

CHELTENHAM

# Local development framework

**Supplementary Planning Document -  
Residential Alterations and Extensions**

**Adopted February 2008**

*Note: This draft Supplementary Planning Document (SPD) replaces the 2004 adopted Supplementary Planning Guidance (SPG) "Residential alterations and extensions – A design guide for householders". This is now withdrawn*

**Drawings illustrating the principles of the SPD are important in making the document user friendly. An appropriate consultant is currently being appointed to deliver the appropriate illustrations. This version of the SPD is an interim version (minus illustrations); this is also available online at [www.cheltenham.gov.uk](http://www.cheltenham.gov.uk)**

**This interim version of the SPD can be viewed from the Built Environment Reception, Cheltenham Borough Council, Municipal Offices, Promenade, Cheltenham GL50 9SA. It is available at all Cheltenham's libraries and Councils throughout Gloucestershire.**

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## 1.0 Introduction

Cheltenham has a proud tradition of good urban design. Its Regency and Victorian architecture, with houses grouped in terraces and villas around wide streets and open spaces, is justly famous. Cheltenham has an image of an elegant, spacious town with groups of well proportioned buildings set in generous gardens, with open space extending into the heart of the town.

This is true of the early town but Cheltenham's more recent residential areas are different. They were built in response to a need to accommodate smaller houses on smaller plots, as well as motor vehicles. These areas, dating from the later Victorian era to the present day, have their own character. It stems from the layout, design and style of the houses and the colour of the materials used.

The spaces between the houses, the greenery and the nature of the front boundary fences, walls, hedges (or the lack of them) all contribute to this character. At the edges of the Borough, housing development forms a gateway to the town and the edge between town and country. Good design is as essential here as it is in the historic parts of the town.

### 1.1 The Purpose of this Guide

This Residential Alterations and Extensions Supplementary Planning Document (SPD) has been compiled to help householders, builders and agents when considering schemes for altering or extending individual houses. It re-states and expands on the guidance provided in an earlier supplementary planning guidance document *“Residential alterations and extensions – A design guide for householders”* (2004). We have taken the opportunity to provide additional guidance on sustainable construction techniques, to minimise the impact of schemes on the environment, to update the illustrations and to make necessary corrections. This SPD replaces the previous SPG which is now withdrawn.

The guide's purpose is to ensure that the character of each of the residential areas within the Borough is not eroded through un-neighbourly, poorly - designed extensions and alterations to residential properties. This guide will form a material consideration in the assessment of planning applications. It is intended for use throughout the Borough, especially in residential localities outside the Conservation Areas.

It is well known that houses maintain their value through sympathetic alterations or extensions and the reverse is also true. Poorly designed or executed work which detracts from the character of the house can depress its value.

Central Government planning guidance stresses the importance of high standards of design, throughout the built environment, not just in conservation areas. Planning Policy Statement 1: delivering Sustainable Development (PPS1) states that:

*“Good design ensures attractive, usable, durable and adaptable places and is a key element in achieving sustainable development. Good design is indivisible from good planning”*

One of the main principles of good design is for the proposal to relate to its context. This is why we attach importance to the character of the building and its immediate surroundings, as outlined in this document. This is embodied in Core Policy CP7 (Design) of the Cheltenham Borough Local Plan, adopted 2006. The Local Plan states that:

*“Good design is a key element in providing attractive, high quality, sustainable places in which people will want to live and relax.” (para.4.15).*

Policy CP7 is therefore the starting point for the Council in determining applications for development:

*“Development will only be permitted where it:*

- (a) is of a high standard of architectural design; and*
- (b) adequately reflects principles of urban design; and*
- (c) complements and respects neighbouring development and the character of the locality and/or landscape.*

*Extensions or alterations of existing buildings will be required to avoid:*

- (d) causing harm to the architectural integrity of the building or group of buildings; and*
- (e) the unacceptable erosion of open space around the existing building”.*

The Council also wishes to see sustainable construction techniques used to minimise the impact of alterations and extensions on the environment and to ensure that buildings are resilient to the effects of climate change. This means considering issues like:

- the materials used in the building work; can they be locally sourced, are they from sustainable sources or are they reclaimed or recycled?
- maximising energy efficiency, including the potential to improve the performance of the whole building
- the installation of renewable technologies such as solar panels
- water consumption and sustainable drainage
- recycling waste generated from building work
- incorporating sufficient space within extensions for waste recycling storage.

More detail on these issues is given throughout this guide and in sections 3.10 and 3.11. Further information is also contained in supplementary planning guidance on ‘Sustainable Developments’ and ‘Sustainable Buildings’, available on the website.

