DRAFFT YMGYNGHORI – Arweiniad Creu Lleoedd ar gyfer Ardal o Harddwch Naturiol Eithriadol Gŵyr

CONSULTATION DRAFT – Placemaking Guidance for Gower Area of Outstanding Natural Beauty

Canllawiau Cynllunio Atodl Supplementary Planning Guidance

AONB · GOWER · GŴYR · AHNE
AREA OF OUTSTANDING NATURAL BEAUTY
ARDAL O HARDDWCH NATURIOL EITHRIADOL

Cyngor **Abertawe**
Swansea Council

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introduction

purpose & scope of the guidance

1.1 The Placemaking Guidance for the Gower AONB (hereafter 'The Guidance') provides Supplementary Planning Guidance (SPG) in support of the Council's planning policies and placemaking aspirations, with the overarching aim to raise the standard of design across the Gower Area of Outstanding Natural Beauty (AONB). The Guidance assists the key objective of maintaining and enhancing one of the most naturally beautiful landscapes in the UK, and ensure that new development successfully integrates into the sensitive landscape within which it sits.

1.2 The Guidance provides a practical design tool to be used by all involved in the design and development process, whether planning permission is required or not. It sets out the placemaking objectives and design principles that should be followed to ensure that development respects the distinctive character of both the natural and built environment of Gower. The Guidance should be used at all stages of the development process, from conception to implementation, in order to help to continue to conserve, enhance and inspire both the natural and built environment of this unique and special area.

"Good places are more than collections of architecture; they are memorable and distinctive, well used and cherished by the people who live in them, work in them and visit them"

"No Place Like Home", Design Commission for Wales, June 2010

Above: Gower Area of Outstanding Natural Beauty Boundary [source: City and County of Swansea]
Opposite page: Three Cliffs Bay

aonb designation & the importance of good design

1.3 The Guidance includes specific design modules covering the more common types of development seen on Gower, namely:

- residential;
- agricultural;
- commercial and tourism;
- conversions; and
- chalets

It also provides guidance on matters relating to landscape design; repair and maintenance; and lighting.

1.4 The Guidance applies to all parts of the AONB, which encompasses a variety of character areas from some of the most open, undeveloped landscapes within the County to locations that have been substantively 'suburbanised' through built development. The Guidance may also be applied to certain locations outside the AONB boundary, within the adjoining rural 'Gower fringe' areas, particularly where such locations have similar characteristics to the AONB and/or where development is considered to have a bearing on its setting.

1.5 The Guidance is intended for all those involved in the design and development process. It is a starting point for all types of development in Gower, ranging from general maintenance and refurbishment of existing buildings to new build development.

1.6 The Guidance encourages those involved in the design process to take a holistic approach through considering local context, site opportunities and constraints and key design objectives from the outset of the project.

Above: View across Great Pill from Landimore

aonb designation & the importance of good design

1.7 Gower AONB was the first AONB to be designated in the UK in 1956, and its beauty lies in the variety of outstanding landscape and coastline captured in one relatively small area. The Gower AONB Management Plan (2017) usefully describes the nature of Gower's varied landscape:

> "It ranges from the south coast's superb carboniferous limestone scenery - between Worm's Head and Oxwich Bay - to the salt marshes and the dune systems in the north. Inland, the most prominent features are the large areas of common, dominated by sandstone heath ridges including the soaring sweep of Cefn Bryn. Secluded valleys have rich deciduous woodland and the traditional agricultural landscape is a patchwork of fields characterised by walls, stone faced banks, and hedgerows".
>
> Gower AONB Management Plan 2017

Above: View across Oxwich Bay

aonb designation & the importance of good design

1.8 The primary purpose of the AONB designation is to “conserve and enhance” the natural beauty of the designated area. Poor design of new buildings, conversions and extensions can be detrimental to landscape character, whereas good design can enhance its quality. Planning Policy Wales (PPW) emphasises the importance of good design for successful placemaking:

> “Good design is fundamental to creating sustainable places where people want to live, work and socialise. Design is not just about the architecture of a building but the relationship between all elements of the natural and built environment and between people and places.
>
> ...Meeting the objectives of good design should be the aim of all those involved in the development process and applied to all development proposals, at all scales…
> “
>
> *Planning Policy Wales, paragraphs 3.3 and 3.4*

1.9 The fundamental importance of managing change within the AONB to the wider South West Wales Region, as well as for Swansea, is highlighted in Wales’ National Development Plan:

“Managing the South West’s outstanding natural resources, which include the coast [and] the Gower Area of Outstanding Natural Beauty, is a priority for the region and it should be ensured they can be enjoyed by future gnerations and help provide economic benefits for the region’s communities. The region’s distinctive heritage should be preserved and enhanced by high quality development.”

Future Wales - The National Plan 2040, page 155

1.10 This notion of the effective and sustainable management of change is key to ensure that the distinctive character of Gower’s natural and cultural landscape is not only retained through the conservation, refurbishment and maintenance of existing buildings, but also enhanced through good design in new developments. New development should aim to improve upon an existing building, and create a high quality development that integrates into the existing landscape.

Top right: Lone house above Middleton
Bottom right: Rhossili village with Worms Head in the background

status of the guidance

1.11 The Guidance is a material consideration in the determination of planning applications for development in, and in some instances adjoining, the Gower AONB. It provides Supplementary Planning Guidance (SPG) to the Council's adopted Swansea Local Development Plan (LDP).

1.12 The first Gower Design Guide was adopted as SPG to the now superseded City and County of Swansea Unitary Development Plan (UDP) (2008). This new version of the Guidance will formally replace the first Gower Design Guide once adopted.

1.13 The Guidance provides SPG to augment a number of policies in the Swansea LDP, which include:

- PS 1: Sustainable Places
- PS 2: Placemaking and Place Management
- H 5: Local Needs Housing Exception Sites
- H 6: 100% Affordable Housing Exception Sites
- H 8: Ancillary Residential Accommodation
- HC 1: Historic & Cultural Environment
- HC 2: Preservation or Enhancement of Buildings and Features
- ER2: Strategic Green Infrastructure Network
- ER 4: Gower Area of Outstanding Natural Beauty (AONB)
- ER6: Designated Sites of Geological Importance
- ER 7: Undeveloped Coast
- ER 8: Habitats and Species
- ER9: Ecological Networks & Features of Importance for Biodiversity
- ER 11: Trees, Hedgerows and Development
- CV 1: Key Villages
- CV 2: Development in the Countryside
- CV 3: Replacement Dwellings in the Countryside
- CV 4: Conversion of Rural Buildings
- CV 5: Farm Diversification
- TR 1: Tourism, Recreation and Leisure Development
- TR 2: Developed Coast and Waterfront
- TR 3: Sustainable Tourism and Recreation Development in the Countryside
- TR 5: Holiday Accommodation
- TR 13: Residential Use of Holiday Accommodation
- RP 3: Air and Light Pollution
- RP 4: Water Pollution & the Protection of Water Resources
- T5: Design Principles for Transport Measures and Infrastructure
- T6: Parking

Above: The village shop prior to conversion

Above and Below: The Store, Mewslade Cottage. Example of a restoration and conversion of an existing Gower building.

Below: The old gift shop has been converted to a traditional dwelling and the village store converted to tourism accommodation, using a contemporary design and materials:

@JemHowe @stayatmewslade

1.14 The Guidance takes account of the most up to date legislative and strategic planning context that have arisen at both national and local level. This includes the latest Gower Management Plan (2017), Future Wales: the National Plan 2040, Planning Policy Wales (PPW) and relevant supporting Technical Advice Notes (TANs) produced by the Welsh Government.

1.15 Key placemaking and design related national planning policy and LDP policies that have particular relevant to this Guidance are provided in Appendix 1. Matters relating to placemaking and design are clearly not the only considerations in the determination of planning applications. Applicants will need to demonstrate compliance with other policies in the LDP, and with national guidance and other material considerations, when applying for planning permission.

1.16 This draft version of the Guidance will be subject to full public and stakeholder consultation. All representations made during this process will be considered in the formation of the final version adopted by the Council. The Council monitors the effectiveness of the Guidance through LDP monitoring and planning application feedback questionnaires.

Above: Replacement farmhouse and renovated outbuildings, Hillend Farm, Gower

1.17 The five remaining Sections of the Guidance cover the following key elements:

- **overview of the character of the Gower AONB**
- **development management process**
- **placemaking objectives** for all development to consider
- individual **guidance modules on common types of development** within the AONB, and on issues of sustainability, landscape and lighting, and
- a set of **appendices**.

1.18 At the front of each section or module there is a numbered contents page to guide the user. Further information on how to use the individual guidance modules is included within the introduction to Section 5.

1.19 Users of the Guidance should read Sections 2, 3 and 4 prior to referring to the relevant module in Section 5. The Appendices set out in Section 6 provide practical examples, advice and further explanation.

1.20 It should be noted that the Guidance does not contain a specific guidance module relating to caravan and campsites within the AONB. Further guidance to augment LDP caravan and campsite polices is available separately in order to be relevant to caravan and campsites throughout the County, not just within the AONB.

2	**AONB Character** - this section sets out the landscape, settlement and built environment character of the AONB. It also contains signposts to more detailed landscape character and settlement statements contained in Appendices 5 & 6. Section 2 is important to consult as part of the site and context appraisal stage of the design process.
3	**Development Management Process** - This section should be consulted prior to any development. This explains the steps to be taken in the design of all types and scales of development, including engaging relevant professionals, undertaking site appraisal, consultation, producing a vision and refining development proposals.
4	**Placemaking Objectives** - This section sets out the principles which need to be considered at the outset of a project to guide the development. This section should be consulted when developing a vision and design objectives for any new development.
5	**Guidance Modules** - Each of the individual guidance modules in Section 5 can be read as stand alone modules, enabling easy reference for specific types of development including; detailed design guidance for approach to sustainable development, new residential development, agricultural development, tourism and commercial development, conversions, repair and maintenance, lighting and landscape detailing.
6	**Appendices** - Each appendix provides information on design policy, permitted development and building regulation requirements, seascape and landscape characterisation, and individual settlement statements. The consultation strategy is explained and useful links included.

section 1

gower aonb
design guide

aonb character

why is the existing character important?

2.1 The Gower AONB is one of the most naturally beautiful areas in the Country and is a prized asset for those that live within and visit the area. In the 2015 Swansea Visitor Survey 99% of visitors who responded rated the quality of Gower's landscape as 'good/ excellent'. In particular, the survey found that visitors from outside Wales were influenced to visit Gower due to the quality of the:

- Beaches and coastline; and/or
- Landscape and scenery

2.2 The rich mosaic of elements that makes up the character of Gower is always changing. Over recent years tourism has been one of the biggest contributors to change, alongside shifting agricultural practices and demographic changes.

2.3 All too often past developments and alterations have made little reference to the landscape, ecology, form, materials, settlement patterns and building style of the existing surroundings. Such development can have a negative impact on the area. An appropriate consideration of how development can complement existing character, can result in an uplift in quality, and facilitate a positive economic improvement to the area. To achieve this outcome, any new development should be designed in a balanced and sustainable manner.

2.4 The Gower AONB Management Plan, 2017 contains actions needed to conserve and enhance the special qualities of the AONB and how these will be protected through sustainable development policies. It links the special qualities with the underlying social and economic issues, which impact on, or interact within them. The Plan promotes an integrated approach to the planning and management of the land at a strategic level.

2.5 In order that future development protects, maintains and enhances the integrity of Gower's distinct character and special qualities, the Guidance identifies the aspects that contribute to the character of both the built environment and the landscape in which it sits.

2.6 The following section provides a brief overview of the character of the AONB in terms of its landscape, settlements and built environment. More detailed information is provided within Appendix 6: 'Settlement Character Areas and Settlement Statements'.

"In areas recognised for their landscape, townscape, cultural or historic character and value, it can be appropriate to seek to promote or reinforce local distinctiveness. In those areas the impact of development on the existing character, the scale and siting of new development, and the use of appropriate building materials (including where possible sustainably produced materials from local sources) will be particularly important"

Quote from PPW 2021, para 3.10

Bottom right and opposite page: Views towards Burry Inlet from Llanmadoc Hill

2.7 Gower is hugely influenced by its maritime surroundings and diverse history. It contains a variety of landscapes including spectacular beaches, steep carboniferous limestone cliffs and caves, sand dunes, marshes, isolated farmsteads inland, acidic heaths, moorland and commons, sandstone hill ridges, patchwork fields bounded by stone walls and hedgerows, and deciduous woodlands in steep limestone valleys.

2.8 The seascape of Gower plays a large part in its unique character and is one of the main draws for tourists. There are many spectacular views looking across bays from one headland to another, expansive 360 degree views from some of Gower's highest points, taking in:

- wide expanses of coastline,
- focused and framed views from beaches, and
- views from out at sea looking back to the land.

There are also many beautiful and varied inland views.

Above: Three Cliffs Bay
Below: Rhossili Beach

Key

- extent of Gower AONB
- settlements
- topography indicating high points (shown at 50m intervals)
- coastline (high water mark shown)
- sea
- sand
- main road network
- prominent ridgelines
- key features and landmarks
- key views/panoramas

environmental & historic designations

2.9 The quality of Gower's natural beauty is reflected in the large number of international, national and locally important sites designated for nature conservation reasons including;

- 25 Sites of Special Scientific Interest (SSSI),
- 5 Special Areas of Conservation (SAC),
- a Special Protection Area (SPA), a Ramsar Site,
- 3 National Nature Reserves (NNR),
- 3 Local Nature Reserves (LNR),
- 21 Wildlife Trust Reserves,
- 1 Coed Cadw Reserve, and
- 67 Ancient Woodland Sites.

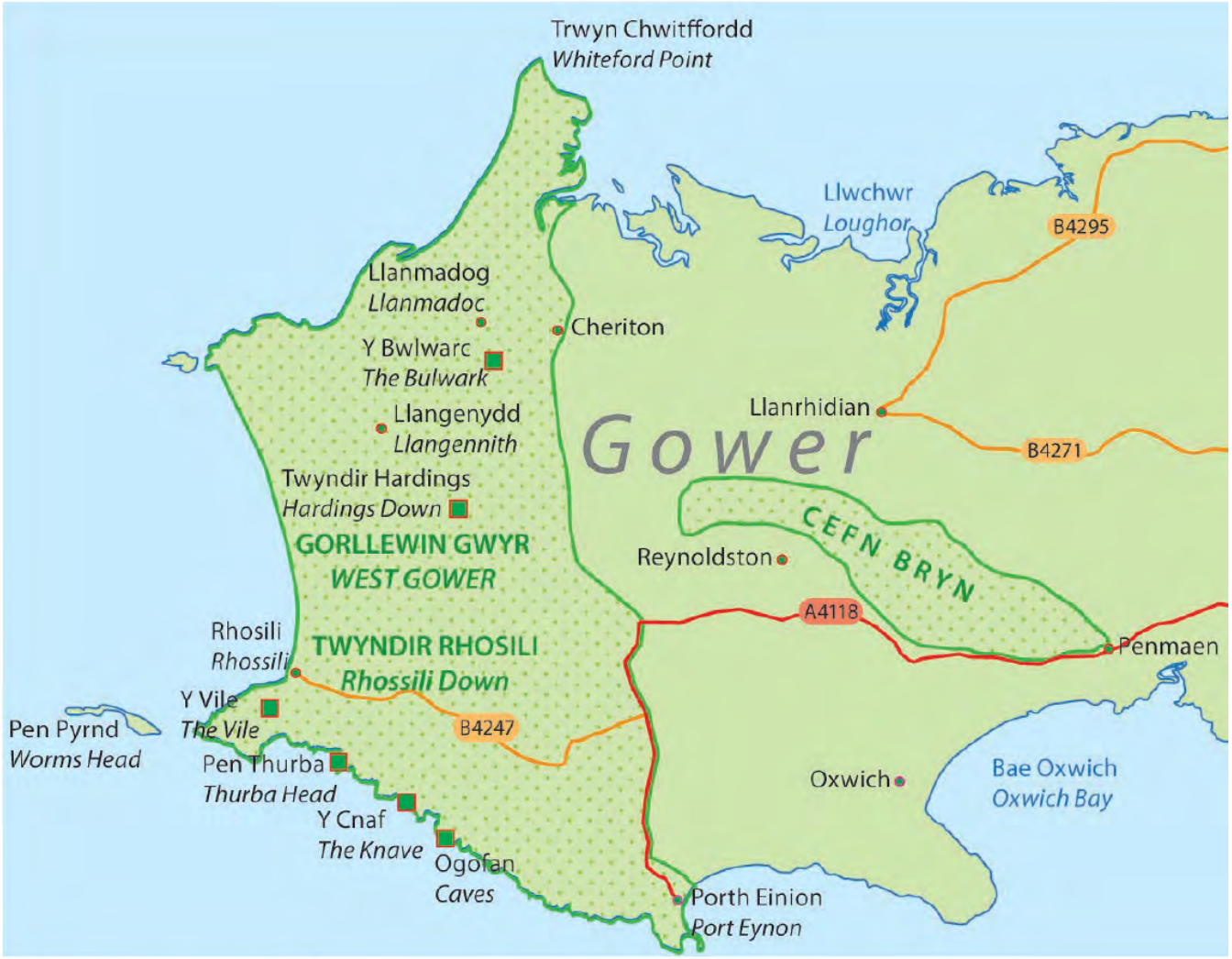
These contain a wide range of wildlife and important geological sites. There are also two Landscapes of Historic Interest, namely West Gower and Cefn Bryn. These are included in the Register of Landscapes of Outstanding Historic Interest in Wales. It should be noted, that as well as the two identified areas, the whole of the AONB has been divided into separate areas and the historic environment characterised. This information is more detailed that the historic aspect in LANDMAP and is available to all for the purpose of education and to inform decision making regarding the effect of change of this historic environment.

Above: Oxwich Castle
Below: Contemporary extension to Grade 2 listed building within a registered Historic Park and Garden at Fairyhill, Gower.
Image @Raum Architects

2.10 In terms of the historic environment Gower has an exceptionally large number of designations, an indication of the rich diversity of sites of high archaeological and historic value within the AONB. These include;

- 79 Scheduled Ancient Monuments,
- 129 Listed Buildings - 20% of which are Grade I or Grade II*,
- 5 Historic Parks and Gardens, namely Fairy Hill, Stouthall, Kilvrough, Penrice Castle and Clyne Castle,
- 1 Historic Park and Garden which is partially within the AONB, namely The Dingle,
- 17 Conservation Areas, and
- over 2000 other known sites, features and finds of archaeological interest.

2.11 As a result of the Historic Environment (Wales) Act 2016, the parks and gardens listed in the Registered Historic Parks and Gardens in Wales will soon be made statutory. All of the designated areas, with the exception of Landscapes of Historic Interest (shown right), are shown on the Swansea LDP Constraints and Issues Map, which can be found on the City and County of Swansea's website at https://www.swansea.gov.uk/ldp. It is recommended that discussions are spought with archaeological advisors (for example, Glamorgan Gwent Archaeological Trust) at an early stage in any proposed development, or change in land use, as this can help minimise through mitigation any detrimental effect on historic assets or landscapes.



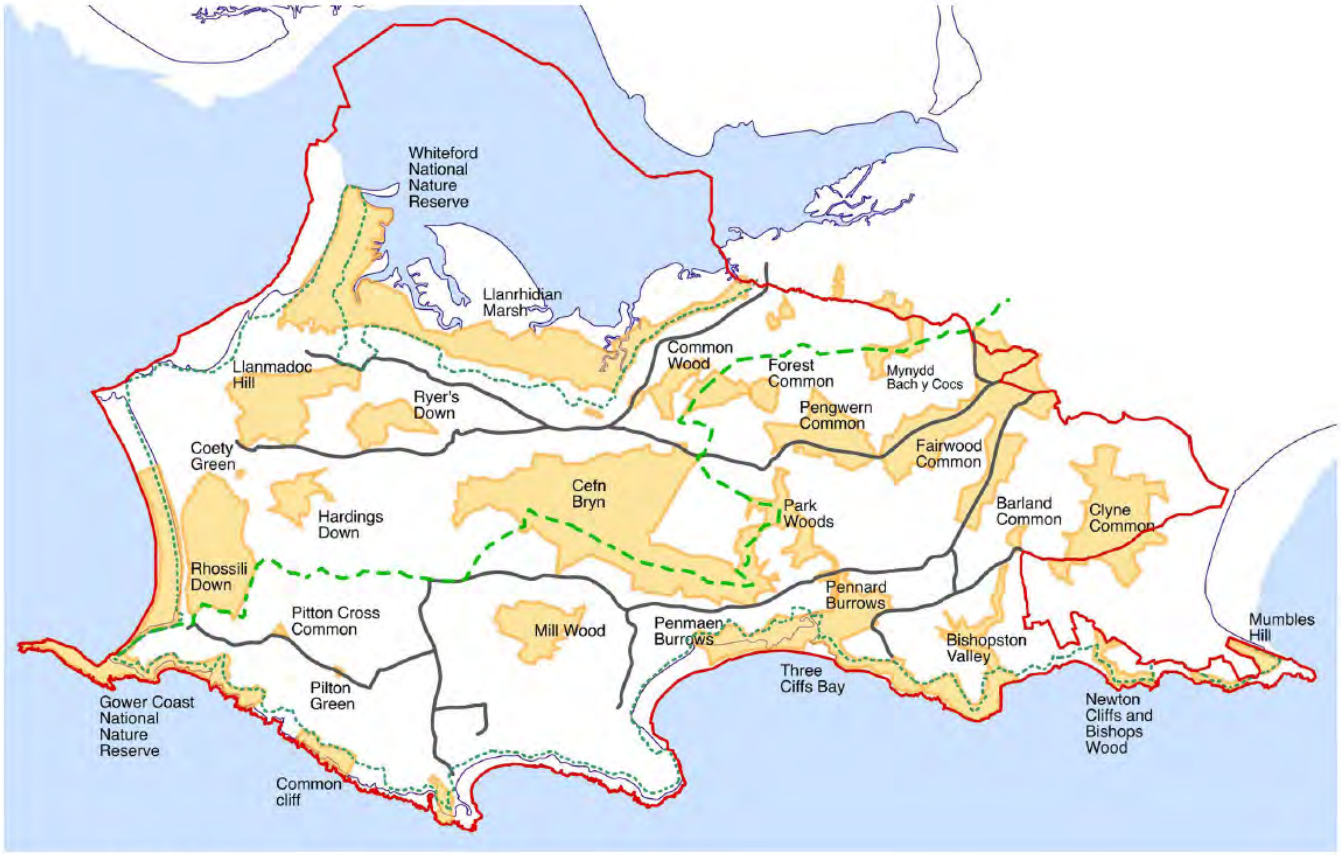
Landscapes of Historic Interest

Source: Landscape of Historic Interest in Wales, Cadw 1998:54

2.12 The high level of public access and the network of public rights of way on Gower provide the opportunity for a variety of experiences for different users. For example, a driver will experience Gower's character and special sequence of events differently from a walker as they take the Gower Way or other footpath. A person on horse back will be able to see across hedgerows, enjoying a very different perspective to someone travelling along the same route on foot.

2.13 Consequently attention should be paid to views from publicly accessible spaces, such as beaches, common land, woodlands, Open Access Land, and land managed by the National Trust and Natural Resources Wales (NRW).

Above: Rural lanes, Penrice



Areas of Publicly Accessible Land

Key

- extent of Gower AONB
- sea
- coastline (high water mark shown)
- Access Land (as defined under the Countryside Rights Of Way Act 2000) This may include Nature reserves, forestry commission or National trust land
- the Gower Way
- Wales coastal path
- main road network

2.14 Many of the special features of Gower are examples of man's impact on the evolution of the landscape and its character. There have been various factors for change in the past, both positive and negative, which have resulted in the landscape that we see today:

Top: Large scale commercial/industrial agricultural buildings are not characteristic of Gower and can dominate landscapes and views.
Bottom: The dominating visual impact of large scale buildings is increased where these break the skyline.

- **Agriculture:** The future care and management of the landscape is heavily dependent on the activities of the farming community, occupying the most extensive area of Gower. The need for this community to derive a living from the land brings pressures for diversification and potential changes in both the landscape and built environment. The challenge is to ensure that any change benefits the landscape and does not lead to a decline in quality.

Above: Pressure for parking and holiday accommodation, Port Eynon

- **Tourism:** As Gower's popularity increases traffic, limited car parking facilities, pedestrian and disabled access, footpaths becoming worn and habitats being disturbed will all need to be effectively managed. The effects of increased land-based and off-shore activities, together with increasing requirements for associated facilities, will need to be carefully considered to achieve a sustainable balance between the economy and the environment.

Above: Tourist facilities at Port Eynon

- **Development and demographics:** As the popularity of Gower grows as an attractive place to live within close commuting distance to Swansea, there is pressure for new development, particularly housing. This includes holiday, retirement and second homes. There is also increasing pressure for the development of ancillary residential accommodation within the curtilages of existing dwellings to meet the demands of an ageing population.

  TAN 6: Planning for Sustainable Rural Communities sets out national guidance on sustainable rural housing and the circumstances in which such development is appropriate. The LDP addresses the issue of providing affordable housing for local people, by allocating sites within the AONB for local needs housing, and containing policies enabling the development of affordable housing for local needs. These dwellings are subject to covenants so that they cannot be used as second homes or sub-let as holiday homes.

  Furthermore, consideration needs to be given to the improvement of public transport networks and communications systems.

- **Renewable energy and climate change:** The need to use renewable energy is a more recent pressure affecting many protected areas, from within and outside their boundaries. Government requirements to reduce carbon dioxide emissions and the need to secure alternative sources of energy will have an increasing impact upon development within Gower, its landscape and seascape.

2.15 It is important to emphasise that the aim of the Guidance is not to prevent any development within the Gower AONB or resist all future change. Instead, the aim is to encourage developers to enhance the existing character and ensure it changes in a positive and appropriate way.

Above: Holiday accommodation, Oxwich

Above: Llanmadoc Village Shop

Above: CGI images of housing development at Pennard courtesy of Coastal Housing Group.

landscape character

2.16 The Guidance provides a classification of the various landscape types found within Gower. These areas often contain a variety of similar smaller landscapes but each 'type' has broadly similar patterns of geology, landform, soils, vegetation, land use, and settlement. The subtle differences between the character areas creates a rich and diverse landscape.

2.17 A plan illustrating the various landscape types found within Gower is on the following page, together with a brief description and example of each type.

2.18 The starting point for landscape classification in Wales is LANDMAP - a digital landscape resource in which landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set. (https:// landmap-maps. naturalresources.wales/)

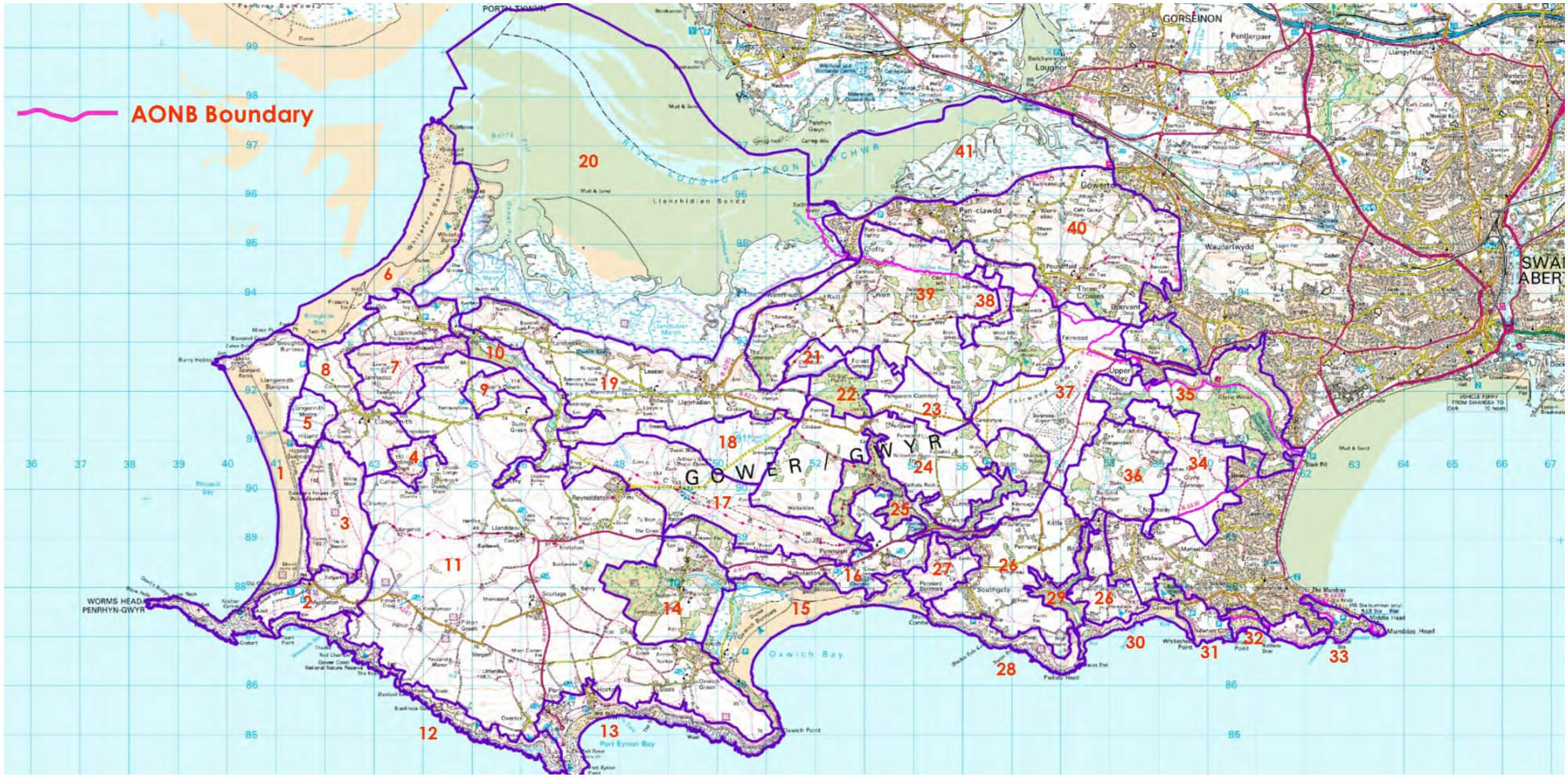
LANDMAP is regarded as the key landscape guidance for Wales. The Gower Landscape Partnership produced a Landscape Character Assessment for the AONB (2013), using LANDMAP as a baseline assessment [https://www.swansea.gov.uk/media/1523/Gower-Landscape-Character-Assessment-2013/pdf/Gower_Landscape_Character_Assessment.pdf].

2.19 Five LANDMAP data sets were analysed:

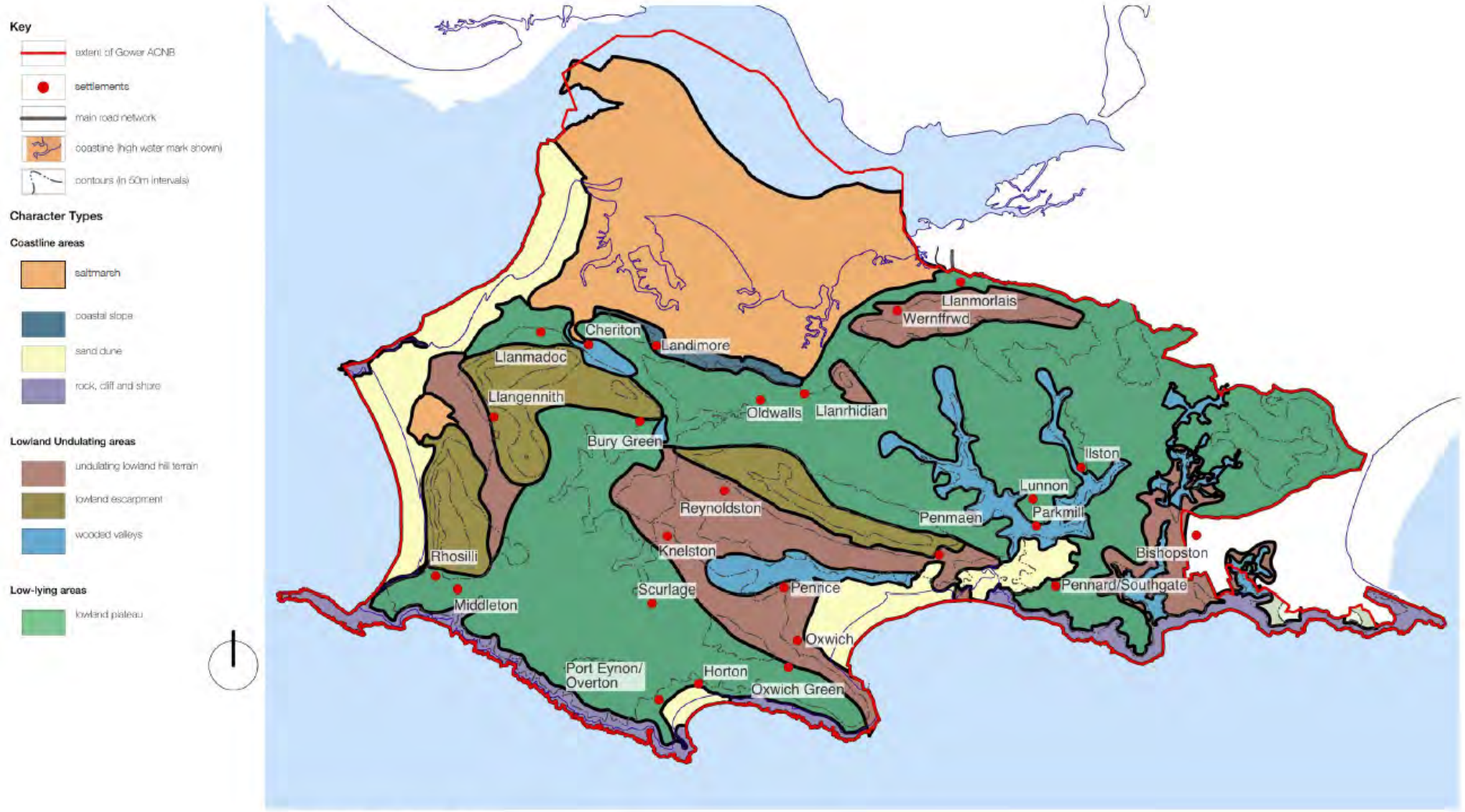
- Landscape Habitats
- Geological Landscape
- Historical Landscape
- Cultural Landscape
- Visual and Sensory

2.20 The data was scrutinised and used as a common base, supplemented by detailed field work, in order to identify and demarcate 41 discrete areas of common landscape character – Landscape Character Areas (LCAs). In several cases, the landward boundary of the Landscape Character Area identified does not correspond with the AONB boundary. This is to be expected since areas of common landscape character continue beyond the AONB, and sensitive areas of high value landscapes can lie outside the AONB, and adjacent to it.

2.21 A plan illustrating these LCAs is on the opposite page, and a more detailed explanation of the 41 character areas, with reference to special qualities, key characteristics, strengths and threats is included within Appendix 5: Landscape Characterisation.



Landscape Character Areas



Landscape Character Types

2.22

Salt Marsh
This landscape type comprises areas of coastal intertidal salt marsh, alluvial plain, marginal land and buried landscape. Some areas have been reclaimed by draining the land with cut channels. They tend to be grazed by livestock, have a feeling of remoteness and stunning beauty, with wide open spaces and very little tree cover. These areas are often of ecological importance, with areas designated as SSSIs, Ramsar sites and nature reserves in view of the bio-diverse and unusual species found there. There is no development within these areas. The character can become degraded through reclamation, enabling different species to utilise the land. Sea level change may pose particular threats to low lying areas of Gower such as the salt marshes.

2.23

Sand Dune
Generally rough textured, besanded landscape adjacent to wide, open intertidal bays consisting of sandy beach, gravel, mud, shingle and rocks. The dunes are often grassed or open sand. The area also includes smaller pockets of fen/swamp and improved grassland. Tourism and leisure is one of the biggest forms of land use for these areas, including static caravan and camping sites, golf courses, nature reserves and associated buildings, shops, etc. The edges of Port Eynon and Horton spill out into this landscape. There are a number of NNRs and SSSIs encompassing some of the richest varieties of coastal habitat in the UK, with over 600 flowering plant species. There is little tree cover although dense scrub is a distinct feature, usually interfacing such sand dunes with surrounding landscape types such as cliffs.

2.24

Coastal Slope
A narrow strip of wooded cliff top coastal slope is made up of north facing steep slopes and lower carboniferous crags below Dinantian plateau. It is of high value for its 'fossil' cliff line but low in ecological value from rough grazing practices. This rocky landscape of complex fieldscapes evolved from encroachment and reclamation of the land. It consists of improved rough grassland but with small areas of broadleaf woodland. Also evident are medieval defensive buildings, the edges of ribbon settlements, tor, iron age remains, regional vernacular buildings, stone walls and hedges. This challenging and interesting landscape has an enclosed and small-scale character.

2.25

Rock, cliff, shore
This narrow strip includes some of Gower's most dramatic and inspiring scenery, with Burry Holms, Worms Head, and the seaward edges of Oxwich and Pwlldu Head. These beautiful areas are largely natural, unified and uninhabited. Where habitation occurs, the tendency is for small farmsteads to be tucked away in the upper cliff tops. These areas consist almost entirely of protected sites, such as the UK BAP habitat, 'maritime cliff and slope'. In many circumstances the views are framed with large expanse of sea enclosed by steep rocky cliffs. Cliffs give way to a rocky foreshore, scree and sand. The land is made up of 60% calcareous maritime grassland, with the remaining areas split between nationally important dry acid heath, and coastal heath land. Bracken and gorse are apparent to the upper reaches of the cliff-line. Tree cover is almost indistinguishable with only low windswept shrubby species. The areas are used mainly for tourism with walks and access, and a small amount of agriculture. Although land in this area is not generally cultivated, much of it is used for agriculture through means such as grazing and the cutting of bracken and gorse.

2.26

Undulating lowland hill terrain
This hilly landscape is usually found alongside lowland escarpment, and includes the lower flanks of the prominent outcrops of Rhosillli Down and Cefn Bryn, together with more enclosed areas such as Bishopston Valley. The area comprises mostly complex and varied arable agricultural fields with irregular, smaller fieldscapes and traditional boundaries, interspersed with green lanes. It contains some of the larger areas of woodland in Gower and generally more tree cover, with areas of mixed deciduous ancient woodland, plantations, parkland trees and copses. Many smaller settlements, dispersed farmsteads and scattered houses are included within this character type. Rough grass and scrub are in evidence as the slopes give way to the heath and moor lands of the upper (lowland) escarpments and these lower hills become encroached. There are a number of small remnant commons and evidence of wet heath and marshy grassland.

2.27

Lowland escarpment
Although this landscape type is categorised as ‘lowland’ at a national scale, within Gower these areas comprise dramatic, clearly defined and distinctive outcrops of higher terrain, above surrounding areas. There are three prominent old red sandstone escarpments with very steep slopes and ridge-lines, dominating much of Gower’s skyline, including Rhossili Down, Cefn Bryn, Ryers Down, Hardings Down and Llanmadoc Hill. They are almost entirely exposed and treeless landscapes with 360 degree panoramic views and comprise un-enclosed common land grazed by cattle and horses. The main land cover is dry acid heath, unimproved acid marshy grassland, bracken and dwarf shrub. There is evidence of prehistoric occupation and ritual landscape. The only habitation is a few scattered farmsteads.

2.28

Lowland plateau
The most common landscape type of Gower, this large area covers a varied mosaic of land use from common land, woodland, golf course, parkland and open arable fields. The flat, expansive terrain largely consists of large and open, semi-regular arable fields with frequent and well managed field boundaries. Hedgerows and scattered hedgerow trees are a prominent feature. Water is prevalent with ponds, lakes and rivers. Unenclosed common land includes Welsh Moor, Pengwern, Fairwood, Clyne and Barland Commons. This type also includes the main transport routes and infrastructure, with Swansea airport and parts of the larger settlements of Bishopston and Southgate. The area is generally of lower ecological value but there are pockets of important wet heath, wet woodland, calcareous grassland, dry heath and dense scrub. The type includes some areas of good quality agricultural land in south-east Gower. The area includes a number of Special Areas for Conservation (SACS) including ash woodland and the common land areas as well as SSSIs.

