSITIVITY

- 7.8 No additional or new receptors have been introduced to the surroundings.
- 7.9 The Proposed Amendments do not result in changes to either the type or sensitivity of the introduced receptors.
- 7.10 On the above basis, the receptors and receptor sensitivities described in the June 2018 Traffic and Transport ES Chapter remain valid and unchanged.

IMPLICATIONS OF THE PROPOSED AMENDS

- 7.11 The implications of the Proposed Amendments on the traffic and transport assessment relate to a negligible, no material increase in the amount of construction materials required to build the additional massing, the increase in residential dwellings and a greater number of affordable housing units, and associated increase in traffic flows and slight amendments to the waste storage and cycle storage in the basement levels.

POTENTIAL EFFECTS

- 7.12 It has already been established that there have been no material changes to legislation, planning policy and guidance, to the assessment methodology and significance criteria, or the baseline conditions relevant to the assessment.

Demolition and Construction

- 7.13 The nature and extent of general demolition and construction works required to facilitate the Amended Proposed Development would remain as stated within the June 2018 ES **Chapter 5: Demolition and**

Construction. The negligible increase in the amount of construction materials required would not affect the projected construction traffic flows (with a peak of 49 vehicles per day predicted in the June 2018 ES) which were used within the assessment of traffic and transport impacts from construction traffic. The likely significant traffic and transport effects of the demolition and construction works would therefore remain as stated within the June 2018 ES Traffic and Transport Chapter.

Operation of the Completed Amended Proposed Development

- 7.14 The Proposed Amendments includes a slight increase in the total number of residential units from 46 to 62, with all units becoming affordable rent. The increase in residential units has led to a minor increase in residential associated trips, with residential person trip rates increasing in the AM peaks by 10 and PM peaks by 6. In addition, as discussed above the new Draft London Plan 2017 cycle standards have been used. This has led to an increase of cycle parking provision from 130 to 164 long-stay spaces (and with a total of 24 short stay spaces).
- 7.15 With the increase in residential units, additional waste storage in the form of 3 bins forms part of the Proposed Amendments. This, along with the increase in cycle parking numbers, has led to a slight change to the layout of the waste storage and cycle storage spaces within the basement.
- 7.16 When considering the Proposed Amendments, together with other relevant factors, it is considered that these would have no material implications upon the impact assessment presented within the June 2018 Traffic and Transport ES Chapter. Minor changes from the increase in residential units and increase in cycle parking are covered in more detail in the updated Transport Assessment (ES Addendum Volume 3, Appendix Traffic and Transport). These do not alter the conclusions of the June 2018 Traffic and Transport ES Chapter.

MITIGATION AND RESIDUAL EFFECTS

- 7.17 As demonstrated above, the likely significant effects of both demolition and construction works and the completed and operational Amended Proposed Development remain as stated within the June 2018 Traffic and Transport ES Chapter. Consequently, all mitigation measures as previously stated remain applicable and valid.

LIKELY SIGNIFICANT EFFECTS

- 7.18 With the mitigation adopted in the June 2018 Traffic and Transport ES Chapter there will be no change to the residual significant effects, with no adverse significant effects, and a significant beneficial effect to amenity, fear and intimidation for existing pedestrians in the area and future residents, visitors and staff of the site once the Amended Proposed Development is completed and operational.

CLIMATE CHANGE

- 7.19 There are no changes or updates to the climate change section of the June 2018 Traffic and Transport ES Chapter which remains valid.

CUMULATIVE EFFECTS ASSESSMENT

- 7.20 The conclusions reached within the June 2018 Traffic and Transport ES Chapter in relation to cumulative effects remain valid. No additional cumulative schemes have come forward since the June 2018 ES.

Chapter 8: Noise and Vibration (Statement of Conformity)

INTRODUCTION

- 8.1 The June 2018 Noise and Vibration assessment and corresponding ES chapter has been reviewed in the context of the Proposed Amends and the Amended Proposed Development.

LEGISLATION, PLANNING POLICY AND GUIDANCE

- 8.2 Since the submission of the June 2018 ES, there have been no changes to legislation, national, regional and local planning policy, and guidance which are directly relevant to the noise and vibration assessment or significance criteria set.
- 8.3 A revised version of the National Planning Policy Framework 2019 has since been published. The updated version, like the previous version, does not contain quantitative guidance relating to noise, and therefore does not influence the assessment or significance criteria set.
- 8.4 Consequently, the policy and assessments remain applicable and valid.

ASSESSMENT METHODOLOGY

- 8.5 No new relevant methodologies pertinent to the undertaking of noise and vibration surveys or the assessment of noise and vibration effects have been published since undertaking the noise and vibration surveys or submitting the June 2018 ES. Consequently, the assessment methodology and significance criteria stated within the June 2018 Noise and Vibration ES Chapter remain applicable and valid.

BASELINE CONDITIONS

- 8.6 The baseline noise and vibration conditions are determined by the nearby roads and underground trains respectively.
- 8.7 There have been no material changes to the relevant baseline conditions reported within June 2018 Noise and Vibration ES Chapter.

RECEPTORS AND RECEPTOR SENSITIVITY

- 8.8 No additional or new receptors have been introduced to the surroundings.
- 8.9 The Proposed Amendments do not result in changes to either the type or sensitivity of the introduced receptors.
- 8.10 On the above basis, the receptors and receptor sensitivities described in the June 2018 Noise and Vibration ES Chapter remain valid and unchanged.

IMPLICATIONS OF THE PROPOSED AMENDS

- 8.11 The implications of the Proposed Amendments on the noise and vibration assessment relate to the proposed massing amendments and thereby increasing the residential massing under consideration for determination of the suitability of the Amended Proposed Development for residential uses, and a slight increase in the amount of construction materials required to build the additional massing; and an increase of 16 residential units with a greater number of affordable housing, which results in a slight increase in average daily operational traffic flows.

POTENTIAL EFFECTS

- 8.12 It has already been established that there have been no changes to legislation, planning policy and guidance, to the assessment methodology and significance criteria, or the baseline conditions relevant to the assessment.

Demolition and Construction

- 8.13 The nature and extent of general demolition and construction works required to facilitate the Amended Proposed Development would remain as stated within the June 2018 **ES Chapter 5: Demolition and**

Construction. The slight increase in the amount of construction materials required would not affect the projected construction traffic flows (with a peak of 49 vehicles per day predicted in the June 2018 ES) which were used within the assessment of noise impacts from construction traffic. The likely significant Noise and Vibration effects of the demolition and construction works would therefore remain as stated within the June 2018 ES Noise and Vibration ES Chapter.

Operation of the Completed Amended Proposed Development

- 8.14 The key features of the Amended Proposed Development in terms of new noise exposure are:
- The extension of the southern façade of the building 750 mm closer to the kerb of Courtfield Road;
 - the addition of two storeys of residential units to the top of the podium section of the building, introducing additional residential exposure at 7th and 8th floor level, and raising the rooftop residential garden/playspace up to 9th floor level; and
 - the provision of additional balconies for residential units on the southern and western façades.
- 8.15 The aforementioned areas remain suitable for this intended use, from a noise perspective.
- 8.16 The small changes in average daily traffic flows would have no material effect upon the noise levels associated with the operational traffic flows. The impact assessments presented in the June 2018 Noise and Vibration ES Chapter therefore remain applicable and valid.

MITIGATION AND RESIDUAL EFFECTS

- 8.17 As demonstrated above, the likely significant effects of both demolition and construction works and the completed and operational Amended Proposed Development remain as stated within the June 2018 Noise and Vibration ES Chapter. Consequently, all mitigation measures as previously stated remain applicable and valid.

LIKELY SIGNIFICANT EFFECTS

- 8.18 With the mitigation adopted in the June 2018 Noise and Vibration ES Chapter there will be no residual Significant Effects associated with the Amended Proposed Development.

CLIMATE CHANGE

- 8.19 There are no changes or updates to the climate change section of the June 2018 Noise and Vibration ES Chapter which remains valid.

CUMULATIVE EFFECTS ASSESSMENT

- 8.20 The conclusions reached within the June 2018 Noise and Vibration ES Chapter in relation to cumulative effects remain valid. No additional cumulative schemes have come forward since the June 2018 ES.

Chapter 9: Air Quality (Statement of Conformity)

INTRODUCTION

- 9.1 The June 2018 Air Quality assessment and corresponding ES chapter has been reviewed in the context of the Proposed Amends and the Amended Proposed Development.

LEGISLATION, PLANNING POLICY AND GUIDANCE

- 9.2 Since the submission of the ES, there have been no changes to legislation, national, regional and local planning policy, and guidance which are directly relevant to the Air Quality assessment or significance criteria set.
- 9.3 A revised version of the National Planning Policy Framework 2019 has since been published, which has been taken into consideration, as was the Draft 2018 update of this document in the June 2018 ES. Consequently, the policy and assessments remain applicable and valid.

ASSESSMENT METHODOLOGY

- 9.4 There are no changes to the assessment methodology set out with the June 2018 Air Quality ES Chapter.

RECEPTORS AND RECEPTOR SENSITIVITY

- 9.5 No amendments have been made to the receptors considered in the original June 2018 Air Quality ES Chapter. Qualitative consideration has been given the impacts at locations where receptor heights and façade locations have changed, utilising the outputs from the June 2018 detailed assessment.

BASELINE CONDITIONS

- 9.6 The baseline conditions have not been revisited as they will not be affected by the Proposed Amendments and the baseline conditions as set out within June 2018 Air Quality ES Chapter remain valid.

IMPLICATIONS OF THE PROPOSED AMENDS

- 9.7 The implications of the Proposed Amendments on the air quality assessment relate to a slightly larger construction volume given the additional two storeys on top of the podium level; new exposure to the residential units within the amended massing; introduction of additional balconies; and an increase of 16 residential units with a greater number of affordable housing, which results in a slight increase in average daily operational traffic flows.
- 9.8 The proposed changes to the floor areas within the Amended Proposed Development have implications on the air quality neutral benchmarks calculations.

POTENTIAL EFFECTS

- 9.9 It has already been established that there have been no changes to legislation, planning policy and guidance, to the assessment methodology and significance criteria, or the baseline conditions relevant to the assessment.

Demolition and Construction

- 9.10 The nature and extent of general demolition and construction works required to facilitate the Amended Proposed Development would remain as stated within the June 2018 ES Chapter 5: Demolition and Construction. The Proposed Amendments will result in a slightly larger construction volume given the additional two storeys. However, the emissions magnitude for the construction works was identified as being

‘Large’ in the June 2018 ES, and this would not change in light of the Proposed Amendments, nor would there be an increase in the projected construction traffic flows (with a peak of 49 vehicles per day predicted in the June 2018 ES). Given the temporary nature of these flows, the fact that they would be lower than trips associated with the current use and considerably lower than the operational traffic volumes, it was not considered necessary in the June 2018 assessment to assess the impacts of traffic emissions during construction and demolition. Appropriate mitigation measures to address the risk of impacts during the construction phase were set out in the June 2018 Air Quality ES Chapter and, given that they will be applied, the impacts during the construction phase will remain ‘not significant’.

Operation of the Completed Amended Proposed Development

Impacts at Existing Receptors

- 9.11 The Amended Proposed Development will generate an additional 17 vehicle trips per day when compared to the original scheme assessed in the June 2018 Air Quality ES Chapter. Considering the scale of the changes in concentrations predicted in the June 2018 Air Quality ES Chapter, alongside the total concentrations, it is judged that such a small increase in the vehicle trip generation will not affect the predicted impacts at existing receptors, or significantly increase the predicted concentrations within the Amended Proposed Development itself.
- 9.12 The energy plant within the Amended Proposed Development will not change compared to that assessed in the June 2018 ES. Whilst the increase in floor space within the Amended Proposed Development will likely lead to greater usage of the plant, the June 2018 air quality assessment made the worst-case assumption that the plant would operate continuously at full load throughout the year, thus the assessment represents an over-prediction with regard to energy plant utilisation, with or without the Proposed Amendments.
- 9.13 Based on the above, it is concluded that there will be no changes to the impacts predicted at existing receptors in the local area in the June 2018 ES. The impacts of the Amended Proposed Development will remain negligible at all existing receptors.

Site Suitability

- 9.14 The key features of the Amended Proposed Development in terms of new exposure are:
- the extension of the southern façade of the building 750 mm closer to the kerb of Courtfield Road;
 - the addition of two storeys of residential units to the top of the podium section of the building, introducing additional residential exposure at 8th and 9th floor level, and raising the rooftop residential garden/playspace up to 9th floor level; and
 - the provision of additional balconies for residential units on the southern and western façades.
- 9.15 The southern façade being 750 mm closer to the kerb of the road will result in receptors at this façade experiencing slightly higher contributions from traffic emissions on Courtfield Road. However, the modelled concentrations at the residential properties on this façade from the June 2018 Air Quality ES Chapter were all well below the objectives, with concentrations no greater than 59% of the objective level. Moving these receptors 0.75 m closer to Courtfield Road (which is quiet with low traffic volumes) will result in a very small increase in concentrations, and concentrations for future residents of these apartments will remain well below the objectives.
- 9.16 Residents of the additional new apartments on 8th and 9th floors will be well away from road traffic emissions (over 27 m above road level), and can expect to experience concentrations close to background levels, which will be well below the objective by the opening year. These residential units, and the users of the rooftop residential garden/playspace, will still be located over 55 m lower than the flues serving the energy plant within the Amended Proposed Development, which will exhaust from above roof level of the taller building element. The hot flue gases, exhausting vertically, will have significant upwards momentum and buoyancy, and very little will be carried down towards the podium level. The June 2018 Air Quality ES Chapter demonstrated that the energy plant emissions would make a negligible contribution to pollutant

concentrations throughout the Proposed Development, and this will also be the case for these additional residential units of the Amended Proposed Development.

- 9.17** The June 2018 Air Quality ES Chapter demonstrated that air quality will be acceptable for all residential units within the Proposed Development, this remains valid and thus there are no issues in air quality terms with any units having balconies.

Significance of the Proposed Development Air Quality Effects

- 9.18** The construction and operational effects of the Amended Proposed Development will remain '**not significant**'.

Air Quality Neutral

Building Emissions

- 9.19** The June 2018 Air Quality ES Chapter identified that the Total Building NO_x emission from all of the proposed plant will be 3,367.3 kg/annum (though it should be noted that this value is based on the worst-case assumption that the plant will run continuously at 100% load, which won't occur in reality). This figure is not affected by the Proposed Amendments.
- 9.20** The Building Emission Benchmarks (BEBs) for the Amended Proposed Development have been recalculated, presented by Table 9.1 below.

