Camden Planning Guidance

Amenity

Draft : November 2017

CPG Amenity

1 Introduction

What is Camden Planning Guidance?

1.1 The Council has prepared this guidance to support the policies in the Camden Local Plan 2017. It is a formal Supplementary Planning Document (SPD), which is therefore a "material consideration" in planning decisions.

1.2 Camden Planning Guidance covers a range of topics (such as design, housing, sustainability and planning obligations) and all of sections should be read in conjunction with, and within the context of the Local Plan.

Amenity in Camden

1.3 Standards of amenity (the features of a place that contribute to its attractiveness and comfort) are major factors in the health and quality of life of the borough's residents, workers and visitors and fundamental to Camden's attractiveness and success. Camden's Inner London location, the close proximity of various uses and the presence of major roads and railways means that amenity is a particularly important issue within the borough.

What does this guidance cover?

1.4 This guidance provides information on key amenity issues within the borough and includes the following sections relating to Local Plan Policy A1 – Managing the impact of development:

- Overlooking, privacy and outlook
- Daylight and sunlight
- Artificial light
- Construction management plans
- Noise and vibration
- Wind and micro-climate
- Contaminated land.

2 Overlooking, privacy and outlook

KEY MESSAGES:

- Developments should be designed to protect the privacy of occupiers of both existing and proposed dwellings.
- Mitigation measures should be included to reduce overlooking
- Public spaces benefit from overlooking as natural surveillance

2.1 This guidance relates to the application of Policy A1 – Managing the impact of development and aims to ensure that the potential impact of development on the privacy and outlook of neighbouring properties and their occupiers is fully considered. This chapter contains guidance on the following:

- Overlooking and privacy
- Separation between buildings
- Mitigation measures
- Balconies and roof terraces
- Outlook

Overlooking and privacy

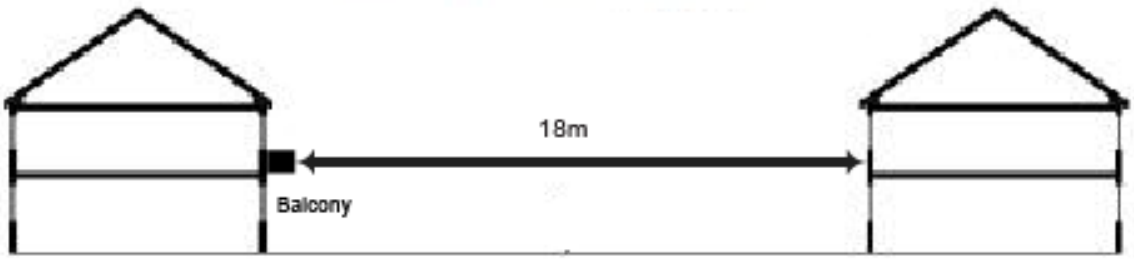
2.2 Interior and exterior spaces that are overlooked lack privacy, which can affect the quality of life of occupants. The Council will therefore expects development to be designed to protect the privacy of the occupants of both new and existing dwellings to a reasonable degree. Therefore, new buildings, extensions, roof terraces, balconies and the location of new windows should be carefully designed to avoid overlooking. The extent of overlooking will be assessed on a case-by-case basis.

2.3 The places most sensitive to overlooking are typically habitable rooms and gardens at the rear of residential buildings. For the purposes of this guidance, habitable rooms are considered to be residential living rooms; bedrooms and kitchens. The area of garden nearest to the window of a habitable room is most sensitive to overlooking.

Separation between buildings

2.4 To ensure privacy, is it good practice to provide a minimum distance of 18m between the windows of habitable rooms in existing properties directly facing the proposed (either residential or non-residential) development, assuming a level topography. In instances where building heights, design or topography mean that opportunity for overlooking would be increased, it is advisable to increase this separation distance. The 18m should be measured between the two closest points on each building (including balconies). See Figure A below.

Figure A: 18m separation distance measurement



2.5 Where there is an existing street or public space, this space is considered to already provide an adequate separation between properties and so the 18m guideline will not apply. However, care should be taken to reduce overlooking from the street into habitable rooms near to a street or public space, particularly bedrooms. Public spaces and communal areas will benefit from a degree of overlooking as this can increase natural surveillance of these spaces and therefore act to deter crime.

2.6 There may also be instances where the historic character of the immediate area is composed of buildings positioned less than 18m apart and it will be appropriate to reflect this in the design of development schemes.

Mitigation measures

2.7 They may be circumstances where a separation distance of 18m cannot be achieved. In these instances, mitigation measures should be incorporated to ensure overlooking is reduced to an acceptable level.

2.8 For example, buildings could be positioned at an angle to each other so it is less likely that people will be able to see directly into neighbouring habitable rooms and gardens of neighbouring buildings. Careful consideration could also be given to the layout of windows, using obscure glazing to prevent overlooking if necessary. It will however not be acceptable for habitable rooms to have windows glazed exclusively with obscure glass however.

2.9 Soft landscaping, such as the use of trees and shrubs can act as privacy screens. Where soft landscaping is proposed as the principle method of screening, applicants should demonstrate that the extent of planting proposed is sufficient to ensure that this will result in reasonable levels of privacy all year.

2.10 Carefully sited permanent domestic structures, such as solid fences, pergolas, garden sheds, bin stores, and cycle storage, can also act as privacy screens. In instances where mitigation is considered necessary to ensure privacy, but has not been provided adequately within development proposals, the Council will consider the use of planning conditions to secure mitigation measures. This could include conditions requiring:

- the installation of obscure glazing;
- restrictions on openable windows; and
- restrictions on inserting new windows into blank walls.

Balconies and roof terraces

2.11 Although balconies and roof terraces can provide amenity space for flats that would otherwise have little or no exterior space, they also have the potential to increase

opportunities for overlooking. Balconies and roof terraces should therefore be carefully sited and designed to reduce potential overlooking of habitable rooms or gardens of neighbouring residential buildings. Conversely, residential buildings should also be designed so that new balconies and roof terraces do not suffer from an unacceptable degree of overlooking from existing developments, particularly when this is the only outdoor amenity space available to the new dwelling.

2.12 'Juliet' (or 'French') balconies are balconies that do not project far enough for an occupant to stand on. Where these are proposed, as the occupants using the balcony are still within the building, the extent of overlooking will be considered in the same way as would a normal window.

Outlook

2.13 Outlook is the visual amenity enjoyed by occupants when looking out of their windows or from their garden. How pleasant an outlook is depends on what is being viewed. For example, an outlook onto amenity space is more pleasant than an outlook across a servicing yard. Particular care should therefore be taken if the proposed development adjoins properties with a single aspect. Any unpleasant features should be screened if possible, for example with permanent landscaping.

2.14 Developments should ensure that the proximity, size or cumulative effect of any structures avoids having an overbearing and/or dominating effect that is detrimental to the enjoyment of their properties by adjoining residential occupiers. The location of bin or cycle stores, for example, should be carefully considered if they are in close proximity to windows or spaces used by occupiers.

2.15 It should be noted that the specific view from a property is not protected as this is not a material planning consideration.

3 Daylight and Sunlight

KEY MESSAGES:

- The Council expects applicants to consider the impact of development schemes on daylight and sunlight levels. Where appropriate a daylight and sunlight assessment should submitted which should be follow the guidance in the BRE's *Site layout planning for daylight and sunlight: A guide to good practice.*
- The 45 degree and 25 degree tests cited in the BRE guidance should be used to assess ('screen') whether a sunlight and daylight report is required.
- Levels of reported daylight and sunlight will be considered flexibly taking into account site-specific circumstances and context.
- The Council may seek independent verification of sunlight and daylight reports if necessary.

3.1 The Council aims to protect the quality of life of occupiers and neighbours through Local Plan policy A1 Managing the Impact of Development, which seeks to ensure that development does not cause unacceptable harm to amenity, including in terms of daylight and sunlight. This guidance relates to daylight and sunlight levels and contains the following sections:

- What is daylight and sunlight?
- Assessing daylight and sunlight levels.
- What should daylight and sunlight reports contain?
- Flexible consideration of daylight and sunlight.
- Independent verification of daylight and sunlight reports.
- Other Considerations: Right to Light Legislation.

What is daylight and sunlight?

3.2 Levels of daylight and sunlight within buildings are important for amenity, health and well-being, for bringing warmth into a property and to save energy by reducing the need for artificial lighting and heating. The Council will carefully assess proposals that have the potential to reduce daylight and sunlight levels for existing and future occupiers.

3.3 In this context, daylight is considered to be the volume of natural light that enters a building to provide satisfactory illumination of internal accommodation between dawn and dusk. Sunlight refers to direct sunshine. Whereas levels of daylight are associated with illumination, sunlight is brighter and has potential to heat buildings. Overshadowing is an outcome of sunlight being blocked and is associated with the measurement of sunlight levels.

Assessing daylight and sunlight levels

3.4 Daylight and sunlight levels are affected by the location of a proposed development and its proximity to, and position in relation to, the windows in nearby properties.

3.5 In order to demonstrate that adequate levels of daylight and sunlight are being provided in accordance with Policy A1, the Council will expect applicants to submit daylight and sunlight reports informed by BRE's *Site layout planning for daylight and sunlight: A guide to good practice* (the 'BRE guidance').

3.6 The BRE guidance contains numerous tools, techniques and recommended standards relating to daylight and sunlight that are relevant to both minor and major developments. It is intended that this section be read in conjunction with the BRE guidance.

When may daylight and sunlight reports be expected?

3.7 Major developments and proposals for new dwellings are expected to provide daylight and sunlight reports.

3.8 To help determine whether a daylight and sunlight report is needed for other types of development, the Council will have regard to several tests, taken from the BRE guidance and quoted in this section for ease of reference. These are referred to as the 45-degree test and the 25-degree test.

3.9 Applicants are expected to use the 45-degree test and the 25-degree tests to screen their proposals to determine whether a sunlight and daylight report is required. The screening procedure in set out in Figure 1 below.

45 degree test:

3.10 The 45 degree test is an assessment of daylight and can be applied to developments that lie perpendicular (at a right angle) to a neighbouring property. It is most suited to minor developments, such as residential extensions. The test can be applied to both floor plan drawings (see Figures 2a and 2b below) and elevation drawings (Figures 3a and 3b).

3.11 When applied to floor plan drawings, the test involves drawing a 45-degree line from the middle of the nearest window from the existing development to the proposed development. If any part of the proposed development crosses the line, then there is potential for daylight to be affected.