2.29

Wooded Valleys
This character type represents some of the smallest and intricate areas of Gower, made up of steeply sloping valleys which result in intimate and complex traits. The vast majority of these areas are made up of linear dense woodlands including, Bishop's Wood, Park Wood, Pwlldu and Lockway Woods. This terrain is most commonly associated with a river/ stream valley such as Burry Pill, Pennard Pill, and Ilston Cwm. Woodlands are mixed or mainly deciduous ancient woodland, with evidence of some younger wooded areas. The Gower Way long distance path cuts through the Park Wood area and it is clear that this character type presents a well used leisure amenity with several areas of woodland being categorised as Access Land. The woodlands are either NRW or National Trust owned and managed, often with permitted access. Whilst a sparsely habited and somewhat isolated area of Gower, it is often frequented by walkers, and naturalists and there are several holiday homes in the area. A number of lakes can be found within open 'glades' at the valley bottoms. The wooded valleys are often interspersed by single track roads. Parkmill, Ilston and Cheriton fall within this type and form a sprawling linear and loose cluster of dwellings, respectively. There are some scattered individual dwellings usually in the valley bottom or associated with roads.

2.30 Seascape is defined in the UK Marine Policy Statement (2011) as: 'Landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other'.

2.31 The European Landscape Convention has an earlier definition of landscape which can also be applied to seascape (and is more compatible with both the national and local seascape assessment methods): 'an area of sea, coastline and land, as perceived by people, whose character results from the actions and interactions of land with sea, by natural and/or human factors.'

2.32 Further to the UK Marine Policy Statement and the National Seascape Assessment for Wales (2015) the Council, in conjunction with Carmarthenshire County Council, Neath Port Talbot County Borough Council, Bridgend County Borough Council and NRW, undertook a local seascape character assessment in 2016 for east Carmarthen Bay, the Burry Inlet/ Loughor Estuary, Gower, and Swansea Bay (including the territorial waters up to 12 nautical miles (nm) offshore). The study seeks to provide further information on the character of seascape in general and special qualities in particular areas, such as Gower AONB and Heritage Coast and provides useful background evidence for the assessment of planning applications which may have a seascape impact. It should be considered with other guidance and baseline information including, LANDMAP and the Gower Landscape Character Assessment (2013).

2.33 The full Carmarthen Bay, Gower and Swansea Local Seascape Character Assessment 2016 can be found at: www.swansea.gov.uk/sca and identifies 20 Seascape Character Areas (SCA's), 7 of which encompass the AONB. Extracts from the relevant SCA's in relation to the Gower AONB are shown in Appendix 7, and further detailed information is contained within the full and final report.

Coastal Zone

2.34 The SCA boundaries are drawn close to the coastal edge, but an inland boundary 10km from the coast was used in order to collate data and to allow consideration of wider landscape context. In order to understand the spatial relationship between SCAs and Landscape Character Areas (LCAs) the landward boundaries have been matched wherever possible. The study does not spatially define a coastal zone. Nevertheless, all land which is intervisible with the sea and coast, i.e. the setting, should be considered as part of a coastal zone and the seascape character of the adjacent SCAs should be taken into account in planning policy and development management. The areas of intervisibility are broadly defined in the maps for each SCA. In addition, areas where buildings may be intervisible with an SCA due to their height should be included within a coastal zone. SCAs and descriptions complement terrestrial landscape character and LANDMAP assessments, and areas inland which have limited visual or physical connection with the sea between the coast and areas of high visibility are excluded from the assessment.

settlement character

2.35 Just as geology has created the outstanding Gower landscape, it has also influenced the pattern of settlements across the peninsula. Most settlements have become established on or near to the coast, the exceptions being smaller farming hamlets or villages at key nodes within the wider movement network.

2.36 Settlement form varies from those that are strung along a road to those constrained by their topography. For the purposes of the Guidance the settlement forms generally consist of elements of one, or more of the following types of structure:

- Nucleated
- Linear
- Dispersed

Nucleated Settlement

2.37 Nucleated settlements are found clustered around a clearly defined centre and are: generally formed at the junction of routes; influenced by the proximity of a water supply; or hold a strong defensive position.

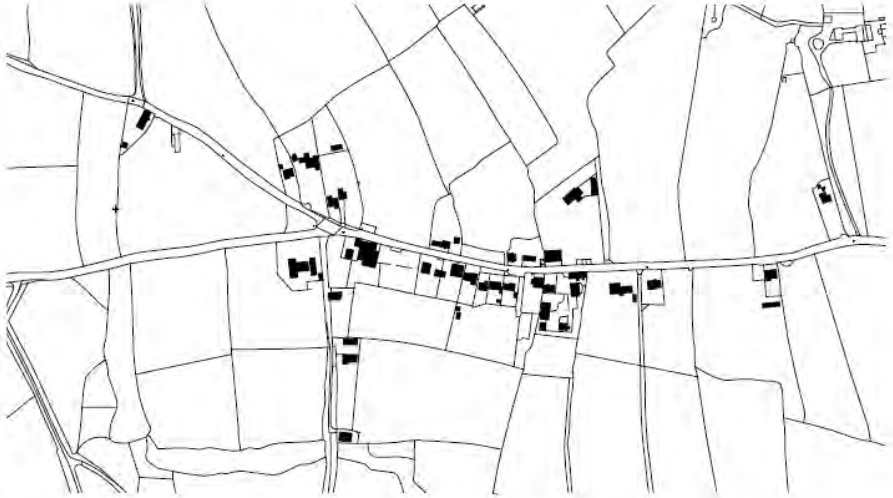
Penrice is an example of such a settlement. Situated on the crest of a hill to the south of the main Penrice Estate, St. Andrew's Church and the adjacent triangular green provide a key focus for the small collection of traditional whitewashed, slated roofed houses.

Map of Penrice illustrating the nucleated settlement pattern

Linear Settlement

2.38 Linear settlements develop, as the name suggests, along a line. This may be a geological feature, such as a springline; a physical feature, such as a steeply sided valley; or a movement route such as an ancient track or road.

Oldwalls is an example of such a settlement. Situated at the junction with the north Gower road to Llanmadoc and the road to Llangennith it was originally based around an inn, chapel, smithy and a few cottages. Over time the spaces between these original properties have been developed, resulting in a small settlement that is spread along one road and is generally only one property deep.

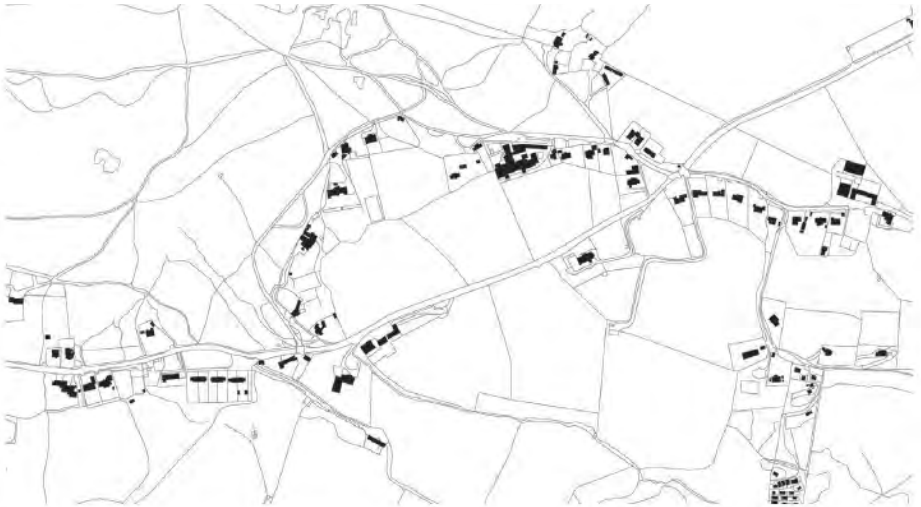


Map of Oldwalls illustrating the linear settlement pattern

Dispersed Settlement

2.39 Dispersed settlements consist of a number of small dwellings or isolated pockets of development scattered across an area. Most often this type of development is the result of; local topography preventing the clustering of development; geology or land use patterns being unable to sustain larger, more concentrated settlement.

Penmaen is an example of such a settlement. Situated on the A4118, at the southern edge of Cefn Bryn, development was orignally focused around the church and a few collages and farmhouses along the main road. The settlement extended along lanes to both sides of the south Gower road. Over time there has been an infilling of development within the settlement however it remains dispersed.



Map of Penmaen illustrating the dispersed settlement pattern

2.40 The Guidance sets out detailed appraisals of settlements across Gower. These are contained within Appendix 6: Settlement Character Areas and Settlement Statements.

2.41 It is important to note that locations described as 'settlements' within this Guidance do not necessarily have a defined 'settlement boundary' within the Swansea LDP. It is only certain designated 'Key Villages' within Gower (i.e. those of a certain nature and scale) that are defined in the LDP as having a settlement boundary, each of which are delineated on the relevant LDP Proposals Maps. These Key Villages are:

- Horton
- Knelston
- Llangennith
- Llanmadoc
- Llanrhidian
- Oxwich
- Pennard and Southgate
- Port Eynon
- Reynoldston
- Rhossili
- Scurlage

2.42 The Settlement Character Areas and Statements at Appendix 6 highlight the key characteristics and distinguished features of the relevant Gower settlement, and provide a brief history of their development, together with a description of the prevalent materials and detailing.

2.43 They do not aim to indicate any specific development opportunity, that might exist within a settlement. Whilst they do highlight certain areas within and adjoining the settlements that are considered particularly important to remain undeveloped, similarly they do not aim to identify every specific part of the settlement that is unsuitable for development. The Settlement Statements should therefore be used as a prompt rather than a substitute for on-site character analysis.

Examples of Settlement Character Statement: Appendix 6

2.44 Gower's built environment, its buildings, walls, roads and paths, is the result of the ever changing requirements of those who live, work and spend their leisure time on the peninsula.

2.45 Originally a building's form was the direct result of its function. The stone walled cottages and farmhouses had simple rectangular plans. They were generally single storey with a pitched roof and often had a porch to provide protection against the weather. Windows were generally small for cost and structural reasons, allowing buildings to retain heat in the winter and remain cool during the summer. Chimneys were positioned at either end of the building. Extensions would generally have been in the form of small additive elements.

2.46 Traditional construction techniques used locally available materials. Buildings were generally constructed by those who were going to use or live in them. In south and north-west of Gower, limestone from the local quarries would have been used, pennant sandstone predominated in the north-east, and old red sandstone and quartz conglomerate within the more central areas and around Cefn Bryn.

Above: Great Pitton Farm, (Grade II listed), is an example of traditional Gower Farmhouse with small windows and slated roof

2.47 Limewash was routinely applied over the softer limestone buildings in the south as a means of protecting the stonework from the worst of the weather.

2.48 Many of Gower's oldest buildings would have been thatched with local reeds or more generally straw which was the predominant thatch material. However the ships which exported the plentiful supplies of lime to the west of England often returned with materials including red clay tiles and bricks introducing 'new' materials. Similarly, the arrival of the railways in the late nineteenth century

Above: Pitt Farm, above Oxwich is an example of a former small manor house. Sharing a number of characteristics of traditional farm houses such as small windows, rendered walls and slated roof

Above: The Nook, Oxwich is an example of a traditional whitewashed Gower cottage which has retained its thatched roof detailing

brought slate from North Wales. These 'new' natural materials have been used in Gower for over 100 years and have now become a familiar and valued element of Gower Vernacular.

2.49 Development during the twentieth century brought the greatest change due to the 'importing' of architectural styles, materials and detailing by a more widely travelled population. Changing attitudes and advancement in technology saw a move away from the tradition of functional, stone built, small windowed houses. Existing buildings were often either demolished to make way for more modern ones or were altered and extended beyond recognition to meet the changing aspirations of their owners.

2.50 The resultant loss of character and detailing from the traditional building stock was exacerbated by the construction of inappropriate, suburban style properties, including 1920's colonial bungalows, 1930's brick built semis, 1960's and 70's large windowed and asymmetrically roofed detached houses, and the 'executive' styles prevalent across the country during the 1980's and early 90's.

Above: examples of twentieth century suburban style development found in Gower

2.51 Whilst such styles may be considered appropriate within suburbs, they are alien to the traditional character of Gower. The result has been an erosion of the local distinctiveness of the AONB, due to a lack of understanding of the importance of a building's context and surroundings.

2.52 More recently there has been a realisation of the importance of designing within the wider context. Well considered analysis will be key to reviving the architectural quality of Gower and, ultimately, enhancing its already outstanding landscape.

Above: Example of new development response to local vernacular and context, Landimore

environmental colour assessment

2.53 Environmental Colour Assessment (ECA) is an objective process set out by the Landscape Institute that helps to resolve many of the issues associated with colour selection and specification, especially in the external environment. ECAs can accompany planning applications alongside Landscape and Visual Impact Assessments and Appraisals (LVIAs / LVAs), since the topics are interrelated.

2.54 It is important to consider the wider colour context, such as surrounding land, water or sky, in order to ensure appropriate colours are applied. Similarly the texture of the landscape setting should inform the colour and material choices. An analysis of the depth of relief, play of light and shade and range of tactile surfaces on local building materials, vernacular detailing, dominant vegetation and ground finishes will help determine appropriate finishes and textures for a development.

useful references

Historic Landscape Charaterisation Website
https://www.ggat.org.uk/cadw/historic_landscape/main/english/historic.htm
or
http://www.ggat.org.uk/cadw/historic_landscape/gower/english/Gower_Features.htm
or
https://cadw.gov.wales/advice-support/historic-assets/conservation-areas-and-other-historic-assets/other-historic-assets-0

Registered Parks and Gardens in Wales
http://cadw.gov.wales/advice-support/placemaking/legislation-and-guidance/registered-historic-parks-and-gardens

Carmarthen Bay, Gower and Swansea Local Seascape Character Assessment 2016
https://www.swansea.gov.uk/sca

Gower Landscape Character Assessment, 2013
http://www.swansea.gov.uk/media/1523/Gower-Landscape-Character-Assessment-2013/pdf/Gower_Landscape_Character_Assessment.pdf

Gower AONB Management Plan
https://www.swansea.gov.uk/gowermanagement

Landscape Institute
Environmental Colour Assessment Methodology
https://www.landscapeinstitute.org/technical-resource/environmental-colour-assessment/

development management process

Introduction

3.1 The eight Stages described in this Section set out the key elements of the development management process. Whilst each Stage is relevant to all scales of development, the inputs required for each stage will need to be proportional to the scale of development. Whilst larger schemes will typically require the most detailed inputs, small schemes may also have specific requirements that will necessitate careful and detailed consideration. As such, proposals will need to be considered on an individual, case by case basis.

Stage 1: Determine if the proposal needs planning permission

3.2 Some categories of small scale development do not require planning permission in view of permitted development (PD) rights allowed under national planning legislation. This can include certain alterations and extensions to properties, as well as the erection of outbuildings in some instances.

3.3 Within the AONB however there are restrictions that apply to standard PD rights, which serve to help manage or prohibit certain proposed changes that may affect the special character of the area.

3.4 Having regard to the above, it is important that, prior to undertaking any works, the advice of the Council is sought as to whether planning permission is required. Development management officers of the Council can provide expert advice in this regard. Such advice can help establish, for example, whether PD rights have been removed by means of a condition on a previous planning permission, or by means of an Article 4 Direction in a Conservation Area (see Appendix 3: PD Rights and Building Regulations). Current Article 4 Directions (at the time of writing) exist for the settlements of Horton, Llangennith, Port Eynon, Reynoldston and Rhossili. This advice can also determine whether a site or building is subject to a legal agreement (S106 agreement) which restricts the use of the land or building.

3.5 If works are proposed but there is uncertainty as to whether planning permission is required for the proposed operational development (a building or engineering works) or the proposed change of use of land or a building(s), an application can be submitted for a Certificate of Proposed Lawful Development.

3.6 Prior to the submission of a formal planning application for development, the Council welcomes the opportunity to discuss proposed schemes with prospective applicants, in order to encourage and promote high quality development and improve the efficiency of the development management process. Further details on the Council's pre-application service for both householder and non-householder developments are set out under Stage 8 below.

Stage 2: Determine if any other approvals are required

3.7 In some instances, approvals other than planning permission will also be required to allow development to take place. In sensitive areas such as the AONB, the site, building and/or its surroundings may be protected by additional designations and/or legal restrictions, which can result in further consents being required to undertake works. Therefore checks should be made on whether:

- it lies within a conservation area (there may be removed Permitted Development Rights);
- it is a listed building or is close to a listed building (unauthorised works to listed buildings are illegal and may result in criminal charges);
- it is a scheduled ancient monument or is close to a scheduled ancient monument;
- it is likely to have an effect upon designated areas of ecological importance;
- it has any of its permitted development rights removed by an Article 4 Direction;
- it will negatively affect any protected trees or species.
- it is likely to have an effect upon hedgerows (which may be protected under the Hedgerow Regulations).

3.8 In addition to obtaining planning permission and any additional approvals as above, building regulations approval will often be required. SUDS (drainage) approval will also need to be obtained for certain developments. It is recommended that planning permission, building regulations and SUDS approval are applied for at the same time in order that any necessary changes can be made to the planning application. Any recommendations from the Building Inspector or the SUDS Approval Body on issues such as demolition and drainage works should be checked with the Council's Planning Department, particularly with regard to works to listed buildings and within conservation areas.

3.9 Even if planning permission is not required, the aim should be to improve design quality on Gower, and to follow the same design process as set out within this document.

Stage 3: Seek professional advice

3.10 A professional advisor may be useful to applicants unfamiliar with the development management process, in particular to assist the design and application process, and better prepare a scheme design that meets the Council's requirements. In some instances professional advice can help speed up the planning determination process, and help secure an acceptable form of development that development management officers can recommend receive planning permission.

3.11 The Royal Society of Architects Wales (RSAW) provides guidance on selecting and appointing a qualified architect. In addition, the Royal Town Planning Institute (RTPI), the Royal Institute of Chartered Surveyors (RICS), and the Chartered Institute of Architectural Technologists (CIAT) can also provide advice. The Landscape Institute (LI) provides a professional home for all landscape practitioners including landscape cientists, landscape planners, landscape architects, landscape managers and urban designers. Considereation of the impact of a development on the landscape is particularly important within the AONB.

3.12 In addition to these professional bodies, advice on highway safety, ecology, arboriculture, archaeology, landscape, urban design and sustainability may also be required to inform and strengthen a design proposal

Stage 4: Speak to your neighbours

3.13 You are strongly advised to speak with your neighbours and explain your proposals before completing your plans. After you make an application, the Council will publicise your proposals and normally consult with your closest neighbours.

3.14 If they or other third parties object in writing to the Council, it may delay your application. If the objections raise valid planning issues, the Council may ask you to amend your application.

3.15 Notwithstanding this, even if there are no objections from neighbours, your application can still be refused if considered unacceptable on design or other relevant planning grounds.

Stage 5: Undertake a comprehensive site analysis, context appraisal and policy review

3.16 The purpose of a site analysis and context appraisal is to gain a thorough understanding of both the application site and its surroundings. This should consider the macro (wide) to micro (focused) scale. It should identify both positive and negative aspects of existing character and demonstrate an understanding of those qualities which conserve or enhance the area and those which detract from the area in order that:

- the full impact of development is addressed; and
- the proposal responds as best it can to the positive characteristics of its context.

3.17 The list to the right highlights the type of information that should be referenced in order to undertake a thorough analysis of context. The list is not definitive and information may be requested whcih is not listed. Inevitably, the level of appraisal work should be proportional to the scale of the proposed development works.

3.18 The site and context appraisal should include a description of the site/building's existing character and assess:

- how the proposal relates to its wider context (both to the local settlement and the wider AONB);
- what influence it has on its immediate context;
- the key constraints to development; and the key opportunities for development

Site Analysis/Appraisal Checklist

Natural Heritage

Topography
Aspect
Orientation
Degrees of exposure
Water courses
Existing landscape structure
Ground conditions
Levels/ types of enclosure
Ecology
Existing landscape characteristics
Key views

Built Heritage

Historic settlement patterns
Archaeology
Relationship between: buildings/roads/open space
Typical building types, size & form
Boundary treatment
Detailing, colours & materials
Key spaces
Key views
Landmark buildings
Access/pedestrian routes
Existing settlement characteristics

Designations & Easements

Listed buildings
Conservation areas
Tree preservation orders
Scheduled ancient monuments
SAC, Ramsar, SPA, NNR, SSSI, LNR
Historic landscapes
Flood plains
Services
Rights of Way

3.19 Undertaking a policy review will establish the relevant planning framework to formulate the scheme, and help understand the context for the proposal. Applicants must consider the national policy set out in: the National Development Framework: Future Wales; Planning Policy Wales (PPW); and various Technical Advice Notes (TANs) including TAN 6 'Planning for Sustainable Rural Communities' and TAN12 'Design'. The appraisal of local policy must include consideration of the relevant policies of the Swansea LDP that apply, and any relevant Supplementary Planning Guidance (SPG), and other Council approved plans and strategies such as the Gower AONB Management Plan.

3.20 Section 6 of the Guidance (Appendix 1) sets out links to PPW and relevant TANs that provide a useful reference for applicants. The Appendix highlights key areas of legislation and Policy that may relate to proposals submitted, and that provide the context within which local policy and guidance should be read. The table set out in Appendix 2 provides a checklist of key planning and design considerations, alongside relevant LDP policies. The list is not exhaustive, and applicants must ensure they have full regard to the policies that apply to ensure that all relevant matters have been addressed.

3.21 The information gathered during the context appraisal and policy review stage will inform the visioning and design development stages. It will also form the basis of an appropriate Design Statement (or Design and Access Statement (DAS)) which may be required to accompany a planning application.

Stage 6: Design Development

3.22 The purpose of this stage is to consider an appropriate number of design options to:

- assess against commonly accepted design and sustainability principles/ objectives (as laid out within Section 5: Guidance Modules); and
- determine the final proposal for submission

3.23 The majority of the design work is undertaken during this stage, taking into account the outcomes of the previous stages. It should allow for a variety of options to be explored and, where appropriate, discussed with the local authority and other statutory bodies.

3.24 Prior to proceeding with any application, proposals should be assessed against planning policy, contextual appraisal and support the agreed vision. They shall be based upon the objectives of good design, including:

- environmental sustainability
- character
- access
- community safety
- movement

Stage 7: Design and Access Statement

3.25 A Design and Access Statement (DAS) must be submitted for the following types of development:

- All planning applications for 'major' development except those for mining operations, waste developments, relaxation of conditions (Section '73' applications) and applications for a material change in use of land or buildings;
- All planning applications for development in a conservation area or World Heritage Site which consist of the provision of one or more dwellings or the creation of floorspace of 100sqm (gross) or more.
- All works to a listed building (for works to the interior of a listed building, the access part of the DAS is not required).

3.26 In accordance with LDP Policy PS2: Placemaking and Place Management, a DAS will also be required in support of planning applications that are considered to have design implications, including applications for new or extended buildings and new infrastructure, changes to landscape appearance, and/or those involving sensitive sites and locations.

3.27 A DAS is a useful tool and can provide a structured way of considering new development. Even where a DAS is not a statutory requirement, it may still be useful to prepare and submit a statement in order to convey the rationale for design choice. Furthermore, during the pre-application and determination process, the Council will request further information in relation to the design if it will assist in making a decision on the application in light of development plan design policies. There will be particular expectations of quality in conservation areas and the Gower AONB.

3.28 The DAS should be proportionate to the scale of development proposed. In the preparation of a DAS, reference should be made to guidance outlined within TAN 12: Design and the Welsh Government's Design and Access Statements in Wales (2017) guidance.

3.29 The scope of a DAS should be agreed wherever possible at the pre-application stage of development to ensure all relevant issues are covered. A DAS must:

- explain the design principles and concepts that have been applied to the development;
- demonstrate the steps taken to appraise the context of the development and how the design of the development takes that context into account (this could for example include the results of an Environmental Colour Assessment);
- explain the policy or approach adopted as to the proposal, means of access, and how policies relating to access in the development plan have been taken into account;
- explain how specific issues which might affect access to the development have been addressed.

3.30 A DAS can include a vision statement. It does not need to be lengthy but should encapsulate the essence of what the final proposal will be by stating:

- the kind of place the site/building is to become, taking into account any relevant plans/policies/guidance for the future of the area (e.g. Gower AONB Management Plan Settlement Statements: Appendix 6)
- aspirations regarding quality; and
- how this is to be achieved in terms of character and use.

Stage 8: Submitting an Application

3.31 Potential applicants are encouraged to make use of the Council's Pre- Application Service, whether the proposal is for householder or non-householder development. This provides an opportunity to raise any significant planning issues prior to the submission of a formal application. Applicants will have the opportunity to consider any issues raised and, if necessary, can amend the proposal in line with comments received to help secure a favourable decision on the submitted planning application.

3.32 Planning Application Forms and Pre-Application Enquiry Forms are available either to download from the City and County of Swansea website (http:// www. swansea.gov.uk) or in paper form from the Civic Centre, Oystermouth Road, Swansea SA1 3SN.

3.33 Guidance notes which provide advice on all information required to be submitted in support of planning applications are issued with all planning application forms and also available to download at the above address.

3.34 Planning applications can be submitted either via paper forms or electronically via the Planning Portal (http://www.planningportal.gov.uk).

placemaking objectives

introduction

4.1 The concept of placemaking is not just for strategic and urban developments; the importance of creating and managing places for people and communities applies at all scales and in all locations. Therefore the placemaking approach applies to rural and semi rural areas such as Gower and its adjoining areas, and crucially applies to all types and scales of development.

4.2 This section sets out key placemaking objectives that should underpin planning proposals within and adjoining the Gower AONB. They are consistent with the principles set out in the Swansea LDP, Future Wales, Planning Policy Wales (PPW), TAN 12: Design 2016, and TAN 6: Planning for Sustainable Rural Communities, 2010. These placemaking objectives should be embraced and applied at the outset of the development process and used throughout the design phases of the project. Following these objectives will ensure that the development integrates sensitively into the environment in which it is located.

4.3 To ensure development meets the relevant placemaking objectives, a series of key considerations are listed under each objective. It is intended that the applicant explores how the development responds to each of these as part of the design development process.

4.4 The relevance of the key considerations will vary depending upon the nature of the proposed development, however the objectives should be used as headings in any DAS. Where development proposals do not meet the defined relevant criteria applicants will be required to submit detailed and comprehensive evidence to justify why they considere a proposal to still be an appropriate development (refer to Section 3:'The Development Management Process').

Above: Cheriton from Llanmadoc Hill
Opposite page: Ford at Parkmill

4.5 Placemaking in its simplest form, is a 'people centred' approach to the planning, design and management of places and spaces. it seeks to create buildings and areas within which people would desire to live, work and spend recreational time. The importance of *Placemaking* has been embraced as a cornerstone of the national planning agenda in Wales and the sustainable development objectives which underpin it. This is emphasised by the 2020 Placemaking Charter, which has been developed in collaboration with the Placemaking Wales Partnership, which is made up of stakeholders, including Swansea Council, who represent a wide range of interests. The charter reflects the collective and individual commitments of these organisations to support the development of high quality places across Wales for the benefit of communities.

Placemaking Wales Charter signatories agree to promote the following principles in the plannng, design and management of new and existing places:

People and Community *- The local community are involved in the development of proposals. The needs, aspirations, health and well-being of all people are considered at the outset. Proposals are shaped to help to meet these needs as well as create, integrate, protect and/or enhance a sense of community and promote equality.*

Location *- Places grow and develop in a way that uses land efficiently, supports and enhances existing places and is well connected. The location of housing, employment leisure and other facilities are planned to help reduce the need to travel.*

Movement *- Walking, cycling and public transport are prioritised to provide a choice of transport modes and avoid dependence on private vehicles. Well designed and safe active travel routes connect to the wider active travel and public transport network, and public transport stations and stopes are positively integrated.*

Mix of Uses *- Places have a range of purposes which provide opportunities for community development, local business growth and access to jobs, services and facilities via walking, cycling or public transport. Development density and a mix of uses and tenures helps to support a diverse community vibrant public realm.*

Public Realm *- Streets and public spaces are wells defined, welcoming, safe and inclusive with a district identity. They are designed to be robust and adaptable with landscape, green infrastructure and sustainable drainage well integrated. They are well connected to existing places and promote opportunities for social interaction and a range of activities for all people.*

Identity *- The positive, distinctive qualities of existing places are valued and respected. The unique features and opportunities of a location, including heritage, culture, language, built and natural physical attributes, are identified and responded to.*

Creu Lleoedd Cymru
Placemaking Wales

4.6 The Swansea LDP puts placemaking at the heart of the Plan's overarching strategy. The LDP contains a number of policies that highlight placemaking objectives, which are consistently used in the determination of planning proposals. Policy PS2 Placemaking and Place Management in particular highlights that all development should enhance the quality of places and spaces, and respond positively to aspects of local context and character that create a sense of place. The policy states that the design, layout and orientation of proposals should accord with the principles of placemaking and, depending on the nature of the proposal, should consider relevant matters relating to:

4.6.1 accessibility,
4.6.2 green infrastructure (at all scales),
4.6.3 biodiversity gain and enhancement,
4.6.4 cultural heritage,
4.6.5 climate change resilience,
4.6.6 well-being,
4.6.7 landscape impact.

4.7 Placemaking Policy Wales 2021 defines "Placemaking" as follows:

Placemaking is a holistic approach to the planning and design of development and spaces, focused on positive outcomes. It draws upon an area's potential to create high quality development and public spaces that promote people's prosperity, health, happiness, and well being in the widest sense.

Placemaking considers the context, function and relationships between a development site and its wider surroundings. This will be true for major developments creating new places as well as small developments created within a wider place.

Placemaking should not add additional cost to a development, but will require smart, multi-dimensional and innovative thinking to implement and should be considered at the earliest possible stage. Placemaking adds social, economic, environmental and cultural value to development proposals resulting in benefits which go beyond a physical development boundary and embed wider resilience into planning decisions.

4.8 Having regard to the national and local planning context, proposals within the AONB must seek to deliver development that address the sustainable placemaking outcomes as outlined in PPW and the LDP. The outcomes should be considered in the development management process to see if a proposal can be improved or enhanced to promote wider well-being.

4.9 Future Wales and PPW emphasise the delivery of multi-functional benefits within developments through the provision of integrated Green Infrastructure (GI). GI is the term for a network of connected, multi-functional green spaces, other natural and semi-natural features and environmental management systems. These are designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaption. This network of green (land) and blue (water) spaces can help to provide a natural life support system for people and wildlife, improving environmental conditions and

therefore health and quality of life. When considering development, the starting point on every site should be to work within the existing environmental constraints and opportunities, and development proposals will need to consider GI at all scales. Some sites may form part of an important green corridor(s) at the landscape scale and may not be suitable for development. Some sites may include GI features which are important at the neighbourhood scale (i.e. boundary trees) and these will need to be retained and incorporated into proposals (see Modules G and H for further guidance).

4.10 Good design is a fundamental facet of Placemaking and key to creating sustainable places where people want to live, work and socialise. The following paragraphs and TAN 12 Objectives summarise key aspects of good design under 4 overarching themes, which are:

- character;
- environmental sustainability;
- access and movement; and
- community safety.

4.11 The TAN 12 Objectives for character are:

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

Key considerations

1. A site and context appraisal of existing character should be undertaken.
2. The Landscape Character and Settlement Statements in Appendices 5 and 6 should be reviewed. The development should integrate well with existing local character and distinctiveness.
3. The scale of development should integrate with the existing hierarchy of development, in terms of layout, plot size, height, scale and massing.
4. Development should respect existing building forms, and lines and typical set back distances.
5. Existing positive building styles, materials and colours should be considered and adopted where appropriate.
6. The potential impact on the historic environment including archaeology, listed buildings, and ancient monuments, and the setting of these historic assets should be addressed.
7. The development should be easy to navigate and understand.
8. Existing building rhythms should be respected.
9. Important views and vistas should be identified and protected.
10. The landscape should be carefully placed to create attractive spaces and selected to contribute towards biodiversity and thrive in the prevailing climate.
11. Issues of local biodiversity should be addressed.
12. High quality building materials and appropriate detailing should be used.
13. Opportunities for appropriate innovative and contemporary design should be embraced if appropriate.
14. Opportunities for sustainable design and construction should be analysed and incorporated into the development if possible.

4.12 The TAN 12 Objectives for environmental sustainability are:

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

Key considerations

Location and siting

1. The development should be located on previously used land where possible.
2. The development should fit into the existing landscape and settlement pattern/character.
3. Orientation and sun path should be considered where possible as a means of reducing energy demand.

Materials

1. Existing structures/materials should be re-used where practical.
2. Durable and sustainable building resources should be specified, including local materials and re-used and recycled materials.

Energy

1. The energy hierarchy should be considered, and ways to reduce energy demand and carbon emissions should be explored and adopted in the design development where possible (Refer to Module G: A Sustainable Design Approach).
2. The sustainability matrix should be used to assess the potential for different types of renewable energy (Refer to Module G: A Sustainable Design Approach).
3. The building envelope should be well insulated and well detailed to prevent heat loss.
4. The location, size and type of glazing should be carefully considered to minimise heat loss (smaller windows on more shadowed north facing aspects).
5. Development should strive to achieve high energy efficiency and the use of renewable and low carbon energy is encouraged (if appropriate in the landscape).

Key considerations

Biodiversity

1. Opportunities for maintaining and enhancing biodiversity through design and layout must be considered (Environment (Wales) Act, Section 6 Duty).
2. At all scales of development the potential impact on species and habitats should be assessed where necessary through an up to date ecological survey and mitigation measures incorporated if required.
3. The Council will require that development results in a net benefit for biodiversity enhancements that are fully integrated into development proposals (for further guidance refer to Module H and the adopted Development and Biodiversity SPG)..

Landscape

1. The Green Infrastructure (GI) approach should be considered and adopted for all sites, at all scales (see Modules G and H for further guidance).
2. Landscape schemes should be designed to shelter buildings from the elements.
3. Vegetation should be chosen to reduce the need for irrigation.
4. Landscape schemes should aim to improve habitats for existing species and enhance biodiversity, and provide thermal and acoustic insulation if appropriate.

Waste

1. Sustainable waste management principles (such as re-use and recycling) should be considered and incorporated if possible.

Lighting and Ventilation

2. Building form, window and vent placements should be used to achieve sufficient natural lighting and ventilation where possible.
3. Low energy lighting should be used. External lighting should be a maximum of 3000Kelvin.

Water and Drainage

1. A sustainable approach to water use, including water saving measures (such as low flush WCs and spray taps); recycling rainwater (such as rainwater collection for use in flushing toilets and garden irrigation) should be adopted.
2. Sustainable drainage (such as permeable surfaces and Sustainable Drainage Systems) should be incorporated. The impact on flooding and drainage should be assessed and any detrimental impact mitigated.

Climate Change and Adaptability

1. The development should aim to be responsive to climate change.
2. Where practicable the building should be adaptable in terms of future size and use requirements.

4.13 The TAN 12 Objectives for access and movement are:

- Ensuring ease of access for all; and
- Promoting sustainable means of travel

Key considerations

1. The development should provide safe and easy of access for all users (pedestrian, cyclist, users of public transport and vehicles) and address the Equality Act (2010) requirements.
2. The development should provide adequate and appropriately designed parking in accordance with policy.
3. The development should have safe, direct linkages to public transport facilities where available.
4. The development should have or enhance safe, direct linkages to existing community services.
5. The development should integrate into the existing pattern of streets, roads, landscape and features.
6. Appropriate linkages should be identified, strengthened or created to contribute towards permeability where appropriate.
7. Opportunities to use sustainable modes of travel should be maximised.
8. The development should support access to public transport services.
9. Provision should be made on site for cycle storage.

4.14 The TAN 12 Objectives for community safety are:

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

Key considerations

1. The built development should provide for natural surveillance over public space.
2. The development should promote a sense of ownership and responsibility.
3. Public spaces avoid/minimise any conflicts of uses.
4. The incorporation of Secure by Design features appropriate to a rural setting.

Planning Policy Wales
https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf

Technical Advice Note 12: Design
http://wales.gov.uk/topics/planning/policy/tans/tan12/?lang=en

Design and Access Statements in Wales, April 2017
https://gov.wales/sites/default/files/publications/2018-09/design-and-access-statements .pdf

Biodiversity and Development Supplementary Planning Guidance 2021
https://www.swansea.gov.uk/biodiversityspg

guidance modules

Whilst the Gower AONB is a relatively constrained location for development in comparison to the urban area of Swansea, between 2014 and 2019 (February) more than 1400 planning applications and pre-applications were determined for new development within the AONB.

5.1 As shown in the table opposite, the most significant proportion of these applications related to 'miscellaneous developments' which includes those relating to discharge of conditions to existing planning permissions, telecoms apparatus and renewable energy applications. Extensions to existing buildings are the next most significant proportion of applications, followed by caravan and camping applications.

5.2 The records show there have also been applications for new and replacement dwellings, agricultural development and works to trees protected by TPOs.

5.3 Annual monitoring of the LDP indicates that, within the AONB boundary, 395 planning applications were submitted in 2019-2020 and 350 in 2020-2021. The majority of planning applications are for extensions to existing buildiings and it is anticipated that this trend will continue. In this regard, the Guidance will provide the potential both to conserve traditional Gower buildings of merit, and to enhance inadequate, unattractive or otherwise neutral properties. Applicants seeking to extend their homes should also refer to the Council's Placemaking Guidance for Householder Development SPG for general advice on extensions and other householder works.

Application Type	%
Miscellaneous	40.5
Extensions	23
Caravan and Camping	12
New dwelling	4.7
Agricultural buildings	3.7
Tree Preservation Orders (TPOs)	3.7
Pre-applications	3.6
Replacement dwellings	2
Barn conversions	1.9
Advertising	1
Listed Building Consent	0.9
Horticulture	0is.8
Residential caravan	0.6
Conservation Area Consent	0.5
Tourism accommodation	0.5
Employment	0.3

5.4 There are however a number of LDP allocations for residential development within and adjoining the AONB, and this Guidance provides an important resource to inform any proposals that come forward at such sites. It will also be used to inform any proposals that come forward at such sites. It will also be used to inform residential schemes on unallocatied sites, such as 100% affordable housing developments that may be proposed within the AONB. Depending on the scale of these proposals, applicants should also refer to the Council's Placemaking Guidance SPGS for Infill & Backland Development and/or Residential Development.

5.5 Consultees and stakeholders that have engaged with the process to produce placemaking guidance for Gower have identified a number of key issues and concerns that the Guidance has addressed, including:

Opposite page: Oxwich Village

- The overarching need to respect the landscape
- The importance of getting the detail right in any development
- The nature and scale of replacement dwellings
- Changing social aspirations
- Pressure for larger developments
- The need for good practice guidance, and a consistent approach to be taken by planners, architects and developers.

5.6 The Guidance provides advice on a range of development types and key themes that aim to address the key issues highlighted above. The Guidance is set out in a number of 'Modules' and grouped under the following headings.

- module A: residential
- module B: agricultural
- module C: commercial and tourism
- module D: conversions
- module E: chalet development
- module F: repair and maintenance
- module G: a sustainable design approach
- module H: green infrastructure, landscaping and biodiversity
- module I: lighting

5.7 Eacah module can be read as stand alone guidance. Notwithstanding this, regardless of the type and scale of development proposed, a thorough uderstanding of the character of a site or building and its surroundings should inform the design process. In this regard, Sections 2, 3 and 4 of the Guidance should be consulted prior to referencing the relevant module(s).

5.8 The following page illustrates the general layout of the Guidance modules, highlighting the key information to assist the user to navigate the guidance.

5.9 The following over-arching policies should be taken into account for all development on Gower and will nbe referred to by the Council in the determination of planning applications, namely:

Sustainable Places
(subject to policy PS1)

Placemaking & Place Management
(subject to policy PS2)

Gower Area of Outstanding Natural Beauty
(subject to policy ER4)

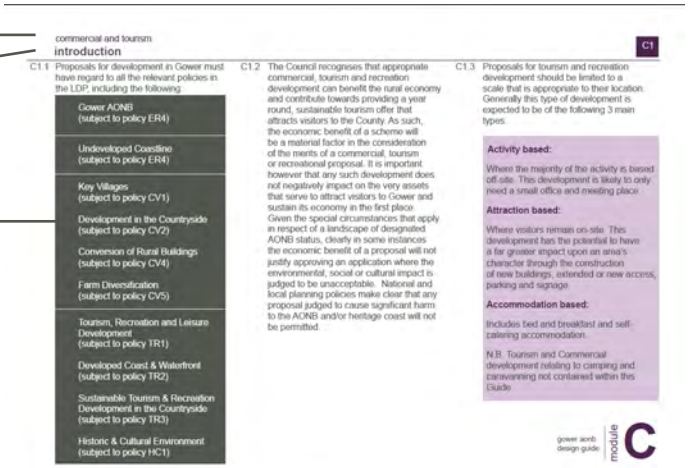
5.10 In addition to the above, each module has a number of policies highlighted which are relevant for that toipic. This is not a comprehensive list and applicants must refer to the LDP for a full list of policies, some of which may be relevant to specific planning applications.

module

title

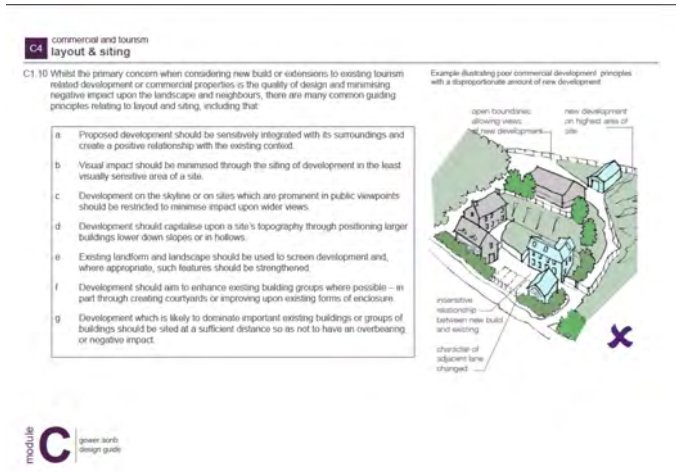
module contents

key policy tags



module paragraph

numbering starts at 1.1 preceded by the letter of the module



placemaking guidance page number

useful weblinks and references

illustrative examples

principles

module identification

section 5

gower aonb
design guide

residential

A1.1 In comparison to the urban areas of the County, there are more limited opportunities for new residential development within the AONB and the majority of work is in the form of extension or alteration to existing buildings, infill plots and replacement dwellings.

