

Planning Policy Wales  
Technical Advice Note  
12: DESIGN



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government



June 2009

This document is one of a series of Technical Advice Notes (Wales) (TANs) which supplement "Planning Policy Wales".

Further information is available from the Planning Division, The Welsh Assembly Government, Cathays Park, Cardiff, CF10 3NQ, at [Planning.Division@Wales.gsi.gov.uk](mailto:Planning.Division@Wales.gsi.gov.uk), or by telephoning (029) 20 823585.

Further copies can be obtained free of charge from:

The Publications Centre  
Welsh Assembly Government  
Cathays Park  
Cardiff  
CF10 3NQ  
Tel: **029 2082 3683**  
E-mail: **[Assembly-publications@wales.gsi.gov.uk](mailto:Assembly-publications@wales.gsi.gov.uk)**

It is also available on the Welsh Assembly Government's website: [www.wales.gov.uk](http://www.wales.gov.uk)

Cover satellite image compiled from Landsat data (colour enhanced visible/near visible infrared) and supplied by [Infoterraglobal.com](http://Infoterraglobal.com).



# Contents

<b>1. Introduction</b>	3
<b>2. Defining Design</b>	5
Objectives of good design	7
<b>3. The Design Process</b>	9
Early and continued design considerations	9
Collaboration	9
A pro-active planning system	10
Design skills	10
A route to good design	12
<b>4. Delivering Good Design</b>	15
Approach	15
Appraising context	15
Achieving design solutions	19
Access	20
Character	21
Community safety	23
Environmental sustainability	24
Movement	26
<b>5. Assessing Design Issues</b>	29
Overarching issues	29
Context	34
Type of development	42
Detailed matters	47
<b>6. Local Planning Authorities</b>	57
Design policy and advice	57
Development plans	57
Supplementary planning guidance	59
Development management	62
Design and access statements	62
Pre-application discussions	62
Skills	63
<b>Appendices</b>	
<b>1</b> Guidance on the design and access statement	65
<b>2</b> Design information for a planning application	77
<b>3</b> Sources and further information	79
<b>4</b> Contacts	82
<b>5</b> Credits	83



Senedd, Cardiff



## 1. Introduction

**1.1** This Technical Advice Note (TAN) should be read in conjunction with Planning Policy Wales<sup>1</sup> (PPW) which sets out the land use planning policies of the Welsh Assembly Government (the Assembly Government). PPW, Ministerial Interim Planning Policy Statements (MIPPS), TANs and Circulars should be taken into account by local planning authorities in the preparation of development plans. They may be material to decisions on individual planning applications and will be taken into account by the Welsh Assembly Government and Planning Inspectors in the determination of called-in planning applications and appeals.

**1.2** Useful reference documents (listed in the reference column in the margin or appendix 3) provide additional information which may be read in conjunction with this TAN.

**1.3** Technical Advice Note 12: *Design*, 2002 and *Planning and Inclusive Design* (Access Statements) Final Interim Guidance (November 2007) are hereby cancelled.

### Context

**1.4** Planning Policy Wales sets out the Assembly Government's land use planning policy in respect of 'Promoting sustainability through good design', which includes the role of local planning authorities in delivering good design.

**1.5** Design and access statements are mandatory to accompany certain planning applications and listed building consent applications. Detailed guidance on design and access statements can be found in Appendix 1.

### Purpose

**1.6** The purpose of this TAN is to equip all those involved in the design of development with advice on:

- how 'Promoting sustainability through good design' may be facilitated through the planning system; and
- the preparation and validation of mandatory design and access statements (Appendix 1).

**1.7** This TAN does not provide exhaustive text on good design, other TANs<sup>2</sup> and guidance such as the Manual for Streets,<sup>3</sup> may also cover design issues relevant to specific topics or types of development.

**1.8** Design issues, as influenced through the planning system, should not duplicate the role of building regulations. As a general rule, planning relates to the external appearance of a building, and its relationship with its context. Building Regulations deal with the technical performance of a building's structure and services. However, the initial design of a building in the planning process needs to consider the ability of the building to meet Building Regulation requirements. Design should therefore be a fundamental consideration from the outset and should not be treated or developed in isolation.

## References

<sup>1</sup> *Planning Policy Wales*, Welsh Assembly Government, 2002

<sup>2</sup> Technical Advice Note 8 'Renewable Energy', Technical Advice Note 15 'Development and Flood Risk', Technical Advice Note 22 'Planning for Sustainable Buildings'

<sup>3</sup> Manual for Streets, 2007



Coach House, Cardiff



## 2. Defining Design

**2.1** The design of our villages, towns, cities and the urban and rural landscape is important in articulating our nation and our culture. Design is important to our quality of life, and the quality of Wales’ varied landscape and townscapes - helping to sustain a positive image for Wales.

**2.2** The Welsh Assembly Government is strongly committed to achieving the delivery of good design in the built and natural environment which is fit for purpose and delivers environmental sustainability, economic development, and social inclusion at every scale throughout Wales - from householder extensions to new mixed use communities.

**2.3** To deliver this, all decision makers across Wales need to understand both the importance of good design and the ways in which it can be achieved.

**2.4** Design is defined in Planning Policy Wales 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.”

Planning Policy Wales emphasises that:

“Good design is also inclusive design. The principles of inclusive design are that it places people at the heart of the design process, acknowledges diversity and difference, offers choice where a single design solution cannot accommodate all users, provides for flexibility in use, and, provides buildings and environments that are convenient and enjoyable to use for everyone.”



**01** Ruthin Arts Centre

*Innovative design embracing sustainability, architecture and good public realm*

## References

**2.5** Good design is not inevitable. It requires a collaborative, creative, inclusive, process of problem solving and innovation - embracing sustainability, architecture, place making, public realm, landscape, and infrastructure.

**2.6** Design which is inappropriate in its context, or which fails to grasp opportunities to enhance the character, quality and function of an area, should not be accepted, as these have detrimental effects on existing communities.

**2.7** 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. Instead, everyone involved in the design process should focus from the outset on meeting a series of objectives of good design (figure 1). The design response will need to ensure that these are achieved, whilst responding to local context, through the lifetime of the development (from procurement to construction through to completion and eventual use). This analysis and the vision for a scheme should be presented in the design and access statement where one is required.

**2.8** Figure 1 illustrates the role of designing in context in achieving the key objectives of good design. The following chapters will provide further guidance on these objectives.

## References



Figure 1: Objectives of good design



Esplanade House, Porthcawl



## 3. The Design Process

**3.1** The definition of design for planning purposes stresses its role in achieving a more holistic design response to sustainable development. The process which drives the design of a development should, from the outset, consider the full life of any development and should encompass the following elements. A route to good design is set out in Figure 2.

### Early and continued design considerations

**3.2** Early consideration of design, well in advance of any planning application is essential to achieving good design. At the outset, appreciation of the site's context, and the development of a vision and agreed design objectives must be established and remain central to the evolutionary process. Setting details too early in the process should be avoided and a clear understanding of the long-term implications of design decisions is also essential from the outset. A design and access statement, where one is required, is a valuable tool in such considerations.

### Collaboration

**3.3** A multi disciplined collaborative approach and a shared ambition for quality are important in delivering good design and should be evident at each stage of the design process. This is best achieved by ensuring the continuous involvement of professionals providing expert advice such as: planners; architects; urban designers; landscape architects; transport engineers; access officers; police architectural liaison officers; local civic societies and others. Engaging those who procure, promote and finance development early on in the process is essential to assist a shared commitment to design quality.

**3.4** Particular attention should be focused on engaging end users and stakeholders in the design process from the outset, and throughout the entire process, as a means of fostering a sense of ownership and consensus, which will be important to the long-term success of a project.





**02** Consultation in action

*Involving the local community and experts to deliver good design*

References

## A pro-active planning system

**3.5** The planning system should be pro-active in raising the standard of design and in raising awareness of design issues among the general public and the private sector. This is achievable in every area of planning activity, from national planning policies and guidance; development plans; supplementary planning guidance (SPG) to development management; landscape design and conservation; local partnerships and urban regeneration initiatives in publicly funded projects such as schools, libraries and hospitals. Design considerations should extend into every aspect of the development process from inception and detailed design, to construction, occupation, management and operation.

**3.6** The local planning authority has a dual role to ensure effective stakeholder involvement in developing design policies and guidance and providing information on design issues. Local planning authorities should also help applicants and potential applicants to respond effectively to the planning and design process, through an advisory as well as regulatory role. Pre-application discussions and advice on preparing a design and access statement will create clarity for applicants.

## Design skills

**3.7** The Assembly Government established the Design Commission for Wales in 2002, to promote good design. The Commission continues to influence, educate and disseminate design advice to all those involved in the design of the built environment. It also provides bespoke training for local planning authorities, consultants and the private sector. The Commission provides a free

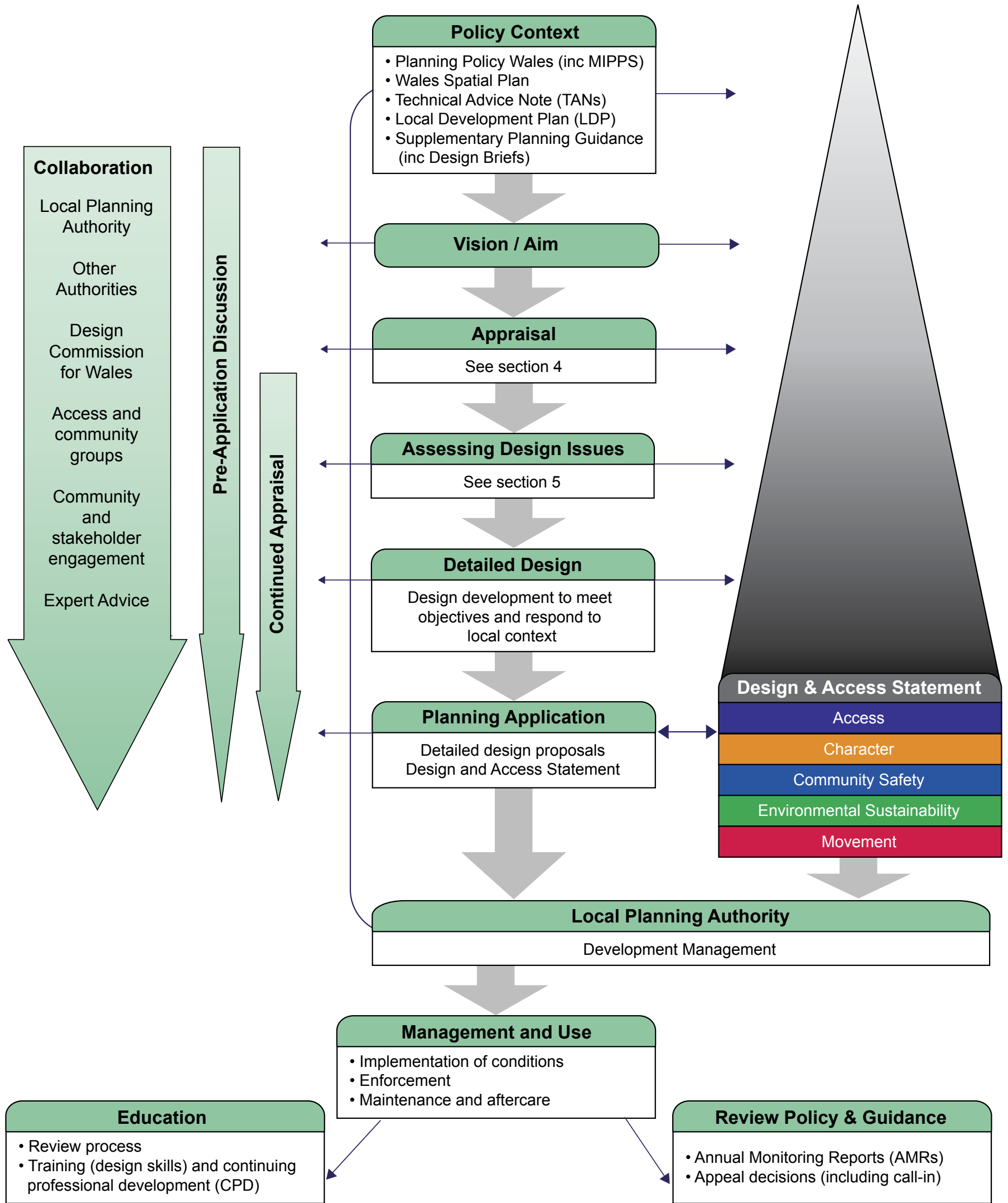
design review service, which allows early consultation with its independent expert panel.<sup>4</sup> Its comments on applications may be material considerations in the planning process. The Commission also publishes case studies and produces good practice guides on a number of design related issues including design and access statements.

**3.8** A high level of design and construction skills is more important than ever in a society which needs to use resources efficiently. The need to adapt buildings and spaces for new uses to keep pace with technological innovation and their application in ways that enhance the environment as well as the need to find long-term maintenance solutions depends on good design and construction skills.

## References

<sup>4</sup> Design Commission for Wales: Who we are, how we work and how our Design review Service can help you, Design Commission for Wales (2008)

Figure 2: A route to good design





## Ceiriog Valley





## 4. Delivering Good Design

### Approach

**4.1** Design is a process of analysis and synthesis: analysing, identifying and diagnosing problems and barriers, then solving them through critique, research, development and testing. Design is a creative means by which to realise innovation and add value. Design for the built environment plays a key role in economic growth and in raising the quality of the places where we live and work.

**4.2** Great buildings, public places and spaces provide for a rich heritage and it is vital that we deliver well designed, flexible, adaptable buildings and neighbourhoods. What we build now will be the heritage of the future. At all times it is important to consider the kind of places we want to make, and to be mindful of the vision for a high quality public realm, vibrant streets and active neighbourhoods.

### Appraising Context

**4.3** The local context comprises the characteristics and setting of an area in which a development is located. This includes the area's natural and human history, the forms of settlements, buildings and spaces; its ecology and archaeology; its location and the routes and waterways that pass through it. Understanding the site and its immediate and wider context is the basis for a meaningful and sustainable design response, and is the responsibility of all those involved in the design process, particularly planning applicants and their agents and those formulating and implementing design policy and guidance.



**03** New boat store, Pembroke

*Contemporary design within the historic context*

**4.4** Planning Policy Wales provides national policy on good design, and development plans and supplementary planning guidance (SPG) should provide a clear context for design requirements in the local area. In appraising context for a plan or a project, it will be important to refer to the objectives of good design and test how proposals reflect local policy requirements. Where a design and access statement is required, the applicants must demonstrate how they have appraised the physical, social, economic and policy context of the development, and how their choice of design principles and concepts takes that context into account.