Figure 1: Daylight and sunlight report screening procedure

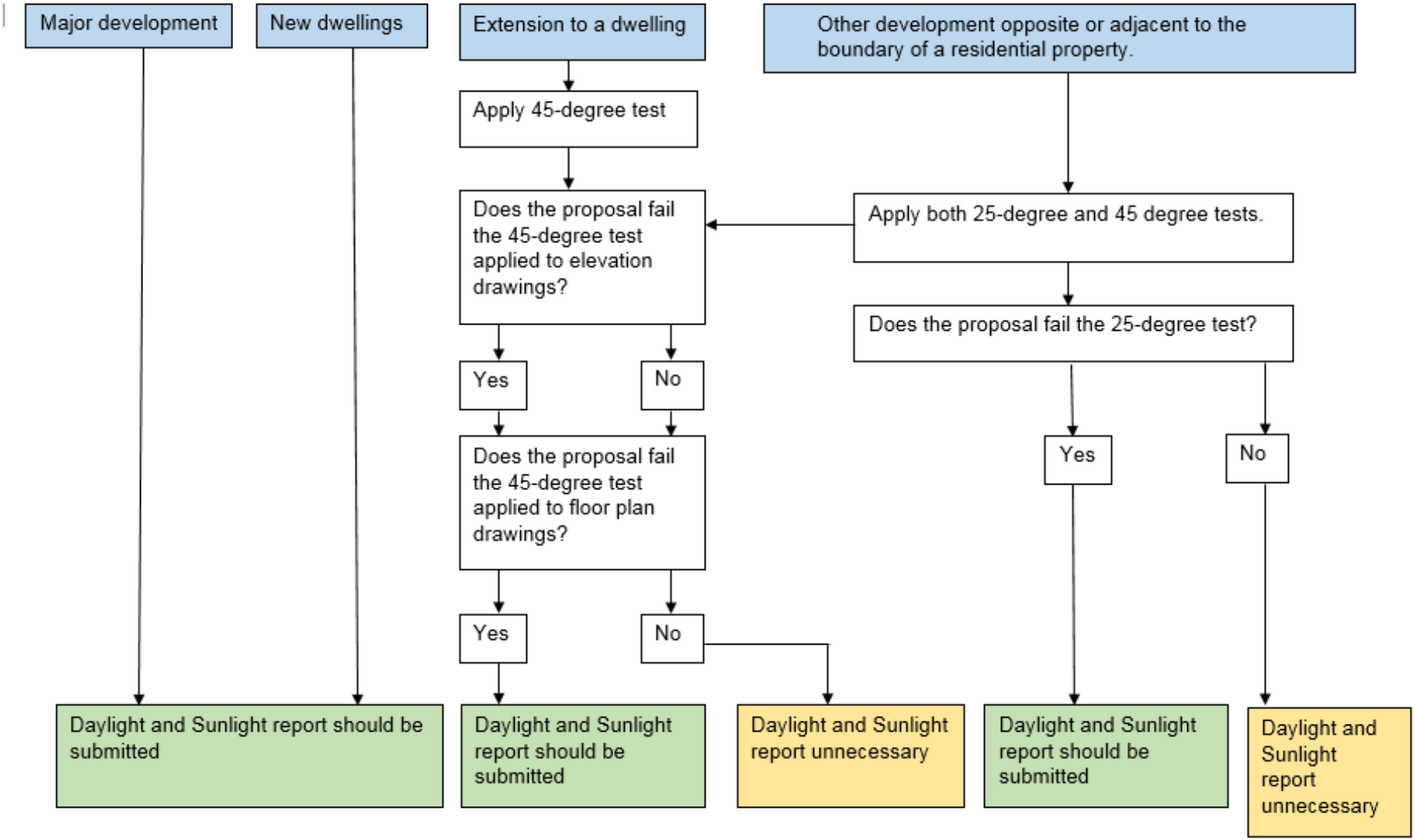


Figure 2a: Proposed development passing 45-degree floor plan test

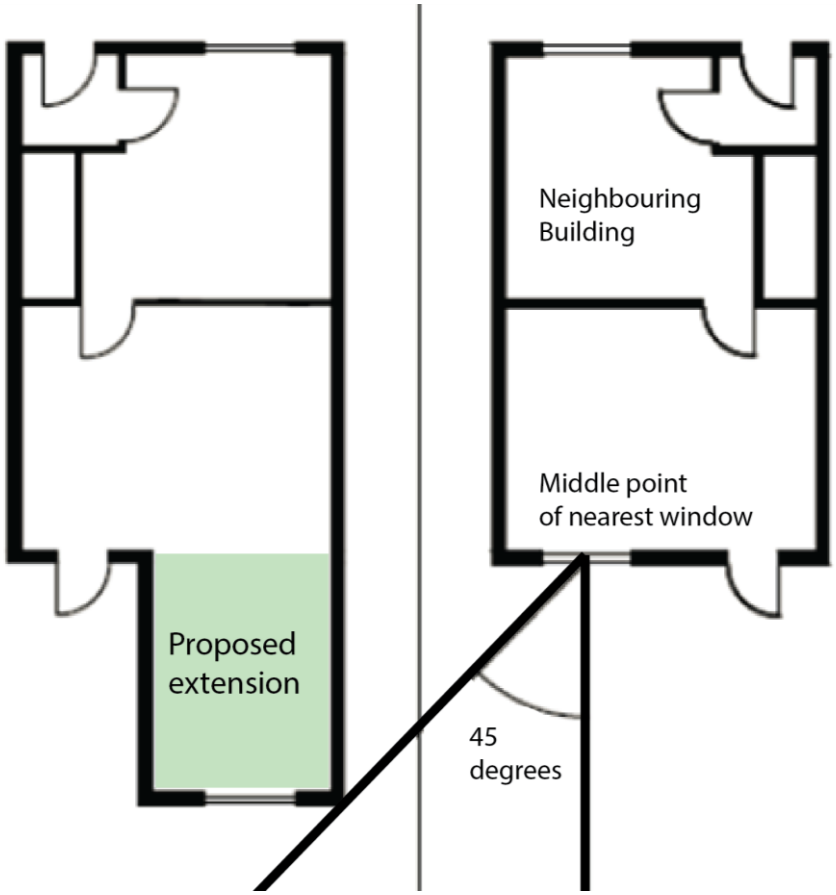
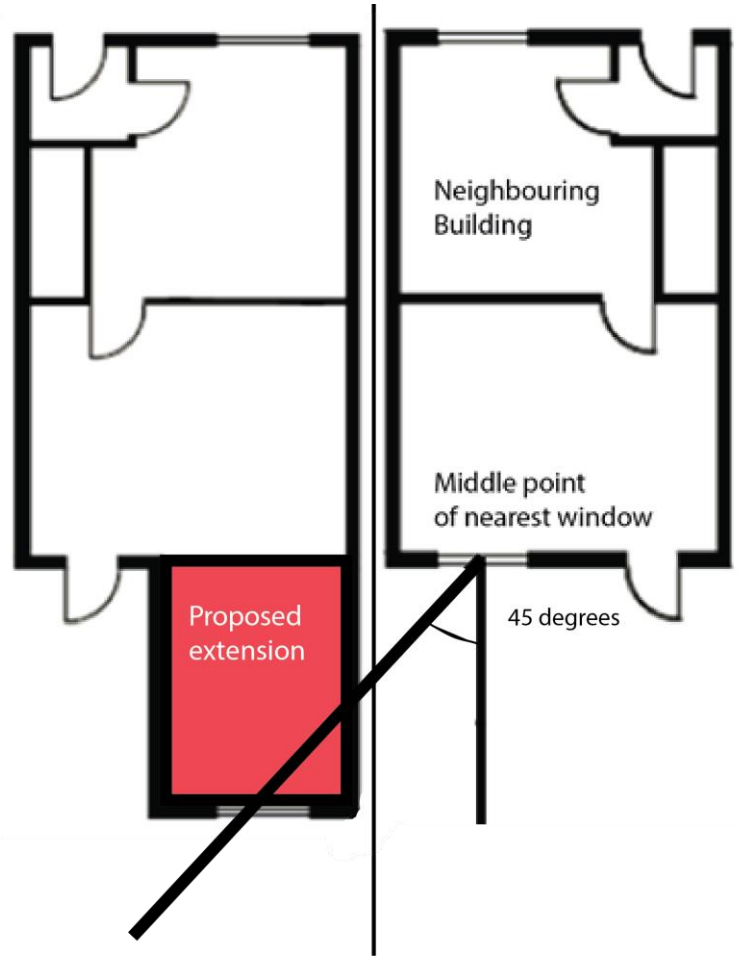


Figure 2b: Proposed development failing 45-degree floor plan test



3.12 When applied to elevation drawings, again a 45-degree line is drawn from the mid-point of the nearest window of an existing property towards the proposed development. If any part of the proposed development crosses the line, then there is potential for daylight to be affected. See Figures 3a and 3b.

Figure 3a: Proposed development passing 45-degree floor elevation test

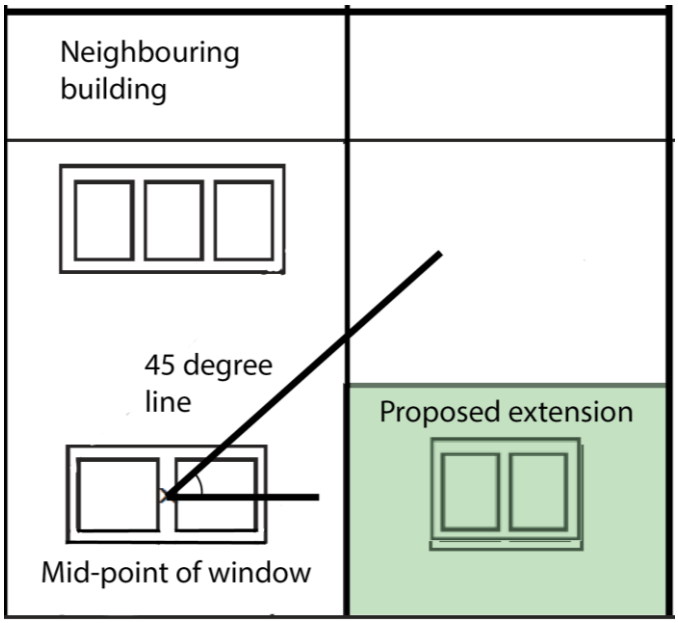
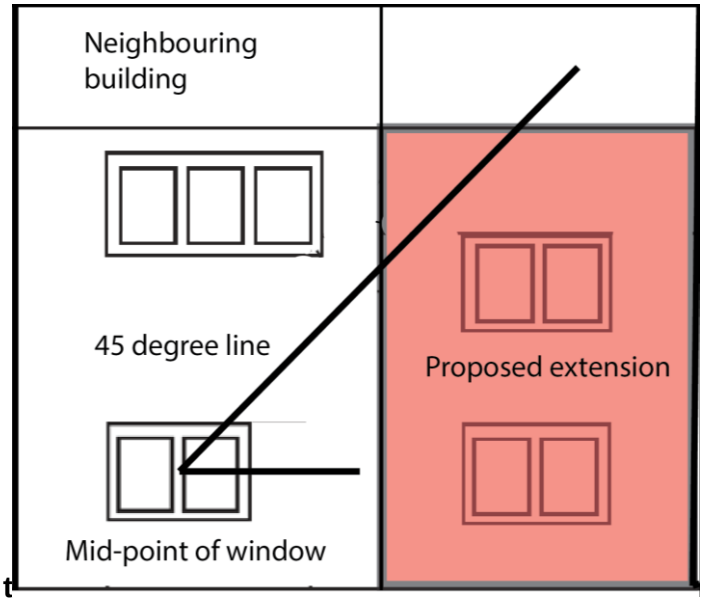