A1.2 Guidance within this module covers proposals for:

- New houses within key villages (i.e. within the boundaries defined in the Swansea LDP)
- New houses in the countryside
- Extensions and alterations

The section of this Module on 'Development Detailing' is applicable to all of these and should be read in conjunction with them.

Note that this Module does not apply to any development proposals for new or amendments to existing residential chalets, due to the special character of these dwellings and the areas within which they are located in the AONB. Specific guidance for new or extended residential chalets within the AONB is provided on Module 5E of the Guidance.

Traditional: Landimore

Modern Vernacular: Bank Croft, Llanrhidian @Raum Architects

Contemporary: Pennard Image ©Hyde + Hyde Architects

A1.3 The following three schemes illustrate well considered, high quality but contrasting approaches to designing in sensitive rural areas:

A. Traditional: Landimore
B. Modern Vernacular: Bank Croft, Llangennith
C. Contemporary: Pennard

A1.4 Whether traditional, modern vernacular or contemporary in design, all proposals will need to demonstrate that they are:

- Clear in their vision/approach to design;
- Of the highest design quality;
- Sensitive to their surroundings in terms of layout, scale and massing, and;
- The choice of materials and detailing is appropriate to its context, form and function.

A1.5 Certain approaches to residential development will not be considered appropriate anywhere within the AONB and should be avoided, these include:

- Executive or suburban style houses

- Pastiche approach to design (poor attempts to copy historic styles)
- Heavily stylised development (such as mock Tudor and neo-Georgian)
- Poorly designed or standard 'off the peg' kit houses and bungalows
- Overtly sustainable designs, which do not respond to context.

A1.6 Proposals for residential development in Gower must have regard to all relevant policies in the Swansea LDP, which will vary depending on the nature of the proposal. These include the following key policies:

Placemaking and Place Management (subject to policy PS2)

Development in Key Villages (subject to policy CV1)

Development in the Countryside (subject to policy CV2)

Replacement Dwellings (subject to policy CV3)

Local Needs Affordable Housing (subject to H5)

100% Affordable Housing Exception Sites (subject to policy H8)

A1.7 Applicants seeking to bring forward residential proposals should also refer to the appropriate Placemaking Guidance for Infill and Backland Development, and Placemaking Guidance for Residential Development. These provide guidance on a range of overarching placemaking principles for consideration.

The opportunities for residential development in the designated countryside outside the boundaries of the AONBs key villages (as defined in the Swansea LDP) are normally limited to:

- Rural enterprise dwellings;
- Affordable housing to meet local need; and
- Replacement dwellings.

The development of Affordable Housing for Local Needs may be permissible within the countryside at appropriate brownfield sites and/or within appropriate small groups of dwellings in the countryside, depending on the nature and scale of proposals. LDP Policy CV2 highlights that such small groups must contain five or more dwellings, consist of a continuous line of dwellings, or a close group of dwellings, adjacent to a highway and have reasonable access to facilities and services, for a rural location.

A1.8 New residential development must successfully integrate with its surroundings, taking into account the character of the key village or settlement in which it sits .In order to achieve this it should reinforce the existing rural character and avoid implementing development of a typical suburban form. It should seek to promote or reinforce traditional and local distinctiveness, by respecting the pattern of the arrangement and size of buildings, their plots, and the general range of building styles and materials.

A1.9 New residential development should provide adequate and sensitively integrated car parking, the visual impact of which should be minimised through the use of appropriate screening to ensure parked cars do not dominated the ploit to wider streetscene. Within settlements, parking in front of buildings should be avoided as this is likely to have a negative impact upon the streetscape and lane character. The integration of electric charging points should be considered.

A1.10 Whilst it is important to take into account a site's surrounding context, new development should respect only the best qualities of neighbouring properties whilst aiming to enhance the settlement's character.

A1.11 The requirement for development to be sympathetic to the character of the key village is not intended to discourage innovative and sensitive design approaches, as long as they do not harm the character and amenity of settlements.

A1.12 As with residential development within key villages, new dwellings in the countryside need to integrate with their rural surroundings, taking into account not only the character of any adjacent buildings but also the landscape in which they sit. They should take into account views of both local and Gower wide importance, together with landscape characteristics such as the 'openness' or 'containment' of a particular site.

A1.13 As part of this guidance, settlement character statements have been produced to highlight the key characteristics of the AONB's key villages, smaller settlements and conservation areas. These can be found within Appendix 6. These statements should be used to inform design decisions and be referenced in any supporting DAS or planning/design statement submitted as part of the planning application process. The Statements should be considered with other related guidance and baseline information including LANDMAP and the Gower Landscape Character Assessment (2013).

A1.14 If existing buildings are proposed to be demolished, then this may require separate planning permission if the building is located within a conservation area. Furthermore, demolition of buildings may impact on protected species and investigatory surveys, protection during construction and mitigation measures may need to be approved as part of the application process (see Module H for further information).

A1.15 If protected species are found unexpectedly during the course of works, it is advised that works stop immediately and the advice of the local authority ecologist or Natural Resources Wales (NRW) is sought prior to the continuation of works.

A1.16 In addition to the requirements for protected species the Development Plan (compromising Future Wales and the Swansea LDP) places significant emphasis on the use of innovative, nature-based solutions to site planning and design of the built environment, and specifically highlights these as key elements for successful placemaking. The Council also has a legal duty under Part 1, Section 6 of the Environment (Wales) Act 2016 ("the S6 duty') to seek to ensure development within Swansea maintains and enhances the County's biodiversity and delivers long term ecosystem resilience. Future Wales

Above: Rhossili, with St. Mary's Church to the right and village green in foreground. Key elements of the conservation area and which add to the character of the key village.

Policy 9 requires all applicatons to demonstrate the actions that have been taken to maintain and enhance biodiversity, ecosystem resilience and green infrastructure assets. This policy requirement is supported by the guidance in PPW that sets out the requirement for a 'stepwise approach' to considering biodiversity in the planning process and securing overall enhancement.

A1.17 The Council has adopted SPG entitled "Biodiversity and Development" which sets out how the LPA will apply the PPW required 'Stepwise approach' at the local level. It is necessary for the Council to determine whether planning applications have followed the stepwise process, and confirm whether appropriate enhancement is proposed to deliver biodiversity net benefit, ecosystem resilience and an integrated network of Green Infrastructure (GI). This will enable the Council to demonstrate appropriate compliance with the relevant legislation and policy. For further information on the 'stepwise' approach and how biodiversity should be considered from the outset of a proposed developed, refer to the Biodiversity and Development SPG.

A1.18 The Development Plan places significant emphasis on the importance of placemaking and the integration of multi-functional GI. Welsh Government and Swansea Council are also signatories to the Wales Placemaking Charter which sets out the placemaking principles to be applied to all developments. Similarly, placemaking and GI is central to the Swansea LDP, as emphasised in Policies PS 2 and ER 2. These state that all proposals should be assessed having regard to these key principles, and should enhance the County's GI network. Policy PS2 also emphasises that development should enhance the quality of places and spaces, and respond positively to the aspects of local context and character that contribute towards a sense of place. The policy states that the design, layout and orientation of proposed buildings, and the spaces between them, should provide for an attractive, legible, healthy, accessible and safe environment, and must not cause unacceptable impacts on people's amenity.

A1.19 Future Wales makes clear that specific opportunities should be identified, including through GI Assessments, to ensure that GI is fully integrated into development schemes. The rural and semi-rural environment of Gower means that opportunities in relation to important connectivity linkages to habitats and features within and outside development site boundaries should be explored. The GI solutions should fully embrace the health and wellbeing, placemaking and sustainability aspects of GI, as expected in national and local planning policy and not just focus on drainage and landscaping solutions within the site. Correct boundary treatments in order to integrate a site into the wider rural landscape will be particularly important. Further information is contained within Module H and Appendix 8 and the Tree and Development SPG.

A1.20 Proposals for residential development in Gower must have regard to all relevant policies in the Swansea LDP, which will vary depending on the nature and location of the proposals, including whether the site is located within the boundary of a key village as defined in the LDP or outside these in the open countryside. These include the following:

Siting and location (subject to policy PS2)	Small scale housing development (subject to policy CV1, H5, H6)	Infill plots (subject to policy CV1, CV2)

A1.21 Whether or not a site is within the boudnary of a key village or is adjoining a group of dwellings in the countryside, part of its character is often how the relevant buildings relate to one another. New development should respect the relationship between existing and proposed buildings. It is important to note that gaps between buildings can be of equal importance to the buildings themselves, particularly if they provide key views into and out of the settlement. Consequently it should be noted that the development of such gaps may not always be appropriate.

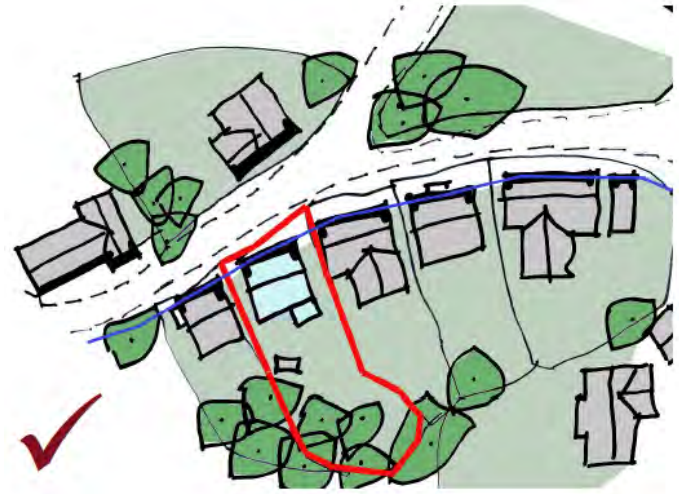
A1.22 The following design principles relating to siting and layout should be considered:

a Development should reflect existing positive development patterns, taking into account:
- The average distance that buildings are set back from the road
- If there is a defined building line and/or orientation of frontages
- The typical distance between buildings
- If there is a common building type: detached, semi-detached, terrace
- If there is locally distinctive boundary detailing
- Parking provision should not be a dominant feature and should be contextually appropriate

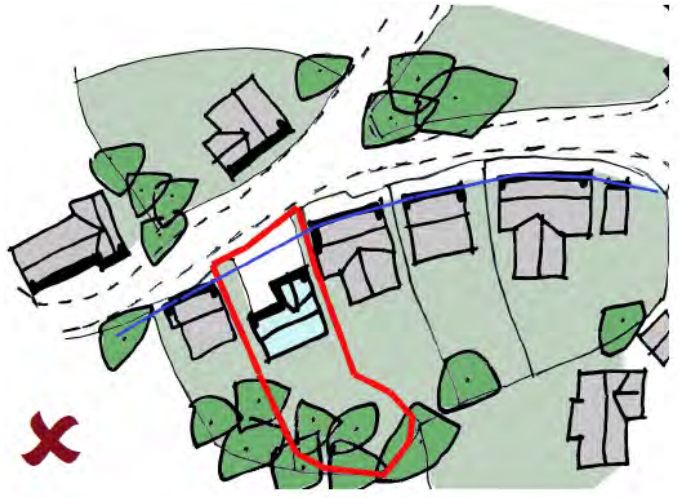
b Development should respect the amenity of neighbouring properties and should not have an overbearing impact, overshadow or overlook them, and should therefore consider:
- If there are any windows overlooking the site
- How close the neighbouring building is to the boundary

c The suitability of site for passive solar design should be determined by assessing:
- If this is an approach appropriate within its context (refer to Section 4: Placemaking Objectives)
- The scale and massing of the proposal

d Development should not impact on protected species and should maintain and enhance biodiversity.



Above: New building follows existing building line and massing



Above: New building set back from the frontage with massing and design different from adjoining building

A1.23 This section sets out the principles that will be applied to ensure proposed developments relate well to their surroundings, particularly in terms of their scale and massing in such sensitive locations. Definitions for these terms are provided below:

Scale:

The impression of a building when seen in relation to its surroundings, or the size of elements of a building as experienced in relation to the size of a person.
The actual dimensions of a building and the combination of its elements give a sense of scale and are a key consideration in assessing appropriate designs.

Massing:

The combined effect of the height, bulk and silhouette of a building or group of buildings. This is another key consideration of design and overly large or dominant buildings will not be supported.

A1.24 The adjacent sketch illustrates the typical anatomy of a Gower cottage, paying particular regard to scale and massing This diagram should be used to inform proportion, illustrating that elongating or enlarging key dimensions results in the

Above: Typical Gower cottages, Penrice

loss of those characteristic proportions. The diagram can typically be used as the basis for an acceptable approach to traditional design, but a well designed, well proportioned, well detailed vernacular house that exceeds the dimensions illustrated may be acceptable based on an assessment of the site context (and other considerations). Further information regarding detailing is included elsewhere within this module.

A1.25 Variety in building heights can create attractive and interesting roofscapes within Gower's villages and should be encouraged where appropriate. However, changes in level should not be visually jarring, rather they should encourage a gentle transition between buildings.

A1.26 Settlements comprise of differing sized building footprints, resulting from the evolution and extension of individual buildings. Proposals should respect this pattern of development through appropriately sized building footprints.

Variety of building heights and roof forms results in a lively, articulated streetscape: Llanmadoc

A1.27 The scale of development should generally relate to its surroundings, both in terms of height and footprint, and the following design principles should be considered:

a Development should respond to adjacent building heights and to those within close proximity to the site, taking into account:

- If the area is characterised by single or two storey buildings
- The existing maximum and minimum eaves/ridge heights

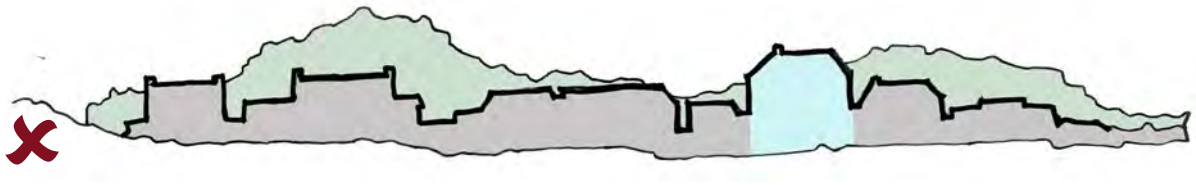
b Development should reflect local patterns of development, assessing:

- The average percentage of site coverage
- The typical size of buildings within the local context

c Development should respond to site topography taking into account

- The natural slope of a site and avoiding skyline locations
- Any significant change in level across the site and,
- Whether it can be utilised to minimise the impact of proposed development

Above: New building in scale with existing street scene



Above: New building out of scale with existing street scene

Above: Sub-dividing a house into a number of visually distinct elements can reduce its overall visual impact, creating a more sensitive form of development

Below: The use of computer graphics illustrate how the same house may look without articulation

- massing inappropriate to its village setting

A1.28 The massing of a building or group of buildings includes a combination of height, volume and silhouette arising from its form. It is this overall visual composition which is read alongside existing development and, as such, the following design principles should be considered:

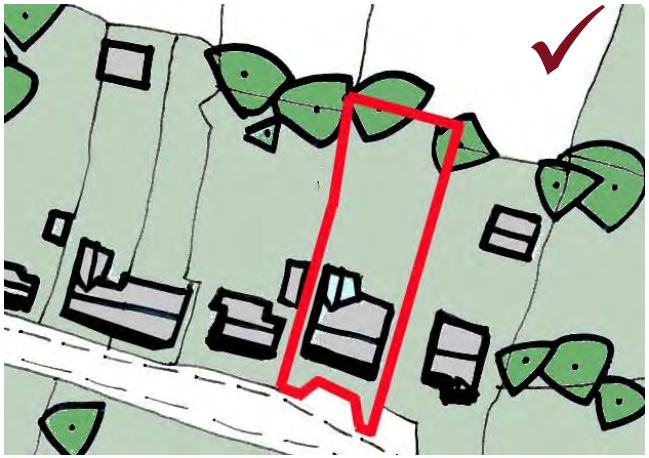
a The size of surrounding properties should be used as a means of determining an appropriate building footprint and preventing the over-development of the site

b Simple, additive forms are a characteristic of Gower and are to be encouraged. Such an approach can also help to break up the massing of larger buildings to make these more acceptable in design terms.

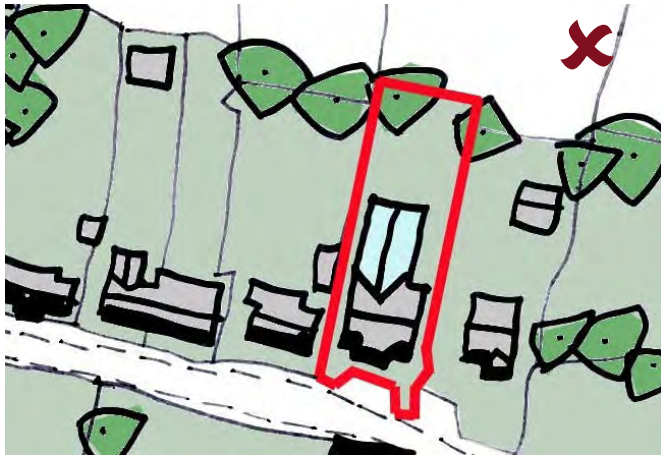
c Large, square or overly long, rectangular shaped plans should be avoided, as they result in single, 'boxy' building forms.

d Roof forms should be uncomplicated, although incorporating a number of roof elements can reduce the overall impact of a new building. Careful consideration of roof pitch and plan depth is also essential in minimising ridge heights. (Further guidance on roofs can be found within this module).

Below: New building footprint in scale with surrounding properties and in proportion to site area



Below: New building footprint out of scale with surrounding properties resulting in over development of site



A1.29 The following two examples provide the opportunity to compare differing approaches to housing design within two areas designated for their special quality.

A1.30 The first is a new house at the centre of a village in a National Park, the second a new house in Landimore, Gower. Although, geographically they are some distance apart, architecturally the two areas have enough similarities between their local vernacular style to allow for comparison.

A1.31 Whilst both properties are of a similar scale they clearly illustrate the importance of appropriate detailing in the creation of a building which is both suitable to its setting and enhances its surroundings.

A1.32 These examples highlight some of the typical assessment considerations undertaken as part of the planning process for new traditional dwellings in the Gower AONB. It is therefore recommended that applicants/agents consider such issues against the local context as part of the design process.

New house in designated National Park

Example of a poor design response to local vernacular and context.

a Simple pitched roof parallel to road - broken by uncharacteristic two storey projecting bay/gable element to front

b No porch

c Horizontal emphasis to openings

d uPVC windows with inappropriate fenestration pattern

e Cills not discernable from window surrounds

f Suburban style, uPVC door

g Mock ‘stone’ quoins to corners are uncharacteristic of surrounding properties

h Undersized chimney

i Post and rail timber fence to front boundary

j Building set back from road

New house in Landimore, Gower

Example of a good design response to local vernacular and context

a Simple pitched roof parallel to road

b Well proportioned porch

c Simple detailing to elevations

d Square and vertical emphasis to openings

e Timber windows of an appropriate style (sash) and fenestration pattern

f Stone cills

g Appropriate door design, in timber

h Well proportioned chimney

j Traditionally detailed stone wall to front boundary

j Building slightly set back from road, with small front garden enclosed by stone wall

design principles for larger scale residential developments

A1.33 Many new homes in Gower will be developed within key village boundaries or replacement homes on existing plots. In these instances the placemaking framework at the more strategic scale is already set by the existing context of frontages, gaps, building lines etc. However where developments create new shared areas such as streets and lanes, there is a need for the strategic placemaking to draw on the valued rural character. To be clear, standard suburban layouts will not be acceptable in Gower due to the harm to the established character.

A1.34 Nationally there is an emphasis on Placemaking and Green Infrastructure and for Gower this means new place led streets/ lanes that have green infrastructure within the streetscene. This could, for example, include the distinctive grass verge frontages with stones that characterise many Gower villages. The highway adoption process recognises the requirement for place-led streets and non-standard street designs will be adopted where requirements for visibility, manoeuvring and safety are met. The relationships between new homes is also important; rigid suburban layouts will not be supported; rather a more informal varied juxtaposition of buildings is expected. Cars must certainly not dominate these environments. The intention is not to preclude innovation rather to set an expectation for new places clearly related to the rural character of Gower.

A1.35 Successful examples of this approach include:

- **Redevelopment of North Gower Hotel** - This scheme of 14 houses including 4 affordable homes recreates a Gower lane with varied kerb line, strong enclosure by stone walls, a turning area as informal space and houses designed for the context.

- **Affordable Housing Scurlage** - This scheme of 14 affordable homes demonstrates that the national Design Quality Requirements can be adapted to ensure the new homes can be related to the Gower context.

- **Pennard Drive** - This scheme of 70 houses including 36 affordable homes recreates Gower lanes on a large scale. A strong feature is new grass verges with block stones as seen throughout Gower. Stone walls provide strong enclosure. Frontages are designed as cottage gardens and again the national Design Quality Requirements are adapted to ensure the new affordable homes are distinctive to Gower. The colours were also carefully considered with many darker window frames, use of traditional render tones including one house referencing the ox blood of Kennexstone.

Above: Affordable Housing, Scurlage

Below: New build Pennard.

Above: View from Llanmadoc Hill across towards North Hill Tor

A1.36 This section provides specific guidance on the principles that apply to proposals for replacement or new dwellings on sites in the countryside outside the AONB key village boundaries defined in the Swansea LDP. In such locations there is a particularly high threshold for standards of design.

A1.37 Importantly, where existing dwellings are considered to make a positive contribution to the rural character of an area, its replacement will not be supported. In instances where a replacement dwelling is considered appropriate in principle, then the replacement must be of high quality and seek to enhance its setting in terms of siting, scale, design, and character by comparison to the existing house which is to be demolished.

A1.38 It is not the intention of the LDP or the Guidance to stifle appropriate modern or innovative designs which are sensitive to the AONB (see Policy PS2) or to restrict proposals which would complement the character of Gower (see Policies ER4 and CV3). It would be a missed opportunity for example not to replace an existing nondescript or poorly designed dwelling with a better designed dwelling that enhances the appearance and character of the locale and the AONB.

The following principles for replacement and new dwellings in the countryside must be considered:

Siting and Scale

A1.39 The siting of a replacement dwelling will in most cases be expected to be similar to the position of the existing house in order to maintain the overall landscape character. In exceptional cases, a building may be sited differently on site if it results in a more sensitively sited building than the existing building, but must remain within the same curtilage.

A1.40 Replacement dwellings that are significantly larger than the exsiting house will only be considered favourably where the design can be demonstrated to be of exceptionally high quality, however there is a limit to the 'visual/environmental capacity' of every site and some sites will inherently not lend itself to such significant increases. Therefore, every scheme will be considered on its merits and contextual visual material such as photomontage images from public viewpoints will usually be required.

Design and Character

A1.41 There may be considerable scope to depart from the design and character where an existing dwelling is not considered to be of architectural merit. In this regard, the Guidance suggested three possible contextual design styles;

- contemporary
- modern vernacular
- traditional

A1.42 All approaches to design style for replacement and new dwellings in the countryside must exhibit a commitment to high quality and the Council may refer schemes to the Design Commission for Wales to gain their expert impartial opinion in this regard. In the case of traditional designs, the materials, details and workmanship must result in a convincing replica of a traditional Gower house not a pastiche or generic design.

A1.43 The use of high quality materials including traditional render types, natural slate, and timber windows are critical to the overall authenticity and integrity of the traditional design. In contrast, contemporary or

Above: House above Landimore

modern vernacular designs could draw on a wider range of materials provided they are an integral part of the scheme and help blend the dwelling into the AONB landscape. Light spill from large window voids can in some instances result in impacts on tranquility and biodiversity. Special consideration must be given to the issue of light spill resulting from the design of any building (refer to Module 5I for further details).

A1.44 The external colour of a building is important. An appropriate colour scheme can provide significant landscape and visual enhancements. These can range from effectively minimising the visual appearance of a utilitarian building to emphasising the distinctive character and qualities of a place through architecture expressed in colour, form and massing. Environmental Colour Assessment (ECA) is an objective process that helps to resolve many of the issues associated with colour selection and specification, especially in the external environment. ECAs can accompany planning applications alongside Landscape and Visual Impact Assessments and Appraisals (LVIAs/LVAs), since the topics are interrelated.

A1.45 It is important to consider the wider colour context, such as surrounding land, water of sky, in order to ensure appropriate colours are applied. Similarly the texture of the landscape setting should inform the colour and material choices. An analysis of the depth of relief, play of light and shade and range of tactile surfaces on local building materials, vernacular detalling, dominant vegetation and ground finishes will help determine appropriate finishes and textures for a development.

Sustainability

A1.46 In addition to being of high quality design and materials, proposals for replacement and new dwellings in the countryside should also be exemplars of sustainability in terms of resource efficiency and climate responsiveness. Such proposals should therefore be supplemented with a supporting statement setting out the sustainability strategy/technologies to be incorporated into the

dwelling. All sustainable technologies will be expected to form an integral element of the design and must respect the qualities that underlie the AONB designation. It should be noted that a high level of sustainability alone will not result in favourable consideration of a poorly designed scheme which does not respond to the context.

Siting and location (subject to policy PS2)

A1.47 There is the potential for new dwellings within the countryside to have a significant impact upon the character of the landscape and quality of the AONB. The following design principles relating to siting and layout apply:

a Replacement development should maintain or enhance existing positive relationships to other buildings and/or building groups, as well as established hedgerows and mature trees wherever possible.

b New development should reflect traditional layout and groupings.

c Proposals should aim to improve upon the existing situation – a replacement dwelling may be able to be more sensitively sited than the existing building but must remain within the same curtilage.

d New development should respond to its site's particular landscape characteristics. Impact can be reduced by use of landform and existing features such as walls, hedges and trees to enclose or protect a site (Refer to Appendix 5: Landscape Characterisation).

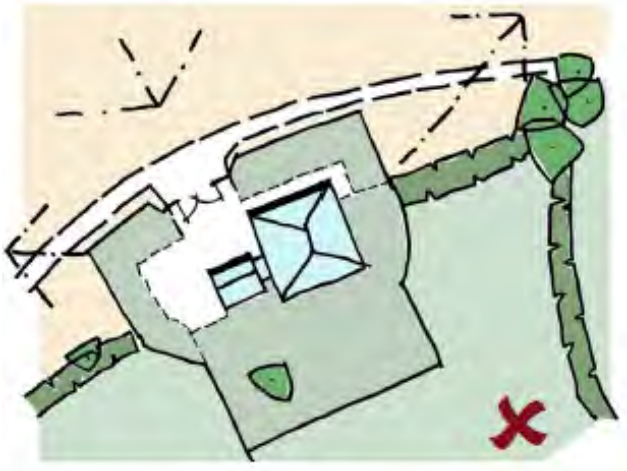
e The siting of a development should not have a negative impact upon any key views or the wider landscape. Generally buildings should not sit on ridgelines or break the skyline.

f The site should be assessed to determine whether it is suitable for passive solar design, if appropriate to its context (Refer to Section 4: Placemaking Objectives).

g Development in environmentally sensitive locations, including important landscape, habitat or archaeological areas, will be resisted.

Above: Detached dwelling rotated to allow for views through to the countryside, important hedgerows maintained massing in clusters hidden by landscape features and soft landscape planting

Below: Insensitive location of the buildings, removal of hedgerows and creation of garden to front detracts from the long views



A1.48 Whilst there may be no immediate built context, the scale and mass of a proposal should be considered with regard to the landscape setting. The following key principles should be used as a guide:

a Replacement dwellings should not have a more significant visual impact than the existing building.

b A building's height should not impact upon key views or break the skyline.

c As with siting, replacement dwellings should take into account current usage/area requirements as 'like for like' replacement may not be appropriate.

d Simple, additive forms are a characteristic of Gower and are to be encouraged. Such an approach can also help to break up the massing of larger buildings to make these more acceptable in design terms.

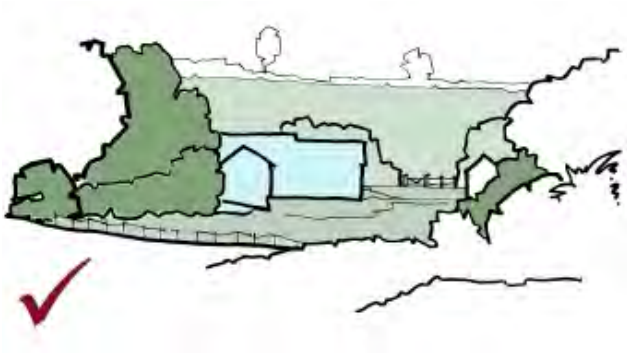
e Large, square or overly long rectangular shaped plans should be avoided as they result in single 'boxy' building forms.

f Roof forms should be simple in appearance and should illustrate the hierarchy of spaces within the building (further guidance on roof forms is provided within this module).

g Contemporary development proposals will need to be able to demonstrate high quality design which reference the local context and enhance their landscape setting.

h Development should complement existing adjacent buildings or groups of buildings in terms of height and massing.

i Imaginative/ innovative approaches to reducing the impact of the scale of new development may be an appropriate response for particular site conditions.



Above: Development takes advantage of existing landform and landscape structure. Massing and arrangement of elements reduces visual impact. Boundary treatment appropriate to context.

Below: Development breaks the skyline and does not relate to existing landscape or landform. Inappropriate boundary treatment for context.

A1.49 As the photograph below illustrates, development within the countryside can have a significant impact upon long range views. The examples on these pages illustrate projects in the Gower AONB and other areas of significant landscape quality. Whilst all display high sustainability credentials, they have addressed creating a relationship with the landscape in differing ways.

Image © Loyn & Co Architects

A1.50 Stormy Castle lies at the junction of two landscapes, Llanmadoc Hill to the north and farmland to the south. This highly insulated earth sheltered house is of a lower height and scale than the existing dwelling it replaces. Materials and colours complement its surroundings and wider setting, resultingthree possible contextual design styles; in a contextual building which embeds itself in the landscape, minimises visual impact and is at one with its setting.

Above: Stormy Castle

Below: Stormy Castle from Kyfts Lane

Hill Barn/ Underhill House, Cotswolds

A1.51 Hill Barn and Underhill House incorporates a converted barn and earth sheltered/ underground eco-house, and is situated within the Cotswold AONB. It is the first dwelling to achieve 'Passivhaus' status within the UK and is almost entirely invisible from the surrounding countryside.

Image ©Samuel Ashfield Dow Building Solutions & Sto Ltd.

TheTillers, Llanrhidian

A1.52 A modern resplacement house in Gower. A simple form, minimal detailing and colour palette and materials that allows the building to integrate with the landscape backdrop, making reference to agricultural buildings and the rural context..

Image ©TPS Planning + Architecture

Bank Croft, Llangennith

A1.53 A new build detached dwelling within the grounds of a working farm, on the edge of the village settlement boundary and within a conservation area. The design has contextual references to historic long barns prevalent in the area and is sympathetic to the surrounding forms of agricultural buildings. The scale and materials used in construction enable the building to blend with the surroundings. Sustainable energy sources feature within the build including Air Source Heat Pump, PV's and a charging point for an electric car.

Image ©Raum Architects

A1.54 Proposals for residential extensions and alterations must have regard to all relevant policies in the LDP, including the following:

Residential extensions and alterations
(subject to policy PS2)

A1.55 Extensions and alterations make up a substantial proportion of planning applications within the AONB and both individually and in combination have the potential to have a significant impact upon its character. Applicants seeking to undertake such works should also refer to the Householder Design Guide SPG for general guidance points. This guidance does not apply to proposals for extensions or alterations to existing, residential chalets, which is due to the special character of these dwellings and the area within which they are located in the AONB. Specific guidance for extensions or alterations to residential chalets is provided in Module 5E of the Guidance.

A1.56 Proposals should respect the local character, although this does not necessarily mean that it should mimic the existing character. Well considered, appropriately proportioned and detailed contemporary additions can enhance both the host building's character and that of the wider area. Consideration needs to be given from the outset of a project as to what approach is most appropriate – traditional or contemporary – but both should be sensitive to the context. Proposals which fail to respect or diminish the character of the host building or wider locality will not be supported.

A1.57 The key guiding principle in relation to the extension or alteration of an existing building is to respect the integrity of the original building. An extension should generally be subordinate to the existing building in terms of scale, massing and volume, and the amenity of neighbouring properties must be respected.

A1.58 Properties which are considered to have special historic or architectural character have additional protection and, if listed, extra permission will be required for most alterations and other works that affect the building both externally and internally. If you are uncertain whether a building is listed either check on the Council's website or contact the development management placemaking and heritage team.

A1.59 For general guidance on amenity considerations such as overlooking, overbearing and overshadowing, refer to the Placemaking Guidance for Householder Development SPG. Please note that in some instances, such as conservation areas, the close knit character of the area may take precedence over the achievement of amenity standards that are derived from modern suburban areas.

Above: traditional extension, Llangennith

Above: contemporary extension to a Grade II listed thatched cottage, Oxwich

what is the exisiting character?

A1.60 In order to begin to understand the existing character of a site, building and wider context, the following guidance should be taken into account.

A1.61 Consider the character of the existing house and its relationship to the plot, in particular:

- a What type of house do you have?
- b Is your house of a particular architectural period?
- c What is the shape of the roof?
- d What is the orientation/principal elevation of your house?
- e Does your house have any distinctive features?
- f What is the arrangement of windows and doors?
- g What materials have been used?
- h What are the car parking and access arrangements serving your house?

A1.62 Consider the character of the street and surrounding area, in particular:

- a Respect the 'Building Line'. Ensure your development respects the line created by other houses/building frontages in the street.
- b Recognise the height of surrounding buildings – the height of your house and other buildings will limit the height of an extension to your property.
- c Note the spaces between buildings. These are as important as the buildings themselves in creating the street scene.
- d Have regard to existing frontage boundary treatments. Boundaries help to distinguish between public and private areas and can present an important and unifying design feature within the streetscene. Poorly designed boundary treatments or those finished in inappropriate materials will not be supported.
- e Respect mature trees, hedges and other planting. Existing natural vegetation can contribute significantly to the setting of a house and attractiveness of the streetscene.
- f Consider what makes your home and the street feel safe. Think about what qualities of your home and street make you, other residents and pedestrians feel safe, and how this can be preserved or enhanced.

A1.63 Further information on the key characteristics of Gower's settlements are included within Appendix 6 of the Guidance.

scale & size

A1.64 It is important to note that there is a point at which an extension can become too dominant, and the following design principles should be considered:

a The scale of extensions should generally relate to their context, both in terms of height and area.

b Extensions should remain subordinate to the original dwelling in order that they do not have an adverse impact upon the overall composition of the building.

c The cumulative effect of numerous extensions over a period of time can prove detrimental to the character of both the building and its surroundings and, as such should be avoided. Proposals to extend will therefore be assessed against the character and form of the original dwelling.

side extensions

Extension lining through with existing building line may be appropriate. Lower ridge, with roof pitch to match existing.

Width of extension must not exceed half width of existing house.

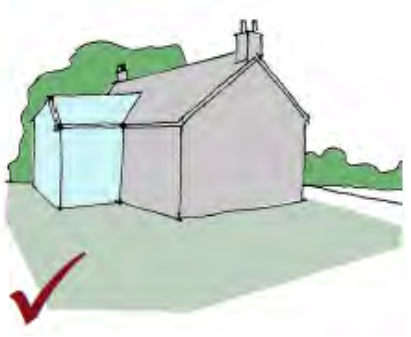
Extension set back from the building line and smaller in scale to the existing building, with roof pitch to match existing.

Width of extension must not exceed half width of existing house.

Extension obscures the form of the existing building

Extension in front of existing building line and over scaled, with flat roof

rear extensions



Roof pitch to match existing and ridge set lower than the existing.

Extension must not exceed the depth of the existing building.

Flat roof dominates existing building form. Extension must not exceed the depth of the existing building.

A1.65 The following design principles relating to the siting, massing and form of all extensions should be considered:

a The positioning of an extension needs to take into account the amenity of any neighbouring properties (Further guidance is provided in this module).

b Extensions to the front of buildings will rarely be acceptable, unless it is a minor addition such as a porch (Further guidance is provided in this module).

c Proposals should be subordinate in both height and scale, and the ridgeline should be lower than the main building. Generally this means that the width of an extension to a traditional dwelling should be no more than half the width of the existing building. Any new roof which runs in line with the existing should mirror its angle.

d Generally extensions should be set back from the front building line, unless the local vernacular is to the contrary. This helps to retain the integrity of the original building and allow for appropriate detailing of the junction between the existing and new.

e Extensive, flat roof extensions are generally considered unacceptable as they dominate the original building, detracting from both its character and form.

f It is important to note that due to Gower's settlement pattern the rear of many properties are visible, such that equal care should be taken when considering both the scale and execution of rear extensions as well as with those to the side.

A1.66 Where it is difficult to integrate an extension, consideration may be given to offsetting the new element from the existing and linking the two elements with a third. This can often be a successful approach when providing additional accommodation for older dwellings and also as a means of linking smaller elements of conversions. However the offset new element must still be appropriately subservient to the main dwelling.

Above: Subordinate extension (right) to traditional cottage, Landimore

Below: The Nook, Oxwich is an example of a contemporary linked extension which has won a number of design awards

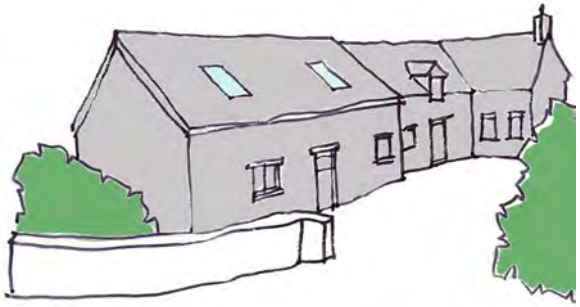
extensing upwards

A1.67 The desire for additional floorspace often leads property owners to consider extending upwards into the roofspace as a convenient alternative to undertaking building works and a means of maximising the building's volume.

A1.68 Owners should consider whether such alterations are structurally possible and whether such an approach will deliver the required accommodation, whilst retaining the integrity of the existing building.

A1.69 Reducing the ceiling level to the first floor can increase the capacity of the roofspace without altering the external appearance of the dwelling and should be the first option considered. These works can be an integral part of strengthening the floor to the loft conversion.

A1.70 The following examples illustrate that the extension into a roof space can be achieved in a number of ways, but that certain solutions may not be appropriate. Proposals that fundamentally alter the character of the dwelling, such as raising the ridge or eaves or other significant changes to the roof form, will rarely be considered acceptable.



✓ **1. Rooflights:** this approach retains the existing building height, roof form and character, but may limit usable space.

(Further guidance on rooflights is included within this module)

✗ **3. Raising the eaves:** this approach retains the existing building height but the reduction in roof pitch detracts from the original character of the building.

✓ **2. Dormers:** this approach retains the existing building height, complements the existing character, whilst potentially providing a more useable space than option 1 above.

(Further guidance on dormer windows is included within this module)

✗ **4. Raising the ridge:** this approach fundamentally changes the character of the existing building and the relationship between its various parts.

Sunrooms/Conservatories

A1.71 As with other extensions, the addition of a conservatory should respect the scale and character of the existing building, and amenity of adjacent dwellings.

A1.72 When considering bespoke design, simple and well proportioned structures are more likely to be appropriate than over-detailed 'period' styles.

A1.73 The preference is for timber construction but, if other materials are to be considered, the design should be to be sensitive to the main building. Frame colour should also be carefully considered. Darker shades regress whilst lighter finishes are more likely to dominate. The use of uPVC and polycarbonate (particularly white coloured) should be avoided unless the context and/or proposed details suggest otherwise. Significant use of uPVC will not be considered acceptable for such proposals.

A1.74 Often a 'garden room', with glazed walls and a solid roof would provide the required space in a more appropriate style than a conservatory.