Table 9.1 Calculation of Building Emission Benchmark for the Amended Proposed Development

Description		Value	Reference
A	Gross Internal Floor Area (m ²) of C1 Use	71,376	SimpsonHaugh
B	NO _x BEB for C1 Use (g/m ² /yr)	70.9	Appendix Air Quality Annex 10: Table 10.1
C	Gross Internal Floor Area (m ²) of C3 Use	7,435	SimpsonHaugh
D	NO _x BEB for C3 Use (g/m ² /yr)	26.2	Appendix Air Quality Annex 10: Table 10.1
Total BEB NO _x Emissions (kg/annum)		5,255	(A x B + C x D)/1,000

- 9.21** The Total Building NO_x emission of 3,367.3 kg/annum is less than the Total BEB NO_x emission of 5,255 kg/annum. The Amended Proposed Development thus remains better than air quality neutral in terms of building emissions.

Road Transport Emissions

- 9.22** The benchmark trip rate for the Amended Proposed Development has been updated, as shown in Table 9.2. The calculated building emission benchmark trip rate provided in Table 9.1 is some 25,000 trips higher than that calculated in the June 2018 Air Quality ES Chapter, predominantly due to the increase in the number of dwellings proposed.

Table 9.2 Calculation of Transport Emissions Benchmark for the Amended Proposed Development

Description		Value	Reference
Residential (C3)			
A	Number of Dwellings	62	SimpsonHaugh
B	Benchmark Trip Rate (trips/dwelling/annum)	407	Appendix Air Quality Annex 10: Table 10.6 of the June 2018 ES
C	Benchmark Trip Rate (trips/annum)	25,234	A x B
Hotel (C1)			

Description		Value	Reference
D	Gross Internal Floor Area of Hotel (m ²)	71,376	SimpsonHaugh
E	Benchmark Trip Rate (trips/m ² /annum)	5	Appendix Air Quality Annex 10: Table 10.6 of the June 2018 ES
F	Hotel TEBs (trips/annum)	356,878	D x E
Entire Development			
Total Benchmark Trip Rate(trips/annum)		382,112	C + F

- 9.23** The June 2018 Air Quality ES Chapter outlined that the Proposed Development would generate fewer than 200,000 car trips per year. It has been identified in Paragraph 9.11 that the trip generation of the Amended Proposed Development will increase by a very small amount (estimated to be ten vehicle movements per day, which equates to 3,650 per annum). Traffic will not increase sufficiently to lead to an exceedance of the amended benchmark trip rate of 382,112, thus the Amended Proposed Development remains better than air quality neutral in terms of transport emissions.

MITIGATION AND RESIDUAL EFFECTS

- 9.24** No changes to the mitigation recommended in the June 2018 ES are required, and the residual impacts and effects will remain the same as those set out in the June 2018 Air Quality ES Chapter.

LIKELY SIGNIFICANT EFFECTS

- 9.25** The construction and operation of the Amended Proposed Development are not predicted to result in any significant effects in relation to air quality.

CLIMATE CHANGE

- 9.26** The impacts of climate change discussed in the June 2018 Air Quality ES Chapter are not affected by the Proposed Amendments.

CUMULATIVE EFFECTS ASSESSMENT

- 9.27** The cumulative effects assessment is not affected by the Proposed Amendments and no additional cumulative schemes have come forward since the June 2018 ES. The cumulative effects of the Amended Proposed Development will remain '**not significant**'.

Chapter 10: Daylight, Sunlight, Overshadowing and Solar Glare (Replacement Chapter)

TOPIC	Daylight, Sunlight, Overshadowing and Solar Glare
AUTHOR	Point 2 Surveyors Limited
SUPPORTING APPENDIX	ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare: <ul style="list-style-type: none">Annex 1: Legislative and Planning Policy Context;Annex 2: Drawings of the existing and proposed situations;Annex 3: Daylight and sunlight analysis results for surrounding residential properties;Annex 4: Sun on Ground and Transient overshadowing analysis results for surrounding areas of amenity space;Annex 5: Solar Glare analysis results; andAnnex 6: Daylight and Sunlight amenity within the proposed residential accommodation and shadow upon proposed areas of amenity space.
KEY CONSIDERATIONS	Key considerations in this assessment comprise: <ul style="list-style-type: none">Daylight amenity to the residential properties which surround the site;Sunlight amenity to the residential properties which surround the site;Overshadowing to amenity areas and open space around the site;Solar glare effects from the completed Amended Proposed Development; andDaylight and sunlight amenity within proposed residential accommodation and shadow upon proposed areas of amenity space.
KEY LEGISLATION	There is no National Legislation which specifically references daylight, sunlight, overshadowing and solar glare effects.
KEY NATIONAL PLANNING POLICY	National Planning Policy Framework, 2019 Planning Practice Guidance, 2014
KEY REGIONAL PLANNING POLICY	The London Plan, 2016 Draft New London Plan, 2018 Supplementary Planning Advice on High Buildings and Strategic Views in London, 1999 Housing Supplementary Planning Guidance, 2016 Sustainable Design and Construction Supplementary Planning Guidance, 2014
KEY LOCAL PLANNING POLICY	The Royal Borough of Kensington and Chelsea's (RBKC) Consolidated Local Plan, 2015
OTHER RELEVANT STANDARDS & GUIDANCE	Historic England Guidance on Tall Buildings – Historic England Advice Note 4, 2015 Building Research Establishment Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice, 2011 British Standard 8206 Part 2; Lighting for Buildings. Code of Practice for Daylighting, 2008 CIBSE Lighting Guide LG10 – Daylighting – A Guide for Designers, 2014 Commission Internationale de L'Eclairage (CIE) 146:2002 & CIE 147:2002 Collection on glare, 2002
CONSULTATION	The EIA Informal Scoping Report is presented in ES Volume 3 Appendix: EIA Methodology of the June 2018 ES which sets out the scope and methodology for assessment. No specific comments or issued were raised by RBKC within their informal scoping feedback, also presented in ES Volume 3 Appendix: EIA Methodology of the June 2018 ES.
Other	An internal daylight and sunlight analysis assesses the daylight and sunlight to the newly introduced proposed uses and shadowing to newly introduced amenity areas. These assessments are described in a stand-alone document that is submitted in support of the planning application and updated in line with the Proposed Amendments, titled: Point 2 Surveyors Limited, 2019; 'Internal Daylight and Overshadowing Report'

10.1 This ES Chapter provides a complete updated assessment of the daylight, sunlight, overshadowing and solar glare effects of the Amended Proposed Development and the corresponding proposed design amendments. Further details on the Proposed Amendments are provided in ES Addendum Chapter 1 Introduction, Proposed Design Amendments and ES Addendum Approach.

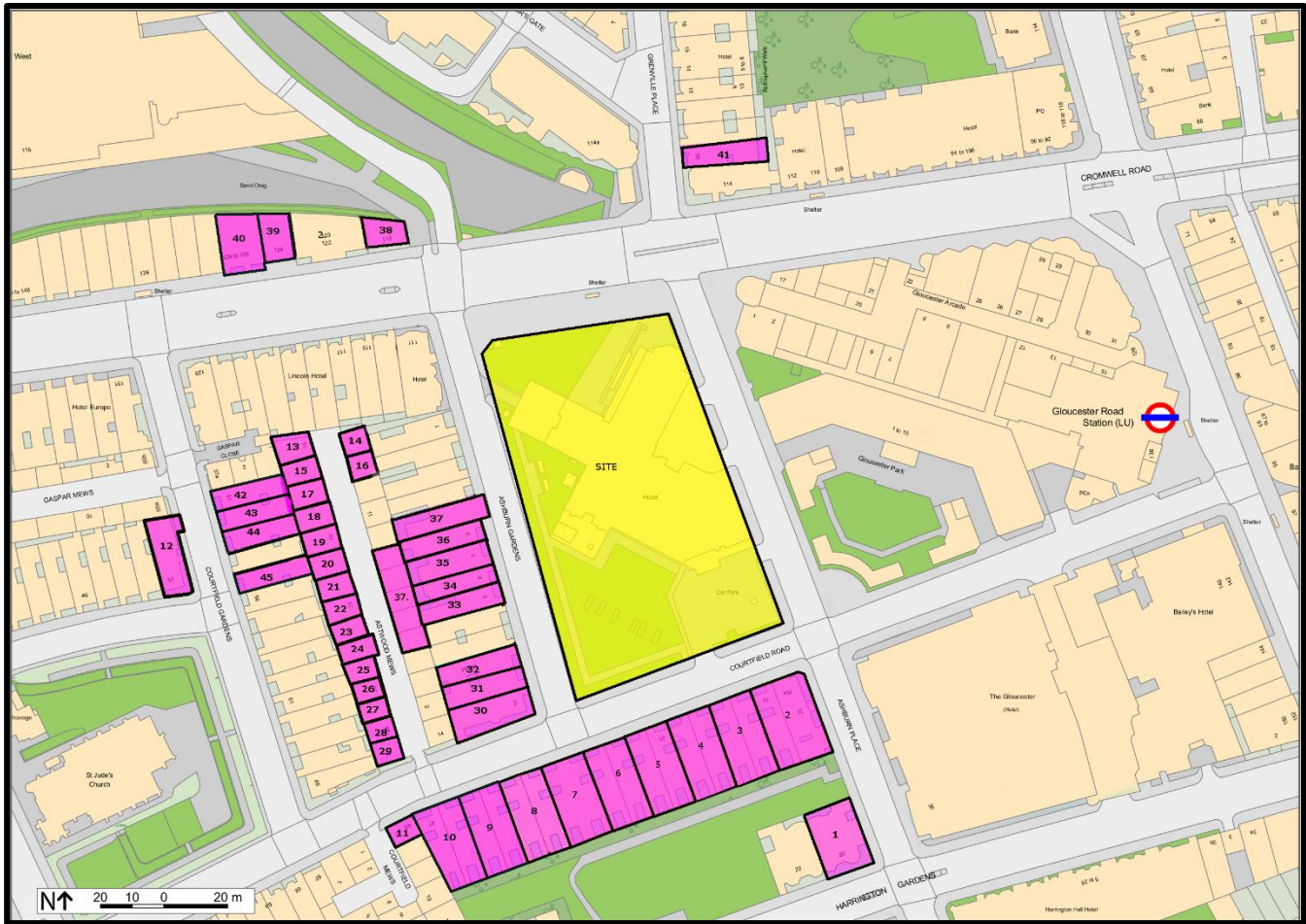
ASSESSMENT METHODOLOGY

Defining the Baseline

Current Baseline Conditions

- 10.2 The assessment of daylight and sunlight amenity is governed principally by the extent that the sky is obscured by the existing and proposed structures (obstructions) which surround a sensitive receptor. Using professional judgement and an inspection of the site and surrounding context, the extent of the study area has been established by assessing the number of properties and open spaces within and surrounding the site which may be affected by any additional obstruction of the sky as a result of the construction of the Amended Proposed Development.
- 10.3 The location of the daylight and sunlight sensitive receptors can be seen in Figure 10.1 and within the drawings within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 2**. Baseline solar glare conditions are not determined as this assessment does not compare effects to existing conditions, the assessment is based upon absolute solar glare values.

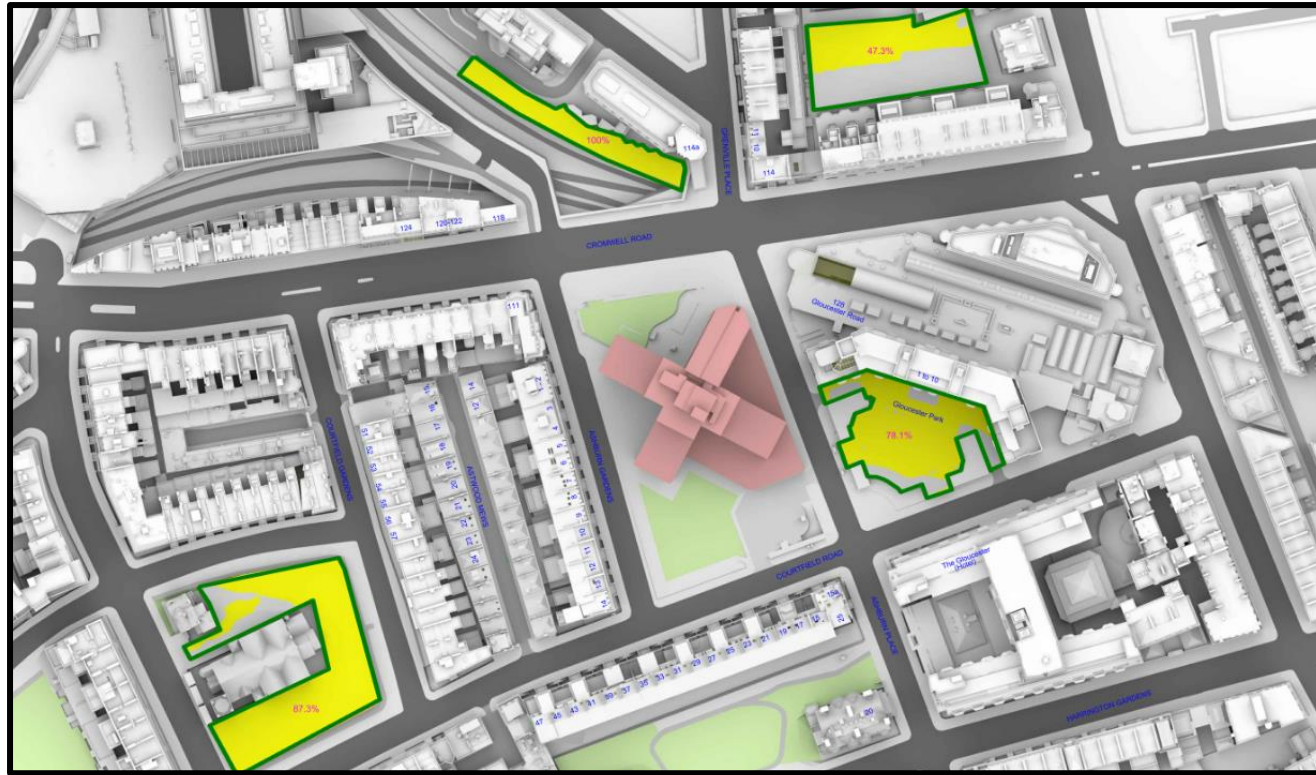
Figure 10.1 Location of Surrounding Sensitive Receptors



- 10.4 BRE guidance states at Appendix H that: -
“...trees and shrubs are not normally included in the calculation unless a dense belt or group of evergreens...”. Hence the data reported in the body of this Chapter refers to the ‘without trees’ condition.
- 10.5 The trees on the western side of the site are not evergreen, they are, however, densely planted. This can be seen from the assessment model drawings within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 2**. The trees have been modelled to survey and, therefore, are an accurate reflection of their state. Hence a full set of data ‘with trees’ has been included within the Appendices of the ES Chapter.

