

Camden Planning Guidance

# Sustainability

London Borough of Camden

CPG 3



September 2013



## CPG1 Sustainability

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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. This document was updated on 4 September 2013 following statutory consultation to clarify the guidance in Section 9 related to the Code for Sustainable Homes. The Camden Planning Guidance documents (CPG1 to CPG8) replace Camden Planning Guidance 2006.
- 1.2 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?

- 1.3 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.
- 1.4 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 - Code for Sustainable Homes, BREEAM and EcoHomes
- Green roofs, brown roofs and green walls
- Flooding
- Climate change adaptation
- Biodiversity
- Urban food growing



## 4 Energy efficiency: existing buildings

### KEY MESSAGES

As a guide, at least 10% of the project cost should be spent on environmental improvements

Potential measures are bespoke to each property

Sensitive improvements can be made to historic buildings to reduce carbon dioxide emissions

- 4.1 Many of the sections in this guidance focus on reducing the environmental impact of new buildings, however Camden's existing buildings account for almost 80% of the borough's carbon emissions. Therefore it is essential that these buildings make a contribution towards the borough's reduction in carbon dioxide emissions.
- 4.2 This section provides more information on how existing buildings can be more energy efficient. It builds on the previous section, which covered Stage 1 of the energy hierarchy and improving energy efficiency in new buildings.
- 4.3 Camden Core Strategy Policy CS13, paragraph 13.9 expects development or alterations to existing buildings to include proportionate measures to be taken to improve their environmental sustainability, where possible.

### WHAT DOES THE COUNCIL EXPECT?

- All buildings, whether being updated or refurbished, are expected to reduce their carbon emissions by making improvements to the existing building. Work involving a change of use or an extension to an existing property is included. As a guide, at least 10% of the project cost should be spent on the improvements.
- Where retro-fitting measures are not identified at application stage we will most likely secure the implementation of environmental improvements by way of condition. Appendix 1 sets out a checklist of retro fit improvements for applicants.
- Development involving a change of use or a conversion of 5 or more dwellings or 500sq m of any floorspace, will be expected to achieve 60% of the un-weighted credits in the Energy category in their EcoHomes or BREEAM assessment, whichever is applicable. (See the section on Sustainability assessment tools for more details).
- Special consideration will be given to buildings that are protected e.g. listed buildings to ensure that their historic and architectural features are preserved.

### How can I make an existing building more energy efficient?

- 4.4 There are many opportunities for reducing the energy we use in our homes. The design and the materials used can make a significant

contribution. Simple measures, such as closing curtains at dusk, can help stop heat loss. Installing condensing boilers, heating controls and energy saving light bulbs and appliances reduce energy use and carbon dioxide emissions significantly. Reduced energy use also means lower energy bills.

- 4.5 When dealing with historic buildings a sensitive approach needs to be taken. Guidance on this is provided later within this section.

### **Draught proofing**

- 4.6 There is a range of effective draft proofing measures you can use to help insulate your home:

- Fix brush seals to exterior doors and letterboxes, and tape to ill-fitting doors;
- Put reflector panels behind radiators to reflect heat into the room; and
- Use shutters for windows and/or thicker curtains that do not drape over radiators.

### **Energy efficient lighting**

- 4.7 In most homes lighting accounts for 20% of the electricity bill. It is easy to cut waste by simply turning off lights and adjusting blinds and curtains to let in more natural light. When lighting a room, always use energy saving light bulbs.

### **Windows**

- 4.8 Windows let light and heat into your home, but they can also let a lot of heat out when temperatures are colder outside than inside. If you are replacing windows or building an extension, thermally efficient glazed windows will provide more effective insulation than older windows. Double glazed panels can now be fitted into some original wooden frames, without the need to replace the whole frame. This helps preserve the historic character of the building.

- 4.9 The use of PVCu windows is not considered to be acceptable in historic buildings, conservation areas and listed buildings as this material detracts from their historic significance and the architectural qualities of historic buildings and places. See below for more information on listed buildings and conservation areas.



- 4.10 There is a range of simple measures which can improve the energy efficiency of windows. These include:

- General repair and maintenance – which can substantially improve the energy efficiency of windows, as much of the heat lost through windows is through leaks and cracks.



- Installation of draught seals – which can help to further eliminate cold draughts and leaks.
- Secondary glazing – adding a second sheet of glass or plastic to a window frame can improve sound-proofing as well as energy efficiency. If carefully designed it can be unobtrusive and appropriate in a listed property or one within a conservation area.
- Secondary protection - e.g. shutters or heavy curtains, although these are predominantly a night-time option.

### **Insulation**

- Loft insulation - Your home may already have some loft insulation, but if the material is thin it will not be saving as much energy and money as it could. Fitting proper loft insulation is the most cost-effective way of saving energy. As a guide, your loft insulation should be around 250mm thick to be effective.
- Floor insulation - If you have any gaps between your floorboards and skirting boards, you can reduce heat loss by sealing them with a regular tube sealant, like the silicon sealant used around the bath. It is also very useful to insulate underneath the floorboards at ground floor level.
- Cavity wall insulation involves filling the gap between the bricks with insulating material. It can reduce heat loss by up to 60%. Most homes built after 1930 will have a cavity that could be insulated
- Solid wall insulation (internal or external) – buildings constructed before 1930 almost always have solid wall construction. The only way to insulate solid walls is to add insulation to the inside or outside of the wall. External insulation involves adding a decorative weather-proof insulating treatment to the outside of your wall while internal insulation involves attaching insulating plaster board laminates or wooden battens in-filled with insulation to the inside of the wall. Generally 100mm of insulation is required to be effective. Solid wall insulation, whether internal or external, will require relocation of the services attached to the wall e.g. radiators, electrical sockets, drainpipes.

### **Heating and hot water**

- New boiler - Replacing an old boiler (more than 10 years old) with a high efficiency condensing boiler and heating controls to provide heating and hot water could significantly cut energy consumption.
- New/upgraded central heating – If you install a new boiler the rest of your central heating system may need upgrading, for example large, old radiators could be replaced with smaller, more efficient radiators that are better suited to the new boiler
- Upgrading heating controls - You can install heating controls that allow you to control the temperature in different parts of your building. These can be included as an electronic timer control for your boiler, room thermostats for your main living area and thermostatic valves on all your radiators.

- Insulating hot water pipes and your hot water tank will retain hot water for longer, and save money on heating it.

- 4.11 See the Council's website for further information for householders on various retro-fitting measures and whether permission is required.

### **Generating your own energy**

- 4.12 Buildings can also reduce their energy consumption by generating their own energy in the form of heat or electricity using low carbon and renewable technologies which use little or no energy. See section 6 of this guidance on renewable energy for more advice on the technologies that are available and appropriate in Camden.