Above: Garden room with timber detailing and slate roof: Southgate

Below: Inappropriate style and choice of material for a conservatory within Gower

Garages and Outbuildings

A1.75 Generally garages and outbuildings should be logically sited close to the main building, with a sufficient set back to ensure they are not obtrusive. Proposals to the front of dwellings will not typically be supported.

A1.76 Their size and massing should not dominate and the design should not be utilitarian in approach. Particular care should be taken if incorporating an upper floor, such as a workspace. The inclusion can result in the building adopting a residential character and should be avoided.

A1.77 Traditional domestic garages and outbuildings have a pitched roof design. As such flat roofed garages and outbuildings serving traditional dwellings will not typically be considered acceptable. Proposals for garages and outbuildings to contemporary dwellings should reflect the character of the dwelling they would serve.

A1.78 Darker, more regressive colours can help to reduce the impact of larger elements such as garage doors. Vertical emphasis within single garage doors can often help in limiting the inherent horizontal nature of double garages.

A1.79 Careful consideration should be given to the scale and siting of other ancillary buildings such as sheds and greenhouses, which should be modest in scale and have limited impact on either neighbouring properties or boundaries with the open countryside.

A1.80 Properties may also be extended through the introduction of smaller elements which have the potential to impact upon the building's character and that of its surroundings. These include porches and balconies:

Porches

A1.81 Traditional Gower porches were generally simple, masonry structures with pitched roofs. They would originally have been open structures but, over time, many have added an outer door and/or have had side windows incorporated. New porches should take their lead from this simple approach and be well proportioned in relation to the main building. A separate door should be provided between the porch and the main house. Larger conservatory styles and over-ornate structures should be avoided.

Top right: Traditional open porch with slate roof : Penrice
Bottom right: various, inappropriate balcony styles

Balconies

A1.82 Whilst balconies can provide additional amenity space, particular care needs to be taken in respect of neighbouring amenity, visual impact and appropriateness of design. Balconies on visually prominent elevations of a building will generally be resisted, particularly within settlements. Generally balconies should be recessed rather than projecting in order to limit visual impact. The character of the existing building should not be compromised, therefore the balcony structure should complement it both in its style and size. Likewise, the appropriateness of the inclusion of a Juliet balcony will be dependent on the character of the individual dwelling.

A1.83 The greatest potential visual impact is the balustrade element of a balcony. Whilst timber might at first appear to be an appropriate and sustainable approach, it can dominate if not carefully detailed. Similarly, glazed balustrades which would appear to provide minimal visual intrusion can have a far greater impact when taking into account the potential for glare. Alternative options should be considered which provide minimal visual impact as well as respecting the prevailing character of the existing dwelling and wider locality.

Example 1: Sympathetic repairs and alterations

a Simple fenestration patterns to windows, retaining vertical emphasis

b Existing chimney retained or new chimney constructed to appropriate size and proportions

c Single storey element re-roofed in material to match existing main house

d Front door in keeping with simple detailing of existing house, and simply decorated porch

e Decoration kept to simple, muted colours

Example 2: Unsympathetic repairs and alterations

a Inappropriate fenestration patterns to windows and introduction of horizontal emphasis by replacement

b Existing chimney removed and poor patch repair to roof

c Single storey element re-roofed in contrasting material to existing main house

d Inappropriate front door due to proportions and detailing, with uncharacteristic overboarding of porch

e Shutters create unnecessary 'fussy' detailing

f Satellite dish creates clutter on front elevation and planning permission will be required in conservation areas

g Unsympathetic decoration

h Inappropriate positioning and detailing of flue pipe

A1.84 Some alterations do not require planning permission, despite having the potential to have a major impact upon the character of an area. The cumulative effect of alterations being made to various properties can, if unchecked, result in the loss of the special distinctiveness of a place.

A1.85 The replacement of elements such as windows and doors, roofing materials, rainwater goods and other original features, including boundary features, should be carefully considered, as should the addition of external features such as aerials, satellite dishes and flue pipes which may require planning permission e.g. if located within conservation areas.

A1.86 The illustrations to the right show how minor alterations, which may not require any permission, can impact upon a building's character.

A1.87 20th century development on Gower has left a legacy of buildings which have no strong link with their context and which, if viewed individually, could be in any suburban estate of the same age.

A1.88 It is important to appreciate the role that general maintenance and repair, when combined with small scale alterations or extension can play in the enhancement of poor quality or otherwise 'average' buildings. Please also refer to the Householder Design Guide SPG for further guidance on undertaking such an approach.

A1.89 Such opportunities should be encouraged as a means of improving the quality of Gower's built environment, not only in terms of its visual impact, but also in addressing the sustainability agenda, creating a 'sense of place', and reflecting the simplicity of Gower designs, local colour palette and local materials.

A1.90 The following examples illustrate that undertaking this type of project can help to enhance the quality and character of existing properties.

Above: before renovation

Above: original style

Above: after renovation

Above: recently renovated adjacent property

Example 1: Southgate
This 1970's detached property is typical of the suburban style of houses which can be found dotted across Gower.

Extensive remodelling and renovation works have reinvigorated an otherwise 'tired' family dwelling, creating an attractive, contemporary home which enhances the local character.

Example 2: Llanrhidian
The first of these two neighbouring properties is a largely original, well maintained 1970's bungalow, with an additional rooflight.

The second property has been recently renovated, the wavey edged gable boarding has been removed, and new windows added. These works have resulted in a clean cut, contemporary style.

introduction

A1.91 Whilst the siting, scale and massing of a new building or extension is key to the success of a development either blending in or complementing its surroundings, likewise the articulation of elevations and finer detailing can impact upon its overall quality and character.

A1.92 The choice of materials; proportion, positioning and style of windows and doors; form, pitch and roof finish; detailing of eaves, verge and ridge; and use and positioning of chimneys, all combine to create the overall development character.

A1.93 The introduction of new materials and building methods in the early 20th century diluted the traditional rural vernacular. As the settlement character statements included within Appendix 5 of this Guide illustrate, there is now a wide range of materials and building methods being used across the peninsula which has, in many cases, diminished the local character.

A1.94 In exceptional cases the introduction of 'new' materials and innovative construction techniques can enhance the quality of an area's character. Likewise, employing standardised or poor quality materials and building methods has the potential to diminish character.

A1.95 Guidance within this section covers the following four key building elements which should be read in conjunction with the appropriate sections:

- Walls
- Roofs
- Windows
- Doors

Top right: Traditional Gower cottage: Oxwich rendered stone with small openings and slate to roof

Bottom right: Modern private house, The Tillers, Llanrhidian. The design of the replacement dwelling is a direct result of consideration and evaluation of the Landscape of the Gower AONB (in particular the Lowland Plateau), the local vernacular and constraints. The resultant modest dwelling integrates harmoniously with the landscape due to its simple unobtrusive form, scale and material tones which take inspiration from agricultural buildings and compliment the visual and sensory landscape. @TPS Planning + Architecture

A1.96 Careful consideration should be given to the size, proportion and detailing of openings within a wall. Stone walls were traditionally thick with the windows small and set back. Improved modern construction techniques have led to enlarged openings, ultimately resulting in the large 'picture windows' typical of the 1960's and 1970's.

A1.97 The principle of a solid to void ratio is key to understanding the appropriateness of the size and proportion of an opening in relation to its context. This is concerned with the amount of 'blank' wall in relation to the number and size of openings. Traditional building techniques meant that older traditional buildings are likely to have a high solid to void ratio whilst newer, more contemporary ones generally have a lower one.

A1.98 Elevations should generally have a greater proportion of solid to void – but the reverse may be appropriate on high quality contemporary designs, subject to detailing, context and the over-arching approach to design.

A1.99 Recent sustainability concerns have influenced the size of openings and how they are detailed to minimise heat loss and maximise useful heat gains. Including a greater area of glazing than is required to adequately light and ventilate a building can result in unnecessary heat loss, or gain, as well as being disproportionate in terms of the solid to void ratio.

A1.100 When considering alterations to or extension of an existing traditional vernacular building, any new opening should be of matching or similar proportions to the existing. Such new openings should not have a significant or negative impact upon the balance/composition of the existing building, or the wider character of the area. Generally new openings should line through with the existing.

Examples of high solid to void ratio:

Small windows set in thick walls are a characteristic of older Gower properties.

far left: Oxwich

left: Pitt Farm

Examples of low solid to void ratio:

far left: mid-twentieth century detached house - large windows with strong horizontal emphasis

left: Cliff House, Southgate contemporary design, maximising orientation and views @Hyde & Hyde

walls: materials

A1.101 There is a diverse range of building materials in evidence within Gower, although traditionally local stone would have been used and indeed was the predominant material up until the First World War. In the case of the south and north-west of the peninsula, this would have been limestone from the local quarries; pennant sandstone predominated in the north-east and old red sandstone and quartz conglomerate within central areas and Cefn Bryn.

A1.102 Walls were generally constructed of coursed random rubble and local sourced lime mortar, and lime washed as a means of waterproofing. The export from Gower of limestone resulted in return loads of roofing materials and bricks coming to Gower, which were often used as detailing to doors, windows and chimney flues.

Top right: traditional white rendered house, Penrice

Middle: traditional Gower stone farmhouse, Box Farm, Reynoldston

Bottom right: inappropriate brick, suburban style residence, Southgate

A1.103 Material choice should be guided by the following general principles:

a Consideration must to be given to the local context (further information is provided within Appendix 6: Settlement Character Areas and Settlement Statements).

b Stone or traditional lime render are the most appropriate finishes (this is not an exhaustive list and other finishes may be acceptable).

c Lighter colours, whites and more 'earthy' tones should be used in preference to bright accent colours which are not considered acceptable.

d Brickwork is rarely considered as an acceptable material for use within Gower except for contextually appropriate small scale elements or detailing where there is a history of these in the locality.

e Pebbledash is not considered acceptable.

f If contemporary materials are being proposed the scheme will need to be of an exceptionally high design standard to be acceptable.

A1.104 The following images illustrate the importance of detailing to the overall appearance of a wall.

A1.105 When considering stonework; coursing (how the blocks are arranged), mortar colour and, pointing style must all be taken into account. Further information regarding pointing can be found within Module F: Repair and Maintenance.

Above: traditional stone quoins (left) provide structural support to the corner of the building. This approach has been copied in a more contemporary way using engineering brick (middle) However the use of 'applied' rounded stones (right) is visually inappropriate

Above: traditional stonework with appropriate mortar colour and pointing detail

Above: 20th century development which has used stonework to relatively good effect, however more attention to the placement of the stones would have enhanced it further

Above: 20th century development which has poorly chosen stone, in terms of both colour and size, and inappropriate mortar colour and pointing style

Above: traditional tile hanging and mock timbers to upper storey of former coastguard house

Above: attractive use of timber to upper storey of contemporary extension, with lower storey built in appropriately laid and detailed stonework visually inappropriate

Above: 20th century development with suburban style mock half timbering to upper storey is an inappropriate design response in Gowersually inappropriate

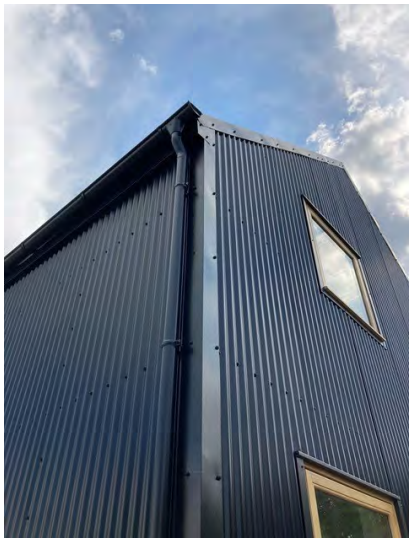
contemporary/modern examples

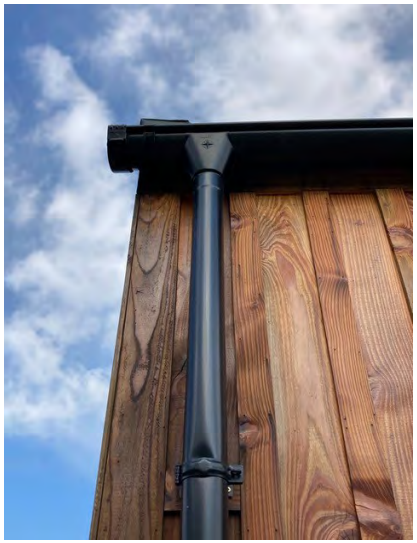
A1.106 Traditional and natural materials can be incorporated in a more contemporary way to create sustainable new development as these two examples.

Left: Bank Croft, Llangennith. Modern private dwelling, inspired by traditional long barns..

Materials used: Limestone/larch/oak/ash/birch, glass and steel.

Image Credit: @Raum Architects





Right: The Tillers, Llanrhidian. New modern private dwelling, the simple form is inspired by agricultural buildings.

Materials used: Accoya windows, black corrugated steel cladding, Douglas Fir vertical timber cladding, black stainless steel rain water goods.

Image: @TPS Planning + Architecture

A1.107 Generally, the following principles should be followed in relation to the form of both existing and new roofs:

a Roofs should span the shortest plan dimension in order to minimise height.

b Main ridgelines should generally run parallel to the road within settlements; except where this is not in keeping with the local character (Refer to individual settlement character statements within Appendix 6 of the Guidance).

c The angle or pitch of a roof should relate to the character of the locality, the material to be used, and also take into account how exposed the site is. Typically where two or more elements roofs on the same building have the same roof shape (e.g. pitched or hipped) and/or run in line, even if of differing heights, the pitches should be the same.

d Roof forms should be simple in appearance and with additions being subordinate to the main building. Incorporating a number of roof elements can play a key role in reducing the massing/impact of an extension or new building.

e Simple gable roofs are the most common form within the AONB but hipped gables may be appropriate in particular circumstances, such as at the end of a row of buildings. Hips should be avoided within rows due to their negative visual impact.

f Flat roofs should be avoided in the context of traditional buildings but they may be appropriate on high quality contemporary designs – subject to detailing and context. For traditional buildings, consideration should be given to providing a catslide/lean to roof which ties in to the eaves of the main roof instead. The pitch of this roof should be shallower than that of the main roof.

Ridgeline matching existing character

Ridgeline contrary to existing character

Simple pitched roof forms create uncomplicated roofscape on extension to rear elevation

Use of various complicated roof forms create a visually disjointed roofscape

roof: materials

A1.108 When considering the choice of material for both existing and new roofs, the following principles should be taken into consideration:

a Replacement materials should match the existing in terms of colour, size and appearance where appropriate. Consideration should therefore be given to using locally reclaimed materials where possible.

b Existing slates should be retained and reused wherever possible.

c Existing laying patterns should be adopted using existing patterns as a reference point.

d Whilst the use of real slate is preferable, appropriately high quality reconstituted products may be an acceptable alternative in some situations. However real slate is required in traditional designs in conservation areas and on traditional style replacement dwellings.

e Other roofing materials will be considered on merit but they should respect the context and enhance the character of the existing building.

f The use of 'new' materials and sustainable roofing systems may be considered appropriate on high quality contemporary designs, subject to detailing and context.

g Use of thatch within Gower is limited but existing examples should be regularly maintained and repaired with appropriate materials. New thatched roofs need to consider technical specifications relating to the pitch and structural loading of the roof.

h Buildings should minimise the number of roofing materials and colours used.

i Introducing a mixture of roofing materials and/or colours to a new builds or extensions will likely diminish the character of the building and locality and is therefore unlikely to be considered acceptable.

Above and below: Extensions and re-roofing can result in the introduction of numerous, inappropriate or unsympathetic materials or colours, which can have a negative impact upon an individual building, character of an area, or key views.

A1.109 When considering the detailing for both existing and new roofs, the following principles should be taken into consideration:

a Generally eaves and verge detailing are simply detailed. Eaves generally have a small overhang, with a gutter board or gutter brackets. Verges are simple 'mucked' verges or single slates.

b The use of wide/heavy fascia boards, soffits and guttering is unlikely to be considered acceptable unless these are an original feature of the building and locality.

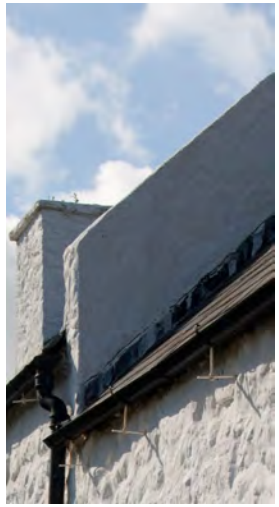
c Chimneys provide visual interest to roofscapes and should be retained even when not in use.

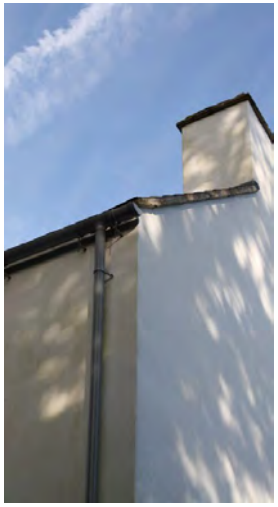
d Where chimneys are a feature of the locality, these should be provided on new houses also, even if these are not intended for use (false chimneys). New chimneys should be appropriately proportioned and not appear too small or overly tall.

e External chimneys (those which project from the outside wall) are not generally a characteristic of the AONB and should be avoided.

f If installing chimneys on non-traditional buildings, such as conversions or more contemporary designs, the use of metal flues pipes may be a more acceptable approach subject to the detailing of these.

g Incorporating photovoltaic tiles or solar panels can have a significant visual impact. Generally, such features should be avoided on elevations visible to the public within Gower settlements and areas where there are potentially sensitive views.





Top and bottom right: typical eaves and verge details

Bottom left: upstand indicates that this roof was at sometime thatched. Simple brackets support guttering

rooflights

A1.110 Rooflights can provide an alternative and less intrusive means of lighting rooms within the roof space. When considering their use the following principles should be taken into consideration:

a These should be incorporated in the least visible side of the roof, generally to the rear of properties. Within settlements and they should be used sparingly.

b Careful consideration should be given to their positioning, particularly when more than one is being used, and they should be positioned in such a way as to respect the alignment and size of other openings. Overly large rooflights or the grouping of smaller rooflights together will not be supported.

c They should generally be positioned within the middle third of the roof and have a vertical rather than horizontal emphasis.

d Conservation style rooflights are the most appropriate design approach for traditional buildings. These must be used in conservation areas and on listed buildings where these works are approved.

e The reflective nature of such windows should be taken into account when considering the impact on potentially sensitive views.

f. The degree of light spillage must be taken into account in the design of any roof light (see lighting module I).

Above: Conservation style rooflight sits flush with roof finish.
Below left: Reynoldston - Sensitive conversion incorporating conservation style rooflights with a vertical emphasis.
Below: Use of a variety of sizes of rooflights and horizontal emphasis created by solar panels results in a cluttered roof slope.

A1.111 Windows would traditionally have been either a simple wooden side hung casement or sliding sash. The introduction of more thermally efficient double glazed uPVC products during the latter decades of the twentieth century resulted in the replacement of traditional windows with a variety of styles and sizes. Initially the detailing of elements such as frames and glazing bars was poorly replicated due to technical constraints, and traditional stone cills were often replaced by an integral uPVC cill. The overall impact was a loss of character. However some recent uPVC designs such as sliding sash windows are a fair reflection of traditional character.

A1.112 Since its introduction debate has continued as to whether uPVC is an appropriate alternative to timber, particularly in 'protected' areas. Whilst it may require less maintenance and provide high insulative properties, when including double glazed units, uPVC requires large amounts of energy to produce the base material and it is not able to be repaired. Conversely sustainably sourced timber requires much less energy and individual elements can be repaired or replaced.

A1.113 Building regulations takes into account the need to balance increasing energy efficiency requirements with the character of historic buildings, and highlights the need for the structure of older buildings to 'breathe'. Therefore when considering replacing windows within historic properties the Council's conservation team should be contacted for advice.

A1.114 The following principles should be taken into account with regard to new and replacement windows:

Left: timber sash style painted window

Left: uPVC opening and fixed casement window with overly wide frames

With regard to materials;

a It is preferable to use sustainably sourced, painted timber windows.

b Window materials in extensions should match the existing, subject to appropriate detailing.

c In all traditional designs in conservation areas, villages and other settlements, it is desirable to use timber windows. However, if uPVC is the predominant material locally, then this may be acceptable for the new windows provided they are of good quality and incorporate acceptable detailing to replicate a traditional timber window.

d Proposals for replacement dwellings in the open countryside should be high quality. Therefore well detailed timber windows should be an integral element of a traditional design approach.

e If uPVC, aluminium or other alternative materials are used, the proportions of the window and all its component parts should reflect those of a timber window.

f The use of uPVC is not acceptable in listed buildings as this harms the character of the building and may cause lintel failure due to trapped moisture.

g The use of coloured powder coated aluminium windows may be appropriate on high quality contemporary designs, subject to detailing and context.

h The colour of window frames should be considered as part of the overall design and should be appropriate to the context of the scheme.

Above: timber opening casement painted window

Above: uPVC tilt and turn casement

With regard to the style:

a Generally, original windows should be retained and repaired where possible. If not, the design of any new window should be in keeping with the period of the building.

b The same window style should be used throughout a traditional building. The use of various styles has a negative impact upon the visual composition and should be avoided.

c The replacement of inappropriate styles of window by those of a more sensitive design can greatly enhance a property's character.

d Top hung casement windows will rarely be considered appropriate within the Gower AONB.

With regard to the detail:

a Any design should avoid a horizontal emphasis for windows in traditional buildings, as windows would generally have been square or had a vertical emphasis.

b Particular care should be taken with finer details such as the width and moulding of glazing bars which, if incorrect or unsubtle, can have a significant impact upon the overall window and building.

c Generally, window frames should be set back a minimum of 100mm or, in the case of a replacement or extension, match those of other windows on the property. Flush fitting windows may be considered appropriate as part of a high quality contemporary design.

d Cills should be separate elements, generally of stone or brick. These should project outward from the main wall to an appropriate depth (typically 50 – 100mm depending on the local context).

roof dormers & extensions

A1.115 Additional floorspace has traditionally been provided within the roof space, to maximise the use of its internal volume. (Refer to 'section 'Extending Upwards' within this module). Such spaces need to be lit, but roof dormers, or roof extensions as they are known if larger than the window itself, can have a significant impact upon the form and appearance of a building, adjacent roofscape and the wider context.

A1.116 Considerable care should be given to the use and type of the roof window chosen. When considering whether to incorporate roof dormers or extensions the following principles should be taken into account:

Above: traditional dormer to cottage, Penrice

a Large flat roof dormer windows or flat roof dormer extensions are inappropriate and should be avoided. Where larger dormers are proposed, consideration should be given to providing a catslide roof design.

b Dormers should not compromise the roof form or dominate the plane of the original roof.

c Dormers should therefore be set down from the ridge line. Generally these should also be set up from the eaves unless serving a half dormer window.

d Generally, dormers to front elevations will not be supported unless these are characteristic of nearby properties.

e Dormers incorporating balconies are rarely an acceptable approach within the AONB and should be avoided.

f The inclusion of 'false' dormers (dormers with windows below the eaves line of the roof) is not an appropriate design response in any situation and will be not be considered acceptable (see illustration page A36).

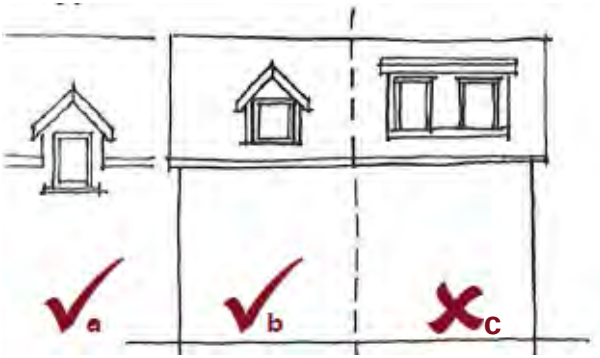
g The proportions of a dormer should be appropriate to the building and be positioned in such a way as to respect the alignment of the windows below them.

h Smaller separate dormers often look better than a single larger one (see illustration page A36). However, care should be taken in the detailing and impact of rainwater goods as these can have a negative impact upon an elevation if too numerous.

i If a dormer is proposed on a house with a hipped roof, the roof pitch should mirror that of the main roof.

roof dormers & extensions

Type

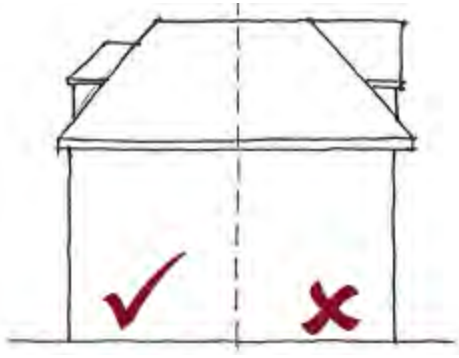


Above and middle: Dormer windows are generally as wide as the window and if well proportioned sit comfortably within the roof plane

Above: Dormer roof extensions can over dominate the existing building

a - half dormer
b - full dormer
c - flat roofed dormer

Position (in relation to ridge)



Above: On hipped roofs the dormer should mirror the original roof

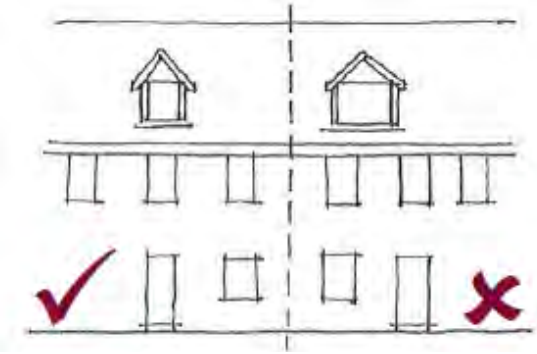
Above: The ridge of the dormer should not line through with the existing. It should set down from the main ridgeline and set up from the eaves than the main ridgeline.

Purpose

Above: Dormers are to serve a function - when the window level needs to be higher than the eaves

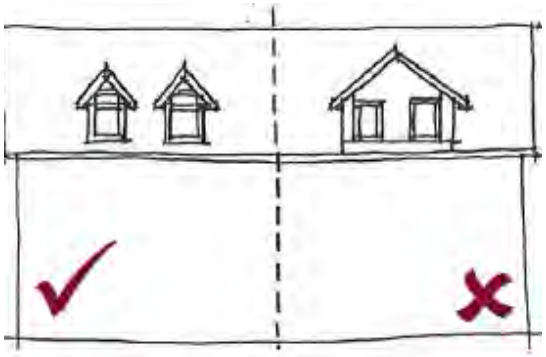
Above: False dormers (windows below the eaves level) are an inappropriate response and should not be used

Position (in relation to elevation)



Above: Dormers should be carefully positioned to take into account existing openings to ensure that the elevation remains balanced

Scale



Above: The use of a number of smaller dormers may help to minimise visual impact, but should not be used to excess

Above: Oversized dormers should be avoided as they can dominate the elevation

A1.117 Doors would traditionally have been of a simple timber design but fashions have changed and now there is a wide variety of types of doors used throughout Gower. It is important to note the potential detrimental effect of removing or relocating doors as this can result in an imbalance in composition of an elevation. The following principles should be taken into account with regard to new and replacement doors:

a Where possible, traditional doors should be repaired and retained. If not, the design of a new door should be in keeping with the period of the building.

b Any new door should fit the existing opening. Infilling to provide a new opening can have a negative effect upon the overall proportions.

c The door should be set back a sufficient distance from the face of the wall (as for windows).

d Excessively ornamental or inappropriately detailed doors should be avoided.

e uPVC doors are not an acceptable replacement within an existing traditional building in view of their standardised proportions, detailing and inability to be altered

f Patio doors, French doors and glazed screens can be used to great effect to introduce light to a building, however care should be taken that the inclusion of such features does not have an undue impact upon the balance of the overall elevation.

g New doors should respect the character of the host building and wider context. The relocating of doors on public elevations is therefore unlikely to be supported.

Above: poor example of doors - use of uPVC and resultant inappropriate style and details
Below: good examples of doors - simple design, colour and choice of ironmongery

One Planet Development

A1.118 Policy CV 2 of the LDP allows for One Planet Development (OPD) in the County. OPD is development that through its particularly low impact nature, either enhances or does not significantly diminish environmental quality. OPD may take a number of forms and can either be single homes, co-operative communities or larger settlements. They may be located within or adjacent to existing settlements, or be situated in the countryside. However, the special nature of OPDs in the countryside means that not all sites will be suitable. The proposed location of an OPD will be a prime consideration as sites of high ecological or landscape sensitivity (such as the AONB) may not be suitable, as OPD activities could have unacceptable negative impacts unless these sensitivities are carefully conserved and enhanced.

A1.119 OPD located in the countryside should provide for the minimum needs of the inhabitants in terms of income, food, energy and waste assimilation over a period of no more than five years from the commencement of work on the site (i.e. OPD should be broadly self-sufficient, in ways which have a low environmental impact). This should be evidenced by a management plan produced by a competent person(s). Where this cannot be demonstrated, proposals should be considered against LDP policies which seek to control development in the countryside.

A1.120 The Council will consider advice contained within TAN 6: Planning for Sustainable Rural Communities and the Welsh Government's One Planet Development Practice Guidance, 2011, when considering any applications for OPD.

A1.121 Planning consent for OPDs will be granted subject to a S106 agreement or planning condition tying the management plan directly to the development in order to control the activities agreed in the permission. A S106 agreement will also be used to tie the dwellings to the land which justified the grant of planning consent. Where there is a change in ownership of the OPD or any individual holding within larger schemes, a new management plan must be submitted to the Council for approval. Furthermore, an annual monitoring report must be submitted to the Council to evidence compliance with the management plan by identifying activities carried out during the previous twelve months. Failure to meet the terms of the management plan could result in enforcement proceedings in respect of a breach of condition subject to which planning permission was granted. All OPD applications must contain an 'Exit Strategy' stating how the development and associated land use changes will be removed and the site restored to its previous use (or another agreed use) and that the site is to be left in the same or better condition than before the development took place.

City and County of Swansea
http://www.swansea.gov.uk

Design Guide for Household Development

City and County of Swansea Local Development Plan
http://www.swansea.gov.uk/LDP

Natural Resources Wales
https://naturalresourceswales.gov.uk

Cadw
http://www.cadw.wales.gov.uk

Historic Buildings Advisory Council for Wales
http://www.buildingconservation.com

The Society for the Protection of Rural Buildings
http://www.spab.org.uk

One Planet Development Practice Guidance. Technical Advice Note 6: Planning for Sustainable Rural Communities, October 2012
https://gov.wales/sites/default/files/publications/2019-06/planning-permission-one-planet-developments-in-open-countryside.pdf

module A

gower aonb
design guide

agricultural

Agricultural Land
(subject to policy RP11, PPW11 and TAN 6)

Agricultural Development
(subject to policy CV4, CV5)

B1.1 Farming has been integral to the creation of the very special landscape for which the AONB designation was awarded. Generations of farmers have had, and continue to undertake, a key stewardship role in the maintenance and enhancement of Gower's landscape.

B1.2 TAN6: Planning for Sustainable Rural Communities provides overarching advice on sustainable agriculture and development involving agricultural land.

B1.3 Certain types of agricultural and forestry buildings are classified as being "permitted development" and as such do not require planning permission. However, a Prior Notification application must be submitted for such development to ensure that the siting and design of the building is acceptable.

B1.4 Further details relating to permitted development rights for agricultural holdings are contained in TAN6 and the Town and Country Planning (General Permitted Development) Order 1995 (GDPO) Schedule 2, Part 6.

B1.5 Whatever development is proposed, it will need to be constructed in accordance with the relevant industry standards and meet current DEFRA requirements for animal welfare.

B1.6 This module does not cover farmhouses, the conversion of traditional agricultural buildings, or equine development. For guidance on new/ replacement farmhouses refer to Module A: Residential, and Module D: Conversions.

B1.7 Proposals must ensure the protection of natural heritage and the historic environment and be sympathetically sited, designed and landscaped.

B1.8 Whilst guidance within this module covers the extension and alteration of existing farm buildings, as well as new build, key principles applying to all include:

- being sympathetic to surroundings
- appropriately located, avoiding sensitive locations
- minimising the impact of the massing of new buildings
- encouraging appropriate agricultural uses for older buildings

Right: Elements of agricultural development
Opposite page: Various buildings at Great Pitton Farm, Pitton

B1.9 The siting and layout of a new agricultural building or extension is important. Even well designed buildings can have a negative impact if inappropriately sited. One of the primary concerns should be the building's functional requirements and its siting in relation to existing buildings.

B1.10 Compromise may be required between the siting of a building and its functional requirements. However the following general principles will be taken into account when considering the siting and layout of proposals

a Development should aim to enhance existing building groups where appropriate by creating courtyards or improving upon existing forms of enclosure.

b Development in environmentally sensitive locations, including important landscape, habitat or archaeological areas will be resisted.

c Generally newer buildings should be sited on the less public side of existing groups of farm buildings, unless conflicting demands dictate otherwise.

d 'Stand alone' buildings should avoid open or unscreened sites and will need to take into consideration the potential impact of any new access arrangements.

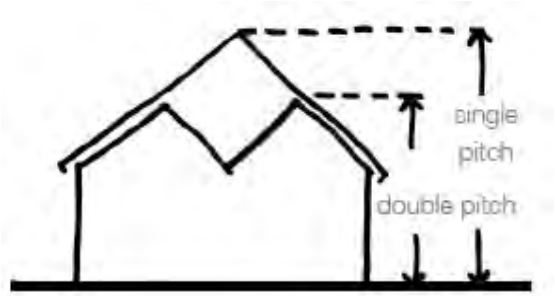
e Development on the skyline or sites which are prominent in public viewpoints should be avoided to minimise impact upon wider views. Such proposals will not be supported without strong justification. If this is unavoidable, careful detailing in terms of height, colour and landscape screening should be incorporated.

f New agricultural development should aim to minimise the need for unnecessary journeys and be sited accordingly, taking into account the requirement to be sensitive to its surroundings.

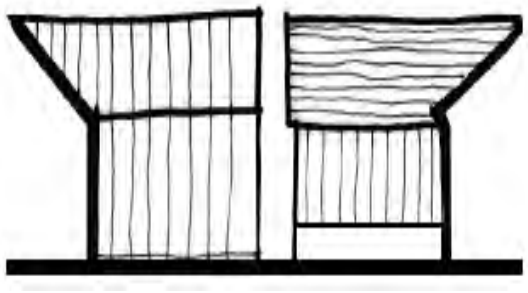
Right: examples of three types of siting of agricultural (and former agricultural) buildings in Cheriton

1. Barns and outbuildings sit prominently towards the top of the hill
2. Barn screened by well established planting
3. Converted barns set near to the valley floor

B1.11 Functionality is of primary importance when considering a building's scale and massing. An agricultural building's form should be based upon its function – with the final design being clearly recognisable as a working building.



Above: illustration showing that using a double pitch reduces the overall building height



Above: examples showing that the use of different materials breaks up elevations, minimising impact

B1.12 The following general principles will be taken into account when considering the scale of proposed new farm buildings or extensions:

a Proposals should be sympathetic to the existing pattern and form, with consideration given to the cumulative impact of numerous extensions on the overall scale and massing of individual or groups of buildings.

b Where possible, development should respect existing eaves and ridge lines. If this is not possible, proposals should consider ways of limiting visual impact of height, such as dividing the span - using a double ridged rather than a single ridged roof.

c Development should capitalise upon the site's topography – positioning larger buildings lower down slopes or in hollows to limit the impact of their height. New buildings should generally be aligned parallel to the contours as a means of minimising the impact of the topography. Proposals to site new buildings on ridgelines will be resisted.

d If a building's height is likely to dominate, consideration should be given to it being sited away from traditional building groups in order that it does not have an overbearing or negative impact.

e Overhanging eaves result in shadows which define the junction between roof and walls, encouraging them to be read as individual elements. When combined with the use of different materials this can have the apparent effect of reducing the scale of a large building.

B1.13 The key concern with the massing and form of new agricultural buildings is to minimise the visual impact. The following general principles will be taken into account when considering the massing of proposals:

a Division of volume – breaking down a single volume into a number of elements. It is important to note however that whilst this can be an effective way of creating an attractive building group it can have limitations in terms of functionality.

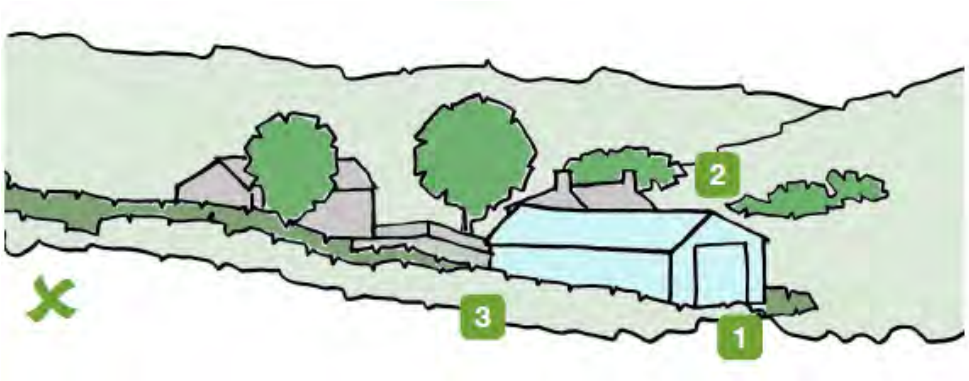
b Alternative floor plans – the use of an 'L' shaped building plan rather than linear building reduces the overall length and creates the perception of reduced mass.

c Topography should inform design decisions. Stepped, linear forms can be equally acceptable in the appropriate context.

d Division of a façade through the use of different materials or colours can result in the perception of a reduced building mass.

Illustration showing poor examples of agricultural development (see following page for good example)

1. impact of existing structure exaggerated by position up-slope from farmhouse and single, unbroken massing
2. single ridged roof maximises height
3. siting building on higher ground increases its visual impact



B1.14 Roofs are a key element of farm buildings, providing visual form within the landscape. The following general principles will be taken into account when considering proposed roofs:

a New roofs within existing traditional farm groups should ideally match the existing pitch. However this may not be an appropriate response if the width of the building results in an excessive ridge height; or if the roofing material is not compatible with the existing roof pitch.

b Large, uninterrupted areas of roof should be minimised (see previous guidance on massing).

c Overly complicated roof forms are rarely necessary or appropriate for agricultural buildings.

d Proposals should include overhanging eaves where appropriate. This helps to create a shadow line between roofs and walls, so that these are read as individual elements rather than an all encompassing surface.

Illustration showing good examples of agricultural development (see previous page for poor example)

1. siting building in hollow or on lower ground reduces impact of height
2. double ridged roof minimises height
3. trees/planting to front of building breaks up massing

B1.15 The choice of colour and materials should be guided by both functional requirements and the need to minimise visual impact. The following general principles will be taken into account when considering proposed colours and materials:

a Materials should either weather appropriately over time or be 'sensitive' enough to blend with the surroundings.

b If extending or building in close proximity to sensitive/ high quality existing buildings, designs should aim to use materials of a similar tone, colour and texture to those key buildings.

c The visual impact of roofs should be reduced through use of non-reflective/ matt finishes.

d The number of materials and colours used on one building or within a building group should be limited. Subtle changes in colour and/or material can help to visually break up large building volumes.

e The use of bright colours will not be considered acceptable. Generally greys, grey greens, dark greens and blacks will be the most appropriate choice, but consideration needs to be given to the building's context. Environmental Colour Assessment is a useful method to help inform colour selection and assist incorporating development within the landscape. See Section 2 for more details of this process. Coloured profile cladding will be allowed where appropriate.

f Glossy or reflective materials and light colours should be avoided.

Above: farm buildings painted or clad in brighter, stronger colours stand out in the landscape

Below: the same buildings treated with a more muted and sympathetic colour are not so prominent in the view

Left: Farm buildings sited on ridge line results in them being a prominent landmark feature against the skyline from certain views - endeavoured to mitigate impact against landscape by using dark colours. A strong silhouette has been created.

Middle: Farm buildings, Scurlage. The shed to the left is viewed as two parts as a result of the roof being a darker colour from the walls. To the right the lower structure appears to blend in well with the ploughed landscape, however its light colour is likely to stand out against a green background.

Left: Dark colours have been used in an attempt to mitigate the landscape impact of new barns. Planting would soften the impact further.

B1.16 In addition to larger agricultural buildings there are a number of ancillary structures which will need to be accommodated. Generally these can be categorised as:

B1.17 **Towers, silos and hoppers** – often tall structures which, as such, will need to be carefully sited to minimise their impact on the skyline. Contextually appropriate natural, matt colours can assist in reducing visual impact, and existing buildings can be used as screens.

B1.18 **Fuel Tanks** – should be sited within existing groups of buildings where possible, whilst taking into account safety easements. Tanks should not be sited on elevated or in highly visible areas, and bunding is required to contain leakage/ spillage. Contextually appropriate natural colours help to minimise visual impact.