**4.5** In many cases an appraisal of the local context will highlight distinctive patterns of development or landscape where the intention will be to sustain character. Appraisal is equally important in areas where patterns of development have failed to respond to context in the past. In these areas appraisal should point towards solutions which reverse the trend.



**04** | Cathays Park, Cardiff

*Formality in relationship between buildings and spaces*

**4.6** A range of **techniques** may be used to carry out context appraisal, including observation and site surveys, review of historic records, interviews, access auditing, analysis of crime statistics and information held by statutory undertakers and agencies, such as passenger transport operators and retail research organisations. Context appraisal can usefully inform development plan policy, SPG and development briefs as well as applications for specific proposals.

**4.7** An appraisal of an area's natural resources is a prerequisite to providing **environmentally sustainable** design solutions. An appraisal

should identify the opportunities offered by a particular site (e.g. decentralised energy) and recognise the site's constraints (e.g. flooding, limitations of public transport links). It should focus on site assets and resources such as the development form, soils and geology, slope/topography, drainage, landscape, solar and wind energy as well as wildlife, biodiversity and natural habitats. New development should harness the intrinsic resources or "natural capital" of the site or area to help create the conditions for more environmentally sustainable development and in particular to consider measures to help reduce effects related to climate change and to build in resilience to the measures (mitigation and adaptation). An appraisal of the effects of **climate change** (such as increased temperatures, risk of flooding and extreme weather events<sup>5</sup>) can highlight where a design response is needed to minimise vulnerability to the effects of climate change.

**4.8** Appraising "**character**" involves attention to topography; historic street patterns, archaeological features, waterways, hierarchy of development and spaces, prevalent materials in buildings or floorscape, architecture and historic quality, landscape character, field patterns and land use patterns, distinctive views (in and out of the site), skylines and vistas, prevailing uses and plan forms, boundary treatments, local biodiversity, natural and cultural resources and locally distinctive features and traditions (also known as vernacular elements).

**4.9** Opportunities for **innovative design** will depend on the existing context of development and the degree to which the historic, architectural, social or environmental characteristics of an area may demand or inhibit a particular design solution. Thorough appraisal of context can provide design pointers, which help to inspire an innovative design response, which meets present and future needs. A contextual approach should not necessarily prohibit contemporary design.



**05** | Converted Chapel, Rhodiad y Brenin, St David's

*Traditional boundary treatments define public and private areas and reinforce local distinctiveness*

## References

<sup>5</sup> United Kingdom Climate Change Impacts Programme (UKCIP [www.ukcip.org.uk](http://www.ukcip.org.uk))





06 | St Donats Arts Centre, Llantwit Major

*Sustainable innovative design for an extension*

## References

**4.10** Appraisal of the **relationship between private and public space** could focus on gap sites which interrupt the common building line, exposure of rear elevations, the proportion of “active” frontages (such as entrances and shopfronts) to “dead” frontages (such as high walls and blank facades and at upper floor level); means of boundary definition such as walls, fences and gardens, the relationship between the height of buildings and the spaces they enclose, planting or other natural features such as land form which enclose space.

**4.11** Appraisal of the **landscape** should focus on its quality in terms of geology and geomorphology, vegetation and habitats, visual and sensory quality and historic and cultural quality. “LANDMAP” is one method of assessment which has the potential to provide a framework and information base from which good design and management can be developed. Similar assessments are available to measure the quality of the ‘**seascape**’. These identify what areas, characteristics and qualities are important to conserve at a time when our coastal areas face many pressures from new developments. Historic Landscape Characterisation provides a more detailed level of assessment for the historic environment, and studies have been carried out for all of the areas included in the Register of Landscapes of Historic Interest in Wales. Further detailed site appraisals may also provide information on local hydrology, microclimate, soils, plant communities and features, and all visual qualities including views and vistas.

**4.12** Appraisal of the **public realm** should focus on condition, fitness for purpose in changing climates, ease of use for everyone, safety, convenience, enjoyment, contribution to local identity and potential for reducing street clutter. An audit of hard and soft landscaping, street and recreational furniture, signage, highways, lighting, ease of access, nature of use and management can assist in pinpointing priorities.



**07** | Brewery Quarter, Cardiff

*Use of public realm to create a sense of place*

**4.13 Movement and ease of access for all** to and from development should be appraised at the strategic and local level, with a view to supporting a shift from car use to walking, cycling and public transport and recognising the need for better connectivity within areas and with the surrounding areas. Consideration should be given to the volume and relative ease of pedestrian movements, including people with mobility or sensory impairments. Similar consideration of volume and ease of movement should be given to cycle, public transport and car movements, while areas of conflict, congestion and connections should be identified throughout the area surrounding the site.

**4.14** Appraisal of the **legibility** of an area should concentrate on landmarks such as key buildings or landscape features, junctions, views and vistas, barriers and boundaries. Barriers may be physical, such as rivers, or perceived as in heavy traffic. The coherence and connectivity of the local street and footpath network will also be important.



**08** | Clock Tower and the Ruthin townscape

*Local landmarks contribute to legibility*

**4.15** Appraisal of **adaptability and diversity** should focus on the use of both buildings and spaces and factors which determine use, such as building plan, form, construction method, condition, circulation and suitability for modernisation and new use. In relation to spaces, focus should be on layout, microclimate, patterns of sub division and mix of uses and tenure. It should also take into account the climate that the building is likely to experience over its lifetime and its impact on the operation of the development. Assessment of value for money should be based on the “whole life” costs of development and it is important that the long-term management and maintenance implications of design decisions are fully explored as well as assessing more immediate capital costs.

## Achieving Design Solutions

**4.16** Achieving good design is the responsibility of all those involved in the design process. It is the physical expression of the design objectives (development on the ground) that impacts on the quality of our lives and is the focus of judgment of whether the design objectives have been successfully achieved. Some issues which will be relevant in meeting the objectives when devising proposals are set out below.



**09** Environment Centre, Swansea

*Innovative design at the extension to the Environment Centre*

**4.17** Those involved in the design process should consider how the following aspects of their development (from procurement to construction through to completion and beyond i.e. the lifetime of the development) meet the objectives of good design and respond to local context. This analysis and the vision for the scheme should be presented in the design and access statement.

**4.18** The following pages provide further detail on the key objectives of good design, reflecting the five aspects of good design. This includes how to respond to these objectives following an appraisal of the context.

**4.19** These are not mutually exclusive and are often complementary. Where contention arises this will need to be considered by the applicant at the outset, and by the local planning authority when coming to a decision. The particular relevance and weight attached to each of the following objectives may depend on local policy, circumstances and the nature of the proposed development. This is to be used as guidance at the outset of the project. The design issues, included in Section 5, expand on the issues that may need to be considered in the design process.



# Access

Accessibility - ease of access for all into the development and to all elements within the site

**Objective** - Ensuring ease of access for all

## Design Response Following Appraisal of Context

- By adopting inclusive design principles that deliver adequate provision for all people including those with mobility impairments, sensory impairments and learning difficulties.

## Design Solutions

- The way in which the development addresses the accessibility needs of all people who may use it;
- How it can adapt to varying contexts and requirements of inclusiveness over time; and
- The way in which the layout meets practical requirements such as access for emergency vehicles whilst including clear connections and ease of access for all, particularly pedestrians and cyclists.

## Relevant Design Issues (see section 5)

Inclusive Design	Public Realm
Safety	



**10** Caernarfon Castle Walkway  
*Aesthetic improvement to the access to increase accessibility to Caernarfon castle*



**11** Llanfyllin Medical Centre  
*Providing street level access*

## Character

### Objectives

- **Sustaining or enhancing local character**
- **Promoting legible development**
- **Promoting a successful relationship between public and private space**
- **Promoting quality, choice and variety**
- **Promoting innovative design**

### Design Response Following Appraisal of Context

By responding to:

- landscapes and townscapes, culture and biodiversity
- locally distinctive patterns and forms of development
- existing buildings, infrastructure, urban/rural landscape and public art
- clear boundaries and established building lines
- appropriateness of uses and the mix of uses and densities
- easily recognisable and understood features and landmarks.

### Design Solutions

- **Landscape design** - the way in which the land will be treated (other than buildings) for the purpose of enhancing or protecting amenities of the site and the area in which it is situated;
- **Scale** - of development in relation to surroundings, including height, width and length of each building proposed within the development; how the massing of the proposal contributes to the existing hierarchy of development to reinforce character; how the mass and height impacts on privacy, sunlight and microclimate; and how height impacts on the attractiveness and safety of neighbouring public space;
- **Amount** - the number of proposed residential units or the floor space for each proposed use forming part of the development: how the proposed density and mix will encourage different uses by various sectors of the community. Anticipate potential change in the make up and needs of occupiers and how the proposal anticipates, in the short and longer term, efficient use of land whilst safeguarding the quality of life. Where applicable, consider how the development provides innovative solutions to accommodate higher density whilst considering the outcome of higher density on its surroundings;
- **Layout of development** - how the layout makes the development integrate with its surroundings whilst taking into consideration the orientation of the

building to maximise energy efficiency and connectivity (the ways in which routes and open spaces within the development are provided, situated and orientated in relation to each other and to buildings and spaces outside the development); how the external area contributes towards the development and is used to make the development a more sustainable development; how is the chosen site the best location and how it links into adjacent uses; and

- **Appearance** - (exterior design, including materials) means the aspects of a building or place within the development which determine the visual impression of the building or place makes, including external built form of the development, its architecture, materials, decoration, lighting, colour and texture.

**Relevant Design Issues**

(see section 5)

Inclusive Design	The Historic Environment
Landscape and Townscape	Urban Regeneration
Rural Areas	Public Buildings
Housing Design and Layout	Employment and Commercial Areas
Public Realm	Public Art
Signs and Advertisements	Safety



**12** | The Nook, Oxwich

*Use of sensitive materials to enhance the local character*



**13** | Ty Gwala, Rudry

*Use of various local materials can enhance local character*



**14** | The Hand, Lancaster Square, Llanrwst

*Sensitive renovation to enhance the surrounding character of the street and adjacent buildings*



## Community Safety

### Objectives

- Ensuring attractive, safe public spaces
- Security through natural surveillance

### Design Response Following Appraisal of Context

By promoting:

- high quality in the public realm
- routes which are fit for purpose and will provide opportunities for safe physical activity and recreation to meet the needs of all members of society
- a sense of ownership and responsibility for every part of the development.

### Design Solutions

- **Crime prevention** - the way in which development is designed to protect property by allowing for natural surveillance; improving the community's and individual's safety by reducing conflicts in uses; and promoting a sense of ownership and responsibility.

### Relevant Design Issues

(see section 5)

Safety	Urban Regeneration
Housing Design and Layout	Employment and Commercial Areas



15 | Drybridge, Monmouthshire

*Promoting a sense of ownership*

## Environmental Sustainability

### Objectives

- **Achieving efficient use and protection of natural resources**
- **Enhancing biodiversity**
- **Designing for change**

### Design Response Following Appraisal of Context

By incorporating:

- sustainability measures to reduce the environmental impact associated with buildings and minimising the demand for energy (low and zero carbon sources), water, and materials and creation of waste
- approaches to development which create new opportunities to enhance biodiversity
- adaptable and flexible development that can respond to social, technological, economic and environmental conditions/changes (e.g. the current and future effects of climate change) over time to minimise the need to demolish and rebuild.

### Design Solutions

- **Landscape/townscape setting** - the way in which a new development will work with the site and its landscape context. Including key features and qualities such as pattern, form, grain, appearance, colours and elements to also meet the objective of sustaining character and reinforcing legibility;
- **Biodiversity and local environment** - includes aspect of layout/planting) the way in which the development will maintain/enhance opportunities for species to inhabit the area and building fabric and how will the development maintain and improve habitat connectivity and illustrate how the development will integrate with open spaces,<sup>6</sup> including management and aftercare;
- **Energy efficiency/carbon reduction** - the way in which new development seeks to minimise the energy demand and carbon emissions associated with the development through implementation of the energy hierarchy, or deliver zero carbon standards;
- **Sustainable materials** - use of materials with a low environmental impact (embodied energy), reduced energy inputs, sourced sustainably (i.e. Forestry Stewardship Council timber), locally sourced (to reduce transport emissions), and the use of used, reclaimed and recycled materials;

<sup>6</sup> Technical Advice Note 5 'Nature Conservation and Planning'

References

- **Water** - sustainable approach to water supply (rainwater harvesting), demand management (water efficiency) and drainage (e.g. permeable surfaces for pavements/traffic) and its effect on the local water table;
- **Waste management** - the way in which waste will be dealt with during and after construction (re-use and disposal), including the provision of appropriate facilities for sorting, storing and recycling of waste in buildings and across the site;
- **Climate resilience** - the way in which the development is climate proofed to take into account the climate the development is likely to experience over its expected lifetime by managing and minimising climate change effects (e.g. extreme temperatures); and
- **Sustainable building standards** - the use of nationally recognised and quality assured standards to demonstrate that environmentally sustainability design solutions (as set out above) have been incorporated into new developments.

Relevant Design Issues

(see section 5)

Climate Responsive Development	Sustainable Buildings
Landscape and Townscape	Housing Design and Layout
Public Realm	Biodiversity
Urban Regeneration	Public Buildings
Employment and Commercial Areas	



16 | Solar shading in SA1, Swansea

*Passive design elements such as solar shading can be used to minimise the need for artificial cooling in the summer*

# Movement

**Objective** - Promoting sustainable means of travel

## Design Response Following Appraisal of Context

By maximising:

- safe and clear connections
- the potential to cycle, walk and use public transport safely, and reducing the reliance on the car
- the connection to the existing transport infrastructure by integrating development with existing footpaths, cycle ways and public and private transport infrastructure
- the integration of different transport types whilst minimising the adverse effects on the network
- the ease of movement to, from and within the development for sustainable forms of transport by creating a safe and attractive environment
- the provision of on site facilities for sustainable forms of transport.



**17** Cyclepaths and walking

*Connecting new development to existing routes can improve opportunities for sustainable modes of travel*



**Design Solutions**

- **Connections** - The way in which the proposed layout contributes to or improves the existing framework of connecting routes and spaces and waterways to achieve a successful relationship between private and public space;
- **Modes** - The way in which the development accommodates for different transport modes;
- **Servicing** - The suitability of the servicing arrangements exist to transport freight required by the development; and
- **Parking** - The way in which the development has considered the requirements for parking and whether this will be managed appropriately.

