Ceredigion

Local Development Plan 2007 - 2022

Supplementary Planning Guidance

Built Environment and Design








Adopted January 2015

Cyngor Sir CEREDIGION
CEREDIGION County Council

Images: Courtesy of Zeta Freeman, Catalina Architecture.

This Supplementary Planning Guidance (SPG) is one of a series of guidance notes which support the policies of the Local Development Plan (LDP). Although decisions on planning applications will be based on the LDP's policies (as indicated in part 38(6) of the Planning and Compulsory Purchase Act 2004), the content of the SPG is a material planning consideration.

The Guidance does not set out policy independently of the LDP but only provides supplementary guidance. Therefore, in line with the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004, it has not been considered necessary to subject it to separate Strategic Environmental Assessment (SEA). The results of the Sustainability Appraisal/ Strategic Environmental Assessment (SA/SEA) of the policies relevant to this SPG:

- DM06: High Quality Design and Placemaking
- DM07: Conservation Areas
- DM09: Design and Movement
- DM10: Design and Landscaping
- DM11: Designing for Climate Change
- DM13: Sustainable Drainage Systems

May be viewed in Appendix 3 of the Ceredigion Local Development Plan Final Sustainability Appraisal Report (April 2013).

Contents

Introduction

This document aims to provide guidance on the issues that need to be considered when developing various buildings. This document is broken down into separate sections each based on a theme. Some themes can be read independently, others will need to be read in combination with other themes. The sections are as follows:

1. Sustainability
2. Character
3. Movement
4. Landscape
5. Extensions
6. Shop Fronts
7. Sustainable Drainage Systems

It is recommended that for all new developments, i.e. new house, office, that all sections are considered. For developments that are related to extension only certain sections of this SPG will need to be read.

All design and development contributes to Ceredigion's image and illustrates its history, culture and future aspirations. The excellence of the built environment is important to the quality of life of our residents and communities and the quality of Ceredigion's varied landscape and townscape.

Achieving good design does not have to be difficult. It is the aim of this guide to promote good, sustainable design in all aspects of development from residential extensions, large-scale housing developments, to new supermarkets and healthcare centres.

Policies

Planning Policy Wales (PPW) recognises the role design has to play in securing sustainable, desired developments and it defines design as:

"the relationship between all elements of the natural and built environment. To create sustainable development, design must go beyond aesthetics and include the social, environmental and economic aspects of the development, including its construction, operation and management, and its relationship to its surroundings."

The objectives of good design are illustrated in the diagram below:

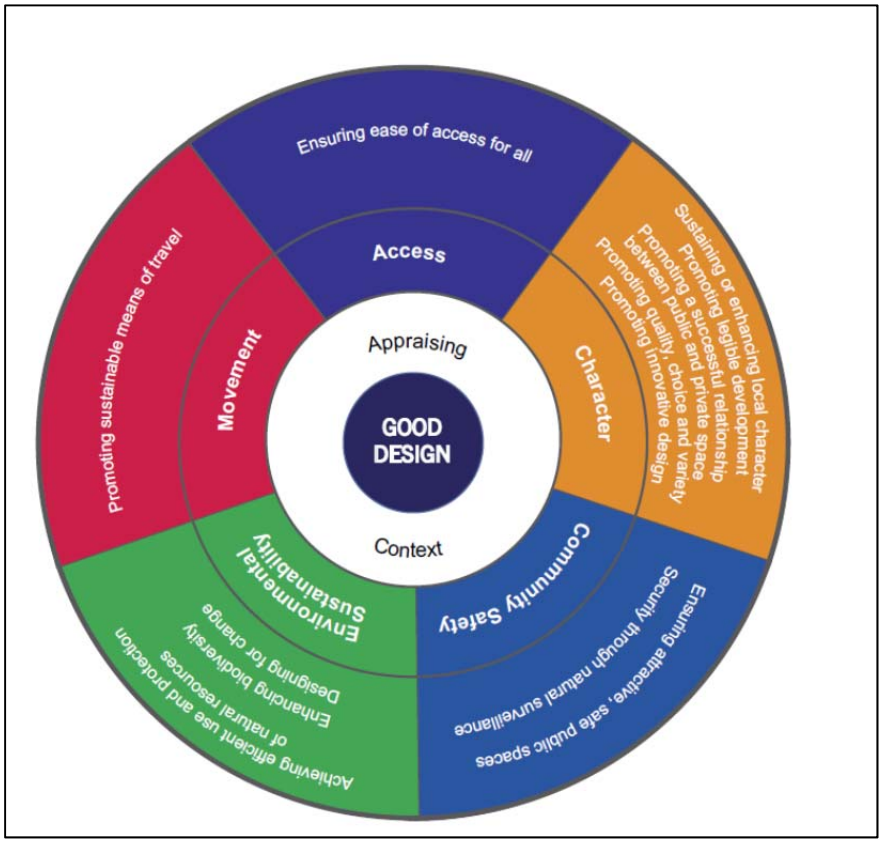


FIGURE 1: OBJECTIVES OF GOOD DESIGN (TAN 12: DESIGN)

Technical Advice Note 12: Design provides further, detailed guidance on design and how good design can be achieved.

To support national guidance, policies have been included within the Ceredigion Local Development Plan (LDP) which provide further advice on the elements that need to be considered to achieve good design. The main LDP design policies are:

- DM06: High Quality Design and Placemaking;
- DM07: Conservation Areas;
- DM09: Design and Movement;
- DM10: Design and Landscaping; and
- DM11: Designing for Climate Change.

What Should be Considered as Part of the Design Process?

Design should be an inclusive process that when applied well can help raise public aspirations, reinforce pride and a sense of place to an area.
The Local Planning Authority (LPA) want to help developers achieve the best from their development and therefore it is important that you speak with Planning Officers at the earliest opportunity (before putting pen to paper in terms of drawings and detail).

The Planning Service offers a Pre-Application Advice Service. Further information on this service can be accessed via:
http://www.ceredigion.gov.uk/Planning

The design of our villages, towns and the urban and rural landscape is important in articulating what Ceredigion is. Design is important to the quality of life of the people who live in Ceredigion and therefore it is essential that new development is of a high quality, promoting Ceredigion as an enjoyable place to live.

Good design is not inevitable. It requires clear thought and planning, the design process needs to be holistic embracing creativity, sustainability, architecture, landscape and placemaking. Good design incorporates many aspects the main principles being:

- Sustainability;
- Character;
- Access and Movement; and
- Community Safety.

Throughout Ceredigion, Wales and the United Kingdom there are examples of developments that through their design are inappropriate in their context, or which fail to grasp opportunities to enhance the character, quality and function of an area. Such developments and designs will not be accepted, as these have detrimental effects on existing communities.

A holistic approach to design requires a shift in emphasis away from total reliance on prescriptive standards, which can have the effect of stifling innovation and creativity. From the beginning of the process the focus should be set on meeting the objectives of good design (figure 1). The design response will need to ensure that these are

achieved, whilst responding to local context. Figure 2 below shows all the different stages in the design process.

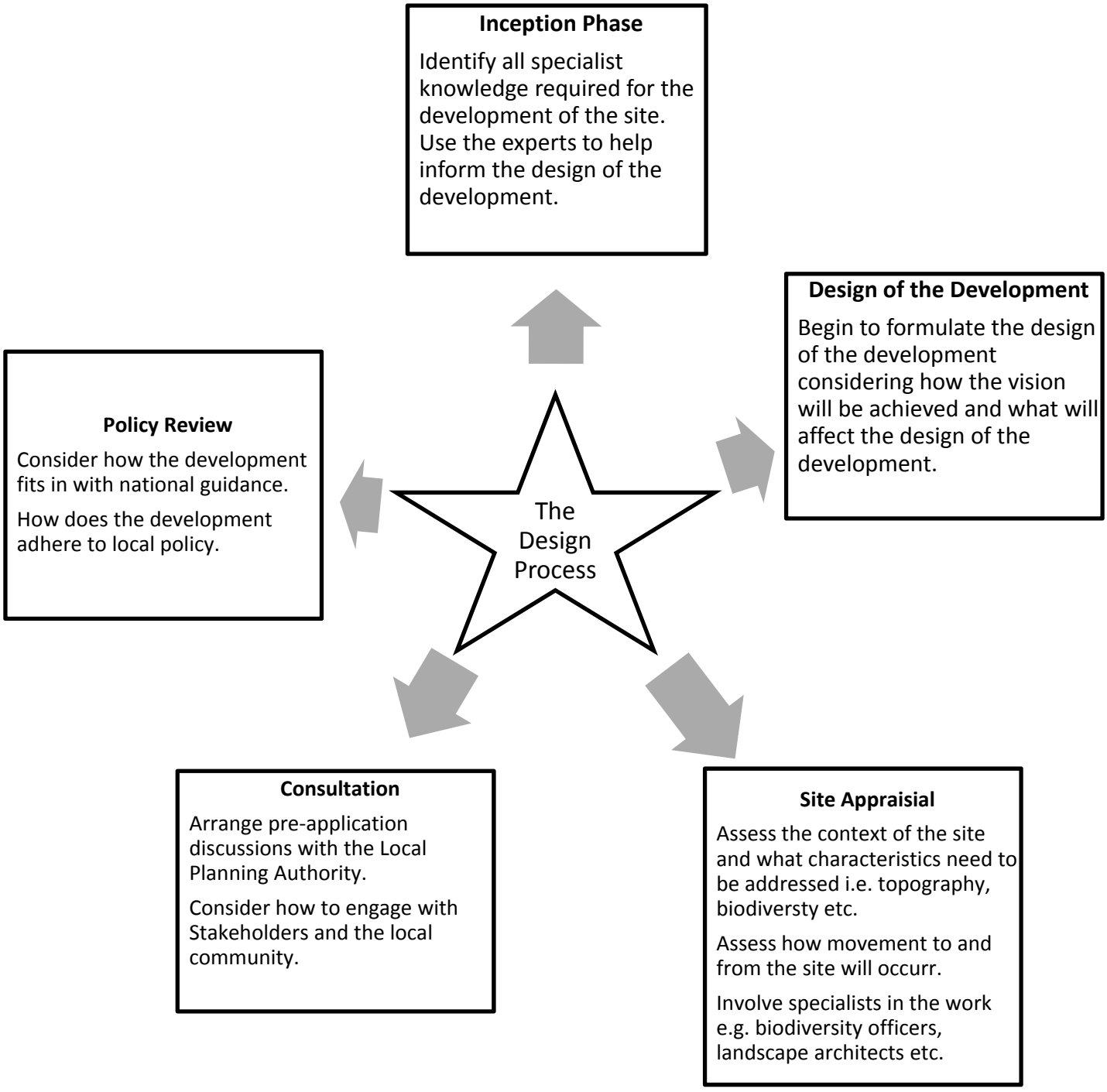


FIGURE 2: THE DESIGN PROCESS

Design and Access Statements

A Design and Access Statement (DAS) is a useful communication tool that explains the design thinking behind a planning application. For example, they should show that the person applying for permission (the applicant) has thought carefully about how everyone, including disabled people, older people and very young children, will be able to use the places they want to develop.

Demonstrating how the local context has influenced the design is also an important element. This should be discussed in relation to the scheme as a whole.

Guidance on DAS is available from the Planning section of the Welsh Government via: http:// www.wales.gov.uk

Here to Help: Speak to your Authority

Planning Officers are here to help you, and you are encouraged to consult them prior to the submission of a detailed application, this can help speed up the planning process and avoid any difficulties.

A pre-application system already exists within the Ceredigion County Council that allows for a meeting to occur with a Planning Officer. For further information refer to the Council's website:
http://www.ceredigion.gov.uk/Planning

What Permissions Will You Need?

Certain developments can take place without the need for planning permission. These developments are known as 'permitted development'. If you wish to know more about permitted development you can look at the Welsh interactive house on Planning Portal which will give you guidance on many common householder projects, including home micro-generation (the generation of electricity or heat usually for small scale domestic use, by methods that do not contribute to the depletion of natural resources e.g. solar panels / air source). You can access the planning portal site via this link (http://www.planningportal.gov.uk/permission/

Whilst planning permission may not be required design is still an important factor to consider and therefore elements of this Supplementary Planning Guidance (SPG) will be of use.

To find out if you are in a conservation area or to see if your building is listed contact the Planning Service - Development Management on 01545 572135.

For demolition work within a Conservation Area, you will need to obtain Conservation Area Consent; and for works to a Listed Building you will need to obtain Listed Building Consent.

Further guidance is available from the Welsh Office Circular 61/96: Planning and the Historic Environment: Historic Buildings and Conservation Areas. via: http://wales.gov.uk

Speak to the Experts

It may be that the advice of an appropriately trained professional would be helpful in producing a well-designed planning application.

Organisations that can provide advice include: Royal Society of Architects Wales (RSAW), Royal Town Planning Institute (RTPI), The Royal Institute of Chartered Surveyors (RICS) and the British Institute of Architectural Technologists (BIAT).

Be a Good Neighbour

It is always a good idea to make your neighbours aware of any plans you have for the extension of your property. If a planning application is submitted your neighbours will automatically be consulted.

If your proposal includes a party wall you will need to comply with the Party Wall Act 1996. Leaflets about this Act are available to you via your planning department.

Building Regulations

Building regulations apply to building work and set standards for the design and construction of buildings to ensure the safety and health for people in or about those buildings. The regulations also include requirement to ensure that fuel and power is conserved.

Building Regulation Approval is a separate consent from planning permission and will have to be obtained separately. If you receive planning permission you do not automatically have building regulations approval and vice versa.

1. Sustainability

Sustainability has many meanings ranging from environmental sustainability to economic sustainability. Simply described, sustainability is about creating communities and environments that seek to minimise their impact and provide a high quality of life, not only for the present, but for the benefit of future generations too. This section will explore largely environmental sustainability, how the built environment can respond to this, and ways in which the effects of new development can be minimised.

Though the overall aim of the LDP is to facilitate development that is sustainable in nature, Policy DM11 is of particular relevance in relation to sustainability as it deals with climate change.

1.1. Environmental Sustainability

Climate Change is one of the biggest challenges facing the world today and it will affect all of us in one way or another. Tackling climate change is a fundamental part of delivering sustainable development.

The planning system has an important role to play in improving the sustainability of new developments. Some of the effects of climate change will have an impact on our built environment. Therefore there is a need to design buildings to not only accommodate these changes but also reduce the amount of carbon our buildings and we consume; through good design we can achieve this.

1.2. What Does this Mean to You and What Can You Do?

Perception of sustainability can often be negative, a person says sustainable and people often think; reduction, change of lifestyle, expensive, space age design. Sustainability is not one element but many elements within a system.

Good, sustainable design and construction will have direct benefits on the residents of a locality, communities and even the developers. By considering sustainability at the beginning of the design process it can become an easy and holistic process.

1.3. Lifetime Homes

Ceredigion LDP Policy **LU02: Requirements Regarding All Residential Developments** requires that all housing development provide Lifetime Home Standards. Information on the Lifetime Home Standards can be accessed via: http://www.lifetimehomes.org.uk/

The purpose of applying Lifetime Homes standards is to design a dwelling that has the flexibility to meet the needs of its owners as time progresses and its owner's needs change. The design features required are very simple and when incorporated early at the design stage is unlikely to add too much further to the build cost. By implementing these elements a dwelling is capable of easier adaptation to meet the changing needs of its occupiers. A dwelling that has been designed with Lifetime Homes creates and encourages better living environments for everyone. From raising small children to coping with illness or dealing with reduced mobility in later life, Lifetime Homes make the ups and downs of daily living easier to manage.

There are 16 criteria within Lifetime Home Standards, the document 'Lifetime Home (LTH) Revised Criteria July 2010' produced by the Lifetime Home organisation (available for free download via this link: http://www.lifetimehomes.org.uk/data/files/For_Professionals/accessible_revisedlthstandard_final.pdf). This document helps to explain the criteria and what is required to achieve them.

1.4. Natural Heritage: Biodiversity and Landscape

Development should be designed to integrate with, protect and enhance the landscape and biodiversity values of the site and locality. The landscape of Ceredigion is important and should be protected and enhanced. This does not mean that development should not be permitted but that any development permitted is of a high quality that complements or contributes to the landscape.

Often landscape and biodiversity are seen as a constraint to development but this is not true. The unique landscape and biodiversity of an area will help give a site its distinct identity which in turn could help to market and sell the development. The

advantage of maintaining existing trees and hedgelines is that a newly developed site instantly has a feeling of maturity. It simply looks better and is often more appealing to buyers.

Section 4, of this SPG deals in detail with landscaping.
However, some general elements to consider at design stage include:

- Specialist input; consider using ecologists and landscape architects to advise on the overall design and layout of your site.
- Consider the natural heritage of the site. How can it be positively incorporated into the design?
- Retain existing biodiversity features and landscapes i.e. do not clear the site of features, encompass these features into the design of the development
- Design in new features which promote biodiversity.
- Compensate for any loss of biodiversity.

It's not just soft features which may be of importance to wildlife. Many existing buildings and structures have features that may be exploited by wildlife; birds and bats in particular. Lower plants such as rare mosses and lichens may also use these features. Demolition, extensions and even alternations may remove, block or alter these features and therefore have a significant impact on wildlife. For example, extending a property may involve affecting the soffits which may currently form an access point to a bat roost. In these cases, appropriate surveys may be required and sufficient mitigation and compensation incorporated into the development.

Building structures also provides opportunity for enhancements. Modern construction has created bat and bird bricks, bat tiles etc., which are built into buildings, walls and other structures. This provides a more long lasting integrated approach. Traditional bird and bat boxes may be appropriate in some circumstances.

For further information on when a development may impact wildlife and opportunities for enhancements, see the Nature Conservation SPG and the guidance note on 'Bats and Development'.

1.5. Low and Zero Carbon Developments

Buildings have an inherent environmental impact and contribute to carbon emissions. They require natural resources to be used both in their construction and use/occupation. The design affects how the occupiers use the building over its lifetime. It is the aspiration of Welsh Government that in the future all new buildings achieve a zero carbon standard.

TAN 12: Design provides guidance on low/zero carbon developments. Figure 3 demonstrates three key fundamentals that will need to be considered.