Proposals for householder alterations and extensions are judged against these criteria and the advice in this document. Each planning application is judged on its merits, however, so there may be scope for flexibility to meet specific circumstances if there is a reasoned justification.

If your property is located in the Area of Outstanding Natural Beauty, in a Conservation Area, or if it is a Listed Building, the suitability of the design and materials employed in the extension or alteration will be particularly important. Please consult the Conservation Team at an early stage in the design process. You may also require additional consents. Contact [builtenvironment@cheltenham.gov.uk](mailto:builtenvironment@cheltenham.gov.uk) for more information.

## 2.0 Getting started

The following stages set out a design process which may help you to achieve an appropriate design and obtain planning approval.

### **What do you want to achieve?**

Perhaps you would like more living room space or a study; a better kitchen; a bathroom on the first floor; a garage?

Analyse your requirements - have you considered all the options?

For instance, would the re-allocation of existing rooms make better use of space?

Removal of structural walls and chimneys can be expensive and might compromise stability. Repair of windows and doors can be as economic as replacement, is a sustainable option and is more likely to retain the character of the house.

### **Is it possible?**

There are limits to what is likely to be approved; for example a proposed extension may simply be too large for the site, or it may deprive neighbours of daylight. There may be insufficient headroom

in the roof to allow conversion to living space. The Party Wall Act applies to any works on, or affecting, boundary structures and may have implications for your scheme.

### **Have you considered character?**

Are your proposals likely to alter the character of your house, or affect the character of the immediate surroundings? Stand back and look at your house in the street as a whole.

Imagine your building and its extension or alteration as others may see it. This is particularly important if you have an attached neighbour.

### **Landscaping**

Have you considered how your scheme will relate to existing trees and shrubs? Ensure that it does not affect any protected trees.

## 2.1 Five Basic Design Principles

The principles below underlie the detailed advice found throughout this guide.

### **1. Maintain Character**

The character of the house and its setting should influence the extension. Note the characteristic features of the house. For instance:

- the pitch and shape of the roof,
- the existence of dormers,
- window design,
- the fenestration pattern,
- the amount of modelling or flatness of the façade,
- flues, vents and rainwater goods,
- the eaves or parapet details and
- materials

These features are all determining features of the house. If for instance the elevations are symmetrical, this should be respected.

As a rule, if there is an established pattern of acceptable design features in the street, you should aim to use them in your project. A more varied street scene could accept some diversity in the design of a house extension, although total contrast in every design element such as roof profile, windows, materials and footprint produce discord, and if repeated in another house, lead to incoherence.

## **2. Subservience**

An extension should not dominate or detract from the original building, but play a 'supporting role'. Generally, the extension should not be higher than the original. A well-designed extension is normally set back from the main elevation but there can be exceptions to this principle in some circumstances – discuss this with the planning officer. The materials should either match or complement the existing building.

## **3. Maintain spaces between buildings**

Cheltenham has a reputation as a spacious town. This spaciousness derives from the spaces at the front, back and at the sides of buildings. Glimpses of trees, gardens and surrounding hills are essential if the spacious character of the town is to be maintained. The Council will maintain such spaces between buildings to prevent a terracing effect between existing houses. This may mean that a gap can only be partially closed.

## **4. Maintain Privacy**

Extensions can mean the loss of privacy for neighbours – there may be overlooking from new windows set closer to adjacent properties. Facing windows to habitable rooms (living, dining and bedroom) should be a minimum of 21 metres apart, with at least 10.5 metres from window to boundary. At ground floor level, it may be possible to provide a screen on the boundary.

Balconies can threaten the privacy of neighbours but skilful design can prevent overlooking across a boundary.

Sound privacy can also be an issue: you should always consider location of noise generating activity when preparing your design, and the use of construction materials which provide noise attenuation.

## **5. Ensure adequate daylight**

Your neighbours have the right to adequate daylight and sunlight.

Extensions can have the effect of blocking out daylight from neighbours' windows. The Council will have regard to minimising this problem when assessing proposed extensions. We refer to Building Research Establishment document IP5/92 'Site layout and Planning for daylight' (see useful contacts and references at the end of the guide).

# **3.0 Design guidelines**

## **3.1 Side extensions to semi-detached houses**

### **Issues**

The space between semi-detached houses is essential to the character of streets with this form of development. But the sense of space can be completely lost when adjacent owners decide to create two storey extensions. This produces a terraced appearance,

closing off the important space between buildings and giving formerly symmetrical houses a lopsided appearance.

The Council may refuse permission for a proposed extension if an existing adjacent extension would make it impossible to achieve a visual gap between houses.