**Relevant Design Issues**

(see section 5)

Transport	Inclusive Design
Urban Regeneration	Rural Areas
Housing Design and Layout	Employment and Commercial Areas

**References**



**18** | Holyhead Harbour

*Connecting routes and improving townscape through public art*

Galeri Caernarfon



## 5. Assessing Design Issues

**5.1** This section deals with specific design issues where the implications of design choices may be particularly significant in influencing whether the objectives of good design are achieved. The emphasis for each issue is on finding sustainable design solutions, as the concept of sustainability must inform all aspects of design. As with all forms of development, these issues should be considered in the context of the broader advice on the design solutions. In some cases, choices will need to be made if solutions which are optimal for some design objectives conflict with other design objectives. These choices should be informed by local and national policy.

**5.2** Where a design and access statement is required, this will provide an opportunity for developers to demonstrate how they have considered the design issues discussed in this section. This may be relevant to more than one of the statutory aspects of the development in which the explanation of design principle and concepts must cover as a minimum. Further guidance on design and access statements is provided in Appendix 1.

### Overarching issues

#### 5.3 Inclusive Design

**5.3.1** The Assembly Government expects all those involved in the design process to foster a culture of inclusion, whereby design solutions provide access to the widest possible range of people. Inclusive design is a specific approach to barrier free environments, implicit in which is a departure from a “special needs” approach to impairment which relies on adaptations (principles included in PPW and referred to in section 2 of this TAN). Where a design and access statement is required, the issues and principles set out here will be particularly important to the requirement to explain how issues relating to access to the development have been dealt with, but they should also act to deliver as a driver to the statement as a whole.

**5.3.2** In every area of development earlier and greater attention should be given to the needs of all sectors of society, including older people, children and disabled people. This principle applies to the design of the public realm, to public transport infrastructure and to the location, design and layout of public leisure facilities as well as the design of individual buildings.<sup>7</sup> It is a common misconception that inclusive design is primarily a matter for those with mobility impairments. On the contrary, designing for all means that consideration should include the needs of all, including people with mobility impairments, people with sensory impairments and people with learning difficulties.

**5.3.3** The Disability Discrimination Act 1995 (as subsequently extended, including by the Disability Discrimination Act 2005) makes it unlawful to discriminate against disabled people in areas of employment, access to goods, facilities and services, education and the management, buying or renting of land or property. More specifically, since October 2004 service providers have been required to consider making permanent reasonable adjustments to the physical features of their premises in order to make their services accessible.

<sup>7</sup> Planning and Access for Disabled People, ODPM (2003)





19 | Ruthin Art Centre

*Sensitive inclusive design to a public area*

The provisions introduced in 2005 also imposed a general duty on all public authorities to promote equality of opportunity for disabled people in all their functions, including planning policy.

**5.3.4** Those public authorities deemed to have a significant impact on the lives of disabled people (this includes local planning authorities in Wales) are also subject to a specific duty and are required to publish a Disability Equality Scheme setting out the actions they will take to promote equality of opportunity for disabled people. As part of this process, public authorities are required to monitor and report on progress in meeting the general duty and promoting equality of opportunity for disabled people.

**5.3.5** Good practice for all involved in the design process involves:

- increasing awareness of inclusivity by all
- consulting disabled people and groups representing them
- identifying physical and non-physical barriers to access
- making adjustments to deal with identified barriers
- drawing adjustments to the attention of disabled people
- regular reviews of effectiveness.

**5.3.6** Building Regulations, British Standards and guidance lay down minimum standards for access to all classes of building. Adopting an inclusive approach from the outset minimises the need for new buildings to require subsequent modifications to ensure compliance with the requirements of the Disability Discrimination Act. Initiatives which are designed to meet the existing and future needs of occupants such as “lifetime homes” illustrate the importance of foresight and flexibility as well as sensitivity in design as a means of allowing everyone to use the environment and/or access services/facilities in an equal and independent way. This type of initiative focuses on the positive impacts of inclusive design, such as access for the whole population, flexibility and adaptability in use and the approach is entirely compatible with sustainable objectives.

**5.3.7** Those seeking permission to build new and public commercial buildings are encouraged to include in their plans, accessible ‘Changing Places’ toilet facilities in addition to standard accessible toilets. These toilets have enough space for disabled people and their carers or personal assistant(s), and the right equipment, including a height adjustable changing bench and hoist.

## References

## 5.4 Climate Responsive Development and Sustainable buildings

**5.4.1** Planning authorities, developers and other partners in the provision of new development should engage constructively and imaginatively to deliver climate responsive developments and sustainable buildings, particularly where these are contained in policy. These will be delivered through the consideration of a range of environmentally sustainable design solutions appropriate to the development. The implications arising from them must be considered at the earliest opportunity in the design process.

**5.4.2** Achieving climate responsive development requires an understanding of the ways in which a development can tackle the causes of climate change (mitigation) and be resilient to its effects (adaptation).

**5.4.3** To effectively **mitigate** the causes of climate change in the design of a development a clear approach to reducing carbon and other greenhouse gas emissions associated with the development should be taken. Good practice in mitigating the causes of climate change is to apply the energy hierarchy<sup>8,9</sup> which details a series of steps that should be taken to minimise the carbon emissions associated with a new development in the most efficient and cost effective way. In taking forward an energy hierarchy, an approach to ‘carbon reduction’ can be prepared for developments, where appropriate, and included or summarised in a design and access statement to illustrate how the design of the development has sought to reduce the carbon emissions associated with the development - including opportunities to move towards zero carbon.

**5.4.4** Feasibility studies can be used to determine the best way to reduce carbon emissions arising from a development using the energy hierarchy. The potential for achieving zero carbon standards should be considered as part of this process.

**5.4.5** The mix, density and land use of a development determines its energy, heat and cooling needs. Larger sites or those adjacent to existing development are likely to provide the greatest opportunity for development of combined heat and power and district heat systems (including demands for cooling), a combination of smaller sites can offer opportunities for decentralised energy solutions.

**5.4.6** Opportunities for local and low or zero carbon energy supply such as CHPs and district heating systems can be maximised when higher densities and a mix of uses are proposed which balance energy demand over different time periods. Such as between industrial and residential or with a major institutional use such as a hospital or a leisure centre.

## References

<sup>8</sup> Technical Advice Note 22 ‘Planning for Sustainable Buildings’

<sup>9</sup> Technical Advice Note 8 ‘Renewable Energy’



20

**Centre for Alternative Technology, Machynlleth**

*Reducing the energy demand through efficient fenestration, use of materials and solar panels*



21 | Solar panels, Coach House, Cardiff

*Incorporation of solar panels into roof line*

**5.4.7** To effectively **adapt** to the effects of climate change attention should be given to the ways in which the design can both minimise and manage the impacts arising from climate change. Good practice for all involved in the design process includes:

- an awareness and appreciation of the current and future effects of climate change<sup>10</sup>
- awareness on how climate adaptation measures can offer multiple benefits and support other objectives of good design (such as promoting biodiversity through the incorporation of green roofs)
- responding to effects of climate change through the structure, physical envelope and choice of materials to enable them to withstand extreme temperatures
- ensuring that design solutions do not constrain current and future opportunities to adapt or a development's vulnerability to climate change
- recognise the relationship to more strategic responses to climate change such as flood risk and drainage.<sup>11</sup>

**5.4.8** Criteria for development layout and approaches that can be included within a design could include:

- to avoid poor micro-climate (hill crests or frost pockets) and make the most of south facing slopes
- passive measures that balance the benefits of minimising heat loss in winter with the risk of excessive solar gain during the summer (avoiding the need to install artificial cooling systems)

## References

<sup>10</sup> UK Climate Impact Scenarios

<sup>11</sup> Technical Advice Note 15 'Development and Flood Risk'



- shelter from the elements to minimise heat losses in winter and provide adequate shade in summer provided from land form, landscape and other buildings
- orientation to enable the buildings to face within at least 45 degrees of south to maximise solar gain (dependent on type of use)
- provision of natural shade in outdoor spaces
- sustainable drainage measures through layout and design features which enable the consequences of flooding to be acceptably managed
- maximising of opportunities to maintain and/or enhance habitat connectivity and create space for future adaptation.



22 | Adnams Warehouse

*Use of grass roof on a commercial development*

## References

**5.4.9** Many aspects of design such as **built form** and **fenestration** affect the environmental sustainability of buildings. The following factors may be relevant:

- internal layout to include consideration of the placing of rooms e.g. needing higher temperatures (such as living rooms) to the south
- use of design features such as atria, conservatories and porches to enable natural ventilation and conservation of heat
- layout of windows, doors and roof lights e.g. to provide larger windows to areas to the south and smaller to the north in residential developments and to provide natural lighting for employment use whilst considering the possibility of overheating in the summer months
- plan depth compatible with natural daylight and ventilation
- compact form to reduce external surface area, and avoid infiltration from increased wind and temperatures
- facilities for good at source segregation of wastes need to be integrated sensitively - separating those wastes for reuse and recycling on site from those wastes to be removed from the site and provisions for the reuse and recycling of wastes remaining on site for the lifetime of the development
- provision for low and zero carbon energy technologies to be included or made feasible
- use of green roofs to insulate against heat gains, reduce surface water run-off and facilitate biodiversity

- use to be made of material with reduced energy inputs (sustainably produced timber (FSC certified), locally manufactured or recycled materials (e.g. bricks, slate)
- sustainable construction processes which avoid or reduce waste and other environmental, health, or social effects during construction
- provision for the collection and use of rainwater and also for the appropriate reuse of rainwater
- choice of materials that will reduce the impact from higher wind speeds and extreme temperatures on their performance
- designs that provide summertime cooling through solar shading, thermal mass and ventilation.

## References

## Context

### 5.5 Landscape and Townscape

**5.5.1** The distinctive settlement patterns which characterise much of Wales have evolved in part in response to the country's diverse landscape and topography. The way in which development relates to its urban or rural landscape or seascape context is critical to its success. Because of this, an understanding of landscape quality, including its historic character, is fundamental to the design process.



23 | Tenby

*Successful relationship between coastline and townscape*

**5.5.2** In general terms, good design will almost always be dependent on working within the natural constraints and the historic character of the landscape and this should be the starting point from which the design of development evolves. The aim should be to achieve good design solutions which maximise the natural landscape assets and minimise environmental impact on the landscape. It is particularly important that proposals to amend or create new landscape are not considered as an afterthought and that the long-term impact of development on the landscape is fully understood. The quality of implementation and the long-term management of changes implicit in planting schemes are fundamental to a scheme's success.

**5.5.3** Local planning authorities are responsible for assessing adequately the relative qualities of their local landscape. The development plan may specify the local authority's landscape design expectations or it could also have a role in the preparation of design guidance and SPG for specific developments or in specific areas.

**5.5.4** For larger developments, undertaking strategic landscape assessment at the outset of the design process should help to define the capacity of the natural and historic environment to absorb development. It should also provide a broad context for decisions on appropriate scale, form and layout and determine which landscape features need to be protected or enhanced. This should include the desire to provide for habitat connectivity as well as the intrinsic role of landscape in the sustainable management of resources such as water and soil on a catchment scale. In areas included on the Register of Landscapes of Historic Interest in Wales, a methodology exists for assessing the significance of the impacts of proposed developments (ASIDHOL, Assessment of the Significant of the Importance of Development on Historic Landscape). Design solutions should demonstrate clearly how the strategic landscape assessment, including any role it may have in facilitating adaptation to climate change, in combination with the site appraisal have informed the detailed design of development and planting proposals.

**5.5.5** It is important that the qualities of the urban landscape (townscape) are appreciated and considered in the design of development. Townscapes are closely related to topography, natural features such as rivers, existing patterns of vegetation, parks, green corridors and planting in streets and public spaces. They are often an integral part of the historic character of the town. The landscape qualities of the settlement including its contribution to views and links to the open countryside, its functions in water management, soil protection, natural cooling, habitat connectivity and its historic character need to be taken into consideration early in the design process.



24 | Mid Wales

*The wider landscape can be used to inform how the design responds to its local context*



## 5.6 The Historic Environment

**5.6.1** The general advice on the objectives of good design, the value of context appraisal and achievement of design solutions, is equally applicable to design in the historic environment.<sup>12</sup> Achieving good design in development also involves making appropriate use of the legislative controls available to raise quality. In areas of special character such as conservation areas or areas recognised for their landscape value, the way in which new development is accommodated and change is managed may need a greater level of direction from the local planning authority. Whilst meeting the objectives of good design should be the starting point, more detailed advice may be required to ensure preservation or enhancement of specific qualities and these should form part of the pre-application discussions. In conservation areas there should be regard to the desirability of preserving or enhancing their character and appearance. Where a design and access statement is required to be submitted with a listed building consent application, the statement must address the specific statutory aspects of the works as a minimum; these differ from those specified for planning applications.

**5.6.2** In areas recognised for their landscape, townscape, architectural, archaeological and/or historic value, such as National Parks, Areas of Outstanding Natural Beauty, World Heritage Sites and conservation areas, the objective of sustaining character is particularly important and context appraisals should reflect this.<sup>13</sup> The general aspects of the “character” objective of good design should be pursued but more detailed information may be needed in relation to key issues such as:

- **the setting and views** of key buildings, landscape, parks and gardens, archaeology and skylines within, to and from the area
- **the degree of architectural unity or informality** in building groups and settlements and in landscape
- **locally distinctive building elements** and construction techniques, such as roof pitches, window proportions, parapets, or paving details
- **locally distinctive facing materials** such as natural slate, brick quoins or natural stone in both buildings and the public realm
- **boundary details** including means of enclosure of landscape features, open spaces and gardens
- **street furniture** including signage, street nameplates, street lighting
- **in retail areas** distinctive design and proportions of shopfronts, signs, and lettering.



**25** Listed Buildings at Bethel Square, Brecon

*Accommodating change in the historic environment and maximising the potential of listed buildings*

## References

<sup>12</sup> Planning and the Historic Environment: Historic Buildings and Conservation Areas (Welsh Office Circular 61/96)

<sup>13</sup> Cadw (2004), Converting Historic Buildings in Wales: A Guide to Good Practice

## References

<sup>14</sup> Civic Trust for Wales & Department of City and Regional Planning, Cardiff University (2000), 'Conservation Areas in Wales: Management and Urban Design'

**5.6.3** Specialist skills are needed to achieve accurate assessment of areas of architectural or historic character. In the design of alterations or extensions to listed buildings, professional expertise is essential to assess the elements which make up the special interest of the building and to achieve a balance between sensitive change and maintenance of integrity.<sup>14</sup>

**5.6.4** In the alteration of listed buildings and in the wider historic environment efforts should be made to use local materials or materials from other sources which have equivalent appearance, colour and weathering characteristics. It may be appropriate to abandon conventional design solutions in favour of a more imaginative and contemporary approach. This may involve flexibility in the application of policies, and on the part of applicants the use of spaces within historic buildings in a less orthodox way and high quality specifications. Cadw and Conservation Officers within local authorities provide detailed guidance on issues relating to listed buildings.

