

Camden Planning Guidance

Design

London Borough of Camden

CPG **1**



July 2015

CPG1 Design

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1 Introduction

What is Camden Planning Guidance?

- 1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional “material consideration” in planning decisions. The Council adopted CPG1 Design on 6 April 2011 following statutory consultation. This document was updated in 2013 to include Section 12 on artworks, statues and memorials, and updated in 2015 to revise the guidance for recycling and waste storage. Details on these updates and the consultation process are available at camden.gov.uk/cpg.
- 1.2 The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden’s LDF.

Design in Camden

- 1.3 Camden has many attractive and historic neighbourhoods as well as both traditional and modern buildings of the highest quality. These are a significant reason that the borough is such a popular place to live, work and visit. As well as conserving our rich heritage we should also contribute towards it by ensuring that we create equally high quality buildings and spaces which will be appreciated by future generations.
- 1.4 This objective of achieving high quality design does not just concern new development or large-scale schemes, but also includes the replacement, extension or conversion of existing buildings. The detailed guidance contained within this section therefore considers a range of design-related issues for both residential and commercial property and the spaces around them.



What does this guidance cover?

1.5 This guidance provides information on all types of detailed design issues within the borough and includes the following sections:

1. Introduction
2. Design excellence
3. Heritage
4. Extensions, alterations and conservatories
5. Roofs, terraces and balconies
6. Landscape design and trees
7. Shopfronts
8. Advertisements, signs and hoardings
9. Designing safer environments
10. Waste recyclables storage
11. Building services equipment
12. Artworks, statues and memorials

1.6 This guidance supports the following Local Development Framework policies:

Core Strategy

- CS14 Promoting high quality places and conserving our heritage
- CS15 Protecting and improving our parks and open spaces & encouraging biodiversity
- CS17 Making Camden a safer place
- CS18 Dealing with our waste and encouraging recycling

Development Policies

- DP24 Securing high quality design
- DP25 Conserving Camden's heritage
- DP27 Basements and lightwells
- DP29 Improving access
- DP30 Shopfronts

1.7 It should be noted that the guidance covered in this section only forms part of the range of considerations that you should address when proposing new development. In addition to these specific design matters you should also consider wider issues such as cycle storage, residential space standards, wheelchair housing, designing in sustainability measures and impacts on neighbours. Further guidance on these, and other issues, is contained within the Local Development Framework documents and the Camden Planning Guidance.

2 Design excellence

KEY MESSAGES

Camden is committed to excellence in design and schemes should consider:

- The context of a development and its surrounding area;
- The design of the building itself;
- The use of the building;
- The materials used; and
- Public spaces.

- 2.1 High quality design makes a significant contribution to the success of a development and the community in which it is located. Design of the built environment affects many things about the way we use spaces and interact with each other, comfort and enjoyment, safety and security and our sense of inclusion.
- 2.2 The purpose of this guidance is to promote design excellence and to outline the ways in which you can achieve high quality design within your development.
- 2.3 This guidance primarily relates to Core Strategy Policy CS14 Promoting high quality places and conserving our heritage and Development Policies DP24 Securing high quality design.



When does this apply?

- 2.4 This guidance applies equally to all development, whether new build, converted, refurbished, extended and altered development. However, the implications for a proposal will vary greatly depending on the nature of the site, the proposed use, the scale of development, its interaction with surrounding sites, and existing buildings and structures on the site.

- 2.5 Other sections in this Camden Planning Guidance (CPG) relate to specific types of developments and relevant design matters, for example advertisements, signs and hoardings, designing safer environments, extensions, alterations and conversions, heritage and shopfronts.

General guidance on design

- 2.6 Camden is committed to excellence in design. The borough contains many special and unique places, many of which are protected by conservation area status. In accordance with draft London Plan policies 7.1–7.7, Core Strategy policy CS14 requires development schemes to improve the quality of buildings, landscaping and public spaces and we will not approve design which is inappropriate to its context or fails to improve the character of an area.
- 2.7 We are working with our partners to promote design excellence and improve public buildings, landscaping and the street environment. We have established the Camden Design Initiative which seeks to encourage involvement, awareness and understanding of good design and this is promoted through the bi-annual Camden Design Awards which acknowledge high quality and innovative design. We are also a promoter of the national Civic Trust Awards which are awarded to buildings judged to have made a positive cultural, social or economic contribution to the local community.
- 2.8 In order to achieve high quality design in the borough we require applicants to consider buildings in terms of context, height, accessibility, orientation, siting, detailing and materials. These issues apply to all aspects of the development, including buildings and other structures (e.g. substations, refuse or cycle storage), outdoor spaces, landscaping and access points and should be considered at an early stage in the design of a development, as these elements are often difficult to change in later stages.



Context

2.9 Good design should:

- positively enhance the character, history, archaeology and nature of existing buildings on the site and other buildings immediately adjacent and in the surrounding area, and any strategic or local views. This is particularly important in conservation areas;
- respect, and be sensitive to, natural and physical features, both on and off the site. Features to be considered include, but are not limited to: slope and topography, vegetation, biodiversity, habitats, waterways and drainage, wind, sunlight and shade, and local pollutant sources. Movement of earth to, from and around the site should be minimised to prevent flood risk, land instability and unnecessary transport of aggregates, especially by road; and
- consider connectivity to, from, around and through the site for people using all modes of transport, including pedestrians, cyclists, wheelchair users, those with visual impairments, people with pushchairs, and motorised vehicles.

Building design

2.10 Good design should:

- ensure buildings do not significantly overshadow existing/proposed outdoor spaces (especially designated open spaces), amenity areas or existing or approved renewable energy facilities (such as solar panels). For further information, refer to CPG3 Sustainability Renewable energy (A shadowing exercise may be required for tall buildings or where they are near open spaces);
- consider the extent to which developments may overlook the windows or private garden area of another dwelling;
- consider views, both local and London wide, and particularly where the site is within a recognised strategic viewing corridor (as shown on the policy Proposals Map);
- consider the degree of openness of an area and of open spaces, including gardens including views in and out of these spaces
- contributions to the character of certain parts of the borough;
- provide visual interest for onlookers, from all aspects and distances. This will involve attention to be given to both form and detail;
- consider opportunities for overlooking of the street and, where appropriate, provide windows, doors and other 'active' features at ground floor; and
- incorporate external facilities such as renewable energy installations, access ramps, plant and machinery, waste storage facilities and shading devices into the design of the development. Careful consideration must be given to ensure that the facility does not harm the built environment.

Land use

- 2.11 The use of a building should:
- take into account the proposed use, and the needs of the expected occupants of the buildings and other users of the site and development; and
 - provide clear indication of the use of the building. It is noted, however, that reuse of existing buildings, as well as the accommodation of possible future changes of use, can make this difficult.

Materials

- 2.12 Materials should form an integral part of the design process and should relate to the character and appearance of the area, particularly in conservation areas or within the setting of listed buildings. The durability of materials and understanding of how they will weather should be taken into consideration. The quality of a well designed building can be easily reduced by the use of poor quality or an unsympathetic palette of materials. We will encourage re-used and recycled materials, however these should be laid to ensure a suitable level accessible surface is provided. Further guidance is contained within CPG3 Sustainability (Sustainable use of materials).

Tall buildings

- 2.13 Tall buildings in Camden (i.e. those which are substantially taller than their neighbours and/or which significantly change the skyline) will be assessed against a range of design issues, including:
- how the building relates to its surroundings, both in terms of how the base of the building fits in with the streetscape, and how the top of a tall building affects the skyline;
 - the contribution a building makes to pedestrian permeability and improved public accessibility;
 - the relationship between the building and hills and views;
 - the degree to which the building overshadows public spaces, especially open spaces and watercourses; and
 - the historic context of the building's surroundings.
- 2.14 In addition to these design considerations tall buildings will be assessed against a range of other relevant policies concerning amenity, mixed use and sustainability. Reference should be made to this CPG (Heritage chapter), CPG3 Sustainability (Climate change adaptation chapter) and CPG6 Protecting and improving quality of life (Overlooking and privacy and Wind/microclimate chapters).
- 2.15 Where a proposal includes a development that creates a landmark or visual statement, particular care must be taken to ensure that the location is appropriate (such as a particular destination within a townscape, or a particular functional node) and that the development is sensitive to its wider context. This will be especially important where the

development is likely to impact upon heritage assets and their settings (including protected views).

- 2.16 Design should consider safety and access. Guidance on these issues is contained within this CPG (Designing safer environments chapter) and CPG4 Protecting and improving quality of life (Access for all chapter). Schemes over 90m should be referred to the Civil Aviation Authority.

Design of public space

- 2.17 The design of public spaces, and the materials used, is very important. The size, layout and materials used in the spaces around buildings will influence how people use them, and help to create spaces that are welcoming, attractive, accessible, safe and useful. They can also contribute to other objectives such as reducing the impact of climate change (e.g. the use of trees and planters to reduce run-off and provide shading), biodiversity, local food production and Sustainable Urban Drainage Systems (SUDs), and provide useful amenity space. In Conservation Areas there may be particular traditional approaches to landscaping/boundary treatments that should be respected in new designs.
- 2.18 The spaces around new developments should be considered at the same time as the developments themselves and hard / soft landscaping and boundary treatments should be considered as part of wider cohesive design. The landscaping and trees chapter in this CPG, and individual Conservation Area Appraisals, provide further guidance on this issue.
- 2.19 Public art can be a catalyst for improved environmental quality by upgrading and animating public space and enhancing local character and identity through helping create a sense of place. The Council will therefore encourage the provision of art and decorative features as an integral part of public spaces, where they are appropriate to their location and enhance the character and environment.
- 2.20 It is important that public spaces and streets are maintained to a high standard and so, in line with the Local Implementation Plan, the Council will continue to undertake public space enhancement works through specifically targeted programmes. The Designing safer environments chapter in this CPG provides more detailed guidance on the incorporation of safety and security considerations in public spaces.

Design and access statements

- 2.21 Design and Access Statements are documents that explain the design ideas and rationale behind a scheme. They should show that you have thought carefully about how everyone, including disabled people, older people and children, will be able to use the places you want to build.
- 2.22 Design and Access Statements should include a written description and justification of the planning application and sometimes photos, maps and drawings may be useful to further illustrate the points made. The length

and detail of a Design and Access Statement should be related to the related to the size and complexity of the scheme. A statement for a major development is likely to be much longer than one for a small scheme.

- 2.23 Design and Access Statements are required to accompany all planning, conservation and listed building applications, except in certain circumstances as set out on our website www.camden.gov.uk/planning. Our website also provides a template for Design and Access Statements and lists the information that each statement should contain. Further guidance on Access Statements is provided in CPG4 Protecting and improving quality of life (Access for all chapter).

Further information

General	By Design: Urban Design in the Planning System – Towards Better Practice, DETR/CABE, 2000 Design and Access Statements; how to read, write and use them, CABE, 2007
Tall Buildings	Guidance on tall buildings, English Heritage/CABE, 2007
Historic Environment	Understanding Place: conservation areas designation, appraisal and management (2011) Building in Context, English Heritage/CABE, 2002. Seeing History in the View (2011) Good Practice Advice 3- Settings and Views (2015)
Other	Royal Institute of Chartered Surveyors (RICS); and Royal Institute of British Architects (RIBA).

3 Heritage

KEY MESSAGES

Camden has a rich architectural heritage and we have a responsibility to preserve, and where possible, enhance these areas and buildings.

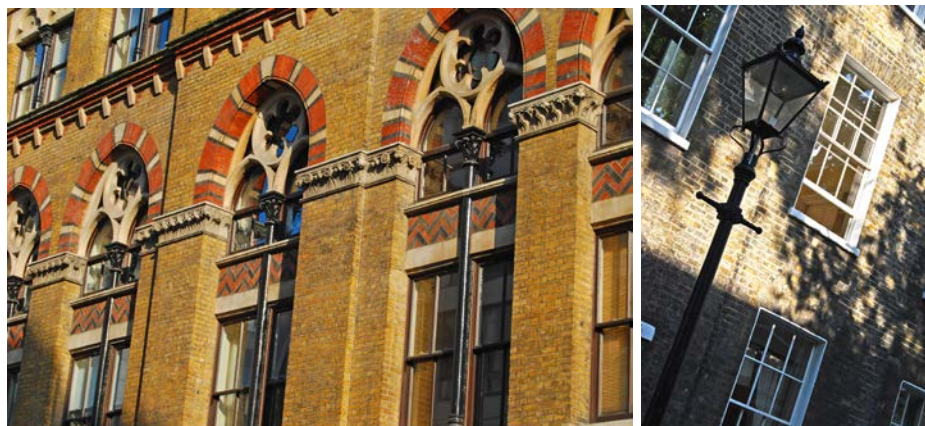
- We will only permit development within conservation areas that preserves and enhances the character and appearance of the area
- Our conservation area statements, appraisals and management plans contain more information on all the conservation areas
- Most works to alter a listed building are likely to require listed building consent
- Historic buildings can and should address sustainability and accessibility

3.1 This section provides guidance on our identified heritage assets (which include conservation areas, listed buildings and registered parks and gardens), including what they area and the implications of their status and designation. This section also sets out details on how historic buildings can address sustainability.

3.2 This section sets out further guidance on how we will apply Core Strategy Policy CS14 Promoting high quality places and conserving our heritage and Development Policy DP25 Conserving Camden's Heritage.

When does this apply?

3.3 This guidance applies to all applications which may affect any element of the historic environment and therefore may require planning permission, or conservation area or listed building consent.

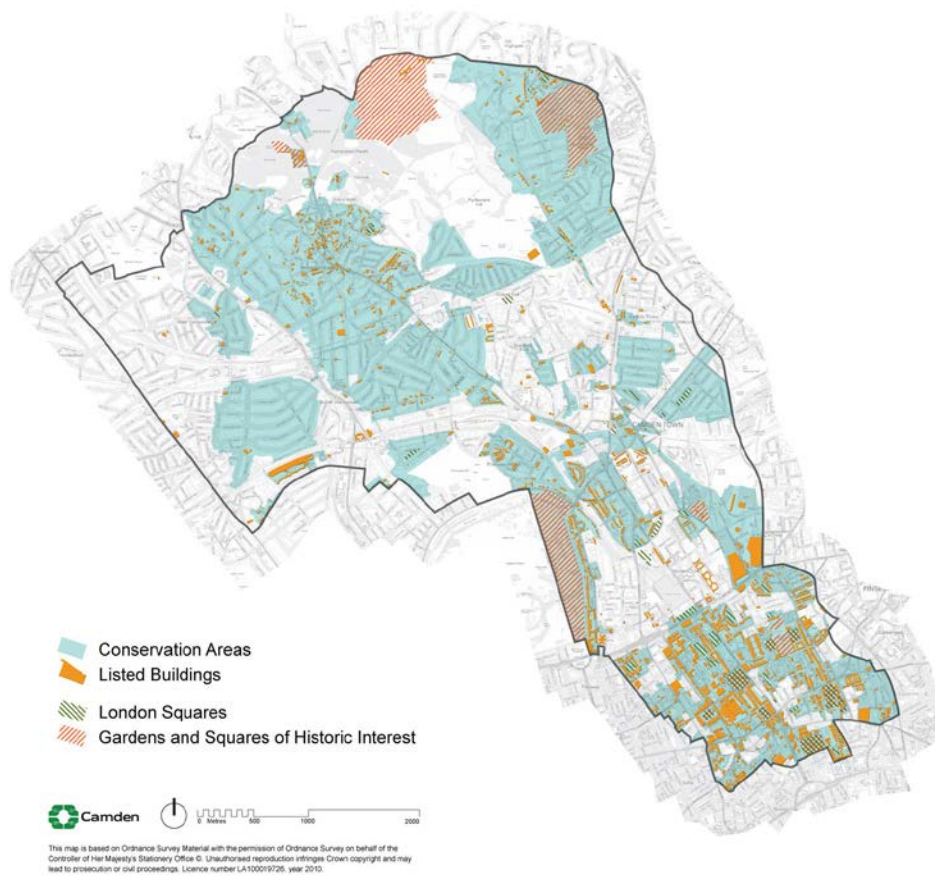


Conservation Areas

What is a conservation area?

- 3.4 A conservation area is defined in the Planning (Listed Buildings and Conservation Areas) Act 1990 as an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve and, where possible, enhance. PPS5 identifies conservation areas as “heritage assets” and requires that proposals in conservation areas are assessed for their impacts on their historic significance. There are 39 conservation areas in Camden, which vary greatly in appearance, size, character and style and these are identified on the LDF Proposals Map.

Figure 1. Conservation Areas



- 3.5 Conservation area designation is a way to recognise the importance of the quality of an area as a whole, as well as giving some protection to individual buildings within it. Conservation areas are not designated to stop all future development or change but to ensure that change is managed to conserve the historic significance of the area as a whole.
- 3.6 Conservation area designation is shown on the proposals map and further information on heritage is available on the 'Conservation and Design' section of the Council's website www.camden.gov.uk and on English Heritage's website www.english-heritage.org.uk.

Effects of conservation area status

- 3.7 We will only permit development within conservation areas, and development affecting the setting of conservation areas, that preserves and enhances the character and appearance of the area (see Planning Policy Statement 5 (PPS5), policy HE8).
- 3.8 The Council has greater control over building work in conservation areas, including demolition, materials and detailed design. Planning permission may be required for alterations or extensions that would not normally need planning permission elsewhere, such as minor roof

alterations, dormer windows, renewable energy installations or installation of a satellite dish.

Renewable energy technology

Renewable energy technologies generate energy from natural resources such as sunlight, wind, rain and heat in the ground, which are naturally replenished.

Demolition in conservation areas

- 3.9 Conservation Area Consent is required to demolish or substantially demolish a building over 115 cubic metres or a structure such as a wall over 1 metre high that adjoins a highway, or more than 2 metres high elsewhere. When determining your application we will follow the guidance in PPS5, Core Strategy policy CS14 and Development Policy DP24 as well as that in our conservation area statements, appraisals and management plans (see below). It is an offence to totally or substantially demolish a building or structure in a conservation area without first getting consent from us and we would not normally allow their demolition without substantial justification, in accordance with criteria set out in government guidance PPS5 – Planning for the Historic Environment.

Trees

- 3.10 Planning legislation makes special provision for trees in conservation areas. Prior to pruning or felling a tree in a conservation area you must provide the Council six weeks notice in writing. All trees that contribute to the character and appearance of a conservation area should be retained and protected. For further information on trees, please see Landscape Design and Trees chapter in this CPG.



Article 4 directions

- 3.11 A range of minor changes can be made to buildings without the need to apply for planning permission as these have a general permission through planning legislation. These changes are known as permitted development. However, the character of a conservation area depends on the presence of specific original details and where these are lost the historic interest and attractive character of the area deteriorates.

- 3.12 In these situations we can issue an Article 4 direction through Article 4 of the Town and Country Planning (General Permitted Development) Order 1995 (as amended). This removes permitted development rights and means a planning application has to be made for minor works that usually do not need one.
- 3.13 Further information on Article 4 directions, including where they apply in Camden is available on the 'Advice and help with planning applications' section of the Council's website www.camden.gov.uk and English Heritage has published Guidance on making Article 4 Directions, available at www.english-heritage.org.uk/publications/guidance-on-making-article-4-directions/

Conservation area statements, appraisals and management plans

- 3.14 We have published a series of conservation area statements, appraisals and management plans that set out our approach to preserving and enhancing the historic significance of each individual conservation area. Many of these conservation area statements are available for download on our website.
- 3.15 Conservation area statements, appraisals and management plans help guide the design of development in conservation areas and we take these into account when assessing planning applications.
- 3.16 Each conservation area statement, appraisal or management plan contains the following:
- A summary of the location and the historical development of an area;
 - A description of its character;
 - An outline of the key issues and development pressures that are currently of concern;
 - The key policy framework for that particular conservation area, and specific guidance for it;
 - An identification of heritage assets and elements of the wider historic environment which give an area its historic significance; and
 - An identification of sites and features that have a negative impact on the conservation area, or where an opportunity exists for enhancement of the area by redevelopment of a building or site.



Listed Buildings

What is a listed building?

- 3.17 A listed building is defined in the Planning (Listed Buildings and Conservation Areas) Act 1990 as a structure or building of special architectural or historic interest. These are included on the Statutory List of Buildings of Architectural or Historic Interest managed by English Heritage. Listed buildings are identified as heritage assets within the LDF and the Council is required to assess the impact that proposals to a listed building, or within their setting, may have on the historic significance of the building.
- 3.18 Listed buildings are graded according to their relative importance as either Grade I, Grade II* or Grade II. Grades I and II* are considered of outstanding architectural or historic interest and are of particularly great importance to the nation's heritage. The majority of listed buildings (about 94% nationally) are Grade II. However, the statutory controls on alterations apply equally to all listed buildings irrespective of their grade and cover the interior as well as the exterior and any object or structure fixed to or within their curtilage.

Listing description

The listing description contains details of a listed building's address, history, appearance and significance. These help to identify what it is about the building that gives it its special historic interest.

- 3.19 Further information on listed buildings in Camden is available on our website www.camden.gov.uk

How can I alter a listed building?

- 3.20 Most works to alter a listed building are likely to require listed building consent and this is assessed on a case by case basis, taking into

account the individual features of a building, its historic significance and the cumulative impact of small alterations. The listing description is not intended to be exhaustive and the absence of any particular feature in the description does not imply that it is not of significance, or that it can be removed or altered without consent. Listed status also extends to any object or structure fixed to the listed building, and any object or structure within its curtilage which forms part of the land. You should contact the Council at the earliest opportunity to discuss proposals and to establish whether listed building consent is required.

- 3.21 Some 'like for like' repairs and maintenance do not require listed building consent. However, where these would involve the removal of historic materials or architectural features, or would have an impact on the special architectural or historic interest of the building, consent will be required. If in doubt applicants should contact the Council for advice.
- 3.22 In assessing applications for listed building consent we have a statutory requirement to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. We will consider the impact of proposals on the historic significance of the building, including its features, such as:
- original and historic materials and architectural features;
 - original layout of rooms;
 - structural integrity; and
 - character and appearance.
- 3.23 We will expect original or historic features to be retained and repairs to be in matching material. Proposals should seek to respond to the special historic and architectural constraints of the listed building, rather than significantly change them.
- 3.24 Applications for listed building consent should be fully justified and should demonstrate how proposals would affect the significance of a listed building and why the works or changes are desirable or necessary. In addition to listed building consent, some proposals may also require planning permission. These applications should be submitted together and will be assessed concurrently.
- 3.25 It is a criminal offence to undertake unauthorised works to a listed building, even if you are not aware the building is listed, and could result in prosecution and fine or imprisonment (or both).
- 3.26 Some works that are required in order to comply with the Building Regulations (e.g. inclusive access, energy efficiency) may have an impact on the historic significance of a listed building and will require listed building consent.

Inclusive access to listed buildings

- 3.27 It is important that everyone should have dignified and easy access to and within historic buildings, regardless of their level of mobility. With

sensitive design, listed buildings can be made more accessible, while still preserving and enhancing the character of the building.

- 3.28 Further guidance is available in CPG4 Protecting and improving quality of life (Access for all chapter) and in the English Heritage publication “Easy Access to Historic Buildings” www.english-heritage.org.uk



How can historic buildings address sustainability?

- 3.29 We recognise the role that the historic environment can play in reducing the impact of climate change. For example, reusing existing buildings could avoid the material and energy cost of new development. There are many ways to improve the efficiency and environmental impact of historic buildings, for example improving insulation, draught-proofing and integrating new energy-saving and renewable-energy technologies. We will seek to balance achieving higher environmental standards with protecting Camden's unique built environment (in accordance with LDF Core Strategy policies CS13 Tackling climate change through promoting higher environmental standards and CS14 Promoting high quality places and conserving our heritage) and PPS5 policy HE.1.
- 3.30 More detailed guidance on how to modify buildings without compromising their significance is contained within CPG3 Sustainability (Energy efficiency: new buildings, Energy efficiency: existing buildings, Renewable energy, Climate change adaptation, Water efficiency, Flooding and Sustainable use of materials). For further information see the links at the end of this chapter.

Planning obligations relating to heritage assets

- 3.31 Many of the potential impacts of development on historic buildings and in archaeological priority and conservation areas can be covered through design and by conditions on the planning permission, for example the

need to carry out surveys or the storage and restoration of artefacts. Some objectives for building and area conservation or archaeology are unlikely to be satisfactorily controlled by a condition or in such cases and where impacts are off-site, or involve a particularly sensitive or complex programme of works, involving phasing, the Council may require implementation of these measures through a Section 106 Agreement.

Further information

<p>Planning Policy Statement 5 (PPS5)</p>	<p>The Government's national policies on the historic environment are set out in:</p> <ul style="list-style-type: none"> • Planning Policy Statement (PPS) 5 Planning for the historic environment – CLG, 2010 <p>If you want guidance implement this national policy, it is provided in:</p> <ul style="list-style-type: none"> • PPS5, Planning for the Historic Environment, The Government's Statement on the Historic Environment for England, and The Historic Environment Planning Practice Guide
<p>English Heritage</p>	<p>www.englishheritage.org.uk</p> <p>Guidance on heritage assets:</p> <ul style="list-style-type: none"> • Guidance on Conservation Area Appraisals, 2006 – English Heritage; • Guidance on Management of Conservation Areas, 2006 – English Heritage; • Climate Change and the Historic Environment (2008); and • Heritage at Risk Register - English Heritage http://risk.english-heritage.org.uk/2010.aspx <p>Guidance on sustainability measures in heritage buildings:</p> <ul style="list-style-type: none"> • Energy Conservation in Traditional Buildings • Climate Change and the Historic Environment <p>There is also an online resource dedicated to climate change and the historic environment, available at:</p> <ul style="list-style-type: none"> • www.englishheritage.org.uk/climatechangeandyourhome <p>Guidance on accessibility:</p> <ul style="list-style-type: none"> • Easy access to Historic Buildings, 2012 • Easy access to Historic Landscapes, 2013
<p>Energy Saving Trust</p>	<p>www.est.org.uk</p>

6 Landscape design and trees

KEY MESSAGES

- Camden's trees and green spaces are integral to its character.
- Landscape design and green infrastructure should be fully integrated into the design of schemes from the outset.
- We require a survey of existing trees and vegetation to be carried out prior to the design of a scheme.

- 6.1 This guidance sets out how to protect trees and vegetation and design high quality landscapes in conjunction with development proposals to ensure an attractive, safe, accessible, sustainable and ecologically diverse environment.
- 6.2 This chapter sets out:
- how existing trees and landscape should be protected;
 - what specific protection is given to some trees;
 - how new landscaping should be incorporated into developments; and
 - considerations for specific landscaped areas and types of landscaping.
- 6.3 The green landscape of the Borough is formed by parks and open spaces, railway and canal corridors, trees, gardens, green walls and roofs. These landscape components provide Camden's green infrastructure and play a key role in maintaining the local climate, reducing storm water run off, increasing biodiversity, providing space for urban food production and providing public enjoyment.
- 6.4 We expect landscape design and the provision of green infrastructure to be fully integrated into the design of development proposals from the beginning of the design process.
- 6.5 This section sets out further guidance on how we will apply Core Strategy Policy CS14 Promoting high quality places and conserving our heritage and Development Policy DP24 Securing high quality design.

Where does this guidance apply?

- 6.6 This guidance applies to all proposals affecting or including landscape design on and around buildings and proposals relating to on and off site trees.

How should existing Trees and Landscape be protected?

Benefits of retaining vegetation and trees

- 6.7 Vegetation of all types is at a premium in Camden given the Borough's dense urban environment. Camden's tree canopy and other existing vegetation are integral to its character. If you maintain existing trees and

vegetation on a development site it will help provide a sense of maturity to a development and integrate a development into its setting. Existing trees and vegetation are a key component in adapting to climate change and conserving biodiversity. See CPG3 Sustainability chapters on Climate change adaptation and Biodiversity. Existing species can serve as an indicator of what might be successfully grown on the site when selecting additional plants. The retention of existing mature trees and vegetation also make an important contribution to the sustainability of a project. For example by reducing the impacts and energy demand associated with the provision of new plants such as in their transportation and the irrigation required.

How should existing trees and vegetation be protected?