### **Design Principles**

- The extension should normally be recessed by not less than one metre from the front elevation of the house. Side extensions in line with the front façade lack the necessary subservience and often draw attention because it is difficult to match new and existing materials. Some house designs do not require this type of set-back, however; the planning officer considering your application will be able to advise you about this. We encourage early discussion on design principles.
- The extension should normally allow for a clear space from the side boundary of the property for access or to avoid an overhang over the adjacent property.
- The roof of the extension should echo the original building in its pitch, shape and covering.
- Materials should either match the existing, or adopt a darker tone to help the extension stand back and let the shape of the original building dominate.
- Garages should be a minimum of 2.7m (9ft) wide internally to allow for a car door to be opened on one side.
- The Council will take into account current guidance on site planning for daylight and sunlight. See, for instance, BRE publication IP/92 by Paul Littlefair ([www.brebookshop.com](http://www.brebookshop.com))
- Refer to information on sustainable construction techniques in sections 3.10 and 3.11

## **3.2 Rear extensions**

### **Issues**

Rear extensions can cut out daylight, sunlight or outlook from an adjacent neighbour's windows or garden to an unacceptable degree. Windows in extensions, which directly overlook properties (including gardens), can seriously reduce the privacy of neighbours. Extensions of 3m or more can make rooms in the original house excessively deep, reducing daylight to unacceptable levels.

The diagram shows the key dimensions and angles which determine the projection of an extension, related to the position of windows on adjacent properties. We use these calculations to establish the impact of the extension.

Careful attention to the size and position of windows on an extension will minimise problems of overlooking and it is often possible to devise an imaginative solution.

It is customary to match the roof pitch of the extension to that of the main house. There can be exceptions to this principle, however. Please discuss your requirements with the planning officer.

Always consider the view from upper storeys and issues of crime prevention if you propose a flat roof on a single storey extension.

## **Will a proposed extension cause a significant reduction in daylight in neighbouring windows?**

The first drawing shows an extension at the conventional projection of 3m from the wall of the original house. Draw a line from point (1) at 45° to the extension wall, to point (2) on the wall of the adjacent building.

Draw another line from the extension eaves (3) at 45° to the ground (4). If the centre point of any window to a habitable room lies within the cross hatched area, it is likely to suffer significant loss of daylight (window A).

Window B's centre point lies within the single shaded area and therefore it will suffer some loss of daylight. The centre point of window C lies outside either shaded area and is not likely to suffer any loss of daylight. The situation can be improved by reducing the projection of the extension or lowering its eaves.

The second drawing shows how to avoid causing loss of light to windows facing your extension.

### **Design Principles**

- The 45° and 25° principles ensure adequate daylight to neighbours windows and prevent excessive overshadowing of the original building.
- The extension should be subservient to the original building in height and width.
- Windows in rear extensions require careful thought regarding location and size, especially on upper floors.
- Windows facing directly into the rear garden of the house are preferable as it is less likely that a neighbour's privacy will be affected. A boundary enclosure (wall, fence or hedge) higher than normal eye level will help to maintain privacy but you need to consider whether the additional height will affect light.
- Windows on upper storeys can be set with a high sill level (typically a minimum 1.7m above floor level). Skilful design of projecting, screened windows can preserve privacy.
- Balconies can affect a neighbour's privacy. The council will require careful consideration of the location and design of any balcony to avoid this problem.
- A roof at the same pitch as the original house will help the extension to blend with the character of the house. It will be more attractive to look at, require less maintenance and reduce opportunity for intruders to break-in to upper floor windows. Generally the roof should be pitched at the same angle as the original building. However, on some cottages a cat slide or lean-to roof may be appropriate. This might be set at a flatter pitch than the main roof.

A pitched roof can accommodate solar panels.

- Refer to information on sustainable construction techniques in sections 3.10 and 3.11

### 3.3 Conservatories

#### Issues

Conservatories are a popular method of extending the living area of the house. They extend the period in which the garden can be enjoyed, and if located on the sunny side of the house, help to keep the house warm.

But conservatories can cause noise nuisance and affect privacy in small rear gardens, especially if they are near to side or rear boundaries. Try to imagine the appearance and the effect of your use of the conservatory from the other side of the boundary.

Analyse carefully the character of the existing house before choosing your conservatory (is it Victorian, Edwardian, later 20<sup>th</sup> or 21<sup>st</sup> Century?) and aim to specify sustainable construction techniques, using local sources for materials.