#### **CASE STUDY**

Renovated Victorian Eco-home: A semi-detached Victorian house in one of Camden's conservation areas was transformed in 2007, reducing its carbon footprint by 60%. Works undertaken to improve energy efficiency included:

- internal solid wall insulation;
- a new fully insulated roof;
- underfloor insulation;
- double glazing; and
- draught proofing.

Heat is provided by an efficient condensing boiler complemented by solar hot water panels on the rear extension; power to the panels' water pumps is provided by solar panels. Other improvements include an upgraded ventilation system with heat recovery, water saving features (e.g. rainwater harvesting for garden irrigation, dual flush toilets), low energy lighting and energy monitoring.

For further information on this property and improvements to other properties of a similar age see [www.sd-commission.org.uk](http://www.sd-commission.org.uk)



### **What if my building is historic, Listed or in a conservation area?**

- 4.13 Historic buildings have special features that need to be conserved and therefore need to be treated sensitively. This section explains how energy efficiency improvements can be achieved without causing harm to the historic environment.
- 4.14 Reflecting the special qualities of historic buildings, additional consents may be required for statutorily designated buildings (listed buildings, or those in conservation areas). The Council's website has more detailed guidance on what types of permission are required. The Council will aim to balance the conservation of fuel and power against the need to conserve the fabric of the building.

- 4.15 Historic buildings can perform well in terms of energy efficiency. When looking to install high energy efficiency measures, however, it is essential to ensure that works do not compromise the character and significance of the building or area.
- 4.16 In order to identify the most appropriate measures, we recommend taking the following approach, which takes into account measures best suited to individual buildings and households (i.e. taking human behaviour into consideration as well as the building envelope and services):
- Assess the heritage values of the building;
  - Assess the condition of the building fabric and building services;
  - Assess the effectiveness and value for money of measures to improve energy performance;
  - Assess their impact on heritage values; and
  - Assess the technical risks.
- 4.17 A range of thermal efficiency measures can then be implemented, which avoid harm to the historic environment. Ranked according to their impact on heritage and the technical risks, these include:
1. Ensure that the building is in a good state of repair
  2. Minor interventions - upgrade the easier and non-contentious elements:
    - insulate roof spaces and suspended floors;
    - provide flue dampers - (close in winter, open in summer);
    - use curtains, blinds and window shutters;
    - provide energy efficient lighting and appliances
    - draught-seal doors and windows;
    - provide hot water tank and pipe insulation.
  3. Moderate interventions - upgrade vulnerable elements:
    - install secondary (or double) glazing (if practicable);
  4. Upgrade building services and give advice to building users on managing them efficiently:
    - install high-efficiency boiler and heating controls;
    - install smart metering;
    - install solar panels, where not visible from the street or public spaces.
  5. Major interventions - upgrade more difficult and contentious elements (where impact on heritage values and level of technical risk shown to be acceptable)
    - provide solid wall insulation.
- 4.18 When considering refurbishment, it is the owner's responsibility to ensure that any work does not cause unlawful or unnecessary damage to the building.

- 4.19 The Energy Savings Trust and English Heritage have published detailed guidance on refurbishing and improving the efficiency of historic buildings. See the Further Information section below for details of where to find these guides.
- 4.20 Before carrying out any work, find out if your property is listed, in a conservation area or subject to any other planning restrictions such as an Article 4 Direction. Then check if any of the proposed works require consent – such as listed building consent, planning permission or conservation area consent. See CPG1 Design for more information on Camden's historic buildings. The Council's website also provides detailed information on these matters.

**Article 4 Direction**

Removes the permitted development rights awarded to properties by legislation and means a planning application has to be made for minor works that usually do not need permission.

## Further information

Energy efficiency in existing buildings:

The Energy Saving Trust	<p>A national agency promoting energy efficiency in the domestic sector. For information on home energy efficiency measures including grants, visit their website: <a href="http://www.energysavingtrust.org.uk">www.energysavingtrust.org.uk</a></p> <p>The Energy Saving Trust also provides technical guidance on energy efficiency in the Publications and Case Studies section of their website.</p> <p><a href="http://www.est.org.uk/housingbuildings/publications">www.est.org.uk/housingbuildings/publications</a></p> <p>Recommended Best Practice in Housing technical guidance documents:</p> <ul style="list-style-type: none"> <li>• CE120 - Energy Efficient Loft Extensions</li> <li>• CE122 - Energy Efficient Domestic Extensions</li> </ul>
T-ZERO	<p>A free interactive web-based tool that allows you to identify the optimal low-carbon solutions for your home. Once you have inputted your home's details, such as type of house/flat, amount of insulation in roof/walls and whether or not you have double glazing, the system identifies a tailored list of optimal insulation, heating, and renewable energy options (and the costs of each).</p> <p><a href="http://www.tzero.org.uk">www.tzero.org.uk</a></p>
GreenSpec	<p>Provides details of products and how they can be used to improve the efficiency of your home or building</p> <p><a href="http://www.greenspec.co.uk">www.greenspec.co.uk</a></p>
The Planning Portal	<p>Provides information on what alterations you can make to your home without requiring planning permission</p> <p><a href="http://www.planningportal.gov.uk">www.planningportal.gov.uk</a></p>

## Energy efficiency in historic buildings:

English Heritage	<p>English Heritage, the UK government's adviser on the historic environment, has produced the following guidance:</p> <ul style="list-style-type: none"> <li>• A Guide to Energy Conservation in Traditional Buildings, which looks at a range of improvements that can be made to reduce the heat lost through a building's walls, windows, floor and roof. This guide is one of a series looking at reducing energy consumption in traditionally constructed homes. <a href="http://www.english-heritage.org.uk/publications/energy-conservation-in-traditional-buildings/">http://www.english-heritage.org.uk/publications/energy-conservation-in-traditional-buildings/</a></li> <li>• Meeting building regulations Part L in existing buildings. The purpose of the guidance is to help prevent conflicts between the requirements of the regulations and the conservation of historic and traditionally constructed buildings. <a href="http://www.english-heritage.org.uk/publications/energy-efficiency-historic-buildings-partl/">http://www.english-heritage.org.uk/publications/energy-efficiency-historic-buildings-partl/</a></li> <li>• saving energy in historic buildings at <a href="http://www.climatechangeandyourhome.org.uk">www.climatechangeandyourhome.org.uk</a> which includes very detailed information about a wide range of improvements, e.g. insulating solid walls.</li> </ul>
The Energy Saving Trust	<p>Provides technical guidance on energy efficiency in the Publications and Case Studies section of their website. <a href="http://www.est.org.uk/housingbuildings/publications">www.est.org.uk/housingbuildings/publications</a></p> <p>This includes their Recommended Best Practice in Housing technical guidance documents: CE138 - Energy Efficient Historic Homes</p>
The Victorian Society	<p>Has information on their website on greening Victorian homes - <a href="http://www.victoriansociety.org.uk/advice/greening">www.victoriansociety.org.uk/advice/greening</a></p>
Building Conservation	<p>Provides a directory of useful contacts, grant sources and websites <a href="http://www.buildingconservation.com">www.buildingconservation.com</a></p>
The Sustainable Development Commission	<p>Provides case studies of existing homes that have improved their energy efficiency, including the example detailed in this section. <a href="http://www.sd-commission.org.uk">www.sd-commission.org.uk</a></p>