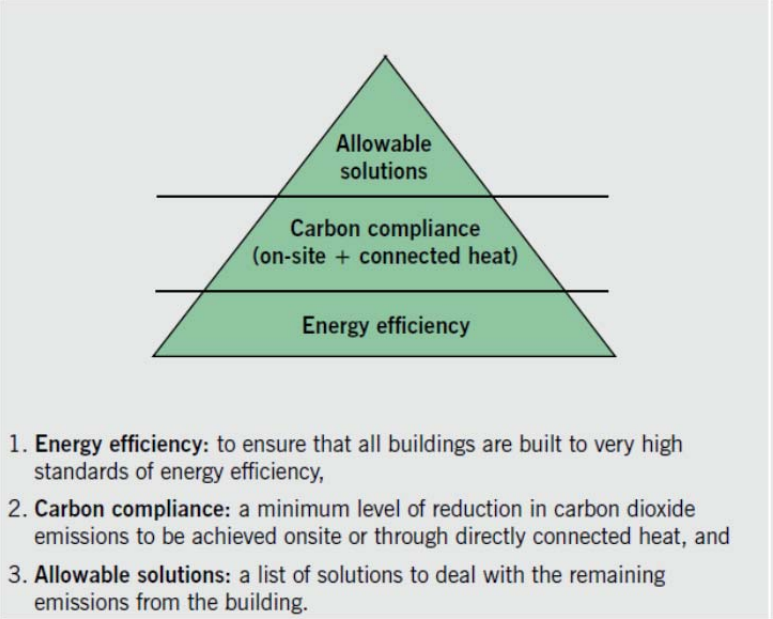


FIGURE 3: APPROACH TO LOW CARBON (TAN 12, WG, 2014)

1.5.1. Zero carbon buildings

This is a general term applied to a building/construction that has zero net energy consumption and zero carbon emissions.

Simplistically, it means that any carbon emissions during the construction stage are offset and that the building does not emit any further carbon emissions during its lifetime i.e. its power is from renewable energy resources, materials are locally sourced etc. Achieving zero carbon is difficult and does require a different way of thinking.

1.5.2. One Planet Developments

Within Technical Advice Note (TAN) 6: Planning for Sustainable Rural Communities there is opportunity to develop a 'One Planet' development. This type of development is defined as:

"One Planet Developments should initially achieve an ecological footprint of 2.4 global hectares per person or less in terms of consumption and demonstrate clear potential to move towards 1.88 global hectare target over time. They should also be zero carbon in both construction and use." (TAN 6, 4.15.1, 2010)

TAN 6 provides very clear guidance on what a development needs to achieve to be considered as a 'One Planet' development therefore all developments of this type should refer to this document which is free to download at: http://new.wales.gov.uk/topics/planning/policy/tans/tan6

1.5.3. Passive Design

Passive design aims to enhance the building form, orientation, façade design and site layout use to make maximum use of the natural environment. By doing this it will provide the occupant with a high level of comfort with minimum use of energy. In particular Passive Design focuses on:

- Solar energy: seeks to control the balance of maximising useful solar heating gains whilst minimising opportunities for overheating;
- Maximising the use of natural daylight;
- Use of natural ventilation when required;
- Using thermal mass to stabilise internal temperatures e.g. reducing the impact of high heat gains and avoid summertime overheating.

1.6. Flood Resilient Development

National planning policy prevents further housing from being developed in the C2 flood zone unless it can be justified in accordance with Technical Advice Note 15: Development and Flood Risk, Section 6. If a development is justified against these requirements it must be resilient to flooding.

You can find out if your site is within a flood zone via the Welsh Government interactive mapping: http://data.wales.gov.uk/apps/floodmapping/

Even if your site isn't within an area known to be affected by flooding you should consider some of the flood resilient design solutions, as one of the predicted effects of climate change is heavier rainfall and it may be that properties, whilst not being within a flood zone, can suffer from flash flooding. Flood resilient design solutions include:

- Skirting boards in a flood proof material;
- Main appliances on plinths so they are lifted off the floor;
- Appropriate flood resilient plaster for walls where the water may intrude;
- Ground floors should be of solid construction and finished with a flood resilient flooring e.g. slate, clay and thermoplastic floor tiles. Vinyl should be utilised over carpets or rugs which can be rolled up and moved to safety in a flood event.
- Guidance on flood proofing measures can be obtained from http://naturalresourceswales.gov.uk/flooding-and-water/what-to-do-before-during-and-after-a-flood/before/?lang=en http://naturalresourceswales.gov.uk/flooding-and-water/what-to-do-before-during-and-after-a-flood/before/?lang=en http://naturalresourceswales.gov.uk/flooding-and-water/what-to-do-before-during-and-after-a-flood/before/?lang=en.
- External doors are inset to allow for flood guards to be fitted if required.

1.6.1. Green roof buildings

A simple way to help save energy, improve water drainage and help wildlife is to install a green roof. A green roof is a system of roofing that uses plant life for roof covering instead of traditional covering materials. The roofs are made up of vegetated layers that sit on top of the conventional waterproofed roof surfaces.

Figure 4: Augustenborg (Malmo) green roof center (Susdrain)

Figure 5: Ddol House, Aberarth, Aberaeron

Image: Courtesy of Zeta Freeman, Catalina Architecture.

There are a variety of green roofs some of which are better for biodiversity and others for general wildlife.

A green roof can help reduce energy costs as it adds another layer of insulation making the internal building temperature cooler during summer months and warmer in winter months. This in turn helps lower CO2 emissions as the need for additional heating/cooling is reduced.

A green roof can also reduce the amount of surface runoff and can therefore be a key element to a Sustainable Drainage System (see Section 7: SuDS).

By installing a green roof, either on all of your building or on part you are helping to provide an element of 'Green Infrastructure' which helps benefit the environment of Ceredigion.

As a green roof is very different from a normal roof it is important to get informed advice on how the extra weight can be accommodated within the build process. It will also be important at the design stage to consider how access to the roof can be achieved for maintenance purposes.

As the design and planting of a green roof is very specialised, it is advised that if you wish to install a green roof you contact a trained professional who will advise you on the best plants etc. to use. Some resources are:

- http://www.thegreenroofcentre.co.uk
- http://livingroofs.org
- http://www.greenroofstoday.co.uk

1.6.2. Rain Gardens

A rain garden is a specifically planted dip or shallow hole that has been designed to take on the water displaced from impervious surfaces e.g. roads, roofs etc. This area reduces water runoff by allowing the water to be gradually soaked into the ground and therefore can also be seen to be an element of Sustainable Drainage Systems (SuDS). Please see Section 7 of this SPG (link).

Figure 6 and 7: Ashby Grove Rain Garden (Sudrain)

The garden therefore should be positioned near to an impervious source such as a downspout.

As this is an area that is meant to be wet it is important to plant water loving plants that are native to this country. It is important to plant a range of plants such as shrubs, trees, ferns as these all help soak up water. A Rain Garden will:

- Filter runoff pollution;
- Recharge local groundwater;
- Conserve water;
- Improve water quality;
- Protect rivers and streams;
- Remove standing water in your garden;
- Reduce potential of home flooding;
- Create habitat for birds & butterflies;
- Survive drought seasons;
- Enhance visual amenity; and
- Increase garden enjoyment.

1.6.3. Water Butts

A simple and cheap way of helping to conserve water is by installing a water butt. According to Waterwise, an average of 85,000 litres of rainfall falls on your roof every year. This rain can be diverted back into your garden to water your garden, clean your car and wash your windows. You can buy a water butt from the Council: http://www.ceredigion.gov.uk See website for more info.

1.7. Renewable Energy

Installing a form of renewable energy can help reduce electricity and heating bills, whilst also helping the environment. The main sources of renewable energy for the home are:

- energy from sunlight;
- heat from the earth, the air or water sources;
- plants grown for fuel (biomass or biofuels);
- waste;
- the movement of water (known as hydro) and wind.

For more information on the different types of renewable energy visit the Energy Savings Trust website:

http://www.energysavingtrust.org.uk/Generating-energy

If you wish to install photovoltaic or solar thermal as part of your project you should ensure that the frames of these systems are black instead of white or silver. A black frame will blend in with the traditional roof colour of Ceredigion more than the other and therefore look less incongruous.

1.8. Design Considerations

There are some simple things you can do when designing your new home or extension that can help with climate change, such as:

- Make use of onsite construction and demolition waste through the re-use of existing building materials e.g. bricks, tiles, slate etc.

- Design buildings and external spaces with enough room to provide for effective recycling and composting facilities.
- Consider onsite renewable energy. Large developments can often implement a community renewable energy scheme to serve the needs of the whole development.
- Consider design features which will help tackle some of the effects of climate change, for example:
    - shutters to shield against sun;
    - designing the roof, roof drainage and stormwater run-off to cope with higher and more intense rainfall; and
    - landscape planting suitable for drier conditions.
- Implement Sustainable Drainage Systems, this is a national requirement
- Design a rain garden – see above for more information
- Design a building to have a green roof – see above for more information
- Install a water butt – see above for more information
- Consider how the building can be used in the future, how it could be adapted to other uses.

2. Character: Understanding the Context of an Area.

Good design is one of the key elements of creating and maintaining vibrant, engaging environments that are sustainable. Developments should be designed so that they are desirable, healthy and safe. They should be designed for people of all ages to live, flourish and enjoy.

Ceredigion is fortunate to have a rich history, which is often reflected in many of its buildings and spaces. However, a lot of modern day development has little which connects it to Ceredigion, meaning it could relate to anywhere in Wales or indeed the UK. New development can be bland and uninspiring if it isn't based on a thorough understanding of what makes a place distinctive. This means looking objectively at the historic character as well as modern features to understand why a place looks the way it does.

Therefore in order to improve the quality of Ceredigion's built environment it is essential that new development is based on a thorough assessment of local character. Essential elements to consider when designing are:

- **People**: places should be designed with people in mind. A well-used place is a well-loved place.
- **Connect with the existing**: analyse objectively the characteristics of the area in which the development is to be located. Do the existing buildings and structures have a recognisable built form, which reflects the history of the place, what is distinctive about the existing architecture and how does it contribute to local identity?
- **Work with the landscape not against it**: designs should ensure the new built form can work with the landscape and enhance it.
- **Think about the future**: developments should be built to last, however demographics and situations change. Will your development be flexible to meet changing needs?

Before you start designing your new development (dwelling, shed etc.) ask yourself:

1. What do you like about the location in terms of its architecture?
2. What don't you like about the location in terms of its architecture?
3. What do you think needs to be improved in terms of the built form?

These three simple questions will give you a general idea as to what it is about a certain location you like and then the elements which you think could be improved upon. Based on this you can begin to consider how your development and the design of the development can address these issues. For a full understanding of the location, at the end of this section there is a list of questions - answering these will provide you with information to inform the Design and Access Statement.

A Positive Effect

When looking at the area you wish to develop it is important to consider whether the existing built form and its local context is positive. If it is you should consider how the new development can reflect these positives attributes.

The character and context of a site should influence the design positively so that it does not simply mimic what already exists but reflects and responds to it.

The first stage of assessing a site is to start working with the site not against it. If a site is sloping, it should not necessarily be levelled. The design of the site should work with the slope where possible not against it. Locally New Quay provides a good example of where development form has worked with the natural form of the land; the houses rising in terraces up from the coast.

You can incorporate positive attributes such as street pattern, building scale and form, proportion all within new development whilst still having a new architectural style.

Figure 8 below shows a good and bad example of how buildings should relate to each other. The top row of terrace houses are in proportion with each other, with the roofs in line, and the windows and doors symmetrically positioned along the façade. The bottom row of terrace houses incorporate a 3 storey building, which is out of proportion to the other terrace buildings, due to its size and also the window and door configuration.

FIGURE 8: SCALE AND PROPORTION IN A STREET

Where the local context has a weak or negative character it would not make sense to perpetuate what has been done before and therefore new development must improve the area. This could be done for example, by introducing new street patterns, building forms and different architectural styles.

Ensuring that the new development will positively improve the appearance and character of a site in its setting will help set a benchmark for future development. This is crucial where the existing site and context are currently of poor visual quality or are weak and lacking in character.

It is often perceived that innovative design cannot exist within established patterns or a settlement and that it conflicts with traditional styles of architecture.

The reality is that architectural styles have evolved over hundreds of years and have changed numerous times in the past in response to changing social, economic and environmental conditions. Therefore there is no reason why design which uses modern materials and responds to contemporary aesthetics should not fit in with the context of more traditional forms of development if done correctly.

Often issues surrounding the merits of traditional versus contemporary architecture revolve around the style of the building itself. Often very basic things are overlooked when designing a new contemporary building. These very simple things can often help the new building be in-keeping with the character and context of the traditional built form. Elements to consider are:

- Building setback;
- Plot width;
- Building height,

FIGURE 9: MODERN BUILDING WITHIN ABERAERON

Visual richness does not mean overly fussy complicated designs. Often some of the best built forms are very simple in their design. Visual richness frequently comes from a focus on detail, for example sash windows, decorative facia etc. It is also important to consider whether your site and development presents an opportunity to do something special in terms of design. Some simple ways of adding visual richness are:

- Adding building height on corners;
- Well detailed facades at the end of vistas;
- Quality materials.

Density and Mix

Development should use land efficiently, applying a density that is appropriate to the area. Compact development encourages densities that are sufficient to support local services and amenities. This in turn reduces the need to travel and helps enhance community cohesion.

It is important to remember that there is an opportunity to ensure that design density drives a responsive approach to the context of the development.

'Cramming' of detached properties onto separate plots should be avoided and instead opportunities for terracing, in-setting and formulating 'property group' design identity are encouraged, as are design responses to on-site levels and natural features.

When thinking about the appropriate density some things to consider are:

- How biodiversity, ecological and landscape will affect the density;
- How higher densities can be used positively to define spaces, frontages and main streets in accessible areas or around concentrations of services/facilities;
- How the provision of open space will be secured within the higher density - guidance with regard to open space requirements and how the requirement is calculated is set out in detail in the LA's Open Space SPG.
- How unit size relates to the plot size. The plot size should reflect the unit size.

Sites specifically allocated for housing within the LDP have already been set a guide density by the Council. These densities should be achieved where possible. If during the design process it becomes apparent that either the guide density cannot be met or could be exceeded you should speak with the LPA prior to submitting a planning application and justify the deviation. The Allocated Site Schedules and Settlement Group Statements can be seen in Volume 2B of the LDP (http://www.ceredigion.gov.uk/ldp) these contain the guide densities for the allocated sites.

If your site is a ‘windfall’ site, i.e. a site within a Service Centre which has not been allocated, the Settlement Group Statements provides a guide density for windfall sites (see Volume 2B of the LDP http://www.ceredigion.gov.uk/ldp).

During the first stages of the design process in relation to any residential development it is essential to consider what dwelling types you are intending to provide. **Policy LU02: Requirements Regarding All Residential Developments** requires that there is a mix of dwelling types and sizes to help achieve a balance of housing stock.

A well designed residential development which has a mix of dwelling types and sizes makes a development site more interesting and ultimately a more desirable place to live. A site that has a mix of dwelling types offers diversity, attracting a range of residents e.g. young couples, families, older persons, which creates a vibrant, socially inclusive residential area.

There are three main dwelling types:

- Detached;
- Semi-detached;
- Terraced.

New development in Ceredigion has recently consisted of large detached properties with a small element of semi-detached properties. In order to ensure an appropriate mix and to achieve the higher densities as set out within the LDP a development which offers a mix of detached (small and medium sized), semi-detached and terraced is encouraged.

Terraced developments (town houses) in Ceredigion are evident in Aberaeron, Aberystwyth and New Quay. Unfortunately recent developments have not carried on this development style despite it being an excellent way of achieving higher density.

An associated problem with terraced development is that historically it has meant smaller properties (although this is not the case within Ceredigion), noise issues and less privacy.

However with new building standards now in place the issue of carried noise from one property to the next will be drastically reduced. In regard to private amenity space this can easily be achieved by having private gardens that are either walled or fenced – as would be the case in a semi-detached property.

Terraced development offers a range of advantages, including:

- Relatively cheaper than semi-detached and detached dwellings;
- Cheaper to heat - fewer outside walls;
- Possibly lower Council Tax banding;
- Potentially more social contact with neighbours than with detached dwellings.

Whilst historically terraced dwellings have been designed to look the same this doesn't have to occur in modern development. Different render colours and materials can bring in interesting variety to the streetscape.

Additionally terraces do not have to be two or three storey, it is possible to build single storey terraces which may assist with more appropriately meeting the needs of an aging population within the County, whist allowing a site be used effectively in terms of land.

Detached properties by their very nature take up more land than other dwelling types. Whilst a detached dwelling is often the most desirable there are more efficient ways to develop these properties. For example, link-detached properties make more efficient use of land. Whilst this means that the property is attached to another it is usually attached via a garage. This means the main rooms of the dwelling are still detached from one another therefore it retains the 'detached' classification.

Overall it is important to consider the mix and density when designing your site as they go hand in hand and have to be considered together in order to achieve a holistic design.

Questions to Ask Yourself

The purpose of these questions is to help you understand what is positive and negative about an area, this in turn will help you design a development that builds upon the positive elements but hopefully reinforces against the negative parts.

The context of an area is not just about the character of the place, it is also about understanding what that place offers people in their day to day activities. Again you will need to look at the site and assess how you see a development working there.

You can use the answers to these questions to inform the Design and Access Statement which is required as part of a planning application.

- What is the local architecture style? Is there a clear style e.g. Georgian or is there a mix?
- How are existing buildings laid out e.g. are they set back from the road with gardens at the front or are they all different?
- How high are the surrounding buildings?
- What are the roofs like?
- What materials are used in the area e.g. stone, brick, render? Are they all the same or is there a mix?
- Is there one type of building that has a dominance e.g. detached dwellings, terraces, bungalows? Does this make it interesting or dull?
- Are the buildings plain with a lack of detailing or is there a lot of detailing?
- What are the windows like? Are they vertical or horizontal in proportion? Are there bay windows or dormer windows? Are they all in proportion or not?
- Does the area have a strong character or character features that could be incorporated into your design through perhaps the use of materials, height of buildings etc.
- Is the character of the area uninspired, adding little to the area and therefore a new character approach would be a positive enhancement?
- Are there any buildings on site? Are the buildings interesting in their architecture, could they be refurbished?

