Committee(s)	Dated:
Planning and Transportation	30/07/2019
Subject:	Public
Daylight and Sunlight Guidance	
Report of:	For Decision
The Built Environment	
Report author:	
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Summary

Members have queried whether the City's current approach to daylight and sunlight is appropriate and whether there would be a case for having Guidelines specific to the City for daylight and sunlight.

Recommendation(s)

Members are asked to:

 Maintain the City's present policy position as set out in the Draft Local Plan and support the preparation of further guidelines as to how the present policy will be implemented within the City. These Guidelines will be brought back to Committee for your consideration.

Main Report

Background

- 1. The impact of development on the daylight and sunlight to adjoining buildings and open spaces is a material consideration that needs to be taken into account in the determination of planning applications. It is of greater significance in relation to residential buildings and to public buildings and spaces where natural light is of importance. It is regarded as of lesser importance in workspaces where artificial light is widely used.
- 2. Daylight and sunlight considerations in relation to planning are separate to Rights to Light which are managed under different legislation. They could only become relevant to Planning when in very rare circumstances the City of London Corporation would intervene to enable a development, vital to the City of London, to proceed when negotiations on rights to light have failed.
- 3. The availability of sunlight to open spaces and to other amenity areas is an important planning consideration.
- 4. The City's dense urban fabric and street patterns as well as its policies to meet the needs of a growing world financial centre leads inevitably to further densification and increased building heights in places. Accommodating this objective and the City's approach to daylight and sunlight requires a careful balance.
- 5. Members have queried whether the City's current approach to daylight and sunlight is appropriate and whether there would be a case for having Guidelines specific to the City for daylight and sunlight.
- 6. Several Members received training on this subject in June 2019. A session was led by Gordon Ingram, a recognised expert in this field. A previous training

session for Members was led by Dr Paul Littlefair who is the author of the current Building Research Establishment (BRE) Guidelines.

Current Position

The National Planning Policy Framework 2019

- 7. The NPPF states at para.123 in relation to achieving appropriate densities that:
- 8. "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).
- 9. The City Corporation's approach to daylight and sunlight is set out in the relevant Development Plan. The current relevant policies in the London Plan and the City Corporation's Local Plan are set out in Appendix One.
- 10. The proposed policies in the draft London Plan and the draft Local Plan are set out in Appendix Two.
- 11. A number of comments have been received in response to consultations on the draft Local Plan in relation to daylight and sunlight from residents and from developers. Residents are on the whole seeking greater controls over loss of light whilst developers are seeking greater recognition of the urban context and flexibility in the application of daylight and sunlight policies.
- 12. All the relevant documents refer to the Building Research Establishment's Guidelines published in 2011. These are titled:
 - Site layout planning for daylight and sunlight. A Guide to good practice.
- 13. The BRE Guide gives advice on site layout planning to achieve good sunlight and daylighting, both within buildings and in the open spaces between them. The document is widely used to provide advice during the planning and design stages of building development in the UK and is widely used by Local Authorities across the UK.
- 14. The BRE Guide's primary purpose is to ensure adequate levels of daylight and sunlight in the development of new housing. However, it has relevance to the impact of development on existing housing. The Guidelines make it clear that levels of daylight and sunlight cannot be expected to be as high in dense urban locations as would be the case in suburban or rural ones.
- 15. It should be noted that whilst widely used, these are guidelines and they do not have a statutory or mandatory basis.
- 16. In 2019 the European Standard for Daylight and Sunlight has had an annex added following an EU Directive which requires more precise Europe-wide rules on assessing daylight and sunlight levels within new developments to be taken into account.
- 17. The new standard emphasises the importance of the health and well-being of the building's users. They set out new ways to assess sunlight in buildings, daylight, glare and views. The new targets are comparable to the current ones but the approach to measuring them is more rigorous and systematic, covering all rooms

- in a new building and are not as at present limited to habitable rooms. There is some flexibility in the new standard which would enable local authorities to adopt different daylight and sunlight targets for suburban and urban locations.
- 18. The new standard may lead to tensions with its continued pressure on the need to deliver more housing at greater density across our cities to meet the housing crisis.
- 19. The BRE is due to prepare new guidance which is expected to be in place in early 2020 subject to funding.
- 20. Local authorities are likely to expect new proposals to apply the new standard, particularly once the BRE has updated its guidance.