**5.6.5** The impact of traffic in historic areas is a key concern. The design of traffic management and transport infrastructure schemes should consider:

- simplicity and respect for local materials and detailing;
- use of existing building form to effect traffic calming, such as existing pinch points;
- narrow streets or strategically located buildings;
- use of natural features, such as the use of hedges as a traffic calming aid; and
- scope for rationalisation of traffic signs and reduction of clutter.



**26** | **St Clare's Conversion**

*Sensitive conversion of an old building*

**5.6.6** Conservation is often dependent on accommodating change, and successful design in the historic environment is reliant on a programme of management which links conservation policies to wider urban design and

regeneration strategies. Local planning authorities should make full use of SPG in the form of design guidelines and development briefs to help to bind policy to practical opportunities for enhancement.

**5.6.7** The degree of access to the historic environment which is afforded to all sectors of society is a matter of concern to all those involved in the process of design. Creative design solutions may be required to achieve acceptable levels of access not only to buildings but throughout the public realm in historic areas. More specific guidance on making historic buildings more accessible is available from Cadw and from local planning authority Conservation Officers.

**5.6.8** Works to historic buildings may often successfully achieve higher energy and other environmental standards without compromising the special architectural qualities or historic interests of the building. Whilst flexibility of the application may be required, such opportunities should not be overlooked.

## 5.7 Urban Regeneration

**5.7.1** Realising the potential of existing urban areas will help reduce the need to travel, help revitalise and regenerate urban centres and reduce pressure for development on the countryside. The historic environment is a significant aspect of local distinctiveness, which is a valuable asset in regeneration. There is a complex relationship between density of development, provision of services and quality of the environment, and good design is fundamental to the success of this relationship. In areas where there is a need to promote growth and change, such as town centres and older housing and employment areas, local planning authorities should clarify their vision of how the area might develop over time. An urban design framework or masterplan can help to develop this vision three dimensionally and can usefully form the basis of SPG or other design advice to guide development.



27 | Drift Park, Rhyl, Denbighshire

*Urban regeneration through partnership creating a new interest to an area*

## References



**5.7.2** Those involved in the design process need to recognise existing urban qualities and find ways of ensuring that new development strengthen or complement these. Examples include integration of established landscape elements into the urban environment; making best use of natural features such as river frontages or varied topography; and reusing redundant man-made features such as docksides or former railway lines for pedestrian and cycle routes. There are multiple benefits in this approach, in terms of enhancing local distinctiveness linking component parts of urban areas, creating green corridors and areas for both nature conservation and leisure use and reducing car dependency.

**5.7.3** Evidence shows that careful integration of compatible mixed uses can help urban areas become more competitive, viable and sustainable. In design terms, a mix of uses adds diversity to the townscape and the activity generated adds vitality. Good design and construction techniques are essential to ensure that practical issues such as noise abatement and privacy are addressed but also to ensure that mixed uses relate well to one another physically and offer opportunities for visual interest and originality.



**28** | The Works, Ebbw Vale

*Large scale urban regeneration through collaboration with stakeholders*

**5.7.4** Building at higher densities is not synonymous with high rise development and innovative good design is a prerequisite to the success of higher densities. The perception of lower density can be influenced by skilful design. Clearly defining public and private space and ensuring suitability for purpose will be particularly important where densities are high.

## 5.8 Rural Areas

**5.8.1** The special qualities of the rural landscape and coastline of Wales should be recognised. The qualities should be enhanced through conservation of the character of the countryside and by achieving quality in new development.



**29** | Beddgelert,  
Snowdonia  
National Park

*Bus shelter designed with regard for context*

**5.8.2** Design is relevant to rural settlements, urban fringe, steep sided valleys, mountain top plateaus and broad agricultural areas vary significantly. Policies and guidance should take account of the need to steer activity to avoid negative impact on distinctive rural landscapes and the best agricultural land and to conserve and enhance diversity of species and habitats. Managing change by means of a landscape strategy based on a thorough landscape assessment is one means of safeguarding a rural sense of place. This should analyse key issues and put forward guidelines for design themes, palettes of materials, and briefs for specific sites.

**5.8.3** Reconciling the maintenance of local identity with efforts to support economic viability in rural areas will often point to conversion of existing buildings. Conversion requires skilful and sensitive design, an understanding of traditional construction methods and the imagination to make the fullest and most exciting use of the space available. Many buildings in rural Wales occupy visibly prominent locations and the scope for damaging local distinctiveness through inappropriate development may be even greater than in densely developed areas. Conversely, parts of the countryside may offer unique opportunities for innovative design which maintains aesthetic quality and also improves access for everyone and these should be fully explored.

**5.8.4** In relation to conversion or adaptation of agricultural buildings, character retention will often involve the least amount of change possible to external appearance. Solidity and simplicity in design and relationship of built form with landscape provide the distinctive character of many Welsh rural areas. The fragility of these qualities and the important contribution which local distinctiveness makes to a sustainable future for rural areas should be reflected in development plan policies and guidance.

**5.8.5** The scale, form and siting of new agricultural buildings or buildings for on-farm diversification, is usually influenced by the operational needs of the enterprise. Where possible, new buildings should be integrated within the farmstead. Elsewhere, particular care should be taken with siting, massing and detailed design to enable them to fit well into the landscape. The use of materials appropriate to the setting, attention to colours of materials and detailing can all facilitate integration into the landscape. The standard pattern book approach needs to evolve to accommodate vernacular elements and relate to the local context.



**30** | Ystradfellte

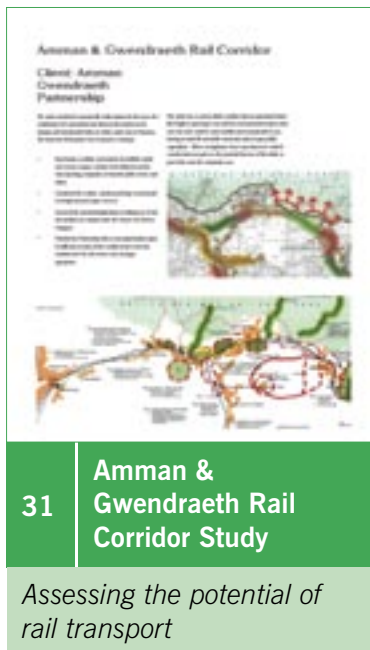
*Conversion of disused farm buildings to water treatment works*

## References

## 5.9 Transport

**5.9.1** The siting, layout and detailed design of development will often be critically important to the success of efforts to provide genuine alternatives to car travel and to achieving quality in the environment as a whole. Environmental quality has been identified as a key factor in influencing whether or not people choose to walk or cycle within urban areas. Good site location, building and street design can play an important role in achieving a reduction in car traffic and speed and short distance motorised journeys, as well as encouraging a wider choice of more sustainable modes of travel.

**5.9.2** The planning of movement should always be based on an understanding of local context and analysis of the area's needs and potential. Technical Advice Note 18: Transport<sup>15</sup> sets out how the Transport Assessment process can assist in analysing travel demand and impact. This process should contribute to the design of transport infrastructure for the development and result in the production of a Transport Implementation Strategy to manage movement to, from and within (for large developments) the site. When providing a design and access statement such assessments can be cross-referenced.



**5.9.3** In large developments, strategic opportunities such as the potential for public transport interchanges should be considered and accommodated, as well as the benefits of locally based traffic management measures. The highest standards should be applied to the design of transport infrastructure and the potential for “landmark” design, which reinforces local identity, should be explored. Fitness for purpose and the comfort and safety of users are essential, in the design of public transport infrastructure. In particular, the potential for raising the profile of bus and rail travel through innovative design which meets present and future needs should be realised.

**5.9.4** Particular care should be taken to ensure that the design of infrastructure avoids severance and fragmentation of communities. Permeable access for all is vital. Issues such as gradient, lighting, and security should be addressed in the design of pedestrian and cycle routes in particular to ensure that routes are coherent, legible, direct, attractive, safe, and unobstructed. The different needs of cyclists and pedestrians, including those with mobility impairments and/or sensory impairments, and potential for conflict should also be recognised and addressed. Safety and perception of safety are vitally important in efforts to encourage walking and cycling. Designs should take account of the need to protect the interests of all vulnerable road users.

## References

<sup>15</sup> Technical Advice Note 18 ‘Transport’ (2007)





**32 Porthmadog**

*Using existing infrastructure to create new routes for cyclists*

**5.9.5** Early stakeholder involvement in transport and movement issues should be sought so that the needs of users and operators are understood and reflected in design solutions. The Manual for Streets and local highway standards can provide developers with guidance on standards of design, layout and construction which local authorities would expect new developments to follow, however the blanket application of prescriptive standards should be avoided. A better balance between the five principle functions of streets, should be achieved, particularly the movement and place functions, as set out in Manual for Streets. A close working relationship between the

design team, planners and highway engineers is essential to achieve this. Local standards should be reviewed in light of Manual for Streets and its key principles may be used more widely than just residential streets.

**5.9.6** When taking account of transport infrastructure needs in the design process, the emphasis should be on the safe accessible movement of people and goods along attractive routes which relate well to urban and rural environments. The layout of infrastructure should contribute to the promotion of walking, cycling and public transport. To achieve this, consideration should be given to all forms of modes at the start of the design process ensuring that direct and attractive routes for different modes such as pedestrians and cyclists, can be safeguarded or, where possible, enhanced.

**5.9.7** The needs of disabled people, children and older people should be given particular attention and in the interests of inclusive design should be considered at the outset.

## Type of Development

### 5.10 Public Buildings

**5.10.1** The public sector has a responsibility and an opportunity to set high standards in achieving good design in its own buildings and achieving low carbon targets or zero carbon where possible. In the design of schools, hospitals and other buildings and infrastructure intended for use by the local community the aim should be to achieve fitness for purpose, value for money over the whole life of the building, and a positive impact on the lives of those who use it and on its surroundings.

## References



**33** | Cardiff Library

*Leading by example - Incorporation of sustainable design in public buildings*

**5.10.2** Through their location and design, public buildings can provide a strong community focus and reinforce local identity. Integration with the community they serve is essential. Most public buildings will be best placed at central points in highly visible locations. Where there is scope to emphasise civic status by development of adjoining public spaces this should be pursued. The objectives of access for all and achieving legibility are particularly important in the design of buildings into which the public are invited.



**34** | Millennium Centre, Cardiff

*Innovative design using materials from Wales to add character and create a distinctive public place*

**5.10.3** Innovative design of public buildings can act as a powerful regenerative tool and the potential for social and economic benefits associated with the design of “flagship” public buildings should not be underestimated. Similarly high aspirations should apply to local buildings which have a more direct impact on people’s everyday lives.

**5.10.4** Best value for money in terms of whole life costs is best achieved by integrated project teams which mobilise all the design and construction skills in the team to achieve high quality and minimum waste.

## 5.11 Housing Design and Layout

**5.11.1** Achieving more sustainable residential environments is dependent on linking development to public transport and other uses and services (e.g. district heating), providing access to local services, and securing the most efficient use of land.<sup>16</sup> For a successful residential area, the design of housing should be to establish a sense of place and community, with the movement network used to enhance these qualities, and to incorporate features of environmental sustainability. Further advice is available on how the needs of pedestrians and children in particular, are given as much consideration as vehicle movement in residential street design.<sup>17</sup>

**5.11.2** Development proposals, in relation to housing design should aim to:

- create places with the needs of people in mind, which are distinctive and respect local character
- promote layouts and design features which encourage community safety and accessibility
- focus on the quality of the places and living environments for pedestrians rather than the movement and parking of vehicles
- avoid inflexible planning standards and encourage layouts which manage vehicle speeds through the geometry of the road and building
- promote environmental sustainability features, such as energy efficiency, in new housing and make clear specific commitments to carbon reductions and/or sustainable building standards
- secure the most efficient use of land including appropriate densities
- consider and balance potential conflicts between these criteria.



**35** | **Crickhowell**

*Grouping buildings and mixing density to create variation and sense of local identity*

**5.11.3** The design of housing layouts and built form should reflect local context and distinctiveness, including topography and building fabric. Response to context should not be confined to architectural finishes. The important contribution that can be made to local character by contemporary design, appropriate to context, should be acknowledged. To help integrate old and new development and reinforce hierarchy between spaces, consideration should be given to retaining existing landmarks, established routes, mature trees and hedgerows within housing areas as well as introducing new

planting appropriate to the area. All residential proposals should seek to minimise energy demand, larger schemes should investigate the feasibility of a district heating scheme especially when mixed uses are proposed for the site.

**5.11.4** The location and definition of public and private space and the design of boundary treatment are particularly important for housing. New development should take account of the existing relationship of buildings to landscape and the

## References

<sup>16</sup> Planning Officers' Society Wales (2005), "A model design guide for Wales - residential development"

<sup>17</sup> Technical Advice Note 18 'Transport', 2007 and Manual For Streets, 2007



local means of boundary definition such as hedges, walls and fences. In general, every effort should be made to orientate dwellings so that they front existing roads and spaces, ensuring a balance with the need to promote features of environmental sustainability. The relationship of the perimeter of a development to its setting is important and developments which turn their back on existing roads do not integrate well with their context. An exception should be made where the characteristic layout is more organic, such as in many rural villages and smaller settlements throughout Wales where gables of dwellings are typically sited on the road frontage.

**5.11.5** The regular application of rigid highway standards with no consideration of Manual for Streets; over reliance on standard house types and a failure to relate to local context have all been identified as obstacles to good housing design and factors which mitigate against achieving a distinctive sense of place in housing development. Including the following elements in the design may help to create a sense of place:

- **varying density** to create differences in the built form to which residents and visitors can relate and make it an interesting place
- **locating key buildings at corners or junctions** to establish a clear hierarchy of development
- **exploiting existing natural features** or taking advantage of views and natural shelter
- **varying elevational** treatment, materials and building form so that smaller groups of buildings are developed to which people can relate.



36

**Felindre Farchos,  
Newport,  
Pembrokeshire**

*New housing designed to reinforce existing sense of place and community*

**5.11.6** The street should be regarded as public space where people can meet. Street networks within housing developments should generally be interconnected or 'permeable' to facilitate safe walking and cycling. They should also connect with adjacent street networks and make provision for future connections with subsequent developments. This does not preclude the use of cul de sacs but they should be used with caution to avoid restricting permeability. Routes which increase crime risks, such as isolated routes to the rear of premises or routes which are not easily overlooked should be avoided.