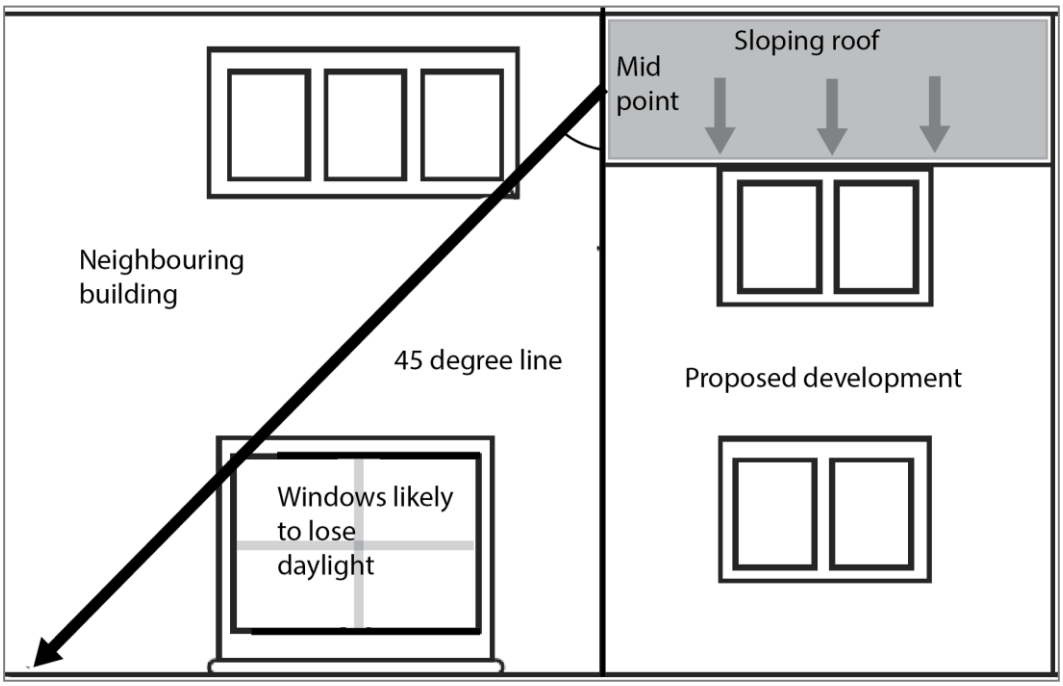
Figure 3b: Proposed development failing 45-degree floor elevation test



3.13 In applying this test however, two additional factors should be considered where relevant:

- Where the nearest window stretches from floor to ceiling height (a patio door for example), the BRE guidance states that point at which the 45 degree angle is measured should be 1.6m from the floor.
- Where a sloping roof is proposed, it is best to measure the 45-degree angle downwards from the mid-point of the roof slope. Windows lying underneath this line are likely to have experience loss of daylight. See Figure 3c.

Figure 3c: 45 degree test measured downwards from the mid point of sloping roof.

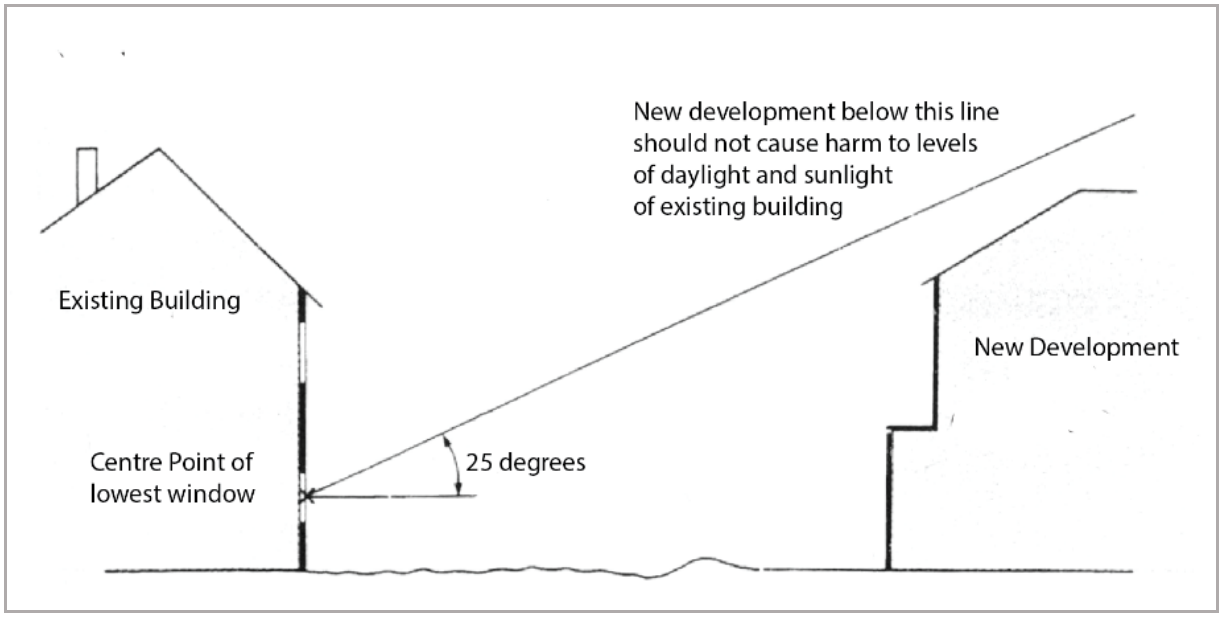


25 degree test

To assess the impact a proposed development on existing properties (see Figure 4a), a 25 degree line should be projected from the centre of the lowest window of existing residential properties opposite the proposed development. If the whole the proposed development is lower than this line then it is unlikely to have a substantial effect on the daylight enjoyed by occupants in the existing building.

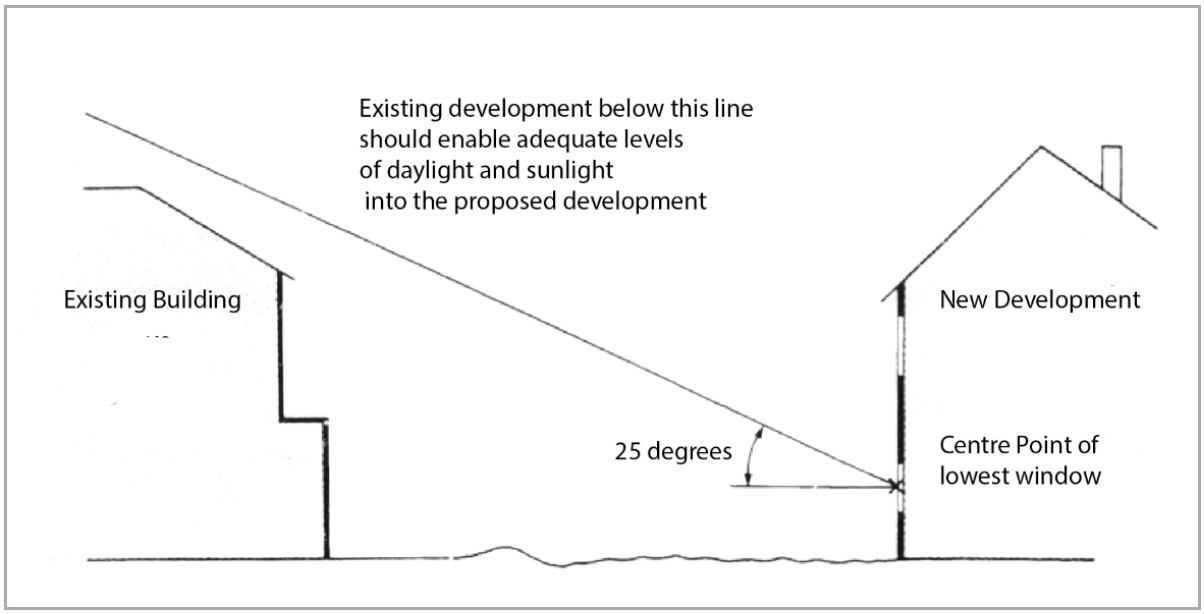
3.14 If the proposed development projects above the 25 degree line, the Council will expect the extent of the development's impact upon daylight and sunlight levels to be assessed in more detail through a daylight and sunlight report.

Figure 4a: 25 degree rule from existing building



3.15 The same principle can also be applied to determine whether the occupants of proposed residential developments are likely to receive adequate levels of daylight and sunlight. To assess this a 25-degree line is instead projected from the centre of the lowest window of each residential property within the proposed development. See Figure 4b.

Figure 4b: 25 degree rule from proposed development



What should daylight and sunlight reports contain?

3.16 The BRE guidance should form the basis for daylight and sunlight reports. They should be prepared by a specialist surveyor or consultant and assess the following:

1. Levels of daylight and sunlight that occupiers are likely to experience within the proposed development and gardens and open spaces (where relevant); and
2. The extent that the proposed development is likely to cause on levels of daylight and sunlight entering windows of neighbouring properties, gardens and open spaces (where relevant)

3.17 Daylight and sunlight reports should also demonstrate how the design has taken into consideration the guidance contained in the BRE document on passive solar design; and have optimised solar gain.

3.18 The Council will expect daylight and sunlight reports to report daylight and sunlight levels using the tools cited in the BRE guidance. The most common tools used are:

- Vertical Sky Component (VSC)
- Average Daylight Factor (ADF)
- Annual Probable Sunlight Hours (APSH)
- No Sky Line (NSL).