- What is the landscape of the area? Is it flat? Does it slope; can the design incorporate the slope to provide terrace development for example as development occurred in New Quay?
- Have you assessed the site for ecology? What constraints has the assessment identified?
- Is the site very visible? Can it be seen from more than a local perspective?
- Is the site exposed to prevailing winds? If so how can the design of the development reduce the effects of this exposure?
- Does the site adjoin an existing built form? How will issues such as privacy and shadowing be tackled?
- Are there any neighbouring uses that the new development will need to be screened from?
- How is site access to be gained?
- Are there existing routes crossing the site?
- Can you connect into existing pedestrian/cycle networks?

3. Built Heritage

Heritage Bill for Wales: The Heritage Bill and associated measures will aim to modernise and simplify controls while making protection more effective where it is needed. The Heritage Bill is scheduled for introduction to the National Assembly for Wales in spring 2015. It is important that this document is referred to when making a Listed Building application.

Conservation Areas and Listed Buildings

Conservation Areas

Ceredigion has a strong built heritage and due to this we have thirteen conservation areas. Conservation Areas are areas of 'special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.' If you live in a conservation area you may have restricted permitted development rights. Ceredigion currently has 13 Conservation Areas:

- Aberaeron
- Aberystwyth
- Adpar
- Cardigan
- Cenarth
- Lampeter
- Llanbadarn Fawr
- Llanddewi Brefi
- Llandysul
- Llanrhystud
- Llansantffraed / Llan-non
- New Quay
- Tregaron

Many of the conservation areas within Ceredigion were designated during the 1960's and lack detailed explanations for the designations. However, three conservation areas do have conservation area appraisals, they are:

- Cardigan
- Tregaron

- Llanddewi Brefi

Over the coming years the Local Authority will be reviewing the conservation areas in the county and may consider designation of new ones.

It is important that where a conservation area appraisal exists reference is made to it as part of a planning application. The information and guidance given within the conservation area appraisal should be used to inform the design of a new development.

Existing conservation area appraisals can be accessed via the Councils website at: www.ceredigion.gov.uk. As the evaluation and assessment of the conservation areas is an on-going project it is important that you check the Council's website www.ceredigion.gov.uk to see if any new documents are available on specific areas.

Cadw has produced a characterisation report on Aberystwyth: 'Aberystwyth: Understanding Urban Character' available for download via the Cadw website, a link to which is provided via the Council's website www.ceredigion.gov.uk. This document can be used to inform plans and development within the Aberystwyth area and should be considered at an early stage of the design process.

If you are considering any demolition works within a conservation area you will need to obtain conservation area consent.

What you Need to Consider

When designing a new development that is either within a conservation area or adjacent to a listed building you need to assess the character of the area and the building.

For a listed building this means looking at and evaluating the:

- Style – what era is the architecture, Victorian, Georgian etc.?

- Proportion – how big is the building, does it fill the whole plot?
- Scale – is the building of the same scale as surrounding buildings, is it larger, smaller?
- Condition – good condition or poor?
- Significance – is this part of a group listing or does the building stand out on its own?

If you are developing within a conservation area this means you need to think about:

- How the proposed development fits into the conservation area and enhances it.
- How does the proposed development reflect the spatial and structural characteristics within the conservation area?
- How do the siting, scale, height, form, details and building materials reflect and enhance the conservation area?

It is also important to consider how the development may affect views into and out of the site. Will the proposed development alter an important view, if so can it be re-designed to eliminate these issues?

Ultimately it is essential that the proposed development enhances the conservation area or the listed building. Please reference: Welsh Office Circular 61/96: Planning and the Historic Environment: Historic Buildings and Conservation Area.

Tree Preservation Orders (TPOs) and Trees in Conservation Areas

Many trees and woodlands in Ceredigion are protected by Tree Preservation Orders (TPOs). Tree Preservation Orders are placed on trees, groups of trees and woodlands on the basis of their landscape and amenity value. There are some 200 TPOs in place in Ceredigion. In brief, TPOs prevent the cutting down and lopping (or other specified works) of trees unless the permission of the local authority has first been obtained.

Trees in Conservation Areas are also protected: the local authority must be given 6 weeks notice before carrying out works to trees in a conservation area. This period gives the Council an opportunity to consider the proposals.

All trees are also protected by felling license permissions administered by the Forestry Commission. For more information see the following website: http://www.ceredigion.gov.uk

Listed Buildings

Ceredigion has approximately 1888 listed buildings. If your building has a special historic or architectural character it may be a listed building. These are the three different types of listings:

- Grade II: Of special interest (majority of listed buildings fall within this category).
- Grade II*: Of particular importance (small majority of listed buildings fall within this category).
- Grade I: Of exceptional interest (very small minority of listed buildings fall within this category).

Listed buildings are buildings which have been assessed against criteria set out in Welsh Government Circulars 61/96 ‘Planning and the Historic Environment: Historic Buildings and Conservation Areas’ and Circular 1/98‘Planning and the Historic Environment: Directions by the Secretary of State for Wales’. You can access these circulars via this link: http://wales.gov.uk

The main criteria for listing are:

- Architectural interest: buildings important to the nation for the interest of their architectural design, decoration and craftsmanship
- Historic interest: buildings which illustrate important aspects of the nation’s social, economic, cultural or military history
- Historical associations: the building is associated with people or events of importance to Wales

- Group value: where the buildings comprise an important architectural or historic unity or a fine example of planning

When a building is listed it applies to the whole building not only to the front elevation. The listing includes the interior of the building and any other buildings or structures within the grounds (or 'curtilage') of the listed building. As part of the listing there is a ‘list description’, please note that this description is only intended to identify the property, therefore do not assume that because a feature of the building is not mentioned in them they are not of value.

If you are proposing to do work on a listed building you will need to get listed building consent. It is also important that you refer to paragraph 70 of the Welsh Office Circular ‘61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas’. This circular gives you clear information on what can and cannot be done to listed buildings and buildings within conservation areas.

Having a property in a conservation area or having a building listed does not prevent change and buildings are not ‘frozen’ in time. Listed buildings can be altered, extended and sometimes even demolished within national planning guidance. However you should note that it is a criminal offence to alter, extend or demolish a listed building in any manner, internal or external, that would affect its character as a building of special architectural or historic interest without listed building consent.

For any works to a building in a conservation area or a listed building you should refer to the Planning Portal website for information on current regulations and policies:
http://www.planningportal.gov.uk/planning/appeals/otherappealscasework/listedbuildingconservation

When developing a listed building or in a conservation area, development should preserve and enhance the area and/or building. As part of a planning application the LPA expects a heritage statement setting out:

- Description of the heritage asset and its setting;
- An assessment of significance of the building/area;
- An explanation of the design concept for the proposed development;
- Describing the direct impact of the proposed development on the building/area;
- Describing the impact on setting;
- Describing the impact on archaeology.

Building Regulations and Listed Buildings

The Building Regulations are a group of statutory instrumental documents set by the Welsh Government that cover the construction and extension of most new buildings and many alterations to existing buildings, including listed buildings for the purposes of securing reasonable standards of health and safety.

The Building Regulations only apply to new work and there is no general requirement to upgrade all existing buildings to meet these standards.
Where a building did not comply with the Regulations before the alteration, the work of alteration shall be carried out so that afterwards the building's compliance with the Regulations is no more unsatisfactory.

Welsh Governments Approved Document L1B: Conservation of fuel and power (Existing dwellings) states that ‘Work to such buildings is required to comply with the energy efficiency requirements as far as is reasonably practicable. In considering what is reasonably practicable, the work should not unacceptably alter or mar the character of the building or increase the risk of long-term deterioration.’

The detailed technical guidance on how to implement specific energy efficiency measures produced by English Heritage should be taken into account when determining appropriate energy performance standards for building work to existing dwellings. See list of available guidance documents at http://www.english-heritage.org.uk.

Ceredigion's: Built Heritage

Registered Historic Parks and Gardens

The Cadw/ICOMOS Register of Parks and Gardens of Special Interest in Wales is a heritage register of significant historic parks and gardens in Wales. Sites are classed into grades I, II* and II according to their importance, in the same way as Listed Buildings.

There are 12 registered historic parks and gardens in Ceredigion:

1. Llanllyr – Grade II
2. Pigeonsford Walled Garden - Grade II
3. Alltyrodyn - Grade II
4. University of Wales, Aberystwyth: Plas Penglais, Penglais Campus and Llanbadarn Campus; The National Library of Wales - Grade II*
5. Derry Ormond - Grade II
6. Hafod - Grade II
7. Llanerchaeron - Grade II
8. Nanteos - Grade II*
9. Trawsgoed - Grade II
10. Lodge Park - Grade II
11. Coedmore - Grade II
12. Cardigan Castle - Grade II

Registration is a material consideration in the planning process; local planning authorities must take into account the historic interest of the site when deciding whether or not to grant permission for any changes: For more information go to: http://cadw.wales.gov.uk

Reusing Existing Redundant Buildings

Repairing, adapting and reusing existing redundant buildings contribute to protecting the buildings embodied energy and avoids unnecessary waste. Conversion provides a sustainable alternative to new build and has an important role to play in increasing the level and type of housing stock within the County. Policy LU07: Subdivision of Existing Dwellings and Policy LU09: The Re-use of Former/Abandoned Dwellings of the LDP considers various circumstances in which opportunity for conversions may be suitable. You can find more information at: http://www.ceredigion.gov.uk/ldp

Clom Buildings

Clom buildings are an ancient building style that was used in Wales and Ceredigion, some examples remain. Traditionally the walls of a building would have been made from earth, straw, animal hair and water from the surrounding area.

The clom method of buildings is seen to be ‘eco-friendly’ as it is using plentiful natural material, i.e. soil, straw etc. Due to the fact that the material can be sourced locally travel impacts are reduced and the embodied energy is minimal. The end result of this method produces a high level of thermal insulation.

The ‘dry’ result of a clom building is a very hard and durable external wall, although the building does need to be protected from driving rain as it will eventually erode the structure.

The clom building method has in recent years seen a revival and is becoming a popular building method. Part of the popularity is from the fact that interesting shapes and forms can be taken when using this building method due to its flexibility.

Whilst it is a traditional building method the building will still need to meet modern day Building Regulations and you will still need house and property insurance.

Earth Sheltered Buildings

Earth sheltered buildings uses the ground as insulating blanket which effectively protects it from temperature extremes, wind, rain and extreme weather events. An earth sheltered home is energy-efficient, quiet, freeze-proof and low maintenance. Aesthetically an earth sheltered home blends in with the natural environment, leaving more yard space and more space for wildlife. The main advantages of having an earth sheltered building are:

- Less susceptible to the impact of extreme outdoor air temperatures;

- Require less outside maintenance, such as painting and cleaning gutters;
- Natural soundproofing;
- Ability to 'blend' into the landscape.

As earth sheltered buildings are a specialist type of development it is recommended that you seek a professional architect and developer who has expertise in this type of development. It is also important to remember that you will still need to meet Building Regulations and you will still need house and property insurance.

Archaeology

Dyfed Archaeology are consulted on any application near to a Scheduled Ancient Monument or which may impact on a known archaeological site. Depending on the type of application, they may request archaeological investigations prior to determination of an application or request planning conditions relating to recording of archaeology during construction. For more information go to: http://www.dyfedarchaeology.org.uk/

4. Movement

The ability to move around or through a place (movement) affects how it is used, the activities undertaken, how it will develop in the future and the overall 'feel' of the place.

There are three main LDP policies that address the issue of travel and movement:

- DM03: Sustainable Travel;
- DM04: Sustainable Travel Infrastructure as a Material Consideration; and
- DM09: Design and Movement.

Reference should also be had to the following guidance documents:

- Manual for Streets
- Ceredigion County Council SPG: Transport Assessments
- Ceredigion County Council SPG: Parking Standards
- CSS Wales Parking Standards 2008.

For your development to be welcoming it is essential that it is designed for the people who are to use it.

At the end of this section you will find a set of questions which you can use to help you assess the space you wish to develop. If you use these questions, they can help inform the Design and Access Statement that you need to submit as part of a planning application.

4.1. Layout of Residential Areas

Layout is a major influence on how people choose to travel or move through and area. The layout of streets, spaces and buildings is fundamental to achieving high quality design. If the layout of the development is wrong then no matter how high quality the design of a development or building is it will not work as well as it could have.

Ceredigion has a mixture of layout types however they can broadly be broken down into two categories:

- Traditional networks: irregular and regular; and
- *Cul-de-sac*.

To provide adequate amenity space and prevent overlooking the following should be applied as a guide:

- 21 meter gap between opposing windows of habitable rooms;
- 10.5 meter gap between main windows and a blank wall; and
- A 10 meter garden depth should be provided.

These guide measurements could be reduced if a landscaping scheme helps prevent overlooking (refer to the Section 4: Landscaping within this SPG) and

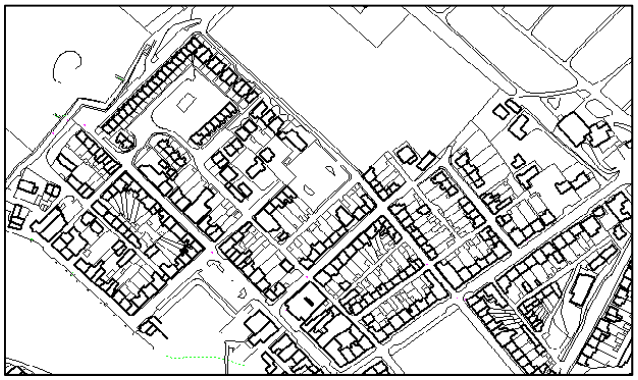
open space is provided for (refer to the Open Space SPG) within the development.

Traditional Networks

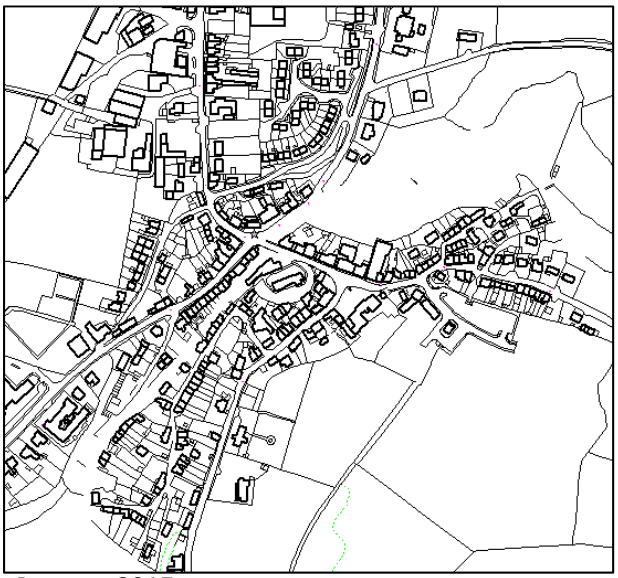
Generally traditional networks are simple grids of streets that connect together. They can be very regular creating rectangular or square 'blocks' (very typical of American layout) or irregular creating a variety of block shapes of buildings.

The advantage of traditional networks is that people are able to navigate them easily, places are well connected to one another, giving direct routes. Dwellings usually face straight onto the street so there is a general feeling of it being 'safe'.

Figures 10 and 11 below illustrate the traditional grid pattern seen within Aberaeron.



Whilst figures 12 and 13 demonstrate an irregular grid pattern as can be seen at Tregaron.



Cul-de-sac

Associated with housing developments of recent decades, typical design is a single access point with housing around it. Figures 14 and 15 illustrate a cul-de-sac development in Llanarth.

The positive aspect of a cul-de-sac development is that it is often quiet and is safer because there is only one way in and only one way out (not a through route so used by residents and people visiting or serving those residents only). There are however some associated problems with this type of layout.

Firstly there is little connection between one cul-de-sac and the next thus it is harder for people to get around on foot. Often the only way to walk within a cul-de-sac is to follow the road. The cul-de-sac has mainly been developed with car movements as the principal means of transport, not people. Having only one entry and exit can cause problems in terms of trying to get on/off the estate to local services etc.

Secondly many if not all of the buildings in a cul-de-sac have in recent times looked the same and it can be difficult for a person to navigate the area and find where they are looking for. This lack of mix in dwelling types makes a rather uninteresting streetscene.

These problems can easily be overcome by thinking of cul-de-sacs not only in terms of cars but also people. Having a link through the site to other areas

e.g. to the main footpath, to other developments, that is naturally overlooked will allow people to move around a development on foot or on bike.

Additionally by having a mix of different types of dwellings e.g. terrace, semi-detached, bungalows, interest is added to the streetscene and individual cul-de-sacs gain identity rather than being one of many identical cul-de-sacs in the same area.

4.2. Legibility

Developments need to be easy to understand so people can easily navigate their way around and through the development, this is what is meant by legibility.

The structure of a development in terms of its streets, built form and spaces creates an image of a place and can help establish the identity and character of a place and how it is perceived by others. It is essential that a place can be easily understood otherwise it means people cannot find their way around as it may not be obvious which route leads to a further street or to a dead end. It can also mean that a place has no clear sense of identity and is seen as being ‘bland’ or possibly negatively such as ‘the estate off the trunk road’. Some elements which help improve legibility are:

- The movement function of the streets, reinforced by the design of the streets, public realm and the scale and form of the buildings;
- That development ties into the existing pattern of landscape, streets and roads so that it is connected with the existing urban/rural pattern;
- The design and position of landmark buildings to create focal points;
- The design and landscape of spaces and vistas;
- Linkages to existing landmarks and views;
- Visual connections along routes, between spaces and at landmark locations with appropriate landscaping, lighting and signage;
- The function of a place or building is recognisable.

Figure 16 illustrates how a building can be used as a landmark and how whilst being of a different scale balances within the surrounding development.

FIGURE 16: ILLUSTRATION SHOWING SCALE, PROPORTION AND SYMMETRY.

4.3. Accessibility and Ease of Movement

The success of a new development depends on how well the connections to and from the site are. Developments should be created that are accessible to all, linking into the surrounding areas, ensuring that it is easy to get from one point to another.

The ease of movement or the 'walkability' from one point to another is essential to the vitality of a place and how well it works.

Developments now need to consider all forms of movement, not just cars. Movement by foot, bicycle or public transport should be as easy and convenient as using the car. This does not mean that the car should be excluded but that there is a balance and that the car is not the primary focus.