- 6.8 We will require a survey of existing trees and vegetation to be carried out prior to the design of a scheme in order to identify what trees and vegetation should be retained and protected on site. We will expect developers to follow the principles and practices set out in BS 5837: 2005 Trees in relation to construction to integrate existing trees into new developments.



- 6.9 BS5837: 2005 Trees in relation to construction outlines the survey method for identifying which trees should be retained and protected. Once the survey has identified the important trees and vegetation a Tree Constraints Plan (TCP) needs to be prepared for the site. The TCP is essential to site planning as it provides the limitations for development including:
- site layout and building lines;
 - changes in levels;
 - foundation design; and

- service provision where the root zones and crown spread of trees are to be protected.

NEW UTILITIES

Useful guidance for the installation of new utilities in the vicinity of trees is also provided in National Joint Utilities Group (NJUG) Vol 4 - Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees

- 6.10 The TCP should also identify the provision of sufficient space, above and below ground for new planting to develop and mature and existing trees to continue to grow (see paragraph 6.42 below regarding soft landscape design).
- 6.11 Where trees are identified to be retained it is imperative that contracting and site supervision procedures are in place to ensure that there is no damage during and after construction. We will normally seek a Method Statement which sets out how trees that are to be retained, both on and adjacent to the site will be protected. The Method Statement should identify how the provision of site accommodation, storage areas, site access and the positioning, heights and arcs of cranes will not affect the trees and vegetation that are to be protected.

Root zone

The area and volume of soil around the tree in which roots are found. May extend to three or more times the branch spread of the tree, or several times the height of the tree.

Crown spread

The extent of the branches, twigs and leaves that form the top of the tree

Specific protection for trees

- 6.12 Where a planning application involves works that affect trees either within the application site or on adjacent land (including street trees) we will require the following information to determine the application:
1. A Tree Survey
(see section 4.2 of BS5837:2005)
 2. A Tree Constraints Plan
(see sections 5.2 and 5.3 of BS5837:2005)
 3. An Arboricultural Implications Assessment
(see section 6 of BS5837:2005)
 4. An Arboricultural Method Statement for the protection of trees to be retained including a Tree Protection Plan
(see section 7 of BS5837:2005)
- 6.13 Failure to supply the documents outlined above may lead to a planning application not being validated.

- 6.14 To obtain a copy of BS5837:2005 please visit www.StandardsUK.com and for a list of arboricultural consultants visit www.trees.org.uk, www.charteredforesters.org and www.consultingarboristssociety.co.uk.

Tree preservation orders

- 6.15 Many trees in Camden are covered by a Tree Preservation Order (TPO). Please contact the Council to find out if a tree is protected by a TPO.

TREE PRESERVATION ORDER

A tree preservation order is made by the Council to legally protect specific trees or groups of trees that provide public amenity.

Unauthorised works to a tree with a TPO is a criminal offence and may result in prosecution and, upon conviction, a fine.

- 6.16 Works (above or below ground) to trees with a TPO require our permission. Application forms for these works are available at www.camden.gov.uk.
- 6.17 Works to a tree with a TPO required to enable the implementation of a planning permission are dealt with as part of a planning application. A further TPO application is not required.

Trees in Conservation Areas

SECTION 211

Under Section 211 of the Town & Country Planning Act 1990, anyone proposing to cut down or carry out work on a tree in a Conservation Area must provide the Council 6 weeks notice of their intention to do so.

- 6.18 All trees in Conservation Areas with a trunk diameter of 75mm or greater measured at 1.5m above ground level are protected under section 211 of the Town and Country Planning Act 1990 (as amended). If you are proposing works to a tree in a Conservation Area, above or below ground, you are required to give Camden Planning Services six weeks notice of your proposals (See above link for forms). Works to a tree in a Conservation Area required to facilitate the implementation of a planning permission are dealt with as part of a planning application. A further section 211 Notification is not required. If you carry out unauthorised works to a tree in a Conservation Area is a criminal offence and may result in prosecution and, upon conviction, a fine.

How should new landscaping be included into a development?

General principles

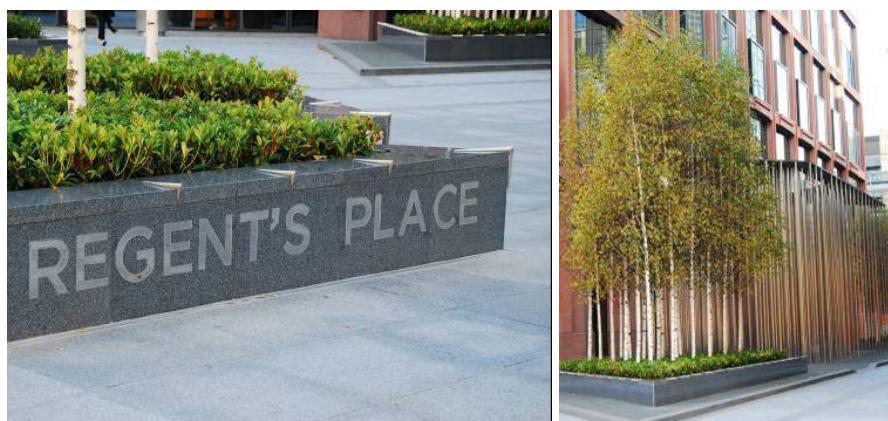
- 6.19 Urban landscape design encompasses the following types of spaces:
- streets and associated public spaces,
 - parks, public and private squares, gardens,
 - amenity and servicing space around buildings; and

- buildings themselves.

6.20 The principle components of landscape design are soft landscape details (planting) and hard landscape details (the constructed aspects of design) for example surfaces, lighting, seating, water features and boundary treatments.

6.21 Urban spaces have particular character which results from a combination of factors including geology, ecology, topography and the history of their development and use. We will expect new landscape design to respond to, preserve and enhance local character, including through the:

- preservation of existing trees and hedges;
- planting of new trees and hedges; and
- detailed design of boundary treatments and spaces within the site particularly where they are visible to the public domain.



6.22 Planning applications will be assessed against

- the successful resolution of the above elements into the design of the site
- whether the site design has optimised opportunities to increase a site's sustainability and function in adapting to climate change (see CPG3 Sustainability for further details on Biodiversity and Climate change adaptation)
- the need to reduce opportunities for criminal behaviour (see the chapter in this guidance on Designing safer environments)
- the need to provide inclusive environments (see CPG6)

Specific areas that are landscaped and contain trees

6.23 Areas within a development site that are generally landscaped include:

- gardens;
- access and servicing routes;
- parking spaces and cycle stores;
- boundary walls, fences and railings; and

- building roofs and walls.

Gardens

- 6.24 Front, side and rear gardens make an important contribution to the townscape of the Borough and contribute to the distinctive character and appearance of individual buildings and their surroundings. Gardens are particularly prone to development pressure in the Borough with their loss resulting in the erosion of local character and amenity, biodiversity and their function in reducing local storm water run off.

Front Gardens

- 6.25 The design of front gardens and forecourt parking areas make a large impact on the character and attractiveness of an area and in particular the streetscene. The design of front gardens and other similar forecourt spaces should:
- consider a balance between hard and soft landscaping. Where changes take place no more than 50% of the frontage area should become hard landscape. Where parking areas form part of the forecourt enough of the front boundary enclosure should be retained to retain the spatial definition of the forecourt to the street and provide screening;
 - retain trees and vegetation which contribute to the character of the site and surrounding area;
 - retain or re-introduce original surface materials and boundary features, especially in Conservation Areas such as walls, railings and hedges where they have been removed. If new materials are to be introduced they should be complementary to the setting; and
 - prevent the excavation of lightwells as a means of providing access to basements where this does not form part of the historical means of access to these areas.



Paving of front gardens

CHANGES TO PERMITTED DEVELOPMENT

The General Permitted Development Order no longer allows the creation of more than 5 square meters of impermeable surfaces at the front of dwelling houses that would allow uncontrolled runoff of rainwater from front gardens onto roads without first obtaining planning permission.

Changes to frontages incorporating hard standings may also be affected by Article 4 Directions. Article 4 Directions are issued by the Council in circumstances where specific control over development is required, primarily where the character of an area of acknowledged importance would be threatened, such as conservation areas

- 6.26 Planning Permission will not be granted for hard standings greater than five square metres that do not incorporate sustainable urban drainage systems (SUDS) into the design. SUDS incorporate permeable surfaces to allow water to soak into the subsoil, rather than being diverted into the stormwater system. SUDS are particularly appropriate in the parts of the borough north of Euston Road as this area has predominantly clay soils. Methods for choosing the appropriate design of a SUDS are provided in “Responsible rainwater management around the home” available from www.paving.org.uk. Planning applications which incorporate car parking areas into developments will be required to demonstrate that the chosen solution is appropriate to the underlying soil type.

Creating a cross over

- 6.27 For single family dwellings planning permission is not required for the creation of a cross over unless the property is affected by an Article 4 Direction or the cross over is to a classified road. However permission is required for the formation of a cross over from the Highways Authority. The Highways Authority will generally refuse permission where it would result in the loss of on street car parking spaces.
- 6.28 Planning permission is required for forecourt parking at the fronted of buildings divided into flats. Listed Building Consent is required to alterations to structures affecting listed buildings including structures within their curtilage.

Listed building consent

Legally required in order to carry out any works to a Listed Building which will affect its special value. This is necessary for any major works, but may also be necessary for minor alterations and even repairs and maintenance. Listed Building Consent may also be necessary for a change of use of the property.

Rear Gardens

- 6.29 Rear gardens are important as they:
- form part of the semi public domain where they are over looked by large numbers of properties and the occupants of surrounding buildings benefit from the outlook.

- form the character of an area in terms of the relationship between buildings and spaces and the resulting openness or sense of enclosure
- provide a sense of the greenery where they can be viewed through gaps between buildings
- provide a sense of visual separation and privacy
- soften the impact of buildings and integrate them into their setting
- play a significant role in maintaining the biodiversity of the borough (see CPG3 Sustainability for further details on Biodiversity). In particular groups of trees and vegetation along the rear boundaries of garden provide important wild life corridors within existing development patterns.

6.30 The potential detrimental affects of new structures in gardens can be reduced by:

- carefully siting structures away from vegetation and trees,
- designing foundation to minimises damage to the root protection zones of adjacent trees,
- including green roofs, green walls on new development and vegetation screens.

Root protection zone

The area around the base or roots of the tree that needs to be protected from development and compaction during construction to ensure the survival of the tree.

6.31 Planning permission is unlikely to be granted for development whether in the form of extensions, conservatories, garden studios, basements or new development which significantly erode the character of existing garden spaces and their function in providing wildlife habitat (See the chapters on Extensions, Alterations and Conservatories in this guidance document, and CPG4 on Basements).

Access and servicing areas

6.32 Where underground parking and/or servicing forms part of a larger development, access should be integral to the design of the development. Entrances and ramps should be discrete.

6.33 Entrances and adjoining areas of buildings are often spaces which require the integration of a number of competing needs such as the provision of bins, cycle storage, meters and inspection boxes and external lighting. These elements should be constructed with materials sympathetic to the site and surroundings. You can minimise the visual impact of storage areas by careful siting and incorporating planters to screen developments and incorporating green roofs as part of their structure.

6.34 Space and location requirements for the storage of waste and recycling can be found in this guidance in chapter on Waste and recycling

storage. Further guidance on how access to site and parking areas should be designed can be found in CPG6 Transport.

Boundary Walls, Fences and Railings

- 6.35 Boundary walls, fences and railings form the built elements of boundary treatments. They should be considered together with the potential for elements of soft landscaping. For example, we encourage the combination of low brick boundary walls and hedges as a boundary treatment. Boundary treatments should:
- delineate public and private areas;
 - contribute to qualities of continuity and enclosure within the street scene; and
 - provide site security and privacy.
- 6.36 Due to the prominence of the boundary treatments in the streetscene we will expect the design, detailing and materials used to provide a strong positive contribution to the character and distinctiveness of the area and integrate the site into the streetscene.
- 6.37 With regards to boundary walls, fences and railings, we will expect that:
- you consider repairing boundary walls, fences and railings before they are replaced;
 - they make a positive contribution to the appearance and character of the development site and to the streetscene;
 - you consider designs to be effective for their function.
 - the design and construction does not damage any on site or off site trees that are identified for retention (See paragraphs 6.15 to 6.18 above).
- 6.38 For boundary treatments around listed buildings or in a conservation area we will expect:
- the elements are repaired or replaced to replicate the original design and detailing and comprise the same materials as the original features
 - the works preserve and enhance the existing qualities and context of the site and surrounding area
- 6.39 Planning Permission is not required for the erection of a boundary treatment no higher than 1m where it abuts the highway or 2m on any other boundary. These heights are measured from ground level and include any structure that may be attached for example a trellis attached to the top of boundary wall.
- 6.40 Listed Building consent may be required for any works to boundary treatments within the curtilage of a listed building.

Types of landscaping

- 6.41 Landscaping are divided into the following broad types:

- soft landscaping (planting);
- hard landscaping; and
- landscaping on building.

Soft Landscape Details (Planting)

6.42 Soft Landscape is a term to describe the organic, vegetative or natural elements of Landscape Design. There are three main objectives in planting design (1) Functional (2) Ecological and (3) Aesthetic. Each of these objectives is likely to be inter related however one may be prioritised over another for the purpose of a particular project.

6.43 Functional objectives include:

- integrating a site with its surroundings;
- providing spatial definition and enclosure;
- directing pedestrian and vehicular movement;
- providing shelter,
- providing micro climatic amelioration and
- providing SUDS.

Ecological Objectives include:

- maintaining and enhancing natural processes; and
- increasing the biodiversity value of a site.

Aesthetic Objectives include:

- creating or contributing to the character of a place; and
- adding to people's sensory enjoyment in the use of a space.

Crown canopy

The uppermost layer in a forest or group of trees.
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6.44 Landscaping schemes need to maintain and plant large canopy trees as a means of countering the negative effects of increasing urban temperatures due to climate change. Existing large canopy trees are part of the character of several areas in the Borough. In these areas in particular and other areas where the opportunity arises space should be made for the growth and development of large canopy trees. Large canopy trees are usually considered to be trees which reach a mature height of 15-20m+. Site design should make provision for the expansion of the crown canopy of these trees and sufficient soil volume to support a trees growth to maturity. As a general rule the soil volume required to support a healthy large canopy tree is 6m x 6m x 1m depth. The detailed requirements for the growth and development of large canopy urban trees can be found in "Up by the Roots" by James Urban (International Society for Arboriculture, 2008).

6.45 The long term success of planting schemes will determine species selection suitable for local growing conditions (soil conditions, temperature ranges, rainfall, sun light and shade) and provision for on

going maintenance. Generally native species are considered to be most adapted to local conditions however there are a range of exotic plants which are at least equally adaptable to the unique ecology of urban areas and which provide an important contribution to a site's biodiversity.

- 6.46 Maintenance requirements should be considered at the design stage in terms of ensuring there is access for maintenance, whether maintenance materials need to be stored on site and that there are available sources of water. Water conservation should be intrinsic to the design of a planting scheme whether it is by selecting drought tolerant plants, maintaining soil conditions conducive to water retention with, for example, mulching or providing for on site water harvesting and grey water recycling.
- 6.47 Planning applications will be assessed against the degree to which planting schemes meet their objectives and that the chosen objectives are appropriate for the site. Planning applications should be accompanied by:
1. a statement of the design objectives of planting plans;
 2. planting plans indicating species, planting patterns, planting size and density; and
 3. where appropriate managements plans.

Hard Landscape Details

- 6.48 Hard landscape is a term used to describe the hard materials used in landscape design such as paving, seating, water features, lighting, fences, walls and railings (see paragraphs 6.35 to 6.38 above for guidance on boundary walls, fences and railings and the chapter on Design excellence regarding the design of public space).
- 6.49 Hard landscape makes a significant contribution to the character of the Borough. The scale, type, pattern and mix of materials help define different uses and effects the perception of the surrounding buildings and soft landscape and overall quality of an area. To help integrate the development with its surroundings and contribute to the sustainability of the project we will expect:
- the selection of materials, patterning and methods of workmanship to consider those already at use in the area;
 - traditional and natural materials to be used, especially in Conservation Areas (Guidance can be found in Conservation Area Statements, Appraisals and Management Plans);
 - the use of salvaged and re used materials, where appropriate; and
 - all paving to be level and accessible where used by pedestrians, this needs careful consideration where the use of historic materials is proposed.
- 6.50 The Council will discourage the replacement of soft landscaping with hard landscaping in order to preserve the environmental benefits of vegetation identified above. However where hard landscape is

unavoidable we will seek sustainable drainage solution to any drainage (see CPG3 Sustainability chapter on Flooding).

Lighting

- 6.51 Lighting can make an important contribution to the attractiveness of an area. It is also important for the security and safety of an area. The design and siting of columns and lights can provide a significant role in the creation of the character of a place. Other lighting techniques include wall mounting, bollards with integral lights and ground level up lighters. While adequate lighting is required, the intensity of lighting should be appropriate to its function. Care should be taken not to over light which can lead to unnecessary light pollution and energy consumption and in some cases become a nuisance to neighbouring residential properties. Lightning can also become a disturbance to local wildlife, particularly bats, and can affect the wildlife that uses and lives on the canal.

Landscaping on buildings

- 6.52 Landscaping on buildings includes both soft and hard landscaping and occurs in the forms of green and brown roofs and green walls. Green roofs, brown roofs and green walls can provide important landscape detail, biodiversity improvements, prevent local flooding and keep a building insulated. See CPG3 Sustainability (Green roofs and walls chapter).

Camden Planning Guidance

Housing

London Borough of Camden

CPG 2



July 2015

CPG2 Housing

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1 Introduction

What is Camden Planning Guidance?

- 1.1 We have prepared this Camden Planning Guidance (CPG) to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional “material consideration” in planning decisions. The Council formally adopted CPG2 Housing on 6 April 2011 following statutory consultation. The Camden Planning Guidance documents (CPG1 to CPG8) replace Camden Planning Guidance 2006.
- 1.2 This document (CPG2 Housing) has been subject to two updates:
- 4 September 2013 following statutory consultation in November to December 2012, and
 - 17 July 2015 following statutory consultation in March to April 2015.
- Details on these updates and the consultation process are available at camden.gov.uk/cpg.
- 1.3 The Camden Planning Guidance covers a range of topics (such as design, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden’s LDF.

Housing in Camden

- 1.4 A key priority for the Council is to ensure that everyone has the opportunity to live in a decent home at a price they can afford in a community where they want to live. Camden is a very popular place to live, which means that average house prices are high and that the demand for affordable housing far outstrips supply.
- 1.5 The Local Development Framework seeks to make full use of Camden’s capacity for housing to establish a plentiful supply and broad range of homes. In addition to meeting or exceeding Camden’s housing targets, the Local Development Framework seeks to ensure that new homes are built to a high standard and provide well-designed accommodation that meets the needs of a range of occupiers.

What does this guidance cover?

- 1.6 This guidance provides information on all types of housing development within the borough. It provides specific guidance on:
- Affordable housing
 - Student housing
 - Residential Space standards
 - Lifetime homes and wheelchair housing
 - Development involving net loss of homes
- 1.7 It highlights the Council's requirements and guidelines which support the Local Development Framework policies:
- CS1 – Distribution of growth
 - CS5 – Managing the impact of growth and development
 - CS6 – Providing quality homes
 - CS14 – Promoting high quality places and conserving our heritage
 - DP1 – Mixed use development
 - DP2 – Making full use of Camden's capacity for housing
 - DP3 – Contributions to the supply of affordable housing
 - DP4 – Minimising the loss of affordable housing
 - DP5 – Homes of different sizes
 - DP6 – Lifetime homes and wheelchair housing
 - DP7 – Sheltered housing and care homes for older people
 - DP8 – Accommodation for homeless people and vulnerable people
 - DP9 – Student housing, bedsits and other housing with shared facilities
 - DP26 – Managing the impact of development on occupiers and neighbours

4 Residential development standards

KEY MESSAGE

Development should provide high quality housing that provides secure, well-lit accommodation that has well-designed layouts and rooms.

- 4.1 This guidance relates to Camden Core Strategy policies CS5 – *Managing the impact of growth and development*, CS6 – *Providing quality homes* and CS14 – *Promoting high quality places and conserving our heritage* plus Camden Development Policy DP26 – *Managing the impact of developers on occupiers and neighbours*. In addition, homes of all tenures should meet lifetime homes standards in accordance with Development Policy DP6 and the CPG on Lifetime homes and wheelchair housing.

TENURE

Describes the ownership of a home and the relationship between a household and their home i.e. owner-occupied, shared ownership, private rented, social rented, etc.

- 4.2 The '**Access for all**' section in CPG6 **Amenity** sets out the Council's approach to providing buildings and spaces that are accessible to everyone. Reference should also be made to the **Design Excellence** section of CPG1 **Design** and to other sections of CPG2 **Housing**.
- 4.3 The space standards in this guide are minimum requirements and should not be taken as maxima. Housing which exceeds the minimum standards will always be encouraged.
- 4.4 This guidance applies to planning applications involving the provision of residential accommodation and residential conversions, extensions and change of use. In cases involving residential conversions of listed buildings a sensitive and imaginative approach to achieving these standards may need to be taken.

MAYOR'S HOUSING SPG

The Mayor has prepared a draft replacement housing SPG. The Mayor's draft SPG supports the emerging replacement London Plan, which makes provision for residential standards to be applied across all tenures of development. Both the draft replacement London Plan and the draft replacement Housing SPG are expected to be adopted in autumn 2011.

In addition, we anticipate that housing with public subsidy in London will have to comply with the Mayor's London Housing Design Guide from April 2011 (published in interim form in August 2010). The Mayor is seeking to adopt the London Housing Design Guide standards for all housing tenures in London through the London Plan.

- 4.5 Camden's Core Strategy indicates that we will seek a range of self-contained homes to meet identified dwelling size priorities. These

priorities are set out in detail in our Development Policies document – see particularly policy DP5 and paragraph 5.4.

Guidance on residential development standards

General principles

- 4.6 All residential developments in the Borough are required to be designed and built to create high quality homes:
- All newly created dwellings for households of 2 or more people should be self-contained (applies to homes in Use Class C3, but does not apply to care homes for elderly or vulnerable people, student housing, bedsits, or other Houses in Multiple Occupation (HMOs)).
 - Each dwelling should have its own secure private entrance which leads either directly from the street or off a common entrance hall – the number of entrances off one corridor should be limited.

SELF-CONTAINED

Accommodation with its own kitchen, bathroom and toilet for the sole use of occupants behind a separate front door.

HOUSES IN MULTIPLE OCCUPATION (HMO)

HMOs are flats or houses permanently occupied by more than one household, where each household does not have exclusive access to all cooking, washing and toilet facilities behind a locked front door.

Layout

- 4.7 There should usually be a permanent partition between eating and sleeping areas. Kitchens and living rooms that are permanently separated are preferable. However, combined kitchen and living areas are considered acceptable as long as the floor area is sufficient to allow for the greater range of activities that will take place in them.

Rooms

- All rooms should be able to function for the purpose for the purpose for which they are intended.
- They should have an adequate size, shape, door arrangement, height, insulation for noise and vibration and natural lighting and ventilation.
- They should lead off a hallway or lobby so that it is possible to access any habitable room without passing through another habitable room, although Building Regulations Part B - Fire Safety allow inner rooms provided they meet certain criteria.

HABITABLE ROOM

A room that is capable of being used as primary living space. Generally consists of living rooms, dining rooms, large kitchen/diners and large bedrooms

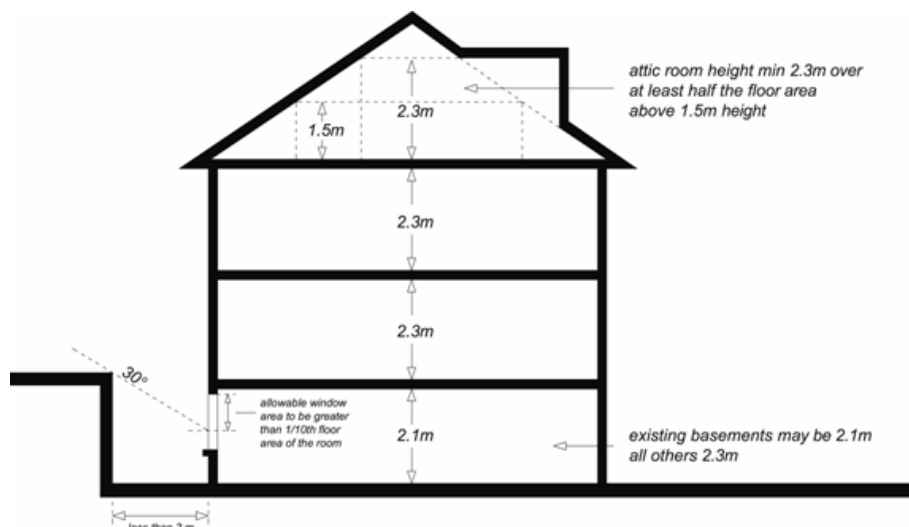
Flexible construction/layout

- 4.8 In addition, wherever practical dwellings should be designed to enable greater flexibility in construction design so that they can be capable of some form of extension or adaptation in order to accommodate changing lifestyles and family needs or other social use.
- 4.9 For example design features that could be considered, include:
- open plan layouts or generic layouts/floor plans;
 - avoiding load bearing internal walls;
 - easily accessible services and utilities e.g. a central accessible core or accessible floor/ceiling cavity.
 - For further examples see: By design urban design in the planning system: towards better practice: www.communities.gov.uk/publications/planningandbuilding/bydesignurban by DETR (2000) (accessed April 2011).

Internal space standards

Ceiling heights

- 4.10 All habitable rooms should have minimum headroom of 2.3 metres. The exceptions are habitable rooms in existing basements, which may have 2.1 metres headroom, and habitable rooms in attics which should have a minimum room height of 2.3 metres over at least half of the floor area (not including any floor space where the ceiling height is less than 1.5 metres). See Figure 9.
- 4.11 Any floor area where the ceiling height is less than 1.5 metres will not count towards the habitable floorspace. We will also consider the suitability of floor to ceiling heights in relation to context of building and how size of windows and floor to ceiling heights impact design. Please also refer to CPG1 **Design** (see particularly the sections on '**Design Excellence**' and '**Roofs, terraces and balconies**') and CPG4 **Basements**.

Figure 9. Ceiling heights and natural light for basements

Space and room sizes

- 4.12 Although planning cannot control the precise internal layout of individual proposals, it is important to ensure that dwellings are capable of providing a suitable layout and adequate room sizes that reflect the use and type of accommodation. The Council will be flexible in the application of these guidelines in order to respond to site-specific circumstances.
- 4.13 The Council has set minimum space standards to ensure rooms are large enough to take on varying uses. Space standards relate to the occupancy of a home rather than number of bedrooms and the developer will be required to state the number of occupants each dwelling has been designed to accommodate. The occupancy of housing at the time of its first occupation is not a reliable prediction of future levels of occupancy over the lifetime of a home. The only sensible assessment of occupancy is therefore the designed level of occupancy.
- 4.14 The overall internal floorspace in new self-contained dwellings (excluding communal lobbies and staircases) should normally meet or exceed the minimum standards set out in the following table.

Number of Persons	1	2	3	4	5	6
Minimum floorspace (sq m)	32	48	61	75	84	93

- 4.15 For dwellings designed for more than 6 people, allow approximately 10sq m. per extra person. In order to successfully to provide ease of movement and storage space for wheelchair users, the council will normally wheelchair housing dwellings to exceed the minimum floorspace standards. Please also refer to the section on 'Lifetime homes and wheelchair housing' in this CPG document.
- 4.16 The Council will expect bedrooms to meet or exceed the following minimum sizes:

- First and double bedrooms - 11.0 sq m
- Single bedrooms - 6.5 sq m

4.17 The Council's Private Sector Housing Team has produced specific minimum standards for Houses in Multiple Occupation (HMO's) and hostels which includes guidance on room sizes and facilities. Schemes for bedsits, shared houses and flats and hostels should be prepared with reference to these standards. These can be viewed on Camden's website www.camden.gov.uk/housing (see Private Sector Housing/ Private Housing Standards pages).