## Appendix 1: Checklist for retro-fitting measures

Applies to all:

- changes of use
- conversions
- extensions over 30sq m

Please note that not all the measures will be appropriate for all buildings and some measures will require planning permission e.g. alterations to the front of a property

Measure	Specification	Evidence
Draught proofing		
Reflective radiator panels		
Overhauling/upgrading windows		
New boiler		
LED lighting		
Meters, timers, sensors, controls on heating or lighting		
Mechanical Ventilation with Heat Recovery		
Insulation		
Hot water tank & pipes		
Roof		
Walls Internal		
Walls External		
Floor		
Renewable energy technology		
Solar PV panels		
Solar thermal (hot water) panels		
Ground source heat pumps		
Double glazed windows / Secondary glazing		
Combined heat and power unit		
Green or brown roof		
Rainwater harvesting		
Other measures		
Join the Camden Climate Change Alliance (commercial only)		
Off-setting contribution £3,000		



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

## 2 Air quality

### KEY MESSAGES:

- All of Camden is a designated Air Quality Management Area due to the high concentrations of nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>).
- All developments are to limit their impact on local air quality.

2.1 Poor air quality can harm health and the environment. The Council aims to make sure that new development does not harm air quality. This guidance provides advice on how to address air quality issues in planning applications.

2.2 Camden Core Strategy policy CS16 - *Improving Camden's health and well-being* and policy DP32 – *Air quality and Camden's Clear Zone* of the Camden Development Policies sets out our approach to air quality in the borough.

2.3 *Planning Policy Statement PPS23: Planning and Pollution Control* contains the Government's core policies and principles on air quality and air pollution. The London Plan outlines regional policies related to protecting local air quality during the planning process.



### Air quality in Camden

2.4 An Air Quality Management Area (AQMA) must be declared by the local authority for an area that is unlikely to meet the national air quality targets for specific air pollutants. The authority then produces a Local Air Quality Action Plan. See Camden's website for our air quality plan.

2.5 The whole of Camden is an Air Quality Management Area (AQMA) as it does not meet national air quality targets for nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>). The main sources of air pollution in Camden are road transport and gas boilers. The Council's Air Quality Action Plan outlines measures to reduce emissions from the key sources of air pollution in the borough. Included in the plan are measures to minimise and control NO<sub>x</sub> and PM<sub>10</sub> emissions associated with new developments both during the construction of a building and its future use.

2.6 Air quality is particularly poor in the south of borough which is characterised by high levels of traffic. We will only grant planning permission for development that significantly increases travel demand in

the south of the borough where it includes appropriate measures to minimise the transport impact of development.

- 2.7 Where appropriate we will seek developments to include monitoring equipment to allow us to better understand local air quality.

#### **WHAT DOES THE COUNCIL REQUIRE?**

The Council's overarching aim is for new development is to be 'air quality neutral' and not lead to further deterioration of existing poor air quality.

You will be required to include mitigation and offsetting measures to deal with any negative air quality impacts associated with your development proposals. At the same time your development should be designed to minimise exposure of occupants to existing poor air quality.

To manage and prevent further deterioration of air quality in Camden, we will require an air quality assessment with planning applications for development that could have a significant negative impact in air quality. This impact can arise during both the construction and operational stages of a development as a result of increased NO<sub>x</sub> and PM<sub>10</sub> emissions.

- 2.8 An air quality assessment will also be required for a proposal if it introduces uses that are susceptible to poor air quality, such as housing or a school, into areas of particularly poor air quality.
- 2.9 The Council will not grant planning permission for developments that could significantly harm air quality or introduce people into areas of elevated pollution concentrations, unless mitigation measures are adopted to reduce the impact to acceptable levels and protect public exposure (see paragraph 32.4 of policy DP32 of the Camden Development Policies).
- 2.10 Although all of Camden is covered by an AQMA we will only require an air quality assessments where development could potentially cause significant harm to air quality as set out in the table below.

**An Air Quality Assessment is required in developments:**

- with potential to significantly change road traffic on any road exceeding 10,000 vehicles per day. Significant changes include:
  - increase in traffic volumes > 5% (Annual Average Daily Traffic (AADT) – or peak);
  - lower average vehicle speed or significant increase in congestion;
  - significant increase in the percentage of HGVs;
- that introduce, or increase car parking facilities by, 100 spaces or more;
- with commercial floorspace of more than 1,000sq m;
- with more than 75 homes;
- where people will be exposed to poor air quality for significant periods of the day, in particular developments located on busy roads;
- involving the following - biomass boilers, biomass or gas combined heat and power (CHP);
- involving industrial or commercial floorspace regulation under the Environmental Permitting (England and Wales) Regulations (EPR) which will be subject to Environmental Assessment under the Town and Country Planning (Environmental Impact Assessment) Regulations 1999.

**What should an air quality assessment cover?**

2.11 Air quality assessments for developments potentially contributing to poor air quality are to include the following:

- a) An inventory of the PM<sub>10</sub> and NO<sub>x</sub> emissions associated with the proposed development, including the type and quantity of emission concentrations, during the construction and operational phase. This shall cover transport, stationary and mobile emission sources.
- b) The application of atmospheric dispersion modelling to predicted existing and future NO<sub>2</sub> and PM<sub>10</sub> concentrations, both with and without the proposed development. Dispersion modelling shall be the carried out in accordance with Air Quality and Planning Guidance, London Councils (2007) and Technical Guidance Note (TG09). (Specific guidance for modelling combustion plant emissions can be obtained from the Council's Sustainability Team – see Useful Contacts at the end of this section).
- c) An assessment of the significance of air quality impacts during both the construction and operational phases. Reference shall be made to the Environmental Protection UK Guidance Note: Development Control: Planning for Air Quality (2010 Update).
- d) Consideration of the potential cumulative impacts on air quality which may arise during the construction or operational phases as a result of emissions arising from other developments within a 100m radius of the development.
- e) Where a biomass boiler or combined heat and power (CHP)/combined cooling, heating and power (CCHP) will be used for

on site energy generation, you are to complete the Council's Air Quality Information Request Form. This requires specific technical details related to the appliance, fuel type, emission concentrations, maintenance and exhaust stack. The forms can be obtained from Camden's Air Quality Officer or the Council's air quality webpage under Environment.