**5.11.7** Reference should be made to Manual for Streets, for information on the design options for car parking. The emphasis in the design of parking provision should be on integration with the overall setting and recognition that car ownership and car size can vary with income, age, household composition, the type of housing and its location. Where and how cars are parked can be a major factor in the quality of a development. Vehicles should not be allowed to dominate the space or inconvenience pedestrians and cyclists. At the same time, the needs of disabled people to park near their dwellings should

be acknowledged. A balance needs to be struck between the expectations of car owners, in particular the desire to park as near to houses as possible, to be secure and overlooked and the need to maintain the character of the development.

## 5.12 Employment and Commercial Areas

**5.12.1** The design of employment areas is important, as high quality of design can add value to commercial property, support the image of modern businesses and encourage further investment. Early consideration of the need to embrace high environmental standards, low carbon aspirations and minimise the need for artificially cooled buildings, provide opportunities to develop shared low carbon and renewable energy options.

**5.12.2** Large new employment buildings can often make a bold statement of their purpose. Recognising the functionality of business premises is important to ensure they contribute to the economic success of the occupier. However, robust design, high quality materials, flexibility of exterior and interior layout and appropriate landscape treatment such as earth form or planting, can help to integrate new business premises into their surroundings, minimise the need to artificially cool buildings and allow for easier conversion by successive occupiers. Service and utility features, exposed and imaginatively detailed, may in many cases provide elements of interest in otherwise plain facades. The need to consider the building and landscape maintenance processes once the development is completed is also essential to ensure that the development remains integrated.

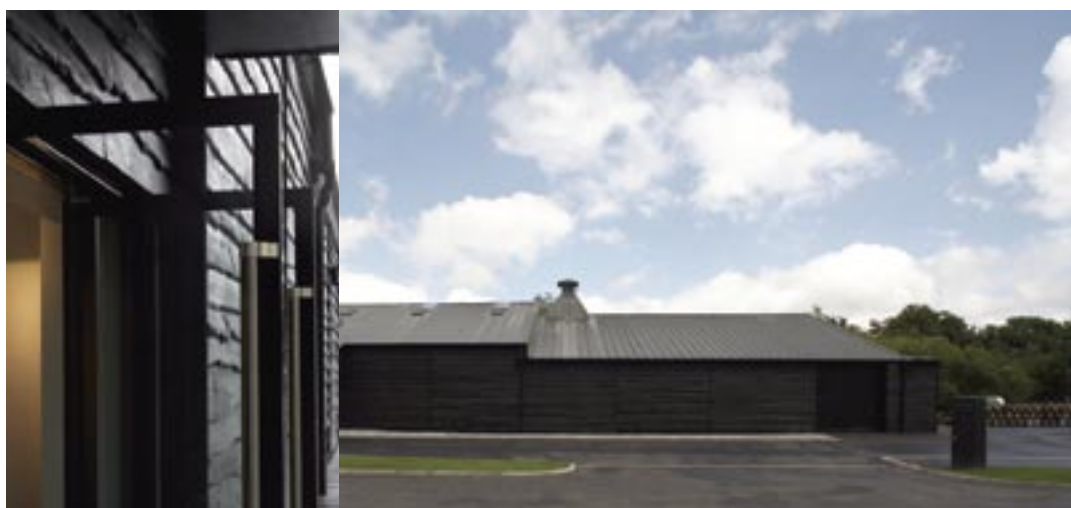
## References



37 | Technium OpTIC

*Innovative design in commercial buildings*

**5.12.3** Where employment premises are grouped together, a sufficient scale of planting and earth forms is essential, to absorb the bulk of the building, ancillary circulation, and parking areas. Opportunities to minimise energy demand through the adoption of renewable energy or low carbon technology such as district heating schemes including CHP running on low carbon fuel, should be realised. Mixed employment uses would improve the feasibility and viability of such schemes and care should be taken to avoid the creation of insular estates. Efforts should be made to present a positive, outward looking image by ensuring key buildings within the development front onto roads and help improve connectivity. Accommodating parking within courtyard layouts can help to reduce the overall visual impact of parking areas. Separate, safe and attractive routes for pedestrians and cyclists, and high quality facilities for public transport should be incorporated. Low maintenance regimes will be particularly important in mixed occupancy areas.



**38** Penderyn Offices

*Use of local materials to add character to a commercial building*

**5.12.4** Where situated in proximity to other uses, smaller employment premises especially, will need to be more closely related in terms of scale and appearance to their context. This should not mean concealing their purpose but expressing it in a way which reflects or complements the setting. In some circumstances, especially in regeneration and rural areas, the conversion of existing buildings for employment purposes will be appropriate. However even in these areas there can also be a place for new buildings of an appropriate appearance.

## Detailed Matters

### 5.13 Biodiversity

**5.13.1** Local planning authorities have a duty to consider the conservation and enhancement of biodiversity in their planning policy and development control decision-making processes and to test their development plans with regard to

significant effect on “European sites” through Habitats Regulations Appraisal.<sup>18</sup> Good design can contribute to conserving or enhancing the wildlife interests of an area or site.

**5.13.2** Designers should be aware that stakeholders can perceive features of wildlife interest as a characteristic of an area, in addition to the value of that feature for wildlife (such as an area of unmanaged open land within a housing estate, or a hedgerow that is rich in a variety of wildlife). Identifying and maximising opportunities to maintain and enhance biodiversity as part of the design process can be complementary to the inclusion of other features of environmental sustainability through design.



**39** Sustainable drainage systems at Pontyclun

*Use of sustainable drainage system as a regional control in a housing development*

**5.13.3** Creating space for biodiversity can enhance the ability of developments to adapt to changes in local environmental conditions over the life time of the built development which may result from climate change. The design and related long-term maintenance should be based on sufficient understanding of natural processes which are present to ensure that features of biodiversity interest can be sustained in the long term. In situations where protected habitats and species are involved appropriate specialist advice must be sought. Approaches that can be adopted within a design include:

- conservation, enhancement and creation of an existing feature
- measures to protect and/or encourage species and habitats.

## 5.14 The Public Realm

**5.14.1** A high quality public realm can make a unique contribution to a stimulating environment and can provide a focus for community activity. The form and design of spaces and routes which comprise the public realm

## References

<sup>18</sup> Technical Advice Note 5 will include guidance on the Habitat Regulations Assessment (appropriate assessments)



## References

<sup>19</sup> Technical Advice Note 18 'Transport', 2007 and Manual for Streets, 2007

are critical to its success. Carefully designed and imaginative use of surfacing, changes in level, enclosure, lighting, street furniture and planting will enhance the overall environment and define its “sense of place”. Further guidance on integrated street design is available.<sup>19</sup>

**5.14.2** Particular attention is needed to reflect the needs of all sectors of the community in the design of public spaces and streets, and inclusive design principles should be applied to achieve this. A range of facilities may be needed to serve those such as carers or older people who may value locally based facilities; children, for whom segregation from traffic may be a particular concern; those with restricted mobility; and those with limited or no vision. The intention should be to encourage a hierarchy of connected public spaces so that there is a network of provision that reflects local needs.



**40** | The 'Kite Tail' Aberafan Seafront, Port Talbot

*Adding a visual interest to an area through use of street furniture and public art*

**5.14.3** To compete economically, communities need to identify and exploit their unique “personality” so that they offer different reasons for visits. A well designed public realm of high quality can help to create a “sense of place” in communities which add to their attraction beyond the immediate area. In the design and improvement of the public realm key considerations will be:

- the relationship of the space to buildings which enclose it
- the fitness of the space for its intended purpose

- the communal services required and their relationship with the type of development
- the extent to which it is safe and perceived to be so.

**5.14.4** The opportunity should be taken when improving the public realm to protect and enhance biodiversity and assist pollution abatement through careful design, implementation and maintenance of planting. Planting, particularly large tree species can also be used to improve microclimate and reduce dust and the perception of noise through, shade, shelter and screening. The use of Sustainable Drainage Systems (SUDS)<sup>20</sup> within the public realm can help reduce the localised impact of flooding.

**5.14.5** The development should take positive steps to provide adequate public lighting, but also to minimise unnecessary light pollution in their schemes for enhancement of the public realm. Lighting should be considered as an integral and creative part of the design of the public realm. Consideration should be given to methods of:

- directing light more accurately
- reducing carbon emission from the energy use of street lighting
- reducing glare by use of low profile reflectors and ensuring appropriate rather than excessive levels of illumination.

**5.14.6** Those involved in the design and management of the public realm should be aware of the potential for noise generation in their proposals and the impact this may have on neighbouring amenity. Opportunities to minimise ambient noise, such as traffic, should be explored and reflected in the layout and detailed design of the public realm and by use of low-noise surfacing materials and natural or man made barriers to noise.

**5.14.7** The absence of appropriate long-term maintenance is a major factor in the deterioration of environmental and aesthetic standards in the public realm. Good maintenance is also vital to ensure an accessible environment for all. Proposals which focus on improvements to the public realm must incorporate management strategies and funding for the continued maintenance of these areas. The design should reflect the need to minimise the maintenance liability without compromising on design quality. The use of simple, but robust materials, adequate litter bins and avoidance of litter traps or design features which may act as crime and disorder generators can all help to reduce maintenance costs, safeguard appearance and maximise public enjoyment.



**41** Seating at Conwy

*Seating providing visual interest as well as being practical*

## References

<sup>20</sup> Technical Advice Note 15 'Development and Flood Risk'

## 5.15 Public Art

## References

**5.15.1** Public art plays an important part in creating or enhancing individuality and distinctiveness, and in raising the profile of our towns, villages, cities and urban and rural landscape. The integration of the skills or work of a professional artist can add value and can also be employed at key locations to enhance legibility and public realm. There is considerable scope for integrating public art into the townscape, ranging from the dramatic to the subtle, from traditional landmark sculpture, commemorative works and smaller incidental interventions, to integrated works using contemporary and interactive media such as sound or lighting. The innovative design of street furniture or other functional objects can also be considered and increasingly, imaginative design of floorscape, railings, lighting and signage is being used to give everyday objects a unique appearance and identity. Through a considered choice of location and use of tactile materials, public art can and should be made accessible to all, whilst not itself compromising general accessibility.



**5.15.2** Public art adds a social and cultural dimension to a town centre visit and may also enhance the cultural economy and support cultural tourism, as well as providing a stimulating environment where shoppers and visitors can linger, with obvious benefits to local traders. Implicit in achieving this is a commitment to quality in concept, design, craftsmanship and materials in all artwork commissions.

**5.15.3** The unique role of public art as a regenerative tool has long been recognised in Wales and internationally and the production and adoption of Public Art Strategies by a number of local planning authorities is helpful. There is considerable precedent and potential for private sector sponsorship of public art projects, particularly where large developments are proposed. Innovative, well considered and contemporary approaches can also attract contributions from dedicated trusts and foundations, as well as adding substantial publicity and marketing value.



43

### Fitzhammon Embankment Public Art Scheme

*Use of public art to create interest at night*

## References

**5.15.4** Public art should be considered early in the design process and be integral to the overall design of a building, public space or place. The choice of artists and the nature of subsequent work should be the subject of full collaboration from the outset between the artist, the local community and professionals involved in the design process. Engendering a sense of local ownership and public responsibility for artwork is critical to the long-term success of public art projects. Public art professionals should be consulted at the earliest possible stage to identify opportunities and provide professional advice to local planning authorities and developers. In Wales the Arts Council of Wales and its revenue funded national body, Safle<sup>21</sup> provides such advice.

<sup>21</sup> [www.safle.com](http://www.safle.com)

## 5.16 Signs and Advertisements

**5.16.1** A key area in which individuality can be expressed is in the design of signs and advertisements. The degree to which signs are appropriate to their context is a critical consideration. Through skilful design it is possible to modify standard company signs to respect sensitive context without loss of corporate image and this practice should be encouraged. Whereas a sensitive or traditional approach to the design of signs may be needed in historic areas, elsewhere, imaginative signs, appropriately illuminated, can contribute to the vibrancy and visual interest of town centres. The use of neon lighting can be a sensitive issue but is likely to be most appropriate in busy shopping and commercial



leisure areas. In larger urban centres bright illuminated signs can encourage a lively and successful evening economy. Care should always be taken however, to avoid a proliferation of signs that could lead to clutter and confusion in the street scene. Bilingual signs in English and Welsh provide an opportunity for innovative design.

References



44 | Signs for cyclists and pedestrians

*Use of clear appropriate signage can enhance a user's experience of a place*

**5.16.2** It is important to ensure that signage is designed with the needs of visually and cognitively impaired people in mind and floor level advertising such as 'A' boards should be avoided where they would hamper movement.

5.17 Safety

**5.17.1** Local authorities (including National Park Authorities) are required to have due regard to crime and disorder prevention in the exercise of their functions under Section 17 of the Crime and Disorder Act 1998. Consideration should be given to practical ways in which the design of development can reduce opportunities for crime, disorder and anti-social behaviour.



45 | Tenby

*A positive relationship between private and public space, natural surveillance incorporated into the design of new flats*

**5.17.2** The Safer Places<sup>22</sup> and Secured by Design Initiative<sup>23</sup> provide recognised standards that have been shown to reduce crime (particularly residential burglary) and the impact of crime upon neighbourhoods. It is desirable for the security of all housing developments, public buildings, and all buildings funded by public bodies, to achieve similar measurable standards. It is recognised, however, that security needs must be considered in conjunction with other objectives of good design and a balance will

<sup>22</sup> DCLG (2004), 'Safer Places: The Planning System and Crime Prevention'  
<sup>23</sup> <http://www.securedbydesign.com/>

need to be struck between often competing desires for privacy, access for all and achieving security in the design of development.

**5.17.3** Community Safety Partnerships in Wales<sup>24</sup> are required to undertake regular strategic assessments of crime and disorder and substance misuse issues in their areas and produce annual three year rolling Community Safety Plans. The design and security of all developments should reflect the strategic aims of the local safety plan. Design measures should be commensurate with identified risks and good practice, with the appropriate Wales Programme for Improvement Indicators and with development plan policies.

**5.17.4** Both social and physical arrangements impact on incidence of crime, disorder and anti-social behaviour. All those engaged in the design process should be aware of the importance of social factors in determining how members of the community interact with the environment and each other. For example, when sites are selected, adequate provision of shops, leisure facilities and other services should be sought to support new development, and integration with existing transport systems should be achieved. Similarly, a mix of dwelling type should encourage occupation during the day and increase opportunity for natural surveillance, community interaction and environmental control.