3.19 Detailed descriptions of these tools and their associated target values can be found within the BRE guidance.

3.20 As a minimum, daylight and sunlight reports should show:

- the expected daylight and sunlight levels before and after the development is built to enable ease of comparison;
- full details of the methodologies used,
- the full results of assessments; and
- an executive summary.

Flexible consideration of daylight and sunlight

3.21 The Council notes the intentions of the BRE document is to provide advice to developers and decision makers and therefore it should be regarded as a guide rather than policy.

3.22 While we strongly support the aims of the BRE methodology for assessing sunlight and daylight we will consider the outcomes of the assessments flexibility where appropriate, taking into account site specific circumstances and context. For example, to enable new development to respect the existing layout and form in some historic areas, it may be necessary to consider exceptions to the recommendations cited in the BRE guidance. Any exceptions will assessed on a case-by-case basis.

Independent verification of daylight and sunlight reports

3.23 In order to provide the Council with greater certainty over the expected daylight and sunlight levels stated within a daylight and sunlight report, the Council may commission an independent verification of the report, which will be funded by the applicant. Independent verification is likely to be required in instances where

there is possible dispute regarding the measurements cited or new techniques/technology is used to create daylight and sunlight measurements.

Other Considerations: Right to Light Legislation

3.24 The right to light is a legal right which one property may acquire over the land of another. If a structure is erected which reduces the light to an unobstructed property to below sufficient levels, this right is infringed. A right to light can come into existence if it has been enjoyed uninterrupted for 20 years or more, granted by deed, or registered under the Rights of Light Act 1959.

3.25 Planning permission does not override a legal right to light. There also may be instances where development built under permitted development rights compromises light levels to an existing window. In both instances, where a right to light is claimed, this is a matter of property law, rather than planning law. It will be for the parties affected to seek a legal remedy. The Council will have no role or interest in any private dispute arising and it will be for the owner or occupier affected to seek a legal remedy.

4 Artificial Light

KEY MESSAGES:

- Artificial lighting should be considered at the design stage and not affect the amenity of neighbours or wildlife.
- Planning permission is required for artificial lighting structures and equipment that substantially affect the external appearance of a building.
- Developers are expected to employ a specialist lighting engineer accredited by the Institute of Lighting Engineers to design their lighting schemes.
- The Council will apply the agent of change principle in instances where developments sensitive to high levels of artificial light are proposed near to existing uses that are reliant upon the light for their operation.

4.1 This section provides guidance on the Council's approach to artificial lighting and should be read in conjunction with Camden Local Plan policy A1 Managing the impact of development. This chapter contains the following sections:

- Artificial light
- When will planning permission be required for lighting?
- What information should accompany a planning application?
- Matters to consider when designing lighting.

Artificial light

4.2 Excessive or poorly designed lighting can cause light spillage and glare and be damaging to the environment by:

- having a detrimental impact on the quality of life of neighbouring residents;
- changing the character of the locality;
- altering wildlife and ecological patterns; and
- wasting energy.

4.3 The following can cause an artificial light nuisance if they are not maintained or used properly

- security lights (domestic and commercial);
- sports facilities (like floodlit football pitches);
- decorative lighting of buildings or landscapes; and
- laser shows and light art.

4.4 The Council will therefore expect that the design and layout of artificial light be considered at the design stage of a scheme to prevent potential harmful effects of the development on occupiers and neighbours in terms of visual privacy, outlook and disturbance. Artificial lighting should only illuminate the intended area and not affect or affect the amenity of neighbours.

When is planning permission required for lighting?

4.5 Planning permission is usually required for lighting structures and equipment that is likely to substantially affect the external appearance of a building. Planning permission is not required for the carrying out of maintenance that affects only the interior of a building or does not materially affect its external appearance. Temporary lighting schemes also generally do not require planning permission.

4.6 Examples of where planning permission is usually required include:

- illuminated advertisements, although there are some exceptions, such as those indicating medical services and some commercial advertisements on the front of business premises. (See also Camden Planning Guidance on design);
- the erection of columns to support lighting or other similar structures; and
- external lighting as part of an industrial or commercial scheme.

4.7 In accordance with Policy A1 in the Camden Local Plan, schemes that would cause unacceptable harm to amenity will not be permitted.

What information should accompany a planning application?

4.8 Where planning permission for lighting schemes is required, applicants should provide the following details as applicable:

- the design of lights and associated infrastructure;
- the number of lights;
- lighting levels, lux and lumen details, lamp types, wattage;
- plans showing the area to be lit and the layout of lights, including orientation of beams of light;
- the height of lighting columns;
- control systems including types and location of sensors, times lighting will be on; and
- the need for the lighting, that is, an explanation of what activity the lighting is supporting.

4.9 All light installations should be energy efficient and 'Dark Sky' compliant, not causing obtrusive light pollution, glare or spillage and preserving a sensitively lit night-time environment.

Lumen
This is a measurement of the light output from a light source.
Lux
This is a measurement of the light intensity falling on a surface.
Dark sky compliance
To design lighting schemes in order to avoid lighting that extends beyond its intended target and would be inefficient and waste energy. It also avoids glare and light in unwanted areas.

Matters to consider when designing lighting

Light pollution

4.10 Light pollution is the term used to describe any adverse effect of artificial lighting and includes

- Glare - the uncomfortable brightness of a light source when viewed against a dark sky;
- 'Light trespass' – the spread of light spillage from the boundary of the property on which a light is located; and
- 'Sky glow' - the orange glow we see around urban areas caused by a scattering of artificial light by dust particles and water droplets in the sky.

4.11 National Planning Policy Framework (NPPF) advocates the use of good design, planning policies and decisions in order to limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation (paragraph 125). National Planning Practice Guidance (NPPG) provides detail on the factors that should be considered when assessing whether a development proposal might have implications for light pollution. In summary, these are whether the proposal could:

- materially alter light levels outside the development;
- make the proposed location for a development unsuitable because of an existing lighting installation;
- have significant impact on a protected site or species;
- be located in or near a protected area of dark sky or an intrinsically dark landscape;
- have potentially high impact on wildlife; or
- include smooth and/or reflective building materials.

General lighting requirements

4.12 To minimise obtrusive light, developers are expected to employ a specialist lighting engineer accredited by the Institute of Lighting Engineers and follow the general principles taken from the Institution of Lighting Professionals, Guidance Notes for the Reduction of Obtrusive Light (2011). These include the following:

- Lighting is to be directed downwards wherever possible to illuminate its target. If there is no alternative to up lighting, then the use of shields, baffles and louvres will help reduce the spill of light to a minimum. Up lighting is a particularly bad form of obtrusive light and contributes to sky glow.
- Lighting is to be designed to minimise the spread of light near to, or above, the horizontal. Again, any light that shines above the horizontal line of the light adds to the sky glow effect.
- Lighting should be designed to the correct standard for the task. Over-lighting is a cause of obtrusive light and also represents a waste of energy.

- The main beam angle of all lights proposed directed towards any potential observer is to be kept below 70°. It should be noted that the higher the mounting height, the lower the main beam angle could be. This will help reduce the effect of glare and light spill on neighbouring dwellings, passing motorists, pedestrians, cyclists, etc.
- Lighting should be directed to minimise and preferably avoid light spillage onto neighbouring properties. Wherever possible floodlights with asymmetric beams that permit the front glazing should be kept at, or near parallel to, the surface being lit should be used.
- The lights used should be the most efficient taking into account cost, energy use, and the purpose of the lighting scheme required. All lighting schemes should meet British Standards.

4.13 Artificial lighting should be sited in the most appropriate locations to cause minimal disturbance to occupiers and wildlife, while still illuminating the intended area. This includes considering any occupiers located above the lighting source.

4.14 Consideration should be given to lighting associated with buildings of special historic and architectural interest in order to protect their special interest and that of the wider area. This applies both to the lighting of such buildings and the impact of the lighting installation when seen by day.

Lighting Infrastructure

4.15 The visual effect of lighting infrastructure when viewed in the daytime needs to be considered. These elements can include junction boxes, poles, brackets and cabling. The design, size and colours of the physical infrastructure need to be carefully considered and should relate to the building it is located on.

Use

4.16 The design of lighting should be specific to the use it supports (e.g. for recreation facilities). Hours of lighting should be limited to the times needed to support the use (both in summer and winter) and be restricted through the use of timers and sensors where relevant (e.g. for security lighting).

4.17 The Council may seek to secure conditions to any planning permission in order to control the hours of operation of any approved lighting scheme.

Agent of change principle

4.18 In order to avoid adverse effects on existing businesses that are likely to generate acceptable levels of artificial light related to their operation, the Council will apply the ‘agent of change principle’ where light sensitive uses are proposed in close proximity to them. The agent of

change principle identifies that the party responsible for a change should also be responsible for managing the impact of that change.

4.19 Within Camden, this is particularly relevant in cases where residential development is proposed near to an established sports, leisure or entertainment venue. New residents moving into the new residential development, for example, have the potential to make complaints with regards to glare or light trespass which could have an impact on the venue's future operation.

4.20 Development sensitive to high levels of artificial light proposed near to an existing use which generate artificial light that could lead to glare or light trespass should therefore include necessary measures at the design stage to mitigate the anticipated lighting effects of the venue. The Council may seek to secure mitigation measures through the use of planning conditions if necessary.

Consideration of biodiversity impacts

4.21 Artificial lighting can often impact on wildlife habitats, particularly where lighting is proposed in open spaces, for example to provide lighting for sports courts and pitches or to improve security, such as along Regents Canal (see the Royal Commission on Environmental Pollution's 2009 report, Artificial Light in the Environment). Artificial lighting can have particularly severe implications for the natural daily rhythms of a range of animals and plants. Sites and habitats identified for their nature conservation value should therefore not be adversely affected by lighting..(See the Policies Map for the location of nature conservation sites.)

4.22 If proposed lighting is located within or adjacent to areas of open space or nature conservation sites, the Council will expect developers to employ a specialist lighting engineer accredited by the Institute of Lighting Engineers and provide details regarding how the lighting scheme will mitigate any potential biodiversity impacts arising from the installation or operation of the proposed lighting. This may also require a survey to identify if there are any nesting birds in the immediate vicinity or if it is close to an area where bats may hibernate or emerge at feeding time. This is particularly important if the operation of the lighting extends beyond dusk, which is roughly the time bats will come out to forage. Please also see Camden Planning Guidance on biodiversity.

4.23 Please contact the Council's Nature Conservation Officer at an early stage of the design of a scheme to discuss measures to mitigate the impact of lighting schemes on biodiversity.