- f) Applications which include biomass boilers or biomass CHP, the air quality assessment shall compare the impact of emissions from the intended biomass boiler/CHP and a gas boiler/CHP of identical thermal rating.
- g) An indication of the number of new occupiers and users of the site who will be exposed to poor air quality as a result of the development (the occupiers/users should also be shown on a map). For further information please refer to the Environmental Protection UK Guidance Note: Development Control: Planning For Air Quality (2010 Update).
- h) An assessment of the impacts on air quality of the demolition and construction phase and details of mitigation methods for controlling dust and emissions from plant and machinery. Reference should be made to the Best Practice Guidance: The control of dust and emissions at construction and demolition, London Councils (2006).
- i) An outline of, and justification for, mitigation measures associated with the design, location and operation of the development in order to reduce air pollution and exposure to poor air quality.

### **Developments containing sensitive uses**

- 2.12 Developments which will not result in additional NO<sub>x</sub> and/or PM<sub>10</sub> emissions and present no risk in worsening air quality, but introduce new sensitive uses to an area which breaches the air quality standards for NO<sub>2</sub> or PM<sub>10</sub> need to submit an assessment of the local air quality but can omit requirements B, D and E above.

### **What measures can reduce air pollution emissions and protect public exposure?**

- 2.13 Various actions can be taken to mitigate air pollution emissions arising from the construction and operational phases of a new development. Additional actions can be adopted to curtail public exposure in areas where air pollution levels are particularly high. These should be taken into account during the design stage of an application. The key measures are detailed below:

#### **Demolition and construction**

- 2.14 The impact of the construction and demolition phases of a development on air quality must be taken into account as part of your planning application. Exhaust





emissions from construction vehicles and machinery such as generators, piling and grinding equipment can result in:

- dust emissions;
- gases (NO<sub>x</sub>); and
- fine particles.

2.15 Controlling dust emissions is important to:

- prevent disturbance to local residents due to soiling;
- minimise damage to vegetation; and
- reduce impacts on local PM<sub>10</sub> concentrations, thereby protecting public health.

2.16 We may require PM<sub>10</sub> monitoring, before and during the construction and demolition phase, dependant upon the scale of the proposed development.

2.17 We will encourage best practice measures to be adopted during construction and demolition work to reduce and mitigate air pollution emissions. You will be encouraged to adopt the procedures outlined in the London Council's best practice guidance *The control of dust and emissions from construction and demolition*. These focus around three principles to control emissions – prevention, suppression and containment. We will expect you to include the following items in construction management plans:

- Identification of whether demolition/construction represents a low, medium or high risk site in the context of air quality.
- Identification of the best practice measure required to control and mitigate plant and vehicles exhaust emissions.  
(See section 8 of this Guidance on Construction management plans for further details).

#### **Distance of impacts**

Depending of the size, location and characteristics of your development, impacts from demolition and construction phases can occur at distance of 10 to 500m.

### **Building location and design**

2.18 The location of a development has a direct influence on exposure to elevated air pollution levels. This is particular relevant where developments include sensitive uses such as hospitals, schools and children's playgrounds. Suitable building design, layout and orientation can avoid increasing exposure whilst minimising energy demand and energy loss. The Council requires the impact of outdoor air pollution on indoor air quality in new developments to be taken into account at the earliest stages of building design.

- 2.19 The location of outside space is also an important consideration and any exposure of gardens and roof terraces should be screened and, where practicable, minimised through appropriate positioning and orientation. You should take care not to locate flues and exhaust vents in close proximity to recreational areas such as roof terraces or gardens. An energy efficient building design can minimise air pollution resulting from the use of gas boilers. Adopting sustainable building design (e.g. the Code for Sustainable Homes and the Building Research Establishment Environmental Assessment Method (BREEAM)), will reduce thermal heat losses and result in less gas use leading to lower NO<sub>x</sub> emissions. See Camden Planning Guidance 3 – Sustainability for further details on the Code and BREEAM.

### **Gas boilers**

- 2.20 Gas boilers are a large source of NO<sub>x</sub> emissions in Camden. In order to minimise NO<sub>x</sub> emissions arising from heating and hot water systems the Council requires boilers fitted in new development to achieve a NO<sub>x</sub> emissions of <40 mg/m<sup>3</sup> and an energy efficiency rating >90%.

### **Renewable Energy and Combined Heat and Power**

- 2.21 Core Strategy policy CS13 promotes the use of renewable energy technologies to reduce carbon emissions and tackle climate change. The adoption of renewable energy and energy efficiency technologies in major developments can minimise air pollution emissions through reductions in gas consumption required for heating and hot water. These include solar thermal collectors and ground source heat pumps in addition to gas and hydrogen fuel cell combined heat and power (CHP) or combined cooling heat and power (CCHP).

#### **Hydrogen fuel cell**

A fuel cell is an electrochemical cell that converts energy from a fuel (hydrogen) into electricity.

- 2.22 Biomass boilers however can give rise to higher emissions of NO<sub>x</sub> and PM<sub>10</sub> emissions than conventional gas boilers. Permission to operate these appliances will only be granted if the air quality impacts are demonstrated to be equivalent or lower than those associated with a conventional gas boiler of similar thermal rating. Where an assessment demonstrates adverse effects on air quality, this type of biomass boiler should not be used in the development.
- 2.23 You are advised to refer to the national guidance note *Biomass and Air Quality Guidance Note for Local Authorities*, published by Environmental Protection UK. In cases where emissions released from a biomass boiler do not lead to negative impacts on air quality, the



appliance will be required to meet high standards of air pollution control with particular emphasis given to:

- boiler design and operation;
- pollution abatement equipment;
- servicing and maintenance;
- fuel quality, storage and delivery; and
- exhaust stack height.

2.24 We will require evidence that the exhaust stack height of gas CHP/CCHP has been appropriately calculated to guarantee that NO<sub>x</sub> emissions are effectively dispersed, and do not risk increasing ground level NO<sub>2</sub> concentrations. An air quality assessment will be required for developments including CHP/CCHP. Where the assessment reveals a negative impact on air quality, mitigation measures will be required entailing the best available techniques to reduce emissions. This includes the installation of NO<sub>x</sub> abatement technology such as:

- use of low NO<sub>x</sub> burners; or
- increasing stack height.

2.25 A programme of on-going maintenance and servicing will be necessary to minimise gas emissions released from CHP/CCHP.

2.26 The Council will use Section 106 obligations to set requirements for controlling emissions from biomass boilers and CHP/CCHP.

### **Traffic Reduction**

2.27 Reducing car usage caused by new developments is the principle way to minimise vehicle emissions and protect local air quality. Please refer to transport policy *CS11 - Promoting sustainable and efficient travel* in the Camden Core Strategy for more on our approach to improving air quality through transport measures. This requires:

- the adoption of car free and car capped developments;
- provision cycling facilities to encourage sustainable transport;
- green travel plans;
- provision of car club bays; and
- infrastructure for low emissions vehicles such as electric vehicle recharging points.