Measuring daylight and sunlight

- 21. Factors that will influence the impact of development on daylight and sunlight will be:
 - The amount of daylight and sunlight already received
 - The direction that the windows face
 - The windows' size
 - The size of the rooms they serve
 - The purpose of the rooms they serve
 - Whether the room has more than one window and whether the windows face in different directions
 - Are the windows impacted by balconies or another overhang on the affected property
 - The cumulative impact of other developments permitted but not yet built, on the affected windows
- 22. Measuring the impact of development on daylight and sunlight can be carried out in several ways.
- 23. The BRE guidelines consider a number of factors in measuring the impact of development on daylight and sunlight on existing dwellings:
 - Daylight to windows: Vertical Sky Component (VSC): a measure of the amount of sky visible from a centre point of a window. The VSC test is the main test used to assess the impact of a development on neighbouring properties. A window that achieves 27% or more is considered to provide good levels of light, but if with the proposed development in place the VSC figure is both less than 27% and reduced by 20% or more from the existing level (0.8 times the existing value), the loss would be noticeable. VSC measurement has the disadvantage of taking no account of window size or room size variations.
 - Daylight Distribution: No Sky Line (NSL): The distribution of daylight within a
 room is measured by the no sky line, which separates the areas of the room
 (usually measured in sq. ft) at a working height (usually 0.85m) that do and do
 not have a direct view of the sky. The BRE guidelines states that if with the
 proposed development in place the level of daylight distribution in a room is
 reduced by 20% or more from the existing level (0.8 times the existing value),
 the loss would be noticeable. The BRE advises that this measurement should
 be used to assess daylight within living rooms, dining rooms and kitchens;

- bedrooms should also be analysed although they are considered less important.
- Sunlight to windows: sunlight levels are calculated for all main living rooms in dwellings if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are considered less important although care should be taken not to block too much sun. The BRE explains that sunlight availability may be adversely affected if the centre of the window receives less than 25% of annual probable sunlight hours (APSH), or less than 5% APSH between 21 September and 21 March; and receives less than 0.8 times its former sunlight hours as result of a proposed development; and has a reduction in sunlight hours received over the whole year greater than 4% of annual probable sunlight hours.
- 24. In addition to the usual VSC, NSL and APSH methodology there is the Average Daylight Factor (ADF) assessment. The average daylight factor (ADF) test is mainly used to assess light levels within new developments but may also be used to measure the effect on neighbouring properties if room details are known. The ADF is a measure of the light within a room, which is dependent on accurate knowledge of internal room layouts. The BRE guidance recommends an ADF of 5% or more, if there is to be no supplementary electric lighting, or 2% or more if supplementary electric lighting is provided. The guidance sets minimum recommendations for dwellings of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.
- 25. New computer modelling techniques are enabling new measures to be used.
- 26. Radiance in particular provides a measure of the amount of daylight and sunlight that penetrates the room. Developers are increasingly using radiance analysis alongside VSC and APSH to demonstrate that the impact of a development on existing residential development is acceptable. Radiance analysis requires access to affected rooms and results will vary according to room size, layout and decoration.
- 27. A further method of analysis used relates to retained light. Under this approach rather than looking at the loss of daylight and sunlight to a building as a result of development, the analysis considers whether levels of daylight and sunlight, with the development in place, are acceptable. The assessment is made on the basis of VSC, with benchmarks for acceptable levels suggested based on levels of daylight and sunlight enjoyed by residents in similar areas. Whilst the BRE guidelines recommend a target value of 27% VSC, that value is derived from a low density suburban housing model. In an inner city urban environment, the GLA have accepted retained VSC values in excess of 20% as reasonably good. The development industry has suggested that retained VSC levels in the mid-teens are also acceptable in a city centre context.
- 28. In assessing the impact of developments on daylight and sunlight it is normal for the applicant to provide an assessment prepared by an expert in accordance with a number of methodologies. In most cases the City would get these assessments independently assessed, often by BRE, at the cost of the developer to ensure their accuracy.
- 29. In making assessments a judgement is made as to the level of impact on affected windows. Where there is a less than 20% change in VSC the effect is judged as

to not be noticeable. Between 20-30% it is judged to be minor adverse, 30-40% moderate adverse and over 40% major adverse. All these figures will be impacted by factors such as existing levels of daylight and sunlight and on site conditions. The judgements that arise from these percentages do not form part of the BRE Guide and have become part of an industry standard utilised by Daylight and Sunlight specialists. It is for the Local Planning Authority to decide whether any losses result in a reduction in amenity which is or is not acceptable. This will depend on a whole number of circumstances.