- 10.6 The location of the overshadowing sensitive receptors can be seen in Figure 10.2 and within the drawings within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 4**.

Figure 10.2 Location of Surrounding Sensitive Receptors



Scenarios Assessed

- 10.7 None of the cumulative developments detailed in the **June 2018 ES Volume 1 Chapter 2 EIA Process and Methodology** (which remain unaltered in this ES Addendum) are considered to be in sufficient proximity to the site or of a sufficient level of massing to result in any material changes to the assessment results.
- 10.8 The effect of the Amended Proposed Development has, therefore, been assessed on the following bases: -
- Current Baseline (Existing Trees Removed) v Current Baseline with Amended Proposed Development (Retained Trees Removed) – This scenario is reported upon in the body of this ES Chapter and in the Appendices; and
 - Current Baseline (With Existing Trees) v Current Baseline with Amended Proposed Development (With Existing Trees being Retained) – This scenario is reported upon in the Appendices.

Likely Evolution of the Baseline Conditions (The Future Baseline)

- 10.9 The site has been qualitatively considered in the context of the Amended Proposed Development not being delivered, and the likely/expected natural evolution of the surrounding area.

Impact Assessment

Demolition and Construction

- 10.10 Owing to the evolving and changing nature of demolition and construction activities, the assessment of potential effects during demolition and construction of the Amended Proposed Development on daylight, sunlight, overshadowing and solar glare to surrounding properties, amenity spaces and receptors have not been modelled and analysed. It should be assumed that the resultant effects experienced by sensitive receptors are no greater than that described within the Completed Development section.

Completed Development

- 10.11 Using a three-dimensional (3D) computer model of the site and its surrounding context, visualisations of which can be found within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 2**, the levels of daylight, sunlight and shadow in the existing situation were analysed and compared to the levels of light following the construction of the Amended Proposed Development. Instances of Solar Glare from the Amended Proposed Development were also assessed to establish whether they were likely to have an adverse effect upon approaching drivers and/or pedestrians. On the basis that the Amended Proposed Development is intended to be of residential and hotel usage, Light Pollution has not been assessed as there is unlikely to be excessive light spillage from such a building.
- 10.12 The results of the analysis were then interpreted with reference to the BRE Guidelines, which are explained in detail within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 1**. The significance of effects upon the sensitive receptors are then determined as discussed below.

Assumptions

- 10.13 The uses of the properties surrounding the site were established using external observations made during the site visit, from aerial photography and by reference to Valuation Office Agency¹ (VOA) checks.
- 10.14 In order to enhance accuracy room layout plans for neighbouring buildings have been obtained from publicly available sources. Where room layout information was unavailable, reasonable assumptions have been made regarding the likely use and internal configuration of rooms behind the fenestration observed.
- 10.15 Where no indicators of room depth were available, in accordance with industry best practice, a depth of 4.2 m has been assumed for rooms of residential usage.

Daylight

Vertical Sky Component (VSC)

- 10.16 VSC is a quantified measurement of the amount of skylight falling on a vertical wall or window. This is the ratio of the direct sky luminance falling on a vertical wall at the reference point for the simultaneous horizontal luminance under an unobstructed sky. The Commission International de l'Eclairage (CIE) 'standard' overcast sky is used, the ratio is then expressed as a percentage. The maximum value achievable is approximately 40% for a completely unobstructed vertical wall. The VSC of a window can then be related to the Average Daylight Factor in a room, which is a standard test for the British Standard (BS 8206: Part 2) recommendations on interior daylighting for new residential accommodation.
- 10.17 VSC may be calculated by using the sky light indicator or Waldram Diagram. For calculation purposes, trees may be ignored unless they form dense continuous belts. The computer model created for the daylight assessments presented within this assessment has used Waldram Diagrams to establish the VSC and 3D geometric calculations for daylight distribution.

No Sky Line (NSL)

- 10.18 The NSL method is a measure of the distribution of daylight at the 'working plane' within a room. In houses, the 'working plane' means a horizontal 'desktop' plane of 0.85 m in height. The NSL divides those areas of working plane in a room which receive direct sky light through the windows from those areas of the working plane which cannot. If a significant area of the working plane lies beyond the NSL (i.e. it receives no direct sky light) then the distribution of daylight in the room would be poor and supplementary electric lighting may be required.
- 10.19 The potential effect of the daylighting distribution in the surrounding existing buildings is established by plotting the NSL in each of the main rooms. For houses, this includes living rooms, dining rooms and kitchens. Bedrooms are also analysed although they are less important in terms of the amount of daylight received.

Sunlight

Annual Probable Sunlight Hours (APSH)

- 10.20 The BRE Guidelines state in Section 3.2.3 that:

"all main living rooms of dwellings...should be checked if they have a window facing within 90° of due south, kitchens and bedrooms are less important, although care should be taken not to block too much sun."

¹ Valuation Office Agency Website

10.21 Section 3.2.4 continues:

“If the main living room to a dwelling has a main window facing within 90° of due north, but a secondary window facing within 90° of due south, sunlight to the secondary window should be checked.”

10.22 The BRE Guidelines suggest that when assessing sunlight for existing neighbouring buildings, the point at the centre of the window on the outside window face can be used. Section 3.2.5 states:

“If this window point can receive at least one quarter of APSH, including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight.”

10.23 The BRE Guidelines go on to state that if these guidelines are not met, and a window receives less than 0.8 times its former value of total APSH or winter APSH, and if that window has a reduction in total APSH of more than 4% *“then the sunlighting of the existing dwelling may be adversely affected.”*

10.24 All windows facing within 90° of due south and serving habitable residential rooms within properties surrounding the site will be assessed for sunlight.

10.25 Where an existing surrounding room is served by additional windows to those facing within 90° of due south, all windows will be assessed, even any additional window serving the room is facing within 90° of due north. This is done in order to understand the true level of sunlight amenity to the room in question.

This methodology is in accordance with the BRE guidance for the assessment of new dwellings (paragraph 3.1.12) and establishing impact significance (Appendix I paragraph I6). It does not duplicate sunlight values. It measures the total sunlight availability to all windows.

Overshadowing

10.26 The BRE Guidelines acknowledge that sunlight in the space between buildings has an important influence on the overall appearance and ambience of a development. It states:

“...good site layout planning for daylight and sunlight should not limit itself to providing good natural light inside buildings. Sunlight in the space between buildings has an important effect on the overall appearance and ambience of a development.”

Transient Overshadowing

10.27 The BRE Guidelines suggest that where large buildings are proposed which may affect a number of gardens or open spaces, it is useful to plot a shadow plan to illustrate the location of shadows at different times of the day and year. For the purpose of this assessment the overshadowing was mapped for the following three key dates in the year:

- 21st March (Spring Equinox);
- 21st June (Summer Solstice); and
- 21st December (Winter Solstice).

10.28 September 21st (Autumn Equinox) provides the same overshadowing images as March 21st (Spring Equinox) as the sun follows the same path at these corresponding times of year.

10.29 For each of these dates, the overshadowing is calculated at hourly intervals throughout the day from 08:00 to 19:00. Some images are not included within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 4** because the sun would not be present during these times (e.g. from approximately 16:00 onwards on 21st December) and thus no shadow can be cast.

10.30 The indicators are calculated for different latitudes, London being at 51.5° north. Southern orientation is critically important, as are the heights of the existing and proposed buildings.

10.31 Table 10.1 shows the sunset and sunrise times for 21st March, 21st June and 21st December. It also shows the maximum altitude of the sun and the time at which the sun reaches the altitude of 10° which is the altitude at which the BRE Guidelines specifies overshadowing should be assessed. Receipt of sunlight can be disregarded when it is lower than this altitude.

Table 10.1 Sun Altitude Dates and Times

London, UK - Greenwich Mean Time (Accurate to nearest 10 minutes)					
Date	Sunrise Time	Time at 10° Altitude Rising	Maximum (degrees)	Time at Setting 10° Altitude	Sunset Time
21 March	06:10	07:10	39.4	17:10	18:10
21 June	03:50	05:10	62.4	19:00	20:10
21 December	08:10	09:50	15.6	14:10	16:00

Sun on Ground

10.32 Using specialist software, the path of the sun is tracked to determine where the sun would reach the ground and where it would not. This assessment reviews the total percentage of an area that receives at least two hours of direct sunlight on the March 21st.

10.33 The BRE suggests at paragraph 3.3.17 that for a garden “...to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.”

Solar Glare

10.34 The BRE Guidelines makes the following statement regarding the potential for reflected solar glare on a development:

“Glare or solar dazzle can occur when sunlight is reflected from a glazed façade or area of metal cladding. This can affect road users outside and the occupants of adjoining buildings. The problem can occur either when there are large areas of reflective tinted glass or cladding on the façade, or when there are areas of glass or cladding, which slope back so that high altitude sunlight can be reflected along the ground. Thus solar dazzle is only a long-term problem for some heavily glazed (or mirror clad) buildings. Photovoltaic panels tend to dazzle because they are designed to absorb light.”

10.35 The BRE guidelines outline a brief methodology for evaluation of the scale of a solar glare issue:

“If it is likely that a building may cause solar dazzle the exact scale of the problem should be evaluated...by identifying key locations such as road junctions and windows of nearby buildings, and working out the number of hours of the year that sunlight can be reflected to these points.”

10.36 Solar glare assessments simulate the path of the sun for the entire year around a proposed development in order to establish the locations, times, duration and direction of solar reflections and identify where these may affect sensitive locations, with a particular focus on road users or railways.

10.37 The assessment is carried out using a specialist software applied to a 3D AutoCAD model of the building and its surrounding context. In the first instance, the glazing in the building is replaced by yellow coloured mirrors. This will then clearly show the location of all instances of solar glare around the site throughout the year. From this information, the most sensitive viewpoints around the site are established.

10.38 A further (worst case scenario) solar glare assessment is then undertaken from each of these viewpoints based on the actual façade treatment of the Amended Proposed Development. An image for the viewpoint is then produced indicating the area which sees reflection at any point during the year. The diagram illustrates a focal point at 10° from the centre of the visual axis, and concentric circles from 20° to 90°. These provide a reference from which potential issues can be judged.

10.39 In order to understand the overall effect in solar glare terms, all of the instances, duration of those instances and angles of those instances as seen from the assessment points are plotted onto a grid, creating the Calendar Graphs for each viewpoint.

10.40 The Calendar Graphs’ axes show the days of the year along the X axis and time of day on the Y axis. The graph has 365 segments along the X axis, one for each day and 720 segments on the Y axis each representing 2 minutes of the 24hr period per day. The light grey illustrates the times of daylight during each day and the dark grey illustrates the times of night. The yellow, green, orange and red colours indicate when Solar Glare may occur, and, depending on the colour, the angle at which it is likely to occur from the receptor. If a band of colour is tall it means that solar glare is likely to occur for an extended period of time during that day. If the

band of colour is thin and long on the graph, it means solar glare may occur on each day but only for a limited time.

10.41 The limits of the windscreen or the possible use of drivers’ visors, which in reality could mitigate some glare instances, are not accounted for in the assessment.

Defining Significance

Receptor Sensitivity

10.42 Residential receptors/properties and private gardens/public amenity spaces are usually most sensitive to daylight and sunlight availability. These properties/areas of open space are, therefore, considered to be of a high sensitivity level.

10.43 This assessment therefore considers the effects on residential properties and areas of amenity surrounding the site.

10.44 Commercial properties are generally deemed to have a greater reliance upon supplementary electric lighting and have therefore not been included within the assessment. These properties are considered to be of a low sensitivity level.

Magnitude of Impact

Daylight and Sunlight

10.45 The results of each assessment are compared against the criteria set out in the 2011 BRE Guidelines, which is discussed further below.

Table 10.2 Criteria provided within the 2011 BRE Guidelines

Issue	2011 BRE Criteria
Vertical Sky Component (daylight)	A window may be adversely affected if the VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value.
No Sky Line (daylight)	A room may be adversely affected if the daylight distribution (no sky line) is reduced beyond 0.8 times its existing area.
Annual Probable Sunlight Hours (Sunlight)	A window may be adversely affected if a point at the centre of the window receives for the whole year, less than 25% of the APSH including at least 5% of the APSH during the winter months (21 September to 21 March) and less than 0.8 times its former sunlight hours during either period, and (for existing neighbouring buildings), if there is a reduction in total APSH which is greater than 4%.
Sun on Ground (Sunlight)	It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21st March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.

10.46 The BRE Guidelines are predicated upon a suburban environment with recommended VSC values being based upon obstruction angles of 25°. This is a situation typical of a suburban environment but not characteristic of an urban / city centre environment. Therefore, a degree of flexibility should be applied when assessing the significance of daylight and sunlight effects in urban locations.

10.47 The 2011 BRE Guidelines state:

“Adverse effects occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space... The assessment of effect will depend on a combination of factors, and there is no simple rule of thumb that can be applied.”

10.48 In view of the above, the interpretation of the daylight and sunlight results must be assessed in terms of the quantum of light lost or gained, not purely on the percentage of change. The percentage value may well be misleading, particularly where the baseline values are small. In these situations, a small change in the quantum

of light could represent a high percentage change in the overall figure, implying that there would be a significant change in daylight and sunlight whereas in reality the difference could be negligible.

Transient Overshadowing

10.49 The BRE Guidelines do not provide any criteria for the significance of transitory overshadowing, other than to suggest that by establishing the different times of day and year when shadow would be cast over adjacent areas, an indication is given as to the significance of the effect of the proposed development.

10.50 The assessment of transient overshadowing effects is, therefore, based on professional judgement, taking into consideration the effect of the existing buildings upon the site and comparing it with the likely transient overshadowing effect of the proposed development. The effects are defined as being of negligible, minor adverse, moderate adverse or major adverse or of beneficial significance.