4.3.1. Layout Types and Movement

As previously mentioned how a place is designed and planned can affect how a place is used and moved through. Figure 17 show a typically designed cul-de-sac development in Ceredigion. The arrow demonstrates the single point of access and how all movement, pedestrian or otherwise has to follow this one route.

FIGURE 17: CUL-DE-SAC DEVELOPMENT SHOWING THE MOVEMENT IN AND OUT OF THE DEVELOPMENT.

Figure 18 demonstrates the grid layout within Aberystwyth. As can be seen there are multiple routes in and out of the area, with multiple connection points. This provides an accessible environment which people are able to move through easily and freely and thus are used more.

The red arrow shows the main route in to the town, which although mainly for vehicles also provides access for pedestrians. The purple arrows show secondary streets accessed off the main one. The blue arrow demonstrates the clear line that the grid layout presents. This direct line would allow pedestrians to see a clear direction of travel.

FIGURE 18: GRID LAYOUT OF ABERYSTWYTH

It is also important to consider movement in terms of non-domestic development. Figure 19 shows Great Darkgate Street in Aberystwyth.

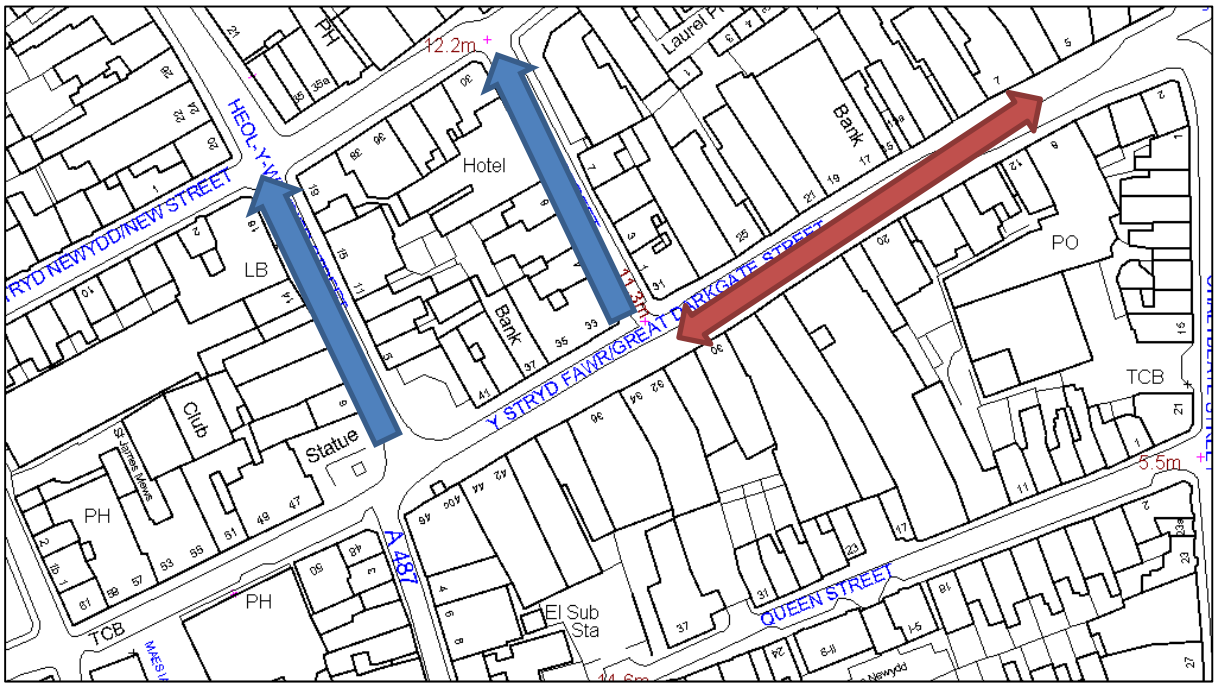


FIGURE 19: GREAT DARKGATE STREET, ABERYSTWYTH

The red arrow indicates the major movements, both pedestrian and vehicular, along Great Darkgate Street, the main high street of Aberystwyth. In order to provide a safer environment this stretch of road has been traffic calmed, having lower pavements so that pedestrians become a visible presence along this stretch. Due to this and the narrow nature of the road drivers tend to drive slowly. By having the street become a mixed area e.g. pedestrians and vehicles, the street is lively and engaging. The purple arrows demonstrate the movements down secondary streets.

Whilst considering how people move it is also important to consider the future of a site. A large site needs to be designed so that potential future access to remaining land can be achieved. Figure 20 shows a site within Aberystwyth which has built into its design the future development of surrounding land. This is demonstrated with the green arrow.

Whilst this estate is based on cul-de-sac principles there is a possibility of multiple access points, as illustrated by the two blue arrows.

FIGURE 20: FUTURE PLANNING

4.4. Different Movement

It is essential that new development is created to be pedestrian and cycle friendly streets and places. The one thing to remember when designing a site is: Think about the place that is being developed rather than the car.

In terms of different types of movements they can be broken down into; pedestrian, cycling and public transport.

The points set out below can help inform how the site is developed and the different types of movements that need to be catered for.

Walking and Cycling Environment

How attractive, safe and well cared for a development is will influence whether or not people will walk or cycle. When a street is well designed and incorporates low speeds then pedestrians, cyclists and vehicles can interact safely. A starting point for considering pedestrian and cycle friendly streets are the 'Five C principles':

- **Connections**: Do good pedestrian routes connect the places where people want to go?
- **Convenience**: Are routes direct, and are crossings easy to use?
- **Convivial**: Are routes attractive, well lit and safe? Is there variety along the street?
- **Comfortable**: What is the quality and width of the footway, and what obstructions are there?
- **Conspicuousness**: How easy is it to find and follow a route? Are there surface treatments and signs to guide users? (Urban Design Compendium, 2007)

When considering the design of development, elements to consider in relation to developing places that will encourage walking are:

- **Making pedestrians be seen:** have a pavement where they can be seen by drivers, other pedestrians, house owners etc.

- **Good connections:** link into existing walking routes or those within the development
- **Safe crossing points:** clear crossing points e.g. raised surfaces for crossing points, different surface material.
- **Attractive environment:** planting, benches, things to look at
- **Lead to somewhere people want to go:** allow people to walk to where they want to go e.g. open space, shop etc. not simply following the main road
- **Measures to slow motorised transport:** slower speeds, road layouts that make drivers travel slower

When considering the cycling environment it is important, like with walking, that routes are safe and direct. Some points to consider are:

- **Clear, direct routes:** design a route that takes them to where they want to be and does not require them to keep stopping and dismounting their cycle
- **Traffic calmed streets**: streets that are of a lower speed are friendlier for cyclists
- **Cycle lanes:** on busier streets where it may not be possible to reduce speeds the provision of a separate cycle lane that is clearly marked on an existing pavement etc. may be beneficial
- **Storage for cycles**: provide safe storage for cycles e.g. by shops, by bus stops etc.

Public Transport

Whilst Ceredigion is a rural county we do have a regular bus service which can be accessed from a variety of settlements. Encouraging people to use public transport is an important step to achieving more sustainable travel methods.

To help encourage people to catch the bus it is important that it is convenient to catch the bus. This, like walking and cycling, means:

- Ensuring that routes to the bus stop are clear, direct and attractive;

- Locating bus stops in visible locations e.g. shops, road junction, residential area;
- Providing attractive shelter, it rains a lot in Ceredigion and people need to be able to keep dry.

4.5. Good Streets and Spaces

The public realm is formed by streets and spaces and is available for use by the community. The streets and spaces make up the 'face' of a settlement and it is what greets its users. An attractive public realm enhances people's quality of life and how a place is perceived. Good streets and spaces are built upon the principles of character, inclusion, ease of movement, safety and legibility therefore new development should aim to meet the following objectives:

- Make a positive contribution to streets and public space, helping to enforce their relative importance in the overall townscape.
- Make a positive contribution to streets and public space as attractive places for appropriate activity and social interaction.
- Support an attractive, pedestrian-friendly environment for all.
- Support or provide a public realm of streets and spaces that are well designed so that they are visually attractive, engendering pride in place.
- Be designed to make a positive contribution to the street scene.

In order to meet these objectives development should:

- Ensure continuity in the frontages of streets and spaces, this does not mean that every building has to look the same, but that there is a relationship between the building line and the street pattern.
- Avoid inappropriate or unsightly gaps between buildings and unusable, left open spaces.
- Support an attractive pedestrian-friendly environment for all where the focus is not entirely on vehicle transport access.
- Encourage active frontages in commercial and mixed use developments, minimising blank walls and other 'dead' frontages.

- Ensure that pedestrians have safe and convenient access to the homes, street and public space.
- Ensure that off street parking is designed so that it does not disrupt or detract from the townscape and landscape.
- Embrace the sunniest aspect of the site providing seating and activity areas in these locations.
- Provide shelter from winds in public spaces by locating appropriate buildings or landscaping.
- Provide coordinated street furniture.
- Integrate landscaping into the street furniture e.g. trees, hedging etc.
- Where appropriate consider the use of public art.
- Provision of shady areas particularly in car parks

Areas and streets that are safe are more likely to be used and enjoyed. Two principles that should be considered in every development are:

- Public spaces are overlooked and visible by surrounding buildings; and
- Clear distinction between public and private space.

The document 'Secured by Design' by the Association of Chief Police Officers focuses on crime prevention of homes and commercial premises and promotes the use of security standards for a wide range of applications and products. The guidance given within these standards could be used to help design out crime. It is available here:
http://www.securedbydesign.com/index.aspx

For advice on car parking facilities developers should refer to the Ceredigion County Council Parking Standards SPG 'Park Mark - The Safer Parking Scheme' this has been developed by the association of Chief Police Officers and it is aimed at reducing crime and the fear of crime in parking facilities. You can access it via this link: http://www.britishparking.co.uk/Park-Mark---The-Safer-Parking-Scheme

4.6. Street Characterisation

All streets are diverse and as such their uses and movement patterns are different. As part of any new development it is essential that you assess what the development is to be and how the streets can reflect this.

When thinking about the development and its design the main question that should be asked is **'what will happen on this street?'** By doing this you can begin to design the streets to suit the activities that you would like to see carried out on it.

For example, if the street is to be a commercial/retail development the street should be designed to enable people to enter the shops, to linger in front of shop windows, to meet and chat with others, to have a drink etc. If however the development is residential, streets should be designed so that it is safe for people to walk and children to play. This may result in narrower streets with lower speed limits and a more interesting 'streetscape'.

Whilst the provision of highways, junctions etc are governed by other national legislation strict adherence to rigid road layouts can produce bland, uniformed developments that do not reflect the sense of place. It is therefore essential that you speak with Highway Officers at the earliest possible opportunity to discuss your ideas.

4.7. Questions to Ask Yourself

When thinking about your development, the accesses required and the movement of the development it may be useful for you to consider the following questions:

- How does it relate to the wider area?
- Is it part of a network of similar streets or is it individual?
- Will it be linking in with an existing street or is it completely new?
- If it is an existing street, how is it used?
- How do people use the street?
- How do vehicles use the street?
- If it is a new street how will the street be used?

- How will people use the street?
- How will vehicles use the street?
- What are the main building uses?
- Are there any trees, verges or other vegetation?
- What road signs are present?
- What street furniture is present? E.g. benches, bins etc
- Does the street feel open or enclosed?
- Does it feel crowded or busy, or both?
- Does it feel dangerous because of traffic activity?
- Is the street unattractive or derelict?
- A collaborative design approach for vehicular, pedestrian and cycle should be designed in conjunction with one another. Design for low vehicle speeds to ensure that streets and spaces are safe for pedestrians and cyclists to use.
- Development should connect into existing routes around and through the site;
- Direct routes that are attractive and follow a line of desired travel and movement pattern e.g. local shop, school, bus stop etc.
- Identification of the importance and significance of each route reflecting the hierarchy of roads, streets and paths via their design;
- Routes should allow for further development stages;
- Site is permeable and interconnected. Consider how access for all is to be provided e.g. those with physical, visual and hearing impairments to be catered for;
- Clear signage to aid way finding;
- Regard to Manual for Streets.

When considering movement all types of movements e.g. cars, pedestrians, cyclists, public transport, should be contemplated, addressing the following points:

- **Integration/Linking Up**: how does the new development connect with the existing built form? How will it overlap? What links can be provided between the old and new?

- **Sense of place**: how will the development be distinct? What makes it different from other developments? How does the development strengthen local identity?
- **Functionality**: Consider as a whole how all the individual land use elements will work together e.g. dwellings, shop, play area, streets etc.
- **Harmony**: consider the environmental sustainability, how does the development affect it, what can be done to enhance the environment?
- **Safety:** How will movement around and through the development be safe? What risks are there, can they be minimised?

5. Landscaping

The landscape is one of Ceredigion's most important features and resources and therefore it needs to be protected and enhanced. This does not mean that there can be no change to the landscape, simply that any development needs to be of a high quality design that complements and contributes to landscape character.

An essential element of the design process is considering the landscape. A well-conceived landscape can help improve and enhance an area as well as helping integrate new development into an area, making a positive contribution to the street scene and add to the market value of the site.

When thinking about the landscape it is important to consider all the things that contribute to and make up the landscape. Buildings define a space creating an edge; roads provide entry points, parks and open spaces demonstrate the public environment.

The SPG advises on aspects to consider when planning a development or designing an improvement scheme. It is not intended to be a 'short course' in landscape design and on some schemes it may be advisable to employ a qualified landscape architect. A qualified landscape architect can contribute experience, vision and inspiration to a project. The Landscape Institute has a list of accredited Landscape Architects (http://www.landscapeinstitute.org).
In this guidance the term 'hard landscaping' refers to paving, walls, railings, fences, retaining structures and street furniture such as lighting, seats,

bollards, adverts and signs. ‘Soft’ landscaping includes trees, plants, grass, water and earth modelling. Hard and soft landscaping should be considered together and as an integral part of any proposal to create or improve external spaces.

Numerous policies within the LDP contribute towards landscaping, however, the most specific one is DM10: Design and Landscaping. This policy focuses on the need to consider the existing landscape and how the new development takes this into account and enhances it. This policy requires a landscaping scheme to be submitted for any type of development other than householder. This scheme should show what existing landscaping is to be retained (e.g. trees, ponds), and the new planting; what it is and where it is going (marked on a location plan).

5.1. Landscape Character Assessment

The landscape of the area which is to be developed should be assessed. This should be an objective process that provides factual information about a particular locality. At this stage the assessment is not about whether certain design styles are appropriate or not but it should help inform the design stage when it occurs.

An understanding of landscape character can help ensure that development is well designed and integrated with its surroundings, taking reference from the locality to inform its siting.

A good understanding of a site, its sense of place and character, can also help secure development design which is innovative. This understanding will help ensure landscapes are appropriately restored, enhanced, well maintained and managed. It will also protect special or important features. When assessing the existing landscape you should take note of:

- Existing site features/details e.g. trees, hedgerows, watercourses etc
- Identify which features are to be retained
- Identify which features are to be removed
- Topography of the site e.g. sloping, flat etc.
- Ways in which the landscape can be improved

- Ways in which development can strengthen links between the site and its surroundings.

This understanding of the landscape should help influence how development can occur which protects and enhances the existing features, where appropriate.

The amount of landscaping a site needs is dependent upon what is being proposed, where it is to be located and how big the development is. For example, a development of 5 new dwellings may require soft landscaping to mitigate for any losses on site due to the development and landscaping as part of the overall development. Whereas a development of 20 dwellings may require new planting to help ensure that site blends in with the existing landscape.

5.2. Basic Principles

Figure 21 illustrates how landscaping can provide an interesting and engaging street scene.

FIGURE 21: EXAMPLE OF GOOD AND BAD LANDSCAPED STREET SCENE

5.3. Green Infrastructure

Green Infrastructure is a network of high quality green and blue spaces and other environmental features that support the natural and ecological processes. It is essential to the health and quality of life of Ceredigion's residents[1].

When designing the development, how it fits in within the existing landscape and how it can enhance it should be a main consideration. However, for any new landscaping it is important to consider how it all connects together. By carefully planning your site and the landscaping the development can help towards Green Infrastructure.

Many of the landscaping and biodiversity requirements of the LDP contribute towards Green Infrastructure. Basic design elements that could be included within a development that contribute towards Green Infrastructure are:

- Trees;
- General planting – hedges marking boundaries, shrubs, flowers etc.
- Grass verges that function as swales (SuDS);
- Permeable paving, etc.

It is important to consider all aspects of the development together, the provision of **S**u**DS**, biodiversity and open space all contribute to making a greener environment. Both the SPG: Open Space and SPG: Nature Conservation provide further detail on Green Infrastructure.

5.4. Soft Landscaping

Soft landscaping can often contribute more to the environment and to the character and maturity of a new development than any other factor. The Council will seek to retain existing trees and will encourage the planting of new ones. Some of the positive elements landscaping can bring to a development are:

[1] 'Planning for a healthy environment: good practice for green infrastructure and biodiversity' Town and Country Planning Authority (TCPA) (July, 2012) http://www.tcpa.org.uk/data/files/TCPA_TWT_GI-Biodiversity-Guide.pdf

- Enhanced biodiversity;
- Trees can provide protection from the sun;
- Vegetation can help minimise water runoff and soil erosion;
- Provide interest: different colours, seasonal change;
- Promote movement and activity;
- Increased development/property values.

The type and spacing of proposed planting will vary depending on the design functions of the planting e.g. screening, instant impact, framing a view, colour, smell etc.

The context, location and consideration of biodiversity should also influence the selection of plants. Policy DM10: Design and Landscaping states that non-native invasive species should not be included in the landscaping and the focus should be mainly on native species of a local provenance. Species that are thriving locally are more likely to survive and also support a higher number of species or local species.

It is important to consider where any new planting is to occur. For example it may be appropriate to have a small tree within a garden but if the same tree was used in open space or to provide screening to the outside of the development it may be more vulnerable to snapping and look proportionally wrong in such a large space.

It is also important to think about how planting in public areas will be protected. In areas where planting is vulnerable e.g. pedestrian paths, roads etc., barriers should be considered to help protect the planting. If permanent protection is required, this is usually a fence in either metal or wood.