B1.19 **Manure and slurry stores** – will need to be in close proximity to livestock buildings but of a sufficient distance from watercourses and supplies. Where possible, such stores should be screened by existing buildings and take advantage of landform as additional screening.

B1.20 **Silage clamps and bagged silage storage areas** – need particular care both in terms of visual screening and location with regard to watercourses. Boundary materials should aim to blend with surrounding structures and, in an ideal situation such areas will be surrounded by existing buildings to minimise visual impact.

B1.21 **Handling pens** - should relate to existing buildings and features. If not incorporated into an existing building group such structures should be constructed of local materials if appropriate. If the systems are not permanent they should be removed as soon as possible.

B1.22 **Agricultural equipment** - covered storage facilities should be provided for the use of storing equipment, vehicles and machinery, where possible. Storing equipment in the open, around the farm grounds is visually intrusive and often detracts from the character and quality of the area and should be avoided.

Above: the siting of silo towers within a hollow reduces their visual impact

Below: storage in visually sensitive areas should be avoided

B1.23 Landscaping can serve to soften or screen new agricultural development, and the following general principles should be taken into account:

a Retain and capitalise upon existing landforms and contours to ensure that buildings are sympathetically sited. Siting buildings in hollows, or behind existing trees can serve to soften new development from longer range, or more sensitive views.

b Only use native tree and hedgerow species when incorporating new planting or strengthening the existing structure. A shrub edge and under storey can be of value for wildlife and is usually vital for screening purposes.A mixture of mostly small transplants and some larger stock (such as 'feathered' or 'standard' trees) gives a good balance between long term establishment and initial screening.

c Wherever possible new planting should link into existing hedgerows/ landscape structure to ensure that it is in keeping with the existing landscape character of the AONB. The planting of new hedgerows and trees - the latter preferably in small groups - in the surrounding landscape can also help with longer distance views.

d Hedgerows may be protected and should not be removed to create larger visibility splays without prior permission. The removal of hedges that are not protected should be avoided whenever possible as this may have be detrimental to the local landscape character.

e Poorly considered or inappropriately specified landscape structures or planting should be avoided, as these can often highlight their artificial nature and detract from the local character. Planting in rows should be avoided.

f The screening of a poorly designed building by landscaping will not be considered an acceptable approach.

g A management and maintenance programme for the landscaping planting will be required for a minimum of three years.

Above: The siting of farm buildings within a hollow and adjacent to well established planting softens the impact of the development, as does the use of a dark matt roof colour

City and County of Swansea
http://www.swansea.gov.uk

City and County of Swansea Local Development Plan
http://www.swansea.gov.uk/LDP

Natural Resources Wales
https://naturalresourceswales.gov.uk

Department for Environment, Food and Rural Affairs
www.defra.gov.uk

commercial and tourism

gower aonb design guide | module C

introduction

C1.1 Proposals for development in Gower must have regard to all the relevant policies in the LDP, including the following:

- Gower AONB (subject to policy ER4)
- Undeveloped Coastline (subject to policy ER4)
- Key Villages (subject to policy CV1)
- Development in the Countryside (subject to policy CV2)
- Conversion of Rural Buildings (subject to policy CV4)
- Farm Diversification (subject to policy CV5)
- Tourism, Recreation and Leisure Development (subject to policy TR1)
- Developed Coast & Waterfront (subject to policy TR2)
- Sustainable Tourism & Recreation Development in the Countryside (subject to policy TR3)
- Historic & Cultural Environment (subject to policy HC1)

C1.2 The Council recognises that appropriate commercial, tourism and recreation development can benefit the rural economy and contribute towards providing a year round, sustainable tourism offer that attracts visitors to the County. As such, the economic benefit of a scheme will be a material factor in the consideration of the merits of a commercial, tourism or recreational proposal. It is important however that any such development does not negatively impact on the very assets that serve to attract visitors to Gower and sustain its economy in the first place. Given the special circumstances that apply in respect of a landscape of designated AONB status, clearly in some instances the economic benefit of a proposal will not justify approving an application where the visual, environmental, social or cultural impact is judged to be unacceptable. National and local planning policies make clear that any proposal judged to cause significant harm to the AONB and/or heritage coast will not be permitted.

C1.3 Proposals for tourism and recreation development should be limited to a scale that is appropriate to their location. Generally this type of development is expected to be of the following 3 main types:

Activity based:

Where the majority of the activity is based off-site. This development is likely to only need a small office and meeting place.

Attraction based:

Where visitors remain on-site. This development has the potential to have a far greater impact upon an area's character through the construction of new buildings, extended or new access, parking and signage.

Accommodation based:

Includes bed and breakfast and self-catering accommodation.

N.B. Tourism and Commercial development relating to camping and caravanning not contained within this Guidance.

C1.4 At the national level, TAN 6: Planning for Sustainable Rural Communities indicates that Planning Authorities should support the diversification of the rural economy as a way to provide local employment opportunities, increase local economic prosperity and minimise the need to travel for employment. Similarly, at the local level, the Swansea LDP sets out the framework for permitting sustainable rural enterprises, business and tourism uses having regard to important criteria that serve to manage the form and scale of such development.

Left: Gower Heritage Centre, Parkmill

Left: The Welcome Country Pub and Kitchen, Llanrhidian

C1.5 Proposals must balance the requirements in national guidance (PPW) and the LDP to ensure the natural beauty of the countryside and AONB is conserved and enhanced, against the needs of the local community and visitors to the area for sustainable forms of development. Such sustainable development may include proposals for local services such as village shops, small scale leisure facilities and cultural buildings; and development that contributes to the local economy, including agricultural buildings, sustainable tourism facilities and low key commercial operations. Policy CV2 highlights specific exemptions to the principle of resisting development beyond settlement boundaries, including:

- Development for the purposes of agriculture, forestry or other rural enterprise;
- The expansion of an existing rural business;
- A rural exception site for employment in or adjoining a settlement;
- Development to allow a small business to operate from home.

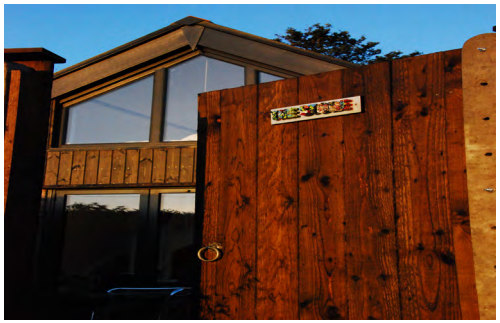
C1.6 Rural enterprises comprise land related businesses, including agriculture, forestry and other activities that obtain their primary inputs from the site. Examples are the processing of agricultural, forestry and mineral products, together with and management activities and support services including agricultural contracting, tourism and leisure enterprises. They do not include renewable energy schemes.

C1.7 Sustainable tourism and recreation related attractions and facilities in the countryside must be consistent with the criteria set out in Policies TR1 and TR3 and other relevant policies in the LDP. Policy TR3 relates to rural enterprises, specifically new tourism, leisure and recreation facilities and attractions which may include ancillary holiday accommodation. This includes proposals for, and extensions of, existing tourism attractions and facilities. Any ancillary accommodation proposed as part of a wider scheme should remain subordinate economically to the main attraction/ facility. Extensions to existing tourism related attractions and/ or facilities should be subordinate in scale and function. Proposals that constitute substantial extensions will be treated as new development and considered against relevant policies.

C1.8 In accordance with LDP Policy TR1, all applications for new, or the extension of existing, tourism facilities or accommodation must be accompanied by a Tourism Needs and Development Impact Assessment (TNDIA). The TNDIA must be based on meaningful evidence which is directly linked to the proposal, rather than broad based tourism data. Evidence such as a business plan, financial evidence, and marketing and management strategies will help to quantify the need for the development, whether there is current and forecoasted demand, and its long term sustainability and economic viability. The contents of the TNDIA must not be aspirational, but based on sound, most recently availableevidence. The information required within a TNDIA will be proportionate to the nature of the proposal, its scale and location. However, as a general overview the types of information required as part of a TNDIA would be:

- Evidence to support why a development of this type is needed, for example, no such facilities or sites exist within the locality, or there is a waiting list of people wanting to use existing visitor accommodation sites in the vicinity;
- Evidence to show that the proposal is viable and sustainable as a tourism business;
- Impact on the local community, for example, how the development will support the economy, number of jobs created, increased revenue/visitor spend in local economy;
- If appropriate, how the impact on agricultural business will be mitigated, for example, loss of grazing and subsequent potential impact on income;
- Evidence of vacancy rates within a reasonable geographical area, as agreed with the Council, in order to demonstrate any significant unmet need;
- Evidence of demand; (e.g. vacancy rates on neighbouring sites; waiting list for holiday accommodation; evidence of demand from local holiday let companies).
- Assessment of the anticipated levels of vehicular traffic, parking space demand and highway safety impact;
- Demonstration that the development is of high quality, sustainable buildings which extend the existing tourism offer;
- A Landscape and Visual Impact Assessment, including details of appropriate mitigation.

C1.9 It is anticipated that a significant amount of new tourism and commercial development within the AONB is likely to be accommodated within converted traditional farm buildings or in new buildings closely associated with suitable groups of farm buildings, or within villages. If the development is to be accommodated within a converted building reference should be made to:
Module D: Conversions and
Module H: Green Infrastructure, Landscaping and Biodiversity



Above: Holiday accommodation at The Store, Mewslade Cottage @jenhowe @stayatmewslade

Above: Holiday accommodation at King Arthur Hotel, Reynoldston

C1.10 Whilst the primary concern when considering new build or extensions to existing tourism related development or commercial properties is the quality of design and minimising negative impact upon the landscape and neighbours, there are many common guiding principles relating to layout and siting, including that:

a	Proposed development should be sensitively integrated with its surroundings and create a positive relationship with the existing context.
b	Visual impact should be minimised through the siting of development in the least visually sensitive area of a site.
c	Development on the skyline or on sites which are prominent in public viewpoints should be restricted to minimise impact upon wider views.
d	Development should capitalise upon a site's topography through positioning larger buildings lower down slopes or in hollows.
e	Existing landform and landscape should be used to screen development and, where appropriate, such features should be strengthened.
f	Development should aim to enhance existing building groups where possible – in part through creating courtyards or improving upon existing forms of enclosure.
g	Development which is likely to dominate important existing buildings or groups of buildings should be sited at a sufficient distance so as not to have an overbearing or negative impact.

Example illustrating poor commercial development principles with a disproportionate amount of new development

C1.11 Consideration should also be given to a development's height, massing and overall silhouette in order that it neither dominates the principal building, in the case of extensions, or any neighbouring properties – nor has an adverse impact upon wider range views. Guiding principle are:

a The key concnern therefore is to minimise the visual impact by either limiting its scale or by breaking up the form into a number of smaller elements where possible

b The use of 'L' or 'T' shaped plans can assist in reducing the perception of a building's overall size. Linear or square floor plans can accentuate a building's length or height and should be used with care.

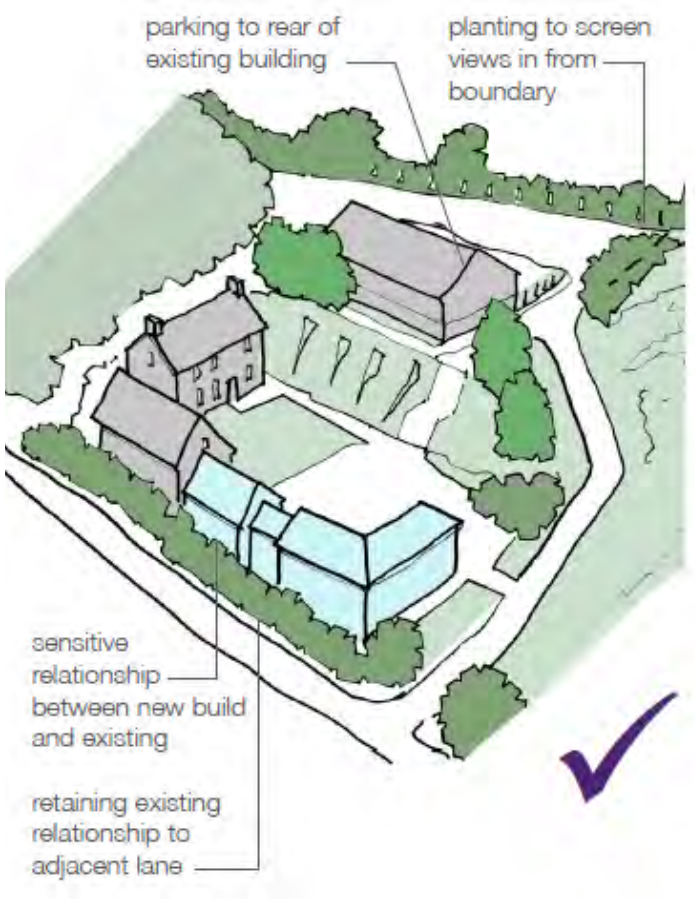
c Whilst a building's form will need to reflect its functional requirements, the height of a proposed development should be kept to a minimum, reflect the height of existing buildings and respect its context.

d Roof pitches should match existing wherever possible, although reduced pitches can help minimise a building's height if necessary.

e Large, uniterrupted areas of roof would be resisted.

f Incorporating overhanging eaves can help to define the junction between roofs and walls and has the effect of reducing a building's apparent scale. However this would not be an appropriate response for a barn conversion (Module D: Conversions). The division of a facade through the use of differnt materials or colours can have a similar effect.

Example illustrating good commercial development principles with amount of new development which is proportionate to existing.



C1.12 The choice of colour and materials should reflect the nature of use and take into account context. Environmental Colour Assessment is a useful method to help inform colour selection and assist incorporating development within the landscape and built context. See section 2 for more information. The following principles should be used as general guidance, complementing site specific detail:

a	When extending or building in close proximity to sensitive buildings, designs should incorporate materials of a similar tone, colour and texture to the existing.
b	The number of materials and colours used on one building (or element) should be strictly limited.
c	The use of bright colours should generally be avoided, although the careful introduction of contrasting materials/textures or colours can serve to accentuate key elements.
d	In more rural areas, the choice of colour is important and, if a development is to regress into the landscape, consideration should generally be given to a palette of colours based around greys, grey greens, dark greens and blacks.
e	Glossy or reflective materials should be avoided generally, particularly on roofs. Roofs should seek to use non-reflective/matt finishes and be darker in colour than the walls.
f	All materials should either have properties which will weather appropriately over.
g	Time or be sensitive enough to blend with the surroundings.

Right: Timber clad community hall, Oxwich

Right: Restaurant, Langland, which has drawn inspiration from adjacent beach huts

Right: Contemporary extension at Fairyhil @Raum Architectsl

C1.13 In considering both tourism and commercial related development, there is likely to be a requirement for car parking and servicing provision and care should be given to the detailing of external areas.

C1.14 Car parks will need to be designed in context with local landscape character and should take into account the following principles:

Above: understated reinforced grass provides visually soft parking area at Oxwich Castle

a Efficient use of space should be encouraged to minimise both space requirements and potential impact, with layout and landscape design being used to direct drivers in preference to additional signage.

b Consideration should be given to the flexibility of parking areas, with an allowance being made for increased numbers during peak periods; overflow areas will not necessarily need to be of a permanent construction.

c Elements such as boundaries, planting and hard standing should complement traditional local patterns where appropriate. Where there is no strong local precedent detailing should be simple, robust and functional.

d The visual impact of parking areas should be minimised and should be sited away from key views. Existing buildings, landform and landscape should be used to screen parking areas where appropriate.

e Service and storage areas should be sited in the least visually intrusive part of the site, wherever functionally possible. Service areas should be screened from sensitive and long range views. Appropriately detailed bin stores should be incorporated into proposals to minimise any potential negative visual impact.

f Within settlements parking between buildings and the road frontage should be avoided as this is likely to have a negative impact upon the streetscape.

g Planting can help to both screen and contain parking and service areas; landscaping schemes should specify appropriate native species and ornamental planting should generally be avoided. Planting schemes should ideally be both low maintenance and enhance local biodiversity. If mature trees or hedges border a parking area, a suitable distance must be left to avoid compaction.

h In accordance with PPW, car parking for new non-residential development should provide a minimum of 10% of the car parking spaces with Ultra Low Emission Vehicle (ULEV) charging points.

C1.15 When considering materials specification for car parking, the following principles should be taken into account:

a Soft delineation of spaces often results in a more efficient use of space than a 'park anywhere' approach and schemes should aim to use materials such as stone/logs set into ground or low level timber fences

b The surface material should be both practical and sensitive to its context. Large areas of tarmacadam will not be acceptable and consideration should be given to the use of sustainable materials, sourced locally or recycled. Such surfaces should be porous or permeable to encourage sustainable drainage.

c A hierarchy of materials can introduce a number of surfaces/textures which can break up larger areas of parking into smaller elements. Whilst each site should be considered on merit, the following materials may be appropriate:

- Loose or clay bound gravel
- Loose aggregate
- Reinforced grass (for example where a mesh system is used to reinforce the soil and allows grass to grow through)
- Grass
- Natural stone/concrete (setts or paving)

Above: parking provided on grass at Port Eynon reduces impact of large areas of hard surfaces during off-peak times

C1.16 Proposals for signage and adverts in the AONB must have regard to the relevant policies in the LDP as well as relevant advertisement legislation.

Advertisement Regulation and Definitions
(subject to policy PS2)

C1.17 Advertisements do not meet the statutory definition of 'development' but are controlled by The Town and Country Planning (Control of Advertisements) Regulations 1992 (as amended) made under the Town and Country Planning Act 1990 (TCPA 1990) (as amended).

C1.18 Under the provisions of the above Regulations the term 'advertisement' means:

"any word, letter, model, sign, placard, board, notice, awning, blind, device or representation, whether illuminated or not, in the nature of, and employed wholly or partly for the purposes of, advertisement, announcement or direction, and (without prejudice to the previous provisions of this definition), includes any hoarding or similar structure used, or designed or adapted for use, and anything else principally used, or designed or adapted principally for use, for the display of advertisements, and references to the display of advertisements shall be construed accordingly."

C1.19 Under the Regulations, it is unlawful to display advisements without deemed consent, or otherwise, without express consent. ('Deemed consent' refers to advertisements for which the rules give a 'deemed consent' so that the planning authority's consent is not needed, provided your advertisement is within the rules and 'express consent' refers to advertisements for which the planning authority's ,express consent' is always needed).

Above: Mixture of highway signage and advertising boards

C1.20 TAN 7: Outdoor Advertisement Control, November 1996 provides over arching advice on the control of advertisements to protect amenity and public safety. Advertisement applications are judged against two criteria:

- Public safety
- Amenity

Public safety

C1.21 The Council as Local Planning Authority (LPA) will consider the effect of a proposed advertisement on all highway users, namely drivers, cyclists and pedestrians. Full account will be taken of possible hazards to less mobile and visually impaired people. The main considerations are whether the advertisement itself or the exact location proposed for its display might be so distracting or confusing that it creates a hazard to, or endangers, people in the vicinity, which clearly is not necessarily confined to the highway itself. Concern is centered on the possible distraction of drivers and the safety of pedestrians. The Council's Highways Department will be consulted on all advertisement proposals.

Amenity

C1.22 The test here is whether the advertisement will adversely affect the appearance of the building or its immediate neighbourhood. The Council as LPA will take into account the scenic, historic, architectural or cultural features. It is recognised that businesses located in the countryside expect to be able to advertise their whereabouts, especially to visitors, but care should be taken to ensure that signs are designed and sited to harmonise with their setting, and that a proliferation of individually acceptable advertisements does not spoil the appearance of the open countryside. Wherever possible, businesses in the same general location, or in by-passed communities will be encouraged to combine their essential advertising needs so as to avoid a proliferation of advanced signs.

C1.23 The AONB was designated an 'Area of Special Control' of advisements in 1959. This means that there is strict control over advertisements and signage in order to avoid urbanising clutter and ensure the natural beauty of the area is not spoilt. Within the AONB applicants need to show a reasonable requirement for an advertisement. Similarly, stricter controls apply to signage in conservation areas.

C1.24 Within the AONB a balance must be struck between protecting the natural beauty and the importance of advertising to the local economy. However, careful consideration of signage is paramount whether it be road signage as part of a highways scheme or advertising signage on a commercial building. There is a danger that if advertisements are granted consent without a careful assessment of their need and design, the character and quality of the countryside will be eroded with an adverse effect on the tourism economy.

C1.25 Advertising signage should use a simple palette of subdued colours and simple graphics whilst road signs should be kept to a minimum. The use of timber, stone, stainless steel or even recycled plastic is preferred for public information boards and way markers.

C1.26 Signage on buildings should be limited to a business name and purpose only and should be of a size sufficient for identification purposes. Additional advertising signage often results in a cluttered appearance and as such should be avoided.

C1.27 Excessive lighting of signage should be avoided as not only is it inappropriate in the rural context, the light may cause light pollution and impact on wildlife, including flight paths of bats. If lighting is proposed, then the advice of an ecologist will be sought. For further information, see Module 5I: Lighting.

Above: Minimalist signage using materials sympathetic to the local context, Oxwich

C1.28 There are many different types of signage/ advertisements:

Fascia Signs

C1.29 These are usually found on the main elevation of buildings, between ground and first floor level and should not obliterate architectural features such as cornices and first floor level window cills. Signs should be carefully designed to form a natural, integral part of a shop front or commercial building and standard designs should not be merely affixed to a building without regard to the character of that building, particularly within conservation areas. Attention needs to be paid to the size and position of such signs and the relationship with adjoining shopfront and fascias.

C1.30 Proposals for fascia signs on buildings within the AONB will be considered against the following:

- They should be non-illuminated unless they incorporate external illumination or illumination of individual letters only;
- The lettering, colouring, style and material should be in sympathy with the building and area;

Above: Examples of individual letter signage and illumination, Port Eynon
Below: Image shows a variety of signage - highway, Rights of Way, adveretising and commercial

- The size, design and placing of the fascia should respect the architectural detailing, scale and character of the building and the street scene.The complete elevation of the building over its full height should be considered and not just the ground floor in isolation from the rest.

- Projecting/Hanging signs

C1.31 These are usually at fascia level, projecting at right angles from the building and normally supported by a bracket. There is a presumption against projection signs within the AONB unless they are of a traditional design. A multiplicity of projecting signs will lead to the visual detriment of the AONB and conservation areas. Projecting signs will normally be restricted to a maximum of one per building and should be:

- non-illuminated unless they incorporate external illumination;of a size, design and placing of which shall respect the architectural detailing, scale and character of the whole building and street scene.

- at least 2.4m vertically (the bottom of the sign) above any public footway or within 0.5m horizontally of any carriageway;
- located at fascia level or where this is not practicable it shall be located below the cill level of any first floor window.
- any source of illumination shall not be directly visible or of such intensity as to create dazzle to drivers on public highways.

Above: Example of a hanging sign, Llangennith

Poster Hoardings

C1.32 Poster hoardings are the largest form of outdoor advertisement and therefore they should be sympathetically designed in order to minimise any potential detrimental visual impact.

Sun blinds and canopies

C1.33 Traditionally made of wood and canvas, and intended to protect goods in the shop from sunlight, such features may be acceptable where they are a traditional feature of the particular locality. However, they are now commonly a fixed feature used as an additional form of advertising, and may detract from the street scene. They should not be a hazard to pedestrians.

Forecourt signs

C1.34 These are either moveable A-boards or fixed structures on commercial premises. The Council acknowledge the need for the clear identification of business premises, but will seek to avoid a proliferation of signs which are also potential hazards for pedestrians. The public footway is part of the adopted highway, and therefore such display requires consent from the Highway Authority, which will not be granted if they are classed as obstructions. Signs should:

- be located wholly within the curtilage of the premises to which it relates;
- well sited in relation to road safety and the visual amenity of the area;
- non-illuminated (except where essential on road safety grounds);
- constructed of natural materials and sympathetic to the surroundings where they are to be displayed in terms of scale, colour and method of support.

Flags

C1.35 Except for national flags, these are classed as advertisements. Within the AONB, conservation areas and on listed buildings, they require consent.

Temporary banners

C1.36 Usually attached to a building, they are often used to advertise events and do not relate to the building on which they are located, and therefore are not encouraged, and may only be accepted in limited circumstances.

Advance Signs

C1.37 Where a tourist facility, site or event is not easily seen from the highway, advance signs give prior notice to drivers and pedestrians. The Council accepts the importance of such signs in connection with larger tourist accommodation facilities, events and attractions and those that rely on passing trade, where the premises themselves nor their driveway entrance are readily visible from a main highway (i.e. Trunk Roads and 'A' and 'B' class roads) and the need for the sign could not be met by an appropriate combined advance sign.

C1.38 Signs should be located within 1 km on a direct highway route of the premises to which it relates and be no larger than 0.6 sq. meters in area with a maximum height above ground level of 2.4 meters.

C1.39 Where signs to a number of businesses in one location are requested the Council will seek shared signage, and where appropriate, a rationalisation of existing signs will be sought. Applicants proposing signs for tourist facilities should, in the first instance, explore their possible qualification for a "white on brown" highway tourist sign. If on highway land, consent from the Highway Authority will be required.

Fly Posting

C1.40 Often used to advertise forthcoming events, but any form of fly posting (that is, displaying advertisements without the owner's permission) is an offence which is immediately open to prosecution.

Public Rights of Way

C1.41 There is a duty for highway authorities to sign Public Rights of Way (PRoW) where they leave the metalled road. These signs are numerous and, by their nature, very visible to walkers, riders and cyclists, and use nationally recognised symbols to represent the different statuses of PRoW. At the end of a footpath a walking person symbol is used and at the end of a bridleway a horse rider symbol. In built-up areas the Authority uses a green and white metal sign, whilst in rural areas an oak sign is used. On well used routes, signs showing distances and destinations are occasionally used.

C1.42 Along PRoW, waymarks help members of the public to follow the route and the nationally recognised colours and designs are used: Public footpaths are marked with yellow arrows; public bridleways with blue arrows. Furthermore, the Wales Coast Path route is waymarked using white dragon-shell logo and coast path way marks.

Signage and the Welsh Language

C1.43 LDP Policy HC1: Historic and Cultural Environment seeks to safeguard and promote the Welsh language throughout the County. Although Gower is outside the designated Welsh Language Sensitive Area, the use of bilingual signage will be encouraged.

Discontinuance Action

C1.44 The Council will take discontinuance action to remove advertisements where it is in the interest of amenity or public safety.

useful references

City and County of Swansea
www.swansea.gov.uk

City and County of Swansea Local Development Plan
www.swansea.gov.uk/LDP Natural Resources Wales www.naturalresources.wales

TAN6: Planning for Sustainable Rural Communities (2010)
wales.gov.uk/topics/planning/policy/tans/tan6/?lang=en

TAN7: Outdoor Advertisement Control (1996)
https://gov.wales/technical-advice-note-tan-7-outdoor-advertisement-control

conversions


Blackberry
Barn

Conversion of Rural Buildings (subject to policy CV4)

D1.1 The LDP permits the conversion of existing traditional rural buildings, as described in policy CV4, that contribute to the attractiveness of the area and merit safeguarding, to uses which contribute to the rural economy, subject to a number of criteria. Conversion of such buildings to residential accommodation will generally be resisted. Tourist accommodation is preferable to private residential use.

D1.2 Policy CV4 clearly states that traditional rural buildings include stone-built barns, stables, churches, chapels and schools which create locally distinctive development, contribute to the County's attractive countryside scene and merit safeguarding. The primary initial consideration when assessing proposals for the conversion of a rural building, will therefore be the building's construction materials, age and purpose to determine whether it can be deemed a 'traditional' building in terms of the policy. Other policies in the plan which relate to rural building conversions must be read in conjunction with CV 4, which sets the context and criteria against which any proposal must be assessed. Consequently, if a building is not considered to be a traditional rural building which merits safeguarding; described by policy CV 4, it will fail to comply with CV 4 and is not considered suitable for conversion. Redundant agricultural buildings are the most common building types to be converted. However, within Gower there are also examples of mills and chapels. The conversion of such buildings provides the potential to create locally distinctive development.

D1.3 Adopted Supplementary Planning Guidance, The Conversion of Rural Buildings (July 2011), re-confirms this approach to the conversion of rural buildings. This SPG will be updated and adopted in support of the LDP and should be consulted as part of any proposals to convert existing rural buildings. TAN6: Planning for Sustainable Rural Communities also sets out guidance on the re-use/ adaptation of rural buildings.

D1.4 Subject to general planning policy considerations, the re-use and extension of these buildings for purposes that contribute to the local economy can promote the principles of sustainable development as well as helping to retain the local vernacular and character of the AONB. However, the loss of any special historic architectural detailing will not be acceptable.

D1.5 Some rural buildings may be unlisted but may be of historic significance with important architectural features, evidence of repairs/ evolution and features relating to original use. Therefore building recording before any work can commence, during and after works may be required by planning condition. The record must be deposited by the applicant or agent in the West Glamorgan Archives and to GGAT for the Historic Environment Record.

D1.6 For further information refer to;

- Module A: Residential
- Module F: Repair and Maintenance; and
- Module G: Sustainable Design Approach

Opposite page: Blackberry Barn, Llangennith incorporating an attractive mix of stone and whitewashed walls, visually tied through by the use of subtle grey/blue paintwork. Retaining appropriately simple verge and eaves detailing.

D1.7 Subject to Swansea LDP Policy CV4, the primary guiding principle is that the original character and integrity of the building and its setting should be respected, and ultimately the original character enhanced, by the conversion. If necessary, the needs of the user should be adapted to suit the building, rather than the requirements of the conversion being imposed upon it.

D1.8 The conversion of redundant traditional buildings will generally require consideration of protected species. These buildings often provide shelter for species such as bats and barn owls and investigatory surveys, protection during construction, and mitigation measures will need to be approved as part of the application process. This is particularly true of lesser horseshoe bat populations which are a distinct genetic clade on Gower and their conservation is vitally important. (Refer to Module H: Green Infrastructure, Landscape and Biodiversity).

D1.9 When proposing the conversion of any traditional building the following general principles should be considered:

a Proposals will need to ascertain the suitability of the building to be converted for the proposed use, and whether it is likely to need structural and/or remedial work to stabilise the structure e.g. underpinning foundations, or before strengthening roof structure. Such work should not have a negative impact upon the character of the building.

b The building should be capable of conversion without prejudicing the original character of the building or rural character of the locality. It should remain largely intact, retain its form, and its design should be in keeping with its surroundings.

c The scale and massing of the existing building should be respected and external alterations kept to a minimum.

d A sense of the building's original overall volume should be retained internally as well as externally. The insertion of additional floors within the existing structure may not always be an acceptable approach, particularly if the building is listed.

e A building's setting may be as important to the local character as the structure itself. If proposals include converting a group of buildings the scheme should retain existing relationships between the buildings and common spaces such as courtyards as well as to any significant natural features.

f Be aware that there may be a requirement for an archaeologist to record any groundworks. Where possible preserve original flooring and ensure that evidence of previous occupation remains undisturbed.

openings

D1.10 The solid to void-ratio - the amount of 'blank' wall in relation to the number of openings (doors, windows, etc.) - of the existing building should be respected. Generally, older traditional buildings are likely to have a high solid to void ratio, and new openings therefore often need to be incorporated during conversion in order to achieve acceptable natural lighting levels. The following general principles should be taken into account:

a The existing openings should be used to accommodate new doors, windows and screens wherever possible. Re-opening previously blocked up openings may also be an appropriate way of introducing more light into a building. Existing sources of light should be maximised.

b New openings should be kept to a minimum and the proportions of existing openings should be used as a basis for design of new ones.

c Windows should have an appropriate depth of reveal (the distance set back in the wall). Reveals are generally relatively deep within older traditional buildings and provide attractive shadows which add interest to an elevation.

Above: conversion which has respected the character of the existing building, in terms of openings and roof detailing, Reynoldston

roofs

D1.11 For alterations to roofs the following principles should be taken into account:

a The existing roof structure and shape should be retained where possible. Traditional roof pitches should not be altered as this can have a negative impact upon the buildings form, however there may be opportunities to improve non-traditional roof forms.

b The introduction of new dormers to outbuildings will rarely be considered acceptable as these fundamentally alter form and character.

c Existing traditional roof coverings should be kept and re-used where appropriate. Existing slates should be kept and re-used where possible. Replacements should match with existing, both in terms of colour, texture and pattern.

d Alternative roof finishes may be appropriate particularly on commercial schemes or more contemporary residential conversions, subject to detailing and context.

e The removal of existing, traditional roof features such as chimneys, capping tiles etc. will be resisted.

D1.12 For alterations to doors and windows the following general principles should be taken into account:

Doors

a Doors in conversions should be limited to simple styles and detailing, and should fit the existing opening. The infilling of an opening in order to fit a door should be avoided.

Above: Existing openings retained and simply glazed to provide access and daylighting. Home Farm, Penrice.

Windows

a If windows are required to light an upper floor, their design should be appropriate to the existing building. The incorporation of internal light wells and atria with ridge roof lighting can assist in getting natural light deep into the heart of a building.

b The introduction of dormer windows is rarely an acceptable approach when converting a building unless they are an existing feature, due to the impact upon the character and form of the original building. Rooflights should be considered as an alternative. (Refer to windows within the detailing section of Module A: Residential).

c The projection of rooflights above the roof plane should be minimised and preferably these should sit flush within the roof plane. For proposals on older buildings of architectural merit as well as any buildings within conservation areas, rooflights must be conservation style and generally sit flush within the roof plane (unless strong justification is provided for the need for an alternative approach).

d The choice of style of window should reflect the style and characteristics of the existing building. The window should fit the opening rather than vice versa, as such standard or 'off the shelf' windows will rarely be acceptable.

e The use of uPVC windows will not be accepted for converted buildings as often these are older, traditional properties which may be of some architectural or historic interest, even if not protected through being listed.

f Care should be taken with the subdivision and proportions of windows, which should be appropriate to the building type rather than its new use.

g Large openings provide the opportunity for the inclusion of attractive, strong design elements. The detailing of such openings should aim to retain the openness of the original building and, as such, any sub-division by frames should be minimal.

h Light spill from large window voids can in some instances result in impacts on tranquility and biodiversity. Special consideration must be given to the issue of light spill resulting from the design of any building (refer to Module 5I for further details).

D1.13 Proposals should aim to retain the simplicity, form and composition of the original building. Therefore the impact of new services or features must be carefully considered. Proposals should therefore take into account the following general principles:

a Buildings should not be 'domesticated' through the introduction of inappropriate detailing or features such as porches or conservatories.

b Considerable care needs to be given to both siting and detailing when incorporating chimneys, flues or ventilation systems:

- External masonry chimneys will rarely be an acceptable addition to any conversion. However where these are existing and original features, the repair or reinstatement of these will be supported.
- Insulated metal flues should be used instead as these can be housed within the building, minimising visual impact. Such flues should be finished in a dark recessive colour (typically black or dark grey). Flues should only project to the minimum requirement to meet current building regulations and care should be given to locating these where their visual impact is minimised. Excessively tall flues will not be supported.

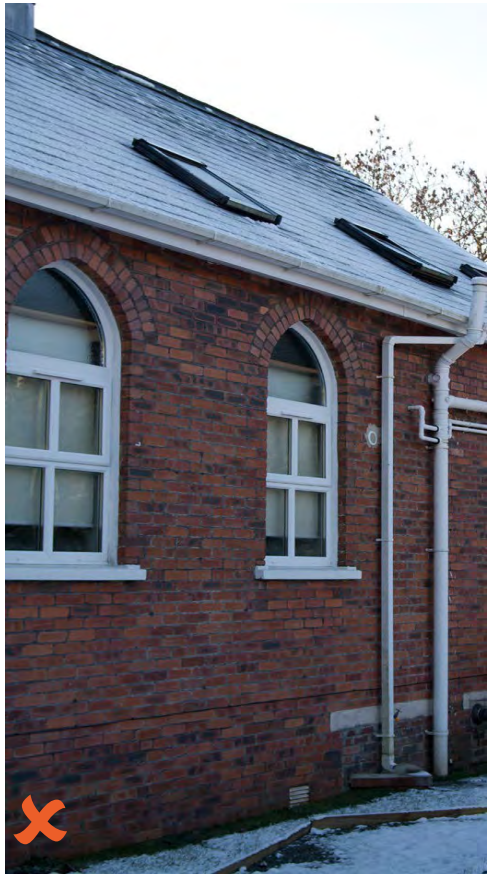
c Any necessary bulky plant should be sited on the least visible side of the building or, preferably, within the building itself.

d External pipework should be kept to a minimum. Generally, all foul water drainage should be incorporated within the building, with external soil vent pipes being in a dark/ recessive colour (typically black or dark grey).

e Gutters and down pipes should be of a style, material and colour appropriate to the building, with existing/traditional fixing details being used.

f Existing ridge and eaves detailing should be retained or reinstated where possible, however the introduction of timber fascias and bargeboards will not be acceptable on agricultural conversions regardless of material, as they are not typical detailing.

g Be aware that there may be a requirement for an archaeologist to record any groundworks. Where possible preserve original flooring and ensure that evidence of previous occupation remains undisturbed.



Above: external pipework and timber decking detract from the integrity of this residential chapel conversion

D1.14 In addition to the form and fabric of the building, the detailing of external spaces and potential impact that conversion could have on local ecology should also inform proposals. Consequently, the following general principles should be taken into account:

a Any landscape scheme should avoid domesticated detailing - simple planting schemes, traditional boundary treatments and hard surfaces will be most appropriate. If lawns and planting are to be incorporated, they should be simple and sensitive to the character of the building and wider landscape setting (Refer to Module H: Landscape).

b Where a conversion consists of a number of units, a common treatment should be applied to external spaces in order that these read as a single, unified entity.

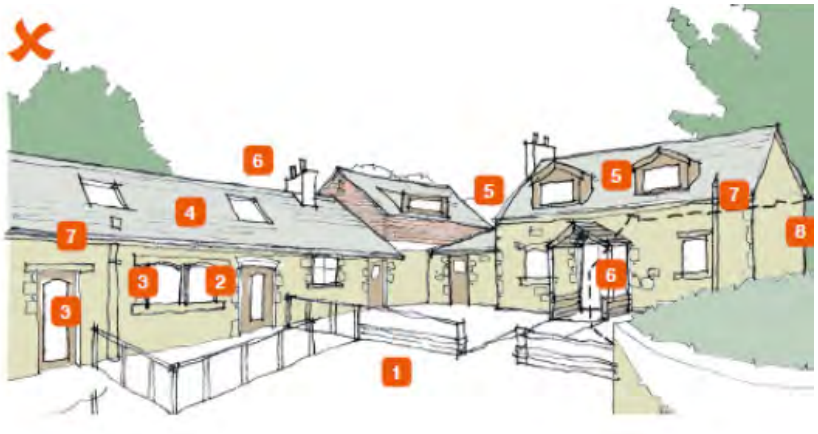
c The siting of outbuildings including garages and sheds will need to be controlled to respect the existing building's character. Wherever possible, such uses should be incorporated within the existing building. When not viable, these structures should be sited away from the building in the least visually obtrusive part of a site. Appropriate measures should be taken to screen any visually intrusive structures, preferably using planting, if appropriate, landform and natural materials.

Above: Barn conversion for use as holiday accommodation, Glebe Farm, Cheriton. Utilising existing openings, simple detailing and incorporating level access.

Below: Converted barn fronts onto quiet lane, with stone walls providing enclosure for private space. Oxwich Green

D1.15 The following illustrative example has been prepared to show how a typical collection of farm outbuildings might be converted into holiday accommodation. The example highlights the principles of good conversion and, conversely, how a poor conversion can destroy not only a single building but often an entire grouping.

Below: farm buildings used as basis for the preparation of illustrative examples *(right)*



Poor example - leading to a loss of character

1. subdivision of yard into individual areas
2. Alteration and over-enlargement of existing openings
3. introduction of inappropriate window and door styles
4. use of standard rooflights
5. inappropriate introduction of dormers
6. introduction of residential detailing such as porches and chimneys
7. poor positioning of services
8. removal of existing building

Good example - retaining and enhancing existing character

a. retention of single courtyard space to front
b. use of existing openings sensitive window and door styles
d. use of conservation style rooflights.
e. chimneys ventilated by flue on less visible elevation
f. incorporating existing features such as shutters

commercial & contemporary conversions

D1.16 On commercial properties, roller shutter and security style doors will not be considered acceptable, with side hung, timber or metal panel doors being a more acceptable approach.

D1.17 Commercial schemes will need to consider the potential impact of access and storage arrangements upon the character of both the site and wider area. If there is more than one commercial unit, boundaries should be well defined and a maintenance regime should form part of any tenancy agreement. Screened bin storage should be provided for each unit.

D1.18 The example opposite illustrates a replacement farmhouse and outbuilding conversions which have adhered to the general principles laid down in within this module.