Solar Glare

10.51 There are no quantitative criteria within the 2011 BRE Guidelines regarding acceptable levels of solar glare. There is, however, research which suggests that the significance of a glare occurrence is largely dependent upon its angle from the line of sight and the relevance of this with respect to the human field of vision:

“The fovea centralis, also generally known as the fovea, is a part of the eye, located in the centre of the macula region of the retina. The fovea is responsible for sharp central vision (also called foveal vision), which is necessary in humans for reading, watching television or movies, driving, and any activity where visual detail is of primary importance.”²

Effect Significance

Daylight, Sunlight and Transient Overshadowing

10.52 The assessment criteria specified within the BRE Guidelines only suggests where a change in daylight and sunlight may be noticeable to the occupants. It does not further define effects beyond this apart from within Appendix I – Environmental Impact Assessment, paragraphs I3-I4 in which it states that:

“Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space. The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied.”

10.53 Appendix I (paragraph I6) states that:

“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.”

10.54 The Appendix I definitions of beneficial, negligible, minor adverse and major adverse effects are shown in Table 10.3. Moderate adverse effects are not specifically defined.

Table 10.3 BRE Appendix I Daylight, Sunlight and Sun on Ground Criteria

2011 BRE Criteria	
Negligible (paragraph I5)	“Where the loss of light is well within the guidelines, or only a small number of windows or a limited area of open space lose light (within the guidelines)”
Minor Adverse (paragraphs I5-I6)	“Where the loss of light is only just within the guidelines, and a larger number of windows or open space affected...” “Where the loss of skylight or sunlight does not meet the guidelines...only a small number of windows or limited area of open space are affected...the loss of light is only marginally outside the guidelines...the affected building or open space only has a low requirement for skylight or sunlight...there are particular reasons why an alternative, less stringent, guideline should be applied.”
Major Adverse (paragraph I7)	“Where the loss of skylight or sunlight does not meet the guidelines...a large number of windows or large area of open space are affected...the loss of light is substantially outside the guidelines...all the windows in a particular property are affected... the affected indoor or outdoor spaces have a particularly strong requirement for skylight or sunlight.”

2 B. Colbert, et al., Anatomy, Physiology, and Disease, An Interactive Journey for Health Professions, 1st edn, 2016

- 10.55 . For the purposes of this assessment the terms ‘marginally outside’ (minor adverse) and ‘substantially outside’ (major adverse) as well as the terms negligible and moderate adverse are, based upon professional judgement, and are further defined as described in Table 10.4 below. In complex scenarios where 1 or more BRE criteria is breached but another satisfied, or where there are other compelling circumstances then professional judgement is applied to arrive at a definition, and that rationale is set out within the body of the ES Chapter. The rationale for this is also set out in sections 10.57 – 10.60 below.
- 10.56 Effects classed as significant would be those which fall within the moderate adverse or major adverse categories.

Table 10.4 Standard Daylight and Sunlight Significance Criteria

Issue	2011 BRE Criteria
Negligible	No alteration or a small alteration from the existing scenario which is within the numerical levels suggested in the BRE Guidelines.
Minor Adverse	Marginal infringements (20.1-30%) of the numerical values suggested in the BRE Guidelines, which should be viewed in context.
Moderate Adverse	Moderate infringements (30.1-40%) of the numerical values suggested in the BRE Guidelines, which should be viewed in context.
Major Adverse	Major infringements (40%+) of the numerical values suggested within the BRE Guidelines, which should be viewed in context.

- 10.57 In Appendix F of the BRE Guidelines it states that the standard numerical target values for assessing how much light from the sky is blocked by obstructing buildings are purely advisory and, as such, different targets may be used.
- “...in a historic city centre, a typical obstruction angle from ground floor window level might be close to 40°. This would correspond to a VSC of 18%, which could be used as a target value for development...if new development is to match the existing layout”
- 10.58 This suggests that a more realistic VSC value for an urban location would be 18% rather than 27%, which is 66.7% of the standard target value.
- 10.59 The standard NSL target value is 80% of the room area. Applying the same level of flexibility to the NSL assessment as the VSC assessment, 66.7% of the standard 80% target value is 53.4%.
- 10.60 The effect of the Amended Proposed Development upon the daylight amenity to a room in this more urban context is, therefore, also considered to be of minor adverse significance in situations where:-
- Any VSC and/or NSL alteration is no greater than 30% of the baseline value; and
 - Despite any VSC and/or NSL alterations, all windows serving the room retain at least 18% VSC and the room which they serve retains at least 53.4% NSL.

Transient Overshadowing

- 10.61 The BRE Guidelines do not provide any criteria for the significance of transitory overshadowing, other than to suggest that by establishing the different times of day and year when shadow would be cast over adjacent areas, an indication is given as to the significance of the effect of the Amended Proposed Development.
- 10.62 The assessment of transient overshadowing effects is, therefore, based on professional judgement, taking into consideration the effect of the existing buildings upon the site and comparing it with the likely transient overshadowing effect of the Amended Proposed Development. The effects are defined as being of negligible, minor, moderate or major significance and either beneficial or adverse.

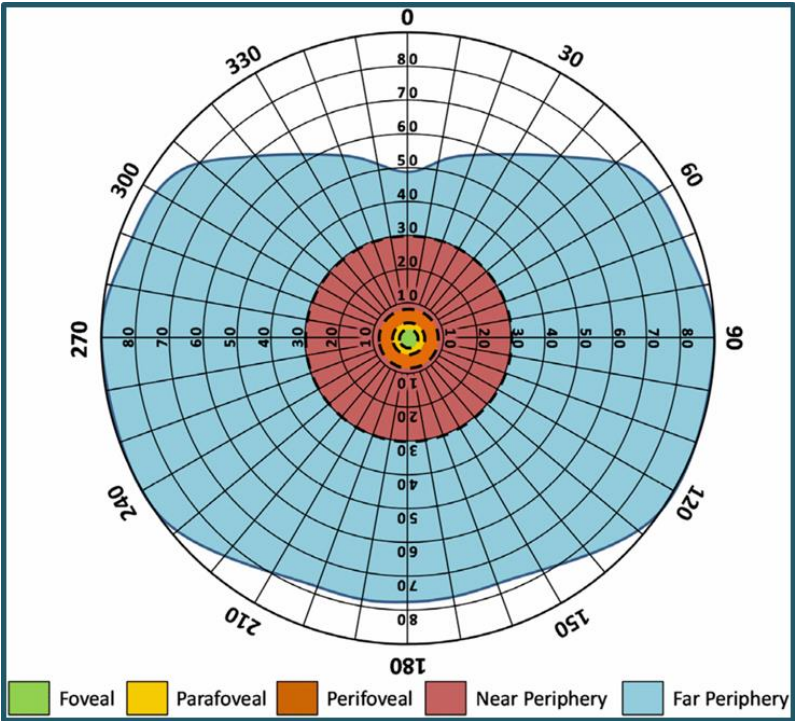
Solar Glare

- 10.63 There are no quantitative criteria within the 2011 BRE Guidelines regarding acceptable levels of solar glare. There is, however, research which suggests that the significance of a glare occurrence is largely dependent upon its angle from the line of sight and the relevance of this with respect to the human field of vision:

“The fovea centralis, also generally known as the fovea, is a part of the eye, located in the centre of the macula region of the retina. The fovea is responsible for sharp central vision (also called foveal vision), which is necessary in humans for reading, watching television or movies, driving, and any activity where visual detail is of primary importance.”³

- 10.64 Glare occurrences that could encroach on the foveal view (3° from the visual axis) are likely to cause significant visual impairment or distraction. It is also likely that the viewer’s line of sight will vary from the chosen view direction at each Viewpoint. To account for this along with the likely range of movement of the eye, it is considered that lengthy occurrences within approximately 10° of the centre of the visual axis are potentially the most hazardous. In this scenario, the adverse effect would often be considered major and mitigation would be required.
- 10.65 Between 10° and 30° corresponds to Near Periphery field of view and therefore where glare occurs between these angles, the impact would be considered minor or moderate depending upon the location and use of the adjacent sensitive receptor and the period of time the glare occurs for.
- 10.66 A reflectance angle of greater than 30° from the viewpoints shown in Figure 10.3 corresponds to the Far Periphery field of view and, therefore, the risk of reflective solar glare causing a hazard is reduced. As such, the impact would be considered to be minor or negligible.

Figure 10.3 Regions Within Human Binocular Field of View⁴



RECEPTORS AND RECEPTOR SENSITIVITY

Existing

- 10.67 The location of the existing daylight and sunlight sensitive receptors in relation to the site can be seen in Figure 10.1 and in the drawings within ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 2. They are also listed in Table 10.4 below

³ B. Colbert, et al., Anatomy, Physiology, and Disease, An Interactive Journey for Health Professions, 1st edn, 2016

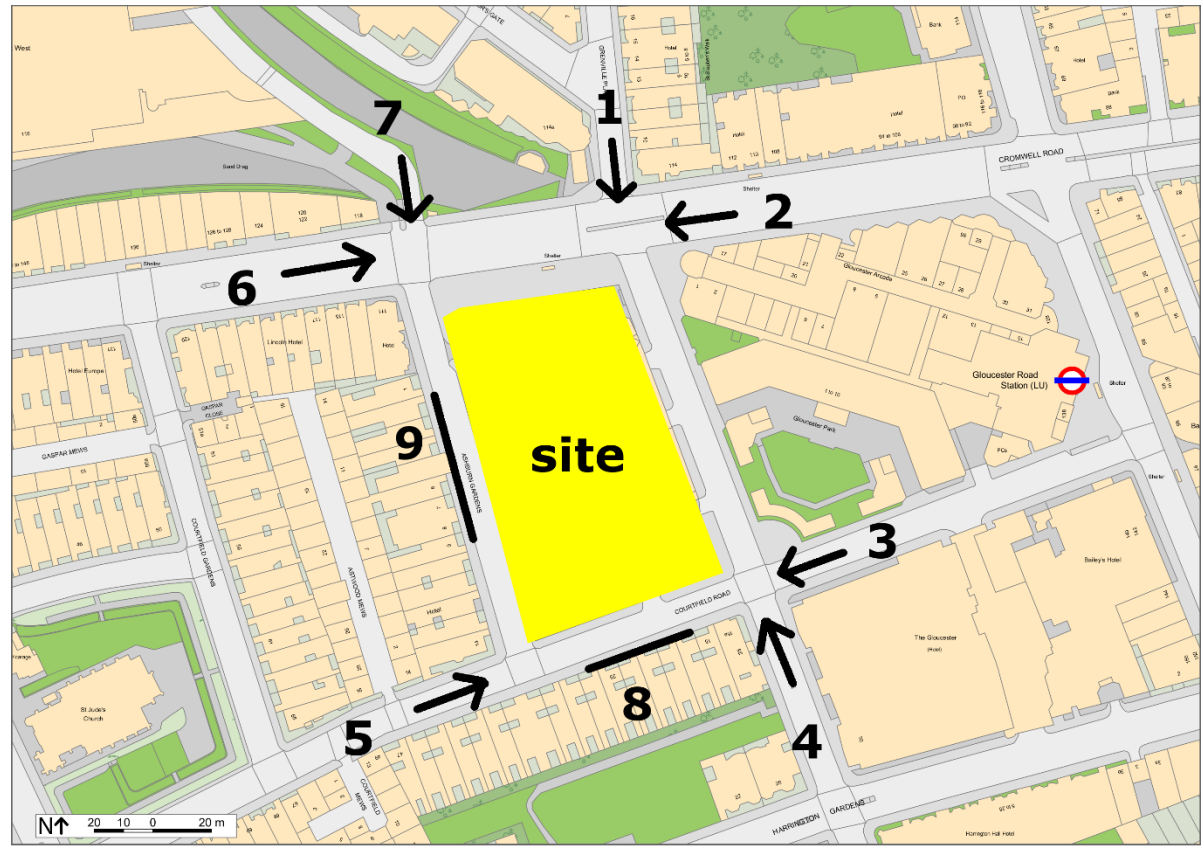
⁴ J. Jones, Et Al., Peripheral Stimulation And Its Effect On Perceived Spatial Scale In Virtual Environments

Table 10.5 List of Daylight and Sunlight Sensitive Receptors

Address	Address
1. 20 Harrington Gardens	24. 24 Astwood Mews
2. 15 - 15A Courtfield Road & 25 Ashburn Place	25. 25 Astwood Mews
3. 17 - 19 Courtfield Road	26. 26 Astwood Mews
4. 21 - 23 Courtfield Road	27. 27 Astwood Mews
5. 25 - 27 Courtfield Road	29. 16 Courtfield Rd
6. 29 - 31 Courtfield Road	28. 28 Astwood Mews
7. 33-35 Courtfield Road	30. 14 Ashburn Gardens
8. 37 - 39 Courtfield Road	31. 13 Ashburn Gardens
9. 41 - 43 Courtfield Road	32. 12 Ashburn Gardens
10. 45 - 47 Courtfield Road	33. 9 Ashburn Gardens
11. 13 Courtfield Mews	34. 8 Ashburn Gardens
12. 50 Courtfield Gardens	35. 7 Ashburn Gardens
13. 15 Astwood Mews	36. 6 Ashburn Gardens
14. 14 Astwood Mews	37. 5 Ashburn Gardens
15. 16 Astwood Mews	38. 118 Cromwell Road
16. 13 Astwood Mews	39. 124 Cromwell Road (Lilloto House)
17. 17 Astwood Mews	40. 126,128 Cromwell Road (Bury House)
18. 18 Astwood Mews	41. 10 Grenville Place
19. 19 Astwood Mews	42. 55 Courtfield Gardens
20. 20 Astwood Mews	43. 53 Courtfield Gardens
21. 21 Astwood Mews	44. 52 Courtfield Gardens
22. 22 Astwood Mews	45. 51 Courtfield Gardens
23. 23 Astwood Mews	

- 10.68 The location of the existing overshadowing sensitive receptors in relation to the site can be seen in Figure 10.2 and in the drawings within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 4**.
- 10.69 The location of the most sensitive solar glare viewpoints can be seen in Figure 10.4 and on the drawings within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 5**.

Figure 10.1 Location of Sensitive Solar Glare Viewpoints



Introduced

- 10.70 The location of the sensitive receptors introduced by the Amended Proposed Development can be seen in the drawings within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 6**.

BASELINE CONDITIONS

Current Baseline Conditions

Daylight and Sunlight

- 10.71 Detailed drawings of the existing baseline scenario can be found at **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 2**. Figure 10.1 and the drawings indicate the position of the existing surrounding daylight and sunlight receptors in relation to the site.
- 10.72 The model was analysed in order to ascertain the baseline levels of daylight and sunlight amenity within the existing residential properties.
- 10.73 The existing baseline VSC, NSL and APSH conditions were assessed. Full detailed results can be found in **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annexes 3 & 4**.
- 10.74 The results for VSC, NSL and APSH are summarised in Tables 10.6, 10.7 and 10.8 respectively.