Barriers or guards that will require removal in the future should be avoided as these are often left and the trees end up in poor condition.

5.4.1. Trees and Hedgerows

When doing any work which may involve the removal of a hedgerow or tree it is important to contact the Council as there may be legislation protecting it.

The retention of existing trees and hedges is important. Developments will not be permitted where damage or destruction could occur unless for very specific and justified reasons.

A further reason to keep existing landscape features and trees is that it adds value to the area and the properties. This occurs because the new development fits in better to the existing landscape as there is an instant maturity in the growth and screening.

The Hedgerow Regulations 1997 introduced to the Council a system whereby the Council must be given 42 days' notice of the intention to remove a hedgerow subject to the Regulations. Hedges that are covered by the regulations are those on or adjacent to the following:

- Common land;
- Village Greens;
- Sites of Scientific Special Interest;
- Local Nature Reserves;
- Land used for agriculture;
- Land used for forestry;
- Land used for the breeding or keeping of horses, ponies or donkeys.

When determining planning applications, the LPA must take into account the Hedgerow Regulations 1997 and whether a hedgerow would be considered an 'important' Hedgerow. A hedgerow may be 'important' if they are at least 30 years old and meet at least one of the criteria listed in part II of schedule 1 of the Regulations. The criteria relate to the value of the hedgerows from an archaeological, historical, landscape or wildlife perspective.

Trees play a very important role in the world's climate; they take in carbon dioxide (and keep it) and give out oxygen. The retention of trees and woodlands is essential in providing interesting, visually enhanced places, they can also help filter out noise, provide habitat for wildlife and help reduce water runoff.

Protection of trees comes under two main forms, a Tree Preservation Order (TPO), which can be applied to both specific, individual trees, or groups of trees, and Conservation Area designation also provides a level of protection to trees within those areas.

The principal use of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of a tree or trees without the consent of the local planning authority. If a tree with a TPO is cut down or has work done to it without permission the Authority can pursue prosecution, which may result in a fine or even sentencing.

Conservation areas are areas of special architectural or historical interest; the character or appearance of which it is desirable to preserve or enhance. However any tree that is in a conservation area that does not have a TPO is protected under the area's designated status, and therefore anyone who wishes to cut down or carry out any work to a tree in a conservation area is required to give the Local Planning Authority **6 weeks prior notice** before the work is carried out, allowing the Authority to decide whether a TPO should be made in respect of the tree.

If you are thinking of cutting down a tree it is important to check with the Local Authority that your property is not in a Conservation Area or that the tree does not have a TPO attached to it.

Further information can be found in Technical Advice note 10: Tree Preservation Orders.

Additionally further information on the Hedgerow Regulations and TPOs can be obtained from the Council's Coast and Countryside Department.

5.5. Landscape and Biodiversity

Landscape and ecological elements on site are often seen to be a constraint to development, but often the reverse is true. With some early planning and thought, the incorporation of natural features can actually make a site and a development more attractive fostering a distinct identity as well as potentially increasing plot values[2]. The key to addressing the natural environment is to ensure that it forms a positive part of the design and is not left untill the development is designed and then has to be incorporated as an add-on.

Development should be designed to integrate with, protect and enhance the landscape and biodiversity of a site. Additional planting should consider ecological corridors allowing movement of species within the site and also link to surrounding habitats.

Built up areas can often be the last haven for species that have lost their habitat in the open countryside due to over-intensification of farming practices.

Local Species

Guidance on suitable planting can be found within the 'Planting for wildlife within developments' Guidance.

For further information about native species refer to the Nature Conservation SPG.

Ponds and ditches should be left to regenerate by themselves. The successional communities from pioneer species through to established communities are important to biodiversity. It also reduces the risk of contamination with diseases and non-native invasive species.

5.5.1. Wildlife Protection and Enhancement

Ceredigion takes pride in the wide range of plants, animals and habitats within the County, and it is the Authority's aim to protect and enhance these.

[2] The Case for Trees in Development and the Urban Environment (Forestry Commission England, 2010) http://www.bristol.gov.uk/sites/default/files/assets/documents/eng-casefortrees.pdf

When a planning application is submitted the Local Authority Planning Ecologist and, where appropriate, Natural Resource Wales (NRW), will be consulted where there is potential for wildlife to be impacted or surveys have been submitted. The Ecologist and/or NRW may request further information such as species surveys or mitigation. This work is likely to require input from Ecologists/Arboroculturalists/Landscape Architects. They will also, where satisfied with the development, recommend conditions for the Development Management Officer to incorporate should the application be approved.

In any development situation, an approach should be taken that protects and enhances the overall wildlife value of a site, through retention and incorporation of existing wildlife features and creation/restoration of other features wherever practicable in line with Policies DM14: Nature Conservation and Ecological Connectivity and DM15: Local Biodiversity Conservation, as well as Policies DM06: High Quality Design and Placemaking and DM10: Design and Landscaping.

It is recommended that you contact the Local Authority Ecologist as early on in the scheme as possible to ensure that the appropriate level of survey work, mitigation etc. is integrated into the scheme in the early stages, preventing costly delays and further costs which may not have been necessary at application stage.

For more information on the requirements of a developer and when wildlife may be impacted, see the Nature Conservation SPG and associated Guidance Notes. In particular Section 12 provides information on ‘Development Types and Case Studies’.

5.5.2. Maintenance of Landscaping

When planning landscaping, in particular soft landscaping, consideration needs to be given to the maintenance of that landscaping scheme in the future. A developer will need to ensure there is sufficient access for people/machinery to manage the vegetation. On larger schemes, there will

also need to be a long term management scheme in place before planning permission is approved. This may require a S106 agreement.

5.6. Design Considerations

New development should avoid regimented layouts. Existing and new trees and hedgerows should be integrated within and bordering the site. When thinking about landscape in new developments there are a few basic principles that need to be considered:

- Site planning:
    - Landscape should always be planned in conjunction with the positioning of any buildings within and adjacent to the site, rather than as a means of filling in the gaps left over.
    - Consideration should be given to the form and use of the space when planning the site and the design should take into account all aspects of safety.
    - Vehicular and pedestrian access to and within the site, should be incorporated in the design at an early stage.
    - Planting should be to an appropriate scale for the space that it is in.
    - What existing/ new green infrastructure can be incorporated into the design of the proposal to mitigate/ adapt to climate change effects e.g. shading; reduce surface water run-off?
- Existing features and vegetation:
    - Incorporate existing healthy vegetation, screening shrubs, natural habitats or features within landscape proposals. This will give schemes an instant maturity and assist their integration into the local area. Take account of these at the beginning before designing the layout. Consider how you can use the existing features for sustainable drainage and incorporate into final scheme.
- Topography:
    - Information should be gathered early in the planning process on site levels.

  - Developments should work with the grain of the landscape not against it where at all possible. Whilst sloping ground can pose problems for site development, it can provide opportunities to create landscape interest through the use of earth modelling, retaining walls, steps and ramps Where possible sites should not be flattened to enable development.
- Allowing for growth:
  - Ensure that sufficient space is provided for any proposed or existing trees or shrubs to grow fully and freely without the need for extensive pruning, lopping or even removal in the future.
  - Ensure accessibility for the maintenance of landscape elements at the design stage.
- Open Space:
  - Open space is a requirement of LDP Policy LU24: Provision of New Open Space. Landscaping can often be used to help provide some of the open space requirements.
- Planning for the works:
  - Any features that are to be retained need to be protected during the construction works.

6. Extensions to Existing Buildings

Whilst the extension to an existing property is very different from the development of a new dwelling or a housing estate there are some common factors in all developments that need to be taken into account.

All areas have their own individuality and character. In the past local materials and techniques were used, and while no two dwellings were exactly the same, they had certain features in common which led to recognisable, regional architecture. Refer to Section 2: Character.

Attention to detail can often make a difference to the overall character of a development. Time spent considering the siting, design, materials and

landscaping will make the best use of a site and result in an attractive development.

An important role planning has to play is safeguarding the existing qualities of buildings and streets. Therefore it is important that extensions and alterations are designed to complement the character of your property and street or area.

To achieve this you need to understand the character of your property and area. In particular you should consider how your proposals will fit in with the characteristics of the surrounding area. Things you will need to consider are:

- Shape and pitch of existing roofs;
- Windows: dormer, bay, modern;
- Symmetry and design of openings e.g. door in the middle with windows either side;
- Gaps between properties;
- Landscaping e.g. front gardens, boundary walls or railings;
- Materials: brick, render, stone, wood.

Some small extensions and conservatories do not require planning permission. The website Planning Portal (http://www.planningportal.gov.uk) offers an interactive user guide to help you determine whether or not the work you are doing will require planning permission. Please ensure that you are checking the planning legislation for Wales not for England as they differ.

Whether or not your extension requires planning permission its design should always complement the existing building. The size and scale of an extension (cumulative) should not be disproportionate to the existing building and its setting. An easy way to do this is to have a lower ridge height and have the extension set back from the existing property.

Extensions to existing residential properties should not be sited too close to adjacent dwellings and it is advisable that you discuss your proposals with your neighbours at an early stage.

When designing your extension it is important to consider how you will protect the amenities of neighbouring dwellings or other uses from overshadowing and privacy.

The choice of how and where you extend will depend on a variety of factors including what you want the extension to do. Another important factor is to consider where there is the most space, at the side or the rear? How will the extension relate to the internal arrangement of the existing property?

In some instances there may be several options where an extension can be accommodated with little effect on surrounding properties. However the basic principle to follow is that the extension should not overwhelm the existing property and should respect and enhance the style and character of the property.

When considering the design of extensions, another consideration is nature conservation. Bats and birds may already be using features which may be removed, permanently or temporarily blocked or altered from the extension. In many cases this is unlikely to prevent the extension coming forward but it is important to be aware of the design considerations that will need to be considered. This may include the need to retain or replace access points or roosts or nests, ensure there is 500mm gap from an existing access point or use non-breathable membrane/block loft access from the existing loft to the extension. Ensuring bat and bird surveys and discussions with the LPA Ecologist are done early on in the design stage can prevent costly delays and re-drawings. It should in particular be noted that there are timing constraints on when bat surveys can be carried out.

For further information regarding this see the Nature Conservation SPG and the guidance note on ‘Bats and Development’.

Front Extensions

The suitability of a front extension depends on the property's form and location and the size of the proposed extension. It is important that front extensions do not detract from the continuity of the street scene or built up form and are not over-dominant in relation to the existing building.

A large extension to the front of a property, particularly where it projects forward of the established building line is likely to be over-dominant both to the original property and the surrounding street scene/built form and likely to be considered unacceptable.

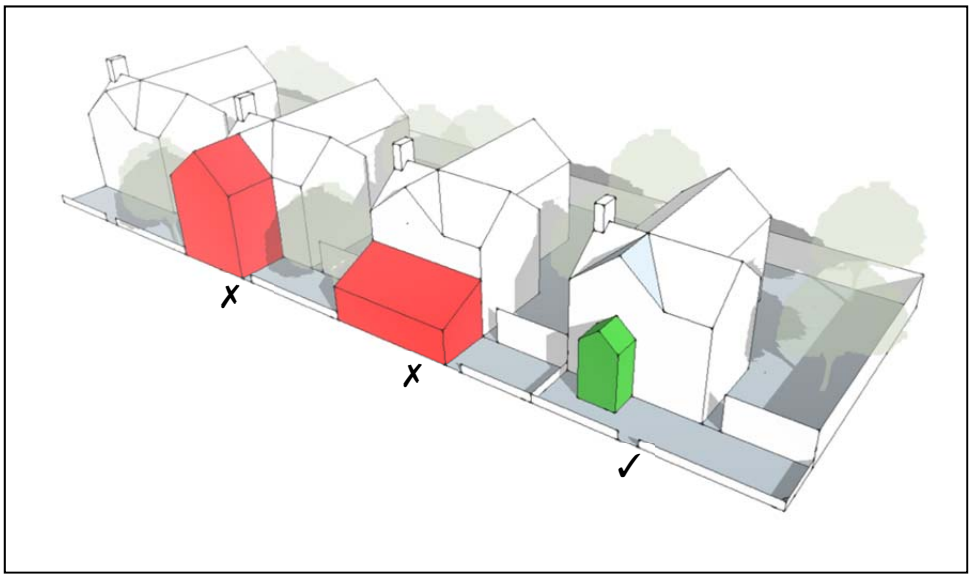


FIGURE 22: GOOD AND BAD EXAMPLES OF FRONT EXTENSIONS

Porches can add character to a dwelling and they are often an obvious feature in many traditional buildings. In new dwellings they are often a desirable element as they provide useful weather protection and storage.

Whilst porches are relatively small extensions they need to be designed sympathetically. A front porch should usually be fairly simple in design and not too bulky or so large that it dominates the front of the dwelling.

FIGURE 23: GOOD AND BAD EXAMPLES OF PORCHES

Often the installation of a porch does not require planning permission. You can check whether it will be using the 'Interactive House' on Planning Portal, you can access this via this link: http://www.planningportal.gov.uk/permission/

Side Extensions

An extension to the side of your property can have a very large impact on the overall appearance of your property. Generally the extension should be designed to fit in with the front elevation. Care should be taken to ensure that any side extension does not dominate existing property or result in a terracing effect where the gap between properties is lost.

Generally, the extension should be set back from the front elevation and the ridge height dropped lower than the main ridge line so that the extension is subservient to the existing building.

An extension that recognises the shape of the existing building is more likely to be successful than one which ignores the design of the original.

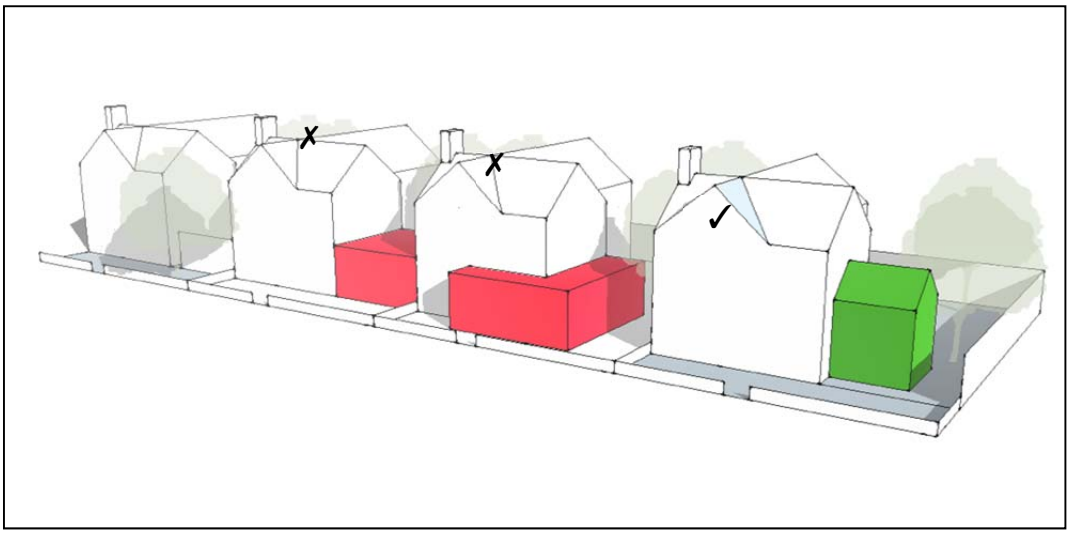


Figure 24: Good and bad examples of side extensions – front view

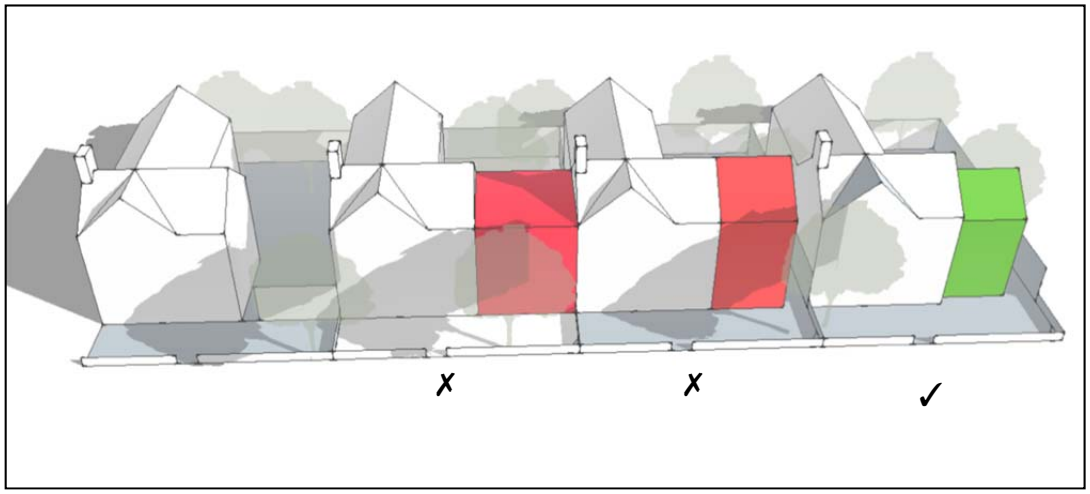


Figure 25: Good and bad examples of side extensions – Aerial view

You will need to consider carefully the type, size and colour of materials for the extension. Whilst generally using material that is similar to the existing will make your extension more in keeping there may be designs that would be suitable for a different type of material. See figure 26 for an example of different materials blending together.

It is also very important to consider how the roof of the extension will work. For example in terms of residential development, on a dwelling where the roof is pitched an extension with a flat roof is unlikely to fit in. Unless it is well designed and sympathetic to the character to the existing built form as in the case of the picture above.

Extensions should not have an adverse impact on highway safety or car parking provision.

FIGURE 26: MODERN EXTENSION ON TRADITIONAL BUILDING
Image: Courtesy of Zeta Freeman, Catalina Architecture.

Rear Extensions

It is likely that most extensions will occur to the rear of the property and it is this location where there could be a detrimental impact on neighbouring properties.