#### Design Principles

- At the planning stage, work out how your conservatory can be used to reduce the demand for energy in your house. A conservatory can provide passive solar gain and improve energy efficiency, but to maximise benefits you will need to carry out this exercise at the start of the design process.
- In general, conservatories should be sited on the rear (private) side of the house, or possibly to one side if space permits.
- Arrange the long axis parallel with the house, as a lean-to (to reduce undue projection into small gardens). However, to ensure that the conservatory does not dominate the house, it should not normally extend across the whole width of the house.
- To allow maintenance and some privacy, the side wall of the conservatory should be located at least 1.0m from the side boundary, unless it is entirely solid on the end elevation.
- Remember the need for maintenance of windows above the conservatory, and check whether the means of escape from the first floor will be compromised.
- There are many conservatory styles but an elegant modern design is often more appropriate on 20<sup>th</sup> and 21<sup>st</sup> century houses than “mock Victorian”. Conservatories of all types can incorporate climate-moderating devices such as internal shades and ventilators. Timber is a more sustainable material than uPVC for conservatories but do ensure that the timber is from a sustainable source and is FSC certified.
- Normally, the ridge of a conservatory should be no higher than the underside of the first floor window sills, unless it is acting as a passive solar collector wall in which case it is likely to rise through the full height of the parent building. In such cases, it should not be unduly strident in scale or design, when viewed from the public realm.
- Verandas are a characteristic architectural feature in the historic parts of Cheltenham. Where they are an integral part of the street scene, you may want to consider a contemporary interpretation. A veranda should be shallow in depth and arranged with its framing to achieve a vertical proportion.
- Solar panels can be fitted if the orientation of the conservatory is appropriate

- Refer to information on sustainable construction techniques in sections 3.10 and 3.11

### **3.4 Extending into the roof space**

#### **Issues**

Loft conversions can provide much needed living space, if the roof space has sufficient headroom. If you need to increase headroom, remember that over-wide dormers or flat roofed extensions built off the walls of the original building may harm the appearance of the house and stand out as a visually disruptive element in the street.

You will need to assess whether the existing roof structure will allow for adaptation to habitable rooms with its increased floor loadings. Will there be room for a staircase, including the necessary headroom? Will the insertion of windows in the roof space be visually damaging to the character of the house or the street?

#### **Design Principles**

- Loft conversions should not have the appearance of an extra storey on top of the house – a dormer window should always be set within its roof. This is because the original character of the building could be affected; there could be overlooking of neighbouring properties and the character of the street would be altered if all properties increased their storey height.
- Headroom: is the depth of the house and the pitch of the roof sufficient to achieve at least 2.1m headroom over half the span of the roof?
- Dormer design should reflect the character of the original building. This can be done by (a) placing a dormer window in line with the windows on the floor below (b) ensuring that the dormer is placed carefully within the roof slope the roof and that where there is more than one they are well spaced.
- If dormers are inserted into hipped roofs facing the side boundaries, consider possible loss of privacy if a similar dormer is proposed on the adjacent property. Always recess a dormer in such a position that it does not clash with the hip or ridge of the roof. The structure should be only nominally wider than the window itself to avoid a “heavy” appearance
- Roof lights: These can be a less obtrusive alternative to dormers, where it is important to minimise alteration to the shape of the roof. Roof lights can be quite small as more daylight/sunlight reaches a sloping roof than a wall. Roof lights of approximately 600mm or 750mm are often quite adequate. Some roof light manufacturers have period-style or “conservation” roof lights that are more sympathetic to traditional settings.
- Roof lights should not be placed opposite each other on both sides of a pitched roof, because privacy can be lost and the roof can appear insubstantial. ‘Sun pipes’ are an alternative to roof lights and dormers. They are unobtrusive and can focus natural light into rooms on the first or ground floor.
- Refer to information on sustainable construction techniques in sections 3.10 and 3.11

### 3.5 Windows

#### Issues

Windows and their subdivision by mullions and glazing bars make a significant contribution to the character of the house. Changing the window proportions rarely improves the façade, which would have been designed with the original windows as part of the composition.

If your windows are showing their age, consider whether total replacement is necessary. Have you thought about repair instead? Specialist firms provide a repair service, because property experts agree that the value of a house is enhanced if it has its original windows. Windows are often replaced because of draughts and rattles, but before removing them, think about the scope for secondary double-glazing. With its large air gaps, this type of double glazing is good for sound deadening as well as heat insulation.

If replacement is the only option, use timber from a sustainable source/FSC certified and explore other opportunities to improve the energy efficiency of your home.

uPVC replacement windows have a shiny plastic appearance which are rarely complementary to the house. It is extremely difficult to achieve correct window proportions, frame and glazing bar thickness in uPVC. The use of top-hung vents in any material is not encouraged, because they have a poor appearance when open and they often remove the vertical emphasis of the original design.