Table 10.6 Summary Baseline VSC Results

Address	Total No of Windows that meet VSC Criteria (>27%)	Total No of Windows
20 Harrington Gardens	0	1
15 - 15A Courtfield Road & 25 Ashburn Place	22	61
17 - 19 Courtfield Road	11	56

Address	Total No of Windows that meet VSC Criteria (>27%)	Total No of Windows
21 - 23 Courtfield Road	12	47
25 - 27 Courtfield Road	14	47
29 - 31 Courtfield Road	13	43
33-35 Courtfield Road	10	46
37 - 39 Courtfield Road	8	44
41 - 43 Courtfield Road	12	38
45 - 47 Courtfield Road	18	38
13 Courtfield Mews	2	20
50 Courtfield Gardens	0	1
15 Astwood Mews	1	5
14 Astwood Mews	0	2
16 Astwood Mews	1	5
13 Astwood Mews	0	3
17 Astwood Mews	0	6
18 Astwood Mews	0	10
19 Astwood Mews	2	12
20 Astwood Mews	0	10
21 Astwood Mews	2	21
22 Astwood Mews	2	12
23 Astwood Mews	2	8
24 Astwood Mews	0	10
25 Astwood Mews	2	14
26 Astwood Mews	0	10
27 Astwood Mews	2	10
16 Courtfield Rd	0	11
28 Astwood Mews	0	4
14 Ashburn Gardens	15	22
13 Ashburn Gardens	13	19
12 Ashburn Gardens	12	18
9 Ashburn Gardens	6	19
8 Ashburn Gardens	5	23
7 Ashburn Gardens	3	25
6 Ashburn Gardens	2	22
5 Ashburn Gardens	2	20
118 Cromwell Road	20	25
124 Cromwell Road (Lilloto House)	16	20
126,128 Cromwell Road (Bury House)	24	40
10 Grenville Place	9	16
55 Courtfield Gardens	0	1
53 Courtfield Gardens	0	2
52 Courtfield Gardens	0	1
51 Courtfield Gardens	0	2

Address	Total No of Windows that meet VSC Criteria (>27%)	Total No of Windows
Total	264	872

Table 10.7 Summary Baseline NSL Results

Address	Total No. of Rooms that Receive NSL in Excess of 80%	Total No. of Rooms
20 Harrington Gardens	0	1
15 - 15A Courtfield Road & 25 Ashburn Place	28	33
17 - 19 Courtfield Road	19	26
21 - 23 Courtfield Road	16	27
25 - 27 Courtfield Road	17	26
29 - 31 Courtfield Road	18	24
33-35 Courtfield Road	20	22
37 - 39 Courtfield Road	19	25
41 - 43 Courtfield Road	20	25
45 - 47 Courtfield Road	20	25
13 Courtfield Mews	6	6
50 Courtfield Gardens	1	1
15 Astwood Mews	0	2
14 Astwood Mews	0	2
16 Astwood Mews	1	3
13 Astwood Mews	0	2
17 Astwood Mews	0	3
18 Astwood Mews	0	4
19 Astwood Mews	0	6
20 Astwood Mews	0	4
21 Astwood Mews	0	6
22 Astwood Mews	0	6
23 Astwood Mews	0	5
24 Astwood Mews	0	4
25 Astwood Mews	0	6
26 Astwood Mews	1	4
27 Astwood Mews	1	7
16 Courtfield Rd	5	5
28 Astwood Mews	2	2
14 Ashburn Gardens	12	12
13 Ashburn Gardens	9	12
12 Ashburn Gardens	14	14
9 Ashburn Gardens	11	12
8 Ashburn Gardens	9	10
7 Ashburn Gardens	7	12
6 Ashburn Gardens	4	13

Address	Total No. of Rooms that Receive NSL in Excess of 80%	Total No. of Rooms
5 Ashburn Gardens	5	12
118 Cromwell Road	23	23
124 Cromwell Road (Lilloto House)	20	20
126,128 Cromwell Road (Bury House)	23	26
10 Grenville Place	12	14
55 Courtfield Gardens	1	1
53 Courtfield Gardens	2	2
52 Courtfield Gardens	1	1
51 Courtfield Gardens	2	2
Total	349	498

Table 10.8 Summary Baseline APSH

Address	Total No. of Rooms that Meet APSH Criteria	Total No. of Rooms
15 - 15A Courtfield Road & 25 Ashburn Place	1	2
17 - 19 Courtfield Road	0	5
21 - 23 Courtfield Road	1	3
25 - 27 Courtfield Road	1	3
29 - 31 Courtfield Road	1	1
33-35 Courtfield Road	0	3
41 - 43 Courtfield Road	1	1
45 - 47 Courtfield Road	1	1
13 Courtfield Mews	5	5
15 Astwood Mews	1	1
19 Astwood Mews	1	1
21 Astwood Mews	1	1
22 Astwood Mews	1	1
23 Astwood Mews	1	1
25 Astwood Mews	1	1
27 Astwood Mews	1	1
16 Courtfield Rd	2	2
14 Ashburn Gardens	1	3
13 Ashburn Gardens	0	1
12 Ashburn Gardens	0	2
9 Ashburn Gardens	0	1
8 Ashburn Gardens	3	4
7 Ashburn Gardens	2	3
6 Ashburn Gardens	2	2
5 Ashburn Gardens	1	2

Address	Total No. of Rooms that Meet APSH Criteria	Total No. of Rooms
118 Cromwell Road	23	23
124 Cromwell Road (Lilloto House)	20	20
126,128 Cromwell Road (Bury House)	22	25
10 Grenville Place	14	14
Total	108	133

Transient Overshadowing

10.75 An analysis of the path of transient shadow from the existing baseline buildings has been undertaken in order to demonstrate the extent and times that shadow from the existing buildings falls upon the area surrounding the site. Full details of the analysis results are presented in **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 4.**

Solar Glare

10.76 Solar Glare is not assessed in the baseline situation as the effect assessment is one which is not based upon a comparison of the existing and proposed situations.

Evolution of the Baseline Conditions (The Future Baseline)

10.77 If the Amended Proposed Development was not delivered, the site would remain in its existing use and conditions relating to daylight, sunlight, overshadowing and solar glare would remain as per existing baseline conditions in relation to the site and when considering the surrounding area.

POTENTIAL EFFECTS

Demolition and Construction

10.78 Effects in relation to daylight, sunlight, overshadowing and solar glare would vary throughout the demolition and construction stage. They would, however, be less than the effects of the completed Amended Proposed Development. Those effects, which may be perceptible during construction, would be similar or less when compared to those of the completed development set out below.

Completed Development

Daylight and Sunlight

10.79 There are currently 872 windows serving 498 residential rooms surrounding the site which are material for consideration in daylight terms. These have all been assessed in terms of both VSC and NSL. Full detailed results are available within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 3**, and are summarised in Tables 10.9 & 10.10 below.

Table 10.9 Existing Baseline + Amended Proposed Development VSC Summary

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Windows
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
20 Harrington Gardens	1	0	0	0	0	1
15 - 15A Courtfield Road & 25 Ashburn Place	27	20	9	5	34	61
17 - 19 Courtfield Road	33	11	9	3	23	56
21 - 23 Courtfield Road	37	8	2	0	10	47
25 - 27 Courtfield Road	45	2	0	0	2	47

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Windows
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
29 - 31 Courtfield Road	43	0	0	0	0	43
33-35 Courtfield Road	44	2	0	0	2	46
37 - 39 Courtfield Road	44	0	0	0	0	44
41 - 43 Courtfield Road	38	0	0	0	0	38
45 - 47 Courtfield Road	38	0	0	0	0	38
13 Courtfield Mews	20	0	0	0	0	20
50 Courtfield Gardens	1	0	0	0	0	1
15 Astwood Mews	7	0	0	0	0	7
14 Astwood Mews	2	0	0	0	0	2
16 Astwood Mews	5	0	0	0	0	5
13 Astwood Mews	3	0	0	0	0	3
17 Astwood Mews	6	0	0	0	0	6
18 Astwood Mews	10	0	0	0	0	10
19 Astwood Mews	12	0	0	0	0	12
20 Astwood Mews	10	0	0	0	0	10
21 Astwood Mews	21	0	0	0	0	21
22 Astwood Mews	12	0	0	0	0	12
23 Astwood Mews	8	0	0	0	0	8
24 Astwood Mews	10	0	0	0	0	10
25 Astwood Mews	14	0	0	0	0	14
26 Astwood Mews	10	0	0	0	0	10
27 Astwood Mews	10	0	0	0	0	10
16 Courtfield Rd	11	0	0	0	0	11
28 Astwood Mews	4	0	0	0	0	4
14 Ashburn Gardens	21	1	0	0	1	22
13 Ashburn Gardens	12	3	2	2	7	19
12 Ashburn Gardens	7	9	2	0	11	18
9 Ashburn Gardens	0	16	1	2	19	19
8 Ashburn Gardens	3	19	0	1	20	23
7 Ashburn Gardens	5	17	0	3	20	25
6 Ashburn Gardens	13	9	0	0	9	22
5 Ashburn Gardens	13	7	0	0	7	20
118 Cromwell Road	25	0	0	0	0	25
124 Cromwell Road (Lilloto House)	20	0	0	0	0	20
126,128 Cromwell Road (Bury House)	39	0	0	1	1	40
10 Grenville Place	15	1	0	0	1	16
55 Courtfield Gardens	1	0	0	0	0	1
53 Courtfield Gardens	2	0	0	0	0	2
52 Courtfield Gardens	1	0	0	0	0	1
51 Courtfield Gardens	2	0	0	0	0	2

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Windows
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
Total	705	125	25	17	167	872

Table 10.10 Existing Baseline + Amended Proposed Development NSL Summary

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Rooms
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
20 Harrington Gardens	1	0	0	0	0	1
15 - 15A Courtfield Road & 25 Ashburn Place	25	2	3	3	8	33
17 - 19 Courtfield Road	22	1	0	3	4	26
21 - 23 Courtfield Road	24	3	0	0	3	27
25 - 27 Courtfield Road	25	1	0	0	1	26
29 - 31 Courtfield Road	24	0	0	0	0	24
33-35 Courtfield Road	22	0	0	0	0	22
37 - 39 Courtfield Road	24	0	1	0	1	25
41 - 43 Courtfield Road	25	0	0	0	0	25
45 - 47 Courtfield Road	25	0	0	0	0	25
13 Courtfield Mews	6	0	0	0	0	6
50 Courtfield Gardens	0	0	1	0	1	1
15 Astwood Mews	1	1	0	0	1	2
14 Astwood Mews	1	0	0	1	1	2
16 Astwood Mews	2	1	0	0	1	3
13 Astwood Mews	2	0	0	0	0	2
17 Astwood Mews	3	0	0	0	0	3
18 Astwood Mews	4	0	0	0	0	4
19 Astwood Mews	6	0	0	0	0	6
20 Astwood Mews	4	0	0	0	0	4
21 Astwood Mews	6	0	0	0	0	6
22 Astwood Mews	6	0	0	0	0	6
23 Astwood Mews	5	0	0	0	0	5
24 Astwood Mews	4	0	0	0	0	4
25 Astwood Mews	6	0	0	0	0	6
26 Astwood Mews	4	0	0	0	0	4
27 Astwood Mews	7	0	0	0	0	7
16 Courtfield Rd	5	0	0	0	0	5
28 Astwood Mews	2	0	0	0	0	2
14 Ashburn Gardens	12	0	0	0	0	12
13 Ashburn Gardens	10	1	0	1	2	12
12 Ashburn Gardens	13	1	0	0	1	14

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Rooms
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
9 Ashburn Gardens	5	4	0	3	7	12
8 Ashburn Gardens	6	1	0	3	4	10
7 Ashburn Gardens	9	1	2	0	3	12
6 Ashburn Gardens	11	2	0	0	2	13
5 Ashburn Gardens	11	1	0	0	1	12
118 Cromwell Road	23	0	0	0	0	23
124 Cromwell Road (Lilloto House)	20	0	0	0	0	20
126,128 Cromwell Road (Bury House)	26	0	0	0	0	26
10 Grenville Place	14	0	0	0	0	14
55 Courtfield Gardens	1	0	0	0	0	1
53 Courtfield Gardens	2	0	0	0	0	2
52 Courtfield Gardens	1	0	0	0	0	1
51 Courtfield Gardens	2	0	0	0	0	2
Total	457	20	9	12	41	498

10.80 There are currently 133 residential rooms surrounding the site which are material for consideration in sunlight terms because at least one of the windows serving the room is orientated to within 90 degrees of due south. These have all been assessed in terms of both winter and total APSH. Full detailed results are available within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 3**, and are summarised in Tables 10.11 & 10.12 below.