4.18 Self-contained homes providing a floorspace below the minimum standards may be considered in exceptional circumstances, for example to reduce the cost of Intermediate Housing to the occupier, however their acceptability will depend on other aspects of the development proposed. Sympathetic consideration may be given where a proposal meets a number of the criteria below:

- Dwellings are targeted at, and affordable to, groups identified by the Borough as being in need.
- External amenity space is provided
- A limited number of dwellings are accessed from each entry point and corridor (ideally 8 or fewer, unless controlled by a concierge or a CCTV system allowing clear facial identification).
- Security controlled access is provided where a larger number of units are accessed from one point.
- Where cluster flats are provided in response to a demonstrable demand (i.e. there are good indications that properties will not be hard to let to the targeted tenants), a limited number of flats are clustered into each dwelling (ideally 8 or fewer) (cluster flats are bedsits with a communal kitchen/eating area).
- A laundrette or communal laundry is provided (sufficient to cater for forecast resident demand at periods of peak usage) where individual dwellings cannot accommodate a washing machine - subject to keeping service and management charges at an acceptable level. The Council will take into account any existing commercial laundrettes that would be convenient for residents.

Storage and utility spaces

4.19 All accommodation should have sufficient internal storage space to meet the likely needs and requirements of potential occupiers. Dwelling layouts should make suitable provision:

- for washing machines and drying clothes;
- a storage cupboard with a minimum floor area of 0.8 sq m should be provided for 1- and 2-person dwellings;
- for each additional occupant, a minimum of 0.15 sq m storage area should be provided;

- storage for bicycles and prams should also be provided, located at the ground or lowest level of the dwelling, preferably accessed from a hall or lobby area;
- for waste and recycling bins, reference should also be made to the section '**Waste and Recycling Storage**' in CPG1 **Design**.

Daylight, sunlight and privacy

- 4.20 Residential developments should maximise sunlight and daylight, both within the new development and to neighbouring properties whilst minimising overshadowing or blocking of light to adjoining properties. Maximising sunlight and daylight also helps to make a building energy efficient by reducing the need for electric light and meeting some of the heating requirements through solar gain. The orientation of buildings can maximise passive solar gain to keep buildings warm in winter and cool in summer.

PASSIVE SOLAR GAIN

Design to optimise the amount of the sun's energy that heats and lights a building naturally.

- 4.21 All habitable rooms should have access to natural daylight. Windows in rooms should be designed to take advantage of natural sunlight, safety and security, visual interest and ventilation. Developments should meet site layout requirements set out in the Building Research Establishment (BRE) Site Layout for Daylight and Sunlight – A Guide to Good Practice (1991).
- 4.22 Overall the internal layout design should seek to ensure the main living room and other frequently used rooms are on the south side and rooms that benefit less from sunlight (bathrooms, utility rooms) on the north side. Kitchens are better positioned on the north side to avoid excessive heat gain.

Minimum requirements:

- 4.23 In particular the following minimum requirements need to be met to avoid the unacceptable loss of daylight and/or sunlight resulting from a development, including new build, extensions and conversions. For example:
- Each dwelling in a development should have at least one habitable room with a window facing within 30 degrees of south in order to make the most of solar gain through passive solar energy;
 - Rooms on south facing walls should always have windows, south facing windows and walls should be designed, sized and/or shaded in summer to prevent overheating. Appropriate shading might be achieved by:
 - mature deciduous trees located so as to shade the structure
 - eaves or overhangs that protect from sun that is high in the sky only

- external shutters or blinds that can be operated by the occupant;
- External shading should be provided for western facing windows and outdoor spaces to minimise overheating in summer. Deciduous trees provide the best shade for this purpose;
- Windows on north facing walls should be sized to prevent heat loss but allow sufficient daylight;
- All habitable rooms, including basements, must have an external window with an area of at least 1/10 of the floor area of the room;
- An area of 1/20 of the floor area of the room must be able to be opened to provide natural ventilation;
- Windows to atriums will be acceptable as external windows in exceptional circumstances only;
- Passive ventilation should be favoured where possible and mechanically assisted ventilation should be silent in operation.

4.24 For further guidance reference should be made to 'The Code for Sustainable Homes' which provides technical guidance on designing for adequate internal daylighting and requires daylight levels to be calculated using the BRE assessment method. Reference should also be made to CPG3 **Sustainability**.

Privacy and security

- 4.25 House and flat developments should be arranged to safeguard the amenity and privacy of occupiers and neighbours.
- New development, extensions, alterations and conversions should not subject neighbours to unacceptable noise disturbance, overlooking or loss of security.
 - Developments should seek to improve community safety and crime prevention. This may include:
 - designing developments so that open spaces are overlooked by windows, avoiding dark secluded areas and buildings face onto streets.
 - obtaining Secured by Design certification – please refer to the '**Designing safer environments**' section of CPG1 **Design**.

Basements

- 4.26 All rooms within a basement should be able to function for the purpose of which they are intended. They should have an adequate size, shape, door arrangement, and height, insulation from noise and vibration, and access to natural lighting, ventilation and privacy (similar to the standards set out above). Four key considerations are set out here.
- Natural light - to ensure that adequate natural light is provided to habitable rooms, walls or structures (including the sides of lightwells) should not obstruct windows by being closer than 3 metres. Where

this is not achievable, a sufficient proportion of the glazing should be above the point on the window(s) from which a line can be drawn at 30° above the horizontal to pass the top of obstruction. The glazed area above the point should total not less than 10% of the floor area of the room. See Figure 9.

- Forecourt parking – nearby vehicles can also restrict light to basements, and consideration should be given to any further obstruction from vehicles parked on the forecourt that may present a barrier to light serving basement windows.
- Means of escape - basements should be provided with either a door or suitably sized window allowing access to a place of safety that gives access to the external ground level, or with a protected escape route within the building leading to a final exit at ground level.
- Lightwells - stairs, ladders and gates in any railings around a lightwell that are required for means of escape should be designed to be as discreet as possible and should have regard to the character of the building and surrounding area.

4.27 Further detailed guidance on basements is contained within CPG4 **Basements**.

Noise and soundproofing

4.28 The layout and placement of rooms within the building should be carefully considered at an early stage in the design process to limit the impact of external noise on bedrooms and living rooms. The impact of noise should also be considered in the placement of private external spaces. Detailed guidance is provided in the '**Noise and vibration**' section of CPG6 **Amenity** and . The following requirements must be met.

- Internal layouts of dwellings should be designed to reduce the problem of noise disturbance between adjoining properties by using 'vertical stacking', i.e. placing living room above living room and bedrooms above bedrooms etc.
- Bedrooms should not be placed above, below or next to potentially noisy rooms, circulation areas of adjacent dwellings or noisy equipment, such as lifts.
- Windows should be located away from busy roads and railway lines/tracks to minimise noise and pollution and vibration.
- The layout of adjacent dwellings and the location of lifts, plant rooms and circulation spaces should seek to limit the transmission of noise to sound sensitive rooms within dwellings.
- Party walls and floors of flats created by conversion must be adequately soundproofed.
- All housing should be built with acoustic insulation and tested to current Building Regulations standards, but acoustic insulation should not be relied upon as the only means of limiting noise.

- Minimum levels of soundproofing are set out in the Building Regulations Part E - Resistance to the passage of sound. Levels of sound insulation above the minimum are encouraged.
- Further advice is given in the London Plan SPG on Sustainable Design and Construction

Outdoor amenity space

4.29 Outdoor residential amenity space can be provided in the form of private garden space, balconies, terraces, roof gardens or as communal amenity space. Where practical the following requirements should be met.

Private outdoor amenity space:

- All new dwellings should provide access to some form of private outdoor amenity space, e.g. balconies, roof terraces or communal gardens.
- Private gardens should be allocated to family dwellings.
- Where provided, gardens should receive adequate daylight, even in the winter.
- The access to private amenity space should be level and should be from the main living space.
- Balconies should have a depth of not less than 1.5 metres and should have level access from the home.
- Balconies and terraces should be located or designed so that they do not result in the loss of privacy to existing residential properties or any other sensitive uses.
- Balconies should preferably be located next to a dining or living space and should receive direct sunlight (they can be designed to project from main building line or be recessed).

4.30 In some instances, it is accepted that existing buildings may not be able to provide balconies or roof terraces, however, external amenity space i.e. access to communal gardens should still be provided where possible. See CPG1 **Design** for further guidance on '**Roofs, terraces and balconies**'.

Communal amenity space:

- Space should meet the requirements of the occupiers of the building and be wheelchair accessible. For example, if there are a large proportion of family units, child and young person's facilities should be included in the communal space. The council will use the Mayor of London's 'Providing children's and young people's play and informal recreation SPG' (March 2008) when calculating requirements: <http://static.london.gov.uk/mayor/strategies/sds/spg-children-recreation.jsp> (accessed April 2011).
- Space should be well designed so that residents have a sense of ownership of the space, which will encourage its use.

- Space should be located sensitively so that it is overlooked by surrounding development and secure for residents.
- Space should be designed to take advantage of direct sunlight.
- Space should be designed to minimise disturbance to occupiers and neighbours, e.g. by being sheltered from busy roads, by being located in the rear of the buildings, back to back, behind perimeter blocks or in courtyards.
- Landscaping and facilities provided for the space should be of a high quality and have suitable management arrangements in place.

Further information

GLA Housing Design Guide	The Mayor's London Housing Design Guide from April 2011 (August 2010) provides detailed guidance on housing design in London http://www.london.gov.uk/who-runs-london/mayor/publications/housing/london-housing-design-guide (accessed April 2011)
Lifetime Homes and Wheelchair Housing Standards	In addition to the above residential standards, most residential schemes will also need to meet specific requirements for Lifetime Homes and Wheelchair Housing Standards: <ul style="list-style-type: none"> • For further guidance on how to meet Camden's requirements refer to CPG on Lifetime homes and wheelchair housing. • For good practice guidance specifically on Lifetime Homes www.lifetimehomes.org.uk
Daylight and Sunlight	For good practice advice on overshadowing and providing daylight and sunlight to buildings, refer to the widely used BRE Report "Site Layout Design for Daylight and Sunlight; a guide to good practice". It provides specific guidance on: <ul style="list-style-type: none"> • Providing good daylighting and sunlighting within a new development • Safeguarding sunlight and daylight within existing buildings nearby • Protection of daylighting of adjoining land for future development • Passive solar site layout • Sunlighting of gardens and amenity areas
Sustainability	The Council will require all that all buildings are designed to be sustainable, thus reference should also be made to CPG3 Sustainability , in particular, the 'Code for Sustainable Homes' sub-section in 'Sustainability assessment tools'.

Camden Planning Guidance

Sustainability

London Borough of Camden

CPG 3



July 2015

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1 Introduction

What is Camden Planning Guidance?

- 1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional “material consideration” in planning decisions.
- 1.2 The Council adopted CPG3 Sustainability on 6 April 2011 following statutory consultation. This document has been subject to two updates:
- 4 September 2013 to clarify the guidance in Section 9 related to the Code for Sustainable Homes, and
 - 17 July 2015 to update a number of sustainable design standards and targets.

Details on these updates and the consultation process are available at camden.gov.uk/cpg.

- 1.3 The Camden Planning Guidance covers a range of topics as well as sustainability (such as design, housing, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden’s LDF.

What is this sustainability guidance for?

- 1.4 The Council is committed to reducing Camden’s carbon emissions. This will be achieved by implementing large scale projects such as installing decentralised energy networks alongside smaller scale measures, such as improving the insulation and energy performance of existing buildings.
- 1.5 This guidance provides information on ways to achieve carbon reductions and more sustainable developments. It also highlights the Council’s requirements and guidelines which support the relevant Local Development Framework (LDF) policies:
- CS13 - *Tackling climate change through promoting higher environmental standards*
 - DP22 - *Promoting sustainable design and construction*
 - DP23 - *Water*

What does the guidance cover?

- Energy statements
- The energy hierarchy
 - Energy efficiency – in new and existing buildings
 - Decentralised energy and combined heat and power (CHP)
 - Renewable energy
- Water efficiency
- Sustainable use of materials
- Sustainability assessment tools - BREEAM
- Green roofs, brown roofs and green walls
- Flooding
- Climate change adaptation
- Biodiversity
- Urban food growing

11 Flooding

KEY MESSAGES

All developments are required to prevent or mitigate against flooding
 All developments are expected to manage drainage and surface water
 There is a hierarchy you should follow when designing a sustainable drainage system

- 11.1 Camden has few permeable surfaces and a very high population density. As a result it is deemed to have a high risk of surface water flooding, which is likely to be increased by further growth and intensification of the built environment as well as the increasing risk of heavy rainfall due to climate change. Surface water flooding is caused when the existing water infrastructure (drains and sewers) cannot cope with heavy rainfall.
- 11.2 Map 5 in the Camden Core Strategy (and Map 2 in Development Policies) shows the parts of the borough that have experienced surface water flooding in the past and identifies the areas which are at risk of surface water flooding in the future. The location of development can impact the way that water flows around and underneath new and existing structures. Therefore all developments need to consider the risk of flooding. Especially developments within the identified areas, which must be designed to prevent causing additional pressure on adjoining sites and the sewer system.
- 11.3 Legislation has been introduced in the Floods and Water Management Act setting up a potential additional approval system for drainage plans. No further details are currently available on the specific requirements to support the Act.

WHAT DOES THE COUNCIL EXPECT?

Developments must not increase the risk of flooding, and are required to put in place mitigation measures where there is known to be a risk of flooding.

Within the areas shown on Core Strategy Map 5 (Development Policies Map 2) we will expect water infrastructure to be designed to cope with a 1 in 100 year storm event in order to limit the flooding of, and damage to, property.

All sites in Camden over one hectare or 10,000sq m require a Flood Risk Assessment in line with the National Planning Policy Framework. The assessment should be site specific and concentrate on the management of surface water run-off, and / or ground water where applicable, and should address the amount of impermeable surfaces resulting from the development and the potential for increased flood risk both on site and elsewhere within the catchment. These must be prepared by a suitably qualified professional and should be submitted with a planning application.

How to reduce the risk of flooding

Surface water

- 11.4 Every urban surface should be considered as a rainfall collector, allowing water to pass through to a drainage layer below or flow to a soakage area so that water volumes do not build up to cause problems downstream. Therefore, the design of drainage is very important. Poorly designed and maintained drainage can lead to surface water flooding caused by heavy rainfall. It needs to be able to cope with the heaviest of rainfall expected over the buildings lifetime (this is around 60 years for commercial development and 100 years for residential development) and also help reduce and slow the amount of run-off leaving a site.
- 11.5 The best way to deal with heavy rainfall and a traditional pipe drainage system is to introduce new areas for water to soak into the ground. Sustainable Drainage Systems (SUDS) provide a way to manage surface water in a way which mimics the natural environment. SUDS help reduce the amount of surface water leaving a site and can slow down the rate water flows. It also helps improve water quality by filtering out contaminants. SUDS can provide broader benefits, including the capture and re-use of water by linking into a rainwater or grey water harvesting system. They can also provide green, landscaped areas offering recreation and habitat for wildlife.

WHAT DOES THE COUNCIL EXPECT?

All developments are expected to manage drainage and surface water on-site or as close to the site as possible, using Sustainable Drainage Systems (SUDS) and the hierarchy set out below.

The Council will expect plans and application documents to describe how water will be managed within the development, including an explanation of the proposed SUDS, the reasons why certain SUDS have been ruled out and detailed information on materials and landscaping.

The Council will expect developments to achieve a greenfield surface water run-off rate once SUDS have been installed. As a minimum, surface water run-off rates should be reduced by 50% across the development.

The SUDS hierarchy

- 11.6 Surface water should be managed as close to its source as possible. The following hierarchy should be followed when considering which SUDS techniques to use. store rainwater for later use - use rainwater tanks or water butts to collect rain/storm water so that it can be re-used. See section 6 of this guidance for more information on grey water and rainwater harvesting systems. This will



help to stop flash flooding during periods of heavy rainfall.


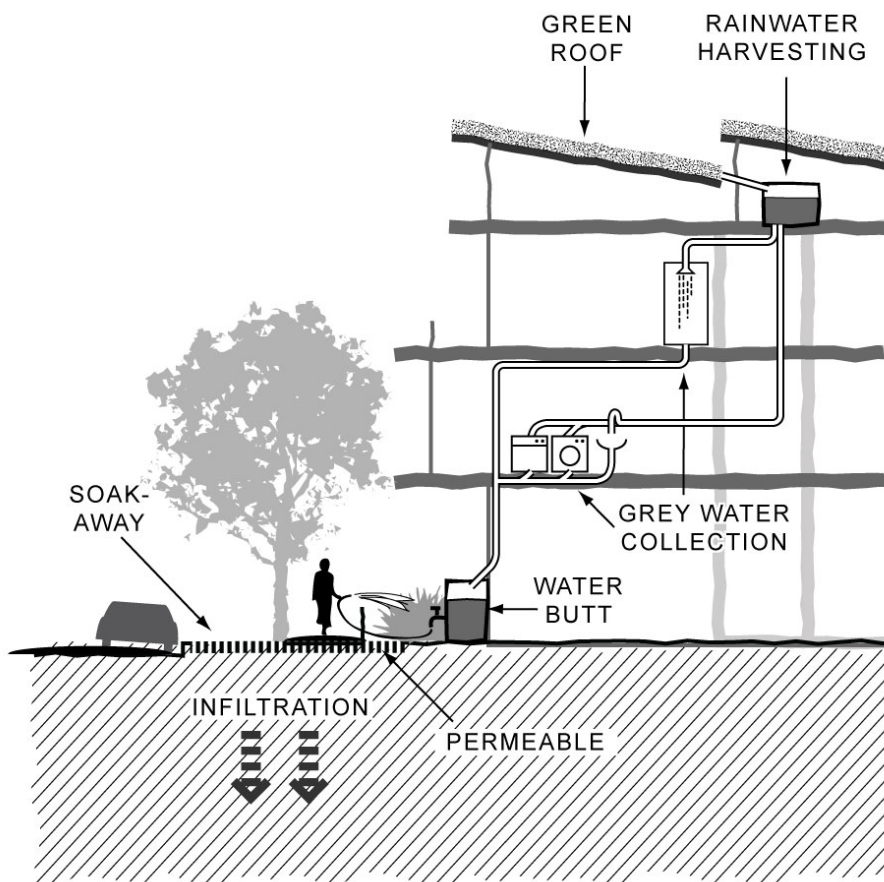
1. Use infiltration techniques - porous and permeable surfaces which allow water to soak (infiltrate) directly into the subsoil, rather than flowing over the top. This method is particularly appropriate on London Clay (in the North of the borough) where infiltration is slow. A layer of material needs to be laid between the clay and the uppermost surface to act as a storage/drainage channel. The use of permeable surfaces in urban SUDS design is critical because space is at a premium in Camden and permeable pavements and surfaces are one technique which does not require any additional land to function effectively.
 
 2. Collect and store (also known as attenuation) rainwater in ponds or open water features for gradual release - SUDS can be designed to hold storm water in ponds or specially designed wetland areas so that it can then be released more slowly into the ground or sewer. This is generally suitable for larger sites and those up stream of areas at risk of flooding)
 3. Collect and store rainwater in tanks or sealed water features for gradual release - where sites are constrained, with no natural landscaping or open areas, tanks can be installed which store water so that it can then be released more slowly into the ground or existing sewer.
 4. discharge rainwater direct to a watercourse
 5. discharge rainwater to a surface water sewer/drain
 6. discharge rainwater to the combined sewer
- 11.7 All the above can be incorporated into the landscaping on a site or development. For example green open space, verges and green roofs can be designed to filter and store rainwater, thus reducing pressure on drainage systems during heavy rainfall. Trees also reduce surface water runoff. For more information, please see section 10 of this guidance on brown roofs, green roofs and green walls and section 5 on Landscape design and trees in CPG1 Design for more information.
- 11.8 Figure 10 below shows all the different types of SUDS, from rain water harvesting, green roofs, porous surfaces, vegetation to ponds, reed beds and rivers.

Figure 9. Sustainable Urban Drainage System



Ground water

- 11.9 The geology in the northern parts of the borough is gravel and silt on top of a layer of clay. Water can travel through the gravel and silt, but the rate of infiltration slows when it reaches the clay layer. This results in an area where ground water is likely to collect. This geology has resulted in the formation of springs, wells and the chain of ponds on Hampstead Heath. The flow of water through the ground is important in order to maintain the local wells and ponds. It is essential that development, especially subterranean development, does not stop or significantly alter the direction of this underground flow of water.
- 11.10 Ground water must be considered when development involves below ground excavation and construction. New underground structures can alter the flow of groundwater as it needs to change its course to flow around the new structure. This can cause water to collect or pool upstream which may result in flooding of nearby areas or buildings.
- 11.11 More information on geology and hydrology in the borough can be found in the Camden Hydrological and Geological Study 2010. We also have further guidance on basement development in CPG4 Basements and lightwells.

Basements

- 11.12 The Council will require all applications for basement and underground developments to be accompanied by an assessment of the scheme's impact on drainage, flooding, groundwater conditions and structural stability, as appropriate.
- 11.13 The Council will also require a site-specific flood risk assessment with applications for basements on streets identified as being 'at risk' from surface water flooding, unless it can be demonstrated that the scale of the scheme is such that there is no, or minimal, impact on drainage conditions. See map Core Strategy Map 5 (also DP Map 2). We also have further guidance on basement development in CPG4 Basements.
- 11.14 In line with Development Policy DP27, the Council will not allow habitable rooms and other sensitive uses for self contained basement flats and other underground structures in areas at risk of flooding.

How to reduce the impact of flooding

- 11.15 Developments should be designed so that they can cope with flooding. This can be done by carefully considering design and layout, for example by locating the most vulnerable uses in lower risk parts of the development, ensuring buildings do not block key flood routes and by raising floor levels.
- 11.16 Flood proofing measures can also be designed into developments to reduce flood damage. The Environment Agency has prepared advice on how you can plan to reduce flood damage and reduce the amount of flood water that enters your building. See the Further Information section below for details.

Further information

Environment Agency	<p>Provides a range of guidance on SUDS, including planning advice www.environment-agency.gov.uk</p> <p>Guidance on how to reduce flood damage www.environment-agency.gov.uk/homeandleisure/floods/105963.aspx</p> <p>Guidance on how to keep flood water out of a building www.environment-agency.gov.uk/homeandleisure/floods/106769.aspx</p>
CIRIA	<p>Provide a range of advice and publications on SUDS, including the SUDS</p> <p>Manual, Sustainable Drainage Systems – design manual for England and Wales and Sustainable Water Management in Schools www.ciria.org.uk/suds</p>
Interpave -	<p>Provide technical guidance on the construction of permeable concrete block paving www.interpave.org</p>
Living roofs	<p>Provides information on the role of green roofs in SUDS www.livingroofs.org</p>
LB Camden Strategic Flood Risk Assessment	<p>Carried out to inform the preparation of Boroughs Local Plan. The SFRA presents the most up to date flood risk information in the borough. http://www.camden.gov.uk/ccm/cms-service/download/asset?asset_id=3245094</p>

Camden Planning Guidance

Basements and lightwells

CPG 4

London Borough of Camden



July 2015

CPG4 Basements and Lightwells

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1 Introduction

What is Camden Planning Guidance?

- 1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional “material consideration” in planning decisions. The Council adopted CPG4 Basements and lightwells on 6 April 2011 following statutory consultation. This document was updated in 2013 and again in 2015 to expand and refine the guidance. Details on these updates and the consultation process are available at camden.gov.uk/cpg.
- 1.2 The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden’s LDF.

Basements in Camden

- 1.3 With a shortage of development land and high land values in the borough the development of basements is a popular way of gaining additional space in homes without having to relocate to larger premises. Basements are also a typical feature of the Central London part of Camden and used for various purposes including commercial, retail and leisure uses, servicing and storage. However, while basement developments can help to make efficient use of the borough’s limited land, in some cases they may cause harm to the amenity of neighbours, affect the stability of buildings, cause drainage or flooding problems, or damage the character of areas and the natural environment.

What does this guidance cover?

- 1.4 This guidance provides information on basement and lightwell issues and includes the following sections:
- Planning and design considerations;
 - Assessing basements and Basement Impact Assessments; and
 - Impacts to neighbours from demolition and construction;
- 1.5 This guidance supports policy DP27 - Basements and lightwells in Camden Planning Guidance and the following other Local Development Framework policies:
- Core Strategy
- CS5 Managing the impact of growth and development
 - CS14 Promoting high quality places and conserving our heritage
 - CS15 Protecting and improving our parks and open spaces & encouraging biodiversity

- CS17 Making Camden a safer place
- CS18 Dealing with our waste and encouraging recycling

1.6 Development Policies

- DP23 Water
- DP24 Securing high quality design
- DP25 Conserving Camden's heritage
- DP26 Managing the impact of development on occupiers and neighbours

1.7 It should be noted that the guidance covered in this section only forms part of the range of considerations that applicants should address when proposing new basement development. In addition to these specific matters wider issues such as design, heritage, sustainability and the water environment should also be considered. Further guidance on these, and other issues, is contained within the Local Development Framework documents and the Camden Planning Guidance.

When does this guidance apply?

1.8 This guidance applies to all developments in Camden that propose a new basement or other underground development, or an extension to existing basement or other underground development where planning permission is required. Permitted development rights mean that some basements will not require planning permission. Underground developments may include ground or lower ground floors where excavation is required, for example when a ground floor is extended further into sloping land requiring excavation.

PERMITTED DEVELOPMENT

Permitted development rights are nationally set and allow certain building works and changes of use to be carried out without having to make a planning application. Permitted development rights are set out in The Town and Country Planning (General Permitted Development) Order 1995 as amended, which permits "the enlargement, improvement, or other alteration of a dwellinghouse" within the limits laid down for extensions.

In certain situations such 'Permitted Development' rights are removed, such as:

- For listed buildings;
 - Within a conservation area if there are any trees which will be affected by the development;
 - Outside a conservation area if any protected trees are to be affected (further guidance on the protection of trees is on page 10); and
 - For works classified as 'engineering operations'.
- You should also check any relevant Article 4 Directions which may remove Permitted Development rights. For guidance on permitted development rights, please visit the Camden Council website.

2 Basements and lightwells

KEY MESSAGES

The Council will only permit basement and underground development that does not:

- cause harm to the built and natural environment and local amenity;
- result in flooding; or
- lead to ground instability.

We will require applicants to demonstrate by methodologies appropriate to the site that schemes:

- maintain the structural stability of the building and neighbouring properties;
- avoid adversely affecting drainage and run-off or causing other damage to the water environment; and
- avoid cumulative impacts upon structural stability or the water environment in the local area.

Applicants will be required to submit information relating to the above within a Basement Impact Assessment (BIA) which is specific to the site and particular proposed development.

In certain situations we will expect an independent verification of Basement Impact Assessments, funded by the applicant.

- 2.1 This guidance gives detailed advice on how we will apply planning policies when making decisions on new basement development or extensions to existing basement accommodation.
- 2.2 Policy DP27 Basements and lightwells of Camden's Local Development Framework requires applicants to consider a scheme's impact on local drainage and flooding and on the structural stability of neighbouring properties through its effect on groundwater conditions and ground movement. Section 3 of this guidance document sets out how basement impact assessments need to provide evidence on these matters.

Planning and design considerations

- 2.3 We recognise that there can be benefits from basement development in terms of providing additional accommodation, but we need to ensure that basement schemes:
- do not cause undue harm to the amenity of neighbouring properties;
 - do not have a detrimental impact on the groundwater environment, including ponds and reservoirs;
 - do not have any effects on surface water run-off or ground permeability;

- do not harm the recognised architectural character of buildings and surrounding areas, including gardens and nearby trees, and that conservation area character is preserved or enhanced;
- conserve the biodiversity value of the site;
- achieve sustainable development; and
- do not place occupiers at risk or have any effects on the stability or bearing capacity of adjacent land generally.

Size of development

- 2.4 Often with basement development, the only visual features are lightwells and skylights, with the bulk of the development concealed wholly underground, away from public view. However, just as overly large extensions above the ground level can dominate a building, contributing to the over-development of a site, an extension below ground can be of an inappropriate scale. There may be more flexibility with the scale of a development when it is proposed underground, but there are a number of factors that would mean basement development would be overdevelopment.