#### Design Principles

- Repair rather than replace
- Use timber from sustainable/ FSC sources
- Adopt the principle of replacing like with like in terms of window proportions, materials and the depth of the recess from the front face of the building. Retaining the recess gives the building some three dimensional modelling. It provides a sense of depth and solidity and increased weather protection.
- Always retain the proportion and spacing of windows on the elevation.
- Refer to information on sustainable construction techniques in sections 3.10 and 3.11

### 3.6 Making openings in walls

#### Issues

Over-wide openings can alter the original vertical proportions of windows in older houses. Avoid the loss of lintel and quoin (the sides of the window openings) in alteration work.

#### Design Principles

- It is important to maintain the proportions of the original openings in the house to retain the character of its façade.
- Maintain basic proportions in new work. Always match the proportions of important elements such as doors and windows.
- Reinstate lintel, quoin and cill details in older houses.

- Avoid the random creation of openings, especially in older houses with more formality in their design. Line up the centreline of a new opening with the centreline of the window above (or below).
- Consider the material arising from your works. To reduce the amount of material disposed in landfill, can it be reclaimed and re-used on your site or elsewhere?

### **3.7 Filling in openings in walls**

#### **Issues**

It is difficult, if not impossible to fill in an opening and expect the work to be invisible. Even if the stone or brick and mortar can be matched exactly, it may be difficult to achieve the same level of workmanship and joint thickness and to replicate the subtle changes of colour and sharpness due to years of weathering. To avoid this type of problem, recess the infill work and retain lintels, quoins and cills.

#### **Design Principles**

- In brick or stone walls it is advisable to infill the opening with a panel of matching walling material recessed by approximately 100mm from the front face of the wall. This avoids unsightly and ill matched 'bonding-in'. It also retains the option of reversing the process should that be necessary later. The infill panel could alternatively be in a contrasting material, depending on the character of the house.
- Use reclaimed materials for the best match, from a local source if possible.

### **3.8 Porches**

#### **Issues**

Porches need particular care because they are usually very prominent. Porches can look very 'boxy', especially on smaller buildings. A projecting canopy may be better in such a case. Ensure that the roof design relates to the roof of the main building. Porches designed in isolation from the remainder of the elevation can clash with bay windows or other architectural features. An enclosed porch can improve the energy efficiency of your building.

#### **Design Principles**

- Consider the appearance of the porch within the elevation as a whole: can it be integrated with other projecting features?
- The angle of the roof pitch should be the same as the main roof, to ensure harmony and continuity with the design of the house. Similarly, it is advisable to use the same roofing materials.
- Full height glazing with large panes of glass is likely to introduce a larger scale than the original building. As a guide, use window frames of similar size to the original.
- Try to integrate unsightly elements such as meter boxes into the design, perhaps on the side of the porch.
- Use reclaimed materials for the best match, locally sourced if possible.
- Refer to information on sustainable construction techniques in sections 3.10 and 3.11

### 3.9 Boundaries

Boundaries and their fences, walls and hedges can contribute to the character of a residential area as well as the buildings themselves. When you are planning alterations, you should consider the boundaries as carefully as the buildings.

#### Issues

Removal of front boundaries to provide parking in front gardens; replacement of boundary fence, railings or wall; planting of side or rear boundaries with quick growing evergreen trees to achieve privacy; enclosure of 'open plan' front gardens with a variety of boundary treatments.

#### Design principles

Removal of vegetation on a boundary and forming a hard standing in a garden can reduce the variety of habitat for wild creatures and affect biodiversity. It can also increase the rate of surface water run-off unless a permeable surfacing is used.

In a street of a consistent style of houses, it is advisable to maintain the original or similar design of boundary. This will preserve the character of the area and the value of the house. Look at the least altered property in the street to establish the original design. Front boundaries are often quite characteristic of the area in which they are located:

**Urban:** Often railings on stone plinths or low walls, with stone gateposts and metal gates.

**Suburban:** Low walls or fences often with hedging behind to improve privacy.

Planting on side boundaries:

- If you require privacy, we recommend planting a hedge rather than a wall or fence, to increase biodiversity. Hedges should be of species common to the locality. See the High Hedges booklet for guidance on nuisance caused by unreasonably high hedges.
- Before removing a boundary enclosure, identify potential loss of habitat for flora and fauna –a hedge will provide shelter and food for a variety of species, many of which will be beneficial to the gardener. Reconsider your scheme if it would displace wildlife.
- New paving will add to surface water run-off, which can contribute to local flooding. Consider alternatives to removal of green areas but where this is necessary; use permeable surfacing so that water can still be absorbed into the ground.
- Wherever possible, provide a simple habitat for wildlife; for instance frogs and toads will make use of a damp area under stones, while invertebrates will inhabit a pile of decaying wood. A small wild area in your garden will form a valuable resource.