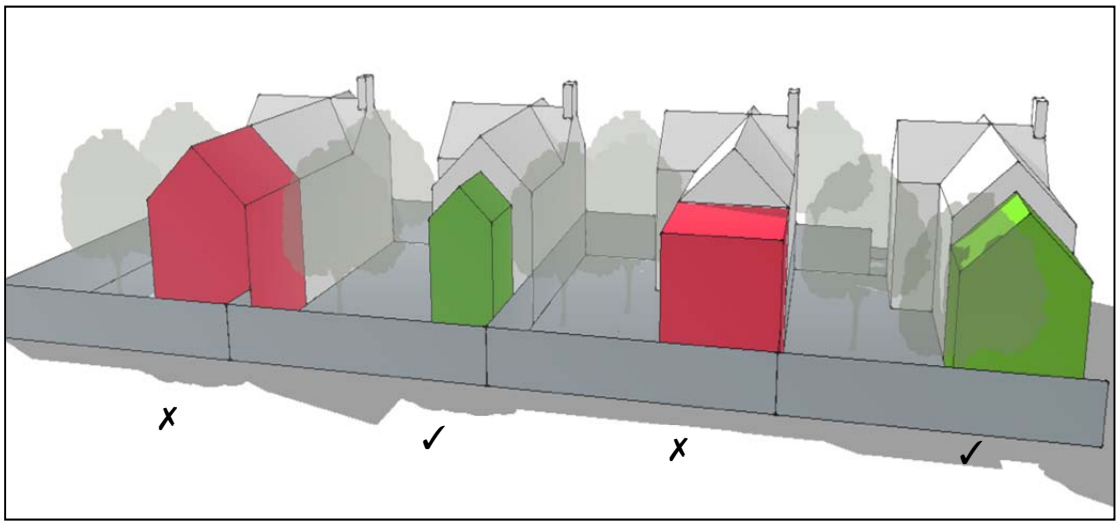


FIGURE 27: GOOD AND BAD EXAMPLES OF REAR EXTENSIONS

Side windows situated on the rear of an extension would normally result in a loss of privacy to neighbours and therefore will usually not be permitted unless they are situated above eye level or are of obscure glazing.

As with other extensions consideration should be given to the materials to be used. Traditionally using similar brickwork, stonework or render would help the extension blend in with the existing property. However, with careful consideration to design and materials a more modern styled extension can occur.

Access to the rear should not be constrained by the new extension.

In terms of residential properties, to help protect the amenities of neighbouring dwellings from overshadowing or obstruction you should apply the 45 Degree Rule.

This involves drawing a line from the mid-point of the sill of a window which is potentially affected by a neighbour's extension, at an angle of 45 degree towards the extension. If the proposed extension crosses that line it is unlikely to be acceptable as it will cause overshadowing.

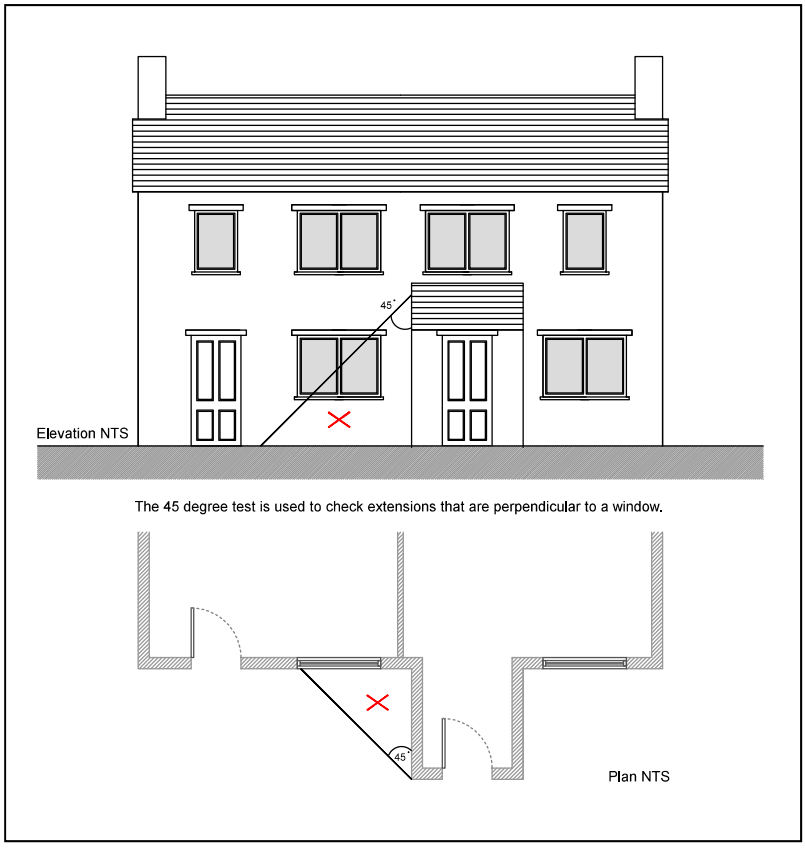


FIGURE 28: 45 DEGREE RULE ILLUSTRATION

As with every development each case will be assessed on its merits and there may be instances where a development that breaches the 45 degree rule, this is most likely to occur with semi-detached or terraced dwellings.

Loft Extensions

Converting the often underused loft space can provide a space that is very useable and desirable. Often the conversion of a loft does not require planning permission, unless permitted development rights have been removed for that property. Whilst the loft conversion might not require planning permission it will need to comply with building regulations. You are advised to contact your local Building Regulation department for further information on 01970 633484 (North) 01545572484 (South).

As with any extension you will need to consider the effects of the conversion on surrounding properties. You will need to consider if the conversion will result in any overlooking into neighbouring areas.

An easy way to potentially overcome this is to install roof lights on a rear elevation roof. These provide light but help avoid issues of overlooking.

If dormer windows are to be installed they should be small and unobtrusive. They should be designed so that they are in harmony with the existing building.

Basements

Some properties within Ceredigion benefit from having a basement and this area is often overlooked as a valuable space. However, these spaces can be converted and when done well, provide an enjoyable living space.

Obviously a basement is often without natural light and may be suffering from damp. Improvements in modern technology however do allow basements to become watertight areas. It is also important to assess whether any improvements to the foundations will need to occur as part of your conversion and also how ventilation of the new space will be provided.

Depending on how you wish to use your converted space you may be happy for there to be no natural light. For example, if you are turning the room into a cinema/TV room. However for most other conversions some natural light will be required. If it is not possible to install additional windows you could install:

- Cellar Light Wells: A short trench/hole is dug alongside one of the basement walls and a window installed.
- Light tube: similar to a light well this technology is a cylinder which goes through the ground and on ground level has a domed top which filters light through into the room and diffuses the light.
- Glass door: if you have a door from the cellar room to the outside you could install a toughened glass door.

If you are considering converting your basement it is essential you use a company that has specialist knowledge in this area who can advise you on the best way to proceed.

Whilst the conversion of a basement might not require planning permission it will need to comply with building regulations.

6.1. Materials

Traditionally when constructing an extension the same type of finishing material would be used as the original dwelling. However if designed carefully an extension can provide opportunity to use modern materials e.g. glass, steel, timber etc.

The use of materials is particularly important if your property is a Listed Building or within a Conservation Area. Careful consideration of building materials, brick bond and pointing (mortar) is needed to ensure the character and appearance of the building is maintained. You are advised to seek professional assistance with heritage buildings.

6.1.1. Walls

Within Ceredigion there is a mixture of wall finishings that can be seen throughout the county.

Traditionally buildings used natural stone, and this is still encouraged as a traditional material of the area. The stonework, its coursing and detailing should match the character of the locality or the building being extended.
When using stone there are a number of methods to the laying of the stones and although variety exists in the County it is important that your choice of stone and finishing reflects the more immediate locality. Historically within Ceredigion lime rich wash would have been applied to the buildings allowing the walls to breathe and maintain their own moisture levels by evaporation. This approach does however require regular maintenance and a lime render should be finished with a lime wash or breathable microsilicate paint.

A particular problem with extensions to existing buildings arises when the extension involves the continuation of an existing wall. If this is the case, a maximum compatibility between the old and the new in terms of colour and texture of material should be ensured. This is especially true with older dwelling, where the use of reclaimed materials might be the best approach.

Roofs

Pitch

Most traditional roofs have a fairly steep pitch with the ridge line following the longest side of building. Where there are large roof expanses, multiple roofs comprising the main dwelling and wings will help reduce the impact. The ridge lines of secondary wings and additions should be kept lower than the main ridge line. Flat roofs are generally unacceptable as they are not in keeping with traditional forms of design in Ceredigion. In Ceredigion you will see cat slide roofs as a common feature among the architecture. This is a roof that continues down below the main eaves height.

Eaves

The depth of the eaves should reflect those of the existing building or the locality. Heavy timber barge boards and projecting eaves can give a suburban appearance especially on single storey dwellings. The use of red ridge tiles, may be appropriate in towns but generally not in a rural setting.

Roofing Material

Tiles: The roof should ideally be constructed of natural slate, which is the traditional roofing material in the area. Artificial slates may be acceptable on new build, but not when extending an existing slate roof.

Concrete roofing tiles are much thicker than slate and have straight machine cut edges. It is considered that this roofing is usually not acceptable in Ceredigion as such roofs produce strong straight lines, which is uncharacteristic of the area. These tiles also appear too large for porches or dormers and are therefore considered unacceptable.

Metal: Zinc and tin have traditionally been used in Ceredigion as a roofing material. Historically a metal roof was often put on over a thatch roof that needed to be replaced as it was a cheaper alternative.

Thatch: Within parts of Ceredigion there are some properties that have thatch roofing.

FIGURE 29: THATCH ROOF EXAMPLE WITHIN CEREDIGION

Roofs and Ventilation

Building Regulations require that new roofs are adequately vented, however the poor positioning and style of vent can be unnecessarily obtrusive. In order to avoid the poor position of a vent early consideration of the location and style of the ventilation system should occur.

Please note that the use of breathable membrane will not be acceptable where bats are known to use or will be encouraged into the roof.

6.2. Finishing Details

Attention to detail is what can make a new development or an extension stand out. Consideration needs to be given to elements that are often overlooked or thought about at the end of the design process.

The entrance to a building should be obvious with the front door acting as the focal point of the dwelling, reflecting the character of the building.

Doors made from tropical hardwoods should be generally avoided as they are commonly from unsustainable sources and not environmentally friendly. The inclusion of patio doors on front elevations is generally not encouraged as these can disrupt the balance and symmetry of the front elevation.

When thinking about the design of your entrance you should be aware that Building Regulations require that a level entryway is provided for in every new dwelling. Although this is a requirement it is also important to consider your future needs. For example if you intend to stay in your new dwelling for the majority of your lifetime, having wider doors both externally and internally will help not only with movement for young families i.e. prams/pushchairs, but also for elderly relatives. Policy **LU02: Requirements Regarding All Residential Developments** requires that all new builds meet Lifetime Homes Standards, these standards help make a home more easily adaptable. See Section: Sustainability for more information.

Chimneys

Chimneys are an important feature of the Ceredigion skyline in addition to their importance regarding the appearance of a dwelling. They form a strong vertical contrast to the horizontal roof shape and can act to balance the appearance of the roof.

Due to their being a traditional feature of Ceredigion there is a reluctance to have existing chimneys demolished. If an existing chimney is causing a room to be cold due to a draft, a chimney balloon can be installed which can help regulate air flow.

Chimneys can be formed of either brick or stone and their position is usually at the end of a gable. Often a common mistake is to build a chimney that is too small. The chimney plays an important role in the appearance of a building and therefore some thought should be put into the design and size and proportion of the chimney.

It is also worth considering including a working chimney as this allows for adaptability of the dwelling, for example a log-burning stove can be added at a later date. This provides an alternative heating source which can help with the sustainability and longevity of the development.

Windows

The style and position of windows is very important to the appearance and character of a dwelling. The position and proportion of windows is significant to the end visual result of a new dwelling or extension. Their shape, detail and colour will have an effect on the overall appearance of the dwelling/extension.

Generally windows should:

- Not be too big and there should not be an excessive window area in relation to a solid wall;
- Exhibit a vertical emphasis to complement traditional styles found in Ceredigion;

- Casements or glazing bars included should be symmetrically arranged;
- Take into consideration the use of multiples of the basic unit, if wider windows are required;
- Be usually positioned on stone, slate or concrete sill and should be set back from the outside wall (this is called the reveal). This depth will give better weather protection and is in the style of the windows seen in Ceredigion;
- In existing buildings, wherever possible, be repaired rather than replaced. If windows have to be replaced they should match the materials and proportions of the windows already there.

A window style is very dependent on the design of the building. As there is such a wide choice in window design, the possibilities are extensive and sometimes a novel choice in frame design can add richness and interest to a streetscene.

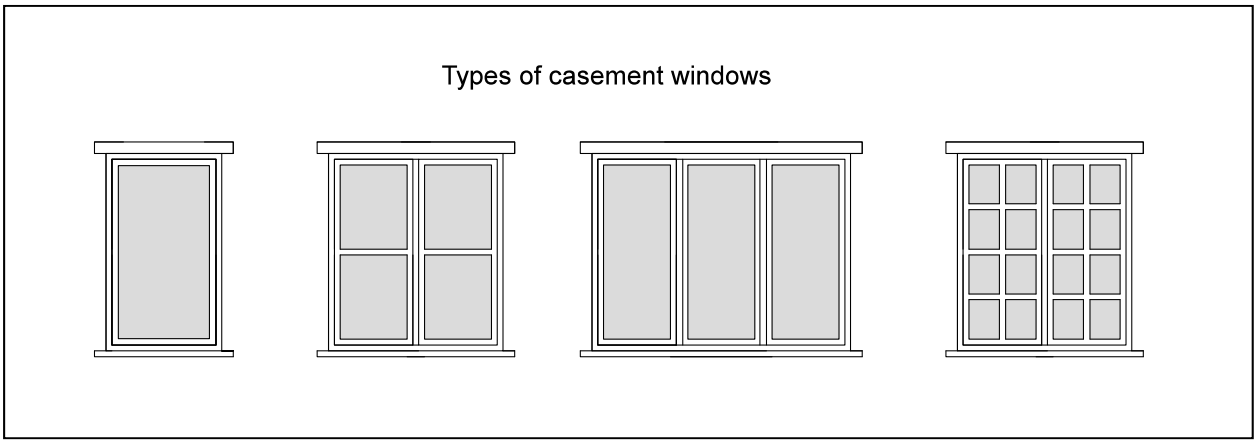


FIGURE 30: EXAMPLES OF CASEMENT WINDOWS

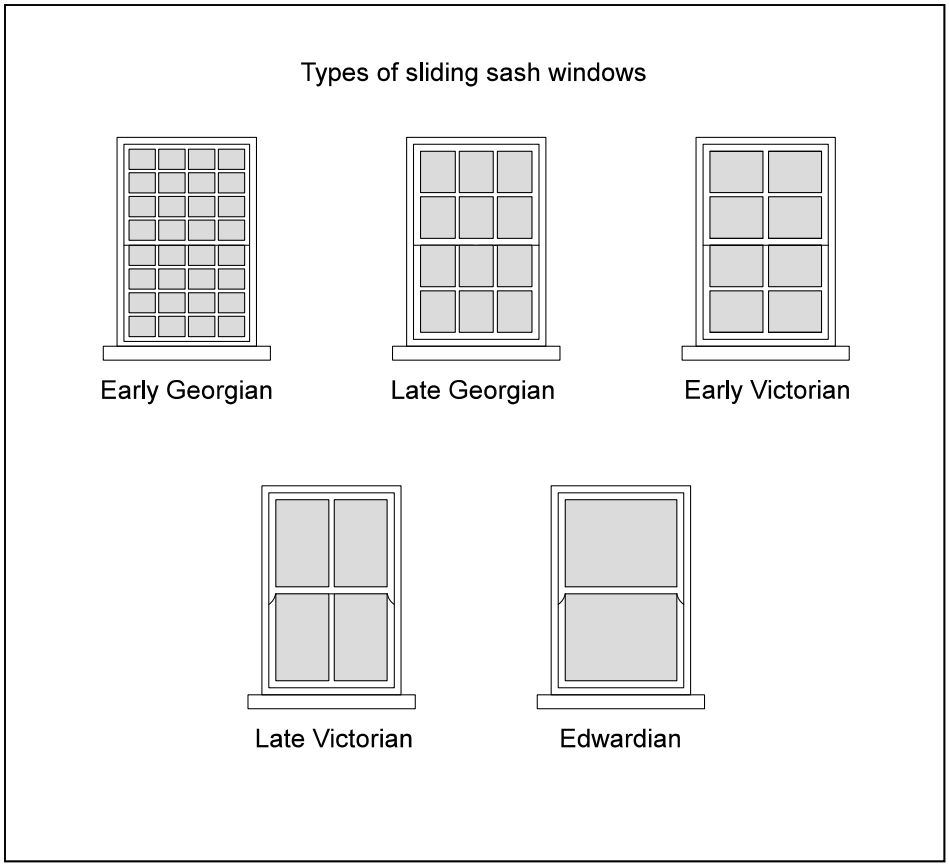


FIGURE 31: EXAMPLE OF SASH WINDOWS

It is compulsory that all new dwellings have double-glazing under Part L (a) of the Building Regulations, which will help lessen the environmental impact the proposed dwelling has.

Although UPVC windows are often the most easily sourced double glazing, it is recommended that the frame of the window actually be timber. As a natural material, wooden window frames are automatically more eco-friendly than manmade options such as metal or uPVC. This is especially true if the wood is sustainably sourced. Additionally you can choose to use reclaimed timber to make your wooden window frames even more eco-friendly. Some of the timber frame windows receive a better 'Green' rating within the BRE Green Guide than UPVC, for example a Durable hardwood window, double glazed, solvent borne gloss paint (non-TWAS) has an energy rating of A+ whereas a PVC-U window with steel reinforcement, double glazed has a lower rating of A. A reason for the lower rating is that the lifespan of UPVC windows is much lower than that of timber ranging from 25 -35 years. Whereas with proper

maintenance wooden window frames can last a lifetime and resist wear and tear well.

A timber framed window is often more attractive than UPVC and will suit both modern and period properties. Timber framed windows allow you a choice of different woods and they can also be painted, stained or carved to further customise your window frames. The use of timber framed windows is often required for properties within Conservation Areas or Listed Buildings.

Dormer Windows

Where there is inadequate headroom within an existing roof space, it may be possible to create additional space through the insertion of dormer windows.