Above: Replacement farmhouse and conversion of outbuildings to provide dwelling house and holiday accommodation, Hill End Farm, Reynoldston. The stone wall, grass verge and planting enhance the development.

City and County of Swansea
http://www.swansea.gov.uk

City and County of Swansea Local Development Plan
http://www.swansea.gov.uk/LDP

Natural Resources Wales
https://naturalresourceswales.gov.uk/?lang=en

Converting Historic Farm Buildings in Wales, Cadw and Monmouthsire County Council (2004)
https://cadw.gov.wales/sites/default/files/2019-05/Converting_Historic_Farm_Bldgs_1_EN_CY.pdf

The Conversion of Rural Buildings SPG, July 2011, City and County of Swansea
https://www.swansea.gov.uk/spg

Guidance on Building Recording
https://historicengland.org.uk/images-books/publications/understanding-historic-buildings/heag099-understanding-historic-buildings

module D

gower aonb
design guide

chalet development


WINDYHILL

introduction

E1.1 Proposals for residential chalet development in Gower, including replacement chalets and alterations - or extensions to existing chalets must have regard to all relevant policies in the LDP, including the following:

Development in the Countryside (Subject to Policy CV2)

Replacement Dwellings in the Countryside (Subject to Policy CV3)

E1.2 At various locations within the AONB and surrounding areas, there are a number of residential chalet type developments. These are located at:

- Hareslade
- Holts Field
- Miles Lane
- Owens Field
- Sandy Lane

Each of these chalet developments has their own particular setting and characteristics, with most located within the designated countryside. The Council considers these to be areas of special character where development will be subject to particular control.

E1.3 As well as the above named chalet developments, other chalets within Gower are on individual plots, discreetly located in relatively isolated areas or are part of small communities that comprise of only a handful of dwellings. The guidance in this module relates to proposals for all residential chalets, whether they are individual dwellings in isolated locations or part of a larger group or community. For the purpose of this Guidance, the term residential chalet does not apply to chalets which are permitted for holiday use only as these invariably have a different character and requirements for amenity standards.

E1.4 The majority of the residential chalet areas and communities across Gower originated as 'plotland' developments in the inter-war period, when land was divided into small plots and sold, often in unorthodox ways, to people wanting to build a dwelling as a holiday home, country retreat or smallholding. Once common throughout the country, many 'plotlands' have been redeveloped with larger 'modern' buildings leading to a loss of the original 'low- key' semi-rural character and resulting in typical 'suburban' developments. However two areas of Gower, namely Holts Field and Owens Field, retain many of their original characteristics and as such are rare examples of Swansea's history and unique built heritage. Holts Field was designated a Conservation Area in 1990.

E1.5 The statutory requirement for planning authorities to have regard to overarching AONB purposes and objectives applies in relation to all activities affecting AONBs, whether those activities lie within, or in the setting of, the designated areas. Consequently, even though Holts Field, Owens Field and Miles Lane are all located just outside the AONB boundary, care must be taken to ensure any development in these areas does not have an unacceptable detrimental effect on the AONB's special landscape qualities.

Above: Sandy Lane

E1.6 The Council recognises the pressure to improve and/or replace chalet properties with more substantial, modern structures and has a clear planning framework in place to resist proposals considered to detract from the special character of residential chalets and/or the areas within which they are located. The main LDP policies against which any planning application for works to residential chalets are CV2: Development in the Countryside and CV3: Replacement Dwellings in the Countryside.

E1.7 The above policies, as well as this Guidance, apply to all residential (non-holiday) chalets and not just those chalet developments referenced in the LDP. Policy CV3 explicitly refers in its amplification text to the chalet communities of Hareslade, Holts Field, Miles Lane and Sandy Lane, in the context of now superseded SPG focussing on these areas. For the avoidance of doubt, Owen's Field is considered of equal importance in terms ensuring planning decision making safeguard the special character of residential chalet areas, hence the inclusion of Owen's Field in the Guide.

E1.8 Proposals for residential chalet development including replacement chalets and alterations or extensions to existing chalets, must seek to maintain the unique design quality of these dwellings. This includes preventing further urban or suburban style attributes and/or unacceptable enlargement of existing chalets. The existence of existing poorly and inappropriately designed chalets is not a justified reason for permitting further insensitive development.

E1.9 In order for the Council to determine proposals for replacement residential chalets, the applicant must submit sufficient justification in support of the appropriateness of the proposed development in the context of the site itself and its wider surroundings. Conditions may be imposed on any planning consent for a replacement chalet, in order to ensure that no extensions or additions are undertaken without further permission being obtained. The policies clearly state that proposals to increase the number of residential chalets within the chalet developments of Hareslade, Holts Field, Miles Lane and Sandy Lane will not be permitted as it would intensify the level of development at those locations, negatively impacting on their semi-rural character.

E1.10 As wewell as policies CV2 and CV3 proposals for residential chalet development must also comply with other relevant LDP policies, such as:

- PS1: Sustainable Places
- PS2: Placemaking and Place Management
- ER 4: Gower AONB
- ER 6: Designated Sites of Ecological Importance
- ER 8: Habitats and Species
- ER 9: Ecological Networks and Features of Importance for Biodiversity
- ER11: Trees, Hedgerows and Development
- RP 3: Air and Light Pollution
- RP 4: Water Pollution and the Protection of Water Resources.

E1.11 In order to maintain the unique character of residential chalets and/or the areas in which they are located, the placemaking requirements and design principles applied to residential chalets will not be the same as those applied in urban area. As a result, some of the approaches set out in the following SPGs will not be apropriate when considering proposals for residential chalets:

- Design Guide for Household Development,
- Infill and Backland Development

The following sections provide an appraisal of the overarching characteristics and key features of significance for the chalet communities identified above. These appraisals provide important reference points to inform any proposals and the decision making process.

Holts Field

E1.12 Holts Field was designated as a conservation area under the provisions of Section 277 of the Town and Country Planning Act 1971, by resolution of Swansea Council in 1990.

E1.13 The site is some 5.6 acres and has 27 relatively small, single storey chalets nestled amongst trees and hedges in a secluded, semi-natural woodland setting, close to Bishop's Wood Nature Reserve and the AONB boundary to the south. The chalets were originally built as holiday chalets but their continued use as permanent residential chalets led to an Established Use Certificate for residential purposes being granted in 1983. The area incorporates a linear central green space which is used as a communal area, with a row of chalets and trees setting the backdrop to this on its western side and chalets set behind hedges on its eastern side as well as shorter north and southern sides. There are also some minor instances of dwellings set in individual plots a short distance away from the green space. Topographically, the site is relatively flat.

E1.14 The chalets are self-built and constructed of a variety of materials, but with a preponderance of timber. There is therefore a variety of design, but also shared common features. The area is important due to the fact that the chalets have not been altered in appearance by the incorporation of inappropriate materials or by the addition of large extensions. The site has therefore retained its character and integrity without detriment to the landscape and nestles well in amongst the green features at this location.

Overarching characteristics:

- Appropriately scaled, single storey chalets (most have a maximum width of 7m);
- Wood board clad dwellings (typically horizontally laid);
- Exposed blockwork and brickwork is limited to foundation plinths and chimneys;
- Metal sheet roofs with some minor instances of slate, felt and other materials;
- Predominantly shallow pitched roofs;
- Metal flues coming through roofs;
- Minor instances of roof mounted PV panels.

Above: Aerial image of Holts Field

Below: Chalet at Holts Field

Owens Field

E1.15 Owens Field is located adjacent to the AONB boundary, Bishops Wood Nature Reserve and an Area of Ancient Woodland. The chalets are similar in character and appearance to Holts Field albeit with a more eclectic mix of materials. The dwellings are more sporadically laid out adjoining a single access lane, with a cluster located in the southern end of site and stepping down the western side of the site. The layout reflects the site topography which falls from east to west (relatively steeply to the west side of access lane). There is only footpath access to the west of the site. As per Holts Field, the dwellings are nestled amongst trees and behind hedgerows (with some minor instances of fences).

Above: Aerial image of Owens Field

Above: Chalet at Owens Field

Overarching characteristics:

- Appropriately scaled, single storey chalets;
- Wood board clad dwellings (typically horizontally laid, some instances of large panel format units);
- Mixture of metal sheet and felt roofs with some minor instances of other materials;
- Predominantly shallow pitched and mono-pitched roofs;
- Instances of roof mounted PV panels.

Hareslade

E1.16 A site of relatively flat topography with some 32 chalets of various styles and sizes. They are situated in adjacent, parallel rows of dwellings (originally in two separate fields) fronting eastwards onto single width access lanes. The eastern lane (field one) has dwellings forming a tight linear group on its western side, with a linear green communal space to the east of the lane. The dwellings face onto the lane. The western lane used to have smaller dwellings and a more spacious layout, but redevelopment of the chalets over time has meant that many of the chalets now fill almost the entire curtilage thus reducing the open semi-rural character of the site. The re-development of the site with unsympathetic chalet designs and materials resulted in the Council producing a design guide in 1984. The guide stated that 2-storey and dormer style developments would not be permitted. However, this stance has clearly not been maintained, with many such developments constructed since the date of the design guide.

Above: Aerial image of Hareslade

E1.17 The existing chalets are predominantly large scale with many having the height and scale of a typical suburban dwellings with living accommodation within the roofspace. In addition to this, the chalets typically have a much more 'permanent' appearance than those of Holts Field and Owens Field as a result of the use of more heavy/solid materials such as slate roofs and instances of mortar/render walls, details such as bargeboards and fascias, as well as the use of more domestic front boundary treatments such as fences and railings.

E1.18 The site itself is also much more open with few trees in and around the rows and, as a result, the settlement is more domesticated and suburban in character and appearance

Above: Chalet at Hareslade

than either Holts Field or Owens Field. The site is no longer therefore considered a 'typical' semi-rural chalet area with the area having been gentrified over the years and is now a very desirable place to reside, with house prices reflecting the nature of suburban dwellings. Accordingly, design expectation will be different from those at Holt's Field, Owens Field and Sandy Lane.

Overarching characteristics:

- Mix of scales from smaller single storey chalets to much larger bungalow types with living accommodation in the roofspace;
- Mixture of wood board clad dwellings with instances of rendered walls (or part thereof);
- Typically slate roofs with some instances of metal sheet and concrete tiles;
- Predominantly pitched roofs ranging between 25-45 degrees pitch;
- Mixture of metal flues and chimneys;
- Instances of roof mounted PV panels;
- Instances of rooflights;
- Roofs typically incorporate bargeboards and fascia details;
- Instances of covered verandas and smaller integrated porch areas.
- Front boundary treatments comprising of railings and wooden fences in variety of styles as well as some minor instances of walls. One instance of integrated first floor balcony area and one smaller external balcony area. However these are not typical or characteristic of the settlement.

Sandy Lane

E1.19 The largest of the chalet areas has approximately 106 chalets and is located wholly within the AONB. Relatively few of the original inter-war chalets remain and the area has the greatest diversity of dwelling types, with smaller, single storey chalet dwellings through to larger 2-storey dwellings, which are-effectively solid construction masonry/rendered bungalows with slate roofs, brick chimneys, uPVC doors and windows. The chalets are highly desirable and have an above average market cost, reflecting the fact that they are far removed from their origins and are no longer simple wooden affordable 'chalets', but gentrified and developed.

E1.20 The dwellings are set in domestic gardens, many with suburban front boundary treatments such as railings, wooden front gates, etc. some with driveways and parking areas. The site topography is gently undulating with dwellings set around a number of loose but compacted gravel lanes (typically single width) commonly bounded by dense, established hedgerows which occasionally open up to reveal flat

green open space areas. Despite the increasingly formal development and boundary treatments, the unstructured, low density layout enables the area to retain its semi-rural character. However, there is a danger that continued pressure for larger chalet units, with the subsequent reduction of undeveloped curtilage and open space, removal of tree cover and vegetation, pressure for additional vehicular parking and increasing amounts of hard standing mean that the area is in danger of becoming more 'suburban' in character over time.

E1.21 A design guide was produced by the Council in 1984. The guide stated that 2-storey and dormer style developments would not be permitted (replicating the guidance for Hareslade). This stance has clearly not been maintained, with many such developments permitted since the date of the design guide. The goal of this SPG is to ensure that future developments at Sandy Lane maintain their unique design quality, and prevent further urban style encroachment by establishing a clear policy position that the existence of poorly

and inappropriately designed chalets is not a justified reason for permitting further insensitive development. Consequently, 2-storey and dormer-style developments

Above: Aerial image of Sandy Lane

Below: Chalet at Sandy Lane

will not be permitted. Other basic principles of the original guide, such as not increasing the number of chalets has enabled the site to retain its low density character and policies CV2 and CV3 continue this stance.

Overarching characteristics:

- Chalets set in individual plots with established and well defined domestic boundaries; Mix of accommodation scales from smaller single storey chalets, bungalow types with living accommodation in the roofspace to some instances of small 2 storey chalets;
- Mixture of wood board clad and rendered chalets;
- Typically slate roofs with some instances of metal sheet and concrete tiles;
- Mixture of roof forms including pitched roofs with instances of additional lean-to roof and flat roof elements coming off these, as well as instances of asymmetrical roofs and small hipped roof elements also;
- Mixture of metal flues and chimneys;
- Instances of roof mounted PV panels;
- Instances of rooflights;
- Roofs typically incorporate bargeboards and fascia details;
- Predominant use of uPVC windows;
- Some minor instances of covered verandas and smaller integrated porch areas;

- Mixture of boundary treatments comprising typically of wooden fences in variety of styles as well as some minor instances of walls;
- Presence of on plot driveways/ parking areas.

Miles Lane

E1.22 Miles Lane is located outside the AONB, but close to the boundary. The site consists of a linear group of 19 dwellings, all situated on the eastern side of Miles Lane. This lane forms the western boundary of the small cluster of dwellings making up Manselfield to the east of Murton. As a result these chalet plots form a row with a strong building line and relatively rigid and uniform plots which give these a more suburban/less rural feel than the nearby chalet settlements of Holts Field and Owens Field. Originally the chalets were considered to form an architecturally interesting cluster immediately adjacent to the suburban area, and the Council produced a Design Guide in 1984 in order to try and retain the character and integrity of the site. However since that time the dwellings have been significantly redeveloped and a number of these have a much more substantial 'bungalow' type character as a result of the use of heavier

Above: Aerial image of Miles Lane

Below: Chalet at Miles Lane

materiality of render and slate or concrete roofs. As a result of this the area has effectively lost its original chalet type character, however efforts should be made to retain an appropriate scale and cohesive character to the row as a whole. Further plot intensification should therefore be resisted.

Overarching characteristics:

- Dwellings set in a strong and tight row of deep but narrow individual plots with established and well defined domestic boundaries.
- Dwellings set back from the lane edge with a mixture of domestic front gardens and on plot driveways/ parking areas;
- Predominantly single storey chalets with instances of living accommodation in the roofspace;
- Approximately 2/3rds of the chalets have a long, gable fronted form with the remainder of the buildings presenting pitched or asymmetrical roofs which run perpendicular to the lane (with some of these having rear gables running perpendicular to the main roof);
- Nearly all chalets are rendered, with one instance of wood cladding; All roofs are finished in either slate or concrete tiles, with one instance of sheet metal to the single wood clad dwelling;
- Mixture of metal flues and chimneys to some dwellings;
- Instances of rooflights;

chalet communities

- One instance of roof mounted PV panels;
- Roofs typically incorporate bargeboards and fascia details;
- Predominant use of uPVC windows;
- Some minor instances of small integrated porch areas;
- Boundary treatments predominantly comprising of hedgerows but with some instances of close boarded fencing;

Current issues in some areas (Hareslade & Sandy Lane) and potential future issues in remainder:

- Increase to size & height of dwellings;
- Changes to material finishes and introduction of domesticating elements resulting in change of character from chalets to more permanent suburban type bungalow appearance;
- Introduction of inappropriate and 'suburbanising' materials (uPVC windows and doors etc.);
- Over-domestication of plots in some areas – i.e. vegetation clearance and introduction of lawns etc., inappropriate boundary treatments (walls, close boarded fencing, hardstandings, etc.)

Opposite and below: examples of developments in Hareslade and Sandy Lane which no longer retain the original characteristics of the chalets

E1.23 The following placemaking principles provide guidance specifically for new/replacement chalets. Separate guidance is provided at the end of this Module for proposals to extend or alter existing chalets.

E1.24 The guidance that follows sets out the overarching principles and plot characteristics that will be applied to new/replacement chalets, the principles of dwelling form and layout, and the requirements for dwelling character and materials.

E1.25 Principle of Development & Plot Characteristics:

a Planning permission will not be granted for completely new chalets on undeveloped land or vacant old chalet sites. This principle is set out within LDP Policy CV 2: Development in the Countryside and Policy CV 3: Replacement Dwellings in the Countryside.

b Proposals to replace chalets with mobile homes or caravans will not be approved. Favourable consideration will be given to the placing of a caravan for a temporary period whilst the chalet is being rebuilt.

c The extension or amalgamation of plots in order to facilitate larger individual buildings will not be approved. This principle is set out within LDP Policy CV 3: Replacement Dwellings in the Countryside.

d The subdivision of plots in order to accommodate additional, separate dwellings will not be approved. This principle is set out within LDP Policy CV 2: Development in the Countryside.

e Conditions will be attached to any redevelopment proposals to limit/ restrict permitted development rights to maintain the character and integrity of approved proposals. Furthermore, no other extensions or additions shall be undertaken at redeveloped chalet sites without the express consent of the Local Planning Authority (LPA). See Policy LDP Policy CV 3: Replacement Dwellings in the Countryside (para. 2.10.31).

f Proposals for larger replacement chalets which would result in an over-development of the plot will not be permitted.

g The loss of good quality, mature trees to accommodate larger chalets will not usually be supported. Where the loss of a tree(s) is unavoidable and considered acceptable this should be compensated for by incorporating within the proposal new tree planting elsewhere on the site.

h If redevelopment proposals require the removal of existing hedges (for construction access, etc.) these should be replaced as a part of the finished proposals.

i Any proposals for new planting on sites should be locally appropriate (mix of) native species.

j The creation or introduction of paved or tarmac driveways and parking areas will not be permitted. Formal layouts for paths should also be avoided.

k Garden sheds and other buildings ancillary to the main building should be of a scale, bulk and design in keeping with the main building.

design principles for chalets

- Plot boundary treatments should be appropriate to the rural nature of the specific chalet site and avoid further suburbanisation/domestication of the plot and wider site. The use of close boarded fencing will not be permitted. Appropriate responses to boundary treatments include at:

  Holts Field & Owens Field
  Hedges & other planting, post & wire fencing with supporting planting.

  Hareslade
  Low stone walls & planting, picket fencing or appropriate rural type fencing, railings of a simple (non-ornate) design.

  Sandy Lane
  Hedges & other planting, post & rail or other appropriate rural/ agricultural type fencing.

Above: simple wooden fence boundary treatment

E1.26 **Dwelling Form & Layout:**

a Proposals for 2 storey and dormer style developments will not be permitted for any chalet. New/replacement chalets located in Hareslade, Miles Lane and Sandy Lane may be able to accommodate subservient first floor (one and a half storey), within the slope of 35 degree roof pitch, depending on the nature of the plot and design proposed. For the avoidance of doubt, no dormers will be allowed on these properties.

b The building width shall be as per the existing dwelling to be replaced or 7 meters, whichever is greater (subject to other considerations regarding overdevelopment of the plot).

c The existing building line of the replacement chalet must be retained, unless sufficient justification is provided for a departure from this.

d The spacing between new and existing buildings should take reference from the existing pattern of development and enhance the layout character of this. The absolute minimum distance between buildings following redevelopment shall be 2 meters (subject to Building Regulations).

e The roof pitch of the redeveloped chalets shall be the minimum pitch necessary, as existing or up to a maximum of 30 degrees for chalets at Holts Field and Owens Field. At Sandy Lane, Hareslade and Miles Lane the pitch of the roof may be a maximum of 35 degrees.

f Support will also be given to mono-pitched or asymmetrical roof designs subject to these forming an integrated part of a coherent design solution.

E1.27 Dwelling Character & Materials:

a Given the eclectic nature of the chalet sites, the design of redeveloped chalets should seek to achieve a diversity in character and appearance to other existing chalets in terms of size, massing, form and detail colour treatment (subject to the acceptability of all other design principles and considerations).

b Replacement chalets should reference the existing materials where these would positively contribute to the character of the site or visually improve the proposed building.

c Elevations should be kept simple in appearance (typically one material finish), whilst allowing for a bold and/or varied colour scheme which should enhance the specific character of the development.

d The roofing material shall be appropriate to the existing character of the site as follows:

- Holtsfield & Owens Field
  Colour coated/standard galvanised corrugated metal sheets or colour coated rolled zinc roofing sheets
- Hareslade
  Slate or synthetic slate or colour coated/standard galvanised corrugated metal sheets or colour coated rolled zinc roofing sheets
- Sandy Lane
  Slate or synthetic slate or colour coated/standard galvanised corrugated metal sheets or colour coated rolled zinc roofing sheets

e Consideration of alternative roofing materials will be made on a case-by- case basis but these should not result in the further suburbanisation of the dwelling in comparison to the dwelling to be replaced.

f The walls of the chalet shall be colour stained or painted wooden shiplap boarding or colour coated corrugated metal. Alternative materials will be assessed on a case-by-case basis.

g The use of uPVC cladding or roof details (bargeboards, fascias, soffits, etc.) will not be permitted.

h The use of uPVC doors will not be permitted.

i Windows should preferably be timber and shall be colour stained or painted a different colour to the main building. If uPVC, aluminium or other alternative materials are used, the proportions of the window and all its component parts should reflect those of a timber window (frame thickness, glazing bars, colour, etc.). Standard frame uPVC windows are unlikely to be supported.

j Window surrounds shall be highlighted in the design and clearly identified in the colour scheme for the building. They shall be a different colour than the main building. The use of white uPVC windows will not be permitted.

k Light spill from large window voids can in some instance be an issue, resulting in impacts on tranquility and biodiversity. Special consideration must be given to the issue of light spill resulting from the design of any building (refer to Module 5I for further details).

l Patio & veranda elements can be incorporated into the design of the redeveloped chalets subject to detailing.

placemaking requirements for extensions or alterations to existing chalets

E1.28 Extensions or alterations to a chalet can ultimately have just as significant impact as a proposal for a replacement dwelling, and it is equally as important to retain the unique character of an existing chalet property. Any such proposals to extend or alter an existing chalet must respect the character of the property as well as its wider setting, and must reinforce positive features.

E1.29 The key placemaking requirements for extensions or alterations to existing chalets are as follows:

- Front extensions are not appropriate with the exception of minor single storey weather porches.
- Side extensions are unlikely to be appropriate to ensure adequate spacing to adjacent chalets and accordance with the maximum 7m frontage width for new/replacement dwellings.
- Rear extension must be subservient and extruded extensions that continue the scale/form of the chalet are not appropriate
- The raising of eaves will normally be resisted. There may be exceptions to this principle at Hareslade, Miles Lane or Sandy Lane to provide a subservient first floor (maximum one and a half storey), subject to clear evidence and analysis being provided to justify that the proposal would significantly enhance the character of the chalet and be an appropriate alteration having regard to the size of the plot. Any proposals to alter the roof pitch for chalets at Holts Field and Owens Field must be a maximum of 30 degrees. At Sandy Lane, Hareslade and Miles Lane the pitch of the roof may be a maximum of 35 degrees subject to this beiong apropriate given the character of the property.
- The addition of roof dormers of any size to an existing chalet is not acceptable but roof windows following the slope of the existing roof covering is likely to be acceptable.
- The addition of roof PV or solar thermal panels is supported but must be positively integrated with the roof design/form.
- Recladding and/or external wall insulation may be acceptable but must follow the established character of the particular chalet development.
- Ancillary structures such as garden rooms and car ports are unlikely to be acceptable on small plots.

repair & maintenance

Placemaking and Place Management (subject to policy PS 2)

Preservation or Enhancement of Buildings & Features (subject to policy HC 2)

F1.1 A large proportion of the work undertaken on buildings within Gower is concerned with maintenance and repair. Much of this work will not require planning permission, but nevertheless has the potential to have a substantial impact upon the character of the AONB and, as such, should aim to enhance buildings and their surroundings.

F1.2 Some works which ordinarily benefit from residential permitted development rights may require planning permission, because of:

- Protected status of the AONB; or
- Listed building or a curtilage feature/ structure associated with the listed building; or
- Conservation area status; or
- An Article 4 direction withdrawing certain permitted development rights which is in force *(refer to Appendix 4)*.

F1.3 Repairs to listed buildings or the associated curtilage listed structures/ buildings must be agreed with the Council Conservation Officer as 'like for like' repairs and changes may also require listed building consent.

F1.4 In order to confirm whether planning permission is required for proposed works, it is recommended that the Council's Development Management Service is contacted, as set out in Section 3.

F1.5 Even if planning permission is not required, the repair of traditional buildings on Gower will generally require consideration of protected species such as bats and barn owls. Further guidance on this matter is set out in Section 5 Module H: Landscape.

Above and opposite: Properties in Llanmadoc and Oxwich which would benefit from a maintenance regime to retain their character and enhance their surroundings

enhancement opportunities

F1.6 It is important to appreciate that general maintenance and repair, together with some minor amendments, can provide scope to enhance poor quality or otherwise 'average' modern buildings. Such opportunities should be encouraged as a means of improving the quality of Gower's built environment, and could include some or all of the following:

- Removal of ornamentation
- Use of simple white render to elevations
- Replacement of concrete roof covering with slate or reconstructed slate product
- Replacement of non-traditional eaves and verges with simple, local detailing
- Reinstatement or introduction of appropriately detailed boundary treatment.

F1.7 Further information on local characteristics are included within settlement statements, in Appendix 6 of this guide. More extensive guidance on residential detailing is included within Module A: Residential Development.

Above: largely original, well maintained 1970's bungalow, with additional rooflight

Above: renovated neighbouring bungalow - clean cut, contemporary

F1.8 Priority for regular maintenance should focus on keeping out water and limiting damp penetration. A regular inspection of roof coverings, gutters, downpipes, gullies and perimeter drains is recommended. A regime of inspection by a suitably qualified professional, who will also check open joints in masonry and cracked render will repay the costs by avoiding unnecessary deterioration in a building's condition. Photographic surveys can help to monitor a building's condition over time. General guidance on maintaining traditional buildings can be found on the Heritage England website: https://historicengland.org.uk/advice/your-home/looking-after-your-home/maintenance/

F1.9 With regard to day-to-day maintenance, the main issues which can normally be tackled by the building owner are:

Check list

- a. Check roof coverings and replace breakages; ☐
- b. Clear leaves and silt from gutters, flat roofs, downpipes, gullies etc., about every three months, but especially during the autumn; ☐
- c. Check that air bricks and vents both within the body of the building and in roof voids are kept free of plants and general debris; ☐
- d. Check that surface drains around the edge of the building are kept clear; ☐
- e. Check for insect and fungal attack. Timber should be checked for signs of woodworm and treated or repaired as necessary; ☐
- f. Check for signs of damp including peeling paint and wallpaper; ☐
- g. Removal of bird droppings from external masonry and any internal spaces e.g. attics, where birds have gained access. Loose bird guards should be fixed to prevent entry; ☐
- h. Removal of plant growth, especially ivy, on masonry and around the building's perimeter. Self seeded trees or large shrubs next to walls and foundations should also be removed. ☐

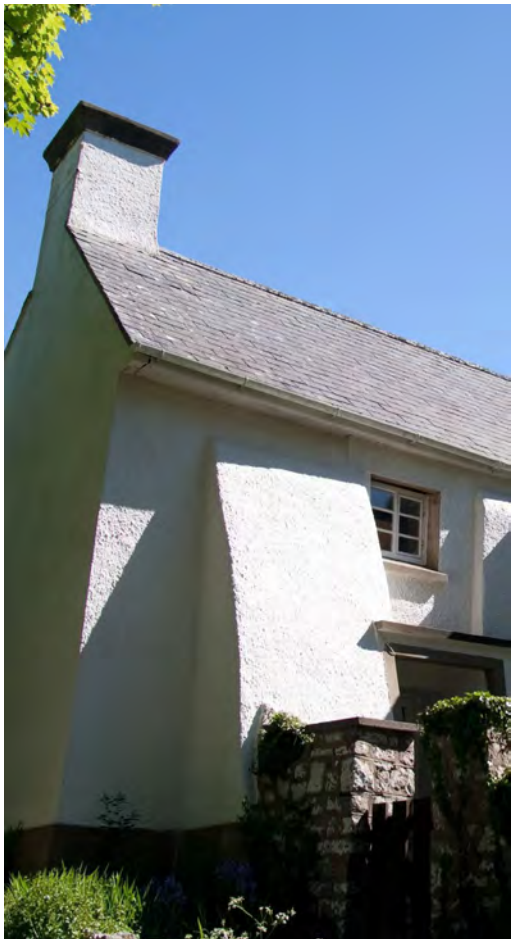
F1.10 It is the general premise that both stone and brickwork provide a weatherproof structure and therefore repairs should take the form of re-pointing rather than re-cladding. The exception to this is when buildings were originally built of poor stone/brickwork which was intended to be either limewashed or rendered.

F1.11 In simplified terms there are three main causes of masonry failure, the first requiring minor repair works, whilst the others may result in more major interventions:

Use of hard setting mortar
Causing the accelerated weathering of surrounding masonry. This will require the removal of the offending mortar, consolidation works and re-pointing.

Settlement
A period of monitoring is advisable to determine the exact cause of the movement; inadequate foundations, change in ground conditions etc. Resultant underpinning to stabilise the structure should be followed by re-pointing as necessary.

Overloading/stressing
This can occur in incidences such as re- roofing, where new materials are heavier than previous coverings. Therefore the cause of the overloading must first be determined before employing a structural solution.



Above: Stone buttress to corner of Great Pitton Farm, Pitton, Rhossili

Re-pointing

F1.12 The essential rules with repair of failed pointing, is to firstly check for bats and putting necessary mitigation in place. Then the old mortar should be removed where it is loose or the joints open, vegetation including roots should also be removed and the voids sprayed with an environmentally friendly herbicide to stop re-growth, and repointed using an appropriate mortar. Generally a mortar which is weaker than the surrounding stonework should be used, allowing weathering of the mortar rather than the stone.

F1.13 Apart from the disfiguring appearance of inappropriate mortar mixes and finishes, these can cause structural problems by effectively 'locking in' damp in the walls. Traditional lime cement mortars allow walls to 'breathe'.

F1.14 Superficial pointing should be avoided as it lacks durability. All joints should be raked out to a suitable depth and cleaned before re-pointing. Generally pointing should be finished behind the face of the stone or brick, rather than spreading across the surface.

F1.15 In masonry which is not finely finished, such as wide-jointed brickwork, the joint can be finished by hitting the mortar with a bristle churn brush with a firm pushing action. This gives a natural weathered appearance by exposing some of the aggregate in the mortar. The use of the brush also helps to compact the joints and increases the surface area which aids drying. However, it is important the mortar is sufficiently set for this otherwise the brush will leave a series of pin-holes in the mortar. Care needs to be taken to ensure that new mortar contains no voids, and that it doesn't dry out too quickly. The removal of embedded roots should be done carefully to minimise the disruption of existing mortar and masonry.

Inappropriate pointing to stone wall

Traditional pointing to stone wall

F1.16 The choice of mortar colour can have a significant impact on the external appearance of a building, especially where large areas are being replaced. The colour should harmonise with the brick or stone colour and not contrast strongly with it.

F1.17 The style of pointing is key to the overall finished look of a wall. Generally mortar should be slightly recessed from the face of the wall, however on historically or architecturally important buildings more ornate styles may be found and, in such a case this detailing should be carefully copied.

F1.18 Further information on the repair and preservation of historic masonry can be found within Historic England's Guidance on repointing brick and stone walls. https://historicengland.org.uk/images-books/publications/repointing-brick-and-stone-walls/heag144-repointing-brick-and-stone-walls/

Stone Repair

F1.19 Whilst there is now a diverse range of materials in evidence within Gower, traditionally local stone would have been the predominant material:

- Limestone in the south and north-west
- Pennant sandstone in the north-east
- Old red sandstone and quartz conglomerate in central areas

F1.20 The weathering of stone is a natural process and it is what gives many of Gower's buildings their character. However it is important to understand that the use of limewash and application of render to traditional stone houses was to protect them from the extremes of weathering.

F1.21 Recent trends have seen the removal of render & limewash, exposing the stonework beneath and opening up the building's structure to attack. This approach to renovation should be avoided and care taken in the re-application of replacement coverings

F1.22 Where weathering has caused the stone to flake or 'spoil' the affected area should be brushed to remove the loose material, exposing the new surface.

F1.23 If greater intervention is required due to excessive weathering or damage, and the stonework needs to be replaced, the choice of stone material is key and consideration should be given to the following:

a Replacement should be in the same stone – either salvaged or new.

b Replacement should be finished to match the existing – both in terms of surface treatment and style of pointing.

c If working on historically important buildings advice should be sort from qualified experts and appropriate discussions held with the Council's Conservation Team.

d Work should be carried out by skilled crafts people.

F1.24 Where small amounts of replacement local stone are needed, it may be possible to source these locally, for example from architectural salvage yards. However as there are no active quarries in Gower, large amounts of 'new' stone may have to be sourced from the nearest regional source. For example the Pencoed Limestone is a close visual and geological match for the south Gower Limestone. In instances where it is not possible to source a close regional alternative, then an alternative complementary material should be considered.

Brick Repair

F1.25 Brick walls and piers supporting gates should be inspected for signs of decay or bulging. The regular regime of repair should include removal of plant growth, especially clinging ivy, and minor areas of re-pointing of brickwork and stonework.

F1.26 In the event of failure of a brick wall, it should be replaced with bricks of the same dimension, strength and durability, texture and colour. They should be laid in the same bond (joint pattern) and width of joint. The appearance of a wall can be seriously impaired by incorporating different joint widths for areas of replacement brickwork. Second hand reclaimed bricks which match the existing are preferable, but if they are not available new stock bricks should be chosen with care trying to achieve the best match possible.

Above: Characteristic smooth and roughcast render finishes, Oldwalls

Render

F1.27 There is a strong tradition for the use of render on Gower buildings, replacing the original waterproofing of lime wash. Various types of render are in evidence including rough finished pebbledash for smoother painted or through coloured render.

F1.28 The most common cause of failure of external render is water penetration. Patch repair may be possible and if the render is self-finished the colour/texture match will depend on the correct choice of sand in the mixture. However, patch repairs of render which is painted are rarely satisfactory and generally the best solution is the removal of the failed render and its complete replacement.

F1.29 When considering new or replacement render, traditional sand/lime or cement mixes are preferable to polymer (acrylic) based finishes as these are effectively a waterproof covering which will seal the building's fabric. Older, stone built properties need to be able to 'breathe' to allow moisture to escape the fabric and in this regard a lime render or lime wash is still the ideal finish.

F1.30 Windows and doors would have traditionally been of simple design, but changing fashions, improvements in technology and the standardisation of materials has led to a wide variety of designs throughout Gower.

F1.31 It is important to note that the replacement of existing traditional windows and doors, without taking into account the character of the building can be detrimental to not only the building but also to the wider character of the area through the introduction of inappropriate styles and materials.

F1.32 Generally, original windows and doors which make a positive contribution to the character of a building should be retained and repaired where possible. The Council will encourage the repair and refurbishment of original windows in Gower, particularly within conservation areas. If they are beyond repair or not of the original design, then reproductions of the most appropriate style is likely to be the best way to 'preserve or enhance' the character or appearance of a conservation area.

F1.33 In terms of maintenance, doors and windows should be checked annually ensuring that:

a Cracked or flaking paint work is sanded, filled as necessary, primed and repainted

b Cracked or broken glazing is removed and replaced

c Windows or doors which 'stick' are renovated

d Broken sashes are re-hung

e Timber decay is remedied

F1.34 For further information on replacement doors and windows - particularly concerning materials, refer to: Module A: Residential: Detailing: Windows/Doors.

Above: attractive timber door of a traditional, simple style enhances this Gower cottage

Below: poorly maintained windows can detract from the overall appearance of a building as well as allowing water to penetrate the structure.

F1.35 All external timber and metal structures are vulnerable to decay due to exposure to the weather.

F1.36 Regular painting with appropriate external quality oil paint of a suitable colour is the best remedy to protect wood. High specification paints should be used in coastal locations.

F1.37 Due to the potentially corrosive nature of the maritime climate, marine quality stainless steel is often the most appropriate choice, however cast iron can also be used. Marine steel is often more appropriate for 'modern' designed developments whilst hot dipped galvanised steel or molten zinc spray is often more appropriate for 'traditional' designs.

F1.38 Traditional buildings on Gower, if painted, would be white or light in colour due to the use of lime wash as a waterproofing finish. However the use of ox-blood as a colourant could provide earthy reds, as illustrated by Kennextone Farmhouse - now at The Museum of Welsh Life, St. Fagans.

F1.39 In more recent times a palette of 'pastels' have become fashionable – more generally on the fringes of the AONB. Whilst these lighter colours, whites and more 'earthy' tones may be appropriate, the use of bright accent colours are less likely to be considered acceptable.

F1.40 It is important to note that painting in a new colour may need listed building approval if it significantly alters the character and appearance of the building. This should be confirmed with the Council's Conservation Team if there is any uncertainty

Above: typical white painted rendered cottage, Bishopston

Below: Kennexstone Farmhouse was originally covered with a limewash coloured with ox-blood

F1.41 The primary purpose of the roof covering is to keep out weather and when this fails there is a need for urgent action to prevent further internal damage to the building, such as rotting of roof timbers.

F1.42 Repair of the existing roof is generally preferable to replacement, where roofs are of a sufficient quality that they are worth retaining. A good maintenance regime for all roofs should include removal of excess moss.

F1.43 Patch repairs can be carried out successfully by re-fixing loose and slipped slates and replacing broken ones with matching material. Wherever possible it is desirable to salvage and reuse existing slates.

F1.44 If reclaimed materials are to be used in re-roofing, existing slates should be stripped from less visible areas of the roof to use on front facing pitches, and replaced by the reclaimed slates. This helps to maintain a cohesive roofscape in terms of both texture and colour.

F1.45 If works require the use of new slate, it should be of a sufficient quality, texture and colour to complement the existing context, and possess weathering qualities which will ensure a similar patina.

F1.46 Substitute materials such as artificial slates made of fibre resin, concrete or 'reconstituted stone' should be avoided on historic buildings, however they may be an acceptable alternative on other buildings. Care should be taken when replacing a roof with a different material as there may be loading implications to the roof's structure.

F1.47 Spray on coating systems either to the underside of the roof, or externally should be avoided as these make subsequent problems difficult to trace and prevent the re-use of materials.

F1.48 Re-roofing or roof repairs may impact on bat roosts or bird nests and investigative work must be conducted prior to works to establish whether protected species are present. Any required survey, management, enhancement or development works must be carried out at the appropriate time of year to avoid disturbance to species. Any disturbance may be in contravention of national or European law. Where protected species and their habitats are found on a site and negative impact cannot be avoided, the Council will require the stepwise process to be followed to ensure that appropriate mitigation, compensation and enhancement measures are considered. If loss of habitat features is unavoidable, it is reasonable to request replacement habitats e.g. by including bird boxes, 'swift bricks' or bat 'bricks'. Further guidance can be found within Module H, the Biodiversity and Development SPG and Householder Design Guide SPG.

F1.49 All chimneys within conservation areas are protected as part of the vernacular roofscape. Generally, the removal of chimneys should be avoided due to the potential impact on both the building's character and that of the wider area. Flashings should be checked for damage to prevent issues with damp. If replacing or reinstating chimney pots ensure that the design and scale is appropriate to the building's character.

F1.50 If considering the introduction of rooflights, refer to the guidance provided within the roofs section of Module A: Residential: Detailing.

F1.51 When maintaining gutters and downpipes consideration should be given to the appropriateness of both the design and choice of materials. Where possible replacement should be 'like for like', particularly when dealing with older properties with cast iron rainwater goods. If wholesale replacement is proposed the householder should consider the impact of new rainwater goods, specifically the colour and detailing. White is often not the most appropriate choice, and more regressive colours such as grey, black and pale blue/ greens may be more suitable.

F1.52 For further information on roofs refer to Module A: Residential: Detailing: Roofs.