### 3.10 Materials

Reduce the environmental impact of your scheme by specifying sustainable materials to protect natural resources and reduce the amount of waste going to landfill. These should include:

- materials which are environmentally sound (e.g. sheep wool insulation batts, natural paints)
- products with a high recycled material content (e.g. cellulose insulation; concrete blocks with high pulverised fuel ash content)
- materials from local sources
- materials from sustainable sources – look for accredited schemes such as the FSC certification scheme for timber
- reclaimed materials (locally sourced)

External materials should match the colour and texture of the existing building. Although you may find materials that match the original, the effect of weathering on the original building might mean that its tiles, bricks and mortar joints are darker. It is partly for this reason that extensions to roofs and walls should be set back from the original elevation, to avoid an unsightly junction.

### **uPVC**

This material is widely used for windows, doors and conservatories. However:

- it is not a sustainable material
- it is rarely possible to achieve a good replica of the original if used for replacement windows and doors
- it is difficult to repair
- it releases toxins in the case of fire.
- there can also be problems of safe disposal when the units are replaced.

There are alternative, more sustainable materials available that you should investigate before using uPVC.

### **Waste materials**

The building process currently generates a lot of waste material, much of which goes to landfill. To minimise this, you should re-use materials arising from your building works on site (or offer top soil and rubble free to other users). See policy 36 from Gloucestershire Waste Local Plan and supporting SPD Waste Minimisation in Development Projects, together with Gloucestershire County Council's leaflet on waste minimisation in small projects.

### **3.11 Designing for a sustainable future**

Even if you are proposing a modest scheme, it is always possible to contribute to the reduction of carbon dioxide emissions, one of the main greenhouse gases affecting climate change. Many small projects like yours are being carried out and together, they have a significant environmental impact

See the Useful Contacts and References section at the end of the document for links to information about sustainable development.

### **Maximising energy efficiency**

Ensure that your scheme (and your home as a whole) maximises energy efficiency. This could include things like installing cavity wall insulation or solid wall insulation, ensuring you have sufficient loft insulation, or installing low energy light bulbs. You should also check whether you could incorporate passive solar gain (using the sun's energy to warm up a space) and natural ventilation into your scheme to reduce the need for heating and cooling. You should always maximise the energy efficiency of your scheme before considering installing renewable energy technologies. A well-insulated, draught-free house means smaller heating inputs and therefore lower bills. You may be able to obtain grants to help you improve the energy efficiency of your home.

See Useful Contacts and References and refer to our guidance on sustainable construction for further information.

### **Renewable energy technologies**

- **solar thermal panels**
- **solar electric photo voltaic (pv)**
- **wind turbines**

#### **Solar panels:**

There are two types of solar panel – solar thermal where hot water is provided and solar photo voltaic (pv) which produces electricity.

#### **Issues**

Solar panels are welcome as a contribution to reducing the demand for fossil fuels for heating and power, but their visual impact requires some consideration. They require a south or near south facing roof, preferably at about 45° pitch for optimum performance, although any angle between 15° and 60° is acceptable. The location of panels in an asymmetrical or random arrangement can detract from the appearance of a house. Large panels can introduce an alien scale to some roofs.

#### **Design Principles**

Panels must be fitted directly onto the roof, or (preferably) flush with the roof covering. They should not be propped at a steeper angle than the roof pitch. Arrange the panels as closely as possible to the alignment of windows below. Select panels of the smallest size and the minimum number to achieve the required performance.

#### **Wind turbines:**

Cheltenham lies in an area that is marginal for wind power. If you decide to install a turbine, consider the aspect carefully in relation to the prevailing wind and assess impact on your own house, your neighbours' houses, wind loading, vibration and appearance.

### **Water consumption and drainage**

#### **Water-saving devices**

##### **Issues**

Demand for drinking water is increasing and we need to change attitudes so that we respect it as a precious resource – it takes 1.2kWh of electricity to supply and treat one cubic metre of drinking water.

Average water use is 150 litres per day but individual use can exceed 500 litres.

### **Design Principles**

- You can save the most water by careful specification of WC flushing. Taps and showers can also be regulated to reduce water use.
- You should consider a grey water recycling system, using water from the shower, bath or hand basins for flushing toilets and for use in washing machines.