5 Construction Management Plans

KEY MESSAGES:

- Construction Management Plans (CMPs) are expected for major developments and the Council will assess the need for a CMP for smaller developments on a case-by-case basis.
- The Council expects CMPs to be submitted after planning permission is granted and to include significant input from the contractor(s) appointed to undertake the work.
- CMPs should address transport/highways and environmental health impacts, as well as any cumulative construction impacts as a result of activity from multiple sites in close proximity to one another.
- The Council's CMP Pro-forma template should be used when completing a CMP.
- Developers are expected to consult on their CMP with affected parties before submitting it to the Council.
- There is a charge for the review and ongoing monitoring of CMPs.

5.1 This guidance relates to the application of Local Plan Policy A1 – Managing the impact of development and provides detail regarding the use of Construction Management Plans.

This chapter contains the following sections:

- What are construction management plans?
- Circumstances where the Council will expect a construction management plan
- How should Construction Management Plans be prepared?
- Cumulative impacts
- Consultation and Construction Working Groups
- Planning obligations

What are construction management plans?

5.2 A Construction Management Plan (CMP) is a technical document, which assists the Council in fulfilling its statutory duties. The Council has the legal duty to ensure highway safety and to protect residents from the effects of noise (including vibration) and other environmental issues affecting amenity, which could result from construction activity under the Control of Pollution Act 1974, Environmental Protection Act 1990 and Prevention of Damage by Pest Act 1949.

5.3 A CMP sets out the measures that a contractor will take, both on-site and off-site, in order to reasonably minimise the detrimental effects of construction and incorporate mechanisms that overlap with other regulatory regimes (particularly highways and environmental protection). Most CMPs are 'umbrella' documents managing all impacts of the demolition, excavation and construction process.

5.4 Besides ensuring that measures under these different service areas are coordinated in one document, CMPs represent a proactive approach to addressing construction issues. They act to encourage developers to work with the Council and local people in managing the construction process with a view to ensuring that problems are foreseen and addressed with appropriate mitigation.

Further information on CMPs is available on the Council's website.

Circumstances where the Council will expect a Construction Management Plan

5.5 Typically, a CMP will be expected where the following developments are proposed:

- major developments;
- other developments, assessed on a case-by-case basis, where:
  - the construction process has a significant impact on adjoining properties particularly on sensitive uses;
  - particular 'on-site' issues arising from the construction process are identified (e.g. large scale demolition or complicated or intrusive remediation measures);
  - sites with poor or limited access;
  - sites with restricted access through narrow residential streets;
  - basement developments;
  - where substantial work to listed buildings or adjacent to listed buildings is proposed;
  - where wildlife could be seriously affected;
  - the anticipated length of the demolition, excavation or construction period could cause significant disturbance;
  - the construction process is likely to take place outside normal working hours;
  - specific issues have been identified in the light of external consultation (where these are supported by objective evidence);
  - where constraints arising from the layout or size of the site could impact on the surrounding road network; and
  - where there are already a high number of existing active construction sites within the local area.

5.6 CMPs are expected for all major developments. When assessing whether CMPs should be submitted for other developments, particular attention will be paid to the nature and layout of the site and any on-site factors that are likely to seriously exacerbate the impact of the works on the surrounding area. These could include development in residential areas, in close proximity to a school or a care home, or very narrow or restricted site access (e.g. development in a mews with no footways). For smaller developments, a lack of on-site space for plant, storage of materials, and loading and unloading of vehicles may mean that construction effects will inevitably take place close to the boundary and encroach onto the public highway.

How should Construction Management Plans be prepared?

5.7 A CMP should be submitted after planning permission has been granted and include significant input by the appointed contractor to ensure that the building work can be delivered as intended. It may also be necessary to seek the input from other consultants on matters such as transport, noise, and pest control.

5.8 The CMP should be prepared using the Council's CMP pro-forma, which outlines the information that the Council expects. The pro-forma has been developed in the context of the Council's commitment to Transport for London's CLOCS

(Construction Logistics and Community Safety) Standard for Construction Logistics, Camden's Minimum Requirements for Building Construction (CMRBC), and the Council's Considerate Contractors Manual.

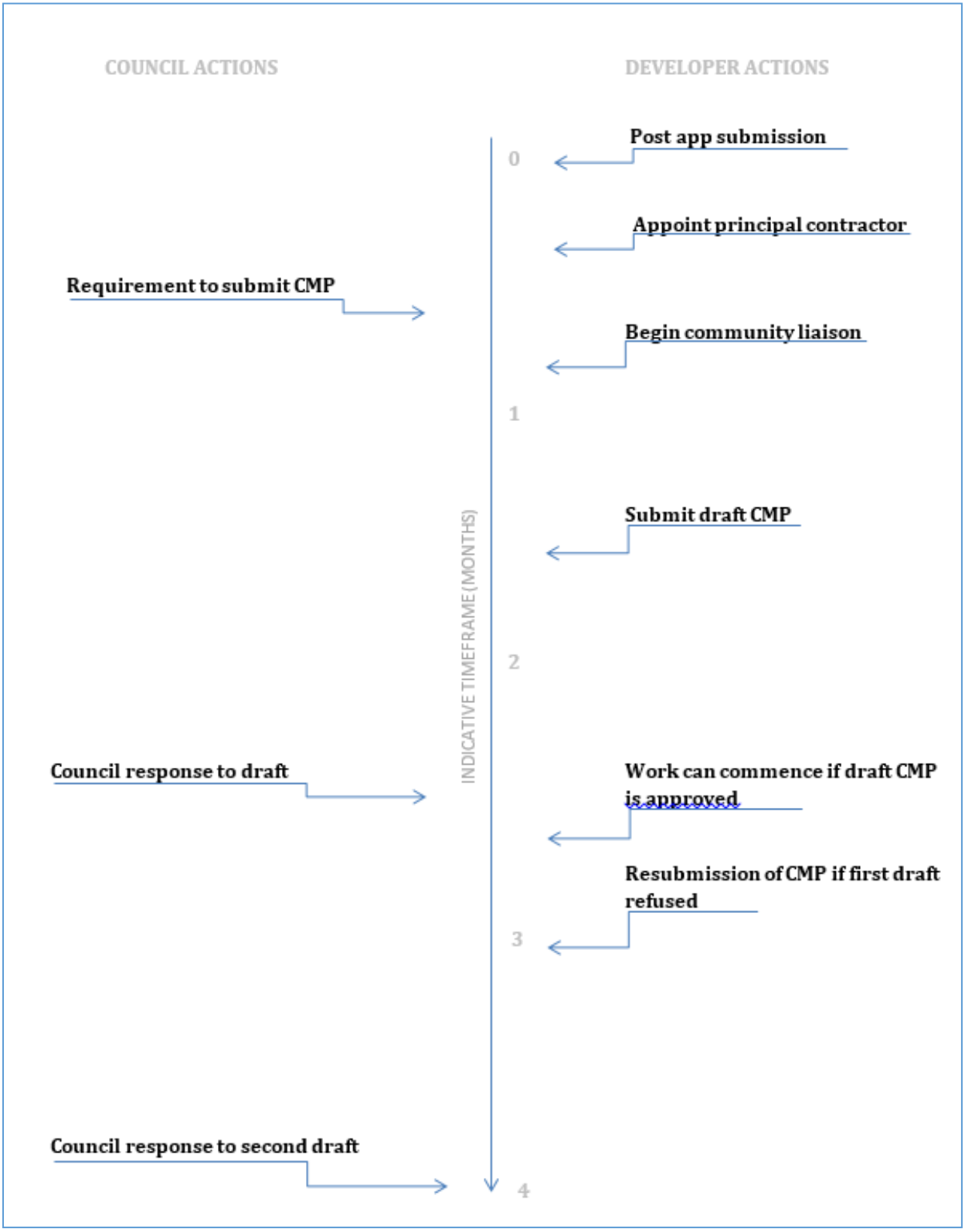
5.9 The CMP pro-forma, including guidance on how to complete the pro-forma is available on the Council's website. A CMP should be treated as a 'live' document, whereby different stages will be completed and submitted as the development progresses. Where it is considered that the CMP does not adequately reflect current/planned works, the Council may request that the CMP be redrafted or additional information is submitted before signing off the document.

5.10 Expected working hours should be set out in the pro-forma. Standard working hours for construction sites in Camden are 8am-6pm Monday to Friday and 8am-1pm on Saturdays. No work should take place on Sundays or public holidays. It is expected that the community be consulted on the proposed working hours. Alternatives to the standard working hours set out above may be considered where proposed in response to consultation with the community.

5.11 The Council is aware that some developers may be more familiar with the use of Construction Logistics Plans (CLPs), referred to in guidance published by Transport for London (TfL). It should be noted that the transport section of Camden's CMP pro-forma is based on TfL's CLP. Building on the contents of a CLP, Camden's CMP process expects, additional detail relating to environmental health and community liaison considerations. These are often not considered in sufficient detail within CLP templates and associated guidance. A CLP prepared solely in accordance with TfL's CLP guidance cannot therefore be submitted as a substitute to a CMP.

Figure A below sets out the usual CMP process and timeline.

Figure A: Construction Management Plan timeline



Cumulative impacts

5.12 At any one time, there are likely to be areas of the borough with particularly high concentrations of individual construction sites. Collectively these have the potential to cause unacceptable adverse impact to amenity. The Council will therefore expect that CMPs should consider the cumulative impacts that could arise from the site and other construction sites within the vicinity. The Council has a good working knowledge of the extent of current and future construction activity within specific areas and developers are encouraged to work with the Council to identify potential problems. Please contact the Infrastructure and Growth team, 5 Pancras Square, London, N1C 4AG, email: planningobligations@camden.gov.uk.

5.13 In order to mitigate any cumulative impacts, the Council will encourage developers to co-ordinate their construction activities with other construction sites, such as managing noisy working hours and coordinating deliveries to minimise impact on the highway network.

Consultation and Construction Working Groups

5.14 A neighbourhood consultation process should be undertaken prior to submission of the first draft of the CMP. This consultation must focus on construction impacts (including proposed working hours), and should take place following the granting of planning permission in the lead up to the submission of the CMP. Consultation regarding. A consultation process specifically relating to construction impact construction must take place regardless of any prior consultations relating to planning matters. Further guidance regarding how to undertake the consultation process is available on the Council's website.

5.15 For major developments, a construction working group should be established in order to discuss, advise and, where appropriate, make recommendations to the developer in relation to the build and preparation of the CMP. Even if this group does not meet regularly, as a minimum the Council would expect a site to set up a communication distribution list with regular emails sent by the developer/contractor to keep the residents informed about the progress of the work. The working group should be made up of an appropriate number of representatives from local residents and/or business associations, a nominee of the Council, and a project manager and/or liaison officer who will act as a point of contact between the local community and the developer.