F1.53 Whilst there can be no standard specification for the repair of historic buildings, widely accepted principles have been laid down to encourage appropriate restoration practices. Most of these buildings will be statutorily listed and subject to stringent controls to both the exterior and interior of the building. For designated heritage assets, this structured approach should be organised into a 'Conservation Plan' which sets out routine tasks and timescales for more significant maintenance/ repairs. The primary aim of repair of these is to slow the process of decay whilst not damaging either the character or historic fabric, and using minimal intervention to ensure the long term survival of the building. This is best achieved through:

a **Analysis and understanding of historic development**
A thorough assessment of the building and its relationship to the wider context should be made prior to repairs being undertaken. Where necessary, this should be carried out by an appropriate professional.

b **Understanding the causes of existing defects**
An investigation into the origins of defects provides an appreciation of the reasons for the failure of the historic fabric. Such knowledge should ensure that any defects resulting from previous mistakes in repair will not be repeated.

c **Avoidance of unnecessary damage by limiting the scope of restoration work**
Repair works should be selective, addressing only areas or details which are in a condition that warrants attention. It is important to appreciate that building elements decay at varying rates and whilst one detail or material may need attention, this does not necessarily mean that work will be required to adjacent areas.

d **Adoption of proven repair techniques**
Repairs should aim to match existing materials and construction methods, and consequently mature at an appropriate rate. New techniques should only be employed where a traditional alternative cannot be identified, and/or where it will secure the preservation of an important feature.

Above: The Nook, Oxwich: Grade II

e **Truth to materials**
Repair works should not be artificially aged in an attempt to misguide the viewer into believing that they are from an ‘earlier time’. Moreover, they should not be obtrusive. If significant repairs are undertaken it may be worth dating such works to inform future analysis.

f **Analysis before removal of later additions**
Careful consideration should be given before any previous repair work/alterations are removed. Whilst they may not have been part of the ‘original’ structure, they can prove equally important to the history of the building. Any works resulting in the removal of historic detail should be sanctioned as necessary and be meticulously recorded.

g **Restoration of lost features**
Repair works provide the opportunity for the replacement of both structurally significant elements and aesthetic features. Whilst the former will be an obvious requirement to ensure long term structural integrity, the reinstatement of the latter should be based upon sound evidence. Works to either should ensure that no loss of historic fabric occurs.

h **Safeguarding the future**
Regular monitoring and maintenance regimes help to minimise future repairs to historic buildings. The life span can be further extended when physical precautions are combined with the occupation of the building which is appropriate and sympathetic to the age and design of the structure.

Above: Lower Mill, Llanrhidian: Grade II

City and County of Swansea
http://www.swansea.gov.uk

City and County of Swansea Local Development Plan
http://www.swansea.gov.uk/LDP

Natural Resources Wales
https://naturalresourceswales.gov.uk

Cadw
http://www.cadw.wales.gov.uk

The Use of Lime Mortar in Historic Structures: Technical Conservation Note 2 April 2002

Small Rural Dwellings in Wales: Care and Conservation (2007)

Conservation Principles (March 2011)

Historic Buildings Advisory Council for Wales
http://www.buildingconservation.com

Historic England

Looking After Your Home
http://historicengland.org.uk/advice/yourhome/looking-after-your-home/

Guidance on Repointing Brick and Stone Walls
http://historicengland.org.uk/images-books/publications/repointing-brick-and-stone-walls/heag144-repointing-brick-and-stone-walls/

The Society for the Protection of Rural Buildings
http://www.spab.org.uk

module F

gower aonb
design guide

a sustainable design approach

introduction

G1.1 Sustainability considerations require a holistic approach to design and lifestyles incorporating a wide ranging, complex set of parameters ranging from energy efficiency to transport planning, to individual consumer choices.

G1.2 The geographical context of Gower as a rural peninsula has special considerations which are outside the scope of this document including a reliance on individual transport options and low levels of green transport use. This is characteristic of rural locations, where appropriate reliance on public transportation is encouraged with car use a secondary option.

G1.3 The Well Being of Future Generations (Wales) Act 2015 aims to improve the social, economic, environmental and cultural well-being of Wales. The Act defines sustainable development as:

"The process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals."

G1.4 The sustainable development principle In this Act is as follows: "Any reference to a public body doing something "in accordance with the sustainable development principle" means that the body must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs."

G1.5 The Act puts in place 7 Well-being goals:

- A Prosperous Wales
- A Resilient Wales
- A Healthier Wales
- A More Equal Wales
- A Wales of Cohesive Communities
- A Wales of Vibrant Culture and Thriving Welsh Language
- A Globally Responsible Wales

Sustainable Development
(subject to policy PS1, PS2, SI1, ER1)

Efficient use of Resources
(subject to policy ER1 & PS2)

G1.6 Sustainable design objectives are embedded throughout all levels of planning policy in Wales. Of specific relevance are:

- Planning Policy Wales (PPW) Edition 11, 2021
- Technical Advice Note (TAN) 8: Renewable Energy, 2005
- Technical Advice Note (TAN) 12: Design, 2016

G1.7 The Welsh Government's "Planning Implications of Renewable and Low Carbon Energy Development (February 2011)" provides best practice guidance on the planning and environmental implications that should be considered in determining an application for renewable and/or low carbon energy development.

G1.8 PPW (2021) states: that the Welsh Government's policy is to secure zero carbon buildings while continuing to promote a range of low and zero carbon technologies as a means to achieve this. Sustainable building design principles should be integral to the design of new development. Development proposals should:

- mitigate the causes of climate change, by minimising carbon and other greenhouse gas emissions associated with the development's location, design, construction, use and eventual demolition; and
- include features that provide effective adaptation to, and resilience against, the current and predicted future effects of climate change (para 5.8.3).

G1.9 The Environment Act (Wales) 2016 seeks to secure healthy, resilient and productive ecosystems for the future whilst still meeting the challenges of creating jobs, housing and infrastructure. The Act contains a biodiversity duty to help reverse the decline and secure the long- term resilience of biodiversity in Wales, together with a duty on Welsh Ministers to set targets for reducing greenhouse emissions.

Above: 'Hedgehog highway between gardens' @ Sarah Cooper Hedgehogstreet.org

G1.10 Schedule 3 of the Flood and Water Management Act 2010 requires that all proposed new developments that include at least 2 properties or developments over 100m^2 must include Sustainable Drainage Systems (SuDS). SuDS can be used to deliver multiple benefits, including: flood risk reduction, an improvement in water quality, and enhancing biodiversity.

- Schemes will be required to adhere to the following criteria:
- Water must be managed on or as close to the source of the runoff as possible;
- Pollution is to be prevented and reduced at the source;
- Use of the 'SuDS management train' starting with prevention techniques, across a site;
- Avoid, where possible, the requirement for pumping of surface water;
- Be an affordable system in terms of construction as well as maintenance, and include environmental and social benefits

G1.11 The Welsh Government has set targets for the generation of renewable energy:

- for Wales to generate 70% of its electricity consumption from renewable energy by 2030;
- for one Gigawatt of renewable electricity capacity in Wales to be locally owned by 2030; and
- for new renewable energy projects to have at least an element of local ownership by 2020.

G1.12 TAN 12 provides guidance on sustainable building design. Design and Access Statements should show how sustainable building design principles have been considered in the design process.

G1.13 The Building Regulations (Wales), 2010 provide energy efficiency requirements for development in Wales. Part L: Conservation of Fuel and Power, of the Regulations sets energy efficiency standards for building fabric and series, provides target CO2 emission rates and guidance on how to reduce the risk of overheating in dwellings. Part L covers new dwellings, work to existing dwellings, new buildings other than dwellings and works to existing buildings other than dwellings.

G1.14 Reference should be made to the Welsh Government website for further information. (www.wales.gov.uk)

Above: Torfaen Council Eco-Building
© White Design

Above: Cliff House, Southgate
© Hyde & Hyde. An energy efficient, low carbon design house

G1.15 Early decision making is paramount to achieving more sustainable buildings. Whilst the guidance set out under the following headings give more specific advice regarding sustainable design, energy and technological systems, there is considerable opportunity in ensuring cost effective sustainable design through a more considered process.

G1.16 There are certain decisions that are made at the outset of a project that have a profound effect on the sustainability outcome. The Guidance suggests that following questions to be asked of any project:

Has an integrated design team been appointed?
Additional fees may be accrued for the input of other professionals but early strategic advice will save money and improve building performance and capitalise on specific project opportunities.

Can the project be linked through an integrated energy infrastructure to others in close proximity?
Whilst the opportunity for larger scale district energy systems may be limited on Gower, two houses sharing a ground source heat loop, for example, will massively reduce the capital investment required.

Has a sustainability statement been prepared to support the planning application?
Guidance on writing a sustainability statement can be provided by the Council.

How have SuDS been included in the scheme?
Provide details of the scheme's sustainable drainage strategy.

Has building orientation and siting been maximised?
This is a fundamental starting point for any project. Maximising natural lighting, ventilation and controlled solar gain, reduces carbon emissions and fundamentally reduces capital cost for achieving the same reductions through other means. This consideration also underpins the wider sustainable design aspects regarding transport, place-making, landscape and ecology.

Has consideration been given to the payback opportunities of any given design or technological approach?
Technology that is bolted on at a later stage may never achieve payback against the expense of its installation. Analysis of different approaches or technology is valuable time spent at the outset of a project and decisions are based on life-cycle considerations.

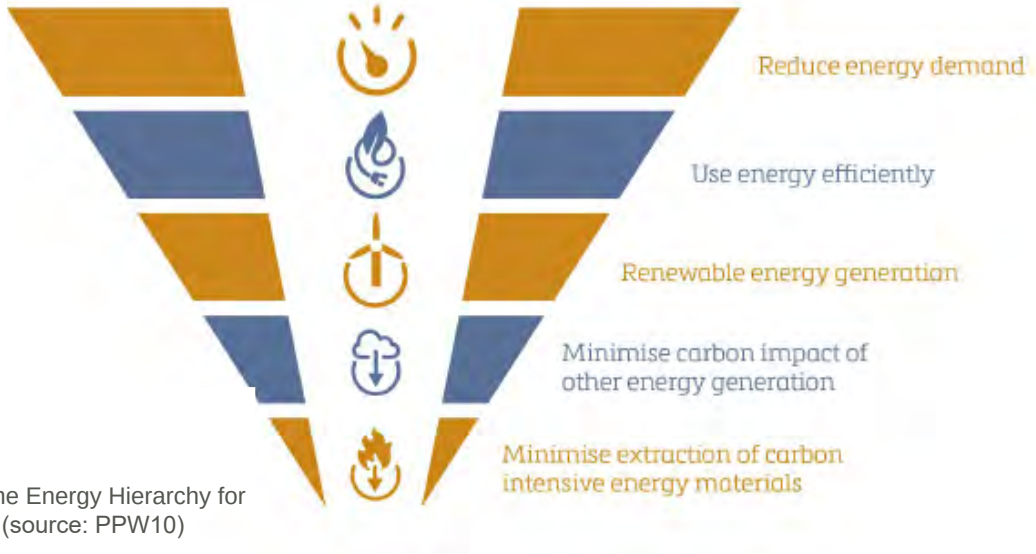
How has Green Infrastructure been considered within the development?
Consider how ecology and biodiversity have been integrated within the development and how the development integrates with the surrounding and wider green infrastructure network.

G1.17 PPW outlines the Energy Hierarchy for Planning and all new developments are expected to mitigate the causes of climate change. New development that has very high energy performance, supports decarbonisation, tackles the causes of climate change, and adapts to the current and future effects of climate change through the incorporation of effective mitigation and adaptation measures should be supported.

Reduce Energy Demand

G1.18 Designs should aim to reduce energy demands with passive design-based approaches including appropriate building siting and orientation, low embodied energy material and low 'U' values, careful design of fenestration, shading openings in elevations prone to excessive solar gain and good daylighting practice. An appointed design team can give advice on the appropriate design approaches.

G1.19 Recognised design methodologies are to be encouraged using the principle of 'fabric first', lean, clean, green approach where the focus is on reducing the energy demand, through high performance building fabrics and clean high efficiency technologies.



Right: The Energy Hierarchy for Planning (source: PPW10)

Example: The PassivHaus Approach

G1.20 This provides a strategy that can be incorporated into a wide range of applications including commercial buildings. It can be used on a variety of sites and adapted to suit the local vernacular architecture. It is in contrast to traditional 'passive solar design' which is a distinctive approach using external glazed spaces to preheat the incoming and internal air therefore reducing the space heating requirement.

G1.21 "The Passivhaus Standard" incorporates the following design and construction approaches to reduce C02 emissions from heating by 80%:

- u values of 0.15 w/m^2.K^1 for all building fabric elements
- u values of glazing 0.8 w/m^2.K
- air-tightness of 1m^2/hr/m^3@50pa
- highly efficient heat recovery ventilation.

1 W/mK stands for Watts per meter-Kelvin. It's also known as 'k Value'. The comparison of thermal conductivity can be measured by the 'k' value. ... If a material has a k value of 1, it means a 1m cube of material will transfer heat at a rate of 1 watt for every degree of temperature difference between opposite faces.

Use Energy Efficiently

G1.22 Proposals should incorporate energy efficiency measures including low energy appliances to reduce the active load demand. This would also include other consumer choices including entertainment systems which are influenced by lifestyle choices.

Renewable Energy Generation

G1.23 The renewable energy options applicable to each design will, in most cases, be governed by the site opportunities and constraints. A full site analysis needs to be undertaken. TAN 12: Design, 2016 provides more details to establish which technologies will be the most appropriate

G1.24 The technology types can be broadly categorised through the fuel type:

- solar
- water
- biomass
- thermal (ground)
- chemical

G1.25 The technologies used to extract the energy vary depending on the development size and use class ranging, for example, from using biomass to fuel a small stove within a residential property, to the larger scale Combined Heat & Power (CHP) plant for a community or district heating system.

Minimise carbon impact of other energy generation

Minimise extraction of carbon intensive energy materials

G1.26 Site analysis should include consideration of the availability of fuel and any transportation carbon costs associated with the delivery, as these broader sustainability issues are to be taken into consideration as described in TAN 8.

Above: Commercial development, Dyfi Valley, JPW

Below: Residential development, Y Foel, JPW

G1.27 The following section outlines some of the considerations for sustainable energy options. Sustainability measures are best considered at the early stages of the design process to obtain best value and help to prevent frustrating compromises at a later date.

Permitted Development (P.D.) Rights exist for some micro generation features associated with domestic properties, but as P.D. Rights have been removed in many areas of the AONB, the Council's Development Management Section should be contacted to establish whether planning permission is required, prior to any development taken place.

Above: BRE Integer House, Garston, Watford

Energy and CO2

Solar - Passive Approaches

G1.28 Traditional passive solar design approaches using a glazed space as intermediate indoor/outdoor space which is thermally separate from the remainder of the dwelling. The angle design of this type of facade is critical to preventing overheating in summer. The incoming air can be passed through this space, preheating the external air and reducing space heating load. This type of approach has the added advantages of buffering the dwelling in semi-exposed and exposed sites, is an extra space that can be inhabited, and can be used for indoor gardening.

G1.29 Efficient orientation and the removal or mitigation of potential overshadowing from adjacent properties and landscape is vital to the success of this approach, as is the ability to ventilate the space at a high level during hot summer months.

Solar - Active Systems

G1.30 Solar thermal energy can be captured by solar panels. There are 2 main types of solar panels which use different technologies. Solar water heating collectors are panels that absorb the energy form the sun and transfer it to heat liquid or air and transfer the solar heat directly to the interior space or to a storage system for later use. Photovolvic (PV) (or solar electric) panels transform solar radiation directly into electricity.

G1.31 Active solar heating systems use panels connected to a domestic hot water system to reduce or eliminate the need for the boiler to run in summer weather. The 2 main types of solar water heating are flat plate collectors and evacuated tubes. Flat plate collectors such as solar roof tiles may be suitable for use in conservation areas rather than traditional solar systems.

G1.32 An orientation of 30 degrees to horizontal is suitable for the southern UK, and the individual technology efficiencies will vary. The Energy Saving Trust are a good starting point when considering renewable solar energy options and can provide signposting to any available funding programmes

Above: Photovoltaics to roof, Southgate

G1.33 Photovoltaics (PV) produce electricity from silicon cells, which can then be used within individual buildings or exported to the grid.

G1.34 There are a number of PV systems available which can be either integrated into a tiled roof or a flat panel as required. Independent systems can be used on an existing flat roof construction. To gain the optimum benefit of the solar radiation, a system which tracks the suns path is best however these come at a premium.

G1.35 Roof mounted solar renewable energy installation (hot water and PV) should be kept low on the roof and not positioned where they will be overshadowed by adjacent buildings or chimney stacks. They should be designed to maintain the simplicity of the roof form and minimial asethietic impact, avowing a ‘stuck on’ appearance. Generally the surface of the panels should blend in with darker roof materials. Locating solar installations and/or PV and adjacent to property boundaries is to be avoided, as future development on adjacent sites may affect the available renewable energy.

G1.36 Placing PV panels on historic buildings requires special consideration in order to minimise the potential damage to the fabric and the visual impact of a renewable installation on the character and appearance of the building or site. Historic England have published guidance providing advice for building owners and occupiers who are considering installing solar PV panels to generate their own energy containing advice on the appropriate selection of equipment and method of installation to work within a historic building.

Left: PV instalation Llanmadoc

Left: PV installation integral to building design

Biomass

G1.37 The term biomass covers a number of different sources, including wood pellets, anaerobic food digestion plants and other farmed or waste cellular products. Wood pellets are the most common source for small scale installations.

G1.38 Small scale biomass for individual buildings is supposedly carbon neutral, however consideration needs to be given to the travel distances required during transportation.

G1.39 Larger scale district heating systems and commercial buildings including schools may be suitable for a biomass CHP energy source. Early assessment by an energy specialist will be required to ascertain whether this is appropriate at the feasibility design stage of the project.

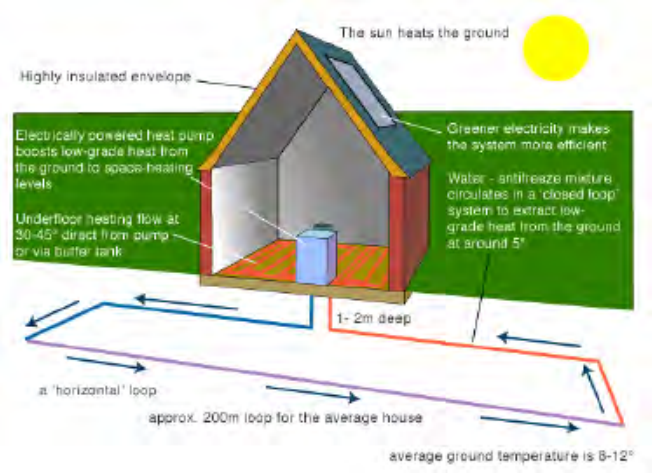
Ground Source Heat Loops

G1.40 Ground temperatures are stable when compared to annual and day swings in air temperature. A ground source loop will utilise this temperature lag depending on the season to either cool or heat internal spaces. The system provides a low level background heat or cooling source, which would replace a conventional heating system.

G1.41 The ground loops require a significant area of clear external land in order to lay out the coils. Although it is possible to vertically bore down, this option is more expensive and tends to be used in high value urban locations. The ground needs to be clear of tree roots and a ground investigation would have to be undertaken to ascertain site suitability.

G1.42 Water sources can also be used as the thermal store using underground water sources to transfer heat through the pipe work. Advice from Natural Resources Wales would need to be sought in such instances.

G1.43 The ground loops are linked to heat exchangers which extract the heat, transferring it into the building. The loops are closed and circulate like a large central heating system. The systems are rated according to their “coefficient of performance” which means the ratio of heat produced, to the electricity consumed. The pumps and fans require an electrical source which could be supplied by a PV installation.



Above: Diagram of ground source heat loop system

G1.44 An increasing number of properties in Gower are beginning to use ground source heat pumps. It may be possible for a scheme to heat a number of properties, as exemplified by a scheme in the village of Avenhorn, Netherlands, which has installed ground source pipe work beneath roadways and external parking areas in which helps to heat a new apartment building in the village.

G1.45 The local Highway Authority would have to be consulted over any proposals which include works to the adopted highway network.

Air Source Heat Pumps

G1.46 Air source heat pumps (ASHP) use the surrounding air as a heat source to heat a building. ASHPs tend to be much easier and cheaper to install that Ground Source Heat Pumps (as they do not need external heat collector loops), but are also usually less efficient. Electivity is required to operate an ASHP and this may be achieved via alternative renewable methods. Even though electricity is required to operate an ASHP (which may not come from a renewable source) they are classed as renewable as the air is heated by the sun. Usually, they make most economic benefit to a householder which is off the main gas grid. Homes should also be well insulated. In some cases the installation of one air source heat pump used solely for hearing purposes is normally permitted, provided that it complies with the appropriate standards. However in some areas of Gower Permitted Development Rights have been removed and the Development Management Section should be contacted regarding installation of an air source heat pump. Pumps are subject to the following conditions:

- no more than one air source heat pump can be installed on (ot within the curtilage of) your property
- the volume of the air source heat pump's outdoor compressor unit (including any housing) must not exceed one cubic metre
- no part of the air source heat pump can be installed within three metres of the boundary of your property
- if in the case of the installation of an air source heat pump, a stand alone wind turbine is installed within the curtilage of the dwellinghouse
- the air source heat pump can not be installed on a pitched roof if installed on a flat roof, the air source heat pump must not be sited within one metre of the external edge of that roof the air source heat pump cannot be installed on a wall or roof which fronts a highway.

G1.47 An air source heat pump must be sited to have aa minimal effect on the external appearance of your property and the wider ameniy of the area.

Combined Heat and Power

G1.48 Combined Heat and Power (CHP) Units and Micro CHP can be powered by either biomass, or mains gas, or a combination of the two, depending on storage space available, and the consistency of fuel supply. The potential efficiency of a CHP unit can be in the region of 90%, offering potential efficiencies in electricity supply when compared to grid supply losses which is in the region of 7.7-20% loss depending on the location of the local power station.

G1.49 These systems have been used for years in hospital sites where security of supply is paramount. They are being introduced in larger scale mixed use developments as a larger plant requires a significant load to service, in the region of 10 hours of operation per day, in order to be cost effective.

G1.50 A medium scale unit may be appropriate for an arrangement of community buildings linked potentially to the surrounding residential areas. The CHP unit will require a separate boiler house and in the case of biomass, access to the site for the delivery and storage of fuel material.

G1.51 A small scale unit can be used for smaller applications, an example of which is Tresellick Gardens in Cornwall where it is used to power onsite catering facilities using a Liquid Petroleum Gas (LPG) powered micro CHP system[2]. This is a 12kW boiler, which in addition generates 5kW of electricity to contribute towards the needs of the café building, although it does not fulfil all of these and mains power is still required.

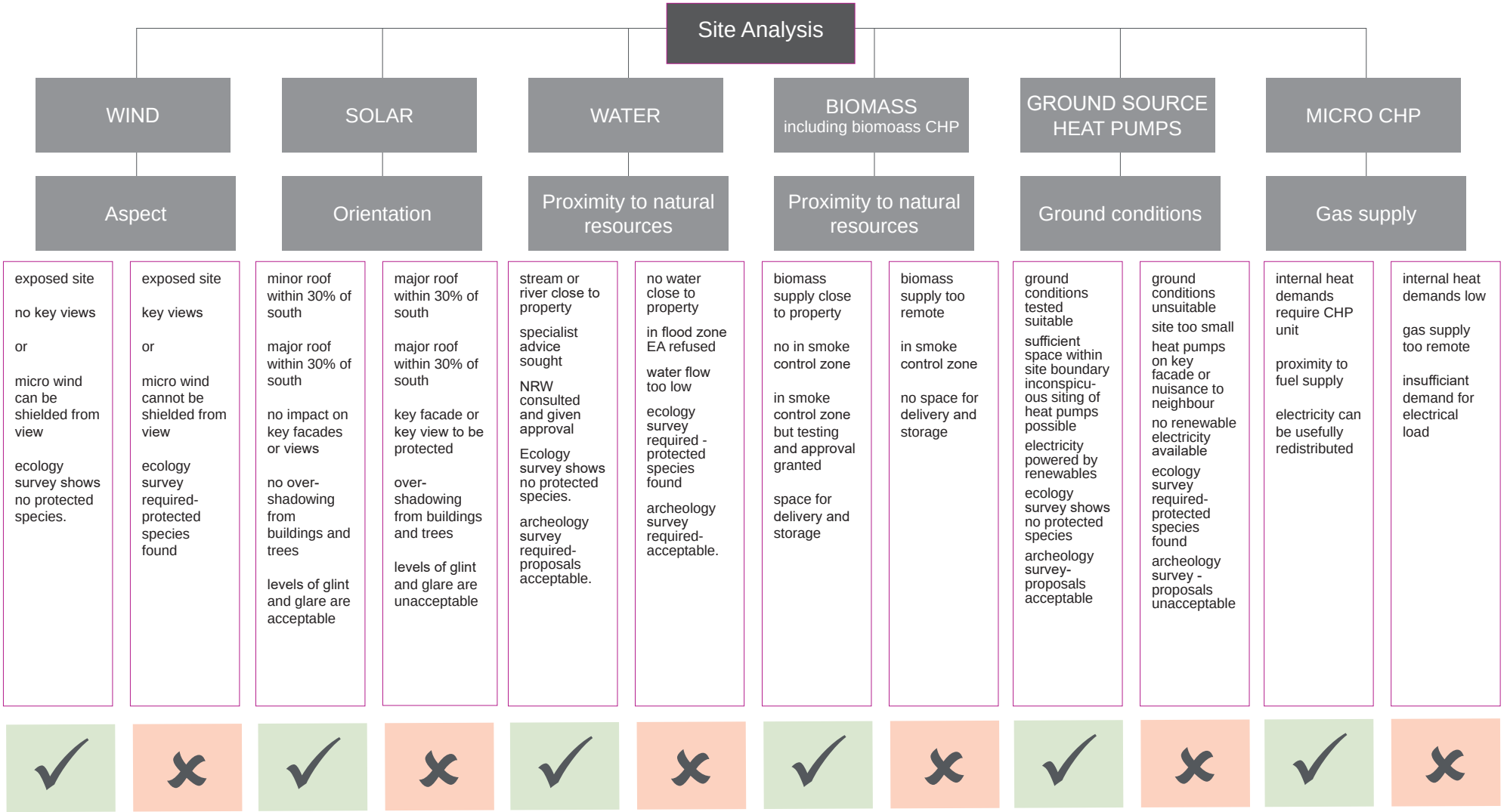
G1.52 The water mill was once a common feature of rural communities before the advent of the national grid. Local rivers are now being seen as a source of power once again. There are three possible routes to power generation; in-stream wheels (including reactivating the existing historic water mills), turbines in smaller streams or springs, and finally weirs.

G1.53 The potential for energy generation will vary depending on the water flow rate and method used, however up to 100kw is possible in some locations.

G1.54 Early consultation with Natural Resources Wales is necessary as any changes to flood patterns and water supply will have to be monitored and agreed (refer to TAN 15: Development and Flood Risk 2004).

2 https://global.ssl.fastly.net/trelissick/documents/crofters-cafe---building-design-guide.pdf ht

sustainable systems decision matrix



consider as part of overall design approach

not appropriate

Wind Power

G1.55 The assessment of large scale wind generation farms is outside the scope of this document, however, small scale wind turbines may be acceptable on Gower within the aesthetic of commercial and agricultural holdings. There is however considerable evidence that suggests that small installations do not achieve a significant enough generation of renewable electricity set against the initial capital investment and ongoing maintenance costs.

G1.56 Other areas for consideration which are included in sustainable design are sustainable water management, the circular economy (material choices, waste), pollution; health and well- being, ecology and management.

Water management:

G1.57 Sustainable Drainage Systems (SuDS) are required for all proposed new developments that include at least 2 properties or developments over 100m^2. SuDS can be used to deliver multiple benefits, including: flood risk reduction, an improvement in water quality and enhancing biodiversity.

G1.58 Water management systems vary from simple measures, including low water use equipment, to rainwater harvesting for larger developments. These measures are intended to make more efficient use of available water resources, and to divert some of the 'waste' water into alternative uses. Grey water recycling is to be considered, as is rainwater for garden use, and for non-potable functions.

The Circular Economy:

G1.59 PPW promotes the concept of a circular economy, which aims to keep materials, products and components in use for as long as possible. The principles of the circular economy seek to move toward reuse, repair and recycle of wastes which arise during development.

The planning system facilitates materials recycling through advocating the use of secondary aggregates in construction, but circular economy principles should underpin all developments.

Above: Circular economy diagram © WRAP 201**9**

Material Choices:

G1.60 The materials or resources needed and made available by development, and those it may generate, should be considered at an early stage in the design process to assist in ensuring cost effective construction. The Local Planning Authority (LPA) will consider both design choices and site selection and treatment as part of assessing a development proposal.

G1.61 The Waste and Resources Action Programme (WRAP) advocate the increased use of materials made with higher percentages of recycled content. WRAP also advocate that all projects should be able to achieve a minimum 10% recycled content by value at no extra cost to the project. This target has been adopted by the Welsh Government as a minimum target to be applied to all projects under its influence. The WRAP “Net Waste Tool” and “Construction Product Guide” are free online tools to help clients, designers and construction professional make specification choices that increase the use of recycled materials.

Waste:

G1.62 Ensuring access for refuse and recycling vehicles, providing space for recycling storage and access to composting facilities is important to ensure household recycling opportunities are easily available for the occupiers of new developments (see LDP Policy RP 10).

G1.63 Construction sites require a degree of cut and fill engineering operations, and minimising the level of earthwork cut and fill volumes not only reduces waste but also protects soils, reduces energy consumption and reduces transport movements to and from a site. Ultimately it also reduces materials being sent to landfill and makes sustainable use of a finite resource.

G1.64 Developers should design proposals to achieve an earthwork balance by submitting a natural material management plan as part of development proposals which seeks to minimise cut and fill, or which may provide for remediation of land elsewhere in the area.

Pollution:

G1.65 Reduced pollution of land, air and sea can be achieved through specifying either benign, or low polluting, materials and systems. Carbon reduction is the main element, however the reduction of other chemicals and gasses are to be encouraged.

Health and Well-being:

G1.66 Well-designed architecture and external space can provide benefits to health and well-being. This also covers air quality and internal qualities, including daylighting.

Management:

G1.67 This includes setting good environmental management standards from the considerate contractors scheme[3], through to regularly using recycling bins, and responsible consumer choices.

Ecology:

G1.68 Please see the separate guidance in Module H relating to Green Infrastructure and Biodiversity.

3 https://www.ccscheme.org.uk/

G1.69 **BREEAM** is an internationally recognised sustainability assessment and certification scheme for non-domestic buildings and ensures a best practice approach to creating the most sustainable and efficient buildings.

G1.70 The primary aim of BREEAM UK New Construction[4] is to mitigate the life cycle impacts of new buildings on the environment in a robust and cost-effective manner. Performance is quantified by individual measures and associated criteria stretching across a range of environmental issues and expressed as a single certified BREEAM rating, i.e. the label. Non-domestic buildngs include agricultural and commercial and tourism buildings.

Agricultural:

G1.71 Proposals should follow the energy hierarchy. Renewable options such as biomass CHP may be appropriate for uses with more significant heating requirements. Small wind turbines may fit within the overall character of the buildings depending on agricultural use. Proposals with floorspace of 1000m^2 or more, or on a site of 1ha or more should achieve a BREEAM standard of 'Very good' overall with 'excellent' for Ene 1.

Commercial and Tourism:

G1.72 Proposals should follow the energy hierarchy. Small scale biomass, CHP, and solar systems may be appropriate for new-build commercial and tourism buildings. Ground source heat pumps and micro hydro could also be used, if appropriate. Proposals with floorspace of 1000m^2 or more, or on a site of 1ha or more should achieve a BREEAM standard of 'Very good' overall and 'excellent' for Ene 1.

Existing Buildings and Extensions:

G1.73 Existing buildings which are listed or within a conservation area will be subject to more stringent policy and design checks.

G1.74 However, there is precedent for high quality contemporary extensions with renewable technologies on historically important structures, and early consultation with the LPA is advised to ascertain whether this approach would be possible.

G1.75 Extensions and alterations to all existing dwellings under standard conditions will need to address the current version of Building Regulations: Part L.

G1.76 A relaxation of the Part L requirements may be the upgrading of the fabric alters the appearance of the building. Early consultation with the Council's Building Regulations Service is advised. Prior to preparing any proposal confirmation should be sought of the latest mandatory sustainable building standards.

4 https https://www.breeam.com/NC2018/content/resources/output/10_pdf/a4_pdf/print/nc_uk_a4_print_mono/nc_uk_a4_print_mono.pdf://www.breeam.com/NC2018/content/resources/output/10_pdf/a4_pdf/print/nc_uk_a4_print_mono/nc_uk_a4_print_mono.pdf

useful references

Building Regulations Guidance Part L (Conservation of Fuel and Power)
https://gov.wales/building-regulations-guidance-part-l-conservation-fuel-and-power

WRAP
http://wrap.org.uk

Natural Resources Wales
https://naturalresources.wales/

Energy Saving Trust
https://www.energysavingtrust.org.uk/

BREEAM UK New Construction Non Domestic Buildings UK Technical Manual SD5078: BREEAM UK New Construction 2018 3.0
https://www.breeam.com/NC2018/content/resources/output/10_pdf/a4_pdf/print/nc_uk_a4_print_mono/nc_uk_a4_print_mono.pdf

Historic England

Energy Efficiency and Historic Buildings: Solar Electric (Photovoltaics)
https://historicengland.org.uk/images_books/publications/eehb-solar-electric/heag173-eehb-solar-electric-photovoltaics/

green infrastructure, landscape and biodiversity


MAYBANK

Development in the Countryside (subject to Policy CV 2)

Strategic Green Infrastructure Network (subject to Policy ER 2)

Gower AONB (subject to Policy ER 4)

Undeveloped Coast (subject to Policy ER 7)

Ecological Networks and Features of Importance for Biodiversity (subject to Policy ER 9)

Trees, Hedgerows and Development (subject to Policy ER 11)

Developed Coast and Waterfront (subject to Policy TR 2)

Air and Light Pollution (subject to Policy RP 3)

Water Pollution and the Protection of Water Resources (subject to Policy RP 4)

H1.1 For any development to integrate successfully into its surroundings, early consideration of a landscape scheme is vital. When considering a landscape proposal, whether an entirely new scheme or simply adjusting an existing site, the approach adopted is key to the success of the development and how it relates to the character of Gower and its wider context.

H1.2 A high quality landscape scheme can result in many positive benefits, by enhancing the local environment and ecology and by adding value to the development. Often, if a landscape scheme is not produced at an early stage, delays can occur which can in turn lead to additional costs. A holistic approach will also provide many cost effective solutions, such as, the implementation of a water management scheme that utilises the existing landscape, rather than introducing new, highly engineered and expensive solutions.

H1.3 Key landscape principles include:

- Protecting and retaining existing landscape character and features
- Sensitive layout, scale, and choice of materials of development
- Careful consideration of site levels and ground modelling
- Connectivity to existing green infrastructure networks

H1.4 TAN 12: Design (2016) not only encourages local planning authorities to give an early indication of its landscape design expectations, it also highlights the need to provide for habitat connectivity in addition to the role of landscape in the sustainable management of resources.

Above: view into Landimore
Opposite page: attractive garden and boundary treatment, Overton

H1.5 On Gower, intrinsic harmony is required between landscape and building. This will not only protect the natural beauty of the area but also provide many additional benefits for people and wildlife. For new development, this can be achieved through application of the Green Infrastructure (GI) approach as part of the placemaking process, as required by Local Development Plan (LDP) policy ER 2 Strategic Green Infrastructure Network.

H1.6 Swansea has developed a GI Strategy for the City Centre which sets out the principles of GI. These principles are applicable to both the urban and rural contexts and a summary is set out below. It is intended that a County wide GI Strategy is developed and this will be supported by a GI Supplementary Planning Guidance (SPG) to provide further guidance on the implementation of the LDP Policy ER 2.

H1.7 The GI approach requires new development to understand the range of GI assets present on the site, consider what opportunities there are to maintain and enhance the functions they perform, and ensure that the development provides a connected network of green spaces and features which optimise the range of benefits provided by GI assets present on the site. For new development, maintaining and enhancing GI needs to be considered at both a site specific and more strategic landscape level.

Green Infrastructure

"A network of multi-functional green space, encompassing both land and water (blue space). The Green Infrastructure areas include existing and new (created) features in both rural and urban areas. The Green Infrastructure network delivers a wide range of Ecosystem Services including environmental and quality of life benefits for local communities."

Swansea LDP 2019

Above: view of Oxwich Bay

H1.8 Gower is a rural area with extensive and high quality GI assets. LDP Policy focuses new development on Gower Key Villages and it is here that maintaining and enhancing multifunctional and connected GI is most important. It is essential to recognise that not all green space within the key village boundaries should be developed. Such spaces may be important components of the GI network providing an array of benefits including amenity, well-being, flood attenuation and ecological connectivity. Embedding high quality, sustainable and multifunctional GI into development on Gower may involve avoiding development on key areas of GI assets; strengthening connections between existing green spaces and compensating for the green space lost to development by recreating green features.

Multifunctional:

Recognising nature itself is multifunctional and that natural areas simultaneously provide a full range of ecosystem services.

Collaborative working between designers of development and supporting infrastructure to explore all opportunities to make features of a scheme multifunctional (for example, drainage solutions can increase biodiversity, cycle routes can provide ecological connectivity, tree planting can improve shade).

Adapted for Climate Change:

Incorporating GI features to build in cost effective means of resilience to climate change issues such as providing shade, evaporative cooling, use of rain water, surface water run-off and air filtration. For example, through the installation of renewable energy sources, sustainable drainage solutions, green roofs and green walls and the introduction of soft landscapes and planting climate change resilient species.

Healthy:

Ensuring development contributes to good health and a sense of wellbeing by providing access to clean air and water, areas for exercise, food growing, exposure to nature and places to socialize, play and learn.

Biodiverse:

Preventing fragmentation of existing habitats. Providing new, and linking existing habitats to allow species movement and increasing amount of available habitat.

Smart and Sustainable:

Incorporating GI features capable of delivery and maintenance without reliance on fossil fuels, save energy, use recycled material, be low maintenance and not rely on artificial irrigation.

H1.9 Soft landscaping can help to define spaces, soften edges, integrate a development into its surroundings, provide sustainable drainage, enhance road systems, provide amenity spaces for people to enjoy and create green corridors and habitat links. It includes all 'living' components of a landscape scheme including soil, grass, earth modelling, trees and shrubs, and water bodies.

H1.10 Consideration should be given to the following:

- Species selection
- Scale of planting
- Design of planting
- Green Infrastructure
- Sustainable Drainage Legislation

H1.11 The coastal climate of Gower influences the growth and species range of large woody plants as noted in Section 2: Landscape Character Types. Trees are found more frequently in valleys and in most villages and hamlets. Gower Ash Woods, a designated Special Area of Conservation, are formed along a series of largely inter-llinked valleys and ravines cut into into Caboniferous limestone, and also on coastal slopes and cliffs with unique transitions through scrub to sand dunes, freshwater marsh and saltmarsh. The woods have a great diversity of trees and shrubs. Small copses or tree clumps are usually associated with farmsteads. There is a considerable amount of coastal scrub, including field hedgerows and gorse.

H1.12 SuDS guidance promotes the inclusion of vegetation and trees within SuDS design. The SuDS Manual gives guidance on appropriate tree and plant selection and planting for the provision of water management and biodiversity.

Above: appropriate and inappropriate examples of non-native species used within Gower

Species selection

H1.13 When choosing plant species for a soft landscape scheme, they should reflect its purpose, location and function.

H1.14 Native species are adapted well to their local environment and are more likely to survive, especially in maritime or exposed environments, and have a higher wildlife value than ornamental or exotic species. Using native species wherever possible will strengthen the character and ecology of Gower.

H1.15 Striking species not naturally found in Gower, such as purple leaved beeches, Italian poplars or pines should be used very carefully as they will draw attention to a development and could look out of place. Whilst the use of tropical style planting is widely seen in the area, as a general rule, the use of exotic and non- native species is discouraged. However if used sensitively and kept low key, species such as Cordyline they can help to strengthen Gower's connections with a mild climate and the sea.

H1.16 Large belts of conifers for screening, ornamental conifers, exotics and topiary are discouraged in exposed, treeless areas where their visual appearance can be intrusive, detracting from the area's character. A planting scheme should not be used to screen or remedy poor building design. Locally native tree belts can be used however to shelter new development and enhance biodiversity, in appropriate locations.

H1.17 Further information on appropriate tree and shrub species is included within Appendix 8.

H1.18 It is important to consider the scale of planting within individual landscape types. If development is within a landscape type dominated by expansive, treeless spaces, a subtle approach should be adopted, only using low shrub planting and avoiding larger trees, and blocks of planting. In areas where woodland blocks, smaller well defined field patterns with hedgerow trees, and a hilly landform are found, such as in 'Undulating Lowland Hill Terrain', a bolder approach is acceptable.

H1.19 Further information on landscape character types is included within Appendix 5: Landscape Characterisation and Appendix 6: Settlement Character Areas and Settlement Statements.

Top left: the area around Pilton Green, within the lowland plateau landscape type demonstrates a typically open and uniform make-up, with scattered low hedgerow trees

Bottom left: the lowland escarpment landscape type presents an exposed and treeless landscape. Tree and large shrub planting would not be appropriate here.