**Further information**

Planning Guidance	<ul style="list-style-type: none"> <li>• Planning Policy Statement 23: Planning and Pollution Control (2004)</li> <li>• Planning Policy Statement 23 Annex 1: Pollution Control, Air and Water Quality</li> </ul> <p>These documents outline the government's advice on methods of planning for pollution control.</p>
Air Quality Guidance	<ul style="list-style-type: none"> <li>• Technical Guidance Note: Assessment of Air Quality Issues of Planning Applications, Association of London Government (ALG), 2006 This provides technical advice on how to deal with planning applications that could have an impact on air quality.</li> <li>• Development Control: Planning for Air Quality. Environmental Protection UK, 2010 This advises of the significance of air quality assessments within the planning process.</li> <li>• Best Practice Guidance - The control of dust and emissions from construction and demolition (London Councils) 2006 The aim of this guidance is to protect the health of on-site workers and the public and to provide London-wide consistency for developers.</li> <li>• Biomass and Air Quality Guidance for Local Authorities (Environmental Protection UK) 2009 This guidance details procedures for assessing and managing the effects of biomass on air quality and provides background material.</li> <li>• Low Emission Strategies (Beacon Low Emission Group) 2009 This provides advice on how to reduce emissions of air pollutants and greenhouse gases from transport.</li> </ul>
Useful Contacts	<p>Camden Council Corporate Sustainability Team  <a href="http://www.camden.gov.uk/smallsteps">www.camden.gov.uk/smallsteps</a> (020 7974 4444)          provides guidance on air quality in Camden</p>

### 3 Contaminated land

#### KEY MESSAGES:

- Contaminated land can pose a serious risk to health.
- The Council will expect developers to identify and assess potentially contaminated land at an early stage.
- Developers will be expected to follow the Council's Contaminated Land Strategy.

3.1 This guidance provides advice on how to approach the development of potentially contaminated sites. This guidance should be read in conjunction with Core Strategy policy CS16 – *Improving Camden's health and well-being*.

3.2 To protect the local environment and the health and well-being of residents, workers and visitors, we will carefully assess any proposals for the redevelopment of sites that:

- are known to be contaminated;
- have the potential to be contaminated, through previous or current uses; or
- are located in close proximity to these sites.

#### What is contaminated land?

3.3 Contaminated land is land that has been polluted with harmful substances to the point where it now poses a serious risk to health and the environment.

#### Causes of land contamination

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

3.4 The most common pollutants of land are metals and organic compounds. Typical land uses that can cause land contamination include petrol stations and gas works.

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

3.6 Contaminants may still be present above acceptable levels even though the polluting use stopped many years ago. 'Contaminated land' has a specific legal definition which is used in relation to an 'unacceptable risk'

of harm to health. For more information please see Department for Environment, Food and Rural Affairs (DEFRA) web pages.

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

### **What should you do if your site is contaminated or potentially contaminated?**

- 3.8 In accordance with Planning Policy Statement (PPS) 23: Planning and Pollution Control, if you propose a development on contaminated or potentially contaminated land, it is your responsibility to ensure that contaminated land issues are considered at the planning application stage.
- 3.9 Where contamination is known or suspected on a site or the proposed use would be vulnerable to contamination, we will expect you to provide, as a part of your planning application, the necessary information as outlined in this chapter to determine whether the proposed development is acceptable.
- 3.10 The information required will need to be sufficient for us to determine:
- the existence or otherwise of contamination;
  - the nature of the contamination and the risks it may pose; and
  - whether these can be satisfactorily reduced to an acceptable level.
- Please refer to Annex 2 of PPS23 for further details.
- 3.11 The identification and assessment of land contamination issues is to be carried out by a qualified and experienced consultant, in consultation with the Council's Environmental Health Service. The contamination report is to be submitted with your planning application so that contamination issues can be assessed at the planning application stage and any necessary remediation measures secured through conditions or a Section 106 legal agreement.
- 3.12 The Council's Contaminated Land Strategy sets out how we will:
- deal with contaminated land;
  - make information available to the public; and
  - implement the requirements of the Part IIa of the Environmental Protection Act 1990 and Environment Act 1995. This and other documents are available on the Council's website ([www.camden.gov.uk/contaminatedland](http://www.camden.gov.uk/contaminatedland)) and should be referred to where contamination is a potential issue.
- 3.13 If there is any existing contamination (or potential risk of contamination) to ground or surface water or to land with statutory nature conservation designation, either from the existing state of land or from proposed



works, the Environment Agency must be informed and their consent obtained to any works. The English Heritage Archaeological Section should be contacted where contaminated land is included within an Archaeological Priority Area.

**Archaeological Priority Area**

As specified in the Camden Proposals Map, and Map 4 of the Camden Development Policies, to help protect archaeological remains that might be affected by development. See policy DP25 Conserving Camden's Heritage of the Camden Development Policies for further guidance on the borough's Archaeological Priority Areas.

- 3.14 Your report should comply with the policies and advice given in PPS23 and its annexes. There are also various best practice documents and British Standards that should be followed. The London Boroughs have produced a local guidance document titled *Contaminated Land: A Guide to Help Developers Meet Planning Requirements*. This document provides guidance on what information should be contained within a contamination report and is available on Camden's website.

## Supporting documents

PPS23	<p>Planning Policy Statement 23: Planning and Pollution Control. Office of the Deputy Prime Minister, November 2004. <a href="http://www.odpm.gov.uk">www.odpm.gov.uk</a></p> <p>In particular Annex 2 should be referred to as this section deals specifically with contaminated land issues. The policies and advice contained in PPS23 is not repeated in this guidance and therefore should be consulted for detailed guidance.</p>
Camden Council Website	<p>Information on the Council approach to management of land contamination, information on historical land uses in the Borough and a copy of the London Borough's 'Guide for Developers on Contaminated Land'.</p> <p><a href="http://www.camden.gov.uk/contaminatedland">http://www.camden.gov.uk/contaminatedland</a></p>
Department of Food, Environment and Rural Affairs	<p>has published a number of documents on land contamination. These can be found at:</p> <p><a href="http://www.defra.gov.uk/environment/land/contaminated/index.htm">www.defra.gov.uk/environment/land/contaminated/index.htm</a></p>
Environment Act 1995	<p>Available from Stationary Office:</p> <p><a href="http://www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm">www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm</a></p>

## Useful Contacts

Camden Environmental Health Service (Contaminated Land) web page [www.camden.gov.uk/contaminatedland](http://www.camden.gov.uk/contaminatedland) has more information on the Council's approach to contaminated land.

English Heritage [www.english-heritage.org.uk](http://www.english-heritage.org.uk) can provide advice on the approach to contaminated land within Archaeological Priority Areas.

## 4 Noise and vibration

### KEY MESSAGES:

We will ensure that noise and vibration is controlled and managed to:

- Limit the impact of existing noise and vibration sources on new development; and
- Limit noise and vibration emissions from new development.

- 4.1 The impact of noise and vibration can have a major affect on amenity and health and can severely affect people's quality of life.
- 4.2 Policy *DP28 – Noise and Vibration* of the Camden Development Policies aims to ensure that noise and vibration is controlled and managed. It sets out the Council's thresholds for noise and vibration and goes beyond the thresholds set out in Planning Policy Guidance 24: Planning and noise (see below). DP28 contains noise/vibration thresholds for the day, evening and night.