Table 10.11 Existing Baseline + Amended Proposed Development Winter Sunlight Summary

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Rooms
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
15 - 15A Courtfield Road & 25 Ashburn Place	2	0	0	0	0	2
17 - 19 Courtfield Road	5	0	0	0	0	5
21 - 23 Courtfield Road	3	0	0	0	0	3
25 - 27 Courtfield Road	3	0	0	0	0	3
29 - 31 Courtfield Road	1	0	0	0	0	1
33-35 Courtfield Road	3	0	0	0	0	3
41 - 43 Courtfield Road	1	0	0	0	0	1
45 - 47 Courtfield Road	1	0	0	0	0	1
13 Courtfield Mews	5	0	0	0	0	5
15 Astwood Mews	1	0	0	0	0	1
19 Astwood Mews	1	0	0	0	0	1
21 Astwood Mews	1	0	0	0	0	1
22 Astwood Mews	1	0	0	0	0	1
23 Astwood Mews	1	0	0	0	0	1

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Rooms
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
25 Astwood Mews	1	0	0	0	0	1
27 Astwood Mews	1	0	0	0	0	1
16 Courtfield Rd	2	0	0	0	0	2
14 Ashburn Gardens	3	0	0	0	0	3
13 Ashburn Gardens	1	0	0	0	0	1
12 Ashburn Gardens	2	0	0	0	0	2
9 Ashburn Gardens	1	0	0	0	0	1
8 Ashburn Gardens	4	0	0	0	0	4
7 Ashburn Gardens	3	0	0	0	0	3
6 Ashburn Gardens	2	0	0	0	0	2
5 Ashburn Gardens	2	0	0	0	0	2
118 Cromwell Road	23	0	0	0	0	23
124 Cromwell Road (Lilloto House)	20	0	0	0	0	20
126,128 Cromwell Road (Bury House)	25	0	0	0	0	25
10 Grenville Place	1	3	1	9	13	14
Total	120	3	1	9	13	133

Table 10.12 Existing Baseline + Amended Proposed Development Annual Sunlight Summary

Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Rooms
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
15 - 15A Courtfield Road & 25 Ashburn Place	2	0	0	0	0	2
17 - 19 Courtfield Road	5	0	0	0	0	5
21 - 23 Courtfield Road	3	0	0	0	0	3
25 - 27 Courtfield Road	3	0	0	0	0	3
29 - 31 Courtfield Road	1	0	0	0	0	1
33-35 Courtfield Road	3	0	0	0	0	3
41 - 43 Courtfield Road	1	0	0	0	0	1
45 - 47 Courtfield Road	1	0	0	0	0	1
13 Courtfield Mews	5	0	0	0	0	5
15 Astwood Mews	1	0	0	0	0	1
19 Astwood Mews	1	0	0	0	0	1
21 Astwood Mews	1	0	0	0	0	1
22 Astwood Mews	1	0	0	0	0	1
23 Astwood Mews	1	0	0	0	0	1
25 Astwood Mews	1	0	0	0	0	1
27 Astwood Mews	1	0	0	0	0	1
16 Courtfield Rd	2	0	0	0	0	2

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Address	Total that Meet BRE Guidelines (Negligible)	Below BRE Guidelines				Total No. of Rooms
		20.1-30% Reduction (Minor)	30.1%-40% Reduction (Moderate)	>40% Reduction (Major)	Total	
14 Ashburn Gardens	3	0	0	0	0	3
13 Ashburn Gardens	1	0	0	0	0	1
12 Ashburn Gardens	2	0	0	0	0	2
9 Ashburn Gardens	0	0	0	1	1	1
8 Ashburn Gardens	3	1	0	0	1	4
7 Ashburn Gardens	3	0	0	0	0	3
6 Ashburn Gardens	2	0	0	0	0	2
5 Ashburn Gardens	2	0	0	0	0	2
118 Cromwell Road	23	0	0	0	0	23
124 Cromwell Road (Lilloto House)	20	0	0	0	0	20
126,128 Cromwell Road (Bury House)	25	0	0	0	0	25
10 Grenville Place	1	0	11	2	13	14
Total	118	1	11	3	14	133

- 10.81 In situations where the construction of the Amended Proposed Development would result in VSC, NSL and APSH alterations to the windows and rooms within a property which are all within the BRE guidelines, the effect of the Amended Proposed Development upon the daylight and sunlight amenity to that property is considered to be negligible (not significant).
- 10.82 Of the 45 properties assessed, the effect to the daylight and sunlight amenity of the 28 properties listed within Table 10.13 would be permanent, direct and of negligible significance (not significant). These properties are, therefore, not considered further in the assessment.

Table 10.13 Properties Experiencing a Daylight and Sunlight Effect of Negligible Significance

Address	Address
20 Harrington Gardens	23 Astwood Mews
29 - 31 Courtfield Road	25 Astwood Mews
33-35 Courtfield Road	26 Astwood Mews
41 - 43 Courtfield Road	27 Astwood Mews
45 - 47 Courtfield Road	16 Courtfield Rd
13 Courtfield Mews	28 Astwood Mews
13 Astwood Mews	118 Cromwell Road
17 Astwood Mews	124 Cromwell Road (Lilloto House)
18 Astwood Mews	126, 128 Cromwell Road (Bury House)
19 Astwood Mews	55 Courtfield Gardens
20 Astwood Mews	53 Courtfield Gardens
21 Astwood Mews	52 Courtfield Gardens
22 Astwood Mews	51 Courtfield Gardens
24 Astwood Mews	50 Courtfield Gardens

- 10.83 Based upon the significance criteria cited within the magnitude of change section above the effect to the daylight and sunlight amenity of the 10 properties listed within Table 10.14 would be permanent, direct and minor adverse (not significant).

Table 10.14 Properties Experiencing a Daylight and Sunlight Effect of Minor Adverse Significance

Address	Address
25 - 27 Courtfield Road	14 Ashburn Gardens
37-39 Courtfield Road	12 Ashburn Gardens
15 Astwood Mews	6 Ashburn Gardens
14 Astwood Mews	5 Ashburn Gardens
16 Astwood Mews	10 Grenville Place

- 10.84 The following 7 properties contain some rooms which fall within the Negligible or Minor Adverse significance criteria but some rooms or windows which fall within a Moderate or Major Adverse significance criteria and are, therefore, discussed below in more detail.
- 15-15A Courtfield Road & 25 Ashburn Place*
- Daylight*
- 10.85 There are 61 windows serving 33 rooms within this property.
- 10.86 13 of the 33 rooms would, with the completed Amended Proposed Development, experience both VSC and NSL alterations which are fully BRE compliant. The effect on these rooms is, therefore, considered to be **negligible**.
- 10.87 The completed Amended Proposed Development would result in 8 rooms experiencing a **minor adverse** effect to their daylight amenity based on the significance criteria described above.
- 10.88 There are 12 rooms which breach some BRE criteria and therefore experience a more material change which requires further consideration.
- 10.89 Of which 4 rooms (3 bedrooms and 1 kitchen) are served by more than one window. All, or most, windows in each room will experience a moderate adverse change in VSC. All 4 rooms will be fully BRE compliant in terms of any changes in NSL. Each room will retain the recommended 80% or more NSL indicating that light will continue to reach deeply into the room. Each of the 4 rooms will retain a good/reasonable quantum of daylight within the room and as a result the effect of the Amended Proposed Development upon these 4 rooms is considered to be **minor adverse**.
- 10.90 The remaining 8 rooms will all experience VSC and/or NSL changes which are minor to major adverse. However, 6 out of the 8 rooms contain windows which will retain a VSC of between 15% and 21% VSC and will retain NSL/daylight distribution to between 39% and 74% of the room. The effect upon these 6 rooms is, therefore, considered to be **moderate adverse** (significant).
- 10.91 The final 2 rooms (R1/500 and R4/500) both living rooms, located on the ground floor which face North across Courtfield Road toward that part of the site which is currently undeveloped but which will house the Affordable Residential block in the Amended Proposed Development, will experience major adverse changes in VSC daylight at the window face, but BRE compliant (Negligible) alterations in NSL/Daylight Distribution for room R1/500 and moderate adverse for room R4/500. The retained daylight level for room R4/500 is considered reasonable/commensurate with a more urban context and the quantum of light within the room remains reasonable and hence it is considered Moderate Adverse. The retained daylight for room R1/500 is commensurate with a more urban context and the NSL daylight within the room is BRE compliant and therefore negligibly affected with light continuing to penetrate into 78% of the room. Hence the effect for room R1/500 is considered **Moderate Adverse**. (significant)
- Sunlight*
- 10.92 All rooms material for sunlight assessment will be fully BRE compliant. The effect upon this property in sunlight terms is, therefore, considered to be **Negligible** (not significant).

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17-19 Courtfield Road

Daylight

- 10.93 There are 56 windows serving 26 rooms in this property.
- 10.94 13 of the 26 rooms would, with the completed Amended Proposed Development, experience both VSC and NSL alterations which are fully BRE compliant. The effect on these rooms is, therefore, considered to be **negligible**.
- 10.95 The completed Amended Proposed Development would result in 5 rooms experiencing a **minor adverse** effect to their daylight amenity based on the significance criteria described above.
- 10.96 There are 8 rooms which breach some BRE criteria and therefore experience a more material change which require further consideration.
- 10.97 4 rooms (1 assumed living room and 3 bedrooms) which are all served by more than one window will experience minor to moderate adverse VSC changes. All 4 rooms will be fully BRE compliant in terms of any changes in NSL and retain 77% to 85% NSL/Daylight Distribution within the room. The effect of the Amended Proposed Development upon these 4 rooms is therefore considered to be **minor adverse**.
- 10.98 There are 2 x 4th floor rooms which are both fully BRE compliant in terms of VSC (i.e. a Negligible effect) but both will experience a Minor and major adverse change in NSL. The respective windows will retain 24 to 25% VSC which represents a good level of daylight incident on the window faces & that the proposed scheme is therefore suitable for context. The effect of the Amended Proposed Development upon these rooms is also considered to be **minor adverse**.
- 10.99 The windows serving the remaining 2 rooms – a lower ground floor room (R4/499) and a ground floor room (R5/500) will experience moderate to major adverse alterations in daylight at the window face (VSC). In addition, the rooms served by those windows will also experience changes in NSL which are major adverse. Both rooms will, however, retain daylight distribution to in excess of 55% of their area and retain VSC daylight values which are commensurate with a more urban context. The effect upon these rooms is, therefore, considered to be **moderate adverse** (significant).

Sunlight

- 10.100 All rooms material for sunlight assessment will be fully BRE compliant. The effect upon this property in sunlight terms is, therefore, considered to be negligible (not significant).

21-23 Courtfield Road

Daylight

- 10.101 There are 47 windows serving 27 rooms within this property.
- 10.102 18 of the rooms would, with the completed Amended Proposed Development, experience both VSC and NSL alterations which are fully BRE compliant. The effect on these rooms is, therefore, considered to be **negligible**. Of those 18 rooms 8 will see a small improvement in their daylight.
- 10.103 There are 9 rooms which breach some BRE criteria and will experience a more material change which require further consideration.
- 10.104 7 rooms will meet one of the daylight criteria (VSC or NSL) and to that extent are negligibly affected and will only slightly breach the other daylight test resulting in a Minor Adverse change on 1 daylight test and have good/reasonable retained daylight values. These are considered Minor Adverse.
- 10.105 2 rooms (R9/499 at lower ground floor and bedroom R8/512 at 2nd floor) are each served by 2 windows. One window serving each room experiences a minor adverse change in VSC daylight and the other a moderate adverse change in VSC daylight. Both rooms experience a BRE compliant change in their NSL daylight and are therefore negligibly affected in terms of penetration of light into the room. The rooms retain a level of daylight commensurate with site context and are considered Minor Adverse.

Sunlight

- 10.106 There are no rooms material for sunlight assessment due to their orientation.

13 Ashburn Gardens

Daylight

- 10.107 There are 19 windows serving 12 rooms in this property.

- 10.108 8 of the 12 rooms would, with the completed Amended Proposed Development, experience both VSC and NSL alterations which are fully BRE compliant. The effect on these rooms is, therefore, considered to be **negligible**.
- 10.109 There are 4 rooms which breach some BRE criteria and will will experience a more material change which require further consideration.
- 10.110 1 room (R4/701 a lounge/living room located at 1st floor) is served by 2 windows, 1 of which satisfies VSC criteria and the other experiences a trivial statistical breach of VSC criteria. The room satisfies the NSL criteria and in fact is barely affected. The effect upon this room is considered Negligible.
- 10.111 The windows serving 3 of the remaining rooms, which are located at lower ground and ground floor levels, all have below the minimum recommended (27%) VSC values in the existing situation. To deal with each of these 3 rooms in turn:
- 10.112 Room R3/699 is a lower ground floor kitchen. In the existing situation because of its orientation and lower ground position it has an extremely restricted view of the sky. It has a VSC of just 4.04% in the existing situation (compared to a BRE recommended level of 27% and typical town or City VSC values of circa 12-18%) and sky visibility to just 20.9 sq ft of the room. The changes in daylight fall into a Major Adverse category (i.e. in excess of 40%) because the existing base line is so low. In fact, the alteration is small in actual terms it is just 2% VSC change and 8.8 sq ft NSL change. When one factors in the presence of the mature Plane trees which are parallel to Ashburn Gardens the change in daylight to this room as a function of the Amended Proposed Development is less and the actual alteration in the quantum of light within the room is expected to be very small. This is considered to be Minor Adverse.
- 10.113 Room R5/699 is understood to be a Bedsit. It is served by 2 windows, 1 of which is affected in VSC terms to a Minor Adverse extent and the other to a Moderate Adverse extent. The NSL daylight within the room is affected to a Minor Adverse extent and the room will retain sky visibility to 73% of its area. Overall this is considered Minor Adverse.
- 10.114 Room R4/700 is a raised ground floor, bay-fronted, living room. It is served by 3 windows. The main larger window is affected in VSC terms to a Minor Adverse extent, whilst its 2 flanking, angled windows, due to their orientation and relationship with other parts of the terrace already have a much lower existing VSC value, are affected to a moderate and major adverse extent. The daylight within the room, NSL, is BRE compliant and in fact barely affected, and therefore considered Negligible. Given that the main window to the room is Minor Adverse and the effect upon the NSL within the room is Negligible, this is considered a Minor Adverse effect in daylight terms.

Sunlight

- 10.115 All rooms material for sunlight assessment will be fully BRE compliant. The effect upon this property in sunlight terms is, therefore, considered to be negligible (not significant).

9 Ashburn Gardens

Daylight

- 10.116 There are 19 windows serving 12 rooms within this property.
- 10.117 5 rooms located from 1st to 4th floor will experience minor adverse changes in VSC daylight but all rooms within will satisfy the NSL daylight criteria and to that extent be negligibly affected. All windows which serve these rooms retain 17-21% VSC at the window face which is a good level of daylight for a city/urban location. The completed Amended Proposed Development would result in these 5 rooms experiencing a **minor adverse** effect to their daylight amenity.
- 10.118 4 rooms located from 2nd to 5th floor will experience minor adverse changes in VSC daylight and NSL daylight. Their retained VSC daylight is 18-22% which is a good level of daylight for a city/urban location. The effect upon these 4 rooms is considered Minor Adverse.
- 10.119 There are 3 rooms which will experience a more material change and require further consideration.
- 10.120 Room R5/705 located on the 5th floor will experience a Minor Adverse change in VSC but a Major Adverse change in NSL. The window will retain a 21% VSC which is good for an urban/city location and will retain sky visibility across 50% of the room area. The alteration here is partly a function of the ratio of window to room size and is considered Minor Adverse.

10.121 Room R12/700 is a raised ground floor bay fronted window. The principle window which faces the site experiences a moderate adverse effect in VSC daylight terms, whilst each flanking window experiences a major adverse effect which is, in part a function of their orientation and relationship with the rest of the terrace. The room experiences a major adverse alteration in NSL daylight within the room. Retained daylight values are reasonable/commensurate with context. The affect is considered to be Moderate Adverse.

10.122 Room R13/699 is a lower ground floor room served by a single window. The room will experience a minor adverse alteration in VSC daylight and major adverse effect in NSL daylight. The effect is considered to be Moderate Adverse.