**46** | Wrexham Town Centre

*Artist designed seating in a communal space. The attention to detail and a sense of security created by natural surveillance help to make successful places*

**5.17.5** The concept of ‘designing out crime’ requires full consideration by everyone involved in the design of development. The design of physical features such as the arrangement of infrastructure and buildings also impact on incidence of crime.

**5.17.6** Attention should be given to the following at the outset of the design process:

- a layout which incorporates clear, direct routes which are desirable and hence likely to be well used
- orientation of buildings, particularly housing, to allow natural surveillance. Careful design solutions will be needed to allow unobstructed views of neighbouring properties without compromising the need for privacy. Natural surveillance is particularly important in vulnerable areas such as communal space, play areas and parking spaces
- design features which help to define clearly public and private areas. Design solutions are needed which avoid creating a “fortress mentality”. For instance through the use of symbolic barriers such as a change of surface treatment or narrowing which help to define defensible space

## References

<sup>24</sup> <http://www.crimereduction.homeoffice.gov.uk/regions/regions00.htm>

- use of plant species to deter access, where appropriate, and careful selection and location of plant species in order to minimise opportunity for unobserved crime
- provision of adequate street lighting.

## References



The Drift, Rhyl, Denbighshire





## 6. Local Planning Authority

### Design Policy and Advice

**6.1** Local planning authorities are responsible for preparing design advice for their areas which takes account of national policy guidance and also reflects local context and issues. Advice should be disseminated through development plans and through a wide range of SPG. In the preparation of advice, local planning authorities should identify the user group or individuals at whom the advice is aimed and work collaboratively to ensure that the content, format and type of advice is most appropriate to meet users needs. Local planning authorities should examine how in the exercise of their statutory functions they can ensure they are responsive to local concerns. This may mean exploring new ways of achieving meaningful participation in policy formulation and in SPG preparation. The level of community involvement should be sufficient to allow adequate evaluation of the needs and concerns of end users, community and business interests at each stage of the design process.

### Development Plans

**6.2** Local planning authorities should not repeat national policy but include clear robust policies on design in their development plans which address local issues and should be based on relevant evidence. These should set out the planning authority's design expectations. They should not impose architectural styles or particular tastes but should secure good quality design as applied to the local context (local distinctiveness). Such local policies should reflect the objectives of good design set out in Section 2.



47

**Ceredigion County Council  
Offices, Aberystwyth**

*Achieving high sustainable building standards*

**6.3** For development plans, achieving the preferred strategy and plan objectives may require strategic, generic and cross cutting design policy. Plans may incorporate targeted design policies for major areas of change or protection, strategic sites or for certain types of development. If there are specific issues in a local planning authority's area which are likely to be relevant to the content of design and access statements and/ or intends to produce SPG, these should be signposted in the development plan.

### References

**6.4** The development plan can identify the need for a more rigorous approach by applicants to the statutory design and access requirements than is advised by national policy, provided there is evidence to justify such an approach. Design and access statements must always include an appraisal of the development's context, and include relevant policies set out in the development plan, national planning policy and any other material policy considerations.

## References



**48** | Neath Port Talbot County Borough Council Offices, Baglan Energy Park

*Local authorities can provide leadership in sustainable design through their own buildings*

## Supplementary Planning Guidance (SPG)

**6.5** Detailed design guidance, whether topic based, area based or site specific can often be more usefully addressed through SPG. Local planning authorities may wish to prepare an overall design guide which states the authority's vision, local context for a design and access statement, design process, design quality expectation and describes the characteristics of the area and any relevant sustainable building standards. Otherwise, types of SPG relating to design issues will fall into the following categories:

### Area specific

Appropriate to guide development in key areas such as town centres, special landscape or conservation areas, or a distinct neighbourhood or urban quarter.

Types of area specific SPG include:

#### Urban design frameworks or strategies

Where there is a need to guide and promote change. These should explain how national and development plan policies apply to the area, including infrastructure provision, and set out comprehensive design principles, linking strategy to practical proposals and providing guidance for deciding planning applications. They should deal with an area "three dimensionally" so that guidance is not simply restricted to issues such as use, density standards and access. These should also illustrate how streets, squares and open spaces are to be connected; how movement patterns for all people whether travelling on foot, cycle, car or public transport will be managed; and, define heights, massing and bulk of buildings in relation to the spaces around them; and

**Neighbourhood or district guides, countryside design summaries, landscape design guides, village design statements and town or village action plans** may also fall within this category.

#### Design codes

This may include detailed drawing or diagrams, setting out in precise detail the design and planning principles that will apply to development in a particular place.

## References

### Site specific

Where guidance is needed on the way in which a particular site should be developed or to inform on characteristics of a specific site in accordance with local/national policy.

Guidance can be illustrated by concept diagrams, building envelope guidelines and three dimensional sketches of building forms and spaces. Prescriptive design and any suggestion of a particular style should be avoided.

These may include:

**Development or planning briefs** to explain how development plan policies should be applied to a specific site. The guidance should:

- set out the vision for a development
- be informed by the site and context appraisal
- state its objective(s) and show how the development plan's design/inclusiveness policies could be applied to the site
- provide basic area and site appraisal including site constraints and opportunities, soil conditions, infrastructure, existing transport and access
- set out the proposed movement patterns, uses, areas, mix of tenures, development densities and other relevant design objectives
- inspire a high quality of design and take account of consultation undertaken.



**Topic based**

Where guidance is needed in relation to particular issues or uses.

Examples include:

**Design guides**

To provide detailed advice on how specific types of development can be carried out in accordance with national and development plan policies. Design guides may cover a wide range of design and development control topics including outlining what is required locally for design and access statements for particular land uses, shopfront design, public art, and/or landscape design. Special care should be taken in relation to guides on specific uses (such as housing) to ensure that diversity and integration with other land uses is encouraged. Design guidance should be used to guide the variety and juxtaposition of different uses.

**Guidance on areas subject to regeneration**

These would typically include a thorough assessment of existing characteristics, highlighting constraints and opportunities. Then relating opportunities for increased density to the transport and movement network, focussing major commercial and community buildings alongside major public transport routes and interchanges. Integrated public spaces to maximise their visual and accessible contribution to this movement network would also need to be considered. In terms of built form, guidance should normally encourage development which reflects the pattern of local streets and blocks, where the pattern makes a positive contribution to local identity and aids accessibility. It may also contain advice on issues such as scale or public realm. The objective should be to ensure that whole or parts of an urban area are developed in a comprehensive and connected way, respecting local distinctiveness.

**Advice on climate change**

To provide more detail on issues related to siting with respect to micro-climate, design for passive and active solar heating, orientation with respect to sunlight and shelter from prevailing winds, sustainable water management, use of landform and planting, and optimising opportunities for maintaining and/or enhancing biodiversity.

**Signs and advertisements**

These may be particularly useful to clarify the local planning authority's expectations in different circumstances. In the processing of applications for advertisement consent and through their own functions in relation to street signing and in communicating information within the public realm local planning authorities also have a responsibility to set high design standards.

**References**

**6.6** Although SPGs will be produced by local planning authorities it is important to develop design related guidance in consultation with the general public and with the private sector as well as other interested organisations. Care should be taken to ensure that participation is fully inclusive by appropriate choice of venue, timing of events and in the clarity of the material produced. Initiatives that enable stakeholder involvement in decision making help to contribute to the development of more sustainable communities and achieve development that better responds to local context.<sup>25</sup>

## Development Management

**6.7** The appearance and function of proposed development, its scale and its relationship to its surroundings are material considerations in determining planning applications and appeals. Developments that do not address the objectives of good design should not be accepted.

## Design and Access Statements

**6.8** It is a statutory requirement that applications for planning permission and listed building consent (with exceptions) are accompanied by a design and access statement (DAS).<sup>26</sup> Further guidance relating to the requirement for a design and access statement is included in Appendix 1.

**6.9** The DAS is a communication tool explaining how the objectives (see Section 2) of good design (which include the principles of inclusive design) have been considered from the outset of the development process. The benefit of the DAS to developers, applicants, local communities and local planning authorities is outlined in Appendix 1.

## Pre-application discussions<sup>27</sup>

**6.10** One aim of pre-application discussions should be to identify the key design and access issues arising from a development proposal at the outset. The basis for discussions on design will have been set by relevant national and development plan policies and SPG. Discussions should focus on meeting objectives of good design and covering the topics to be addressed in the design and access statement (see Appendix 1). Planning officers should give a clear opinion as to whether the proposed design and access statement, vision and objectives are in accordance with policy and SPG. Issues of detailed design would not normally be addressed until later in this evolving process. Discussions should also highlight what information the local planning authority would require for outline planning applications.

**6.11** For large complex proposals, a pre-application draft design and access statement could be presented to the local planning authority and stakeholders for consideration. Local planning authorities may wish to make specific reference to this practice within their “notes for guidance” accompanying planning application forms.

## References

<sup>25</sup> See Appendix 2 for useful guidance from Planning Officers Wales and the Welsh Local Government Association.

<sup>26</sup> The Town and Country Planning (General Development Procedure) (Amendment) (Wales) Order 2009 and Planning (Listed Buildings and Conservation Areas) (Amendment) (Wales) Regulations 2009  
<sup>27</sup> TAN 17 ‘Planning and Managing Development’ (Draft), 2007

## Skills

**6.12** It is important that local planning authorities have access to professional design skills. This could be through employing staff with those skills, sharing skills with other local planning authorities, or through the use of consultants. In addition, local authorities may wish to establish 'in house' design teams where relevant expertise exists. Local planning authorities could also use independent design advisory panels (such as the Design Commission for Wales' Design Review Panel) which may include architects, urban designers, ecologists, engineers, building control, energy specialists, sustainability specialists and access officers whose skills could be utilised as the need arises: membership, however must not give rise to conflict of interest. Design panels could prove valuable not only in assessing contentious planning applications but in the preparation of design policies and guidance. The objective should be to raise skills and design capacity among officers and also to raise the design awareness of elected members.

## References

Machynlleth Town Centre





## Appendix 1

### References

# Guidance on the design and access statement

## Contents

- A1 Requirement for a design and access statement under planning legislation
- A2 Role of a design and access statement
- A3 Content of a design and access statement
- A4 Procedures

## Tables

Broad content of a design and access statement

## A1 Requirement for a Design and Access Statement (DAS) under planning legislation<sup>28</sup>

**A1.1** A design and access statement (DAS) is not part of the planning application but is required by legislation to accompany all planning applications (outline and full) except for:

- engineering or mining operations
- householder development (i.e. development of an existing dwelling house, or development within the curtilage for any purpose incidental to its enjoyment as a dwellinghouse) (N.B. all new dwellings **will require** a statement (unless resulting solely from a change of use))
- material change in use of land or buildings (**but** where the change in use of land or buildings will necessitate access by an employee, or the provision of services (including goods or facilities) to the public then **a statement dealing with access issues only will be required.**)

**A1.2** A DAS is also required by legislation to accompany **all applications for listed building consent**. Whilst a complete statement is required for exterior works, the access element of the statement is not required for interior works.

**A1.3** A DAS is **not required** for applications which are not for planning permission or listed building consent (e.g. applications relating to advertisement control, tree preservation orders or storage of hazardous substances).

**A1.4** An application for **reserved matters** is not an application for planning permission and, as such, a DAS is not a statutory requirement. However, for a DAS to follow the ‘living document’ approach (see para A2.5 below), an application for reserved matters should be accompanied by a progress statement updating what changes, if any, have occurred since the original DAS was submitted at outline stage. It may also be appropriate for conditions relating to matters contained in the DAS to be imposed when the outline permission is granted.

**A1.5** In relation to design, a DAS must explain the design concepts and principles applied to the development or works. A DAS accompanying an outline or full planning application must explain the concepts and principles in relation to (as a minimum):

- **Access**
- **Character** (including amount, layout, scale, appearance and landscaping)
- **Community safety**
- **Environmental sustainability**
- **Movement to, from and within the development.**

## References

<sup>28</sup> Article 4D of the Town and Country Planning (General Development Procedure) Order 1995 (SI1995/419) and regulation 3B of the Planning (Listed Buildings and Conservation Areas) Regulations 1990 (SI1990/1519) as inserted by The Town and Country Planning (General Development Procedure) (Amendment) (Wales) Order 2009 (SI 2009/[7024] W.[87]), and The Planning (Listed Buildings and Conservation Areas) (Amendment) (Wales) Regulations 2009 (SI 2009/[1026] W.[88]).

A DAS accompanying a listed building consent application must explain the concepts and principles in relation to (again as a minimum):

- **Access** (exterior works only)
- **Appearance**
- **Environmental sustainability**
- **Layout**
- **Scale.**

More detail is given at section A3 and table 1 below.

## A2 Role of a Design and Access Statement

### Communication Tool

**A2.1** The DAS is a communication tool showing that the objectives (see Section 3) of good design (which include the principles of inclusive design<sup>29</sup>) have been considered from the outset of the development process.

<sup>29</sup> See definition at paragraph 2.4.

**A2.2** The main roles of a DAS are:

- to ensure that the developer can provide evidence to justify proposals in terms of planning policy (national and local) and in terms of the factors listed in table 1
- to explain how the objectives of good design have been applied, or where they have not been applied, the reasons for that
- to clearly set out the established vision and principles for the scheme
- to demonstrate that the principles of sustainability have been addressed and used to inform the design of the development
- to illustrate how the developer has considered conflicting demands and the extent to which these considerations have influenced the proposed development
- to ensure that the developer has satisfactorily considered design issues (such as those considered in section 5 of TAN 12) early in the design process and that potential problems are highlighted before detailed design work commences
- to demonstrate how design decisions have been influenced through the reappraisal of the design.

**A2.3** The DAS will benefit developers, applicants, local communities & local planning authorities. In essence they will:

- inform decision-making from the outset through the pre-application/

application stages to implementation on site

- provide an opportunity for the applicant, and for developers and designers, to demonstrate their commitment to inclusive design and show how access arrangements make reasonable provision to ensure that all users will have equal and convenient access
- provide an opportunity for the applicant, and for developers and designers to demonstrate how they have responded to the need for sustainable buildings, in particular how they have sought to reduce carbon emissions associated with new developments to deliver low and zero carbon buildings (referencing to sustainable building standards such as the Code for Sustainable Homes)
- help all those assessing the application to understand the rationale that underpins the development proposal, assisting in their negotiations and decision-making
- enable local communities, access groups, amenity groups and other stakeholders to understand the rationale underpinning the development proposal and thus to make effective representation on proposals
- lead to an improvement in the quality, sustainability and inclusiveness of the development
- make applicants more aware of issues that should be considered.