SKYLIGHT

A window, dome, or opening in the roof or ceiling, to admit natural light.

LIGHTWELL

An opening within or next to a building that allows natural light to reach basement windows, that would otherwise be obscured.

- 2.5 Larger basement developments, such as those of more than one storey in depth or which extend outside of the footprint of the building, can have a greater impact than smaller schemes. Larger basement developments require more extensive excavation resulting in longer construction periods, and greater numbers of vehicle movements to remove the spoil. These extended construction impacts can have a significant impact on adjoining neighbours through disturbance through noise, vibration, dust, and traffic and parking issues. Larger basements also can have a greater impact on the water environment by reducing the area for water to runoff and soak away. Basement development that extends below garden space can also reduce the ability of that garden to support trees and other vegetation leading to poorer quality gardens and a loss in amenity and the character of the area.
- 2.6 The Council's preferred approach is therefore for basement development to not extend beyond the footprint of the original building and be no deeper than one full storey below ground level (approximately 3 metres in depth). The internal environment should be fit for the intended purpose, and there should be no impact on any trees on or adjoining the site, or to the water environment or land stability. Larger schemes, including those consisting of more than one storey in depth or extending beyond the footprint of the above ground building, will be expected to provide appropriate evidence to demonstrate to the Council's satisfaction that the development does not harm the built and natural environment or local amenity.

- 2.7 The Council recognises that in the case of larger buildings in central London and on large comprehensively planned sites (for example on large sites that occupy an urban block) the impacts of basements will differ to basement schemes in primarily residential neighbourhoods and in such circumstances larger basements are likely to be appropriate.

Habitable rooms

- 2.8 Development Policy DP27 (Paragraph 27.6) states that the Council will not allow habitable rooms and other sensitive uses for self-contained basement flats and other underground structures in areas at risk of flooding. Outside of these areas, where basement accommodation is to provide living space (possibly for staff), it will be subject to the same standards as other housing in terms of space, amenity and sunlight. Suitable access should also be provided to basement accommodation to allow for evacuation. Further guidance is contained in CPG2 Housing (refer to section 4 on residential development standards).

Conservation areas and listed buildings

- 2.9 In the case of listed buildings applicants will be required to consider whether basement and underground development preserves the existing fabric, structural integrity, layout, interrelationships and hierarchy of spaces, and any features that are architecturally or historically important. Where the building is listed, new basement development or extensions to existing basement accommodation will require listed building consent, even if planning permission is not required. The acceptability of a basement extension to a listed building will be assessed on a case-by-case basis, taking into account the individual features of the building and its special interest. Applicants should contact the Council at the earliest opportunity to discuss such proposals.

LISTED BUILDING CONSENT

Legally required in order to carry out any works to a Listed Building which will affect its special value. This is necessary for any major works, but may also be necessary for minor alterations and even repairs and maintenance. Listed Building Consent may also be necessary for a change of use of the property.

- 2.10 As with all basement schemes, we will need to be satisfied that effective measures will be taken during demolition and construction works to ensure that damage is not caused to the listed building and any buildings it directly adjoins. Poor demolition and construction methods can put neighbouring properties at risk and so can have considerable effects on the character and appearance of heritage buildings and conservation areas.
- 2.11 We will seek the submission of a management plan for demolition and/or construction where basement works are proposed in conservation areas or adjacent to a listed building. Further guidance on this is contained within CPG6 Amenity (refer to section 8 on construction management plans).

Basement walls, windows, and doors

- 2.12 The development of a basement and the introduction of light wells will result in an area of exposed basement wall and will usually mean new window or door openings. Any exposed area of basement development to the side or rear of a building will be assessed against the guidance in CPG1 Design (refer to section 4 on extensions, alterations and conservatories). In general, this expects that any exposed area of basement to be:
- subordinate to the building being extended;
 - respect the original design and proportions of the building, including its architectural period and style; and
 - retain a reasonable sized garden.
- 2.13 The width of any visible basement wall should not dominate the original building.
- 2.14 In number, form, scale and pane size, basement windows should relate to the façade above. They should normally be aligned to the openings above and be of a size that is clearly subordinate to the higher level openings so as not to compete with the character and balance of the original building. On the street elevation, and on certain rear elevations where there is a distinguishable pattern to the fenestration, the width and height of windows should be no greater than those above.

FAÇADE

The face or front of a building

FENESTRATION

The arrangement of windows in a building.

Trees, landscape, and biodiversity

- 2.15 Proposals for basement development that take up the whole front and / or rear garden of a property are very unlikely to be acceptable. Sufficient margins should be left between the site boundaries and any basement construction to enable natural processes to occur and for vegetation to grow naturally. These margins should be wide enough to sustain the growth and mature development of the characteristic tree species and vegetation of the area. The Council will seek to ensure that gardens maintain their biodiversity function for flora and fauna and that they are capable of continuing to contribute to the landscape character of an area so that this can be preserved or enhanced.

GREEN ROOF

A roof that has vegetation growing on it, which can help improve visual appeal, reduce the environmental impact of the building and create habitat for native flora and fauna.

DETENTION POND

A stormwater management facility that is designed to protect against flooding by storing water for a limited period of a time.

- 2.16 The basement development should provide an appropriate proportion of planted material to allow for rain water to be absorbed and/or to compensate for the loss of biodiversity caused by the development. This will usually consist of a green roof or detention pond on the top of the underground structure. It will be expected that a minimum of 1 metre of soil be provided above basement development that extends beyond the footprint of the building, to enable garden planting and to mitigate the effect on infiltration capacity. The use of SUDS is sought in all basement developments that extend beyond the footprint of the original building. For further guidance on SUDS, see CPG3 Sustainability (section 7 on water efficiency).
- 2.17 Consideration should be given to the existence of trees on or adjacent to the site, including street trees and the required root protection zone of these trees. CPG1 Design, (refer to section 6 on landscape and trees) sets out the evidence that the Council requires with respect to the protection of trees, including tree surveys and arboricultural method statements.

ROOT PROTECTION ZONE

The area around the base or roots of the tree that needs to be protected from development and compaction during construction to ensure the survival of the tree.

Lightwells

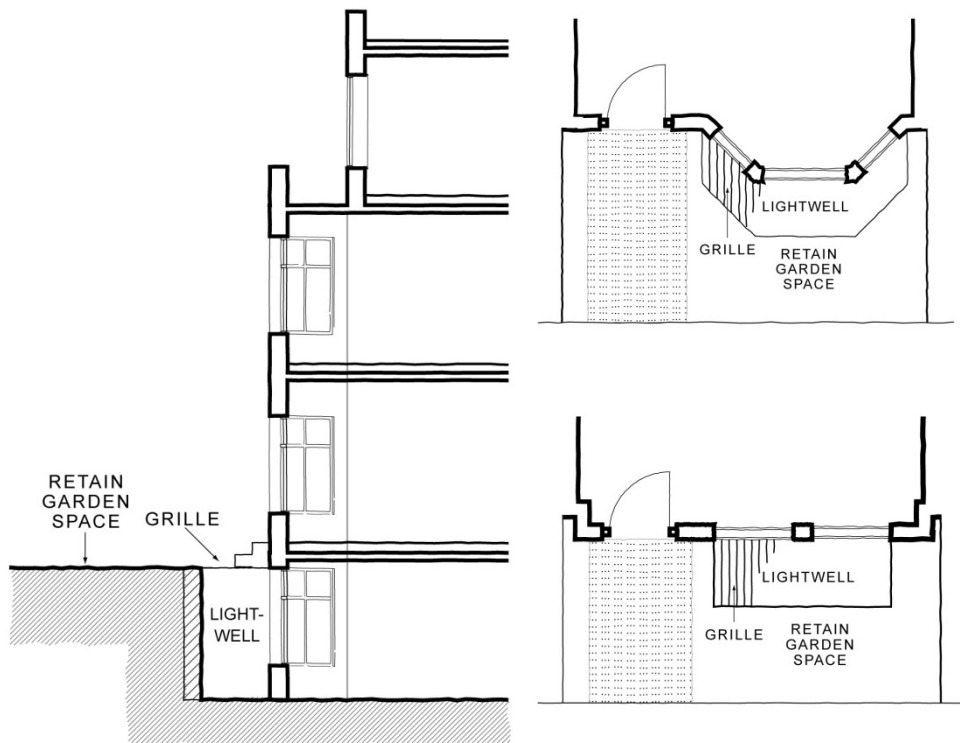
- 2.18 The building stock in Camden is varied. Some areas contain basements developments that include front lightwells taking up part, or all, of the front garden. Other areas do not have basements or lightwells that are visible from the street. The presence or absence of lightwells helps define and reinforce the prevailing character of a neighbourhood.
- 2.19 Where basements and visible lightwells are not part of the prevailing character of a street, new lightwells should be discreet and not harm the architectural character of the building, or the character and appearance of the surrounding area, or the relationship between the building and the street. In situations where lightwells are not part of the established street character, the characteristics of the front garden or forecourt will help to determine the suitability of lightwells.
- 2.20 In plots where the depth of a front garden is quite long, basement lightwells are more easily concealed by landscaping and boundary treatments, and a substantial garden area can be retained providing a visual buffer from the street. In these situations new lightwells that are sensitively designed to maintain the integrity of the existing building may be acceptable, subject to other design requirements and environmental considerations.
- 2.21 In plots where the front garden is quite shallow, a lightwell is likely to consume much, or all, of the garden area. This will be unacceptable in streets where lightwells are not part of the established character and where the front gardens have an important role in the local townscape.

- 2.22 Excessively large lightwells will not be permitted in any garden space.
- 2.23 A lightwell to the side or rear of a property is often the most appropriate way to provide a means of providing light to a new or extended basement development, and can often provide a link to the rear garden. Lightwells to the side or rear of a property should be set away from the boundary to a neighbouring property.

Railings, grilles and other lightwell treatment

- 2.24 In order to comply with building regulation standards, light wells should be secured by either a railing (1,100mm high) or a grille. In gardens that front a street, railings can cause a cluttered appearance to the front of the property and can compete with the appearance of the front boundary wall, or obscure front windows. This is particularly the case in shallow gardens. Where front light wells are proposed, they should be secured by a grille which sits flush with the natural ground level, rather than railings (refer to **Error! Reference source not found.** on the following page). In certain publicly accessible locations grilles should be locked to prevent lightwells being misused for casual sleeping and drug use.
- 2.25 Railings will be considered acceptable where they form part of the established street scene, or would not cause harm to the appearance of the building.

Figure 1. Lightwells and railings



- 2.26 The lowering of the natural ground level to the rear of the property should be minimised as much as is practicable. It is recommended that the rear garden should be graded rather than secured by railings.
- 2.27 Where a basement extension under part of the front or rear garden is considered acceptable, the inclusion of skylights designed within the landscaping of a garden will not usually be acceptable, as illumination and light spill from a skylight can harm the appearance of a garden setting and cause light pollution.

3 Assessing the impact of basement development

- 3.1 The Council will only permit basements and other underground development where the applicant can demonstrate it will not cause harm to the built and natural environment and local amenity, including to the local water environment, ground conditions and biodiversity. Addressing these issues may require the submission of a variety of information to provide us with a basis for determining applications. The level of information required is defined by Policy DP27 Basements and Lightwells and will be commensurate with the scale, location and complexity of the scheme.

Basement impact assessments

- 3.2 This information must be contained within a Basement Impact Assessment (BIA) which is specific to the site and particular proposed development. Basement Impact Assessments should be submitted with the other details at planning application stage. The BIA will include the following stages:
- Stage 1 - Screening;
 - Stage 2 - Scoping;
 - Stage 3 - Site investigation and study;
 - Stage 4 - Impact assessment; and
 - Stage 5 - Review and decision making.
- 3.3 The purpose of a BIA is to enable the Council to 'assess whether any predicted damage to neighbouring properties and the water environment is acceptable or can be satisfactorily ameliorated by the developer' as stated in DP27.3.
- 3.4 Each of these stages is explained in full in this section. Please also refer to Chapter 6 of the Camden Geological, Hydrogeological and Hydrological Study, which is available on the Camden Council website. All the technical analysis and recommendations in this guidance are taken from the Study which should be treated as the evidence base and technical advice for this guidance and will be used when we are checking BIA reports.
- 3.5 We will expect a 'non technical summary' of the evidence that applicants have gathered against each stage of the BIA. This should be presented in a format which can be fully understood by those with no technical knowledge.
- 3.6 At each stage in the process the person(s) undertaking the BIA process should hold qualifications relevant to the matters being considered. We will only accept the qualifications set out in the following table:

Qualifications required for assessments

Surface flow and flooding	<p>A Hydrologist or a Civil Engineer specialising in flood risk management and surface water drainage, with either:</p> <ul style="list-style-type: none"> • The “CEng” (Chartered Engineer) qualification from the Engineering Council; or a Member of the Institution of Civil Engineers (“MICE”); or • The “C.WEM” (Chartered Water and Environmental Manager) qualification from the Chartered Institution of Water and Environmental Management.
Subterranean (groundwater) flow	<p>A Hydrogeologist with the “CGeol” (Chartered Geologist) qualification from the Geological Society of London.</p>
Land stability	<p>A Civil Engineer with the “CEng” (Chartered Engineer) qualification from the Engineering Council and specialising in ground engineering;</p> <p>A Member of the Institution of Civil Engineers (“MICE”) and a Geotechnical Specialist as defined by the Site Investigation Steering Group; or</p> <p>A Chartered Member of the Institute of Structural Engineers with some proof of expertise in engineering geology.</p> <p>With demonstrable evidence that the assessments have been made by them in conjunction with an Engineering Geologist with the “cGeol” (Chartered Geologist) qualification from the Geological Society of London.</p>

A combination of these may be required to address a variety of site conditions.

Stage 1 - Screening

- 3.7 The first stage of the BIA is the identification of any matters of concern which should be investigated. Screening is a process of determining whether or not a full BIA is required. All basement proposals should be subjected to the screening stage of a BIA to identify the matters relevant to assessment of local flooding and/or neighbour amenity and structural risks.
- 3.8 In order to assist in identifying what issues are relevant to a proposed scheme we have developed a series of screening flow charts over the following pages of this guidance, covering three main issues:
- Groundwater flow (see Paragraphs 2.36 to 2.38);
 - Land stability (see Paragraphs 2.39 to 2.42); and
 - Surface flow and flooding (see Paragraphs 2.43 to 2.47).
- 3.9 We will expect applicants to identify how these issues impact on neighbouring properties and the natural environment.

- 3.10 At the screening stage the applicant will need to set out clearly why or why not a full BIA is required. This will need to include an assessment against the flowcharts below and be presented along with the information set out at the end of Paragraph 233 of the Camden Geological, Hydrogeological and Hydrological Study.
- 3.11 Where a respondent answers “yes” or “unknown” to any of the questions in the flowcharts these matters will need further investigation. “No” answers will require written justification.

Stage 2 - Scoping

- 3.12 The scoping stage of the BIA requires applicants to identify the potential impacts of the proposed scheme as set out in chapter 5 of the Camden Geological, Hydrogeological and Hydrological Study which are shown by the screening process to need further investigation. Applicants should use this stage to identify the potential impacts for each of the matters of concern identified in the previous screening stage, this may require some preliminary data collection and field work. Appendix F of the Camden Geological, Hydrogeological and Hydrological Study provides guidance on linking the potential impacts to the screening flowcharts. A conceptual ground model is often a useful of carrying out the scoping stage as it can include the known and suspected features on, below and adjacent to a proposed site. (refer to Section 6.3.3 and Figure 28 in the Camden Geological, Hydrogeological and Hydrological Study for further details and an example).
- 3.13 During the scoping stage the applicant should enter pre-consultation or set up a working group with local residents and amenity groups who may be impacted by a proposed basement in order to fully understand and address the concerns of local residents. The Council will expect consultation with local residents on all basement developments unless the proposed construction work is minimal and will have a negligible effect on the adjoining or nearby properties as evidenced by the applicant to the satisfaction of the Council.
- 3.14 The scoping stage should build on the information obtained for the screening stage. When doing work for scoping stage, it is mostly likely that there will need to be some works under Stage 3 of the BIA – Site investigation and study

Stage 3 – Site investigation and study

- 3.15 The third stage of the BIA – site investigation – is undertaken to develop an understanding of the site and its immediate surroundings. The degree of investigation will vary depending upon the matters of concern identified in the screening and scoping stages, and therefore will be dependent on the location of the proposed basement within the borough, its size and setting in relation to existing development on the site and its relationship to adjacent properties and nearby features of importance.
- 3.16 The BIA site investigation comprises several stages, including:

- Desk study, including site walkover;
- Field investigation, including intrusive investigation;
- Monitoring;
- Reporting; and
- Interpretation.

- 3.17 Each of these stages should reflect both the site of the proposed basement scheme and beyond the site boundary.
- 3.18 Section 7 of the Camden Geological, Hydrogeological and Hydrological Study sets out in further detail how this investigation should be carried out.
- 3.19 Appendix G of the Camden Geological, Hydrogeological and Hydrological Study provides typical contents lists for reporting these stages of the site investigation and we will be looking for submissions that contain comparable content.

Stage 4 – Impact assessment

- 3.20 This stage is concerned with evaluating the direct and indirect implications of the proposed project. Essentially this involves a comparison between the present situation (the baseline) with the situation as it would be with the basement in place (i.e. constructed). Therefore the BIA should describe, quantify and then aggregate the effects of the development on those attributes or features of the geological, hydrogeological and hydrological environment which have been identified (in the scoping stage) as being potentially affected. Section 7 of the Camden Geological, Hydrogeological and Hydrological Study provides more detail on what is required at this stage.
- 3.21 The recommendations in Section 7 on boreholes and trial pits set out the sort of thorough, up to date and professional methodologies of subsurface investigation and analysis, which the Council will expect. It is important to recognise as stated in Paragraph 287 and 288 of the Camden Geological, Hydrogeological and Hydrological Study that DP27 is particularly concerned with the potentially significant impact a development can have beyond the site boundary. Where permission is not given by adjacent landowners for structural surveys or subsurface investigations to be carried out, the undetermined structural conditions and ground conditions beyond the site boundary should be identified as a risk in the impact and should be assessed and mitigated against accordingly.
- 3.22 Hydrogeological processes are subject to seasonal and longer term cyclical influences. Measurements taken at one particular time may not indicate how conditions might be in one or six months from that time. Monitoring of groundwater levels in areas where it is more likely to be present over a period of time is therefore necessary. Please refer to paragraphs 291 to 294 of the Camden Geological, Hydrogeological and Hydrological Study for more detail on monitoring periods.

- 3.23 The BIA will comprise a factual report and an interpretative report. This is explained in more detail in Section 7 of the Camden Geological, Hydrogeological and Hydrological Study. The interpretative report will have three sections:
- detailed site geology;
 - the geotechnical properties of the ground; and
 - an engineering interpretation of the implications of the ground conditions for the development of the site.
- 3.24 Appendix G3 of the study sets this out in more detail from which it should be noted that it must contain details of the retaining wall design for the basement excavation. It is essential for the Council to make the assessment called for by DP27 and to be able to consider, if planning approval is to be given, how the terms of any planning conditions or planning agreements should be drafted.
- 3.25 The engineering interpretation will require calculations of predicted ground movements and structural impact to be provided. Examples of these calculations are given in appendix D of the Camden Geological, Hydrogeological and Hydrological Study. The sides of excavation always move to some extent no matter how they are supported. The movement will typically be both horizontal and vertical and will be influenced by the engineering properties of the ground, groundwater level and flow, the efficiency of the various support system employed during the underpinning and the efficiency or stiffness of any support frames used.
- WATER INGRESS**
Change to water flows and levels both above and below ground.
- 3.26 If the identified consequences are not acceptable, mitigation should be incorporated into the proposed scheme and the new net consequences determined. For example, where there is predicted structural damage to neighbouring property, or where water ingress to neighbouring gardens or properties is predicted to be damaging to residential amenity. Any proposed mitigation measures should be described in the BIA report with details of how they reduce and/or alter the impact of the proposed basement on the surrounding environment. Mitigation measures which may be included in basement development proposals include (but are not limited to):
- Controlled or adequate drainage;
 - High permeability corridors;
 - Underpinning of neighbouring structures; and
 - Setting the basement in from property boundaries.

Burland Scale

- 3.27 Where a BIA identifies risk of damage to properties by subsidence this risk should be described using the Burland Scale. The Burland Scale methodology has been adopted for projects internationally and has been used by the Building Research Establishment and the Institution of

Structural Engineers, London. The classification system of the scale is based on the ease or repair of visible damage. Subsidence is only one element in the many potential impacts assessed in a BIA and other methods will be employed when describing these other impacts.

- 3.28 In the Burland Scale the damage to properties caused by subsidence may be considered in three broad categories:
- (i) visual appearance or aesthetics,
 - (ii) serviceability and function, and
 - (iii) stability.
- 3.29 Burland Scale categories 0, 1, and 2 refer to (i) aesthetic damage, category 3 and 4 relate to (ii) serviceability and function, and 5 represents damage which relates to stability.

Figure 2. Burland Scale

Category of damage	Description of typical damage	Approximate crack width (mm)	Limiting tensile strain ϵ_{lim} (per cent)
0 Negligible	Hairline cracks of less than about 0.1 mm are classed as negligible	<0.1	0.0-0.05
1 Very slight	Fine cracks that can easily be treated during normal decoration. Perhaps isolated slight fracture in building. Cracks in external brickwork visible on inspection	<1	0.05-0.075
2 Slight	Cracks easily filled. Redecoration probably required. Several slight fractures showing inside of building. Cracks are visible externally and some repointing may be required externally to ensure weathertightness. Doors and windows may stick slightly.	<5	0.075-0.15
3 Moderate	The cracks require some opening up and can be patched by a mason. Recurrent cracks can be masked by suitable lining. Repointing of external brickwork and possibly a small amount of brickwork to be replaced. Doors and windows sticking. Service pipes may fracture. Weathertightness often impaired.	5-15 or a number of cracks > 3	0.15-0.3
4 Severe	Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Windows and frames distorted, floor sloping noticeably. Walls leaning or bulging noticeably, some loss of bearing in beams. Service pipes disrupted.	15-25 but also depends on number of cracks	>0.3
5 Very severe	This requires a major repair involving partial or complete rebuilding. Beams lose bearings, walls lean badly and require shoring. Windows broken with distortion, Danger of instability.	Usually > 25 but depends on number of cracks	

Damage Category Chart (CIRIA C580)

- 3.30 In line with policy DP27 the Council will ensure that harm is not caused to neighbouring properties by basement development. Burland states that it is a major objective of design and construction to maintain a level of risk to buildings no higher than category 2, where there is only risk of aesthetic damage to buildings (see Burland, J. "The assessment of the

risk of damage to buildings due to tunnelling and excavations”, Imperial College London, 1995). However the Council considers that neighbouring residential properties are particularly sensitive to damage, where relatively minor internal damage to a person’s home can incur cost and considerable inconvenience to repair and redecorate. The Council therefore will expect BIAs to provide mitigation measures where any risk of damage is identified of Burland category 1 ‘very slight’ or higher. Following inclusion of mitigation measures into the proposed scheme the changes in attributes are to be re-evaluated and new net consequences determined.

Cumulative impacts of basement development

- 3.31 The cumulative effect of the incremental development of basements in close proximity, particularly when these are large, can potentially create a significant impact. Therefore Basement Impact Assessments must identify neighbouring basements and make the assessment considering all nearby basements. Both existing and planned (with planning permission) underground development must be included in this assessment. To ensure cumulative impacts are considered Basement Impact Assessments must respond to the issues raised in paragraph 168 to 174 of the Camden Geological, Hydrogeological and Hydrological Study.

Stage 5 – Review and decision making

- 3.32 The final stage of the BIA is undertaken by LB Camden and consists of an audit of the information supplied by the applicant and a decision on the acceptability of the impacts of the basement proposal. Section 8 of the Camden Geological, Hydrogeological and Hydrological Study outlines in more detail what Council officers will be looking for, as a minimum.

Independent verification of basement impact assessments

- 3.33 In order to provide the Council with greater certainty over the potential impacts of proposed basement development, we will expect an independent verification of Basement Impact Assessments to be funded by the applicant. Independent verification will be required in the following circumstances:
- Where a scheme requires applicants to proceed beyond the Screening stage of the Basement Impact Assessment (i.e. where a matter of concern has been identified which requires the preparation of a full Basement Impact Assessment);
 - Where the proposed basement development is located within an area of concern regarding slope stability, surface water or groundwater flow; or
 - For any other basement applications where the Council feels that independent verification would be appropriate (e.g. where conflicting evidence is provided in response to a proposal).

- 3.34 This independent verification will be commissioned by the Council.

Basement construction plans

- 3.35 In some circumstances the Council may require a basement construction plan secured through a Section 106 Agreement. The Council may require provision of a basement construction plan when the proposed development involves excavation or construction that if improperly undertaken could cause damage to neighbouring properties. In most instances this will be on larger and more complex basement schemes and where excavation is close to neighbouring buildings and structures or involve listed buildings.
- 3.36 A basement construction plan sets out detailed information to demonstrate how the design and construction of the basement has been prepared in order to minimise the impacts on neighbouring properties and the water environment, and provides a programme of measures to be undertaken by the owner to with the objective of minimise the impact on the structural integrity of neighbouring properties and sensitive structures such as the public highway.
- 3.37 A basement construction plan should contain:
- a method statement detailing the proposed method of ensuring the safety and stability of neighbouring properties throughout the construction phase including temporary works sequence drawings,
 - appropriate monitoring including details of risk assessment thresholds and contingency measures,
 - detail demonstrating that the basement has been designed using evidence of local factors including ground conditions, the local water environment and the structural condition of neighbouring properties, in order to minimise the impact on them.
 - provision to retain at the property throughout the construction phase a suitably qualified engineer from a recognised relevant professional body to monitor, inspect, and approve the permanent and temporary basement construction works, and
 - measures to ensure the ongoing maintenance and upkeep of the basement.
- 3.38 The basement construction plan should ensure that:
- a suitably qualified and experienced engineer has agreed the design,
 - the modelling of ground conditions and water environment is appropriately conservative; and
 - best endeavours are undertaken to prevent any impact on the structural integrity of the neighbouring properties.
- 3.39 Prior to final submission to the Council for approval, basement construction plans will need to be certified by a suitably qualified and experienced engineer who is independent of the design team. The certification will need to be funded by the applicant.

Principal impacts of basements in Camden

- 3.40 This section sets out the principal impacts that basement development can have upon the built and natural environment, and neighbour amenity. Each of these impacts should be considered when undertaking the Basement Impact Assessment, particularly stages 1 and 2: Screening and Scoping (see Paragraphs 2.12 to 2.19 of this report).

GROUNDWATER FLOW

The movement of water that travels and seeps through soil and rock underground.

