

Appendix: Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare

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Annex 1

Planning Policy

Legislation and Planning Policy Context

1.1 The following sections of this ES Chapter annex provide a review of relevant legislation, guidance and national, regional and local planning policy in terms of daylight, sunlight and overshadowing.

National Legislation

1.2 There is no relevant legislation for daylight, sunlight and overshadowing.

National Planning Policy

National Planning Policy Framework (2021)

1.3 The National Planning Policy Framework¹, updated in July 2021, stipulates that:

“... planning policies and decisions should ensure that developments ... create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users.”

1.4 Paragraph 123, part C stipulates that:

“...local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).”

National Planning Practice Guidance (MHCLG) November 2016 (Last updated July 2021)

1.5 The National Planning Practice Guidance (NPPG) was last updated in July 2019. This document states that the form and scale of tall buildings should be designed with respect to daylight and sunlight patterns and whether the development would have an unreasonable impact on the daylight and sunlight levels enjoyed by neighbouring occupiers.

Regional Planning Policy

The New London Plan (March 2021)²

1.7 Policy D6 Housing Quality and Standards states that:

- ‘The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space.’

1.8 Policy D9 Tall buildings states that:

- ‘...development proposals should address the following impacts: ...buildings should not cause adverse reflected glare [and] ...buildings should be designed to minimise light pollution from internal and external lighting.’ It continues that “wind, daylight, sunlight penetration and temperature conditions around the building(s) and neighbourhood spaces must be carefully considered and not compromise comfort and the enjoyment of open spaces, including water spaces, around the building.’

¹ Department for Communities and Local Government (DCLG), National Planning Policy Framework, 2012.

² Greater London Authority (GLA), 2021; The New London Plan, 2021.

The Mayor's Housing Supplementary Planning Guidance (SPG) (March 2016)

1.9 The SPG³ draws on the London Plan, primarily policy 7.6Bd, and provides further guidance on standards to daylight, and overshadowing. The guidance states that:

"...an appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves... Guidelines should be applied sensitively to higher density development...where BRE advice suggests considering the use of alternative targets' taking in to account the 'local circumstances; the need to optimise housing capacity; and scope for character and form of an area to change over time."

1.10 Standard 32 states that:

"All homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight."

1.11 It is also states that:

"Natural light is also vital to a sense of wellbeing in the home, and this may be restricted in densely developed parts of the city". The Mayor seeks to encourage housing that provides comfortable and enjoyable places of retreat and privacy" and factors to be considered include daylight and sunlight."

Local Planning Policy

London Borough Of Tower Hamlets Local Plan 2031: Managing Growth and Sharing Benefits (January 2020)

1.12 The recently adopted local plan provides spatial policies, development management policies and site allocations to guide and manage development in the borough. The policy document states that "a sunlight and daylight assessment must accompany all major planning applications and/or smaller schemes where adverse effects on daylight and sunlight levels are anticipated."

1.13 Policy S.DH1 notes that "development is required to meet the highest standards of design, layout and construction which respects and positively responds to its context, townscape, landscape and public realm at different spatial scales". In order to achieve this, developments must:

"use design and construction techniques to ensure that the development does not result in unacceptably harmful impacts arising from overheating, wind, air pollution, light pollution and noise pollution and the loss of sunlight and daylight."

1.14 Additionally, Policy D.DH8 states that development is required to protect and where possible enhance amenity in order to:

"ensure adequate levels of daylight and sunlight for new residential developments, including amenity spaces within the development.

not result in an unacceptable material deterioration of the sunlight and daylight conditions of surrounding development and not resulting in an unacceptable level of overshadowing to surrounding open space and private outdoor space, and

not create unacceptable levels of artificial light, odour, noise, fume or dust pollution during the construction and life of the development."

³ GLA, 2016, Housing Supplementary Guidance, 2016.

London Borough Of Tower Hamlets Tall Buildings Study Draft Report (July 2017)

Tall Building Design

1.15 As with any other development, the London Plan and the borough's design policies apply in guiding an appropriate and high quality design response. However, tall building developments should bring forward an exceptionally well considered urban design response and due to its wider visibility and prominence the architectural quality of a tall building needs specific attention. This must consider in particular:

"The design to minimise impacts on microclimate including wind, overshadowing and daylighting, solar glare and light pollution."

Impact On The Local Environment Impact On Microclimate

1.16 Tall buildings, due to their size and their significant extension above the typical height in an area, will have significantly greater impacts on the local microclimate than other ordinary building types. The following micro-climatic impacts will need particular attention:

- *"Overshadowing and Day Lighting*
- *Solar Glare and Light Pollution"*

Other Relevant Policy, Standards and Guidance

Historic England Guidance on Tall Buildings – Historic England Advice Note 4 (2015)

1.17 Paragraph 4.10 of the Historic England Advice Note 4 recommends that the following should be addressed in relation to tall buildings:

"consideration of the impact on the local environment, including microclimate, overshadowing, night-time appearance, vehicle movements and the environment and amenity of those in the vicinity of the building".

Building Research Establishment (BRE) Guidelines: Site Layout Planning for Daylight and Sunlight 2011, A Guide to Good Practice, Second Edition (2011)

1.18 The Building Research Establishment (BRE) Guidelines 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011, 2nd edition' (released October 2011)⁵ ('BRE Guidelines') provides advice on site layout planning to achieve good sunlighting and daylighting within buildings, and in the open spaces between them. The BRE Guidelines are intended for use by building designers, developers, consultants and Local Planning Authorities (LPAs). The advice presented in the BRE Guidelines is not mandatory and should not be used as an instrument of planning policy, the Guidelines state:

"This guide is a comprehensive revision of the 1991 edition of Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice. It is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location."

1.19 The BRE Guidelines also state:

"The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. In special circumstances the developer or planning authority may wish to use different target values... in an area with modern high-rise buildings, a higher degree of obstruction maybe unavoidable if new developments are to match the height and proportions of existing building" (para. 1.6).

1.20 In addition, the BRE Guidelines state:

"it is intended to be read in conjunction with the interior daylighting recommendations in the British Standard 8206-2 Code of practice for daylighting, and in the CIBSE publication Lighting guide: daylighting and window design" (para. 1.3).

⁴ Building Research Establishment (BRE) Guidelines: Site Layout Planning for Daylight and Sunlight 2011, A Guide to Good Practice, Second Edition, 2011

"Daylighting gives to a building a unique variety and interest. An interior which looks gloomy, or which does not have a view to the outside when this could reasonably be expected, will be considered unsatisfactory by its users."

1.21 *The CIE 146:2002 Collection on glare⁵ states:*

"Disability glare is glare that impairs vision (CIE, 1987). It is caused by scattering of light inside the eye [...]. The veiling luminance of scattered light will have a significant effect on visibility when intense light sources are present in the peripheral visual field and the contrast of objects to be seen is low."

"Disability glare is most often of importance at night when contrast sensitivity is low and there may well be one or more bright light sources near to the line of sight, such as car headlights, streetlights or floodlights. But even in daylight conditions disability glare may be of practical significance: think of traffic lights when the sun is close to them, or the difficulty viewing paintings hanging next to windows."

⁵ *International Commission on Illumination (CIE) CIE Collection on Glare (CIE 146:2002)*