### **How can the impact of noise and vibration be minimised?**

4.3 The main sources of noise and vibration in Camden are generated from:

- Road traffic;
- Railways;
- Industrial uses;
- Plant and mechanical equipment;
- Entertainment uses (such as bars and nightclubs); and
- Building sites.

4.4 For details on how to manage noise and vibration from building sites see section 8 on Construction management plans.

### **Ways to minimise the impact of noise on your development**

#### **Design**

- Locating noise sensitive areas/rooms away from the parts of the site most exposed to noises;
- Creating set backs;
- Designing the building so its shape and orientation reflect noise and protect the most sensitive uses;
- Stacking similar rooms (such as kitchens and living rooms) above each other; and
- Positioning non-residential uses closer to the noise source in mixed use developments.

#### **Built fabric**

- Insulating and soundproofing doors, walls, windows, floors and ceilings;
- Sealing air gaps around windows;
- Double glazing;
- Including architectural fins (where appropriate); and
- Laminated glass.

#### **Landscaping and amenity areas**

- Incorporating planting, landscaping, fencing/barriers and solid balconies to reflect sound.

4.5 Our preference for controlling noise:

- Begins with attempting to reduce noise at its source;
- Then to separate the development (or at least the sensitive parts e.g. habitable rooms) from the source or to use noise barriers; and

- Finally construction materials such as acoustic glazing should be used.

- 4.6 When you consider measures to minimise noise and vibration you also need to take into account our policies on design and crime prevention. You should consider the implications of noise and vibration at the beginning of the design process to enable prevention or mitigation measures to be designed into the scheme. Poorly designed schemes will not be acceptable.
- 4.7 Proposals will be expected to include appropriate attenuation to alleviate or mitigate the impact of noise and vibrations to an acceptable level, as set out in policy *DP28 – Noise and vibration* of the Camden Development Policies. Where appropriate, the Council will consider the cumulative impact of noise sources (for example, air conditioning units).
- 4.8 Everyday domestic activities can also generate noise, e.g. communal entrances and roof terraces. Sufficient sound insulation must be provided between dwellings to prevent the transmission of noise between them, particularly in conversions where new partition walls are often deficient in terms of insulation.

### **Ways to mitigate noise emitted by your development**

#### **Engineering**

- Reducing the noise emitted at its point of generation (e.g. by using quiet machines and/or quiet methods of working);
- Containing the noise generating equipment (e.g. by insulating buildings which house machinery and/or providing purpose-built barriers around the site); and
- Protecting any surrounding noise-sensitive buildings (e.g. by improving sound insulation in these buildings and/or screening them by purpose-built barriers).

#### **Layout**

- Ensuring an adequate distance between source and noise-sensitive buildings or areas; and
- Screening by natural barriers, buildings, or non-critical rooms in the development.

#### **Administrative**

- Limiting the operating time of the source;
- Restricting activities allowed on the site; and
- Specifying an acceptable noise limit.

- 4.9 If your proposal could result in noise and vibration that would cause an unacceptable impact to nearby uses or occupiers, or proposes sensitive uses near a source of noise or vibration and cannot be adequately attenuated then planning permission is likely to be refused.

Developments will be assessed against the thresholds set out in policy DP28.

### **How will the Council manage the impact of noise and vibration?**

- 4.10 Detailed acoustic/noise and vibration information in the form of a report will be required if your development proposes:
- The installation of plant, ventilation or air conditioning equipment;
  - A use that will create significant noise (e.g. new industry, nightclub)
  - A noise-sensitive development in an area where existing noise sources are present (e.g. an existing industrial site, busy road, railway line);
  - A use that will generate a significant amount of traffic.

#### **Noise sensitive developments**

Those developments located near sources of noise, including housing, schools and hospitals as well as offices, workshops and open spaces.

- 4.11 The list above is a guide only and you may need to provide noise and vibration information for other developments depending on the circumstances of the site or proposal.
- 4.12 The appropriate amount and detail of information required will depend on the specific circumstances of your proposal. At a minimum you will be expected to provide the following information to support your application:
- Description of the proposal;
  - Description of the site and surroundings, a site map showing noise and vibration sources, measurement locations and noise receivers;
  - Background noise levels;
  - Details of instruments and methodology used for noise measurements (including reasons for settings and descriptors used, calibration details);
  - Details of the plant or other source of noise and vibration both on plan and elevations and manufacturers specifications;
  - Noise or vibration output from proposed plant or other source of noise and vibration, including:
    - Noise or vibration levels;
    - Frequency of the output;
    - Length of time of the output;
    - Features of the noise or vibration e.g. impulses, distinguishable continuous tone, irregular bursts;
  - Manufacturers' specification of the plant, supporting structure, fixtures and finishes;

- Location of neighbouring windows (and use if applicable);
- Details of measures to mitigate noise or fume emissions and vibration;
- Details of any associated work including acoustic enclosures and/or screening;
- Cumulative noise levels of all the proposed and existing units;
- Hours/days of operation.

4.13 Where appropriate the Council will seek a legal agreement to control or reduce noise levels where this is unlikely to be met through the use of a condition attached to a planning permission.

### Further information

PPG24	Planning Policy Guidance Note 24: Planning and Noise provide Government guidance on noise. This guidance defines four Noise Exposure Categories (A-D) and outlines what should be done if your proposal falls into one of these categories. Advice is also provided on how to address noise issues and secure amelioration methods through the planning system. <a href="http://www.communities.gov.uk/publications/planningandbuilding/ppg24">www.communities.gov.uk/publications/planningandbuilding/ppg24</a>
DEFRA	The Department of Food, Environment and Rural Affairs provide a number of publications on noise and noise related issues. <a href="http://www.defra.gov.uk">www.defra.gov.uk</a>
Camden Council website	Camden's Environmental Health web pages provide strategic information on noise in Camden including the results of monitoring that has taken place <a href="http://www.camden.gov.uk/noise">www.camden.gov.uk/noise</a> Also see <i>Camden's Guide for Contractors working in Camden</i> on the Camden website.
The Mayor's Ambient Noise Strategy	This provides details on the Mayor of London's approach to reducing noise in London. <a href="http://legacy.london.gov.uk/mayor/strategies/noise/docs/noise_strategy_all.pdf">http://legacy.london.gov.uk/mayor/strategies/noise/docs/noise_strategy_all.pdf</a>





## 5 Artificial light

### KEY MESSAGES:

When considering proposals for artificial lighting the Council will consider the:

- need for planning permission;
- need for the lighting;
- design of the lighting; and
- impacts on biodiversity.

5.1 This section provides guidance on the Council's approach to artificial lighting. This guidance should be read in conjunction with policy *DP26 Managing the impact of development on occupiers and neighbours* of the Camden Development Policies.