Planning obligations

5.16 Planning conditions can only be used to control matters within the boundary of a site. However, as the range of matters typically covered by a Construction Management Plan, particularly in relation to highways, lie outside of the site boundary, a CMP will be secured through S106 legal agreement in most cases.

5.17 The Council has a statutory duty to investigate complaints relating to environmental health and highways safety issues. We have therefore introduced an implementation support contribution that is payable by developers and secured through S106 legal agreement. This is used to meet the costs to the Council of reviewing, monitoring and (if necessary) enforcing CMPs. The charging structure is based on the projected officer time, which could include managing complaints from residents, meetings with the applicants and site visits in addition to the time taken to review CMPs.

Further information on Camden's CMP charge structure can be found on the Council's website.

6 Noise and vibration

KEY MESSAGES:

- The Council will assess the impact of noise and vibration through the consideration of acoustic reports submitted by applicants.
- Noise mitigation (where appropriate) is expected to be incorporated into developments at the design stage.
- The Council will secure mitigation measures through planning condition or legal agreement where necessary.
- The Council will adopt the 'agent of change' principle.

6.1 Noise and vibration can have a significant impact on amenity, quality of life and wellbeing. This section provides guidance regarding the application of Local Plan Policies A4 Noise and vibration and A1 Managing the impact of development, which seek to protect residents of both existing and new residential developments and the occupiers of other noise-sensitive developments from the adverse effects of noise and vibration. Appendix 3 of the Local Plan supports these policies and sets out expected standard in terms of noise and vibration.

6.2 This chapter contains guidance on the following:

- Assessing the impact of noise and vibration
- Acoustic reports
- Internal noise levels and vibration
- Plant and other noise generating equipment
- Food, drink, entertainment and leisure noise
- Delivery management.

Assessing the impact of noise and vibration.

6.3 The Council will assess the impact of noise and vibration though acoustic reports submitted by applicants.

When should acoustic reports be prepared?

6.4 When a planning application is submitted, an acoustic report should accompany the application where any of the following are proposed:

- plant, ventilation, air extraction or conditioning equipment and flues;
- uses likely to create significant noise such as food/drink/entertainment and leisure uses, industrial uses, day nurseries, places of worship, schools and colleges;
- a noise-sensitive use located in noisy environment (e.g. near to a busy road, railway line, noisy industry)
    - noise sensitive uses include housing, schools/libraries, hospitals, offices, workshops, laboratories, hotels and open spaces.
    - a noisy environment is considered to be an area where non-standard adaptations have to be made to a development in order to prevent harmful or otherwise unwanted effects, such as annoyance or sleep disturbance.

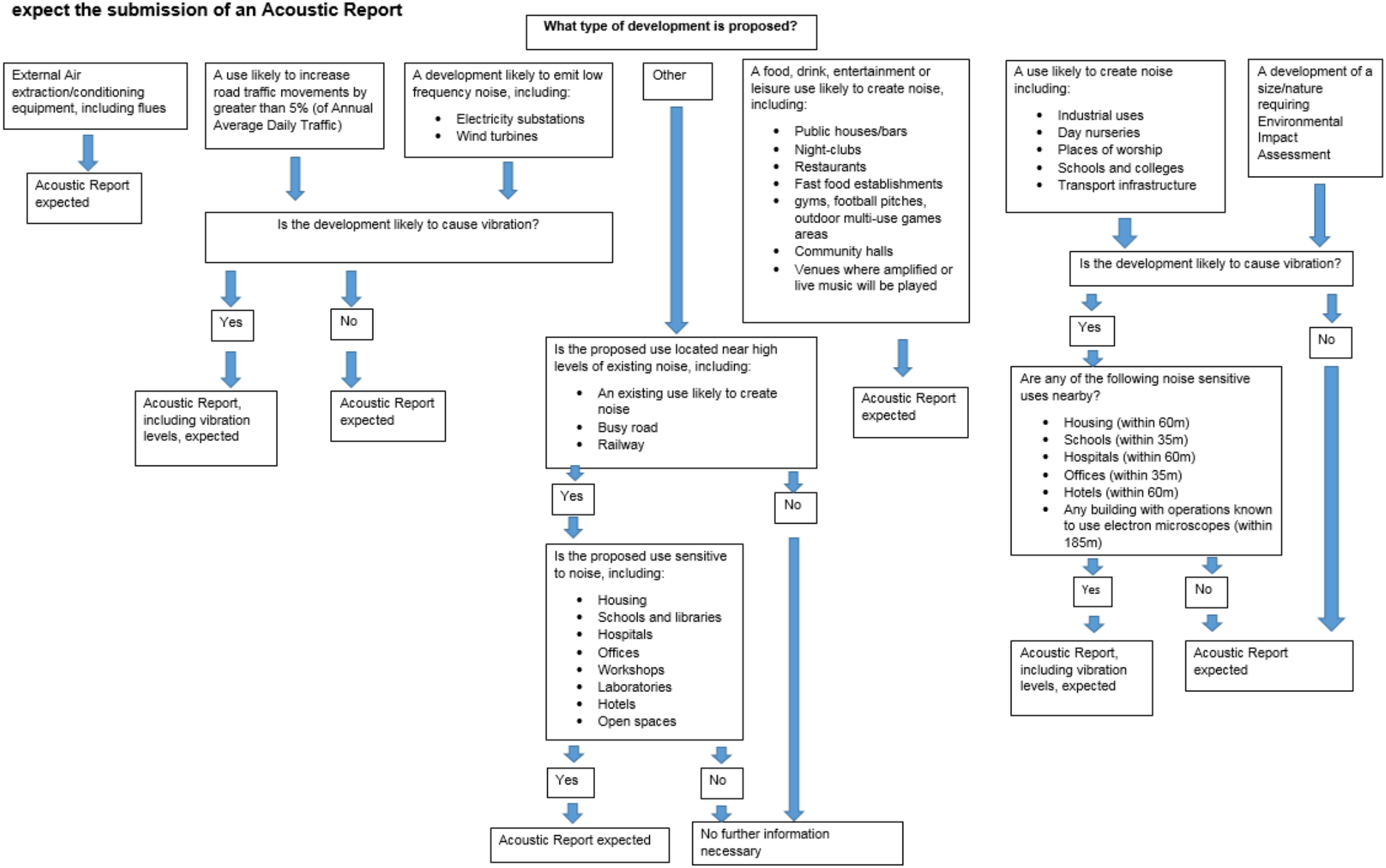
- uses likely to generate a significant amount of traffic (defined as road traffic movements greater than 5% of Annual Average Daily Traffic); and
- developments emitting low frequency noise (e.g. electricity substation).

6.5 Diagram 1 below summarises the instances of where an acoustic report is expected and where the report should also consider vibration impacts.

6.6 After planning permission is granted, an additional acoustic report should also be submitted to consider the noise impacts of the construction stage as part of Construction Management Plans (CMPs). Please see Camden Planning Guidance relating to CMPs and information on the Council's website for further information.

6.7 Development of a size and/or nature requiring Environmental Impact Assessment (EIA) should also submit an acoustic report.

Diagram 1: Flow chart showing when the Council will expect the submission of an Acoustic Report



Noise and vibration thresholds

6.8 When assessing acoustic reports, the Council will consider the reported measurements against the noise thresholds set out in Appendix 3 of the Local Plan. The thresholds are expressed as 'effect levels', which sets out a hierarchy of expected changes in behaviour and impact on health and wellbeing in response to increasing noise levels (measured in decibels - dB). The 'effect levels' are summarised below and explained in detail in National Planning Practice Guidance (NPPG). The table detailing each 'effect level' from NPPG is also set out in Appendix 1 to this guidance for ease of reference.

- No observed effect level (NOEL) – the level below which no effect can be detected on health and quality of life.
- Lowest observable adverse effect level (LOAEL) – the level above which changes in behaviour (e.g. closing windows for periods of the day) and adverse effects on health (e.g. sleep disturbance) and quality of life can be detected.
- Significant observed adverse effect level (SOAEL) – the level above which adverse effects on health and quality of life occur. This could include psychological stress, regular sleep deprivation and loss of appetite.

6.9 Where appropriate, the Council will also consider the cumulative impact of numerous individual noise sources where noise is known to be an issue. Camden's town centres for example are known to have a proliferation of air conditioning machinery and contain numerous food, drink, leisure and entertainment uses which all contribute to creating noisy environments.

Mitigating noise impacts

6.10 The implications of noise and vibration should be considered at the beginning of the design process so that the impacts of noise and vibration can be minimised. Examples of design features which could reduce noise impacts include (but are not limited to):

- locating noise sensitive areas/rooms away from the parts of the site most exposed to noises;
- creating setbacks;
- designing a building so its shape and orientation reflect noise and protect the most sensitive uses;
- stacking similar rooms (such as kitchens and living rooms) above each other;
- positioning non-residential uses closer to the noise source in mixed use developments;
- insulating and soundproofing doors, walls, windows, floors and ceilings;
- sealing air gaps around windows;
- double glazing;
- including architectural fins (where appropriate);
- laminated glass;
- anti-vibration foundations;
- noise barriers such as landscaping, fencing and solid balconies to reflect sound; and
- incorporating 'sound proof' construction/cladding materials.

6.11 In instances where noise mitigation is necessary, proposals will be expected to include appropriate attenuation to alleviate or mitigate the impact of noise and

vibrations to an acceptable level. Where noise mitigation has not been proposed adequately, but is considered necessary, the Council will consider the use of planning conditions or a legal agreement. Guidance regarding mitigation can be found within *BS8233:2014 Guidance on sound insulation and noise reduction for buildings*.

6.12 Examples of mitigation include:

- reducing the noise emitted at its point of generation (e.g. by using quiet machines and/or quiet methods of working);
- containing the noise generating equipment (e.g. by insulating buildings which house machinery and/or providing purpose-built barriers around the site);
- protecting any surrounding noise-sensitive buildings (e.g. by improving sound insulation in these buildings and/or screening them by purpose-built barriers);
- ensuring an adequate distance between source and noise-sensitive buildings or areas;
- screening by natural barriers, buildings, or non-critical rooms in the development.
- limiting the operating time of the source;
- restricting activities allowed on the site;
- specifying an acceptable noise limit;
- restricting window openings;
- sound proofing internal and external walls; and
- using cladding specifically designed for sound reduction.