- 30. Guidance from BRE requires a more flexible approach to daylight and sunlight assessment where there are balconies on existing buildings. Balconies cut out light to windows below and even a modest obstruction to daylight and sunlight from nearby development can have a greater impact on the light to such windows. BRE advice is that, where balconies are present, assessments should consider the impact on daylight and sunlight with the balcony in place and assuming there is no balcony. This will highlight whether any loss of daylight and sunlight is due to new development or the presence of an existing balcony.
- 31. BRE also address the situation where an existing development is built up to the edge of its site and daylight and sunlight to this building is potentially disproportionately impacted by new development on an adjoining site, reducing the scope for new development on the adjoining site. This is sometimes referred to as the concept of a 'bad neighbour' taking more than its fair share of light. To ensure that new development matches the height and proportions of existing buildings, the VSC and APSH targets for windows could be set to those for a 'mirror image' building of the same height and size, an equal distance away from the other side of the boundary.

Options

- 32. The options available to the City are:
 - One: to maintain the City's present approach which is consistent with a city centre context and with the national approach to the efficient use of land.
 - Two: to maintain the City's present approach whilst providing greater guidance on how the range of measurements will be considered and how the City's policy will be implemented
 - Three: to prepare City specific Guidelines which may depart from the BRE approach.

Proposals

- 33. Option one has enabled the City to have regard to the development of the City whilst taking into account residential amenity. It takes account of the very varied circumstance where the issue can arise from major new developments, to impacts where a building's own balcony is impacting on results and in tight historic contexts where narrow streets and tight light wells impact on the results. It is very rare for losses greater than 40% to a window to have been allowed except where there are multiple windows to a room or where existing levels of light are very low.
- 34. Option two would continue the City's present practice but would provide further Guidance as to the factors that would be taken into account in determining an appropriate level of amenity. It would provide guidance on how the range of

measurements will be considered, how the City's policy will be implemented when noticeable reductions are likely and where losses would normally be regarded as unacceptable except in the rarest of circumstances.

- 35. Option three is not recommended to you for the following reasons
 - BRE Guidelines are to be updated shortly to take into account the new considerations and until that is in place it would be untimely to produce City specific guidelines
 - If the City were to create a situation that was more restrictive than the BRE
 Guidelines the Government would be unlikely to support at appeal any
 criteria which would be more restrictive than the BRE Guidelines and which
 would prevent the delivery of city centre development including housing. It
 would be difficult for the City to obtain independent verification of developers'
 proposals and City-specific guidance would be likely to be challenged on a
 more regular basis without this wider verification process.
 - The City would not wish to restrict further its ability to deliver the accommodation that would provide for the world financial centre provided acceptable living standards are created or maintained.
- 36. In the present circumstances it is considered that Option 2 would provide the City with the best mechanism to plan appropriately for its needs.
- 37. Whilst the primary issue with daylight and sunlight impacts relates to the impact of development on residential amenity, any approach adopted would also be applicable to impacts on other public service buildings and open spaces.

Corporate and Strategic Implications

- 38. The policies of the Corporate Plan relevant to the consideration of daylight and sunlight are:
 - People enjoy good health and wellbeing
 - Communities are cohesive and have the facilities they need
 - We are a Global Hub for innovation in financial and professional services, commerce and culture
 - We inspire enterprise, excellence, creativity and collaboration
- 39. It is not considered that any of the City's corporate objectives are compromised provided that an appropriate balance between residential amenity and development is maintained consistent with a city centre context.

Conclusion

40. It is recommended for the reasons set out that the City continues with its present policy approach as set out in the draft Local Plan and that the City prepares further guidance as to how that policy would be implemented.

Appendices

- Appendix One Present City and GLA policy in relation to Daylight and Sunlight
- Appendix Two Draft City and GLA policy in relation to Daylight and Sunlight

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