Sunlight

10.123 In the ‘Without Trees’ scenario the raised ground floor room (R12/700) will experience a Major Adverse change in sunlight enjoyment. However, the trees which predominate on the site have a material bearing on sunlight penetration to Ashburn Gardens. When these are included the alteration in sunlight is negligible.

8 Ashburn Gardens

Daylight

10.124 There are 23 windows serving 10 rooms in this property.

10.125 6 rooms located from 1st to 5th floor will experience minor adverse changes in VSC daylight but all rooms within will satisfy the NSL daylight criteria and to that extent be negligibly affected. All windows which serve these rooms retain 16-21% VSC at the window face which is a good level of daylight for a city/urban location. The completed Amended Proposed Development would result in these 5 rooms experiencing a **minor adverse** effect to their daylight amenity.

10.126 2 rooms located on the 4th floor will experience minor adverse changes in VSC daylight and minor adverse & moderate adverse changes in NSL daylight. Their retained VSC daylight is 19% and NSL is 64-66% which is a good level of daylight for a city/urban location. The effect upon these 2 rooms is considered Minor Adverse

10.127 There are 2 rooms which will experience a more material change both located on the lowest floors.

10.128 Room R13/700 is a raised ground floor bay fronted window. The principle window which faces the site & 1 of the flanking windows experiences a minor adverse effect in VSC daylight terms, 1 of the flanking windows experiences a major adverse effect which is, in part a function of their orientation and relationship with the rest of the terrace. The room experiences a moderate adverse alteration in NSL daylight within the room. Retained daylight values are reasonable/commensurate with context. The affect is considered to be Moderate Adverse

10.129 Room R14/699 is a lower ground floor room served by two windows. The room will experience a minor adverse alteration in VSC daylight and moderate adverse effect in NSL daylight. The effect is considered to be Moderate Adverse.

Sunlight

10.130 In the ‘Without Trees’ scenario the lower ground floor room (R14/699) will experience a Minor Adverse change in sunlight enjoyment. However, the trees which predominate on the site have a material bearing on sunlight penetration to Ashburn Gardens. When these are included the alteration in sunlight is negligible.

7 Ashburn Gardens

Daylight

10.131 There are 25 windows serving 12 rooms in this property.

10.132 9 rooms located from Ground to 5th floor will experience minor adverse changes in VSC daylight but all rooms within will satisfy the NSL daylight criteria and to that extent be negligibly affected. All windows which serve these rooms retain 15-18% VSC at the window face which is a good/reasonable level of daylight for a city/urban location. The completed Amended Proposed Development would result in these 9 rooms experiencing a **minor adverse** effect to their daylight amenity.

10.133 1 x 1st floor room (R17/701) is served by 2 windows, 1 of which satisfies BRE VSC criteria and is therefore negligibly affected, whilst the other is fractionally beyond guidance and is minor adverse. The room will experience a minor adverse alteration in NSL daylight. The windows will retain a VSC of 15% and the room will retain sky visibility over 56% of its area. The effect is considered to be Minor Adverse.

10.134 There are 2 rooms which will experience a more material change both located on the lowest floors

10.135 Room R16/700 is a raised ground floor bay fronted window. The principle window which faces the site & 1 of the flanking windows experiences a minor adverse effect in VSC daylight terms, 1 of the flanking windows experiences a major adverse effect which is, in part a function of their orientation and relationship with the rest of the terrace. The room experiences a moderate adverse alteration in NSL daylight within the room. Retained daylight values are commensurate with a more urban context. The affect is considered to be Moderate Adverse

10.136 Room R17/699 is a lower ground floor room served by four windows. The room will experience a negligible effect to 1 window, a minor adverse alteration to the main window, and a more material effect to 2 other smaller windows which have barely any sky visibility in the existing situation. The room behind the 4 windows will experience a moderate adverse effect in NSL daylight. The room will retain daylight commensurate with context and sky visibility to 40% of the room. The effect is considered to be Moderate Adverse.

Sunlight

10.137 All rooms material for sunlight assessment will be fully BRE compliant. The effect upon this property in sunlight terms is considered to be negligible (not significant).

Transient Overshadowing at Surrounding Areas of Amenity Space

10.138 An analysis of the path of transient shadow from the Amended Proposed Development has been undertaken in order to demonstrate the extent and times that shadow from the Amended Proposed Development’s buildings would fall upon the amenity spaces surrounding the site. Full details of the analysis results can be found within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 4.**

10.139 In addition, sun-on-ground technical analysis has been undertaken in accordance with BRE Guidance. Technical analysis has been undertaken on 5 key areas of amenity space both on March 21st and June 21st to ascertain the proportion of each which will experience more than 2 hours of sunlight over 50% or more of their area. As there is no comparable configuration between the existing disparate open space on Ashburn Gardens and the new park which is proposed, only sun-on-ground analysis has been undertaken on the proposed situation. However full transient shadow analysis can also be seen for the existing situation in the transient shadow analysis within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 4.**

Area	Existing March 21 st	Proposed March 21 st	Existing June 21 st	Proposed June 21 st
Courtfield Gardens	87.3%	88.6%	100%	100%
Area South of 114A Cromwell Road	100%	100%	100%	100%
Area North of 114 Cromwell Road	47.3%	37.7%	98.9%	98.9%
Area South of 1-10 Cromwell Road	78.1%	74.1%	93.7%	92.3%
Ashburn Gardens	N/A	95.5%	N/A	99.7%

10.140 The sun-on-ground analysis confirms negligible or minor alterations and or compliance with the BRE Guidance. For that reason, the effect in sun-on-ground terms is considered negligible.

10.141 This can be found within ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 5.

10.142 The overall effect of the Amended Proposed Development upon neighbouring amenity space is considered to be **minor adverse** (not significant)

10.143 The effect upon al other sensitive receptors will also be of no greater than **minor adverse** effect.

Solar Glare

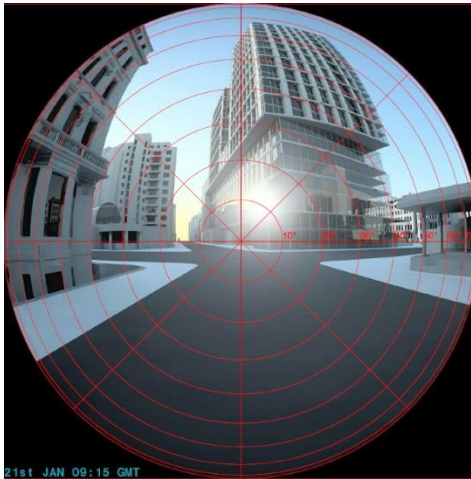
10.144 Solar glare plots can be found in ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 5.

10.145 The potential for adverse instances of solar glare has been assessed from the sensitive driving viewpoints and residential locations shown in Figure 10.3.

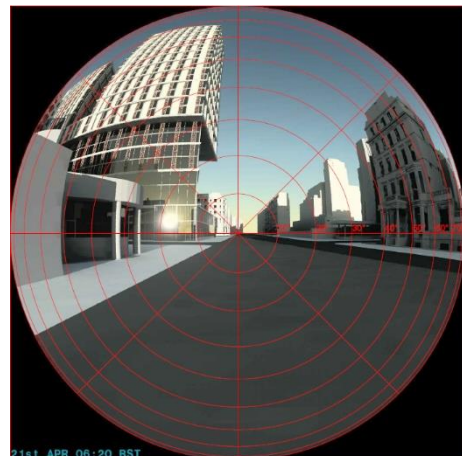
10.146 These viewpoints have been assessed on the basis that there is a direct or oblique view of the Amended Proposed Development from these locations and the initial screening indicated that these locations would experience instances of solar glare at certain times of the day at certain times of the year.

10.147 The following 'worst case' identified instances of solar glare shown below and in the plots within **ES Addendum Volume 3: Appendix: Daylight, Sunlight, Overshadowing and Solar Glare Annex 5** last for the indicated durations specified as Greenwich Mean Time (GMT) or British Summer Time (BST) as detailed below:

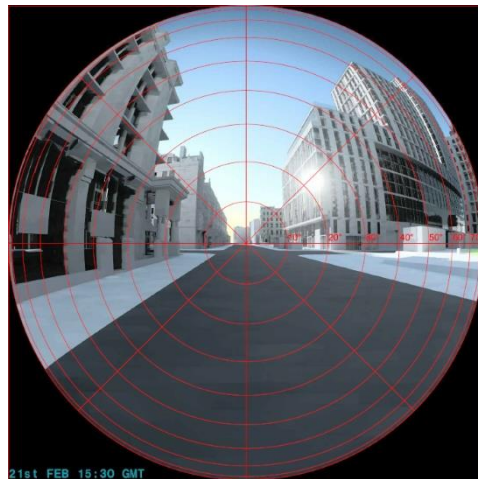
1. Circa 30-45 minutes from 9am (GMT) during the winter months



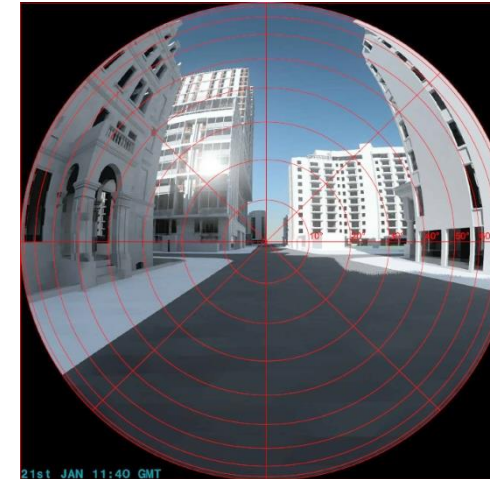
2. Circa 60 minutes from 6am (BST) during the Spring & Autumn months



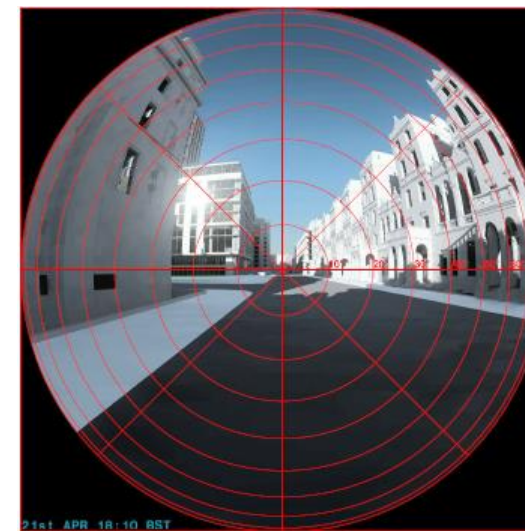
3. Brief potential periods for 60 minutes from 3pm (GMT) during the Spring and Autumn months



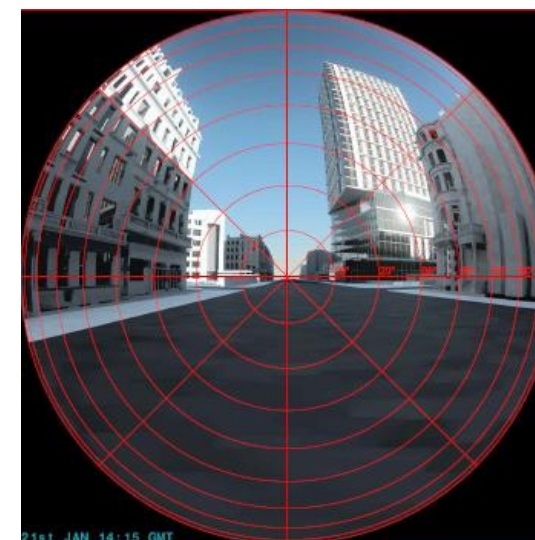
4. Circa 60 minutes from 11am (GMT) during the Spring, Autumn and Winter months



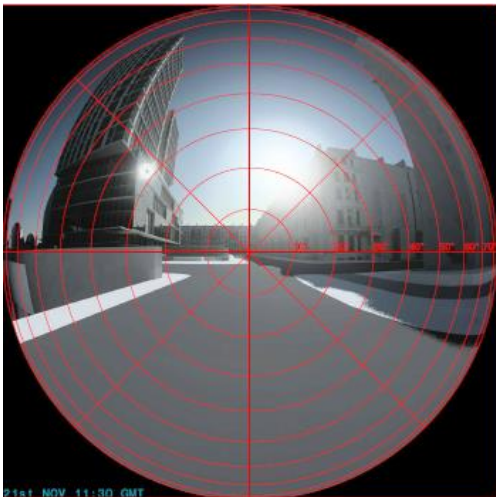
5. Brief incidents from 6am (BST) during the spring & autumn months and circa 60 minutes from 5:30pm (BST)



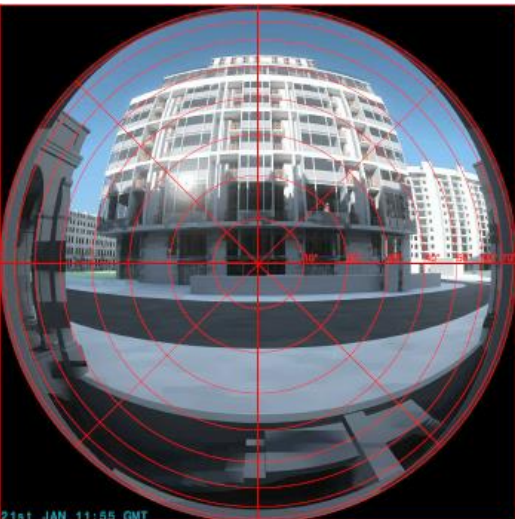
6. Brief incidents from 6am (BST) and circa 30 minutes from 2pm (GMT) during the Autumn / Winter months



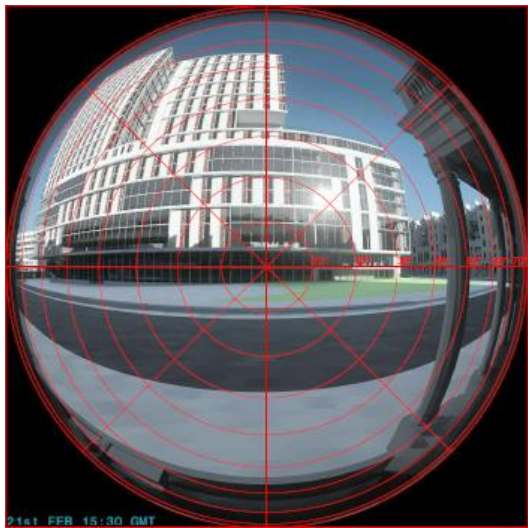
7. Circa 20 minutes from 11am (GMT) and brief incidents from 1pm (GMT) during the winter months



8. At various locations throughout the early part of the day (typically 9am – 12 noon) in winter, early spring and late autumn



9. At various locations throughout the later part of the day (typically 2pm +) in winter, early spring and late autumn



- 10.148 The solar glare calendars and plots within **ES Addendum Volume 3: Appendix - Daylight, Sunlight, Overshadowing and Solar Glare (Annex 5)** show that the instances of solar glare are generally short in duration and/or not directly in the eyeline of an approaching driver.
- 10.149 The likely effect of the Amended Proposed Development in solar glare terms is, therefore, considered to be **minor adverse** from viewpoints 3,4, ,6,7 8 and 9 (Not Significant).
- 10.150 The instances of solar glare from viewpoint 1, 2 and 5 are considered to be **moderate adverse** (Significant) in view of the duration of the glare instances and the fact that it is in the direct view of an approaching driver during a generally busy time of the day.