Agent of change principle

6.13 In order so that existing businesses do not have unreasonable restrictions put onto them because of changes in nearby land uses, the Council will apply the 'agent of change' principle. The 'agent of change' principle identifies the person or business responsible for the change is also responsible for managing the impact of the change.

6.14 Noise sensitive uses proposed near to existing uses/businesses likely to create significant noise should therefore include necessary features to mitigate the anticipated noise and vibration effects of the existing use/business nearby.

Acoustic reports

6.15 Camden's noise and vibration thresholds in Appendix 3 of the Local Plan provide the starting point for developing acoustic reports relating to:

- vibration;
- developments likely to be sensitive to noise;
- industrial and commercial noise; and
- entertainment noise.

6.16 Developers should also seek guidance from the Council's Noise team prior to any acoustic work being carried out in order so they can advise on the best methodology for the proposed development and any bespoke reporting for developments that may fall outside of the above categories.

The Camden Council Noise team can be contacted at RegulatoryServices@camden.gov.uk

6.17 Assessments should be carried out and produced by a suitably qualified and competent consultant and conform to the standards in *BS7445 1-3:2003 Description and measurement of environmental noise* (or any later replacement guidance).

6.18 As assessment and guidance for noise and vibration control is always evolving, applicants must ensure that they consider amendments or updates to existing noise guidance. Where there is uncertainty, they should contact the Council's Noise team for clarification.

6.19 The appropriate amount and detail of information required will depend on the specific circumstances of a proposal. Details and information forming the minimum requirements for specific types of development can be provided by the Council's Noise team.

6.20 The minimum below information is expected to be submitted as part of an acoustic report:

- description of the proposal;
- description of the site and surroundings, a site map showing noise and vibration sources and measurement locations;
- background noise levels measured over a minimum of 24 hours;
- details of instruments and methodology used for noise measurements (including reasons for settings and descriptors used, calibration details);
- details of the plant or other source of noise and vibration both on plan and elevations and manufacturers specifications;
- noise or vibration output from proposed plant or other source of noise and vibration, including:
    - noise or vibration levels;
    - frequency of the output; and
    - length of time of the output.
- features of the noise or vibration e.g. impulses, distinguishable continuous tone, irregular bursts;
- specification of the plant, supporting structure, fixtures and finishes;
- location of noise sensitive uses and neighbouring windows;
- details of measures to mitigate noise and vibration;
- details of any associated work including acoustic enclosures and/or screening;
- cumulative noise levels; and;
- hours/days of operation.

6.21 In order to demonstrate all the above has been submitted, a copy of the Council's acoustic report Checklist should also be submitted along with the report.

Internal noise levels and vibration

Internal noise levels

6.22 The requirements of the Building Regulations are usually adequate for the sound insulation between floors and walls of adjoining dwellings, making planning conditions unnecessary.

6.23 The requirements of the Building Regulations are however likely to be inadequate in instances where:

- a new commercial use likely to generate noise adjoins an existing residential building (and vice versa); and/or
- a change of use will result in a residential development being sited in a noisy environment.

6.24 Where such development is proposed, the Council is likely to use planning conditions requiring substantially enhanced sound insulation of relevant walls, floors and ceilings compared to the minimum specifications of the Building Regulations. In proposing conditions, the Council will consider guidance available within *BS8233:2014 Guidance on sound insulation and noise reduction for buildings*, Guidelines for Community Noise (1999) and Night Noise Guidelines for Europe (2009) published by the World Health Organisation.

Vibration

6.25 Vibrations transmitted through the structure of a building can be detected by its occupants and can result in adverse effects. Depending on the timing and the nature of the vibration, occupants may have disturbed sleep or struggle to work efficiently. Vibration at higher magnitudes can even act to damage a building over time.

6.26 When assessing the impact of vibration, the Council will expect the vibration thresholds within Camden Local Plan Appendix 3 not be exceeded and consider guidance from *B6472-1:2008 'Guide to evaluation of human exposure to vibration in buildings Part 1: Vibration sources other than blasting'*.

Plant and other noise generating equipment

6.27 Developments proposing plant, ventilation, air extraction or conditioning equipment and flues will need to provide the system's technical specifications to the Council accompanying any acoustic report. '*BS4142 Method for rating Industrial and Commercial Sound*' contains guidance and standards which should also be considered within the acoustic report.

6.28 There are however likely to be instances where the Council will consider that a BS4142 assessment alone is not sufficient to provide all the information necessary. Plant such as electrical substations for example, may meet BS4142 standards, but are also known to emit low frequency noise, which also needs to be considered. Developers are therefore encouraged to discuss proposals of this nature with the Council's Noise team before preparing their acoustic report. (Email: RegulatoryServices@camden.gov.uk.)

6.29 Plant, ventilation, air extraction or conditioning equipment and flues can cause disturbance to residential properties. The Council would therefore welcome the use of long-term maintenance agreements to ensure that equipment maintains acceptable noise levels over its lifetime and the use of timers to limit any unnecessary operation of the equipment.

Food, drink, entertainment and leisure noise

6.30 Food, drink, entertainment and leisure uses can pose particular difficulties in terms of noise and disturbance, as their peak operating time is usually in the evening and late at night.

6.31 Where such uses are proposed, access routes, outdoor standing/seating areas, smoking areas, pub gardens, etc. should be sited away from noise sensitive facades and/or effectively screened.

6.32 The Council expects the noise impacts of these uses to be considered within an acoustic report. Assessments of noise from entertainment and leisure premises must include consideration of amplified and unamplified music, human voices, footfall, vehicle movements and other general activity. Developers should contact the Council's Noise team to discuss the most appropriate methodologies to undertake the assessment.

6.33 Principally, in order to manage food, drink, entertainment and leisure noise, the Council will consider the use of planning conditions to control aspects such as (but not limited to):

- opening times;
- amplified music (e.g. times when music can be played and maximum volumes); and
- restrictions on times where outdoor standing/seating areas can be used.

6.34 In line with Local Plan policies TC4 and C5, the Council will also consider the use of management plans secured through a section 106 legal agreement, which may include elements principally seeking to manage noise off-site. Examples could include:

- staff training;
- positioning queues away from residential buildings; and
- ensuring that bottles and cans are not disposed of in outdoor bins areas late at night.

In order for existing businesses to continue operating without restriction, in instances where a noise sensitive use is proposed near to an existing food, drink, entertainment or leisure venue known to generate noise and vibration, the Council will apply the 'agent of change' principle (referred to in Section 1). Within Camden, this will often mean that residential development will be expected to include sufficient insulation to mitigate the anticipated noise and vibration effects of a nearby food, drink, entertainment or leisure venue.

Delivery management

6.35 Deliveries and collections can cause disruption to nearby residential properties. When preparing Delivery and Servicing Management Plans, in order to reduce noise impacts regard should be given to the following:

- Noise Abatement Society's Silent Approach Quiet Night Time Delivery Scheme;
- Guidance published by Transport for London regarding retiming and consolidating deliveries;
- Freight Transport Association Guidance Delivering the Goods – a toolkit for improving night-time deliveries; and
- Camden Local Plan Policy T4 Sustainable movement of goods and materials and associated Camden Planning Guidance to reduce the number of overall deliveries.

6.36 The Council expects that deliveries and refuse collections to be carried out between 08:00-20:00hrs. Developments requiring deliveries outside of these times should provide an acoustic report to demonstrate there will be no adverse impact in relation to noise, with particular reference to residential occupiers as a result of these activities. When preparing the assessment, regard should be given to *BS4142 Method for rating and assessing industrial and commercial sound*. Developers are however encouraged to discuss their proposals with the Council's Noise team before conducting their acoustic report. (Email: RegulatoryServices@camden.gov.uk.)

7 Wind and micro-climate

KEY MESSAGES:

- New developments should consider the local wind environment, local temperature, overshadowing and glare, both on and off the site.
- Buildings taller than their surroundings may cause excessive wind in neighbouring streets and public areas.
- Where poor wind conditions already exist reasonable attempts must be made to improve conditions.

7.1 The purpose of this guidance is to ensure that appropriate standards are met in the design of buildings and outdoor features to ensure that suitable safety and comfort levels are achieved in terms of wind and microclimate. It relates to Camden Local Plan Policy A1 Managing the impact of development and Policy D1 Design in relation to tall buildings (paras 7.35-7.38).

7.2 London Plan policy 7.6 Architecture seeks to ensure that buildings and structures do not cause unacceptable harm to the amenity of surrounding land and buildings, particularly residential buildings, in relation to privacy, overshadowing, wind and microclimate. Furthermore, London Plan policy on tall and large buildings (policy 7.7) states that tall buildings, among other things, should not affect their surroundings adversely in terms of microclimate and wind turbulence.

7.3 This chapter contains guidance on the following:

- When wind and microclimate should be considered
- Wind
- Other influences on microclimate

When wind and microclimate should be considered

7.4 This guidance applies to all development that has the potential to change its environment with regard to wind and micro-climate, including extensions (see box below). However, the implications for a proposal will vary greatly depending on the nature of the site, the scale of development, its interaction with surrounding sites, and existing buildings and structures on the site.

7.5 The construction of a building changes the microclimate in its vicinity. Micro-climate refers to local conditions including wind, temperature, overshadowing, access to daylight and general comfort. In particular high-rise buildings can cause high wind velocities at pedestrian level which can create an uncomfortable environment and can even be dangerous. Therefore, the design of a building should not only focus on the building envelope and on providing good indoor environment, but should also consider the effect on the surrounding outdoor environment.

- Developments with potential to change their local environment include:
- New or modified tall buildings or buildings significantly higher than any surrounding building;
- Significant modifications to the built environment in areas of quantifiable and recognised existing wind nuisance;
- Major proposals adjacent to or incorporating a significant area of public or outdoor space;
- Developments with a large amount of glazing or dark masonry surfaces; or
- A combination of new or modified buildings that cumulatively, will significantly change the wind environment.

Wind

7.6 Buildings taller than their surroundings may cause excessive wind in neighbouring streets and public areas. Environmental winds are primarily driven by building massing and should be considered at the early design stages, when changes to achieve design objectives can be made most easily.

7.7 The Council will expect applicants to consider the local wind environment, both on and off the site, when designing schemes. Where poor wind conditions exist in an area prior to development, a reasonable attempt must also be made to improve conditions in general.

What information should be provided on wind?

7.8 The Council expects relevant developments to use the established Lawson Comfort Level Ratings. The Lawson Criteria are used throughout the UK to assess local wind environments and are a widely accepted assessment tool.

The Lawson Comfort Criteria

The Lawson Comfort Criteria is a scale for assessing the suitability of wind conditions in the urban environment based upon threshold values of wind speed and frequency of occurrence.