### The 'Living' Design and Access Statement

**A2.4** Consideration of design and access matters should influence decision making throughout the life-time of building projects. It is considered good practice that a DAS is seen, and used, as a dynamic series of 'living documents' that 'grow' as a project develops. The statutory requirement is to submit a statement at the application stage; however, good practice is that a statement is initiated at the briefing stage - the strategic level (a time when decisions can have important implications for the success of any development) - and, where appropriate, 'grows' as the various stages that inform and influence the design process are reached.

**A2.5** A well-constructed DAS for a project will clearly identify how the objectives of good design will be addressed as the development progresses, with the series of statements being complementary to, rather than in isolation from, each other. It should be borne in mind that a statement can have considerable value in the context of other regimes, particularly building control, for example in relation to access.<sup>30</sup> To realise this potential, it may be appropriate for the statement to include content which addresses this, and for that to be updated as the project progresses. However, this must not be at the expense of the statutory basis and

### References

<sup>30</sup> Approved Document M of the Building Regulations recommends that building control access statements are provided for all domestic and non-domestic buildings, extensions and where there is a change of use.



purpose of statements.

**A2.6** Care should be taken to ensure that the statement is “fit for purpose” when submitted. The statement may be used for consultation purposes to accompany the planning and listed building consent application and will be taken into account by the decision-maker at the time the application is determined; it follows that content relevant to the planning or listed building application should not be materially amended once submitted. The priority must be to ensure that the submitted statement is sufficiently comprehensive and far-sighted to fully inform the decision on the application and enable resolution of any access and design issues in a transparent and accountable manner (for example by imposing conditions requiring further detail to be submitted and approved before the project progresses beyond a defined stage).

## A3 Content of a Design and Access Statement

### Content of a DAS for planning permission and listed building consent

**A3.1** A DAS will explain and justify the objectives and concepts of good design on which a development proposal is based and how these will be reflected throughout the scheme. The following table indicates the broad content of a DAS.

**Table 1 - Broad Content of a Design and Access Statement**

Applications for Planning Permission and Listed Building Consent (LBC):

**1 Design**

For **planning applications** (unless exempted) and all **LBC applications**

**1A** The DAS must explain the design principles and concepts that have been applied to the development or works. As a minimum, the DAS must explain those principles and concepts in relation to the following aspects:

For **planning applications**:

- environmental sustainability
- movement to, from and within the development
- character (including amount, layout, scale, appearance and landscaping)<sup>31</sup>
- community safety.

For **LBC applications**:

- appearance<sup>32</sup>
- environmental sustainability
- layout
- scale.

**1B** The DAS must also:

For **planning applications**:

- demonstrate the steps taken to appraise the physical, social, economic and policy context of the development
- explain how the design of the development takes that context into account in relation to its proposed use and each of the aspects specified above.

For **LBC applications**:

- explain how the design principles and concepts take account of the special architectural or historic importance of the building, the features that justify its listing and the building’s setting.

**2 Access**

For **planning applications** (unless exempted) and **LBC applications (exterior works only)** the DAS must:

- explain the policy or approach to access
- explain how any policies relating to access in the statutory development plan have been taken into account
- explain how any specific issues which might affect access to the development or listed building have been addressed
- detail how features which ensure people’s access to the development or listed building will be maintained.

In all aspects of the access requirements of the DAS, applicants should adopt the “inclusive design” approach set out in section 3 of this TAN.

Regard should also be had to relevant local design guidance.

<sup>31</sup> “Layout”, “scale”, “appearance” and “landscaping” are further defined in Article 1(2) of the Town and Country Planning (General Development Procedure) Order 1995 (SI 1995/419) as amended by Article 3(1) of the Town and Country Planning (General Development Procedure) (Amendment) (Wales) Order 2008 (SI 2008/2336 (W.199))

<sup>32</sup> The meaning of “appearance”, “layout” and “scale” for the purposes of a DAS are defined in The Planning (Listed Buildings and Conservation Areas) (Amendment) (Wales) Regulations 2009 (SI 2009/[ 1026] W.[88])).

**A3.2** The following matters are appropriate to the preparation of DAS in practice, but in considering them it is advisable to be mindful of the need for proportionality (what type of development and is it a major or minor scheme) in terms of the proposal:

- It is good practice to explain how the applicant's approach in relation to good design fits into stages of the design process from inception (including procurement) to management of the finished development and will thus facilitate the DAS's role in being a "living statement".
- For planning applications, the DAS should not extend to internal aspects of individual buildings. However, this does not mean that internal arrangements should not be considered as part of the design process at the application stage. For example, the location and design of doors, windows etc. will depend on an understanding of the internal layout of a building.
- For listed building consent applications, the design element of the DAS must extend to any internal works proposed.
- For planning applications, in defining the approach, the applicant must explain how the proposal **has appraised and taken into account national/local policy and other relevant aspects of the context of the site**. So in addition to defining how the development's design responds to policy, the DAS should also demonstrate how the design concept responds to the local physical context and to the social and economic background of the site and its surrounding, and what effect the development will have on those aspects.
- In defining the policy or approach to inclusive design in the DAS, it should explain how access arrangements make reasonable provision to ensure that all users will have equal and convenient access, **both into the site from its boundaries to all of the new or extended buildings, and within the site**. Where an applicant considers such provision is not appropriate, then reasons should be provided in the DAS to support the case. The design of any parking spaces and parking layouts is an aspect of inclusive design that should be considered in the DAS or by a cross reference to other accompanying material.
- In defining the policy approach to **environmental sustainability**, it should explain how the design of the development will meet or exceed sustainable building standards, where required or expected in policy. It should also explain how the design of the development has sought to reduce the carbon emissions associated with the development.
- In defining the policy or approach to good design, it is good practice to address the need for **flexibility of the development** and how it may need to adapt to the varying requirements of inclusiveness and sustainability over time or/and adapt, for example to changing surroundings, whether in use or in relation to the changing climate.
- For **outline applications** where 'access' is reserved, the application must include indicative access point(s) to the site. Statements accompanying such applications should clearly explain how the principles of

good design will be used to inform the detailed proposals. A DAS accompanying an outline application should clearly explain and justify the objectives which will be used to inform the detailed proposals, demonstrating an understanding for what is appropriate and feasible for the site in its context, even if all reserved matters are to be considered later.<sup>33</sup>

### Specific Requirements Relating to Listed Buildings (see Table 1)

**A3.3** Table 1 indicates the broad content of the DAS relating to a listed building consent application. The statement will need to explain and justify the approach taken to ensure that the listed building preserves or enhances its special historic and architectural importance. Existing national policy contains advice on such issues, and the DAS should thus include a brief explanation of how the approach to design and access takes account of:

- WO Circular 61/96 (*Planning and the Historic Environment: Historic Buildings and Conservation Areas*)
- BS 7913:1998 - *The Principles of the Conservation of Historic Buildings*.

The DAS should detail the range of design and access solutions considered and give reasons why the chosen solution is the best, both for respecting the character of the listed building and (where relevant to the application) for improving people's accessibility. WO Circular 61/96 advises applicants for listed building consent must be able to justify their proposals, indicating why works that would affect the character of the listed building are desirable or necessary. The 'justification statement' (see WO Circular 61/96) could usefully refer to the DAS required by the LBC Regulations, and would anyway be expected to address and explain the design and access considerations that had resulted in the application proposal being considered the most appropriate solution.

**A3.4** 'Overcoming the Barriers, Providing Physical Access to Historic Buildings' (Cadw, 2002)<sup>34</sup>, provides advice relevant to inclusive design to those involved in the process and all viable alternatives need to be fully investigated so that such facilities are achieved without prejudice or damage to the character of the listed building. A satisfactory solution can almost always be found so long as imaginative and innovative approaches are fully explored. As stated in the guidance (referred to in the previous table) the applicant needs to be able to justify their proposals, indicating why works which would affect the character of a listed building are desirable or necessary.

**A3.5** The access content of a DAS relating to a listed building consent application should make clear how the approach to inclusive design has balanced the duties imposed by the Disability Discrimination Act 1995 (as subsequently extended, including the Disability Discrimination Act 2005), where the proposal is subject to those, and the particular historical and architectural significance of the building. The statement should detail any specific issues that arise particularly with regard to the fact that the building is listed, the range of options considered and where inclusive design has not

## References

<sup>33</sup> The definition of reserved matters is set out in article 1(2) of the GDPO.

<sup>34</sup> *Overcoming the Barriers, Providing Physical Access to Historic Buildings*, Cadw, 2002



been fully provided, an explanation as to the reasons why this was not possible. Where alterations to existing buildings are proposed, and the fabric of the structure restricts the ability to meet minimum levels of accessibility, details could be provided of other adaptations or procedures that will allow duties imposed by the Disability Discrimination Act to be met. These might include, for example, the use of portable equipment or changes to management practices.

**A3.6** Although it is not a statutory requirement that the access element of the DAS extends to internal aspects of proposed works to listed buildings, it would be preferable for applicants to clarify the approach that had been taken to any internal access proposals; this is particularly of relevance where the public visit the building and services are provided.

**A3.7** It is acknowledged that a DAS needs to be proportionate and it is likely that for a number of applications for listed building consent a DAS would be short, as it is recognised that many applications involve discrete alterations to private domestic dwellings, such as replacement windows. Design solutions (e.g. the preferred window choice) already require a justification statement under existing policy, and statements should cross-refer and not duplicate content.

### Historic Parks and Gardens, Scheduled Ancient Monuments, World Heritage Sites, Conservation Areas and Locally Important Historic Assets

**A3.8** A DAS accompanying planning applications affecting historic parks and gardens included on the first part of the ‘Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales’, and scheduled ancient monuments should provide sufficient detail to justify the approach taken to ensure that the development does not compromise the historic, archaeological or architectural integrity of such assets. In addition, proposals physically affecting scheduled ancient monuments will separately require scheduled monument consent. DAS for planning applications affecting the historic environment, including world heritage sites, conservation areas and non-scheduled archaeology should be considered in the context of *Planning Policy Wales*; locally designated assets in the context of a local planning authority’s development plan.

### Access Officers and Local Access Groups<sup>35</sup>

**A3.9** The content of the DAS will benefit from engagement with local access groups and/or local authority access officers. Applicants should consider this engagement as part of pre-application work when proposals are either for significant residential development as defined by the local planning authority or for non residential development which generates intensive use by the public, such as leisure or shopping developments. Local planning authorities should consider agreeing a consultation protocol with local access groups.<sup>36</sup>

<sup>35</sup> In the context of this guidance, ‘local access groups’ are the independent local disability access groups.

<sup>36</sup> See also section 3.9 of the consultation draft of TAN 17 on Planning and Managing Development.

## Presenting the Information (see also appendix 2)

### A3.10 A submitted DAS:

- should be an integrated document, with the design and access elements readily identifiable as meeting the statutory requirements
- should be clear and concise and effectively cover all of the relevant principles and concepts for the proposed development
- should be proportionate in length and complexity to the type and scale of development proposed. The level of detail required will depend on the nature and scale of the development and the sensitivity of its location (i.e. in some cases a short written explanation may suffice, in others, detailed illustrative material may be required, but the underlying design objectives remain the same for all applications and the DAS must in all cases have sufficient content to fulfil the statutory requirements)
- does not need to duplicate other information that can be found in other assessments carried out to accompany the planning application or listed building consent application. However, the DAS should cross-refer to the relevant information, providing that the information is available and accessible
- should justify and explain the conclusion in cases where the applicant considers there may be no implications of a development, for example, vis-à-vis inclusive design in relation to the access element of the DAS. It is likely for a number of applications that this element of the statement would be short and could merely explain very briefly why there are no relevant accessibility issues. Examples would be certain applications relating to variation of conditions (under section 73 of the Town and Country Planning Act 1990), which will require a DAS, such as change of opening hours/type of goods sold, and listed building consent applications involving alterations to private domestic dwellings, and those other applications which do not involve accessibility, such as replacement windows
- may be combined for accompanying applications for planning permission and listed building consent, where there is a planning application submitted in parallel with an application for listed building consent
- should avoid using illustrative materials included with more complex schemes as a substitute for drawings that provide the necessary detail to support the approach to good design claimed by the applicant
- must demonstrate how they have appraised the physical, social, economic and policy context of the development, and how their choice of design principles and concepts takes that context into account
- should indicate how any conflicts between design issues have been resolved or what priorities have been assigned to them if conflicts cannot be resolved.

## References

## Drawings

**A3.11** A DAS should be illustrated, as appropriate by:

- site and context analysis
- plans, elevations and sections
- photographs of the site and its surrounding
- other illustrations such as perspectives.

## A4 Procedures

### Design and Access Statement in Decision Making

**A4.1** An application will not be valid where a DAS is required by the GDPO/LBC Regulations but has not been submitted.

**A4.2** A local planning authority must not enter an application on the Planning Register unless accompanied by a DAS (where one is required) which meets the requirements of the GDPO/LBC Regulations. Where a DAS meets the requirements of the GDPO/LBC Regulations the local planning authority must place it on the public register of applications with the application to which it relates and consultees must be notified that it accompanies the planning application.

**A4.3** A DAS communicates how the application proposal accounts for the objectives of good design and responds to access issues. Thus, where a DAS is required, it is a material consideration that the decision maker must have regard to when considering the application.

**A4.4** Planning permission and listed building consent should be granted only when the fundamental design principles of an application are clear and when adequate evidence of the design quality of the proposal has been provided. For this reason, local planning authorities should not impose conditions which allow the main design issues to be considered at a later date. Care should be taken to ensure that details that are subject to conditions or, where necessary, legal obligations are not crucial to the overall design concept. Where appropriate, conditions and obligations should be used to secure good design and longer term maintenance of design features.

**A4.5** Planning conditions may be attached to a planning permission/listed building consent to take on board the relevant elements of the DAS and ensure that the principles and concepts are realised in the execution of the proposal. For outline applications, any design considerations that are crucial to the development should be secured through conditions on the outline permission; a planning obligation should only be used where it is not possible to attach a valid condition.

## References

**A4.6** Although not specifically required by either, the GDPO, or the LBC Regulations, it is considered good practice to use a DAS as an aid to pre-application discussions. Early discussion on design should help to establish any initial issues.

**A4.7** Where an outline planning application is submitted, local planning authorities may consider that additional information, building on the original statement, will be required at the reserved matters stage (although it is not crucial to the acceptability of the outline application). In such cases the local planning authority should consider setting out such a requirement through a condition on the outline planning application.

## References



## Appendix 2

### Design information for a planning application

Applicants may be asked to submit the following design information by the local planning authority. This list is not exhaustive and applicants should contact the local planning authority for clarification on what design information may be required.

In the case of large scale or complex development proposals models, computer-based representations, three dimensional drawings and perspectives may be particularly useful.