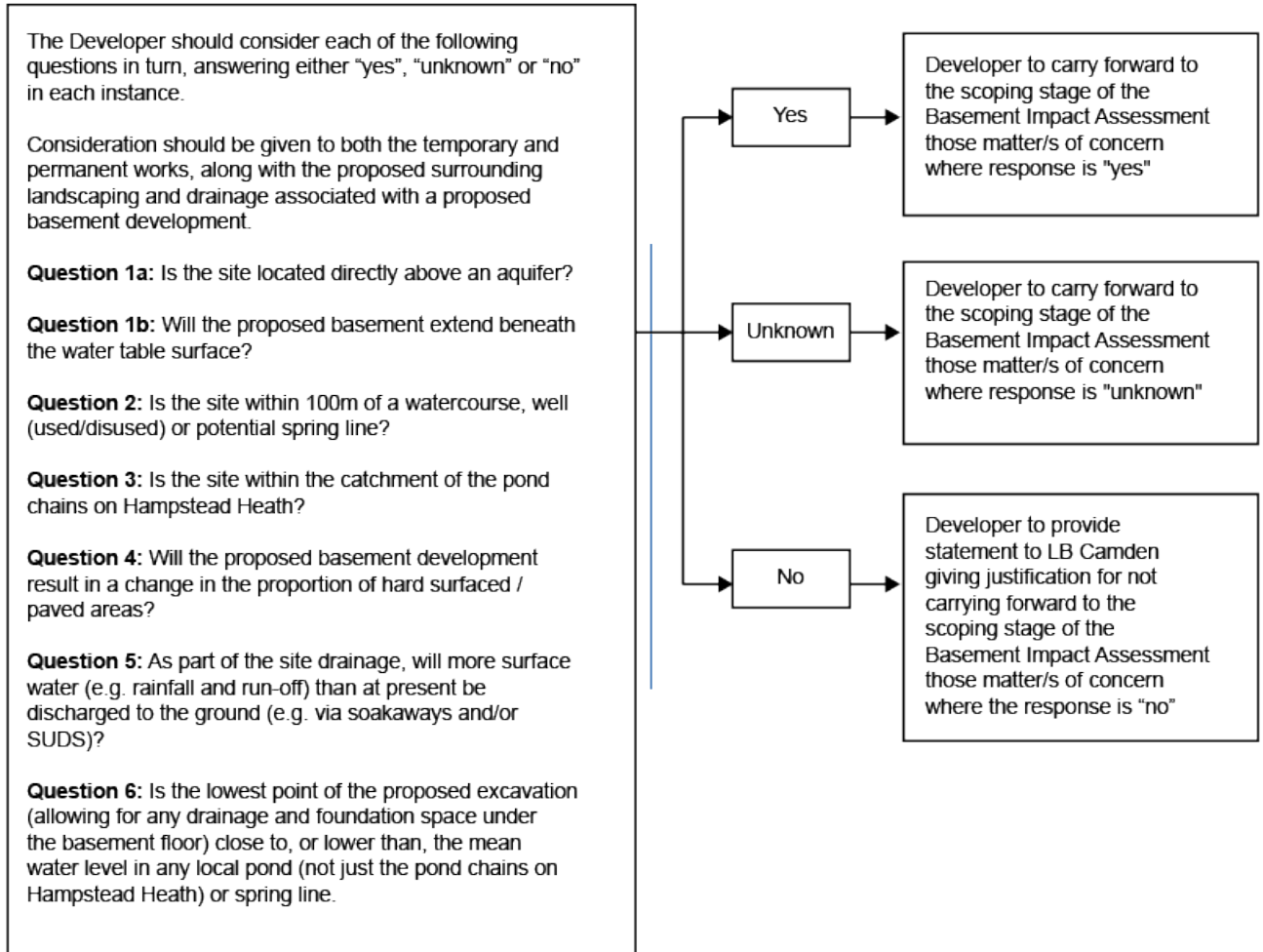
HYDROGEOLOGY

The study of groundwater moving through soils and rock formations

Groundwater flow

- 3.41 Basement development may affect groundwater flows, and even though the displaced water will find a new course around the area of obstruction this may have other consequences for nearby properties, trees, etc. Given the nature of the ground in many higher parts of the borough, or those where streams once flowed, basement development may have the potential to divert or displace groundwater which can cause a rise in groundwater and cause flooding, upstream of the development, whilst immediately downstream the groundwater level may decline, which may affect wells, springs and ponds. Figure 23 of the Camden Geological, Hydrogeological and Hydrological Study sets out diagrammatically the potential impacts.
- 3.42 Applicants should consider the flowchart below to determine whether or not to carry forward to the scoping stage of the Basement Impact Assessment. Where certain factors are present or proposed, for example geological setting, proximity to Hampstead Heath Ponds catchment, or an intention to undertake dewatering as part of the site works, this flowchart will identify that a hydrogeological assessment will be required. If this is the case, it should be prepared by:
- A Hydrologist with the “CGeol” (Chartered Geologist) qualification from the Geological Society of London; and
 - A Fellow of the Geological Society of London.
- 3.43 The Camden Geological, Hydrogeological and Hydrological Study contains a number of maps and plans relevant to groundwater flow, including:
- Figures 2 and 3 showing geology for the whole borough;
 - Figure 4 which shows the geology for Hampstead Heath;
 - Figure 5 showing the geology for the south of the borough;
 - Figure 11 which maps the water courses within and around the borough; and
 - Figure 14 which identifies Hampstead Heath surface water catchments and drainage.

Figure 3. Subterranean (ground water) flow screening chart



**SUBTERRANEAN (GROUND WATER) FLOW SCREENING CHART
NOTES AND SOURCES OF INFORMATION**

Question 1: In LB Camden, all areas where the London Clay does not outcrop at the surface are considered to be an aquifer. This includes the River Terrace Deposits, the Claygate Member and the Bagshot Formation. The location of the geological strata can be established from British Geological Survey maps (e.g. 1:50,000 and 1:10,000 scale). Note that the boundaries are indicative and should be considered to be accurate to $\pm 50\text{m}$ at best.

Additionally, the Environment Agency (EA) "Aquifer Designation Maps" can be used to identify aquifers. These can be found on the "Groundwater maps" available on the EA website (www.environment-agency.gov.uk) follow "At home & leisure" > "What's in Your Backyard" > "Interactive Maps" > "Groundwater". Knowledge of the thickness of the geological strata present and the level of the groundwater table is required. This may be known from existing information (for example nearby site investigations), however, it may not be known in the early stages of a project. Determination of the water table level may form part of the site investigation phase of a BIA.

Question 2: Watercourses, wells or spring lines may be identified from the following sources:

- Local knowledge and/or site walkovers
- Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). If features are marked (they are not always) the following symbols may be present: W; Spr; water is indicated by blue colouration. (check the key on the map being used)
- British Geological Survey maps (e.g. 1:10,000 scale, current and earlier editions). Current maps will show indicative geological strata boundaries which are where springs may form at the ground surface; of relevance are the boundary between the Bagshot Formation with the Claygate Member and the Claygate Member with the London Clay. Note that the boundaries are indicative should be considered to be accurate to $\pm 50\text{m}$. Earlier geological maps (e.g. the 1920's 1:10560 scale) maps show the location of some wells.
- Aerial photographs
- "Lost Rivers of London" by Nicolas Barton, 1962. Shows the alignment of rivers in London and their tributaries.
- The British Geological Survey (BGS) GeoIndex includes "Water Well" records. See www.bgs.ac.uk and follow "Online data" > "GeoIndex" > "Onshore GeoIndex".
- The location of older wells can be found in well inventory/catalogue publications such as "Records of London Wells" by G. Barrow and L. J. Wills (1913) and "The Water Supply of the County of London from Underground Sources" by S Buchan (1938).
- The Environment Agency (EA) "Source Protection Zone Maps" can be used to identify aquifers. These can be found on the "Groundwater maps" available on the EA website (www.environment-agency.gov.uk) follow "At home & leisure" > "What's in Your Backyard" > "Interactive Maps" > "Groundwater".
- The EA hold records of licensed groundwater abstraction boreholes. LB Camden is within the North East Area of the
- Thames Region. Details can be found on the EA website.
- LB Camden Environmental Health department may hold records of groundwater wells in the Borough.

Where a groundwater well or borehole is identified, it will be necessary to determine if it is extending into the Lower Aquifer (Chalk) or the Upper Aquifer (River Terrace Deposits, Bagshot Formation, Claygate Member etc). It is water wells extending into the Upper Aquifer which are of concern with regard to basement development.

Question 3: Figure 14 in the attached study, (prepared using data supplied by the City of London Corporation's hydrology consultant, Haycocks Associates) shows the catchment areas of the pond chains on Hampstead Heath.

Question 4: This will be specific to the proposed development and will be a result of the proposed landscaping of areas above and surrounding a proposed basement.

Question 5: This will be specific to the proposed development and will be a result of the chosen drainage scheme adopted for the property.

Question 6: The lowest point will be specific to the proposed development. Knowledge of local ponds may be taken from

- Local knowledge and/or site walkovers
- Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). If features are marked (they are not always) the following symbols may be present: W; Spr; water is indicated by blue colouration. (check the key on the map being used)
- Aerial photographs

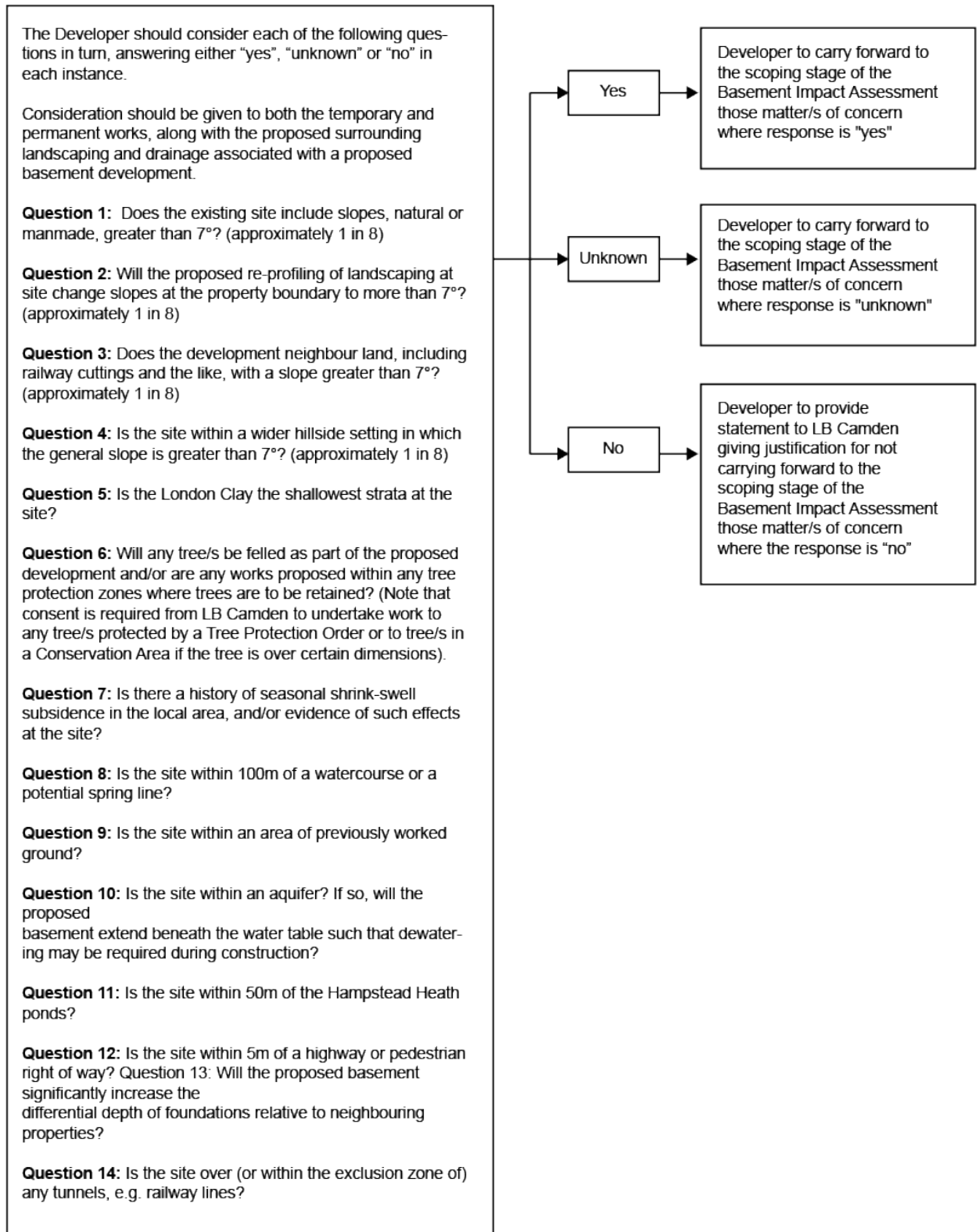
Land stability

LAND STABILITY

Steep areas and a change in geological layers can have vulnerable land stability.

- 3.44 The Council will expect all basement development applications to provide evidence that the structural stability of adjoining or neighbouring buildings is not put at risk. In the first instance applicants should consider the screening flowcharts to determine whether to progress to the scoping stage of the Basement Impact Assessment. If so, it should be prepared by:
- A Civil Engineer with the “CEng” (Chartered Engineer) qualification from the Engineering Council and specialising in ground engineering;
 - A Member of the Institution of Civil Engineers (“MICE”) and a Geotechnical Specialist as defined by the Site Investigation Steering Group; or
 - A Chartered Member of the Institute of Structural Engineers with some proof of expertise in engineering geology, with demonstrable evidence that the assessments have been made by them in conjunction with an Engineering Geologist with the “cGeol” (Chartered Geologist) qualification from the Geological Society of London.
- 3.45 For listed buildings, or properties adjoining or adjacent to listed buildings, we will require a structural stability report before we validate applications.
- 3.46 The Camden Geological, Hydrogeological and Hydrological Study contains a number of maps and plans relevant to land stability, including:
- Figures 2 and 3 showing geology for the whole borough;
 - Figure 4 which shows the geology for Hampstead Heath;
 - Figure 5 showing the geology for the south of the borough;
 - Figure 11 which maps the water courses within and around the borough;
 - Figure 16 which is a land stability slope angle map; and
 - Figure 17 which outlines areas of significant landslide potential.

Figure 4. Slope stability screening flowchart



SLOPE STABILITY SCREENING FLOWCHART**NOTES AND SOURCES OF INFORMATION**

Question 1, 3 & 4: The current surface slope can be determined by a site topographical survey. Slopes may be estimated from

1:25,000 OS maps, however in many urban areas such maps will not show sufficient detail to determine surface slopes on a property-by-property scale, just overall trends. With regard to slopes associated with infrastructure, e.g. cuttings, it should be ensured that any works do not impact on critical infrastructure.

Question 2: This will be specific to the proposed development and will be a result of the proposed landscaping of areas above and surrounding a proposed basement.

Question 5: The plan footprint of the outcropping geological strata can be established from British Geological Survey maps (e.g. 1:50,000 and 1:10,000 scale). Note that the boundaries are indicative and should be considered to be accurate to $\pm 50\text{m}$ at best.

Question 6: this is a project specific determination, subject to relevant Tree Preservation Orders etc.

Question 7: this can be assessed from local knowledge and on-site observations of indicative features, such as cracking, Insurance firms may also give guidance, based on post code. Soil maps can be used to identify high-risk soil types. Relevant guidance is presented in BRE Digest 298 "Low-rise building foundations: the influence of trees in clay soils" (1999); BRE Digest 240 "Low-rise buildings on shrinkable clay soils: part 1" (1993); and BRE Digest 251 "Assessment of damage in low-rise buildings" (1995).

Question 8: Watercourses or spring lines may be identified from the following sources:

- Local knowledge and/or site walkovers
- Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). If features are marked (they are not always) the following symbol may be present "Spr"; water is indicated by blue colouration. (check the key on the map being used)
- Geological maps will show indicative geological strata boundaries which are where springs may form at the ground surface; of relevance are the boundary between the Bagshot Formation with the Claygate Member and the Claygate Member with the London Clay. Note that the boundaries are indicative should be considered to be accurate to $\pm 50\text{m}$ at best. British Geological Survey maps (e.g. 1:10,000 scale, current and earlier editions).
- Aerial photographs
- "Lost Rivers of London" by Nicolas Barton, 1962. Shows the alignment of rivers in London and their tributaries.

Question 9: Worked ground includes, for example, old pits, brickyards, cuttings etc. Information can be gained from local knowledge and/or site walkovers, and from historical Ordnance Survey maps (at 1:25,000 or 1:10,000 scale, or better) and British Geological Survey maps (at 1:10,000 scale, current and earlier editions). Earlier geological maps (e.g. the 1:10560 scale series from the 1920s) include annotated descriptions such as "old pits", "formerly dug", "brickyard" etc.

Question 10: In LB Camden, all areas where the London Clay does not outcrop at the surface are considered to be an aquifer.

This includes the River Terrace Deposits, the Claygate Member and the Bagshot Formation. The general footprint of the geological strata can be assessed from British Geological Survey maps (e.g. 1:50,000 and 1:10,000 scale). Note that the boundaries are indicative and should be considered to be accurate to $\pm 50\text{m}$ at best.

The Environment Agency (EA) Aquifer Designation Maps can be used to identify aquifers. These are available from the EA website (www.environment-agency.gov.uk), by clicking on 'At home & leisure' > 'What's in Your Backyard' > 'Interactive Maps' > 'Groundwater'.

Details are required of the thickness of the geological strata present and the level or depth of the groundwater table. This may be known from existing information (for example nearby site investigations); however, it may not be known in the early stages of a project. Determination of the water table level may form part of the site investigation phase of a BIA and may require specialist advice to answer. Depth of proposed development is project specific.

Question 11: From local knowledge and/or site walkovers, and from Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). In relation to the stability and integrity of the pond structures and dams, the guidance of a Panel Engineer should be sought. (Details of Panel Engineers can be found on the Environment Agency website: <http://www.environment-agency.gov.uk/business/sectors/64253.aspx>). Duty of care needs to be undertaken during any site works in the vicinity of the ponds.

Question 12: From local knowledge and/or site walkovers, and from Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). Any works should not impact on critical infrastructure.

Question 13: From local knowledge and/or site walkovers. May find some details on neighbouring properties from searches of LB Council databases, e.g. planning applications and/or building control records.

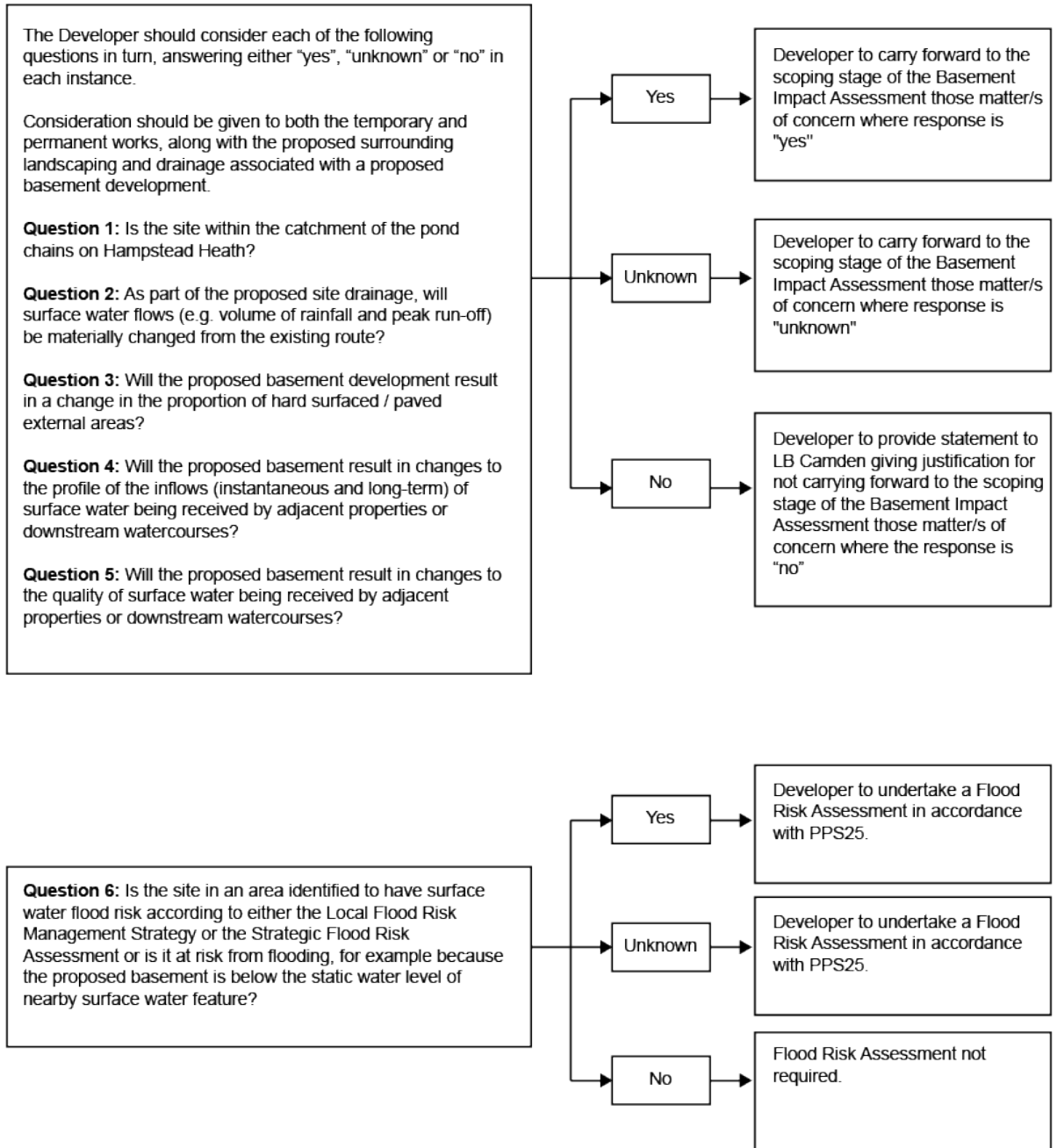
Question 14: From local knowledge and/or site walkovers, from Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale) and directly from those responsible for tunnels (e.g. TfL or Network Rail). Any works should not impact on critical infrastructure.

Surface flow and flooding

- 3.47 While nowhere in the borough is identified by the Environment Agency as being flood prone from rivers or the sea, there are still parts that are identified as being subject to localised flooding from surface water. This is caused during times of heavy rainfall when the local combined sewer system is unable to deal with the volume and rate of flow. Detailed modelling suggests that areas of West Hampstead, Hampstead Town and South Hampstead are at a higher risk of surface water floods, with some risk in Highgate and Gospel Oak.
- 3.48 All applications for a basement extension within flood risk areas identified in the LB Camden Flood Risk Management Strategy or in any future updated Strategic Flood Risk Assessment will be expected to include a Flood Risk Assessment. In line with Policy DP27 in Camden Development Policies, the Council will not allow habitable rooms and other sensitive uses for self contained basement flats and other underground structures in areas at risk of flooding.

- 3.49 Applicants should consider the flowchart below to determine whether to proceed to the scoping stage of the Basement Impact Assessment and whether a Flood Risk Assessment should be undertaken as part of this. For surface flow and flooding issues the Basement Impact Assessment should be undertaken by a Hydrologist or a Civil Engineer specialising in flood risk management and surface water drainage, with either:
- The “CEng” (Chartered Engineer) qualification from the Engineering Council; or a Member of the Institution of Civil Engineers (“MICE); or
 - The “C.WEM” (Chartered Water and Environmental Manager) qualification from the Chartered Institution of Water and Environmental Management.
- 3.50 Figure 14 within the Camden Geological, Hydrogeological and Hydrological Study identifies Hampstead Heath surface water catchments and drainage.

Figure 5. Surface flow and flooding screening flowchart



**SURFACE FLOW AND FLOODING SCREENING FLOWCHART
NOTES AND SOURCES OF INFORMATION**

Question 1: Figure 14 in the Camden geological, hydrogeological and hydrological study (prepared using data supplied by the City of London Corporation's hydrology consultant, Haycocks Associates) shows the catchment areas of the pond chains on Hampstead Heath

Question 2: This will be specific to the proposed development and will be a result of the proposed landscaping of areas above and surrounding a proposed basement. The developer should provide documentation of discussion with Thames Water to confirm that the sewers have capacity to receive any increased wastewater flows.

Question 3: This will be specific to the proposed development and will be a result of the chosen drainage scheme adopted for the property

Question 4: This will be specific to the proposed development and will be a result of the proposed landscaping and chosen drainage scheme adopted for the property. SUDS will be required to compensate any increases in peak flow.

Question 5: This will be specific to the proposed development and will be a result of the proposed landscaping and chosen drainage scheme adopted for the property. SUDS will be required to compensate any increases in peak flow.

Question 6: The principles outlined in PPS25 should be followed to ensure that flood risk is not increased.

- 3.51 Basement development should not displace ground water or surface water flow so it causes flooding on nearby sites or those further away. The Council will require an adequate drainage plan and has a preference for the use of Sustainable Urban Drainage Systems (SUDS). Only where this cannot be achieved should surface/ground water be discharged to combined sewers (refer to the chapter on water efficiency in CPG3 Sustainability and policy DP23 Water).

SUSTAINABLE URBAN DRAINAGE SYSTEMS (SUDS)

Low environmental impact approaches to drain away dirty and surface water run-off through collection, storage, and cleaning before allowing it to be released slowly back into the environment, thereby preventing flooding, pollution and contamination of groundwater.

Camden Planning Guidance

Amenity

London Borough of Camden

CPG 6



CPG6 Amenity

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1 Introduction

What is Camden Planning Guidance?

- 1.1 We have prepared this guidance to support the policies in our Local Development Framework (LDF). It is therefore consistent with the Camden Core Strategy and Development Policies, and is a formal Supplementary Planning Document (SPD) which is an additional “material consideration” in planning decisions. This guidance will replace Camden Planning Guidance 2006, updating advice where appropriate and providing new guidance on matters introduced or strengthened in the LDF.
- 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, Camden’s other LDF documents.

Amenity in Camden

- 1.3 A key objective of the Camden Core Strategy is to sustainably manage growth so that it avoids harmful effects on the amenity of existing and future occupiers and to nearby properties.

What does this guidance cover?

- 1.4 This guidance provides information on all types of amenity issues within the borough and includes the following sections:
 1. Air quality
 2. Contaminated land
 3. Noise and vibration
 4. Artificial light
 5. Daylight and sunlight
 6. Overlooking, privacy and outlook
 7. Construction management plans
 8. Access for all
 9. Wind and micro-climate
 10. Open space, outdoor sport and recreation facilities

- 1.5 This guidance supports the following Local Development Framework policies:

Camden Core Strategy

- CS5 - Managing the impact of growth and development
- CS15 - Protecting and improving our parks and open spaces & encouraging biodiversity
- CS16 - Improving Camden’s health and well-being

Camden Development Policies

- DP26 - Managing the impact of development on occupiers and neighbours
- DP28 - Noise and vibration
- DP31 - Provision of, and improvements to, public open space and outdoor sport and recreation facilities
- DP32 - Air quality and Camden's Clear Zones

6 Daylight and sunlight

KEY MESSAGES:

- We expect all buildings to receive adequate daylight and sunlight.
- Daylight and sunlight reports will be required where there is potential to reduce existing levels of daylight and sunlight.
- We will base our considerations on the Average Daylight Factor and Vertical Sky Component.

6.1 Access to daylight and sunlight is important for general amenity, health and well-being, for bringing warmth into a property and to save energy from 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.

6.2 This guidance relates to:

- Camden Core Strategy policy CS5 - *Managing the Impact of Growth and Development*;
- Core Strategy policy CS14 - *Promoting high quality places and conserving our heritage*; and
- Policy DP26 – *Managing the impact of development on occupiers and neighbours* of the Camden Development Policies.

DP26 sets out how the Council will protect the quality of life of building occupiers and neighbours by only granting permission for development that does not cause harm to amenity.

When will a daylight/sunlight report be required?

6.3 The Council expects that all developments receive adequate daylight and sunlight to support the activities taking place in that building.

6.4 A daylight and sunlight report should assess the impact of the development following the methodology set out in the most recent version of Building Research Establishment's (BRE) "Site layout planning for daylight and sunlight: A guide to good practice". Reports may be required for both minor and major applications depending on whether a proposal has the potential to reduce daylight and sunlight levels. The impact will be affected by the location of the proposed development and its proximity to, and position in relation to, nearby windows.

WHAT DOES THE COUNCIL REQUIRE?

The Council will require a daylight and sunlight report to accompany planning applications for development that has the potential to reduce levels of daylight and sunlight on existing and future occupiers, near to and within the proposal site.

Daylight and sunlight reports should also demonstrate how you have taken into consideration the guidance contained in the BRE document on passive solar design; and have optimised solar gain. Please refer to the BRE guidance on daylight and sunlight.

- 6.5 While we strongly support the aims of the BRE methodology for assessing sunlight and daylight we will view the results flexibly and where appropriate we may accept alternative targets to address any special circumstances of a site. For example, to enable new development to respect the existing layout and form in some historic areas. This flexible approach is at the Council's discretion and any exception from the targets will be assessed on a case by case basis.