Careful consideration to the design of dormer windows is required as they can have a significant impact on not only the character or appearance of the dwelling but also that of the surrounding area. You will also need to consider whether the dormer window will affect the residential amenity of neighbouring properties i.e. is overlooking likely to occur.

Dormer windows should complement the existing features of the dwelling in terms of its proportions, size and positioning and look as if it is part of the original dwelling.

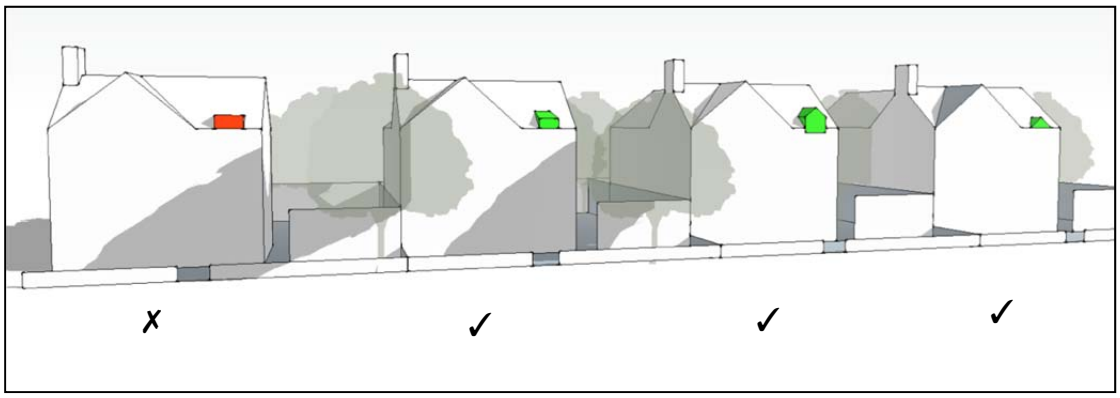


FIGURE 32: GOOD AND BAD EXAMPLES OF DORMER WINDOWS

A dormer window should be:

- Constructed in materials that match the existing dwelling;

- Small in proportion to the existing roof and have a pitch that is no less than that of the main roof of the dwelling;
- Fitted, ensuring the front face and sides of the dormer should match the existing wall or roofing materials;
- An acceptable design, i.e. Large flat roofed dormers are not acceptable.

When extra headroom is not required roof lights can be a viable alternative as they can provide daylight to a loft conversion. As a general guidance rear roof lights are less intrusive on the streetscene, however if front roof lights are to be used they should not be too large and should have a vertical emphasis. If there is more than one roof light, they should all be of the same size, at the same level and spaced evenly. The use of a large number of roof lights in a roof should be avoided, especially when visible from public areas.

7. Shop Fronts

Town centres are key to the economy and prosperity of any area. Not only do they provide a focus for retail and employment activity but they are also a reflection and showcase of an area. The Council is committed to improving the quality, vitality and viability of its shopping centres.

The quality, vitality and viability of town centres are therefore of critical importance. If the visual quality of shopping streets is to be enhanced, well designed shop fronts using appropriate and sympathetic materials are essential.

It is intended that this guidance note will give advice to those seeking planning permission for alternations, improvements and restoration of their commercial properties. Furthermore, guidance is intended to help building owners ensure that improvements will have a positive impact on the surrounding townscape. The guidance clarifies the standard of design that the Council will expect from applicants.

Separate Supplementary Planning Guidance has been developed on the shop fronts within Aberystwyth, this must be referred to if applications are within this location. You can access the document ‘Aberystwyth Shop Front Design Guide’ via this link: www.ceredigion.gov.uk/ldp

At the end of this section is a list of questions you should ask yourself when designing your shop front. These questions will help you consider the design elements of the shop front resulting in a scheme which is appropriate to the area and visually pleasing.

7.1. Need for Consent: Types of Shop Fronts

Planning permission is generally required for any change in the external appearance of a shop including the installation of shutters or blinds.

In a Conservation Area special consent may also be needed for altering a shop front. Any alteration to a Listed Building, including internal works affecting the character of the building, will also require Listed Building Consent.

7.2. Types of shop fronts

Traditional Shop Fronts

Ceredigion has a rich historic built form in many of the locations where retail units exist. This means that we have many traditional shop frontages which need to be preserved and enhanced.

Many of Ceredigion's shopping centres are dominated by terraces of tall buildings with a strong vertical emphasis. Often the ground floor is the retail premises with accommodation above and many have retained the traditional shop fronts. These should be retained where possible and alterations should complement existing style and detail.

Modern Shop Fronts

Where a new shop is moving into an existing building it should incorporate elements of the traditional shop front in order to relate them better to the rest of the building.

In many circumstances retaining, repairing and adapting traditional shop fronts is better than installing a modern replacement. The Council will resist any application which proposes the removal of traditional shop frontages for replacement with unsympathetic, modern replacements.

In some areas of Ceredigion more modern shop fronts have been developed. This type of shop front usually consists of a large uninterrupted expanse of plate glass, often incorporating a doorway flush with the street line. The framework is usually aluminium or plastic.

If this is applied to an old building, it gives a visually unstable, top heavy appearance.

7.3. What makes up a Shop Front

The shop front is a prominent part of most commercial frontages. The design and function of the shop front is integral to the appearance of the building as a whole.

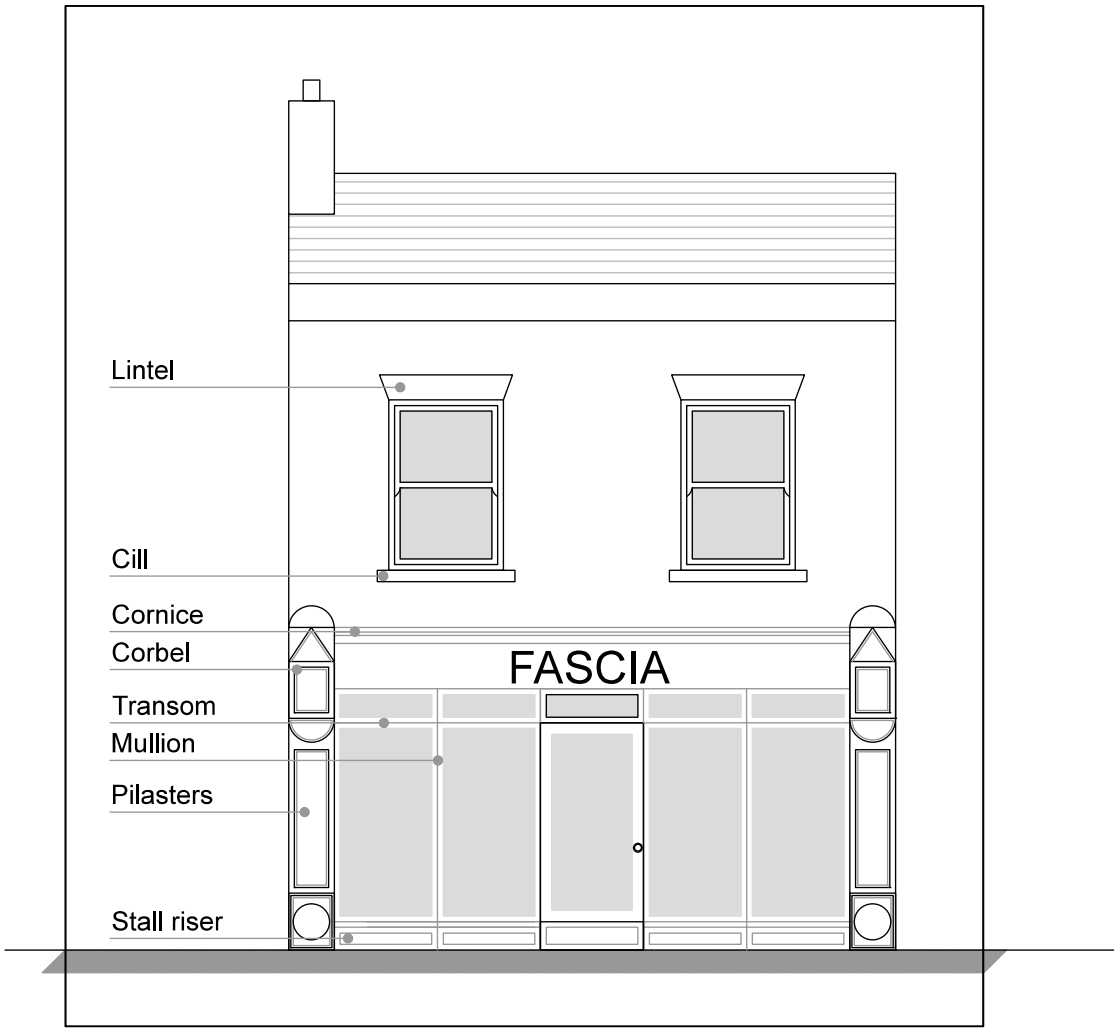


FIGURE 33: SHOP FRONT ILLUSTRATION

Fascia

The fascia forms a space for advertising the name of the shop and the nature of the business. In traditional shop fronts, the fascia is angled downwards. The sign should present its name clearly and the quality of the sign is itself an advertisement for the quality of the goods to be found in the shop.

Whilst in some instances a modern fascia may be appropriate in traditional buildings often the materials and colours used in modern fascia have little relationship to the

overall building. They are frequently too large and dominate the shop front framework. The fascia should:

- Be confined to the width of the shop front opening between intervening pilasters;
- Where appropriate be finished by a neat well defined cornice and architrave;
- Line up with the predominant building line of neighbouring shops. This promotes a more attractive street scene whilst also ensuring that each shop front retains its original proportions;
- Not extend across more than one shop front, even where they are in the same ownership/use;
- Not obscure first floor window sills or other architectural features of upper floors;
- Not obscure, damage or project in front of visually and historically significant architectural details.

The use of quality signage can enhance a locality, demonstrating that it is an independent shopping area, with unique retailers.

FIGURE 34: TRADITIONAL SHOP FRONT IN LAMPETER

Vertical Elements

A pilaster is a rectangular support that resembles a flat column. Pilasters provide vertical framing to the shop front and establish visual and physical separations between the adjoining shop fronts. Removed or damaged pilasters should be repaired or reinstated to maintain building rhythm. Some things to consider are:

- Choice of materials for new pilasters should be compatible with the building design, the adjoining building and the street scene.
- Pilasters should be treated as a single coherent feature and should not be treated / painted in two halves where they serve two properties.
- Pilasters should not be removed or altered to accommodate a wider advertisement than that defined by the fascia.

Stall Risers

Stall risers are common to most traditional shop fronts, providing a visual base for the whole shop front. They provide a strong visual base to the shop front and can serve a practical function of reducing the chance of breakage or damage to glazed areas.

Through the use of materials and design, stall risers can create a distinctive character to the shop front and a strong horizontal emphasis to the street scene.

Whilst they will vary in height depending on the use proposed, they must generally be high enough to give a visual anchor to the street. The height of the stall riser would have then been determined by the nature of the goods on display. For example a jeweller or butcher would like their goods to be closer to eye level so would employ a taller stall riser, whereas a clothes shop would like to maximise the visibility of their goods on display resulting in a lower stall riser. This approach should be taken by modern retailers. Shops glazed to the floor level are unlikely to be acceptable given that a stall riser has both a functional and visual role to play.

Doors and Entryways

Doorways and door design are important to the appearance of a shop. Their design should enable access to all. The Equality Act 2010 gives less abled people important

rights of access to everyday services. Some of the Act's powers are implemented through Part M of The Building Regulations (Access to and Use of Buildings), which sets out statutory provisions for minimum standards relating to entrances of public and commercial buildings.

A doorway should form a strong visual element in the shop front some points to consider are:

- Doors should be lightweight.
- Signs such as 'push', 'pull' etc. should be clearly legible.
- Substantially glazed doorways should be clearly identified ensuring that people with visual impairment are in no doubt as to the location of the door.
- Ironmongery should contrast visually with the surface of the door.
- Style and materials of the door should match the rest of the shop front. Older traditional shop fronts often have a recessed doorway creating an inviting entrance and a distinct three dimensional quality.

Windows

The design of windows and doors are key components in the context of the building and street scenes within which they are situated. Window frames, mullions, transoms and glazing bars frame the display area and articulate the shop front to provide visual interest. If windows are inappropriately designed they can have an unbalancing effect on the building and street scene.

Original windows and glazing are important features of historic buildings. The shop window should be transparent and clearly display the goods on sale.

Large areas of plate glass with a horizontal emphasis are usually out of proportion with the rest of the elevation, especially if used in old buildings. Subdividing large areas of glass with mullions as part of the window frame, giving each individual glazed section a vertical proportion can produce a more elegant effect.

Elements such as glazing bars, transoms and mullions should also retain a scale and proportion which is consistent with the rest of the building. These elements in

particular should be designed to reflect the architectural period of the shop front and building.

Treatments to glazing such as panelling, etching and frosting should be kept to a very minimum and be used for decorative purposes only. As a general guidance windows should:

- Respect the scale and proportions of existing shop front features including the fenestration on upper floors. Windows that are too large in relation to the frontage will not be permitted.
- Have glazing bars and transoms that add character to the shop front.

The windows on the upper floors are equally as important as shop front windows. Window frames should be kept simple and be consistent throughout the building and colours used on the shop front should also be used on the upper floors. Inappropriate replacements should be removed and restored wherever possible.

Applicants are strongly advised to retain and repair their original timber or metal windows. It is often more cost effective to repair original timber than replace them fully. Where replacements are absolutely necessary they should be carried out using the same materials and design details that identically replicate the originals.

Specialist slim double glazing units are available which fit into original window frames and these would be the preferred option should refurbishment of existing windows not be possible.

UPVC replacements may be acceptable in certain circumstances, where the merits of using them are clearly demonstrated (for example, replacing previous poor quality uPVC window replacements). Inappropriate replacements should be removed and restored wherever possible.

Where it is proposed that uPVC units are installed, they must display high levels of craftsmanship which make them difficult to differentiate from original timber windows. This would typically include the following qualities:

- Grained effect giving the appearance of painted white timber
- Authentically shaped, surface mounted, external glazing bars (where appropriate)
- Appropriate and authentic window casing/ rail widths. For example, many traditional sash windows have a deeper bottom rail.
- Authentic replica joints such as ‘mortice’ and ‘tenon’ joints
- Like for like styling
- The position of mullions and transoms should conform to original windows or others in the immediate area.

Roofs

When looking to improve the appearance of a building consideration to the roof should be given.

The significance of a roof is derived from its age, functional performance, shape, pitch, profile, materials and associated features. These elements combine to give a building its character and should be respected when any repair or alteration work is proposed.

The prevalent roof material in Ceredigion is slate, with instances of clay on some early twentieth century buildings.

Slate is typically used in thin slabs of uniform thickness and uniform size; courses are regular. It is important when carrying out repairs and replacements that the correct colour and thickness of slate is selected. Slates should be laid the same as existing, where there is a pattern or style for example.

Welsh slate replacements are the most appropriate as they are most durable and visually appropriate. Whilst imported slates could be used particular should be paid to the colour.

7.4. Security

Whilst the perception of criminal activity is often greater than the reality in shopping centres, there are occasions where security measures may be appropriate.

Security should be achieved without spoiling the character or appearance of a building; otherwise the shopping area as a whole may become unattractive to customers, whose trade is vital to the continued viability of shopping.

Security systems installed can have a major impact on the visual appearance of the shop front, particularly during evenings and weekends when the use of some security measures can result in a fortress feel to shopping centres.

Solid shutters have a very detrimental impact on the visual aspect of an area and are easier to graffiti than other security measures and therefore should be avoided. Internal shutters and/or grills are more attractive and these should be used in most instances.

If an external shutter is required a lath shutter would be more suitable and attractive.

A further security measure is to use laminated glass. Laminated glass resists penetration as whilst the outer glass may break the interlayer retains integrity overall and continues to act as a barrier. It is capable of withstanding repeated blows from heavy objects such as bricks, hammers, crowbars and similar hand held heavy objects. Therefore it protects against break-ins by preventing or slowing down burglary attempts.

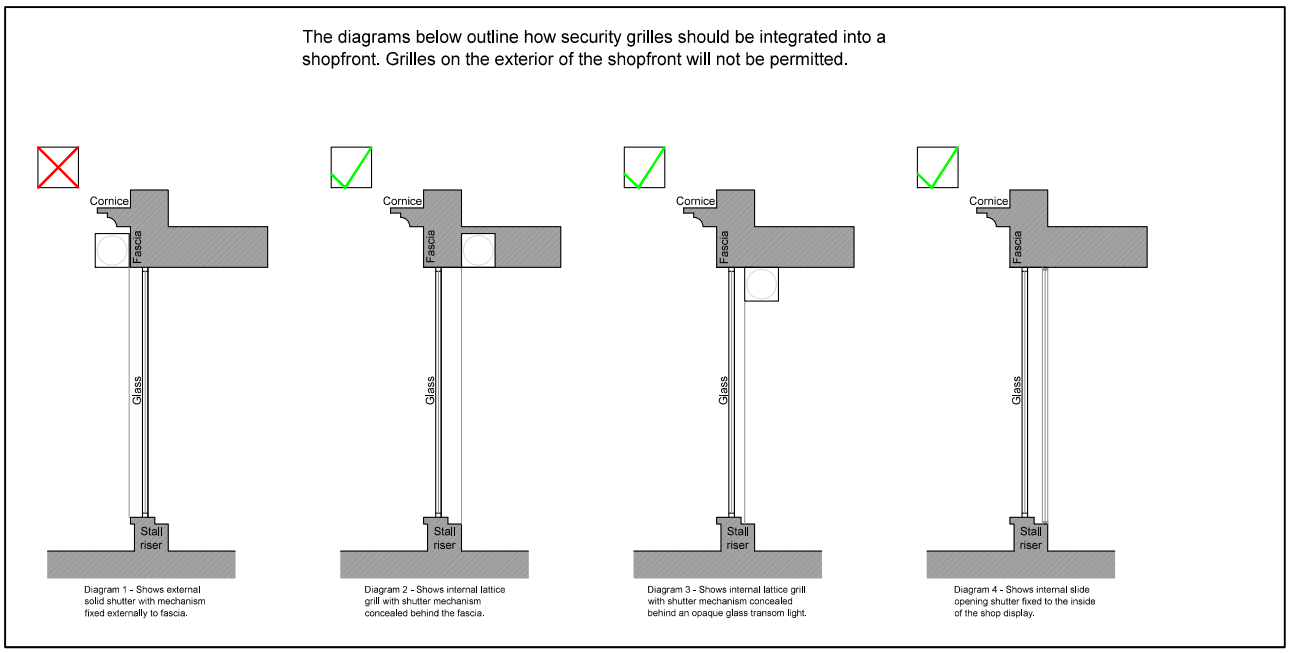


FIGURE 35: ILLUSTRATION SHOWING SECURITY GRILLES

7.5. Advertising

The advertising of a business is crucial and therefore it is essential that the advertising method is of a high standard.