### **Sustainable drainage**

- We recommend the use of a “green roof” to slow storm water runoff, where the design allows. Green roofs also provide wildlife habitats. They do not have to be green in colour – sedum plants provide attractive displays.
- Rainwater harvesting can take many forms. It could be as simple as installing water butts on down pipes for use in the garden. A more complex system, using rainwater for flushing toilets or for the washing machine would be ideal. Rain is a precious resource, which should be used with care.

For more information on sustainable drainage refer to our supplementary planning guidance ‘Flooding and Sustainable Drainage Systems’

### **3.12 Satellite dishes:**

#### **Issues**

Whether they need planning permission or are installed as permitted development, satellite dishes should be installed in such a way as to minimise the impact on the appearance of the building. In deciding on the position and design of the dish, you should consider its impact on the house, the neighbours and the environment.

#### **Design Principles**

- If you have to mount the dish on the front of the house to get reception, try to integrate it as much as possible into the design of the house. If there is a parapet for instance, you could conceal the dish behind it. A dark coloured mesh dish will have less impact on a brick house than a solid white one.
- With a listed building, it may be best to consider a separate ground- level installation position if a dish cannot be effectively hidden or concealed somewhere on the building itself.

## **4.0 What to do next**

### **What sort of work requires permission?**

Your proposal may require Planning Permission and Building Regulations Approval. If you are in any doubt, see the “Useful contacts and references” page and seek advice at an early stage in the process.

### **Permitted Development**

Permitted Development means works that do not require Planning Permission. These can include:

- small extensions,

- boundary walls and fences under 1 metre high,
- cladding,
- removal or installation of windows,
- other minor changes.

For help on this, contact the Duty Planning Officer or email us.

If your proposal is Permitted Development, you can obtain a certificate of lawful proposed development for your records. You can find details about how to apply on the website.

### **Covenants**

Some properties are affected by a restrictive covenant. This might restrict the scope of work that can be carried out, or impose obligations, such as use of particular colours. This type of covenant is a private matter and will normally be found in the deeds relating to your property. For help with a covenant, consult your solicitor.

### **Party Wall Act**

This Act regulates work carried out on or near to a boundary, whether or not the work needs planning permission. We can provide a DCLG booklet that contains information about the obligations and rights relating to party walls (also available at: <http://www.communities.gov.uk/partywall-1996>).

### **Listed Buildings**

If you own a Listed Building, you will require Listed Building Consent for any work that affects the character of the building. Planning permission will probably be required for external alterations. It is advisable to contact the Conservation Section at an early stage. For further help, please contact us or see the general guidance on the Council's website.

## **4.2 Submitting an application**

Prior to submitting an application:

- Discuss your proposals with your immediate neighbours who may be affected. This may help to resolve objections, which might otherwise be raised when you submit your application.
- Discuss your proposals with a development control officer. We recommend that you make an appointment but we do have a duty officer available who will be able to give general guidance.

### **Checklist**

When preparing an application you should work through the Council's checklist, which you can find on the website. This will ensure that your application includes all the information we need.

## **5.0 Glossary**

### **Agent**

A specialist acting on your behalf in the design of the works to your house and the preparation of your application. The agent might be an architect or building surveyor.

### **Bond**

(eg Flemish or Stretcher bond) The method of laying bricks in courses.

### **Character**

The combination of features of a building or an area that give it its distinctive identity compared with other buildings or areas.

### **Cill (Sill)**

The horizontal ledge at the base of a window frame, often projecting from the wall.

### **Context**

The setting or surroundings of a building, usually the area from which a building can be seen (front, rear or side).

### **Density**

Usually expressed as dwellings per hectare, sometimes as persons per hectare.

### **DCLG**

The Department for Communities and Local Government. It sets UK policy on local government, housing, urban regeneration, planning and fire and rescue.

### **Dormer Window**

A window set vertically in a pitched roof.

### **FSC**

Forest Stewardship Council - FSC certified forests are managed to ensure long-term timber supplies while protecting the environment and the lives of forest-dependent peoples.

### **Fenestration**

The arrangement, size and proportion of windows on a facade.

### **Footprint**

The area and shape of the building at ground level.

### **Habitable Room**

A living room, dining room, study or bedroom.

### **Hipped Roof**

A roof pitched in two directions; side as well as front and back.

### **Lintel**

A beam inserted in a wall to create an opening for a window or door. In many traditional buildings the lintel is visible: in contemporary

buildings it is often located behind the brick cladding of the wall.

### **Party Wall**

A wall on a boundary that provides support to the properties on either side.

### **Quoin**

The junction formed between the front and side wall of a building; also at a window or door opening. In traditional buildings the quoin is often emphasised by larger blocks of stone or different colours of brickwork.