Daylight

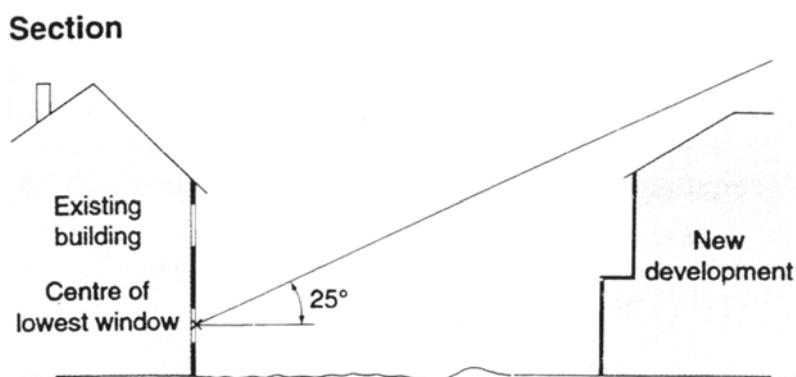
- 6.6 We will aim to minimise the impact of the loss of daylight caused by a development on the amenity of existing occupiers and ensure sufficient daylight to occupiers of new dwellings taking in account overall planning and site considerations. If your proposal will have an unreasonable impact on amenity the planning application will be refused. When assessing daylight issues, we will use the guidelines and methods contained in the BRE's *Site layout planning for daylight and sunlight: A guide to good practice*.
- 6.7 There are two quick methods that can be used to assess access to daylight:

Daylight to new development

- project a 25 degree line, starting 2m above ground level from a wall of your proposed development;
- if none of the existing surrounding buildings extend above this line, then there is potential for good daylighting to be achieved in the interior of your new development.

Daylight to existing development

- project a 25 degree line from the centre of the lowest window on the existing building;
- if the whole of your new 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.



Source: BRE, Site layout planning for daylight and sunlight: A guide to good practice.

- 6.8 For either test, if buildings extend above the 25 degree line a more detailed test needs to be carried out to fully assess either the loss of daylight in existing buildings or the level of daylight achievable in the new development. The two most common measurements of daylight of the more detailed test are the Vertical Sky Component (VSC) and the Average Daylight Factor (ADF).

Vertical Sky Component

The amount of light striking the face of a window

- 6.9 The Vertical Sky Component is expressed as a ratio of the maximum value of daylight achievable for a completely unobstructed vertical wall. The maximum value is almost 40%. This is because daylight hitting a window can only come from one direction immediately halving the available light. The value is limited further by the angle of the sun. This is why if the VSC is greater than 27% enough sunlight should be reaching the existing window. Any reduction below this level should be kept to minimum.
- 6.10 Windows to some existing rooms may already fail to achieve this target under existing conditions. In these circumstances it is possible to accept a reduction to the existing level of daylight to no less than 80% of its former value. Any greater reduction than this is likely to have a noticeable affect on amenity. If this occurs then applications may be refused.

Average Daylight Factor

Average Daylight Factor is a measure of the level daylight in a room. It can be used to establish whether a room will have a predominantly daylight appearance. It provides light levels below which a room should not fall even if electric lighting is provided.

- 6.11 The Average Daylight Factor can be used as a measure to determine whether a room will receive adequate daylight (expressed as a percentage). The ADV takes into account the:
- net glazed area of windows;

- the total area of the room surfaces (ceiling, floor, walls, and windows);
 - the average reflectance; and
 - the angle of visible sky.
- 6.12 If a predominately daylit appearance is required, then the daylight factor should be 5% or more if there is no supplementary electric lighting, or 2% or more if supplementary electric lighting is provided. This figure should be as high as possible to enable occupiers to rely on as much natural light and not use artificial lighting, but as a minimum for dwellings the figures should be 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.
- 6.13 These minimum figures may not be applicable when measuring the impact of new buildings on existing dwellings as the simple preservation of minimum ADFs will not necessarily be seen as an indication of acceptability, especially if the VSC demonstrates a significant worsening in daylight levels. For existing dwellings the Council will consider the overall loss of daylight as opposed to the minimum acceptable levels of daylight. As the BRE guidance suggests, the readings will be interpreted flexibly as their aim is to support rather than constrain natural lighting. However, daylight is only one of the many factors in site layout design. Therefore, when applying these standards in Camden, we will take into consideration other site factors and constraints.
- 6.14 The calculation of the VSC and the ADF is complex. For full details on how these calculations are carried out you should refer to the most up to date version the BRE's "Site layout planning for daylight and sunlight: A guide to good practice". For more complex and larger developments we will expect a daylight study to be submitted with the planning application showing the windows that will be affected and provide before development and post development figures for VSC and ADF.
- 6.15 Other methods can be used to measure daylight and these can be incorporated in daylight and sunlight reports, where necessary, as a supplement to VSC and ADF measurements, such as the No Sky Line (NSL) test contained within BRE guidance.

Sunlight

- 6.16 The design of your development should aim to maximise the amount of sunlight into rooms without overheating the space and to minimise overshadowing.

WHAT DOES THE COUNCIL EXPECT?

New developments should be designed to provide at least one window to a habitable space facing within 90 degrees of south, where practical. This window should receive at least 25% of Annual Probable Sunlight Hours, including at least 5% of Annual Probable Sunlight Hours between 21 September and 21 March, where possible.

Annual Probable Sunlight Hours

The annual amount of sunlight a window receives in an average year.

- 6.17 The BRE's "Site layout planning for daylight and sunlight: A guide to good practice" provides guidance on access to sunlight in relation to:
- site layout, building orientation and overshadowing for new buildings;
 - protecting sunlight to existing buildings, and
 - new and existing gardens and open spaces.
- 6.18 Design for access to sunlight will be specific to the orientation of your site, and the specific design and uses within your proposed development. You should follow the detailed design requirements recommended in the "Sunlighting" section of the BRE document. The Council recognises that not all of the guidance contained within the BRE document, particularly orientation, can be adhered to in all developments due to the dense and constrained urban nature of Camden.

Other considerations**Right to Light**

- 6.19 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. Planning permission does not override a legal right to light, however where a right to light is claimed, this is a matter of property law, rather than planning law. 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.

Supporting documents

- 6.20 For further information on daylight and sunlight please refer to:
Building Research Establishment (BRE). Site layout planning for daylight and sunlight: A guide to good practice.
Copies of this are available directly from BRE.

BRE Bookshop, 151 Roseberry Avenue, London, EC1R 4GB
020 7505 6622
brebookshop@emap.com
www.constructionplus.co.uk

7 Overlooking, privacy and outlook

KEY MESSAGES:

- Development are to be designed to protect the privacy of existing dwellings;
- Mitigation measures are to be included when overlooking is unavoidable;
- Outlook from new developments should be designed to be pleasant;
- Public spaces benefit from overlooking as natural surveillance.

- 7.1 This section aims to ensure that when designing your development you successfully consider the potential impact on the privacy and outlook of neighbouring properties.
- 7.2 This guidance relates to Core Strategy policy CS5 Managing the Impact of Growth and Development and Core Strategy policy CS14 Promoting high quality places and conserving our heritage.
- 7.3 Policy *DP26 – Managing the impact of development on occupiers and neighbours* of the Camden Development Policies outlines how the Council will protect the quality of life of occupiers and neighbours by only granting permission for development that does not cause harm to amenity.

Overlooking and privacy

- 7.4 Development should be designed to protect the privacy of both new and existing dwellings to a reasonable degree. Spaces that are overlooked lack privacy. Therefore, new buildings, extensions, roof terraces, balconies and the location of new windows should be carefully designed to avoid overlooking. The degree of overlooking depends on the distance and the horizontal and vertical angles of view. The most sensitive areas to overlooking are:
- Living rooms;
 - Bedrooms;
 - Kitchens; and
 - The part of a garden nearest to the house.

WHAT IS GOOD PRACTICE?

To ensure privacy, there should normally be a minimum distance of 18m between the windows of habitable rooms of different units that directly face each other. This minimum requirement will be the distance between the two closest points on each building (including balconies).

- 7.5 Where this standard cannot be met we may require you to incorporate some of the following design measures into your scheme to ensure

overlooking is reduced to an acceptable level. Design measures to reduce the potential for overlooking and the loss of privacy include:

- Careful consideration of the location of your development, including the position of rooms;
- Careful consideration of the location, orientation and size of windows depending on the uses of the rooms;
- Use of obscure glazing;
- Screening by walls or fencing; and
- Screening by other structures or landscaping.

7.6 Where landscaping is used as a method of screening, arrangements for ongoing maintenance should be put in place and this may be secured by a planning condition.

7.7 Public spaces and communal areas will benefit from a degree of overlooking due to the increased level of surveillance it can provide.

Outlook

7.8 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. You should design developments so that the occupiers have a pleasant outlook. You should screen any unpleasant features with permanent landscaping.

7.9 When designing your development you should also ensure the proximity, size or cumulative effect of any structures do not have an overbearing and/or dominating effect that is detrimental to the enjoyment of their properties by adjoining residential occupiers. You should carefully consider the location of bin or cycle stores if they are in close proximity to windows or spaces used by occupiers.

7.10 You should take particular care if your development adjoins properties with a single aspect over your development.

7.11 You should note that the specific view from a property is not protected as this is not a material planning consideration.

Further information

Better Places to Live: By Design - A companion guide to PPG3 (ODPM) makes number of design recommendations which recognise the importance of privacy in the home.

Perceptions of Privacy and Density in Housing report available from Design for Homes; 0870 416 3378 or www.designforhomes.org. This report highlights some of the issues facing households living at higher densities, and the implications for future design of buildings.

8 Construction management plans

KEY MESSAGES:

- Construction management plans are required for developments that are on constrained sites or are near vulnerable buildings or structures;
- They are essential to ensure developments do not damage nearby properties or the amenity of neighbours.

- 8.1 The purpose of this guidance is to give details on how construction management plans can be used to manage and mitigate the potential impacts of the construction phase of a development.
- 8.2 All construction and demolition work will cause at least some noise and disturbance. Where construction impact is particularly significant Camden will ensure it is managed through a legally binding construction management plan.
- 8.3 This guidance relates to Core Strategy Policy CS5 Managing the impact of growth and development and policies DP20 Movement of goods and materials, and DP26 Managing the impact of development on occupiers and neighbours of the Camden Development Policies.

When does this guidance apply?

- 8.4 This guidance applies to all development proposals which, having regard to the nature of the surrounding area, are likely to give rise to significant noise and other disturbance during construction. Details on the circumstances in which the Council will expect construction management plans are set out within this guidance.

How should construction management plans be prepared?

- 8.5 Camden's planning policies make it clear that the effect on local amenity and the highway network from construction and demolition is a material planning consideration. Construction management plans are used to set out the measures a developer should take (both on-site and off-site) in order to reasonably minimise and manage the detrimental effects of construction on local amenity and/or highway safety. Usually Camden will secure construction management plans through a Section 106 Agreement, although sometimes for less complicated schemes they may be secured by using a condition attached to planning permission.
- 8.6 Whilst construction management plans are a 'planning led' document they will incorporate mechanisms controlling planning considerations that overlap with other regulatory regimes (particularly highways and environmental protection). Hence, most construction management plans will be an umbrella document managing all impacts of the demolition, excavation and construction process.

- 8.7 Besides ensuring measures under these different regimes are coordinated in one document, construction management plans represent a proactive way of dealing with construction issues. They encourage developers to work with the Council and local people in managing the construction process with a view to ensuring that problems do not arise in the first place.

Circumstances Camden will expect a construction management plan

- 8.8 Whether a construction management plan is required for a particular scheme will be assessed on a case by case basis, although the Council will usually require a construction management plan for larger schemes (i.e. over 10 residential units or 1,000sq m of new commercial floorspace). However, occasionally a relatively large development will have comparatively little impact on its neighbourhood.
- 8.9 Conversely, small schemes on confined or inaccessible sites can have very significant impacts, particularly where the construction process will take place over a number of months (or even years) or outside normal working hours. When assessing smaller developments, special regard should be had to on-site factors that would seriously exacerbate the impact of the development 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). Regard will also be had to the nature and layout of a site. It will be much more difficult to fully absorb or contain the effects of demolition and construction in terms of noise, dust vibration etc within the boundaries of a small constrained site. Furthermore, lack of on-site space for plant, storage of materials and loading and unloading of construction may mean that construction effects will inevitably take place close to the boundary and spill out on to the highway network – a particular issue in much of Camden.
- 8.10 The types of schemes where a CMP will usually be appropriate include:
- Major developments (and some larger scale non major developments);
 - Development where the construction process has a significant impact on adjoining properties particularly on sensitive uses;
 - Developments which give rise to particular 'on-site' issues arising from the construction process (e.g. large scale demolition or complicated or intrusive remediation measures);
 - Basement developments;
 - Significant developments involving listed buildings or adjacent to listed buildings;
 - Developments that could seriously affect wildlife;
 - Developments that could cause significant disturbance due to their location or the anticipated length of the demolition, excavation or construction period;

- Development where site specific issues have arisen in the light of external consultation (where these are supported by objective evidence); and
- Development on sites where constraints arising from the layout or size of the site impact on the surrounding road network.

Contents of a construction management plan

- 8.11 Any construction management plan will manage on-site impact arising from demolition and construction. It will also seek to establish control over construction traffic and how this integrates with other construction traffic in the area having regard to the cumulative effect.
- 8.12 A Section 106 or planning permission securing a construction management plan will contain provisions setting out in detail the measures the final version of the construction management plan should contain. Most construction management plans will be umbrella documents managing all impacts of the demolition, excavation and construction processes. This would include (but is not limited to) issues such as:
- Dust, noise and vibration on site and off site;
 - Traffic management highways safety and highways congestion;
 - Protection of listed buildings (if relevant);
 - Stability of adjacent properties;
 - Protection of any off-site features that may be damaged due to works;
 - Protection of biodiversity and trees; and
 - Preserve the amenity of surrounding residential and other sensitive uses.
- 8.13 A construction management plan is often split into two elements. The first element will be focussed on controlling environmental impacts, pollution and other non-highway related impacts arising from the scheme, having regard to the requirements of the Council's Considerate Contractor Manual and best practice guides from the GLA. In particular this will seek to control hours of operation and monitor and manage air quality, noise, dust and other emissions of other pollutants and location of equipment. The second element will be focussed on traffic control with a view to minimising disruption, setting out how construction work will be carried out and how this work will be serviced (e.g. delivery of materials, set down and collection of skips), with the objective of minimising traffic disruption and avoiding dangerous situations for pedestrians and other road users.
- 8.14 Sometimes the Section 106 will link the construction management plan with a requirement to convene a working group to act as a forum for the developer to meet with local residents and businesses to deal with construction issues as they arise.

- 8.15 Construction management plans will also have to be consistent with any other plans required for the development. For example, a Site Waste Management Plan, which is a legal requirement for works over a certain size which may require the re-use or recycling of materials on-site and therefore the construction management plan will have to reflect that space will be required to sort, store and perhaps crush or recycle materials.
- 8.16 The construction management plan should include the following statement:
“The agreed contents of the construction management plan must be complied with unless otherwise agreed with the Council. The project manager shall work with the Council to review this construction management plan if problems arise in relation to the construction of the development. Any future revised plan must be approved by the Council and complied with thereafter.”

Transport considerations

- 8.17 The details contained within a construction management plan will relate to the nature and scale of the development, however, in terms of assessing the impact on transport the plan should demonstrate that the following has been considered and where necessary the impacts mitigated:
- a) Start and end dates for each phase of construction;
 - b) The proposed working hours;
 - c) The access arrangements for vehicles;
 - d) Proposed routes for vehicles between the site and the Transport for London Road Network (TLRN). Consideration should also be given to weight restrictions, low bridges and cumulative effects of construction on the highway;
 - e) Sizes of all vehicles and the frequency and times of day when they will need access to the site, for each phase of construction;
 - f) Swept path drawings for any tight manoeuvres on vehicle routes to the site;
 - g) Details (including accurate scaled drawings) of any highway works necessary to enable construction to take place;
 - h) Parking and loading arrangements of vehicles and delivery of materials and plant to the site;
 - i) Details of proposed parking bays suspensions and temporary traffic management orders;
 - j) Proposed overhang (if any) of the public highway (scaffolding, cranes etc);
 - k) Details of any temporary buildings outside the site boundary, or overhanging the highway;
 - l) Details of hoardings required or any other occupation of the public highway;

- m) Details of how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any banksman arrangements;
- n) Details of how traffic associated with the development will be managed in order to reduce congestion;
- o) Arrangements for controlling the movements of large/heavy goods vehicles on and in the immediate vicinity of the site, including arrangements for waiting, turning and reversing and the provision of banksmen, and measures to avoid obstruction of adjoining premises.
- p) Details of any other measures designed to reduce the impact of associated traffic (such as the use of construction material consolidation centres);
- q) Details of how any significant amounts of dirt or dust that may be spread onto the public highway will be cleaned or prevented;
- r) Details of any Construction Working Group that may be required, addressing the concerns of surrounding residents, as well as contact details for the person responsible for community liaison on behalf of the developer, and how these contact details will be advertised to the community;
- s) A statement confirming registration of the site with the Considerate Constructors Scheme;
- t) How the servicing approach takes into consideration the cumulative effects of other local developments with regard to traffic and transport;
- u) Provision for monitoring of the implementation of the CMP and review by the council during the course of construction works;
- v) Any other relevant information with regard to traffic and transport; and

Air quality and climate change considerations

8.18 A method statement should be prepared and adopted as part of the construction management plan to minimise gaseous and particulate matter emissions generated during the Construction Phase. The following best practice measures shall be included in the method statement:

- Techniques to control PM₁₀ and NO_x emissions from vehicles and plant;
- Techniques to control dust emissions from construction and demolition;
- Air quality monitoring; and
- Techniques to reduce CO₂ emissions from construction vehicles.

How will we secure construction management plans?

8.19 Generally a Section 106 agreement (rather than a condition) is the most appropriate mechanism for securing a construction management plan. For larger schemes or developments on constrained sites within heavily

built-up areas where building activities could materially affect the highway construction management plans will always be secured through Section 106s. While the use of conditions is normally preferred to Section 106 Agreements, conditions can only be used to control matters on land within the developer's control. The range of matters typically covered by a CMP, particularly in relation to highways, mean that a Section 106 Agreement will be necessary in most cases.

- 8.20 The level of detail contained in a typical Section 106 also lends itself to the tailored, site-specific approach Camden uses for construction management plans. However, the use of a condition to secure a construction management plan may be sufficient for sites where the building activities associated with the build out can be totally accommodated within the site itself, particularly where these are smaller schemes.

Camden Planning Guidance

Transport

London Borough of Camden

CPG 7



CPG7 Transport

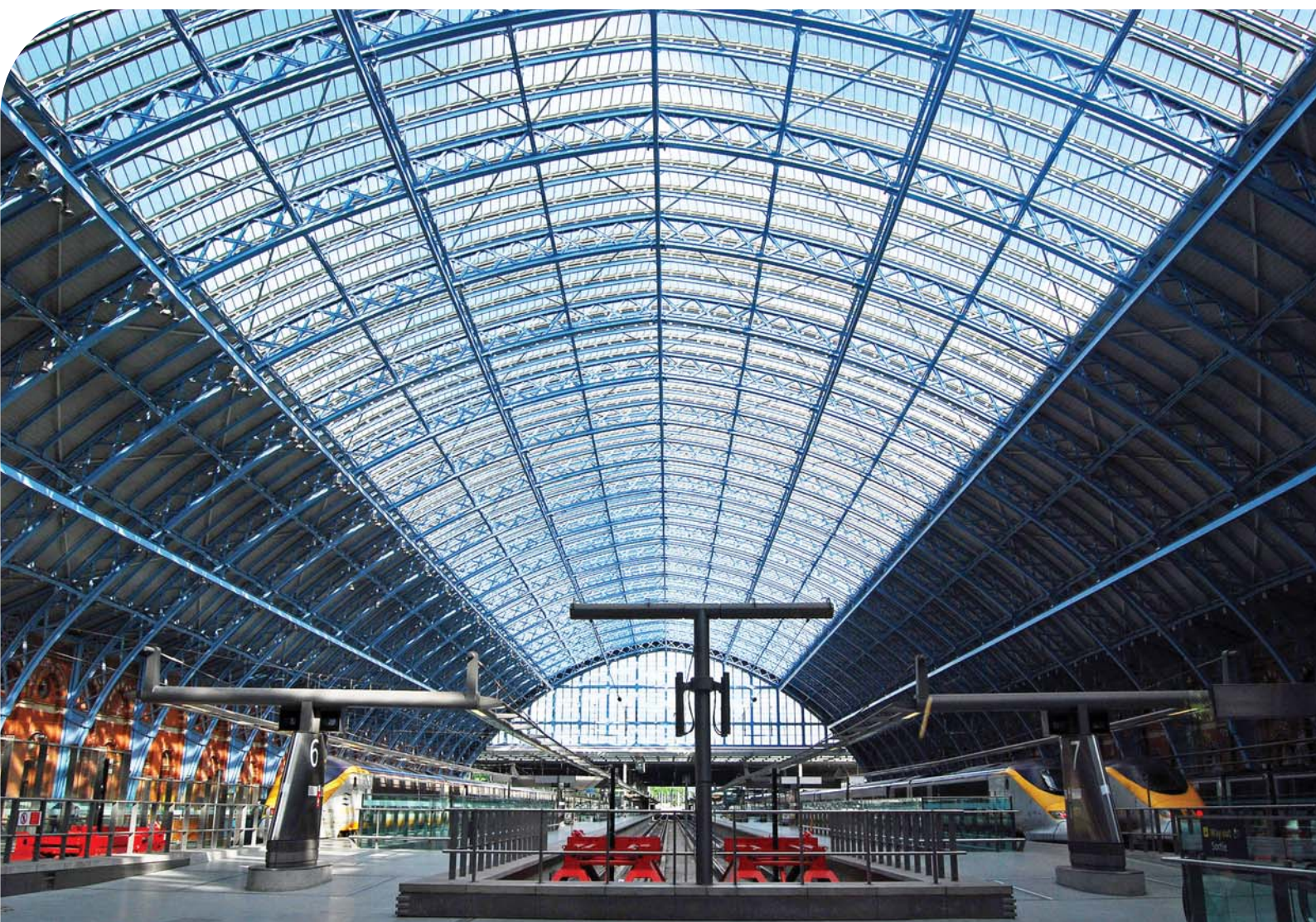
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Camden Planning Guidance

Transport

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5 Car free and car capped development

KEY MESSAGES

- We expect car free development in the borough's most accessible locations and where a development could lead to on-street parking problems
- Legal agreements will be used to maintain car-free and car-capped development over the lifetime of a scheme

- 5.1 This section explains further the terms car-free and car-capped development, as referred to in the Camden Core Strategy and Camden Development Policies, the mechanisms that are needed to secure them, and the circumstances in which it will be appropriate for the Council to refuse additional dwellings that are not car free or car capped.
- 5.2 It relates to Core Strategy Policy CS7 – *Promoting sustainable and efficient travel* and policies DP18 – *Parking standards and limiting the availability of parking* and DP19 - *Managing the impact of parking* of the Camden Development Policies.

Car-free development

A development which has no parking within the site and occupiers are not issued with on-street parking permits

Car-capped development

A development which has a limited amount of on-site car parking, but no access to on-street parking permits.

- 5.3 Car-free and car capped development is successful in Camden because most of the borough has very good access to public transport services. Levels of car ownership are low compared with London generally, and choosing not to own a car can be an attractive lifestyle option. The guidance in this section covers:
- What car free development is, and where it is sought;
 - What car capped development is, and where it is sought;
 - Implementation of off-street parking restrictions for car-free and car-capped development, including partial provision of car free and car capped development, and maintaining the on-street parking rights of existing occupiers;
 - Meeting the parking needs of disabled people.

When we expect car free and car capped housing

- 5.4 Car free and car capped requirements apply to developments in particular locations and circumstances:
- we expect car free development in the Central London area, our town centres and other areas with high public transport accessibility (see Development Policy DP18);

- we will also expect car free development where the creation of a new access could lead to on-street parking problems where the loss of kerb space creates unacceptable parking pressure. Refer to Development Policy DP21, and the Access section of this guidance for more information);
 - Car capped development applies to schemes that would have an unacceptable impact on on-street parking conditions or highway management and safety through the introduction of new units with access to on-street parking permits (see Development Policy DP19).
- 5.5 Car-free or car-capped housing may be sought wherever development involves the creation of one or more additional dwellings – whether newly built, or created by a conversion or change-of-use.
- 5.6 Non-residential development can potentially involve car-free or car-capped designation if it creates a new non-residential address or involves a change-of-use that would otherwise increase the demand for car parking. This reflects the operation of the parking permit scheme, where permits relate to individual addresses.

Car free development

- 5.7 Car-free development is development that does not have any car parking. No parking is provided or allowed on the site (except parking designated for disabled people), and all of the dwellings or units created are not entitled to on-street car parking permits. Where we seek car free development our parking standards do not apply as no parking is allowed.
- 5.8 Camden Development Policy DP18 states that we will expect development to be car free in the Central London Area, the town centres of Camden Town, Finchley Road/ Swiss Cottage, Kentish Town, Kilburn High Road and West Hampstead, and other highly accessible areas.
- 5.9 'Highly accessible areas' are considered to be areas with a public transport accessibility level (PTAL) of 4 and above. The PTAL of a specific site can be established using Transport for London's Planning Information Database website pages, which can be found at: <http://webpid.elgin.gov.uk/>.
- 5.10 Car free development will also be required where the creation of an access to allow off-street parking would reduce the availability of on-street parking (see also section 6 of this guidance on vehicle access), or would otherwise cause problems relating to highway management or safety. Policy DP19 of the Camden Development Policies states that we will resist developments that would harm on-street parking conditions or harm highway safety.

Car capped development

- 5.11 Car-capped development is development in which all of the dwellings or units created are not entitled to on-street car parking permits, although some or all of the dwellings or units created may have a parking space

on the site, in accordance Camden's parking standards (see policy DP18 and Appendix 2 of the Camden Development Policies). It therefore differs from car free development because some on-site car parking is allowed, in line with Camden's parking standards.

- 5.12 Car capped development is sought in developments that are not in the locations listed in paragraph 4.7 above, where additional off-street spaces can be accommodated within the development without harming highway or on-street parking conditions, but where additional on-street car parking is not considered acceptable.

Circumstances where additional on-street car parking is not acceptable

- 5.13 There are parts of the Borough where increasing competition for on-street parking through introducing additional premises with on-street parking rights is not acceptable. This is generally the case in the Central London Area, but also in many other areas where the parking spaces available cannot meet existing demand. This has implications for queuing and congestion, illegal parking, and highway safety. In these circumstances, if a developer will not enter into an agreement to designate the additional development as car-free or car-capped, planning permission will not be given.
- 5.14 In considering the ability of available on-street parking to accommodate the impact of additional development, we will have regard to the cumulative effect of proposals in the area, including unimplemented and partly implemented schemes already granted planning approval.
- 5.15 Our Parking and Enforcement Plan provides regularly updated permit data, which is used to establish levels of on-street parking pressure on each of the borough's roads. This information will be used when considering the acceptability of applications that would involve the potential allocation of additional on-street parking permits to the future occupiers of new development.

Implementation of on-street parking restrictions for car-free and car-capped development

- 5.16 The whole of Camden has controlled parking and, in principle, is appropriate for car-free or car-capped development. On most days, most parking spaces on residential streets are only available to people holding a parking permit issued by the Council. In Controlled Parking Zones we can restrict access to on-street car parking because we can control the issuing of parking permits.

Controlled Parking Zones

Designated areas in regulations control how parking may be used on different sections of the street and at different times.

- 5.17 In order to be able to maintain car-free and car-capped development over the lifetime of a scheme, the developer will be required to enter into

a legal agreement under Section 106 of the Town and Country Planning Act 1990 (as amended), which would permanently remove the entitlement to an on street parking permit for each home created:

- 5.18 The legal agreement requires the owner of the development to inform incoming occupiers that they are not eligible to obtain a parking permit for on-street parking, or to purchase a space in a Council-controlled car park. This part of the legal agreement stays on the local search in perpetuity so that any future purchaser of the property is informed that occupiers are not eligible for parking permits.

Maintaining on-street parking rights of existing occupiers

- 5.19 Existing parking rights can normally be retained on development sites, where it can be demonstrated that existing occupiers are to return to the address when it is completed. This is common where an existing dwelling or block is being extended or subdivided. It can also occur where a change-of-use brings a site or property into residential occupation.
- 5.20 If a development is to have new occupiers, existing parking rights will not apply, and the Council will apply its car-free / car-capped policies as set out in Development Policies DP18 and DP19.