### Location plan

- Scale 1:1250 or 1:2500.
- North point, date and drawing number.
- Outline the application property/site with a red line.
- Draw a blue line around any other land owned by the applicant, close to or adjoining the application site.
- Show the application property/site in relation to at least two named roads and surrounding buildings where possible.

### Details of existing site layout

- Scale, typically 1:200 or appropriate scale to ascertain required level of detail.
- North point, date and number on plans.
- Show the whole property/site, including all buildings, gardens, open spaces and car parking.
- Any relevant assessments carried out.

### Details of proposed site layout

- Scale, typically 1:200.
- North point, date and number on plans.
- Show the siting of any new building or extension, vehicular/pedestrian access, changes in levels, landscape proposals, including trees to be removed, new planting, new or altered boundary walls and fences, and new hard-surfaced open spaces.
- Show proposals in the context of adjacent buildings/environment.
- Illustrate elevation and cross sections of the steepest elevation.

### Floor plans

- Scale 1:50 or 1:100.
- In the case of an extension, show the floor layout of the existing building to indicate the relationship between the two, clearly indicating new work.
- Show floor plans in the context of adjacent buildings, where appropriate.

## Appendix 3

### Sources and Further Information

- The Architecture Foundation (2000), 'Creative Spaces: A Toolkit for Participatory Urban Design'
- Biddulph M (2001), 'Home Zones - A Planning and Design Handbook'
- CABE,(2009), Good Design: The Fundamentals
- Cadw: Welsh Historic Monuments (1999), 'Chapels in Wales - Conservation and Conversion'
- Cadw: (2002) 'Overcoming the Barriers'
- Cadw (2004), Converting Historic Buildings in Wales: A Guide to Good Practice
- Cardiff Council (2006), As Safe as Houses: Crime and Built Environment Residential Developments
- Civic Trust for Wales & Department of City and Regional Planning, Cardiff University (2000), 'Conservation Areas in Wales: Management and Urban Design'
- Countryside Council for Wales (1999), 'Design Notes 1 - Wales: Making Places'
- DCLG (2007), Approved Document to Part B: Fire Safety
- DCLG (2004), 'Safer Places: The Planning System and Crime Prevention'
- Design Commission for Wales (2008), Design and Access Statements: Why, What and How
- Design Commission for Wales (2008), Who we are, how we work and how our Design review Service can help you
- Department for Transport (2007), Manual for Streets
- DCMS (2000), 'Better Public Buildings'
- English Partnerships (1998), 'Time for Design 2 - Good Practice in Building, Landscape and Urban Design'
- English partnerships/Housing Corporation/UDAL/Roger Evans Associates/Llewelyn-Davies; 2007, Urban Design Compendium 1 & 2 Delivering Quality Places
- Historic Towns Forum (2008), 'Manual for Historic Streets'
- Institute of Welsh Affairs (2000), 'Designing Success - The Case for a Welsh Commission for Architecture and Design '
- National Park Authorities in Wales (2008), "Guidance to sustainable development"
- Planning Officers' Society Wales (2005), "A model design guide for Wales - residential development"

- In the case of minor applications it may be appropriate to combine the layout and floor plan (unless any demolition is involved).
- Include a roof plan where necessary to show a complex roof or alteration to one.

## Elevations

- Scale 1:50 or 1:100 (consistent with floor plans) which include figured dimensions.
- Show every elevation of a new building or extension.
- For an extension or alteration, clearly distinguish existing and proposed elevations.
- Include details of material and external appearance.
- Show elevations in the context of adjacent buildings, where appropriate.

## Cross Sections

- Scale 1:50/1:100 (consistent with floor plans), where appropriate.

Planning and the Historic Environment: Historic Buildings and Conservation Areas  
(Welsh Office Circular 61/96)

The Prince's Foundation, English Partnerships, DETR, CPRE 'Sustainable Urban Extensions:  
Planned through Design'

TCPA (2007), 'Achieving a Suburban Renaissance - The Policy Challenges '

TCPA (2006-7), 'By Design' series - Climate Change Adaptation, Sustainable Energy  
and Biodiveristy

TCPA (2007), 'Best Practice in Urban Extensions and New Settlements'

Urban Task Force (2005), Towards an Urban Renaissance

Urban Design Group, 2002 and 2004; Urban Design Guidance, Thomas Telford

Welsh Assembly Government (2009), One Wales: One Planet, The Sustainable  
Development Scheme

WLGA (2007), Shaping the Way We Work, Live and Play

## Accessibility

Barker, P et al (1995), 'Building Sight'

Bright, K et al (2004), Buildings for All to Use

Burton, E & Mitchell, L, (2006), 'Inclusive Urban Design: Streets for Life'

BS8300: 2001 - Design of buildings and their approaches to meet the needs of disabled people  
Incorporating Amendment No.1, Code of Practice, (BSI, 2004)

CABE (2006), The Principles of Inclusive Design (They Include You)

Cadw (2006), Access Strategy for Monuments in State Care

Cadw (2002), Overcoming the Barriers, Providing Physical Access to Historic Buildings

DCLG (2004), 'Approved Document to Part M: Access to and use of Buildings'

DETR (2002), 'Guidance on use of tactile paving surfaces '

Department for Transport (2002), 'Inclusive Mobility: A guide to best practice on access to  
pedestrians and transport infrastructure'

Disability Rights Commission (2004), Access Statements

Disability Rights Commission (2006), 'Creating an Inclusive Environment'

Disability Rights Commission (2006), 'Planning, Buildings, Streets and Disability Equality' -  
a guide to the DED and DDA for Local Authorities



DPTAC (2003), 'Inclusive Projects: a guide to best practice on preparing and delivering project briefs to secure access' (available from Department for Transport)

English Heritage, 2006 Easy Access to Historic Landscapes

Greater London Authority (2004), Accessible London: achieving an inclusive environment (The London Plan Supplementary Planning Guidance)

Hall, P & Imrie, R (2001), 'Inclusive Design: Designing and Developing Accessible Environments'

ODPM (2003), Planning and Access for Disabled People: A Good Practice Guide

RIBA Publishing, 'Designing for Access'

RNIB (2000), Sign Design Guide (Peter Barker and June Fraser, 2000)

RNIB (1995), 'Building Sight'

Sawyer, A & Bright K (2006), The Access Manual - 2nd Edition

Scottish Executive Planning and Building Department Inclusive Design

### Contacts

The Access Association (Wales)  
<http://www.access-association.org.uk>

Access Groups  
[www.accessgroupresources.co.uk](http://www.accessgroupresources.co.uk)

British Waterways  
 Waterways Environment Services  
 The Locks  
 Hillmorton  
 Rugby  
 Warwickshire CV21 4PP

Building Research Establishment (BRE)  
 BREEAM Centre  
 BRE  
 Garston  
 Watford WD25 9XX  
[www.breeam.org](http://www.breeam.org)

Carbon Trust  
 6th Floor  
 5 New Street Square  
 London EC4A 3BF  
[www.carbontrust.co.uk](http://www.carbontrust.co.uk)

Civic Trust (Wales)  
 3rd Floor  
 Empire House  
 Mount Stuart Square  
 Cardiff CF10 5FN  
<http://www.civictrustwales.org/>

Countryside Council for Wales  
 Plas Penrhos  
 Ffordd Penrhos  
 Bangor  
 Gwynedd LL57 2LQ  
[www.ccw.gov.uk](http://www.ccw.gov.uk)

Design Commission for Wales  
 4th Floor  
 Building Two  
 Caspian Point  
 Caspian Way,  
 Cardiff CF10 4DQ  
[www.dcfw.org](http://www.dcfw.org)

Disability Wales  
 Wernddu Court  
 Caerphilly Business Park  
 Van Road  
 Caerphilly CF83 3ED  
[www.disabilitywales.org.uk](http://www.disabilitywales.org.uk)

Environment Agency Wales  
 Environment Development Team  
 Ty Cambria  
 29 Newport Road  
 Cardiff CF24 0TP  
<http://www.environment-agency.gov.uk/>

Energy Saving Trust Wales  
 1 Caspian Point  
 Caspian Way,  
 Cardiff Bay  
 Cardiff CF10 4DQ  
<http://www.est.org.uk>

Landscape Institute Wales (LIW)  
 Landscape Institute  
 33 Portland Street  
 London W1W 8QG  
[www.landscapeinstitute.org](http://www.landscapeinstitute.org)

Planning Aid Wales  
 Suite 1  
 Bay Chambers  
 West Bute Street  
 Cardiff  
[www.planningaidwales.org.uk](http://www.planningaidwales.org.uk)

Town and Country Planning Association  
 17 Carlton House Terrace  
 London SW1Y 5AS  
[www.tcpa.org.uk](http://www.tcpa.org.uk)

The Royal Society of Architects in Wales  
 4 Cathedral Road  
 Cardiff CF11 9LJ  
[www.architecture.com](http://www.architecture.com)

The Royal Town Planning Institute Cymru  
 PO BOX 2465  
 Cardiff  
 CF23 0DS  
[http://www.rtpi.org.uk/rtpi\\_cymru](http://www.rtpi.org.uk/rtpi_cymru)

Safle  
 (Independent public art consultancy)  
 Unit 4  
 Sovereign Quay  
 Havannah Street  
 Cardiff CF10 5SF  
[www.safle.com](http://www.safle.com)

Sustrans Cymru  
 107 Bute Street  
 Cardiff CF10 5A  
[www.sustrans.org.uk](http://www.sustrans.org.uk)

Welsh Assembly Government  
 Cathays Park  
 Cardiff  
 CF10 3NQ  
[www.wales.gov.uk](http://www.wales.gov.uk)

## Appendix 5

### Credits

Page 2 - Senedd, Cardiff	© Crown Copyright (2009) Visit Wales
Page 4 - Coach House, Cardiff	<i>Touchbase Design Ltd</i>
Page 8 - Esplanade House, Porthcawl	<i>Stride Treglown Davies</i>
Page 14 - Ceiriog Valley	© Crown Copyright (2009) Visit Wales
Page 28 - Galeri Caernarfon	<i>Daniel Hopkinson Photography</i>
Page 56 - The Drift, Rhyl, Denbighshire	<i>Denbighshire County Council</i>
Page 64 - Machynlleth Town Centre	© Crown Copyright (2009) Visit Wales
01 Ruthin Arts Centre	<i>Sergison Bates Architects,</i> <i>Photographer: Dewi Tannant</i>
02 Consultation in action	<i>Blaenau Gwent County Borough Council</i>
03 New boat store, Pembroke	<i>Davies Sutton Architects</i>
04 Cathays Park, Cardiff	<i>Royal Commission on the Ancient Historical Monuments of Wales</i>
05 Converted Chapel, Rhodiad y Brenin	<i>Pembrokeshire Coast National Park Authority</i>
06 St Donat's Arts Centre, Llantwit Major	<i>Loyn &amp; Co Architects</i>
07 Brewery Quarter, Cardiff	<i>Powell Dobson Architects</i>
08 Clock Tower and the Ruthin townscape	<i>Welsh Assembly Government 2009, Photo Library Wales: Steve Benbow (left)</i>
09 Environment Centre, Swansea	<i>City and County of Swansea</i>
10 Caernarfon Castle Walkway	<i>Cadw</i>

11	Llanfyllin Medical Centre	<i>Martin Rogers, Archial Architects Ltd</i>
12	The Nook, Oxwich	<i>Dewi Evans Architects Ltd</i>
13	Ty Gwala, Rudry	<i>Loyn &amp; Co Architects Ltd</i>
14	The Hand, Lancaster Square, Llanrwst	<i>Conwy County Borough Council</i>
15	Drybridge, Monmouthshire	<i>Ainsley Gommon Architects for Charter Housing Association and Monmouth County Council</i>
16	Solar Shading in SA1, Swansea	<i>Loyn &amp; Co Architects</i>
17	Cyclepaths and walking	<i>Sustrans</i>
18	Holyhead Harbour	<i>Safle</i>
19	Ruthin Art Centre	<i>Royal Society of Architects in Wales</i>
20	Centre for Alternative Technology, Machynlleth	<i>Centre for Alternative Technology</i>
21	Solar Panels, Coach House	<i>Touchbase Design Ltd</i>
22	Adnams Warehouse	<i>AukettFitzroyRobinson: Photographer Alex Hill</i>
23	Tenby	<i>Pembrokeshire Coast National Park</i>
24	Mid Wales	<i>© Crown Copyright (2009) Visit Wales</i>
25	Listed Buildings at Bethel Square, Brecon	<i>Brecon Beacons National Park Authority: Architect, James Brotherhood, Associated for Boots Properties Plc</i>
26	St Clare's Conversion	<i>Flintshire County Council</i>
27	Drift Park, Rhyl, Denbighshire	<i>Denbighshire County Council</i>
28	The Works, Ebbw Vale	<i>Welsh Assembly Government 2009</i>



29	Beddgelert, Snowdonia National Park	<i>Snowdonia National Park Authority</i>
30	Ystradfellte	<i>Brecon Beacons National Park Authority, Architects Bailey Roberts Jones Ltd, for Welsh Water</i>
31	Amman & Gwendraeth Rail Corridor Study	<i>RPS Chapman Warren for Amman Gwendraeth Partnership</i>
32	Porthmadog	<i>Sustrans, Photographer: Julian Cram</i>
33	Cardiff Library	<i>Cardiff Council</i>
34	Millenium Centre, Cardiff	<i>Jon Page Jenkins</i>
35	Crickhowell	<i>Brecon Beacons National Park Authority: Woodeson Drury, Countryside Properties Ltd for Acorn Televillages Ltd</i>
36	Felindre Farchos, Newport, Pembrokeshire	<i>Pembrokeshire Coast National Park Authority</i>
37	Technium OpTIC	<i>Welsh Assembly Government 2009</i>
38	Penderyn Offices	<i>David Archer Architects, Photographer Keith Collie</i>
39	Sustainable drainage systems at Pontyclun	<i>MWH</i>
40	The 'Kite Tail' Aberafan Seafront, Port Talbot	<i>Neath Port Talbot County Borough Council</i>
41	Seating at Conwy	<i>Safle</i>
42	Public Art in Wrexham	<i>Safle</i>
43	Fitzhammon Embankment Public Art Scheme	<i>Cardiff Council</i>
44	Signs for cyclists and pedestrians	<i>Sustrans</i>
45	Tenby	<i>Pembrokeshire Coast National Park Authority</i>

46	Wrexham Town Centre	<i>Safle</i>
47	Ceredigion County Council Offices, Aberystwyth, Ceredigion	<i>Ceredigion County Council</i>
48	Neath Port Talbot County Borough Council Offices, Baglan Energy Park	<i>Neath Port Talbot County Borough Council</i>