### **Reveal**

The depth of recess between a window and the front face of the wall.

### **Roof Pitch**

The angle of the slope of a roof (often between 30° and 50°).

### **Roof light**

A window set within the slope of a pitched roof.

### **Street scene/Streetscape**

The character of the street or road in which the building is located, for instance buildings set back from the footpath; terraced houses with short front gardens, semi-detached pairs with gaps between them.

### **Subservience**

The effect of an extension on the original building - the extension should not dominate the original.

### **Symmetry**

For instance, where the design of the building is identical either side of (a) a party wall in a semi-detached house or (b) the centreline of the elevation of a detached house.

### **25° Principle**

A guide to whether new development will affect daylight reaching an existing window (see diagram).

### **45° Principle**

The angle taken vertically and horizontally from the centre point of any neighbouring windows, at a right angle to the flank wall of the extension to a house, in order to determine the effects of an extension on the light reaching adjacent property (see diagram).

## 6.0 Useful contacts and references

### Cheltenham Borough Council

[www.cheltenham.gov.uk](http://www.cheltenham.gov.uk)

Municipal Offices  
PO Box 12  
Promenade  
Cheltenham  
GL50 9SA  
01242 262626

### Cheltenham Borough Council Planning, Conservation and Building Control Advice:

Tel: 01242 264328

Email: [builtenvironment@cheltenham.gov.uk](mailto:builtenvironment@cheltenham.gov.uk)

### Day Lighting Principles

Guidance is available in:

BRE publication IP5/92 "Site Layout Planning for Daylight" by PJ Littlefair

[www.brebookshop.com](http://www.brebookshop.com)

### Drainage Enquiries

Severn Trent plc

Tel: 0800 7834444

Email: [customer.relations@severntrent.co.uk](mailto:customer.relations@severntrent.co.uk)

### Energy Saving

Guidance notes are available from the Energy Saving Trust

[www.est.co.uk](http://www.est.co.uk)

### Gloucestershire County Council

GCC is the highways authority and is responsible for all highways matters including dropped kerbs to allow new access to a highway.

[www.gloucestershire.gov.uk](http://www.gloucestershire.gov.uk)

Shire Hall  
Gloucester  
Gloucester  
GL1 2TG  
01452 425000

### High Hedges

See the DCLG publications online at:

<http://www.communities.gov.uk/treesandhedges>

### Party Wall Act

The Party Wall etc Act 1995 (booklet

available at Built Environment Reception) or online at

[www.communities.gov.uk/publications/planningandbuilding/partywall](http://www.communities.gov.uk/publications/planningandbuilding/partywall)

### Planning Portal

General Planning information and submission of planning applications.

[www.planningportal.gov.uk](http://www.planningportal.gov.uk)

### **Sustainable Construction**

The Council has three guidance documents:

[Sustainable buildings 2003](#)

[Sustainable developments 2003](#)

[Flooding and sustainable drainage systems 2003](#)

They can be found at:

[www.cheltenham.gov.uk/libraries/templates/thefuture.asp?URN=1248&FolderID=0](http://www.cheltenham.gov.uk/libraries/templates/thefuture.asp?URN=1248&FolderID=0)

For general information on renewable energy:

Companion Guide to Planning Policy Statement 22

<http://www.communities.gov.uk/documents/planningandbuilding/pdf/147447>

The Sustainable Development Commission is the Government's independent authority on sustainable development. It covers the construction process and the performance of buildings in use - how they meet the needs of occupants and how efficiently they use resources.

[www.sd-commission.org.uk](http://www.sd-commission.org.uk)

### **Sustainable Timber**

See the Forest Stewardship Council's advice at:

[www.fsc-uk.org/](http://www.fsc-uk.org/)

### **Energy Saving**

For advice on improving energy efficiency in your home and the availability of grants contact your local Energy Efficiency Advice Centre on 0800 512 512

Guidance notes are available from the Energy Saving Trust.

[www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)

### **Waste Materials**

Supplementary Planning Document – Waste Minimisation in Development projects

<http://www.gloucestershire.gov.uk/index.cfm?articleid=10581>

For guidance see the leaflet 'Minimising waste from your building project' published by GCC <http://www.gloucestershire.gov.uk/index.cfm?articleid=10581>

### **Wind Energy**

Information on wind energy is available at [www.bwea.com](http://www.bwea.com) and

[www.dti.gov.uk/energy/sources/renewables/renewables-explained/wind-energy/onshore-wind/what-can-i-do/page16108.html](http://www.dti.gov.uk/energy/sources/renewables/renewables-explained/wind-energy/onshore-wind/what-can-i-do/page16108.html)