Meeting the needs of disabled people

- 5.21 Car-free development and car-capped development should be designed taking into account the needs of disabled car users. Blue Badge holders are able to use parking spaces in Controlled Parking Zones without a parking permit. Minimum parking standards apply to parking for people with disabilities, and 1 parking space for people with disabilities is required per 10 general-purpose dwellings (see Appendix 2 of the Camden Development Policies document). In addition, where car-free and car-capped developments contain wheelchair housing, the Council will expect a parking space to be provided for each wheelchair dwelling. Where a resident in need of a reserved disabled parking space moves into a development with no off-street spaces, the Council will consider a request for a designated disabled space on-street in the same way whether the development is formally car-free or not.

Further information

- 5.22 In addition the guidance above regard should also be had to Camden's Parking and Enforcement Plan (2004), which provides further information on our approach to managing parking in the borough.

6 On-site car parking

KEY MESSAGES

This section includes detailed guidance on:

- Implementation of numerical car parking standards
- Dimensions and layout of spaces, including dedicated spaces for disabled people
- Underground and stacked parking
- Car clubs and pool cars
- Electric charging points

6.1 This section assists applicants for developments that will involve the provision of off-street parking spaces.

6.2 It relates to Core Strategy Policy CS11 - *Promoting sustainable and efficient travel* and policy DP18 - *Parking standards and limiting the availability of car parking*; and Appendix 2 Parking standards of the Camden Development Policies. It should be read in conjunction with section 6 of this guidance on vehicle access.

When does this apply?

6.3 This guidance applies to planning applications that involve creation of off-street parking spaces, in line with the standards set out in the Camden Development Policies. The parking requirements for emergency services, such as ambulance, fire and policing facilities, will be assessed on an individual basis, having regard to the specific operational needs of a particular use.

6.4 Applicants should first seek to minimise car use from their development, in accordance with Core Strategy Policy CS11 and policies DP16-DP20 of the Camden Development Policies. Alternative measures include:

- provision for walking, cycling and public transport;
- car-free development so that there is no need for parking; and
- car clubs and pool cars.

How should on-site car parking be provided?

6.5 Standards for the number of spaces required for car parking and servicing are given in Camden Development Policies Appendix 2.

6.6 Thresholds and standards are given as a gross floor area (GFA) relating to the development as a whole, and are not intended to be applied separately to individual units that form part of a larger development. Shared use of parking spaces and servicing bays between units will be encouraged where practical.

- 6.7 Where a development crosses a threshold, requirements apply to the entire floorspace, not only the floorspace above the threshold. For example, for hotels, the requirement for visitor parking spaces for people with disabilities is 1 space per 1,250 sq m from a threshold of 2,500 sq m (Development Policies Appendix 2). This means that no requirement applies to a hotel of 2,000 sq m, but for a hotel of 5,000 sq m, a requirement of 4 spaces for disabled visitors applies.
- 6.8 Paragraph 18.7 of Camden Development Policies addresses the provision of parking for employees with a need for “continuous access to a car for work purposes”, as part of the maximum standards for employment generating uses. For the removal of doubt, this refers to travel needs that cannot be met by walking, cycling or public transport, and relates to access during the working day, not commuting to and from work

Dimensions and layout of car parking spaces

- 6.9 Figure 2 below sets out our minimum standards for the dimensions and layout for off-street car parking spaces.

Figure 2. Dimensions and layout of car parking spaces

Off-street car parking space (standard)	2.4m wide by 4.8m deep.
Front Garden/Forecourt	5.0m wide by 6.0m deep.
Off-street car parking space for use by disabled people	3.3m wide by 4.8m deep.
Layout of car parking spaces for general use	<p>90° parking – aisles may be two-way The minimum aisle width between the ends of spaces is 6.0m</p> <p>60° parking – aisles must be one-way The minimum aisle width between the ends of spaces is 4.2m</p> <p>45° parking – aisles must be one-way The minimum aisle width between the ends of spaces is 3.6m</p>

- 6.10 Disabled parking should be in line with the Mayor’s Draft London Housing Design Guide SPG (July 2009), which states in paragraph 3.3.2 that “Each designated wheelchair accessible dwelling should have a car parking space 2.4m wide with a clear access way to one side of 1.2m wide”.
- 6.11 Dedicated car parking spaces for use by disabled people should be designated with appropriate markings and signs. These spaces should be located as close as possible to main pedestrian entrances and passenger lifts. There must be no obstruction – such as a raised kerb or

heavy doors - between the parking spaces and the entrance to the building. In considering the appropriateness of distances to the furthest facility served by a dedicated parking space, the following guidelines will be taken into account:

Uncovered route	Less than 50m
Covered route (unenclosed or part enclosed)	Less than 100m
Completely enclosed route (unaffected by bad weather)	Less than 200m

- 6.12 In addition to dedicated parking spaces, where premises are likely to attract visits by the public, vehicular setting down and picking up points suitable for use by disabled people should be available as close to main building entrances and passenger lifts as possible.

Underground and stacked parking

- 6.13 Because of the high cost of land in Camden, some developers are seeking to use more space-efficient forms of car parking, such as underground and 'stacked' parking.
- 6.14 Whilst the Council considers that such provision can be appropriate in some circumstances, it must not cause harm in terms of visual impact and safety. In particular, proposals for underground and stacked parking would need to satisfactorily address potential issues in relation to vehicles queuing/ waiting, and impact on the highway, congestion and safety as vehicles manoeuvre around the site, along with any archaeological implications.
- 6.15 As with any car parking provision, underground and stacked parking must meet Camden's parking standards.

Car clubs

- 6.16 Paragraphs 11.18 of the Camden Core Strategy and 18.14 and 18.15 of the Camden Development Policies encourage the provision of car club spaces as an alternative to the provision of private car spaces, in order to make private transport more sustainable.
- 6.17 We will seek publicly accessible spaces, where provision is made as part of development. This enables spaces to form part of a wider network, improving accessibility to spaces, benefitting the local community and reducing impact on the public highway (by avoiding the provision of additional on-street spaces).
- 6.18 Developers should provide spaces for a Camden-approved city car club operator. Please contact the Council for our full list of approved operators.
- 6.19 The Council's preference is for the provision of car club spaces for electric or low carbon vehicles.



Electric charging points

- 6.20 As part of our approach to making private transport more sustainable, the Council promotes the use of low emission vehicles, including through the provision of electric charging points (see Camden Core Strategy Policy CS11).
- 6.21 Electric charging points allow electric vehicles to charge up whilst parked, ready for the next journey, and are normally located in dedicated parking bays. Further information on electric charging points can be found at: <http://www.newride.org.uk/>
- 6.22 We will seek the provision of electric charging points as part of any car parking provision in new developments (policy DP18 of the Camden Development Policies). The emerging London Plan (policy 6.13 Parking) states that 1 in 5 new spaces provided in new developments should provide charging points.
- 6.23 The Council will promote provision of electric vehicle charging spaces as an alternative to any general car parking spaces, but particularly if the charging spaces will be for electric pool cars or electric car-club cars. We will encourage use of renewable energy to provide power for charging points.
- 6.24 Parking for low emission vehicles, pool cars and car clubs should be provided from within the general car parking allowed by Camden's parking standards. If they are provided in addition to general car parking spaces, they are unlikely to be effective in encouraging more sustainable means of transport, and to the Council's overall aim of reducing congestion in the Borough.

Further information

- 6.25 The creation of off-street parking spaces will often require the creation of a new vehicle access to a site. This section should therefore be read alongside section 6 of this guidance on Access to sites for motor vehicles, which sets out how proposals involving new means access are judged in terms of impact on the highway, safety and visibility for emerging vehicles.

6.26 Other useful sources of information include:

- Mayor’s draft Housing SPG, which contains detailed guidance on the levels of car parking;
- Manual for streets; DfT; 2007, which provides guidance on accommodating car parking within the street environment; and
- Camden Parking and enforcement plan, which sets out a comprehensive approach to managing parking and addresses the need for effective enforcement of parking controls, for both on-street and off-street parking.

9 Cycling facilities

KEY MESSAGES

This section includes guidance on:

- The implementation of our minimum cycle parking standards for new development;
- The design and layout of cycle parking; and
- Cycle hire and cycle stations.

9.1 This section provides guidance on meeting cycle parking standards in an effective way, so that cycle parking is convenient and secure, and users of a development are more likely to use bicycles to travel to and from the site.

9.2 It relates to Core Strategy Policy CS11 – *Promoting sustainable and efficient travel* and policies DP17 – *Walking, cycling and public transport* and DP19 – *Parking standards and limiting the availability of parking* of the Camden Development Policies. It should be read in conjunction with Development Policies Appendix 2 – Parking standards.

When does this apply?

9.3 This guidance applies to:

- Applications which involved the creation of one or more additional dwellings;
- Applications which proposed additional floorspace of 500 sq m or more; and
- Applications which are likely to significantly increase the demand for people to cycle to the site.

How do we implement our cycle parking standards?

9.4 Numerical standards for cycle parking spaces are introduced by policy DP18 of the Camden Development Policies, and set out in detail in Development Policies Appendix 2. These standards are applied at a threshold of 500 sq m in most cases. Throughout the standards, the stated number of spaces relates to the number of bicycles to be accommodated, not to the number of stands.

9.5 Where a development crosses the threshold, requirements apply to the entire floorspace, not only the floorspace above the threshold. For example, at a new leisure development, 1 visitor cycle parking space per 250 sq m is required from a threshold of 500 sq m. This means that no requirement applies to a facility of 400 sq m, but 4 visitor spaces are required for a facility of 1,000 sq m.

9.6 Thresholds and standards are given as a gross floor area (GFA) relating to the development as a whole, and are not intended to be applied

separately to individual units where a development is subdivided into smaller units. Thus, space for cycles may be required for small premises (under 500 sq m) which form part of a larger development.

- 9.7 Table 6.3 of the London Plan sets out additional cycle parking standards and states that additional cycle parking provision will be required for larger (C3) residential units.

Location, design and layout of off-street cycle parking

- 9.8 Cycle parking should be provided off-street, within the boundary of the site. Cycle parking needs to be accessible (in that everyone that uses a bike can easily store and remove a bike from the cycle parking) and secure (in that both wheels and the frame can easily be locked to the stand). Security is a critical concern in the location, design, enclosure and surveillance of all cycle parking. The table below provides detailed guidance on the location, design and layout of cycle parking for various groups of cyclists.

Location of off street cycle parking

General

- Cycle parking outside buildings should be positioned near entrances and where frequent surveillance is possible. For short stays, the parking should be sited within 25 metres of building entrances. For stays of over an hour, the parking should be sited within 50 metres of building entrances.
- All cycle parking, including all parts of the parked cycles, should be clear of routes needed for pedestrian movement.
- The route to cycle parking from street level should be step free. cycle parking inside buildings should be at the entrance level of the building or accessible by a ramp or lift from street level that can accommodate a bike.

Parking for visitors

Parking for visitors should be clearly visible or clearly signed from the public highway, and should be near building entrances

Parking for employees (and other long stay parking)

Parking for employees (and other long stay parking) should be provided either within the building, or otherwise protected from the weather. Consideration should be given to providing lockers and showers for cyclists. For larger development this would be expected and would be a requirement of a Travel Plan (see section 2 of this guidance concerning Travel Plans).

Parking for residents

Parking for residents should be within the building. Parking for a resident may take the form of a space within an individual dwelling provided that the space is close to the door of the dwelling, and access to the dwelling is level, or by a ramp or lift that can accommodate a bike.

Design and layout of cycle parking: Sheffield and “Camden” cycle stands

The Council recommends the use of either “Camden” or Sheffield for the provision of off-street cycle parking, as they meet the Council’s requirements in terms of accessibility and security, provided they are laid out correctly.

- The “Camden” stand is a new form of Sheffield Stand, which is now used for all new cycle parking installed on Camden’s public highway. Developers are encouraged to use it in place of the Sheffield stand, although the Sheffield stand is still acceptable. The Council’s Public Realm and Transport team can advice on purchasing “Camden” stands as they are not as widely available as the Sheffield stand.
- The Sheffield Stand is the most common type of cycle stand used in the public highway. It is recommended for use along with Josta two-tier cycle parking;

Annex 1 provides more detailed guidance on the design and layout of “Camden”, Sheffield and Josta stands.

We are willing to consider other forms of cycle parking, however you must meet our accessibility and security requirements, details of which can be obtained from the Council’s Public Realm and Transport team. Generally, designs that require cycles be lifted into place or provide insufficient opportunity to lock the cycle will not be acceptable.



The London Cycle Hire Scheme

- 9.9 The London Cycle Hire Scheme is a public bicycle sharing scheme for short journeys in and around central London. Users can pick up a bike from a docking station, use it for short journeys, then drop it off at any docking station, ready for the next person.
- 9.10 Whilst the cycle hire scheme is currently focused around central London, the Mayor of London is investigating its expansion. The Camden Core Strategy states that we will seek to ensure that the scheme is extended to key destinations across the borough, including our town centres (see Core Strategy paragraph 11.13).
- 9.11 Where appropriate, developments close the area covered by the London Cycle Hire Scheme will be expected to contribute towards the scheme,

where justified as a result of increased trips generated. Contributions could include:

- a financial contribution towards cycle hire facilities. The amount sought will be based on the number of additional trips that are generated by the scheme;
- provision of space on-site to accommodate new cycle hire docking stations, in larger developments where there is space and the location is suitable. Transport for London (TfL) is producing a set of guidance for developers regarding specifications and design requirements for docking stations due to be released in 2011.

9.12 Contributions sought will relate both to the individual impact of a scheme and to any cumulative impact of a number of schemes in the same area.

Cycle stations

9.13 Cycle stations provide a secure managed area for cycle parking. The Camden Core Strategy promotes the provision of cycle stations as part of an effort to increase the availability of cycle parking in the borough (see paragraph 11.13 of the Core Strategy), and we intend to create a network of publically accessible cycle stations across the borough.

9.14 We will seek the provision of cycle stations in locations where it will be possible to attract a sufficient number of users. Suitable locations include:

- town centres and the central London area;
- transport interchanges;
- large commercial developments;
- residential areas - linked to new and existing residential development of a suitable scale; and
- larger health and education facilities.

9.15 Where developments generate an increased level of activity they will be expected to provide contributions towards the provision and maintenance of nearby cycle stations, in order to mitigate the effects of the increased number of journeys.

9.16 We will also seek on-site provision of cycle stations as part of larger developments in suitable locations. On-site provision of cycle stations can incorporate a development's cycle parking requirements for visitors (as set out in our parking standards), but should also include extra provision for the wider public. Parking provision for employees and residents of a development, as set out in our parking standards, should be provided separately in order to ensure that they retain the appropriate number of spaces to meet the demand that they generate.

Design of cycle stations

9.17 As a minimum, cycle stations should incorporate indoor, sheltered standard cycle parking (e.g. Camden or Sheffield type cycle stands) with

controlled access to the indoor area, and lighting. Cycle stations can incorporate a variety of other features including automated cycle locks, changing facilities, lockers, toilets and showers. Access to and from the cycle station by bike must be safe and convenient and accounted for within the space.

9.18 The Camden Cycle Stations Programme - Review of Best Practice (March 2009) provides information on best practice in the provision of cycle stations. Features that contribute to a successful cycle station include:

- Being located not more than 100m from the target destination, with shorter stays requiring shorter distances;
- Good surveillance by staff, other users and passers-by.
- Effective maintenance and management
- Clear and unambiguous signing to and within the cycle station.

Further information

9.19 In addition to the guidance provided in Annex 1 below (which includes details on the layout of off-street cycle parking), reference may also need to be made to the Camden Streetscape Design Manual. The manual contains dimensions for on-street cycle parking and the widths required for unobstructed pedestrian routes.

9.20 Other supporting documents include:

- Forthcoming TfL Design and specification of cycle hire scheme
- Forthcoming TfL Guidance on Cycle Stations
- Camden Cycle Stations Programme - Review of Best Practice (March 2009)

9.21 London Cycle Network Design Manual (London Cycle Network Steering Group, March 1998)

Annex 1 – Sheffield Stand Cycle Parking

9.22 This Annex describes in detail how to lay out Sheffield stands. It also can also be applied to the layout of “CaMden” stands.

9.23 The "Sheffield Stand" refers to a common design of cycle parking made from a tubular steel loop, approximately 50mm to 75mm in diameter, that is fixed to the ground (either bolted through a baseplate or set in concrete). Each Sheffield Stand can accommodate two bicycles, one either side, provided there is sufficient clearance next to the stand and sufficient circulation space so all cycle parking spaces can be accessed

9.24 The CaMden Stand is similar to the Sheffield Stand but is in the shape of a rounded “M” rather than a simple loop. This is designed to encourage users to lock both wheels and the frame to the stand, rather than just the top tube / frame.

Figure 3. Sheffield Stand Elevation

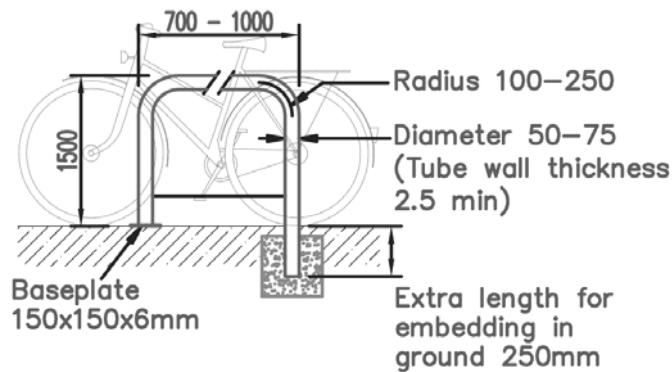
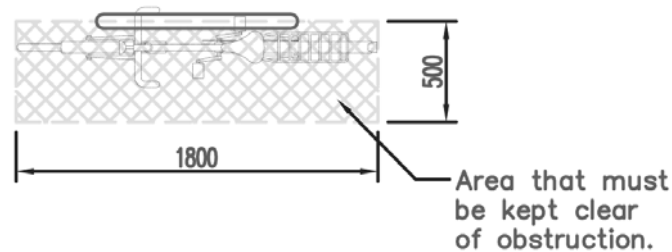
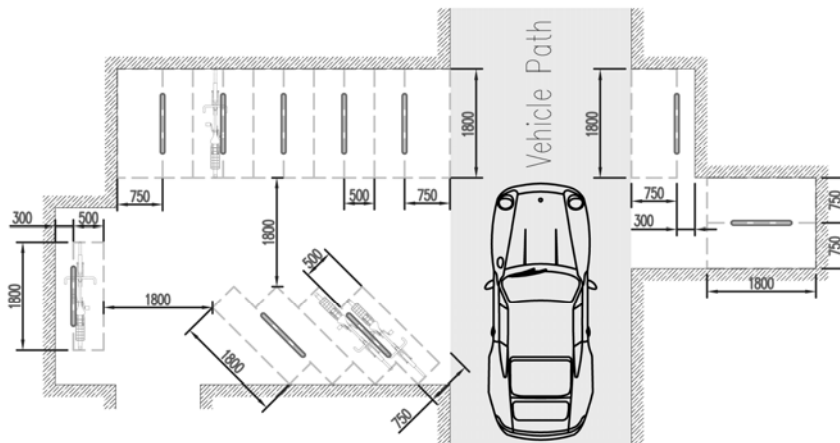


Figure 4. Sheffield Stand Plan



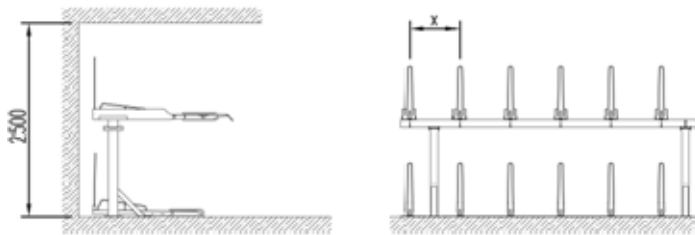
- 9.25 For adjacent stands, an area of at least 1800mm by 500mm next to the stand (measured from the centre line of the tube), must be kept clear for each cycle parking space to allow room for the cycle and working space for locking the bike to the stand. However, if a stand is next to a physical obstruction, such as a wall or a vehicular path, there must be at least 750mm between the stand and the physical obstruction to enable both sides of the stand to be used. If a stand is to be placed close to a wall or other physical obstruction so that only one side of it can be used (i.e. only one cycle can be locked to it), there must be at least 300mm between the stand and the physical obstruction.
- 9.26 Aisles around the cycle store must be at least 1800mm in width. An example cycle store showing various layout options is shown below. Note that the area to be kept clear does not actually have to be marked on the ground, but is shown in outline for clarity.

Figure 5. Cycle stand siting

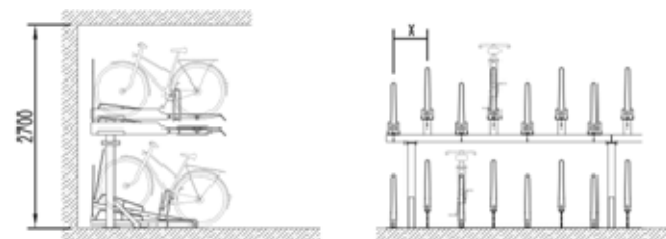


Josta Two-tier Cycle Parking

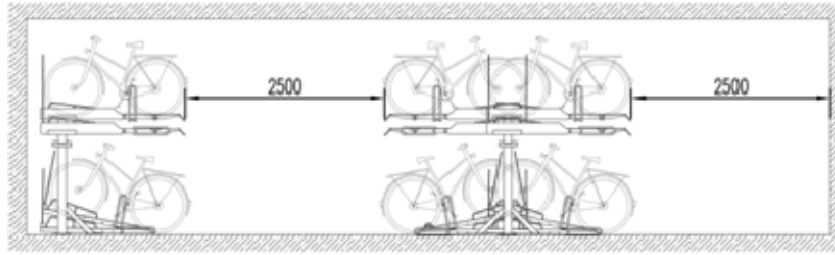
- 9.27 The Josta two-tier cycle parking system (or similar) is generally able to accommodate approximately twice as many cycles per square meter of floor space as Sheffield stands. It also still meets the Council's requirements for accessibility and security, but requires a ceiling height of at least 2500mm.
- 9.28 With a ceiling of at least 2500mm the stands can be placed 650mm apart, i.e. $X = 650\text{mm}$ in the diagram below.



- 9.29 With a ceiling of at least 2700mm the stands can be placed 400mm apart, i.e. $X = 400\text{mm}$ in the diagram below.

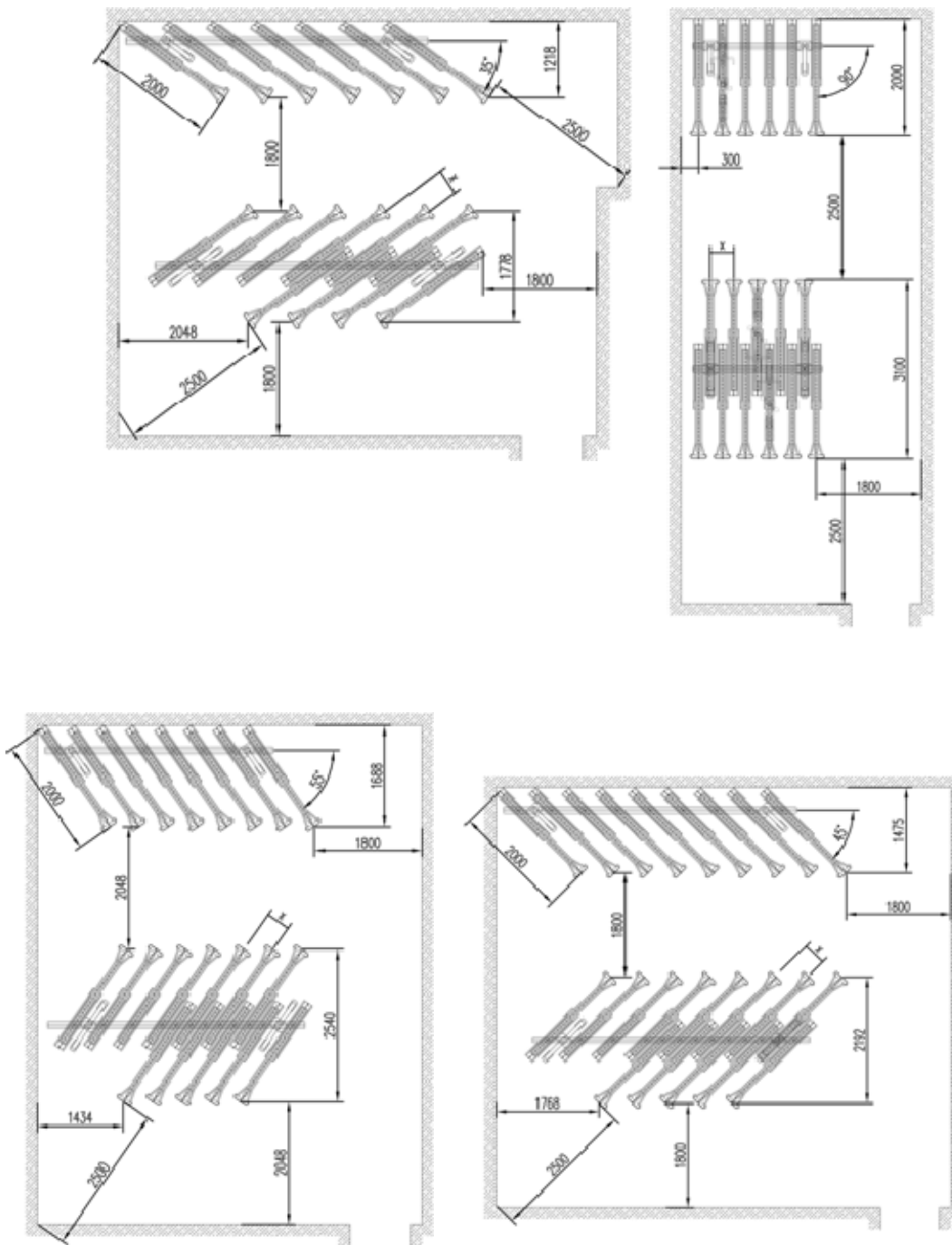


- 9.30 In order to enable the top tier to be used, at least 2500mm of clearance in front of the stand, measured on a line at the same angle at which the top tier stands are extended (see diagrams below), is required between rows of stands, walls or other obstructions.



- 9.31 The Josta stands can be arranged at different orientations (angles) provided there is 2500mm of clearance in front of the rack to remove cycles from the top tier (as described above) and aisles around the cycle store at least 1800mm in width. Examples, with minimum distances are shown below. "X" indicates the spacing between stands, which depends on the ceiling height as described on the previous page.