Generally a business is most easily identified if it has only one or two clear signs.

Primarily, signage should be displayed upon a shop front fascia. It is crucial to the quality of the appearance of the shop fronts that signage is of:

- sympathetic dimensions;
- colours;
- lettering/illustration; and
- illumination.

Good quality advertisements can attract custom by projecting a quality image.

Other areas of the shop front which may be suitable for accommodating signage include glazing lettering and hanging signs.

Whilst a good standard of hanging sign can provide interest to the street scene, signs which are poor by reason of siting or design can detract from the design quality of the shop front and can result in clutter in the street scene.

In traditional shopping areas, flat painted signs supported from hanging brackets are appropriate. Innovative hanging signs or projecting signs will be accepted, provided they are of appropriate scale and do not detract from the character of the shop unit. A hanging sign should:

- Not be out of scale with the shop front;
- Be no wider than the shop fascia;
- Respect shop front uniformity in terms of scale and siting on the building;
- Be sited at the fascia level; and
- Be externally illuminated using discreet lighting, deep internally illuminated projecting boxes will not be accepted.

Repetition should be avoided and additional signs on the storeys above the shop will not be suitable. Using signs provided by advertisers will erode the simplicity of the building and make groups of buildings appear cluttered and should be avoided. Free standing illuminated signs hung within the window-display should also be avoided.

7.6. Canopies and Blinds

Blinds and canopies can be a welcome addition to the street scene where they are appropriately designed. They offer shelter from rain and protect displayed goods from the sunlight. Please also refer to Supplementary Planning Guidance ‘Aberystwyth Shop Front Design Guide’ found via this link: www.ceredigion.gov.uk/ldp.

Blinds serve to protect perishable goods from deterioration due to strong sunlight and inclement weather and help to keep the interior cool. Projecting roller blinds are the preferred solution as they form an integral part of the shop front and are retractable when not required.

Dutch canopies are made from canvas or plastic over a metal frame. They hide architectural details and interrupt the building elevation. They also have little reference to the heritage of Ceredigion's towns, where traditional roller blinds and canopies were common. Also shops have a tendency to leave them open which results in deterioration of the fabric and a scruffy appearance. Generally Dutch canopies are not considered to be acceptable unless justification is given as to why this type of canopy is required.

Where canopies and blinds are proposed they should fit within, and not obscure, existing architectural features and fascia signage. The use of traditional materials (usually canvas) can enhance the shop front and street scene.

7.7. Lighting

The quality of illumination can have an extreme impact on the quality of a shop front. Lighting should be considered as part of the overall design rather than a later addition. Subtle lighting can add vitality to the night time street scene. Poorly designed illuminated signs can look garish rather than stylish. Illumination should be bright enough to draw attention to the shop front but should be subtle in terms of light fittings and the level of illumination. Please also refer to page 39 in the Supplementary Planning Guidance 'Aberystwyth Shop Front Design Guide' found via this link: www.ceredigion.gov.uk/ldp.

Over-illumination must be avoided as it can upset the balance of light by conflicting with street lighting. When considering lighting the following should be taken into account:

- **External Lighting:** Ideally light sources should be concealed and carefully directed at the fascia, avoiding glare. The lighting units themselves should be as subtle as possible and not divert any attention away from the fascia. Suitable lamp types could include tungsten halogen floods, tungsten spotlights, low voltage tungsten and LED spotlights, swan-necked metal arms and concealed fluorescent tubes. All wiring and trunking should be concealed behind the fascia.

- **Backlit Lettering:** Translucent plastic letters or graphics inset into an opaque panel and illuminated from behind may be an acceptable and discrete way of lighting the fascia given that the light box is fully recessed behind the fascia.
- **Individual Halo Lettering:** Individual letters can stand proud of a surface and be lit from behind to produce a halo effect; a treatment which is suitable for fascias or wall mounting. Where this method is used it should be subtle and good quality individual letters should be used. Plastic lettering is not acceptable for listed buildings,
- **Cold Cathode Tubes**: Graphically elegant neon signs may only be acceptable if they are of moderate size, single colour and limited palette.
- **Hanging and Projecting Signs:** Box illuminated signs in any form are not acceptable. However, well crafted, elegant signs making use of thin fluorescent tubes so only the lettering or graphic is illuminated may be considered. Illumination for hanging signs should be external, subtle and well directed.
- **Building Illumination:** Shop window display lighting contributes to a safe night-time environment. Discrete spotlighting to highlight architectural features of the building is welcomed.(Aberystwyth Shopfront & Commercial Facade Design Guide, 2013)

7.8. Threats

Over time building elevations can become degraded as a result of inappropriate additions, poor quality and/or infrequent maintenance and the loss of original features. Some of the common issues faced by historic commercial buildings include:

- Inappropriate/removed/blocked windows;
- Poor quality/inappropriate signage;
- Insensitive removal of historic features;
- Out of proportion shop fronts;
- The use of inappropriate colour;
- The choice of materials such as aluminium over timber in period facades; and
- Lack of maintenance and basic repair.

The Council will not approve any application that contributes to further erosion of the historic environment.

7.9. Questions to Ask Yourself

As with any development there are a number of elements that need to be considered when you are putting together your application. These include:

- **Streetscape:** the visual elements of the street, what type of buildings are there (traditional, modern and mixture), trees, street furniture etc.
    - How does your property fit in with the streetscape? Does it complement it or detract from it?
- Treating the building as one:
    - Does the existing shop front complement the building elevation?
    - Do the upper floors reflect the colours and materials used on the lower floor?
    - Where there is a shop front, it should form the 'base' of the building above e.g. base colour should be the same, colour of wood work should be the same etc.
    - High quality improvements should be applied to the whole facade. This includes removing redundant fixtures and fittings such as signs, cables etc. and cleaning or painting any brickwork or stonework.
    - Gutters and down pipes should also be designed and maintained to a high standard.
    - The rhythm of the upper floors should be maintained or reinstated if necessary.
- Shop front design:
    - Does the existing design complement or detract from the building?
    - Are there any historic shop front elements that are capable of being retained and remediated?
    - Original shop fronts and other architectural features should be retained and refurbished rather than replaced.
    - Any original features that have been concealed by later additions should be restored.

  - Where a new shop front is needed it should maintain proportion with the rest of the building and take due regard to adjoining properties. The design should be sensitive to the specific context and character of the area.

- Signage:
  - Is there a national logo attached to the development?
  - Is there a font style, colour that has to be used in the signage?
  - Are the graphic design styles, advertisement and illumination appropriate to the rest of the shop front, building and streetscape?
  - Is the name of the business presented in a way which is in proportion to the building facade by corresponding with the dimensions of the fascia?
  - Illumination of a shop front should be via external illumination as opposed to internally illuminated box signs.

Canopies/blinds:

- Do you need a canopy/blind?
- Is it appropriate to have a blind/canopy?
- Have you considered how the design will fit in with the overall building style?

Access:

- Does the shop front allow access for all including those with physical disabilities and visual impairments?

Security:

- Do security devices obstruct any architectural features on the building or have a negative visual impact?
- Have internal sliding security grilles been considered?
- Security precautions should not exceed what is reasonably necessary to give protection against burglary and vandalism.

8. Sustainable Drainage Systems (SuDS)

The challenges of climate change mean innovative new solutions to water management are needed. Sustainable Urban Drainage System (SuDS) provide this solution and will bring a range of benefits such as enhancing the quality of life, increasing biodiversity, reducing the risk of flooding and providing greater resistance to the impacts of climate change.

This guide will provide developers and consultants with information and advice to implement SuDS as priority solutions for the disposal of surface water.

8.1. What are SuDS?

Sustainable Drainage System (SuDS) is a drainage system developed in line with sustainable development principles that takes account of quantity, quality and amenity.

The primary purpose of SuDS is to mimic the natural drainage of the site prior to development. They are an alternative to the traditional approach of collecting storm water in pipes and discharging into treatment works and/or watercourses. The use of SuDS will ensure that rivers and ordinary watercourses will not suffer any detrimental effects on water quality from any new development discharges into them.

Traditionally drainage systems were designed to collect and convey rainwater away as rapidly as possible from the area at which it had fallen to the designated discharge point.

SuDS are more sustainable than conventional drainage methods and seen as a means to control surface water to reduce the risk of flooding and providing benefits such as:

- Management and reduction of the rate at which surface water run off occurs, to reduce the risk of surface water flooding and related sewer surcharging. Protects and/or enhances water quality as the system effectively treats polluted water and removes suspended sediments.

- Being sympathetic to each individual site – There are many different SuDS features available to suit the constraints of a site.
- Increasing the variety of habitat for plants and wildlife and enhancing biodiversity.
- Providing long and short term water storage.
- Allowing water to soak/infiltrate into the ground.
- Providing attractive, useable and pleasing features.

8.2. Policies attached to SuDS

The Flood and Water Management Act 2010 requires the implementation of SuDS as priority solutions for the disposal of surface water for all new development.

Currently Building Regulations Part H: Drainage and Waste Disposal, states that infiltration should be the first considered option for rainwater disposal. Failing this discharge should be into a watercourse, with discharge into a sewer being the last resort, where any other forms are not practicable.

Regional policy guidance in the form of Planning Policy Wales advices that in determining applications for development the local authority should work with all the necessary bodies, for example, National Resource Wales, water companies etc, ensuring that surface water run-off is to be controlled as near to the source as possible by the use of SuDS.

This is also supported in the Technical Advice Note 15: Development and Flood Risk that advises that development should not create additional runoff compared with the undeveloped situation i.e. development should not create any more runoff than if the site was not developed. The TAN also states that the local authority can impose conditions requiring the use of SuDS in a development.

Any works proposed in, under, over or on a watercourse that are likely to affect the flow within a watercourse may require a separate consent. Any person intending to carry out any works in, over, under or adjacent to a main river must first obtain consent from NRW. NRW also has byelaws that require persons to obtain their

consent for carrying out activities in or adjacent to main rivers and their floodplains. Main rivers are designated as such on maps held by the Department for Environment, Food and Rural Affairs (DEFRA), Welsh Assembly Government (WAG) and Natural Resources Wales (NRW). All other water courser are referred to as ordinary water courses. The legal provisions for ordinary watercourses comes under Section 23 of the Land Drainage Act 1991

Any proposals to construct or alter any mill dam, weir or similar obstruction to flow, on an ordinary watercourse require consent from Ceredigion County Council (Head of Assets and Transportation Services – Flooding and Coastal). The erection of, or alteration to a culvert likely to affect the flow also require consent.

Any proposal should be discussed with the Authority before commencing to determine whether the proposal requires Consent. That also will ensure that the proposed work can be assessed for its effects and does not cause or make worse an existing flooding problem, and do not adversely affect the local environment, fisheries and wildlife.

If a developer considers that SuDS cannot be achieved then a full written justification needs to be provided with the planning application explaining why this is the case.

8.3. How do SuDS work?

SuDS are the preferred approach to managing rainfall and made up of one or more elements to capture surface runoff allowing as much as possible to evaporate or soak into the ground close to where it fell and eventually conveying the rest to be released at the same rate and volumes as prior to development to reduce peak discharge flows. There are four accepted methods to control surface water:

- Prevention – managing the site well can improve quality. Prevention includes design, maintenance and the education of users;
- Filter strips and swales - vegetated surfaces that allow water to drain evenly off impermeable areas; swales are long shallow channels, filter strips are gently sloping areas of ground. Both of these features mimic natural drainage patterns by directing runoff through vegetation, slowing and filtering the flow;

FIGURE 36: EXAMPLE OF FILTER STRIP/SWALE IN WEST LOTHIAN (SUSDRAIN)

FIGURE 37: URBAN CHANNEL AT STAMFORD (SUSDRAIN)

- Permeable surfaces and filter drains - have a volume of permeable material below ground to store surface water. Runoff flows into this storage area via a permeable surface, such as; Grass, Gravelled areas and Paving blocks;

FIGURE 38: PERMEABLE PAVEMENT AT STAMFORD (SUSDRAIN)

- Infiltration devices - soakaways, infiltration trenches and infiltration basins which drain water directly into the ground. Infiltration devices can easily be integrated into landscaped areas;

A useful concept used in the development of sustainable drainage systems is the SuDS management train (sometimes referred to as the treatment train), illustrated below. Just as in a natural catchment, drainage techniques can be used in series to change the flow and quality characteristics of the runoff in stages.

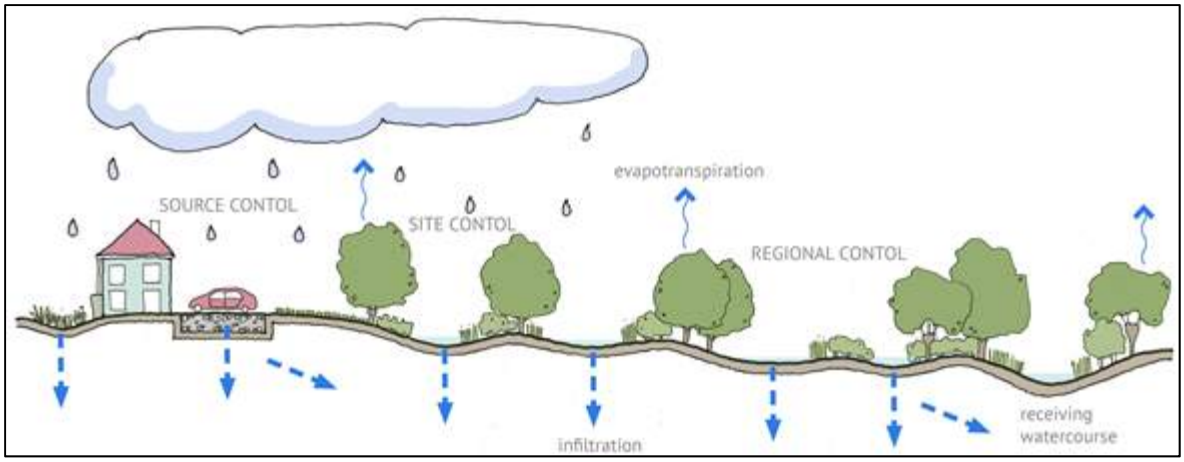


FIGURE 39: DIAGRAM SHOWING THE MANAGEMENT TRAIN OF SUDS (SUSDRAIN)

The management train starts with prevention (preventing runoff by reducing impermeable areas), or good housekeeping measures for reducing pollution; and progresses through local source controls to larger downstream site and regional controls.

Runoff need not pass through all the stages in the management train. It could flow straight to a site control, but as a general principle it is better to deal with runoff locally, returning the water to the natural drainage system as near to the source as possible.

Only if the water cannot be managed on site should it be (slowly) conveyed elsewhere. This may be due to the water requiring additional treatment before disposal or the quantities of runoff generated being greater than the capacity of the natural drainage system at that point. Excess flows would therefore need to be routed off site.

End of pipe solutions where runoff is directly discharged to a wetland or pond should be avoided. SuDS design requires a balancing of different options, often depending on the risks associated with each course of action. The risks of an area flooding have to be balanced with the costs of protecting the area from different levels of floods.

The management train concept promotes division of the area to be drained into sub-catchments with different drainage characteristics and land uses, each with its own drainage strategy. Dealing with the water locally not only reduces the quantity that has to be managed at any one point, but also reduces the need for conveying the water off the site.

When dividing catchments into small sections it is important to retain a perspective on how this affects the whole catchment management and the hydrological cycle.

8.4. SuDS, Landscape, Biodiversity and Open Space

The implementation of SuDS can be incorporated as part of the overall landscaping of the site. Spaces used for SuDS can also often be used for open space and biodiversity gain. Therefore there is potential that numerous requirements of the LDP can be met within the same parcel of land. Further information on landscaping and conservation can be found within the elsewhere within theBuilt Heritage and Design SPG and also in the Nature Conservation SPG, available from the Councils website: www.ceredigion.gov.uk/ldp

FIGURE 40: BLACK CAT DRIVE, UPTON, NORTHAMPTON (SUSDRAIN)

FIGURE 41: SUDS SCHEME ELVETHAM HEATH, HAMPSHIRE (SUSDRAIN)

8.5. Ongoing Maintenance

As with any system, including traditional, there is a level of maintenance that needs to be carried out with a SuDS scheme. However research has found that the on-going maintenance of a SuDS scheme is not more expensive than a traditional scheme and can actually be cheaper.

A report commissioned by Cambridgeshire County Council into the on-going maintenance of a SuDS scheme showed that a permeable pavement had no maintenance for 3 years and then had maintenance below that recommended and the system still performed well and was able to cope with rainfall.

The same report also found that the on-going maintenance of the SuDS scheme came to a total of £1,340 per year, equating to approximately 56 manpower hours per year. This is a lower cost when compared to costs with conventional pipe drainage systems. The scheme at Cambridgeshire is 4% per year cheaper to maintain than the accepted average costs for conventional pipe drainage. (Lamb Drove Sustainable Drainage Systems (SuDS) Monitoring Project Final Report, Cambridgeshire County Council March 2012)

A report by the Environment Agency also found that permeable paving costs less on a lifecycle basis than traditional surfaces, with reduced maintenance costs outweighing increased capital costs. (Cost-benefit of SUDS retrofit in urban areas, November 2007)

8.6. Questions to Ask Yourself

When thinking about your development and the SuDS required it may be useful for you to consider the following questions:

- How has SuDS been considered as part of your layout and site development?
- Are there any issues that SuDS can help overcome? For example surface water flooding
- Have you considered how SuDS can provide landscaping and open space?
- Has the SuDS system you have designed included biodiversity enhancements?