5.2 Artificial lighting has many benefits, however excessive or poorly designed lighting can be damaging to the environment and result in visual nuisance including by:

- Having a detrimental impact on the quality of life of neighbouring residents;
- Significantly changing the character of the locality;
- Altering wildlife and ecological patterns; and
- Wasting energy.



5.3 Nuisance often occurs due to glare and 'light spillage' because the lighting has been poorly designed.

5.4 *Planning Policy Statement 23 (PPS23): Planning and Pollution Control* enables the Council to take account of the possible obtrusive impact of

lighting and paragraph 3.25 of PPS23 permits us to use conditions or planning obligations to protect the environment.

#### **WHAT IS LIGHT POLLUTION?**

Light pollution is the term used to describe any adverse effect of artificial lighting. Light pollution includes:

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

### **Will planning permission be required for lighting?**

- 5.5 Structures supporting, and the installation of lighting equipment may require planning permission, especially if they are substantial or affect the external appearance of a building. Planning permission is not required for the carrying out of maintenance which affects only the interior of the building or does not materially affect the external appearance of the building. Temporary lighting schemes generally do not require planning permission.
- 5.6 Planning permission is normally required for:
- the erection of columns to support lighting or other similar structures;
  - the erection of substantial structures or installations that affect the external appearance of a property;
  - external lighting as part of an industrial or commercial scheme;
  - new lighting structures or works which are integral to other development requiring planning permission; and
  - illuminated advertisements, although there are some exceptions such as those indicating medical services and some commercial advertisements on the front of business premises (See Camden Planning Guidance 1 - Design).
- 5.7 You are advised to check with the Planning Service before installing any lighting scheme. You will need to provide the following details:
- Number of lights;
  - Likely lux output;
  - The height of the lighting columns (if applicable); and
  - The area to be lit.

In accordance with policy DP26 in Camden Development Policies, schemes that would cause harm to amenity will not be permitted.

### **What information should accompany a planning application?**

- 5.8 Where planning permission for lighting schemes is required you will need to submit the information required by paragraph 5.7. We will also expect the submission of the following additional information:
- The design of lights and infrastructure;
  - A plan or plans showing layout of the lights, including orientation of the beams of light;
  - Lighting levels, lumen details, lamp type, wattage;
  - Control systems including types and location of sensors, times lighting will be on; and
  - The need for the lighting, that is, an explanation of what activity the lighting is supporting.

- 5.9 All light installations must be energy efficient and 'Dark Sky' compliant, thereby not causing obtrusive light pollution, glare or spillage (by reference to the British Astronomical Association Campaign for Dark Skies).

**Lumen**

This is a measurement of the light output from a light source.

**Lux**

This is a measurement of the light intensity falling on a surface.

**Dark sky compliance**

To design lighting schemes in order to avoid lighting that extends beyond its intended target and would be inefficient and waste energy. It also avoids glare and light in unwanted areas.

## What should you consider when designing lighting?

### General lighting requirements

- 5.10 To minimise obtrusive light you should follow the general principles taken from the Institution of Lighting Engineers, Guidance Notes for the Reduction of Obtrusive Light (2005):
- Lighting is to be directed downwards wherever possible to illuminate its target. If there is no alternative to up lighting, then the use of shields will help reduce the spill of light to a minimum. Up lighting is a particularly bad form of obtrusive light and contributes to sky glow.
  - Lighting is to be designed to minimise the spread of light near to, or above, the horizontal. Again, any light that shines above the horizontal line of the light adds to the sky glow effect.
  - Lighting should be designed to the correct standard for the task. Over-lighting is a cause of obtrusive light and also represents a waste of money and energy.
  - The main beam angle of all lights proposed directed towards any potential observer is to be kept below 70°. It should be noted that the higher the mounting height, the lower the main beam angle could be. This will help reduce the effect of glare and light spill on neighbouring dwellings, passing motorists, pedestrians, etc.
  - Lighting should be directed to minimise and preferably avoid light spillage onto neighbouring properties. Wherever possible use floodlights with asymmetric beams that permit the front glazing to be kept at, or near parallel to, the surface being lit.
  - The lights used should be the most efficient taking into account cost, energy use, and the purpose of the lighting scheme required. All lighting schemes should meet British Standards.
- 5.11 We will seek to ensure that artificial lighting is sited in the most appropriate locations to cause minimal disturbance to occupiers and wildlife, while still illuminating the intended area. This includes considering any occupiers located above the lighting source.

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

### **Lighting Infrastructure**

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

### **Use**

- 5.14 The design of lighting should be specific to the use it supports (e.g. for recreation facilities). Hours of lighting should be limited to the times needed to support the use (both in summer and winter) and be restricted through the use of timers and sensors where relevant (e.g. for security lighting).
- 5.15 The Council may seek to secure conditions to any planning permission in order to control the hours of operation of any approved lighting scheme.

### **Why do impacts on biodiversity need to be considered?**

- 5.16 Artificial lighting can often impact on wildlife habitats, particularly where lighting is proposed in open spaces, for example to provide lighting for sports courts and pitches or to improve security (such as along Regents Canal). Artificial lighting can have particularly severe implications for the natural daily rhythms of a range of animals and plants, and therefore sites and habitats identified for their nature conservation value should not be adversely affected by lighting. (See the Local Development Framework Proposals Map for a list of nature conservation sites).
- 5.17 If your proposed lighting is located within or adjacent to areas of open space we will expect that any biodiversity impacts arising from the installation or operation of the lighting is mitigated. This may require a survey to identify if there are any nesting birds in the immediate vicinity or if it is close to an area where bats may hibernate or emerge at feeding time. This is particularly important if the operation of the lighting extends beyond dusk, which is roughly the time bats will come out to forage. See Camden Planning Guidance 3 – Sustainability for further information on our approach to protecting biodiversity.
- 5.18 You should contact Camden's Biodiversity Officer at an early stage to discuss measures to mitigate the impact of lighting schemes on biodiversity.

### Further information

PPS23	Planning Policy Statement 23: Planning and Pollution Control. Office of the Deputy Prime Minister, November 2004. <a href="http://www.odpm.gov.uk">www.odpm.gov.uk</a>
DEFRA	The Department of Food, Environment and Rural Affairs has published a number of documents on light pollution. These can be found at: <a href="http://www.defra.gov.uk/environment">http://www.defra.gov.uk/environment</a>
Environment Act 1995	Available at the Stationary Office: <a href="http://www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm">www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm</a>

### Useful Contacts

Camden Planning Service [www.camden.gov.uk/planning](http://www.camden.gov.uk/planning)

The Institution of Lighting Professionals [www.theilp.org.uk](http://www.theilp.org.uk) promotes good practice and excellence in lighting schemes.

The Chartered Institute of Building Services Engineers [www.cibse.org](http://www.cibse.org) provides information on appropriate lighting designs and mechanisms.