Figure 6. Josta Stand minimum siting dimensions

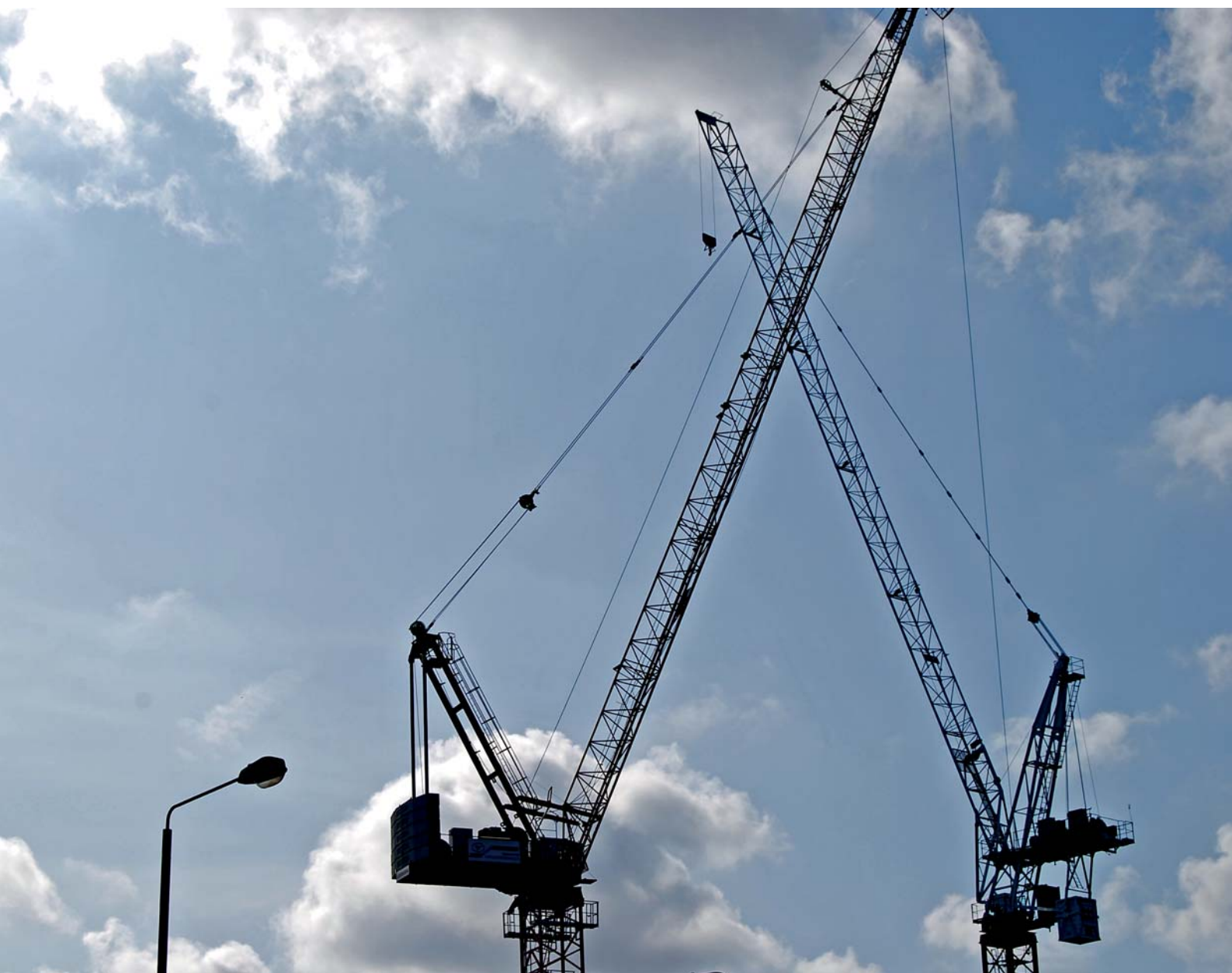


Camden Planning Guidance

Planning obligations

London Borough of Camden

CPG **8**



July 2015

CPG8 Planning obligations

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1 Introduction

What is Camden Planning Guidance?

- 1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Plan documents. This guidance is therefore consistent with our adopted Core Strategy and Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional material consideration in planning decisions.
- 1.2 The Council adopted CPG8 Planning obligations on 7 September 2011 following statutory consultation. This document has been subject to two updates:
 - Updated 25 February 2015 to take into account Camden's Community Infrastructure Levy (CIL) Charging Schedule following independent examination. Camden's CIL charging schedule came into effect on 1 April 2015.
 - Updated 17 July 2015 to include revised guidance for employment and business support.

Details on these updates and the consultation process are available at camden.gov.uk/cpg.

What does this guidance cover?

- 1.3 The purpose of this guidance is to provide an indication of what may be required when the Council considers that a development proposal needs a planning obligation to be secured through a legal agreement. Planning obligations can be used positively and to address some of the negative impacts of development which would otherwise make a development unacceptable. This guidance also sets out how planning obligations will be operated alongside the Community Infrastructure Levy.

When will it apply?

- 1.4 This guidance applies to all development where proposals are likely to be subject to planning obligations under Section 106 of the Town and Country Planning Act 1990 (as amended). In dealing with planning applications, local planning authorities consider each proposal on its merits and reach a decision based on whether the application accords with the development plan, unless material considerations indicate otherwise. Where applications do not meet these requirements, they may be refused.
- 1.5 In some instances, however, it may be possible to make development proposals which might otherwise be unacceptable, acceptable through the use of planning conditions or, where this is not possible, through planning obligations. Where there is a choice between imposing conditions or entering into a planning obligation a condition will be used.

- 1.6 The use of planning obligations is an important tool in managing the impacts of development and assisting the delivery of necessary infrastructure to support the London Plan and Camden's Local Plan documents. They will be used to ensure that the strategic objectives of the Core Strategy and Development Policies are met through requirements attached to individual development proposals.
- 1.7 The use of planning obligations is specifically required through policy CS19- Delivering and monitoring the Core Strategy although other Development Policies may be used to justify an obligation, particularly those relating to affordable housing, sustainability and transport. Further site specific requirements are set out in our adopted Site Allocations DPD. This guidance is intended to provide general advice on how planning obligations operate. Large scale developments generally have more significant and complex obligations attached to them, but obligations may also be applied to small scale developments to achieve measures such as car free housing or to manage the impacts of construction.

5 Design

- 5.1 The Council's planning policies seek to ensure that Camden's places and buildings are attractive, safe, healthy and easy to use. Core Strategy policy CS14 - Promoting high quality places and conserving our heritage requires development to be of the highest standard of design that respects local context and character, including improving the spaces around buildings and achieving high quality landscaping in schemes. More information about our detailed approach to the design of new developments and alterations and extensions can be found in Development Policy DP24 - Securing high quality design.
- 5.2 The Core Strategy also sets out our approach to other matters related to design, such as tackling climate change through promoting higher standards (CS13), the importance of community safety and security (CS17) and protecting amenity from new development (CS5). Further guidance on design is contained in our Camden Planning Guidance 1 – Design

Soft landscaping and ecology

- 5.3 Landscaping is an essential element of high quality design. Planning obligations may be required to protect or secure appropriate landscaping and planting on or around the site if the potential impacts of a development on public spaces, parks and other local green spaces are substantial enough to require mitigation measures. If they are deemed to be necessary to make a development acceptable and so closely related to a development site then they may be secured through a section 106 agreement. More generic area based landscaping works will generally be funded through the CIL.
- 5.4 The Council will consider the detailed landscaping proposals submitted with applications or if necessary specify the scope of the requisite measures and calculate the cost of new planting, new features and associated works based on the cost of implementation by Council contractors. As part of a section 106 Agreement the Council may require a developer to submit for approval a landscape management plan setting out measures and standards in relation to the retention, management and maintenance of affected wildlife habitats, landscapes and other valued spaces which support biodiversity.

Hard landscaping, works to streets, highways and public realm

- 5.5 A whole range of developments may require works to be carried out to the surrounding streets and public spaces to ensure that the site can be safely accessed, and to allow a new development to properly and safely function. Some works may also need to be carried out to mitigate the impacts of development and could include any of the items listed below. Where these works are clearly related to the development of a particular site they will be funded through section 106, but more area based generic works or schemes would generally be funded through the CIL.

5.6 These site specific works could include:

- a connection to a public highway;
- alterations and improvements to junctions;
- new or improved footways and pedestrian facilities;
- new or improved cycle routes and cycle stands;
- new traffic islands/refuges;
- pavement reinstatement and resurfacing;
- new or improved crossings and traffic control signals;
- crossovers;
- road closures / stopping up;
- road realignment and/or widening;
- bridge works;
- traffic reduction and calming measures
- parking management schemes/revisions to a CPZ;
- Traffic Regulation Orders, e.g. loading areas;
- works and improvements to canals and waterways.

Other site-specific public realm works may include:

- retention, repair and reinstatement of historic surface treatments;
- making access to a new development easier and safer for disabled people;
- trees on streets, public or private open spaces;
- street furniture (in some cases removal/rationalisation of street furniture would be appropriate);
- improved street lighting;
- associated signage;
- public art – either within public areas or on private land visible from the street;
- CCTV;
- associated drainage works;
- specific site related conservation area enhancement; and specific area initiatives, e.g. town centre improvements.

Highway works

- 5.7 The Council, as the local highways authority, is responsible for the maintenance, safety and quality of the borough's roads and highways and other adopted public spaces. It will determine how highway and/or other related works should be designed and implemented, in consultation with developers, to ensure that they are carried out in accordance with Council procedures and standards. Developers should refer to the Camden's Streetscape Design Manual. (Note: the Transport

for London Road Network is the exception where TfL are the highway authority).

Level plans

- 5.8 The design of any development needs to take account of the surrounding topography and in particular the levels of site where it adjoins the public highway. The Council will not adjust highway levels to meet accesses that do not sit at the required level. It will be a requirement of a Section 106/278 agreement for the developer to submit level plans to the Council for approval prior to implementation. These plans will need to show existing and proposed levels for channel, top of kerb, back of footway and any other features of relevance. They will also need to clearly show that any accesses or adjoining open areas will match the back of footway levels required.

Agreement of highway works

- 5.9 There are two main ways for public highways works on Borough roads to be undertaken through a section 106 / 278 obligation. The Council can design and carry out these works at the developer's expense; or the developer can (with the Council's agreement) design the works themselves to a specification set by the Council. The Council will then undertake these works at the developer's expense.
- 5.10 In both cases, the Council will exercise control over the design of the works and be involved in the implementation of the scheme. Any works which will or may affect the structural integrity of the highway requires approval and inspection by the Engineering Service's structural engineers. Works may be subject to a formal Approval in Principle under highways legislation. For more information and advice please contact the Council's Engineering Service. Occasionally where very minor works are involved, the Council may, subject to agreement in advance, allow the developer to undertake the works on the Council's behalf (under Council supervision).
- 5.11 In very limited circumstances (e.g. where a Borough road is not maintainable at the public expense, or in large scale developments), a scheme could be designed and implemented by the developer, although the Council's Engineering Service would still need to instruct and approve the scheme. The Council will always have the right to intervene (at the developer's expense) if any works are not to the Council's reasonable satisfaction.
- 5.12 For planning applications located on or affecting GLA roads (Transport for London Network - TLRN), the local planning authority will consult with Transport for London regarding the suitability of the proposed scheme. Where the development would involve an alteration to or a new access onto the TLRN, Transport for London has ultimate responsibility for indicating what is acceptable.
- 5.13 The particular approach to be followed will need to be agreed with the Council before the obligation can be completed. In all cases the works

will need to be completed within an agreed timescale. In some situations where highway works are necessary to allow the development to commence, the works will need to be completed before the works approved by the planning permission are started though in many circumstances any highways or public realm works will tend to follow on from the main construction.

Payment for highways works

- 5.14 The Council will secure payment of required works by preparing an estimate (including fees) for the scheme that the developer will be required to pay before commencing development. It is inevitable that, sometimes, unforeseen costs can arise during more detailed design and implementation. The agreement can provide for a subsequent adjustment to be made if actual costs exceed the amount paid, up to a maximum figure, usually agreed through the planning obligation. On completion of the works the Council will certify how much money was expended in undertaking the works.
- 5.15 If extra costs are incurred which cannot be reasonably predicted or costed, e.g. involving utilities and statutory undertakers and the expenditure exceeds the contribution paid through the section 106 agreement, the Council will require the developer to pay the excess amount. An option may be for developers to pay a one-off negotiated returnable bond or contingency sum in addition to the estimated cost, the size of which will be based on the nature, scale and risk associated with the particular works
- 5.16 If the works cost less than estimated and the agreement of the developer or landowner has not been obtained so that funds can be spent on complementary and similar works in the vicinity of the site, then the Council will repay any unspent monies.
- 5.17 Scheme costings include design, supervision and contract fees will be indexed linked from the date the agreement is signed. The developer will also be required to pay the Council's costs in respect of any necessary traffic management orders or other appropriate costs related to the works.
- 5.18 In occasional situations, it may be appropriate for other accountable parties to implement works or expend funds under the supervision of the Council. Examples of this may include works to canals/waterways or other areas of land over which the Council does not have control.

Public art

- 5.19 The Council encourages the use of public art, either as a permanent or temporary feature, within the urban design process. Public art can be a catalyst for improved environmental quality by upgrading and animating public space, enhancing local character and identity through helping create a 'sense of place', and promoting better visual 'legibility' of the local area by contributing to more recognisable and distinctive places and townscape.

- 5.20 Public art can also serve as an emblem of civic pride or corporate image. It can further improve the marketability of a property and add to the process of urban regeneration. In this sense public art can be seen, both in the short and long term, to add value to a development and to enhance the visual quality of an area.
- 5.21 Examples could include painting, sculpture, photography, film and video, projections, installations, murals, tapestry, decorative ironwork, glass engravings, street and performance art, and elements integral to buildings and surrounding public spaces themselves. Many developers will be committed to public art and high quality design and will positively incorporate public art plans and works when new major developments are being designed and commissioned.
- 5.22 A new development, particularly one which is large enough to attract significant numbers of visitors or to change its context, may be expected to incorporate public art as part of the necessary measures proposed to enhance public spaces and the surrounding townscape. Public art initiatives may more appropriately be an integral part of the design and commissioning process for new development or through the creative management and use of spaces and facilities. Exceptionally they may need to be provided or funded either through the use of section 106 agreements or planning conditions.
- 5.23 The Council will only seek a planning obligation in circumstances which are appropriate and directly related to the proposed development, and where it is not possible to deal with the matter through the imposition of a planning condition. The circumstances where an agreement may be required will be determined by factors such as the precise location, nature and scale of a development, taking into account the nature of the site, the scale of associated public realm schemes and the extent of public accessibility.

Community safety

- 5.24 Achieving community safety in all new developments is an important objective for the Council which is reflected in Core Strategy policy CS17– Making Camden a safer place. Crime preventive design is an important aspect of achieving community safety and should be considered from the earliest stages of a development proposal and integrated into the design. More information on designing safer environments is provided in CPG1 – Design, chapter 09 - Designing safer environments.
- 5.25 Where an otherwise acceptable development could have potentially negative impacts on local community safety, either through its uses , hours of operation, or its design, the Council will require the developer to undertake or fund appropriate site related works or measures to minimise these impacts, which may be secured through a Section 106 Agreement.

5.26 Developments of the following types may require a planning obligation to address community safety issues:

- New proposals (generally those considered “major” or over 1000 square metres) for leisure facilities and venues including uses such as gyms, leisure centres and cinemas that are likely to operate late at night. Any development proposals for entertainment venues will be expected to contribute to improving local safety (e.g. through CCTV coverage);
- Most cafes, restaurants, public houses and clubs with late night opening (generally those that could hold 100 or more people). With applications for new licensed premises (including clubs), the use of security measures around entrances and vicinity management may be required. This will be especially important in the areas identified as having relatively high levels of crime;
- Major town centre and high street developments including retail, hotel, office and mixed use developments that may be open into the night and/or are substantial enough to generate significant increases in visitor numbers and use of local public transport facilities;
- Major residential developments (over 10 units) that suffer from poor public transport accessibility and/or poor pedestrian routes and linkages to public transport facilities, local shops and community facilities;
- Developments located in the vicinity of a canal or waterway; and
- Developments that have specific user or design requirements, such as secured rear servicing, that have implications for the quality of pedestrian routes and streets (e.g. high, blank walls and blank elevations).

5.27 Whilst many measures can be addressed through good design planning obligations (which could take the form of financial or non- financial) may be sought to address a range of issues set out below. Where the measures are directly related to the acceptable development of site they will be secured through section 106 with more area based generic improvements being funded the through the CIL:

- Improving and creating safer routes for pedestrians directly serving and in the vicinity of the development
- Improving and creating safer routes for cyclists directly serving and in the vicinity of the development;
- Improvement or provision of lighting to established or proposed pedestrian routes and cycle routes to make them safer;
- Rerouting of or controlling access to underused and potentially dangerous paths and links such as subways and alleyways which serve a limited purpose;
- Improvements to housing estates in the vicinity of the development at risk of an increase of Anti-social behaviour and crime as a result of it;

- Environmental improvements that contribute towards improving safety in town centres, Central London areas and other areas affected by a development, e.g. landscaping works to improve visibility and removing areas of concealment;
- Improvements to the accessibility, safety and quality of transport infrastructure and facilities serving the development;
- Works to improve the accessibility and safety of waterways and towpaths in the vicinity of the development;
- Community initiatives which may form one strand of crime prevention e.g. youth projects, provision of community safety officers/street wardens;
- Safety improvements to existing or proposed public facilities and car parks where new developments may be located; and
- Providing new and supplementing existing CCTV schemes including management and maintenance.

5.28 The provision of local management plans including community safety management plans to manage the impact of the development on the surroundings may be required. This could include plans for the construction and/or post construction phases of the development.

Development involving heritage assets

- 5.29 Camden has a rich architectural heritage with many special places and buildings from many different eras in the area's history. These places and buildings add to the quality of our lives by giving a sense of local distinctiveness, identity and history. Core Strategy policy CS14 - Promoting high quality places and conserving our heritage and Development Policy DP25 – Conserving Camden's Heritage recognise our responsibility to preserve and enhance the Borough's heritage assets. Further guidance on how these policies will be applied is provided in Camden Planning Guidance 1 – Design, in particular chapter 2 - Heritage.
- 5.30 Many of the potential impacts of development on historic buildings and in archaeological priority and conservation areas can be covered through design and by conditions on the planning permission, for example the need to carry out surveys or the storage and restoration of artefacts.
- 5.31 Some objectives for building and area conservation or archaeology may not be satisfactorily controlled by a condition. Where impacts are off-site, or involve a particularly sensitive or complex programme of works, involving phasing, the Council may require implementation of these measures through a Section 106 Agreement. This would be in accordance with policy DP25.
- 5.32 Depending on the nature of the scheme, the Council may require a developer to:
- put measures in place so that work can be stopped if the developer finds some archaeological artefacts during construction;

- provide, implement and maintain a suitable historic landscape management plan;
- draw up a listed building or conservation maintenance, repair and/or management plan;
- provide and implement a restoration scheme for historic buildings and features perhaps to a set timescale and an agreed specification;
- provide and financially support an information centre including the resourcing of staff;
- carefully record, remove, store, display and maintain specifically identified artefacts or remnants from demolition as part of a new development or in another location;
- safeguard in perpetuity an area containing significant remains and incorporate it into the design of the scheme and allow and manage public access;
- undertake and complete specified works prior to implementation or occupation of any new or enabling development; and
- carry out related surveys.

5.33 A financial contribution or works in kind may also be justified for other site specific works. For example:

- to secure the investigation and protection of archaeological remains and ancient monuments in advance of development;
- to investigate, record and remove any archaeological finds and/or allow and manage public access;
- to reinstate and repair historic features (such as streetlights, bollards and surfaces, such as granite setts, cobblestones and York stone paving) directly affected by the development and its construction impacts;
- installing new paving, lighting or bollards to complement and enhance a directly affected conservation area or heritage asset.

7 Sustainability

- 7.1 Promoting a sustainable Camden is an integral element of our Local Plan documents strategy. Core Strategy policy CS13 – Tackling climate change through promoting higher environmental standards sets out a key part of our overall approach to tackling climate change, which includes promoting higher environmental standards in design and construction.
- 7.2 Core Strategy policy CS13 states that the Council will have regard to the costs and feasibility of measures to tackle climate change within developments (paragraph 13.4). This approach also applies to policy DP22. We will also take into account the cumulative costs of not responding to the need to mitigate and adapt to climate change as well as the long term cost savings, such as on energy and water bills, to future occupiers. Measures to tackle climate change are integral in the development process and are a priority of the Council, therefore, they should not be seen as ‘add-ons’. They are an essential element of sustainable development. For further information on ways to achieve carbon reductions and more sustainable developments please refer to Camden Planning Guidance note 3 – Sustainability.

Biodiversity and habitats

- 7.3 Planning obligations may be used to require developers to carry out works to secure or reinstate existing habitat features, enhance existing features, create new features or to undertake habitat creation schemes. In those very exceptional cases where a developer cannot protect an ecological habitat adjacent to or within the boundaries of the site and in other respects the development is acceptable they will be required to provide an alternative compensatory measure of equal or greater value.
- 7.4 These measures could be land off-site on which the Council or other responsible agency can carry out works and recover the reasonable costs from the developer, or assistance in enlarging or enhancing existing nature conservation assets and habitats and make provision for maintenance of the site.
- 7.5 A planning obligation may also be appropriate where additional monitoring or survey work is considered necessary to confirm that relevant environmental measures have been implemented successfully. Some developments may result in increased activity and affect the value of areas of nature conservation merit adjacent to or within the site.
- 7.6 In certain circumstances legal agreements may be appropriate to restrict types and hours of activities and development rights. They may also be used to control access so as not to damage or harm existing features and to make proper provision for the long-term maintenance of directly affected sites.

Sustainable design and construction

- 7.7 Policy DP22 – Promoting sustainable design and construction contributes towards delivering the strategy in policy CS13 by providing detail of the sustainability standards we will expect development to meet. Meeting the requirements for sustainable design and construction is often achieved in the detailed design or construction phases. Normally, requirements for environmental design will be dealt with using conditions, but in some circumstances, a Section 106 agreement may be required to secure an environmental assessment of the proposed development carried out by an impartial assessment body or a sustainability plan to provide and maintain the highest environmental standards of development.
- 7.8 If they cannot be implemented through the approved design or satisfactorily secured through conditions, the following design features may be specified through a sustainability plan required to be submitted as part of a section 106 Agreement:
- energy efficient design measures;
 - renewable energy facilities;
 - waste and recycling storage facilities;
 - water retention and recycling facilities;
 - heating or cooling systems;
 - internal water consumption levels; and
 - materials sourcing proportions.
- 7.9 Other specific management plans may normally be required through a condition of a planning approval. However, some proposals or aspects of a proposal might generate a requirement for a management plan to deal with some of the following issues, depending on the scale, nature and location of the scheme:
- waste management;
 - energy including renewable energy on site and energy efficiency;
 - facilities management;
 - construction and demolition;
 - water efficiency;
 - Sustainable Drainage Systems (SUDs)
 - community safety;
 - contamination;
 - hazardous substances; and
 - biodiversity.
- 7.10 This list is not exhaustive, and the requirements will be relevant, proportionate and related to the specific nature and potential impacts of the development proposed.

- 7.11 Camden Planning Guidance 3, Sustainability provides further detail on the appropriate standards for different types of development – BREEAM, Ecohomes or the Code for Sustainable Homes. A Section 106 Agreement may be used by the Council to require the developer to carry out and submit a post-construction review to ensure that the development has met the criteria which were approved earlier as part of the estimate and design stage assessments. The Council will not permit occupation of the development until a satisfactory post-construction review has been provided and any issues identified in that review have been satisfactorily addressed

Decentralised energy networks

- 7.12 Developments are expected to connect to a decentralised energy network unless it can be demonstrated that it is not technically feasible or financially viable. Developers should use guidance in CPG3 – Sustainability chapter 5, to determine whether connection to a decentralised energy network, a combined heat and power plant or a contribution towards a decentralised energy network will be expected.
- 7.13 Where justified and clearly related to the development of a site section 106 agreements will be used to secure:
- the installation of CHP/CCHP and the generation and use of energy;
 - details that ensure the plant and its operation is carbon dioxide efficient with regards to operating hours, compatibility with the need (amount and timing) for heat, and requirements for a heat store;
 - details that ensure the design of the heating system is compatible with any nearby decentralised energy network; the export of heat, cooling and/or electricity;
 - developments use heat, cooling and or electricity from a decentralised energy network;
 - sufficient space is provided for future plant, heat exchanges, connection points to either generate, export and take heat, cooling and/or electricity; and
 - a financial contribution towards future decentralised energy networks in the immediate vicinity of the site.

10 Transport

Car free and car capped housing

- 10.1 In order to encourage use of other types of transport and reduce parking stress the Council will use legal agreements to make development car free or car capped. This will limit the number of new residents from being able to obtain on-street parking permits (unless the resident is the holder of a disabled persons badge issued pursuant to Section 21 of the Chronically Sick and Disabled Persons Act 1970.)
- 10.2 Agreements will require the owner of the property to inform the Council's Planning Obligations officer in writing of the official postal address of the property (as issued and agreed by the Council's Street Name and Numbering Department) and to clearly identify the unit number of the car free units specified in the legal agreement before the development is occupied. The owner will also be required to inform any occupants of the property of any car free restrictions (in writing). Please refer to CPG7: Transport on car free and car capped developments for an explanation why the Council imposes these restrictions.
- 10.3 Once planning permission is granted which includes a car free restriction, a copy of the agreement will be passed to the Council's permit issuing team who will maintain a record of properties excluded from obtaining a parking permit. In cases where part of the property is subject to a car free restriction no parking permits will be issued until the owner or developer has clarified in writing with the Council's Planning Obligations officer the official postal address of the property and identified the unit(s) to which the car free restriction applies.

Travel plans

- 10.4 The Council may use legal agreements to require travel plans to manage the impacts of the development where these measures are deemed necessary to control the impacts of the development. A contribution may be sought to cover the staff costs for overseeing the implementation of these plans. Please refer to CPG7:Transport for further information on Travel Plans and Transport Assessments.

Public transport contributions

a) Contributions towards Crossrail

- 10.5 The collection of funds for Crossrail is required under Policy 6.5 of the London Plan (Funding Crossrail and other strategically important transport infrastructure) which states that:
- 10.6 'In view of the strategic regional importance of Crossrail to London's economic regeneration and development, and in order to bring the project to fruition in a suitably timely and economic manner, contributions will be sought from developments likely to add to, or create, congestion on London's rail network that Crossrail is intended to

mitigate. This will be through planning obligations, arrangements for the use of which will be established at strategic level, in accordance with relevant legislation and policy guidance.'

- 10.7 In April 2013 Supplementary Planning Guidance was published by the Mayor explaining how this system will operate alongside the Mayor's Crossrail CIL. In Camden all office, retail and hotel development schemes in Central London and the Euston and Kings Cross Opportunity area which add more than 500sq m of floorspace will need to will need to pay a charge.

Use	Rate per sq m
Office	£140
Retail	£90
Hotels	£61

- 10.8 Applicants' are recommended to consult the 2013 Supplementary Planning Guidance note on the Use of Planning Obligations in the Funding of Crossrail, and the mayoral community infrastructure levy which can be viewed on the Greater London Authority web site.
- 10.9 In general terms, funds collected under the Mayor's CIL for office, retail and hotel uses (currently £50 per sq m) can be deducted from the section 106 charge. The charge will be collected by Camden on behalf of the Mayor. The negotiation of the contribution towards Crossrail will be carried out having regard to Policy 8.2 (Planning Obligations) in the London Plan.

b) Other public transport contributions

- 10.10 Where public transport provision is not adequate to serve a development (in terms of capacity, frequency, reliability, boarding points, access to boarding points and vehicles), and the absence of such provision would make a development unacceptable the Council may seek a contribution to public transport provision in accordance with the statutory tests. This will be assessed through the transport assessment. Please see CPG7: Transport on Assessing transport capacity.
- 10.11 The Council will therefore consider mechanisms such as those listed below to reconcile development proposals with the public transport services which will serve them:
- seeking contributions to existing provision so that they can serve the development better (examples could include enhancing pedestrian routes to stops, providing shelters, better seating and real-time information at stops, or increasing service frequencies); and
 - seeking contributions towards pooled funds to be used towards a particular provision or type of provision once accrued funds are adequate (examples could include funds for bus priority measures extending some distance along a route, for an extension to a route, or

for a co-ordinated series of measures across an area to make public transport safer at night).

- 10.12 The pooling of funds will be limited to 5 contributions per infrastructure project or type of infrastructure. The Council will generally consider seeking contributions towards facilities that assist the use of public transport services which have an existing or proposed boarding point within a convenient walking distance of the development. For bus services, a convenient walking distance is generally up to 400 metres. For rail services, a convenient walking distance is generally up to 800 metres. Funds will not be sought for transport projects which are in Camden's CIL funding list.

Pedestrian, cyclist and environmental improvements

- 10.13 New developments also have wider impacts and may increase the demands on a transport network that at certain times already operates above capacity. Traffic problems include congestion, traffic intrusion (e.g. additional traffic on quiet lanes), road safety, air quality and the impact of additional traffic on other, especially vulnerable, highway users. Such development also increases the need to improve transport alternatives such as walking, cycling and public transport; this requires further investment so as to make these modes more attractive. Where these are site specific and necessary works to make a scheme acceptable they may be secured through planning obligations. Wider strategic and area-based network improvements will generally be addressed through the use of CIL funds.