It sets out a range of pedestrian activities from sitting through to crossing the road and for each activity defines a wind speed and frequency of occurrence (see Figure 1 below).

If the wind conditions exceed the threshold then the conditions are unacceptable for the stated activity.

Figure 1 - Lawson Comfort Level Rating

Lawson Comfort Level Rating	**Predominant activity**	**Mean hourly wind speed exceeded less than 5% of the time**
C4 - Long term "Sitting"	Reading a newspaper and eating and drinking	4m/s
C3 - "Standing" or short term sitting	Appropriate for bus stops, window shopping and building entrances	6m/s
C2 - Pedestrian Walking or "Strolling"	General areas of walking and sightseeing	8m/s
C1 - Business "Walking"	Local areas around tall buildings where people are not expected to linger	10m/s

7.9 For relevant developments, planning applications should be accompanied by qualitative wind impact statement, prepared by a suitably qualified professional (i.e. wind engineer or similar).

7.10 You must firstly carry out a qualitative wind impact assessment. If the results of this show potential negative impacts you will also need to carry out a quantitative assessment. Both assessments must be submitted with the planning application. The assessment must provide detailed information on how the proposal meets this guidance, using quantitative measures (i.e. evidence of wind tunnel testing or similar).

A Wind Impact Statement must:

- Show how the proposal is expected to affect the local wind environment;
- Describe how the proposal has addressed the local wind environment;
- Include reference to specific features of the site or the development that make a contribution to the wind environment, either positively or negatively, and highlight areas of concern; and
- Reference the proposal's ability to meet the targets of this guidance, and make recommendations regarding the necessity for additional work, as described below.

A Wind Impact Statement should:

- Compare existing and proposed conditions against the Lawson Comfort Criteria in both summer and winter conditions;
- Demonstrate how the proposal has adapted to the local wind environment;
- Reference specific features of the site or the development that make a contribution to the wind environment, both positively or negatively;
- Highlight areas of concern, and
- Describe the proposal's ability to adhere to the guidance.

Impact on the following areas must be considered where relevant:

- public and private open spaces on and adjacent to the site;
- outdoor areas on upper levels of the development;
- entrance and exit areas;

- shop windows;
- bus stops;
- outdoor dining areas;
- thoroughfares; and
- pedestrian crossing points.

7.11 If a proposal does not achieve the targeted ratings or outcomes applicants must provide sound justification to demonstrate, to the satisfaction of the Council, why their proposal cannot meet the targets. This justification should be prepared in conjunction with, and endorsed by a wind engineer, and must include evidence of the attempts that have been made to address design deficiencies.

7.12 If a proposal does not satisfactorily meet the criteria, and satisfactory justification is not provided, the proposal may be refused.

7.13 The Council may attach conditions to secure the achievement of wind speeds around a building no greater than those predicted. The Council may require alterations or other remedial measures at the developer's expense if wind speed targets are not met.

Other considerations relating to the wind environment

7.14 Development must not compromise the viability of wind-driven renewable energy generators on adjacent and nearby sites. Where wind-driven energy generators are likely to be significantly affected, applicants are responsible for mitigating the loss by moving, modifying or replacing the installation, or by incorporating equivalent renewable energy generation within the application site.

7.15 Where a development affects the viability of an existing wind-driven renewable energy generator, and the solution is to modify the installation off-site, all approvals, expenses and risks are the responsibility of the applicant. This requirement will be incorporated as a condition or in a S106 agreement relating to any approval. Where additional renewable energy capacity is to be installed on site, this will be assessed in conjunction with other renewable energy installations. (Note: additional capacity that is gained by installations off-site should be credited toward the onsite requirement for the development)

7.16 Wind environment also impacts on natural ventilation systems. Therefore, natural ventilation must also be considered in building design.

Other influences on micro-climate

Local heat

7.17 Local air temperature can be affected by a building's ability to absorb heat during the day and release it at night. This cumulative effect of this happening across London results in the urban heat island effect. The Council strongly encourages green roofs, brown roofs, green walls and soft landscaping in all developments to reduce this effect. Applicants can also consider light coloured building materials so unnecessary heat is not absorbed by a proposed building. See Camden Planning Guidance on sustainability for further guidance on these issues.

Overshadowing

7.18 You should consider the design of your proposal carefully so that it does not block sunlight and overshadow windows or open spaces and gardens. It will be particularly important in Central London and other densely developed part of the borough to prevent overshadowing of amenity space and open spaces given the limited amount of open

spaces and the existing amount of overshadowing. Further detail can be found in the daylight and sunlight chapter of this Guidance.

Glare

7.19 Glare is uncomfortably bright sunlight reflected from a building façade. It is generally caused by tall, fully glazed and sloping facades with reflective finishes that reflect the sun. Tall buildings should be designed to avoid this and use materials that do not result in glare. See Artificial Light section of this Guidance for further details.

8 Contaminated land

KEY MESSAGES:

- Contaminated land can pose a serious risk to health and the environment.
- Contaminated land assessments should be submitted for developments located on contaminated land or propose a use that has the potential to contaminate land.
- Developers should contact the Council's Contaminated Land team for information regarding a site's contamination history and possible remedial measures.

8.1 This guidance relates to the application of Camden Local Plan Policy A1 – Managing the Impact of development, and relates to contaminated land. It covers the following:

- What is contaminated land?
- Causes of land contamination
- Contaminated land assessments
- Assessments for existing contaminated land
- Assessments where there is potential land contamination through the proposed use
- How should contaminated land assessments be prepared?
- Use of planning obligations
- Involvement of statutory consultees

What is contaminated land?

8.2 Contaminated land is land that has been polluted with harmful substances to the point where it now poses a serious risk to health and the environment. 'Contaminated land' has a specific legal definition which is used in relation to an 'unacceptable risk' of harm to health. For more information please see Department for Environment, Food and Rural Affairs (DEFRA) web pages.

Causes of land contamination

8.3 In Camden, historic land contamination is most commonly derived from land uses such as engineering & manufacturing works, chemical works, metal plating works, printers, leather works, railways and electrical substations.

8.4 Some common reasons for land becoming contaminated include:

- improper chemical handling or disposal practices;
- accidental spillages, or leakages of chemicals during manufacturing or storage;
- polluted groundwater migrating under a site; and
- particles settling from factory emissions.

8.5 The most common pollutants of land in Camden include heavy metals (such as lead, arsenic, cadmium and chromium), asbestos and organic compounds.

8.6 Contamination can also come from historical activities dating back many hundreds of years, such as spoil heaps from some Roman lead mines, and even from naturally occurring substances.

8.7 Contaminants may still be present above acceptable levels even though the polluting use stopped many years ago.

Contaminated land assessments

8.8 To protect the local environment and the health and well-being of residents, workers and visitors, the Council will expect Contaminated Land Assessments for any developments that:

- are known to be contaminated;
- have the potential to be contaminated, through previous or current uses;
- are located in close proximity to contaminated land; or
- propose a use that has potential to contaminate land.

Assessments for existing contaminated land

8.9 In principle, the Council supports the redevelopment of contaminated sites where the contamination issue can be successfully addressed and where future uses can be carried out safely. Remediation is particularly important where people will have access within redeveloped sites to land for gardening, play or planting food for consumption.

8.10 In order to know whether the site is contaminated, developers are encouraged to submit an enquiry to the Council's Contaminated Land team. They will be able to provide detail regarding the extent of contamination (if any), the historic practices that could have contributed to the contamination and advice whether a detailed contaminated land assessment is required.

8.11 For email enquiries and further information, please see our contaminated land webpages.

Assessments where there is potential land contamination through the proposed use

8.12 Where a development includes any potentially contaminative uses the Council will expect proposals to be submitted to prevent future contamination of land or groundwater. Details of the potential risks and proposed mitigation should be set out within a contamination assessment and any environmental assessments.

How should contaminated land assessments be prepared?

8.13 The contamination assessment should accompany a planning application so that contamination issues can be assessed at the planning application stage. The assessment should be carried out by a Geo-technical or Geo-environmental Engineer, in consultation with the Council's Contaminated Land team and should determine:

- the existence of, or potential for, contamination;
- the nature of the contamination and the risks it may pose; and
- whether these can be satisfactorily reduced to an acceptable level.

8.14 The contaminated land assessment should comply with the policies and advice in the following:

- Paragraphs 120 and 121 of the National Planning Policy Framework (NPPF)
- National Planning Practice Guidance: Land affected by contamination
- Any guidance published by the Mayor of London regarding hazardous substances (See London Plan Policy 5.22)
- Contaminated Land Report 11 (CLR11) – Model Procedures for the Management of Land Contamination (Environment Agency)
- Development on Land Affected by Contamination: A Guide to help developers meet planning requirements (London Boroughs of Camden, Kensington and Chelsea, Westminster, Barking and Dagenham, Islington and Ealing - copies are available from the Council's Contaminated Land team)
- Other relevant British Standard Institution documents.

Use of planning obligations

8.15 Where remediation or mitigation measures are necessary, these will be secured through conditions or section 106 legal agreement.

8.16 For developments in or adjacent to areas where objectives for land contamination are unlikely to be met by condition (i.e. where there is still a residual impact), the Council will require a section 106 planning obligation. The planning obligation will be directed towards measures designed to deal with the contamination, including during construction works, and to make the site suitable for its intended use.

8.17 The Council may seek a financial contribution for:

- site investigation and remediation works which would include any measures to prevent hazards arising from future use of the site and the removal or containment of any contaminants;
- monitoring work following the completion of the development, e.g. measuring ground gas or ground water contamination in boreholes or installing permanent monitoring equipment; and
- a verification report (post-development survey) to confirm that remediation measures have been completed successfully.

8.18 A management plan may also be necessary to cover the maintenance of remedial works, such as landscaping or water treatment facilities, or to set out restrictions to minimise and control future potentially hazardous or contaminating development or use of the site.

Involvement of statutory consultees

8.19 If there is any existing contamination (or potential risk of contamination) to ground or surface water or to land with a statutory nature conservation designation, either from the existing state of the piece of land or from proposed works on it, the Environment Agency must be informed and their consent obtained for any works.

8.20 Historic England should also be contacted where contaminated land is within an Archaeological Priority Area. These can be identified on the Council's policies ma

Appendix 1: Effect level hierarchy

Perception	Examples of outcomes	Increasing effect level	Action
No observed effect level (NOEL)			
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
Lowest observable adverse effect level (LOAEL)			
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
Significant observed adverse effect level (SOAEL)			
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

Adapted from table cited in NPPG Paragraph: 005 Reference ID: 30-005-2014