## 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

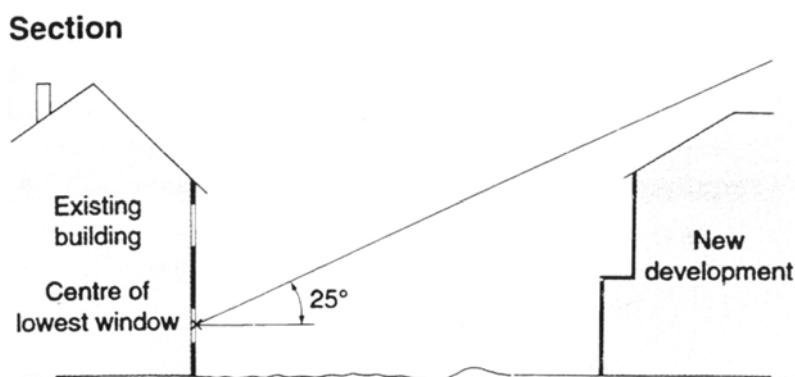
- 6.6 We will aim to minimise the impact of the loss of daylight caused by a development on the amenity of existing occupiers and ensure sufficient daylight to occupiers of new dwellings taking in account overall planning and site considerations. If your proposal will have an unreasonable impact on amenity 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 daylit 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](http://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](http://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 PM<sub>10</sub> and NO<sub>x</sub> emissions from vehicles and plant;
- Techniques to control dust emissions from construction and demolition;
- Air quality monitoring; and
- Techniques to reduce CO<sub>2</sub> 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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## 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.

## 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**

<p><b>General</b></p> <ul style="list-style-type: none"><li>• 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.</li><li>• All cycle parking, including all parts of the parked cycles, should be clear of routes needed for pedestrian movement.</li><li>• 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.</li></ul>
<p><b>Parking for visitors</b></p> <p>Parking for visitors should be clearly visible or clearly signed from the public highway, and should be near building entrances</p>
<p><b>Parking for employees (and other long stay parking)</b></p> <p>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).</p>
<p><b>Parking for residents</b></p> <p>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.</p>

## 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

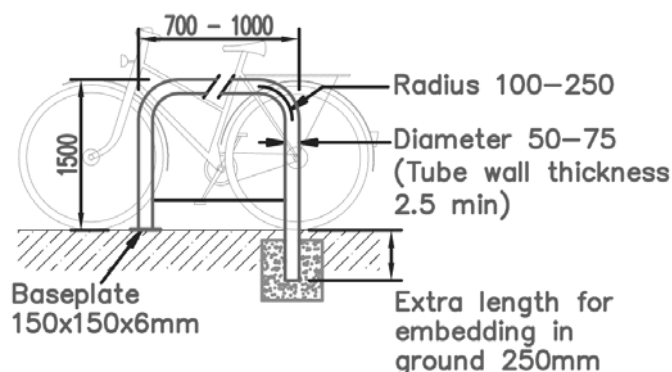
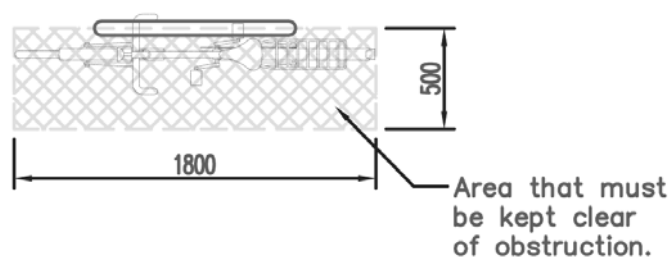


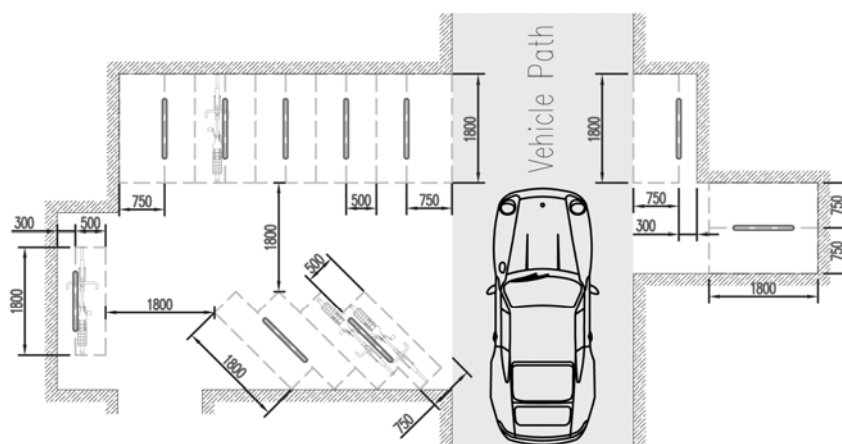
Figure 4. Sheffield Stand Plan



- 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.

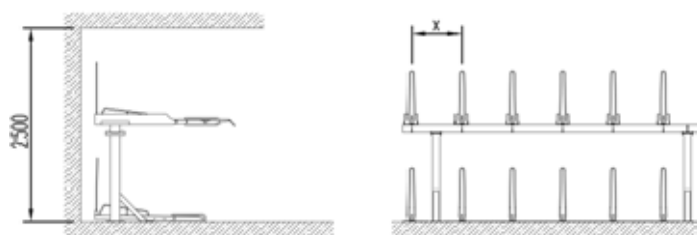


Figure 5. Cycle stand siting

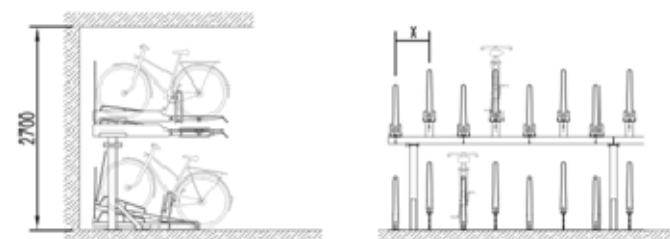


### Josta Two-tier Cycle Parking

- 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.

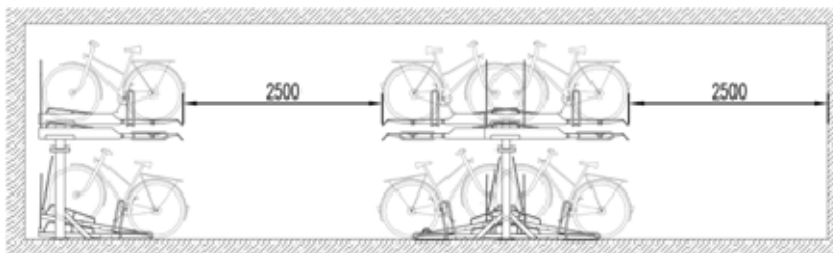


- 9.29 With a ceiling of at least 2700mm the stands can be placed 400mm apart, i.e.  $X = 400\text{mm}$  in the diagram below.



- 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**