MITIGATION AND RESIDUAL EFFECTS

Demolition and Construction

- 10.151 No mitigation measures are required for the demolition and construction stage. Effects in relation to daylight, sunlight and overshadowing would vary throughout the demolition and construction stage. They would, however, certainly be less than the effects of the completed Amended Proposed Development. Those effects, which may be perceptible during demolition and construction, would be similar or less than those of the completed Amended Proposed Development set out previously.

Completed Development

- 10.152 Since there are moderate adverse (significant) solar glare effects from certain viewpoints, it is recommended that mitigation measures be taken to the effect that glazing at the lower levels of the building be treated to ensure that they are less reflective in nature and thereby minimise any potential effect at viewpoint 1, 2 and 5. This can be done by the special coating of or fritting of the glazing panels or the application of fins to lessen the intensity of the instances of glare. This will be considered during detailed design stage and covered by an appropriately worded planning condition.
- 10.153 Whilst there are some isolated daylight effects which are of moderate adverse significance, no mitigation is proffered on the basis that the retained daylight values of those rooms are commensurate with those of similar properties in the same environment which are not affected by the Amended Proposed Development or a more urban environment.
- 10.154 Since there is no effect of the Amended Proposed Development in sunlight and shadow terms which is considered to be greater than minor adverse in significance, no mitigation measures are proposed.
- 10.155 A summary of residual effects can be found in Table 10.15.

Table 10.15 Summary of Residual Effects

Receptor (and Sensitivity)	Description of Residual Effect	Classification of Residual Effect*						
		Nature and Scale**	+ -	D I	P T	R IR	St Mt Lt	
Demolition and Construction								
20 Harrington Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
29 - 31 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
37-39 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
41 - 43 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
45 - 47 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	

Receptor (and Sensitivity)	Description of Residual Effect	Classification of Residual Effect*						
		Nature and Scale**	+ -	D I	P T	R IR	St Mt Lt	
13 Courtfield Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
13 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
17 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
18 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
19 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
20 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
21 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
22 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
24 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
23 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
25 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
26 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
27 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
16 Courtfield Rd	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
14 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
118 Cromwell Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
124 Cromwell Road (Lilloto House)	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
55 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
53 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
52 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
51 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
21 - 23 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
25 - 27 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	

Receptor (and Sensitivity)	Description of Residual Effect	Classification of Residual Effect*						
		Nature and Scale**	+ -	D I	P T	R IR	St Mt Lt	
33-35 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
50 Courtfield Gardens	Loss of daylight and sunlight amenity	Minor Adverse	-	D	P	IR	Lt	
15 Astwood Mews	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
16 Astwood Mews	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
12 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
6 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
5 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
15-15A Courtfield Rd & 25 Ashburn Place	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
17 - 19 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
14 Astwood Mews	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
13 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
9 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
8 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
7 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
126-128 Cromwell Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
10 Grenville Place	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
Surrounding Areas of Amenity Space	Increased levels of shadowing	Negligible to Minor Adverse	-	D	P	IR	Lt	
Solar Glare	Adverse instances of Solar Glare from the Amended Proposed Development	Negligible to Moderate Adverse	-	D	P	IR	Lt	
Completed Development								
20 Harrington Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
29 - 31 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	

Receptor (and Sensitivity)	Description of Residual Effect	Classification of Residual Effect*						
		Nature and Scale**	+ -	D I	P T	R IR	St Mt Lt	
37-39 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
41 - 43 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
45 - 47 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
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13 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
17 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
18 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
19 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
20 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
21 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
22 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
24 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
23 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
25 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
26 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
27 Astwood Mews	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
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14 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
118 Cromwell Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
124 Cromwell Road (Lilloto House)	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
55 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
53 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
52 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	

Receptor (and Sensitivity)	Description of Residual Effect	Classification of Residual Effect*						
		Nature and Scale**	+ -	D I	P T	R IR	St Mt Lt	
51 Courtfield Gardens	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
21 - 23 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
25 - 27 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
33-35 Courtfield Road	Loss of daylight and sunlight amenity	Negligible	-	D	P	IR	Lt	
50 Courtfield Gardens	Loss of daylight and sunlight amenity	Minor Adverse	-	D	P	IR	Lt	
15 Astwood Mews	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
16 Astwood Mews	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
12 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
6 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
5 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
15-15A Courtfield Rd & 25 Ashburn Place	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
17 - 19 Courtfield Road	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
14 Astwood Mews	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
13 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
9 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
8 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
7 Ashburn Gardens	Loss of daylight and sunlight amenity	Negligible to Moderate Adverse	-	D	P	IR	Lt	
126-128 Cromwell Road	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
10 Grenville Place	Loss of daylight and sunlight amenity	Negligible to Minor Adverse	-	D	P	IR	Lt	
Surrounding Areas of Amenity Space	Increased levels of shadowing	Negligible to Minor Adverse	-	D	P	IR	Lt	
Solar Glare	Adverse instances of Solar Glare from the Amended Proposed Development	Negligible to Moderate Adverse	-	D	P	R	Lt	

Receptor (and Sensitivity)	Description of Residual Effect	Classification of Residual Effect*					
		Nature and Scale**	+	D	P	R	St Mt Lt
		-	I	T	IR		
Notes: Notes: Scale = Negligible / Minor / Moderate / Major Nature = Beneficial or Adverse Geographic Extent = Site or Local, District / Borough, Regional, National +ve = Positive (Beneficial) / -ve = Negative (Adverse) D = Direct / I = Indirect P = Permanent / T = Temporary R = Reversible / IR= Irreversible St = Short Term / Mt = Medium Term / Lt = Long Term n/a = not applicable / not assessed							

LIKELY SIGNIFICANT EFFECTS

- 10.156 Whilst there are some isolated daylight effects which are of moderate adverse significance, no mitigation is proffered on the basis that the retained daylight values of those rooms are commensurate with those of similar properties in the same environment which are not affected by the Amended Proposed Development or a more urban environment..
- 10.157 Since there is no effect of the Amended Proposed Development in sunlight and shadow terms which is considered to be greater than minor adverse in significance, no mitigation measures are proposed.
- 10.158 The solar glare assessments however indicate that consideration should be given to the adaptation of the glazing at lower levels to lessen its reflectively and, thereby reduce the intensity of the identified instances of solar glare. Viewpoints 1 and 2 currently experience Moderate Adverse and therefore significant effects.

CLIMATE CHANGE

- 10.159 The assessment of daylight, sunlight and shadowing is based upon the extent to which the sky is obstructed by the Amended Proposed Development.
- 10.160 The analysis of daylight amenity is undertaken using a standard overcast sky. The analysis of sunlight amenity is undertaken using 100 positions of the sun throughout the year which is then overlaid with average weather data. The analysis of overshadowing and solar glare is undertaken using a clear sky at all times.
- 10.161 Currently predicted levels of climate change are, therefore, unlikely to materially change the overshadowing or solar glare effects described in this chapter.
- 10.162 The predicted increase in the level of cloud cover could, however, redefine the standard overcast sky used to assess daylight amenity and the sky conditions used to assess sunlight amenity. Should this be the case the daylight and sunlight effects described in this chapter could change both the baseline and proposed assessment scenarios. The difference is, however, unlikely to materially change the effects described above in terms of their significance.

CUMULATIVE EFFECTS ASSESSMENT

- 10.163 None of the cumulative developments detailed in **ES Volume 1 Chapter 2 EIA Process and Methodology of the June 2018 ES** are considered to be in sufficient proximity to the site or of a sufficient level of massing to result in any material changes to the assessment results.

Chapter 11: Wind Microclimate (Statement of Conformity)

INTRODUCTION

- 11.1 The June 2018 Wind Microclimate assessment and corresponding ES chapter has been reviewed in the context of the Proposed Amends and the Amended Proposed Development.

LEGISLATION, PLANNING POLICY AND GUIDANCE

- 11.2 Since the submission of the June 2018 ES, there have been no changes to legislation, national, regional and local planning policy, and guidance which are directly relevant to wind microclimate.
- 11.3 Consequently, the policy and assessments remain applicable and valid.

ASSESSMENT METHODOLOGY

- 11.4 There are no changes to the assessment methodology set out with the June 2018 Wind Microclimate ES Chapter.
- 11.5 The assessment of the likely wind microclimate changes due to the Proposed Amendments are based on the results of the June 2018 wind assessment and RWDI experience, knowledge and professional judgement of wind flow in the built environment.

BASELINE CONDITIONS

- 11.6 There are no changes to the baseline conditions.

RECEPTORS AND RECEPTOR SENSITIVITY

- 11.7 There are no changes to receptors or receptor sensitivity.
- 11.8 Therefore, the receptors and receptor sensitivities described in the June 2018 Wind Microclimate ES Chapter remain valid and unchanged.

IMPLICATIONS OF THE PROPOSED AMENDS

The implications of the Proposed Amendments on the wind microclimate assessment relate to the extension of the southern façade of the building by 0.75 m; the addition of two storeys on top of the podium section of the building and raising the rooftop residential garden/playspace up to 9th floor level; and the provision of additional balconies for residential units on the southern and western façades.

POTENTIAL EFFECTS

- 11.9 It is not anticipated that there will be any additional effects resulting from the Proposed Amendments. The massing changes to the Proposed Development are insignificant in comparison to the overall height of the development and therefore there is not expected to be a change in the wind conditions presented in the June 2018 Wind Microclimate ES Chapter. The wind conditions at ground and rooftop level are expected to remain as presented within the June 2018 ES.
- 11.10 The new proposed balconies will have side screens with a solid balustrade, which will provide sufficient shelter to occupants. Furthermore, these balconies are located at the lower levels of the Amended Proposed Development where suitable wind conditions are expected.

MITIGATION AND RESIDUAL EFFECTS

- 11.11 There are no changes to the mitigation and residual effects stated in the June 2018 Wind Microclimate ES Chapter. Additionally, no further mitigation is required due to the Proposed Amendments.

LIKELY SIGNIFICANT EFFECTS

- 11.12 There are no significant effects resulting from the Proposed Amendments and Amended Proposed Development.

CLIMATE CHANGE

- 11.13 There are no changes or updates to the climate change section of the June 2018 Wind Microclimate ES Chapter which remains valid.

CUMULATIVE EFFECTS ASSESSMENT

- 11.14 There are no changes to the cumulative effect assessment as a result of the Proposed Amendments, this section of the June 2018 Wind Microclimate ES Chapter remains valid. No additional cumulative schemes have come forward since the June 2018 ES.

Chapter 12: Conclusions

INTRODUCTION

- 12.1** This chapter summarises the conclusions of the ES Addendum while providing an overview to the updates of Chapter 12: Effects Interactions, Chapter 13: Likely Significant Effects and Chapter 14: Mitigation and Monitoring Schedule of the June 2018 ES.

CHAPTER 12 EFFECTS INTERACTIONS

- 12.2** When taking into consideration ES Chapters 6 to 11 of this Volume of the ES Addendum and ES Addendum Volume 2 Townscape, Visual and Heritage Impact Assessment Addendum, no additional effects interactions are likely to occur from the Proposed Amendments and Amended Proposed Development as a whole. Therefore, **Chapter 12: Effects Interactions** of the June 2018 ES remains valid.

CHAPTER 13 LIKELY SIGNIFICANT EFFECTS

- 12.3** The majority of the likely significant effects as presented in the June 2018 ES remain valid. The changes to the likely significant effects due to the Proposed Amendments are presented below.
- 12.4** The additional significant effects during demolition and construction and during operation of the Amended Proposed Development relate only to the loss of daylight and sunlight amenity within surround residential properties, and solar glare. Where previously in the June 2018 ES daylight and sunlight effects ranged from Negligible to Minor Adverse (i.e not significant), a number of windows at five properties are now likely to experience up to Moderate Adverse effects. Therefore, whilst a number of windows at these properties are still expected to have Negligible and Minor Adverse effects, the overall effect on these properties ranges from Negligible to Moderate Adverse at the following locations:
- 15-15A Courtfield Rd & 25 Ashburn Place (Negligible to Moderate Adverse);
 - 17 - 19 Courtfield Road (Negligible to Moderate Adverse);
 - 9 Ashburn Gardens (Negligible to Moderate Adverse);
 - 8 Ashburn Gardens (Negligible to Moderate Adverse); and
 - 7 Ashburn Gardens (Negligible to Moderate Adverse).
- 12.5** In addition, one additional significant effect occurs in relation to solar glare, with a moderate adverse effect experienced at Viewpoint 5. Courtfield Road looking east.

CHAPTER 14 MITIGATION AND MONITORING SCHEDULE

- 12.6** No new or additional mitigation has been identified or is required due to the Proposed Amendments, with the exception of mitigation to mitigate solar glare effects at Viewpoint 5. As already committed to in the June 2018 ES, glazing at the lower levels of the building will be treated to ensure that these areas are less reflective. Therefore, the mitigation and monitoring schedule in Chapter 14: Mitigation and Monitoring Schedule as presented within the June 2018 ES remains valid.

CONCLUSIONS

- 12.7** This ES Addendum has considered whether the Proposed Amendments and Amended Proposed Development as a whole is likely to give rise to any new or materially different significant environmental and socio economic effects, or change any of the conclusions of the June 2018 ES.
- 12.8** The Proposed Amendments, as shown in this ES Addendum, do not materially change the outcomes and conclusions of the June 2018 ES and the Amendment Proposed Development, the only change to significant effects occurs in relation to daylight and sunlight amenity, to an additional five receptors and solar glare to one additional viewpoint.
- 12.9** The topic specific assessments have shown that apart from daylight and sunlight and solar glare effects, no new or altered effects, whether significant or not, occur due to the Proposed Amendments.