Above: undulating lowland hill terrain such as that around Nicholaston, Burry Green and Wernffrwd is typically complex and intimate with woodland clumps, mature hedgerows and conifer planting associated with settlements.

(Source: Historic Landscape Characterisation Gower) www.ggat.org.uk

H1.20 Contemporary and formalised landscape proposals can make an exciting addition to a public facility or park, but care should be taken over the appropriateness of this approach within Gower. This style is more suitable immediately adjacent to buildings or within built up areas, with the design becoming more naturalised and informal towards the boundaries, where the development site meets the surrounding landscape.

Above: This car park at Oxwich bay shows a good example of screening and integrating a car park using the existing landform and a mixture of native and more ornamental species, such as the birch trees and Phormiums

Above: This residential property is situated on the edge of Rhosilli Down and White Moor. The planting design and landform, use of water and natural materials successfully compliment the surrounding open moorland character of the Lowland escarpment landscape type

Grass and Lawns

H1.21 Areas of grass, especially when left to grow long, not only create a permeable surface that helps reduce rainwater run- off, but also create an attractive habitat for many unusual plants and animals, and a space for amenity.

H1.22 The use of wild flower lawns should be considered wherever possible, and incorporate a mowing regime that allows flowering. If mown lawns are required, an area to the periphery should be set aside for this purpose.

H1.23 Reinforced grass areas create a hardwearing surface that is well integrated into its natural surroundings. However the system to be used should be carefully considered. The use of concrete grid systems is often unsuccessful as the grass becomes worn easily and leaves a bare ugly surface. There are several alternative innovative products available, including soil-less turf which are more attractive and reliable and provide more permeable sustainable drainage solutions.

Trees, Woodlands & Hedgerow Protection
(subject to Policy ER 11)

The Protection of Trees on Development Sites SPG (2016)

H1.24 Whenever possible, existing trees should be retained as part of a development and regarded as a positive contribution. Locating a development near existing trees will help to screen and integrate the building into its surroundings and reduce the cost of new planting. The Council's adopted SPG 'The Protection of Trees on Development Sites' (2016) provides guidance in relation to the steps that need to be considered at the planning and design stages and during construction to ensure that significant existing and proposed trees are kept healthy and become an asset to a new development. The guidance applies to trees, woodlands, hedges, hedgerows and large shrubs and development. The SPG is currently being reviewed and will be adopted as SPG to the LDP.

H1.25 Trees provide multifunctional GI benefits such as shade, drainage, biodiversity, amenity, distinctive places, and health and well being.

H1.26 Existing trees may be legally protected by a Tree Preservation Order (TPO). This will need to be investigated as part of the site survey and planning application. Often applications will need to demonstrate how existing trees will be retained and protected, including their associated canopy and root zones. Where trees will need to be removed, provision for their replacement should normally be included as part of the landscape detailing.

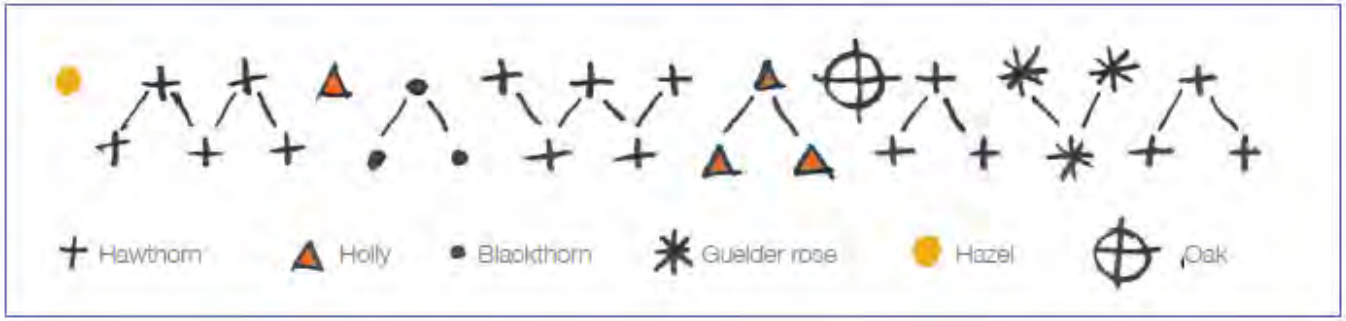
H1.27 Any proposals for the removal of hedgerows or trees must consider the impact on protected species or nesting birds.

H1.28 The Council should be given 6 weeks notice, in writing, of any proposed works to trees with a trunk diameter of 75mm or greater in a Conservation Area. As a result, the Council may place a TPO to control the proposed work.

H1.29 Existing hedgerows should be retained and improved where possible, and in some cases they may be classed as 'ancient hedgerows' and protected as a consequence via the Hedgerow Regulations 1997.

H1.30 Where hedgerows are prevalent, these may form the best type of boundary to a development, linking to the surrounding landscape. If development is in an area where individual hedgerow trees are evident then incorporating these would be appropriate to create a species rich hedgerow. An example of a typical design and species is provided below.

H1.31 Information on appropriate plant species is included within Appendix 8.



Above: typical native hedge planting plan

Water Pollution and the Protection of Water Resources (subject to Policy RP4)

Avoidance of Flood Risk (subject to Policy RP5)

Safeguarding Public Health and Natural Resources (subject to Policy RP1)

H1.32 If a site is near a river, stream or pond, or it is proposed to construct an open water body, Natural Resources Wales (NRW) must be contacted to ensure compliance with their requirements and to ensure that the development will have a minimal impact on the existing habitat. LDP Policy RP4 provides further guidance. The following will also need to be taken into consideration:

- Where would water naturally collect?
- Will it be visible and intrusive from surrounding areas?
- Is the scale appropriate for the area?
- Is the proposed development close (up to 7m) to a watercourse?

H1.33 Watercourses will be safeguarded through green corridors/riparian buffers: to protect water quality and water habitats and species; and to provide for flood plain capacity. Planting will need to be considered carefully and species chosen that suit wet conditions. A good balance of shaded and open habitats is recommended around water bodies. Further information on appropriate water plant species is included within Appendix 8.

H1.34 As with all landscape proposals, water bodies should be annually maintained and managed to ensure they do not become overrun with invasive or competitive species and reduced in biodiversity and ecological value. It is recommended that the advice of a local ecologist or wetland specialist is sought regarding a management regime. Consideration should be given to involving a local community or school group to help out, as they would gain educational benefit from the process.

H1.35 Surface water drainage systems, along with the ideals of a sustainable development, are collectively termed Sustainable Drainage Systems (SuDS). LDP Policy RP4 provides guidance on surface water run-off, including the use of SuDS. SuDS must be designed and built in accordance with the Statutory SuDS Standards Wales and must be approved by the SuDS Approving Body before construction work begins.

H1.36 The SuDS standards follow a natural management approach and water should be managed on or close to the surface and as close to the source as practicable.

H1.37 SuDS should be considered at the earliest stages of site design and inform site layouts in order to ensure maximum GI benefits in addition to surface water management functions. Applications should be accompanied by proposals for a maintenance and funding plan.

H1.38 Foul water drainage should be appropriately designed with the assistance of a drainage engineer, ensuring any new systems are connected appropriately into existing systems.

Above: examples of drainage channels and culverts within Gower

Strategic Green Infrastructure Network
(subject to Policy ER2)

Designated Sites of Ecological Importance
(subject to Policy ER6)

Habitats and Species
(subject to Policy ER8)

Ecological Networks and Features of Importance for Biodiversity
(subject to Policy R9)

H1.39 The Council has a legal duty under Part 1, Section 6 of the Environment (Wales) Act 2016 ('the S6 duty') to seek to ensure development within Swansea maintains and enhances the County's biodiversity and delivers long term ecosystem resilience. At the local level, this is embedded within the Local Well Being Plan and the Council's corporate priorities. Future Wales Policy 9 requires all applications to demonstrate the actions that have been taken to maintain and enhance biodiversity and ecosystem resilience, as well as relevant GI assets. This policy requirement is supported by the guidance in PPW that sets out the requirement for a 'stepwise approach' to considering biodiversity in the planning process and securing overall enhancement. PPW emphasises development should consider the significant opportunities provided by nature based solutions to maintaining and enhancing GI. By taking this approach, development proposals can contribute to the 'Resilient Wales' Goal of the Well Being of Future Generations (WBFG) Act 2015, and assist in meeting the relevant requirements of the SUDs guidance and legislation. It is critical therefore that propsoals are assessed against Future Wales Policy 9, and having regard to the key placemaking, design and GI principles set out in Swansea LDP Policies.

H1.40 The Council has adopted **SPG entitled Biodiversity and Development**, which sets out how the LPA applies the PPW required 'Stepwise approach' at the local level, and also identifies specific measures that could be provided to enhance biodiversity and ecosystem resilience depending on the nature of the proposals. When assessing planning applications the Council will consider whether a stepwise process has been followed, and confirm whether appropriate enhancement is proposed to deliver biodiversity net benefit, ecosystem resilience and an integrated network of GI. This will enable the Council to demonstrate appropriate compliance with the relevant legislation and policy.

H1.41 It is important to remember that many development sites may support protected species and habitats. They are protected by law at both a national level and at a local level through policies in the statutory development plan (Swansea LDP) and SPG. Planning permission could be refused if the proposal does not take necessary action to protect and/or enhance these species and their habitats before and during the construction.

H1.42 The Council's planning ecologist will provide advice on any assessments and subsequent works required, where necessary, in association with any planning application.

H1.43 Undertaking a preliminary ecological appraisal will provide an initial overview to determine the potential presence of protected, priority species. If protected species are found and disturbing them is unavoidable you will need to obtain a licence in addition to planning permission. It is also important to consider your programme of works to account for the bird nesting season, from March to August inclusive. Tree works and clearance must not be undertaken during this period.

H1.44 NRW provide information on the status of priority species, both flora and fauna, in Wales.

Above: Barn owl: protected under Schedule 1 of the Wildlife and Countryside Act, 1981

H1.45 New development must be designed to incorporate features that provide ecological enhancements. Examples of features include:

- Swift boxes
- Sparrow terraces
- Bat boxes
- Pollinator friendly planting (avoiding invasive species)
- Bee and insect features

See the Biodiversity SPG for more details of how to determine suitable features.

H1.46 A Green Infrastructure (GI) Survey can also provide a valuable tool to provide detailed information about the surrounding area and site context, and is vital to understanding the existing features of a site that may need to be retained or enhanced, such as ecology, water courses and trees.

H1.47 More detailed surveys are required for conversion of a building or a new building in more exposed rural areas, where the development may have a greater impact on the surrounding character of the landscape, if it is likely that any protected species are present on the site or will be affected by the development.

H1.48 Your planning application registration may be delayed if you fail to demonstrate that ecology has been fully considered in the design process.

H1.49 As well as addressing national guidance in relation to the protection of habitats and species, there is also the need to consider and address relevant biodiversity policies contained in the Swansea LDP.

H1.50 The landscape around the buildings needs to be maintained in the same way a building does. Unless maintained, the landscape will become degraded, unsightly and with a reduced ecological and monetary value. Lack of maintenance is a large contributor to the failure of landscapes and even the buildings within them. Neglected spaces can often encourage other problems such as anti- social behaviour, littering and vandalism.

H1.51 If development falls within the public realm, it may be possible to arrange separate or additional maintenance regimes with the local authority. Another approach is to involve local wildlife or community groups, for example, if a proposal includes a habitat area such as a pond, or there is a requirement to build log piles, reptile hotels, etc., as part of the planning requirements. Local school children or an ecologist may be willing to help with this and local naturalist groups are usually willing (sometimes for a nominal fee) to provide on-going advice and assistance for the best maintenance of the grounds.

H1.52 Often planting areas can be maintained unsympathetically, resulting in unnatural plant shapes. A softer, more sympathetic approach to maintenance is much more aesthetically in keeping with the natural landscapes of Gower and of greater benefit to wildlife. It is important that a written programme of works is agreed in advance and that an on-going commitment and budget is made from the outset, to ensure this crucial element of landscape design is not overlooked.

Above: Empty house, Rhossili. A lack of maintenance may lead to degradation of buildings and landscape

hard landscaping design

H1.53 Hard landscape design includes all hard surfaces that would be designed or retained as part of a development, such as driveways, steps, footpaths, patios, fences, boundary walls, and ground re-modelling. It forms the foreground of almost all lanes and therefore good quality design of these areas will provide a positive contribution to the overall character of the area and provide the context within which the buildings are viewed. Hard landscaping that has a SuDS function can be designed to incorporate vegetation so that the impermeable surface includes zones of planting or lies adjacent to planted areas, e.g. bioretention zones, swales, detention basins. Trees can also be included in isolated plantings between pavement zones.

H1.54 The construction industry produces materials that are nationally available, and the use of such products without careful consideration, may result in a scheme that does not relate to the local sense of character or sense of place. Natural materials, stone, cobbles, timber, weather better and are more robust. Lifetime costs of materials should take precedence over short term costs.

H1.55 With the recent prolific rainfall and more frequent storm events, all development proposals should consider the rate of run-off from their site. Increasing the total area of hard surfaces increases the rate of run-off and the consequent need for drainage systems. Minimising hard surfacing will help to reduce run-off, presenting larger areas of permeable or porous surfacing and a more sustainable approach to water management.

H1.56 General design principles:

a	a retain and restore original and existing features
b	use good quality, natural materials
c	use legitimately sourced, reclaimed materials from Gower when possible
d	use a limited palette of materials and a simple design
e	incorporate traditional construction methods
f	recycle any materials not used and avoid excess waste
g	avoid discordant colours
h	avoid importing materials from overseas as these will look alien
i	avoid standard road kerbs in rural settlements
j	ensure your design takes account of safety and security e.g. disabled access and trip hazards
k	employ local craftsmen and builders, where skills are of an appropriate level
l	avoid non-porous and/or non-permeable surfaces and follow guidance in SuDS manual

Note: Most minor landscape works will not require planning permission, although certain hard landscape features such as the erection of a fence or boundary walls above a certain height will require consent. If in doubt you are advised to check with CCS Planning Services section

hard surfacing

H1.57 Too many different materials used in a small area can create a disjointed and chaotic feel, and large areas of poor quality tarmac or concrete or brightly coloured cheap block paving can degrade the appearance of both the building and its context.

H1.58 A simple palette of just two or three hard wearing materials such as blocks, cobbles and bound gravel will give a unified, quality solution.

H1.59 Stone is invariably the best material to use for hard surfaces. It is low maintenance, durable and looks attractive, mellowing and changing with age. It is important to use reclaimed or locally sourced stone in order to address both aesthetic and sustainability concerns. When locally sourced stone is not available, the same type of stone should be sourced.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H1.60 Preferred materials include:

- ‘conservation’ or reclaimed granite kerbs, where appropriate
- cobbles
- flag stones, preferably reclaimed
- bound gravel
- unbound gravel
- crushed cockle shells

1 External detailing to holiday units in Llangennith relates well to the materials used in the buildings and the wider context

2 Mix of flags and block paving complement each other in small front garden, Port Eynon

3 Cobbles used as a parking area to the front of a property in Llanrhidian

4 For public realm spaces resin bound aggregates can be used to great effect and can incorporate recycled materials

5 Traditional cobbles used to the front of Great Pitton Farm

6 Recycled shells are a sustainable solution which link back to the maritime nature of the peninsula.

H14 hard surfacing

H1.61 All hard surfacing should be permeable or porous. Large areas of block paving should be avoided as it is too uniform and does not reflect the local character. Tarmac is monochrome and suburban in appearance.

H1.62 Concrete grass reinforcement may be appropriate in heavily pedestrianised areas, such as car parks where grass is worn away easily. However care must be taken with its specification and levels of use. Further information on parking surfaces can be found within Module D: Commercial and Tourism.

H1.63 Threshold detailing is another important detail not to overlook. A threshold is any interface between a building and another component such as a road. It provides a positive contribution to the public realm, a valuable demarcation strip, and allows for changes in level. Suitable edging details should be used. Grass or planting adjacent to the edge of the road or pavement, as opposed to standard road kerbs, is preferred to soften hard surfaces.

1 Poorly specified concrete grass reinforcement system fails to create intended ‘green’ finish

2 Block paviours with contrasting colours or patterns create an inappropriate suburban feel

3 Suburban style concrete kerb detail with haunching too harsh for rural context

4 Planting to verge softens boundary wall and road verge

5 Simple stone kerb and grass verge detailing provides softer and more appropriate response

6 This traditional example of the boundary between a building and the street could be successfully interpreted in a contemporary style

H1.64 Integrating a development seamlessly into its surroundings will help retain the existing character of Gower. Adjusting the siting of development to take account of the landform should be one of the first considerations during the design process. Inevitably some re-modelling may be required.

H1.65 If existing topsoil is to be re-used it should be stored correctly, as it can easily become degraded and damaged. Subsoil and topsoil layers must not be mixed, soil should only be moved in dry conditions and as little as possible, ensuring that the stock pile does not exceed 3m in height and 10m in length. Topsoil should be re-used within 12 months and may need to be ameliorated with compost or fertilizers.

H1.66 Retaining walls should be unobtrusive. Using stone or timber walling, broken up with planting and topped with grass or shrubs can help soften the appearance. Earth mounds should tie into the surrounding landform and avoid appearing out of place, using a gently sloping 'S' shaped profile.

Above: good examples of integrating your landscape scheme into sensitive, open common- land surroundings

Above: retain and capitalise upon existing landforms as a means of softening the building

H1.67 Landform can soften and break up unsightly development within exposed and prominent areas, such as on the edge of moorland. Mounding will also act to shelter, reduce noise levels and reduce the export of excess material off-site. However this should not be a substitute for good design in the first instance.

walls

H1.68 The walls on Gower are a prominent and historically important feature. They provide a micro habitat, adding to Gower's biodiversity. Stone walls provide robust, and maintenance free, security and privacy.

H1.69 Although stone is no longer quarried on Gower, stone walls are prevalent. In the north the walls use pennant sandstone, with old red sandstone and quartz conglomerate within central Gower.

H1.70 A wall bearing no resemblance to the traditional styles will have a negative impact on the character of Gower. The type of stone, colour of render, and finish should be considered carefully. Artificial stone products, blocks and concrete screen walling are all inappropriate.

H1.71 The threshold of a wall – where it meets the ground can be softened by retaining a strip of grass or shrubs, which also enhances biodiversity and assists drainage, as seen in the image of Hillend Farm.

H1.72 The most prominent traditional styles of wall on Gower are:

rubble finish

'cock and hen' or 'buck and doe'

upright and even sized top stones




Top: appropriate types of stone walling
Bottom: different styles of whitewash finish




Above: inappropriate examples of walls including 'crazy paving' stone effect and concrete painted products

Right: Hillend Farm. New stone boundary wall to road, softened with grass verge

fences & gates

H1.73 Whilst fences are a cheaper alternative to walls, they do not have the same quality appearance or durability as stone. In the appropriate context they can be an effective substitutes, but they should be used sensitively.

H1.74 Fences should not be used to screen a development. Over elaborate panelled designs or bright colours are not in- keeping with Gower, and should be avoided. Hedges are also often used and these are discussed in more detail at G1.33.

H1.75 In open countryside, timber post and rail or wire fencing is increasingly being used. It is good practice to incorporate fences alongside new hedgerows as a means of protection until the planting is sufficiently established for the fence to become redundant.

H1.76 Timber post and rail with vertical palings or traditional cleft chestnut post and rail are used in more rural areas and create an attractive form of enclosure.

H1.77 Closeboard, or hit and miss timber fencing, has a bold appearance in the landscape. It is often associated with industrial areas, so the use of this fencing should be discouraged. If proposed such fencing should be painted with dark/green colours and softened with planting in order to blend in with the landscape.

H1.78 In order to maintain biodiversity connectivity, any fencing should provide gaps for wildlife movement (e.g. hedgehogs). Iron railings are not widely used and should be avoided across Gower. Looking at fencing in the locality gives an idea of the materials used, and the level of detailing and craftsmanship common to that area. This will help reinforce the 'sense of place' and local identity. Gates within fences should match the style of the fence. Using salvaged stone gate posts is encouraged.

H1.79 Traditional timber farm gates are used widely on Gower both on residential properties and farmsteads. In agricultural situations they tend to be metal and are usually hung from timber posts, although stone is preferred for its durability. Gates which are hung poorly or not maintained lead to an untidy, neglected appearance.

1 Inappropriate fencing to boundary

2 Appropriate forms of fencing to boundaryAttractive timber gates to driveway

3 Examples of gates of various styles and materials appropriate to Gower

4 Attractive timber gates to drive

5 Suburban style of gates inappropriate to Gower context

pavements

H1.80 Pavements are not common on Gower. The majority of settlements have narrow winding roads leading through them, with grass banks or property boundaries to either side.

H1.81 With the increase in tourism related traffic, conflicts with vehicles and pedestrians, and local residents are likely to become an issue. The need for a paved threshold between new development and road sides should be carefully considered at the planning application stage and due regard should be given to an appropriate level of users safety, whilst retaining the local character.

H1.82 Whilst there is no definitive style for pavements and they tend to be made from tarmac, there may be scope for a more modern approach using cobbles or stone.

Above: typical examples across Gower, showing lack of pavements

1 narrow, enclosed lanes, Parkmill
2 grass verges, Burry Green
3 stone walls to road edge, Oxwich
4 enclosure of walls, Port Eynon

Above: natural materials such as setts and flags would be options for pavements where required

Bollards and Markers

H1.83 A distinct feature of Gower are the simple stone roadside markers acting as vehicle deterrents or way markers. These are sometimes painted white. Bollards are not frequently seen but the preferred material would be timber, recycled plastic or steel. They should be a subdued colour to help them integrate into their surroundings. Chainlink barriers are not appropriate to the character of Gower and should be discouraged.

Above: examples of existing types of bollard and markers found within Gower

Green Infrastructure SPG (Forthcoming)

Biodiversity SPG (Forthcoming)

The Protection of Trees on Development Sites SPG (2016)
https://www.swansea.gov.uk/spg

The Protection of Trees on Development Sites draft SPG (2020)
https://www.swansea.gov.uk/spg

The following links take you to websites that provide information on Gower's Nature Reserves, National Nature Reserves and SSSi's (Sites of Special Scientific Interest):
http://www.the-gower.com/naturereserves/naturereserves.htm
http://www.swansea.gov.uk/index.cfm?articleid=10979

lighting

introduction

I1.1 This module sets out guidance to lighting design for the protection of the dark sky environment of Gower AONB. The guidance enables developers and planners to design, submit and assess lighting schemes that are appropriate to the landscape. Proposals must have regard to all relevant policies in the LDP, including the following:

- Gower AONB (subject to Policy ER 4)
- Air and Light Pollution (subject to Policy RP3)
- Habitats and Species (subject to Policy ER8)
- Placemaking and Place Management (subject to Policy PS2)

I1.2 This module replaces the 'Lighting Scheme Guidance for Gower Area of Outstanding Natural Beauty' SPG (2010). The module will be a material consideration when considering schemes with an element of external lighting as part of development proposals affecting the Gower AONB. It provides information that will assist decision makers in determining whether or not a proposed development is acceptable in planning terms.

I1.3 Swansea Council is seeking the formal recognition of the Gower AONB as a 'Dark Sky Community' from the International Dark Sky Association (IDA). A Dark Sky Community is defined as:

> "a town, city, municipality or other similar political entity that has shown exceptional dedication to the preservation of the night sky through the implementation and enforcement of quality lighting policies, dark sky education and citizen support of the ideal of dark skies."

This recognition requires a quality, comprehensive lighting policy that includes a suite of minimum standards for permanent lighting installations in the AONB

I1.4 This module covers the following matters:

- Overview of the importance of conserving the dark night sky;
- Lighting terminology and light pollution impacts;
- Legislative and policy context;
- General lighting design principles to control light pollution;
- Design guidance to support policy designed to protect the dark sky of Gower AONB;
- Key aspects for any necessary lighting assessment of development proposals and subsequent lighting plan;
- Best practice for all lighting proposals – domestic and non-domestic uses.

I1.5 The guidance relates to all exterior lighting situations regardless of the location of the lighting project, or whether it is a stand-alone lighting project or part of an overall development. Potential developments and lighting situations include, but are not limited to:

- Housing developments
- Industrial developments
- Retail developments
- Roads and footpaths
- Exterior sports grounds and arenas
- Feature lighting for civic enhancement
- Illuminated advertisements
- Replacement of existing lighting installations.

I1.6 To be clear from the outset, this guidance does not seek to eliminate or ban lighting within Gower AONB. Swansea Council recognises that there is a duty of care for developments to include lighting to meet health and safety requirements and other legitimate needs. However, maintaining the dark sky environment of Gower relies on good lighting design that is appropriate to the rural setting and that does not cause light pollution and so impact the special qualities of the AONB. Also, the Council will seek to prevent statutory nuisances where lighting forms part of a planning permission and may seek to regulate light as part of planning conditions and obligations.

I1.7 Guidance can also be found within the Biodiversity SPG and Green Infrastructure SPG .

I1.8 All lighting installations and developments that could cause internal light spill from windows in Gower should apply best practice to reduce light pollution and impacts on the dark sky, following the overall principle of:

'Think before you light; the right amount of light, where needed, when needed'.

dark sky & light pollution

I1.9 Light pollution is the unnecessary brightening of the night sky as a result of upwardly directed light. Light pollution is typically caused by poorly designed development schemes and inappropriate or poorly installed lighting equipment.

I1.10 There are three general types of light pollution:

- Sky glow – This is the glow that is visible around urban areas resulting from the scattering of artificial light. Sky glow is light from reflected surfaces and badly directed light sources illuminating air molecules and other particles. Light directed at the near horizontal is the most damaging as it travels furthest and lowest through the atmosphere; this can be avoided by pointing lights downward.

- Glare – the uncomfortable brightness of a light source when viewed against a contrasting darker background. Glare forms a veil of luminance from poorly controlled and directed lighting which reduces contrast and visibility. To road users, glare can be highly dangerous. Lights in the rural, darker area of Gower will be relatively higher in glare than in urban areas.

Above: example of sky glow
Below: example of glare

Above: example of trespass

[Photos courtesy of South Downs National Park Authority]

- Trespass - the spilling of light beyond the area or property being lit. Light trespass can include intrusion into windows of neighbouring properties, but it can also cause issues to habitats and areas of high biodiversity interest.

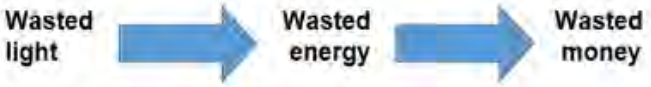
I1.11 An increasing amount of scientific evidence links light pollution to adverse impacts on human health and well-being, wildlife and biodiversity.

I1.12 Light pollution has been demonstrated to disrupt human Circadian rhythm ('body clocks'), with consequences including loss of attention, increased stress and fatigue. Recent studies have linked particularly blue-rich lighting with the suppressing Melatonin production – the hormone that regulates the human sleep-wake cycle.

I1.13 Artificial light can be very disruptive to body clocks of many animal species; but it can also act as a barrier to migration, animal movement and ecosystem integrity. Artificial light can alter a species' phenology. For example, lighting affecting the wetland breeding habitat of frogs and toads can disrupt their nocturnal croaking – an important part of their breeding activity – with consequences for reproduction success and population size.

I1.14 Tackling light pollution can reduce or avoid the above effects; in addition, sympathetic and energy-efficient lighting can satisfy community needs at lower cost and reduce carbon emissions.

I1.15 Poor design and/or installation will allow light spill into adjacent areas or the sky where it is not needed or useful; this is a waste of energy and a loss of efficiency. Whilst new LED systems are reliable and cheap to power, only their effective design and installation will allow their optimal operation and efficiency.



I1.16 There is a perception that lighting is a deterrent to crime. However, the Commission for Dark Skies argue that:

> ‘ there is still no proven link between lighting levels and crime rates, due to the complex nature of the subject, and simplistic conclusions cannot hide the fact that crime is a societal problem, not a lighting problem. Recent switch-offs and dimming [of highways lighting] after midnight by more than half of Britain’s local councils show that darkness does not encourage crime – it reduces it’

I1.17 Domestic security lighting can have the opposite effect to that desired. Bright lights can create contrasting dark spots for intruders to hide within, unseen from the outside. Badly installed lights can also be triggered incidentally by vegetation or wildlife. Lights can help criminals see what they are doing, and help them to see an escape route in what would otherwise be unfamiliar surroundings. Lighting can mean that intruders do not need to use a torch to see what they are doing and would otherwise advertise their presence.

I1.18 Many residential and commercial developments include large glazed areas which bring the landscape into the interior. However at night these large glazed areas can lead to spill of internal light into the landscape.

I1.19 Dark skies are becoming an important aspect for tourism, through landscapes offering unblemished views of the night sky. After its designation as a Dark Sky Park, the tourism authority in Northumberland reported many of the hotels in and close to it witnessed increases in business with visitors especially from urban areas, wishing to see and experience the wonders of the night sky. 2017 figures estimated that dark skies tourism in Northumberland was worth over £25m to the county, supporting around 450 jobs. Other areas in Wales (including Brecon Beacons, Anglesey and Gwynedd) have been devising ways of boosting business through astrotourism.

I1.20 Several characteristics of light are used to describe and assess lighting installations. The following metrics are used to describe light quantities and limits on Gower; these are represented in Figure A and include:

- Lumens (Lm) – The total light output radiated by a light source. 500Lm is sufficient for most domestic needs.
- Candela (cd) – the intensity of light in a given direction.
- Lux (Lm/m^2) – the illumination on a surface; with a higher Lux value, illumination is greater so the subject will appear brighter.

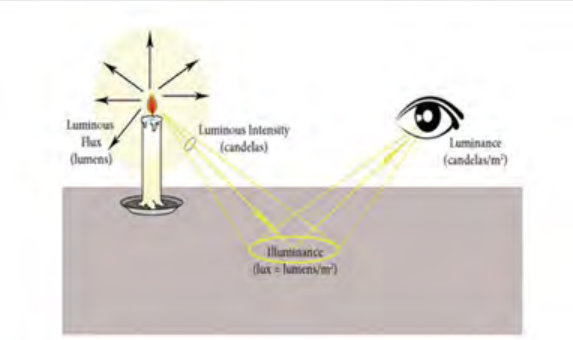


Figure A.
From: Haridy & Haslam (2018). Optical Radiation Metrology and Uncertainty. Intechopen.com

External Lighting

I1.21 For Gower AONB, it is expected that any exterior light sources of 500Lm (or greater) output will be 'fully shielded'. This is defined as - 'a light source screened and its light directed in such a way that none is emitted above the horizontal plane passing through its lowest light-emitting part.' Unshielded fittings with small light sources (less than 500 Lm) may be permitted in special circumstances, but proper upward light control will always be the recommended approach.

I1.22 Outside lights that have the bulb tucked out of sight into the lamp casing, but have a glass bowl beneath are NOT considered Fully-Shielded - as the light is refracted upwards from the curvature of the glass. Unshielded bulkhead lights - of any output - should never be installed - as they waste light in all directions, shining only a small fraction of light to where it is needed.

I1.23 If the angle of a lighting unit is adjustable, it should be directed downwards, with no light escaping above the horizontal plane, and only to where the light is required, and not onto neighbouring property.

I1.24 Switching controls can reduce energy costs and restrict light issues to those times when lighting is necessary. Proper switching should be integrated into lighting projects, incorporating at least one of the following:

- Passive Infra-red (PIR) switching with integrated daylight sensing. These systems activate lights for a set time by detecting the presence of a person/ animal after dark.
- Timer controls to ensure lights are switched off unless required; lights may be dimmed rather than switched off if low-level lighting is necessary.

I1.25 Modern LED technology provides for reliable and energy efficient lighting systems. Whilst lighting systems typically generate a 'white' light, this includes a range of different tones that manufacturers have described using phrases such as 'warm white' or 'cool white'. This range of 'colour temperature' tends to be measured in the Kelvin scale (K) as seen in Figure B below.

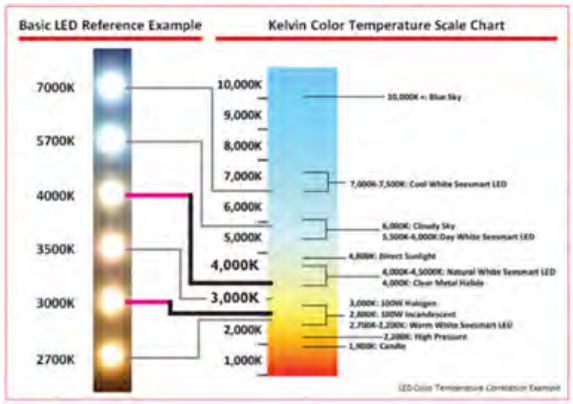


Figure B LED Colour Temperature Correlation Example.
Source: Northumberland National Park

I1.26 High Kelvin lighting includes more light in the blue part of the range. This can create a harsh glare, making it difficult to see clearly at night; it has also been linked to suppression of melatonin production, leading to disrupted sleep and other health risks. High Kelvin external lighting can also affect nocturnal wildlife and their habitats, particularly bats. Lower Kelvin lights are considered to be cost and energy efficient, safer, better for human health and the natural environment, and contribute less to skyglow.

I1.27 For these reasons, lighting systems affecting Gower AONB are expected to use units with a colour temperature of no more than 3000K. The Highways Authority has adopted this standard for all new street lighting on Gower.

Internal Lighting

Glazing

I1.28 Light from inside buildings can also be visible outside through doors and windows and add to the light pollution of an area (this is known as light spill). This is especially true where buildings have large areas of glass. Internal spill can – and will – have a similar impact to external lighting, particularly in interrupting and disrupting the continuity of the dark landscape.

I1.29 In general internal glazing will cause light to spill horizontally and – in the case of sky lights – directly upward, which are the most damaging paths of light. For domestic properties, blinds, curtains or shutters should be used in order to minimise internal light spill. The amount of glazing should be designed to a minimum and mitigation measures will not necessarily be acceptable in all cases. In certain circumstances mitigation measures may be considered where the Council is satisfied that they can be adequately maintained and controlled. This is more pertinent to non-domestic properties due to the difficulty in domestic enforcement.

I1.30 Glazing should:

- Not exceed 25% of the floor area.[1]
- Avoid large single areas of glazing such as floor to eaves glazing/cart shed openings or single elevations.
- Not be on roofs without sufficient mitigation.

Mitigation Options

I1.31 To reduce the light pollution through glass a number of technologies can be used:

- Inward facing glazing - where nearby buildings or courtyards offer shielding - allows for greater flexibility.
- Low Transmission ‘tinted’ Glass - light transmission through ‘tinted’ glass can be reduced with specially coated materials, similar to blackout glass or tinted windows, which can reduce transmittance to ~66%.
- Smart Glass - is made by passing electrical current through the material which changes its transparency. Often used as a securty feature in offices, the use of smart glass offers an effective and controllable option to reduce the light transmission.
- Electronically timed blinds/shutters/ blackout blinds - Blinds can be very

1 Elemental Method Energy Efficiency as reference (building regulations)

useful in cutting out light spill, particularly where glazing design exceeds recommendations. Conditions may be placed on non-domestic facilities that have a larger potential for internal spill, that require the installation of electronically controlled, blackout blinds that automatically operate.

National

I1.32 Over 90% of the UK population now lives under highly light-polluted skies, but Gower AONB is one of the few areas in South Wales that retains a dark night sky.

I1.33 The Environment (Wales) Act, 2016 introduces the Sustainable Management of Natural Resources (SNMR) and sets out a framework to achieve this as part of decision-making. The objective of the SMNR is to maintain and enhance the resilience of ecosystems and the benefits that they provide.

I1.34 The Environment Act also sets a legal target of reducing greenhouse gas emissions by at least 80% by 2050.

I1.35 Paragraph 6.8.1 of Planning Policy Wales (PPW) (Edition 10, 2018) states that there is a need to balance the provision of lighting to enhance safety and security to help in the prevention of crime and to allow activities like sport and recreation to take place with the need to:

- protect the natural and historic environment, including wildlife and features of the natural environment, such as tranquillity;
- retain dark skies where appropriate;
- prevent glare, and respect the amenity of neighbouring land uses; and
- reduce the carbon emissions associated with lighting.

I1.36 PPW recognises the importance of 'Dark Sky reserves' in contributing positively to an area in economic and environmental terms, and states that their characteristics should be taken into account when preparing development plan strategies and policies and when considering individual development proposals.

I1.37 PPW recognises the importance of lighting in rural areas to provide security, but light pollution should be controlled. Conditions can be attached to planning permissions for new developments that include the design and operation of lighting systems, for example, requiring energy-efficient design and to prevent light pollution.

Figure C: Images of light pollution in Wales and Gower. Source: VIIRS 2019 Satellite imagery.
www.Lightpollutionmap.info

I1.38 There is a range of policy and practical guidance for the reduction of light pollution. 'Guidance Notes for the Reduction of Obtrusive Light', Institute of Lighting Professionals (ILP), 2011) recommends 'that Local Planning Authorities specify environmental zones for exterior lighting

control within their Development Plans.' These zones are shown in the Table below:

Table 1 – Environmental Zones

Zone	Surrounding	Lighting Environment	Examples
E0	Protected	Dark	UNESCO Starlight Reserves, IDA Dark Sky Parks
E1	Natural	Intrinsically dark	National Parks, Areas of Outstanding Natural Beauty etc
E2	Rural	Low district brightness	Village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Small town centres or suburban locations
E4	Urban	High district brightness	Town/city centres with high levels of night-time activity

Source: https://www.theilp.org.uk/documents/obtrusive-light/

Local

I1.39 Local Development Plan (LDP) - The LDP, 2019, sets the policy framework against which all planning applications are determined and includes policies to ensure that the design and operation of lighting systems are satisfactory and/or to prevent light pollution. Relevant LDP policies include:

- Policy ER 4: Gower Area of Outstanding Natural Beauty
- Policy RP 3: Air and Light
- Pollution Policy ER 8: Habitats and Species
- Policy PS 2: Placemaking and Place Management

I1.40 **The Gower AONB Management Plan (2017)** - recognises that development pressures continue to affect the dark sky of the AONB, including development/lighting schemes from outside the AONB e.g. urban Swansea and Llanelli. There are also concerns that minor lighting projects on existing individual properties in the AONB have the potential for cumulative impacts on dark skies.

I1.41 **Gower Dark Sky Community Award** - the Council is seeking the formal recognition of Gower AONB as a 'Dark Sky Community' from the International Dark Sky Association (IDA). The designation recognises the efforts made by a community to protect the night sky and the environment dependent on it. The designation will enhance awareness of dark sky matters to all residents and visitors in the area.

I1.42 A recognised Dark Sky Community must commit to - and implement - a range of measures, with the most relevant to this Guidance module including:

- A quality comprehensive lighting policy that includes a suite of minimum standards for permanent lighting installations;
- Community commitment to dark skies and quality lighting as demonstrated by the local Highway Authority owned lighting committed to conforming with the lighting policy;
- Demonstrated success in light pollution control; and
- A sky brightness measurement program must be established and maintained to monitor light pollution in the area.

I1.43 Dark Sky Wales have assessed the dark sky quality on Gower, reporting that:

"The darkest locations identified by the study again correlate well with the visible infrared imaging radiometer suite (VIRS)/ World Atlas overlays, with the Rhossili area recording some of the darkest readings. The readings for the entire AONB are very encouraging with the majority in excess of 20 on the logarithmic scale used by the sky quality meter (SQM) which relates to a Naked Eye Limiting Magnitude (NELM) of 5.5 and above. Visually the unaided eye

can recognise celestial features such as the Milky Way, M31 (Andromeda galaxy) and can make out M33 (Triangulum galaxy)

The human eye can perceive stars down to a NELM of 6, with areas above 4/5 generally considered as good. Therefore, it appears that dark sky quality at the majority of the AONB locations monitored is of a good standard. As shown, there are areas of higher light pollution that correspond to the more populated areas with the more rural locations showing better dark sky quality, as indicated in the original satellite data.

The study also revealed a distinct lack of street lighting within the AONB, with exceptions being larger villages located again mostly towards the east and north.

Even here lighting has been sympathetically installed and are mainly of the newer fully shielded LED type with only occasionally unshielded sodium lighting being identified. Housing within the AONB also demonstrate an understanding of correct lighting with many homes displaying low voltage lighting with only the occasional home requiring remediation to conform to IDA recommendations."

I1.44 The survey results are shown in the Figure D: Gower AONB Dark Sky Survey

I1.45 Applying the above evidence to the 2011 ILP Guidance on environmental zones and the control of obtrusive light, Swansea Council takes the approach that the entire Gower AONB should be treated as a 'Zone 1' area. In addition, this guidance will be applied to developments peripheral to the AONB - where their lighting proposals may impact on the sky quality of the AONB. Subsequent advice in this module therefore applies the corresponding Zone 1 obtrusive lighting limits in the ILP Guidance.

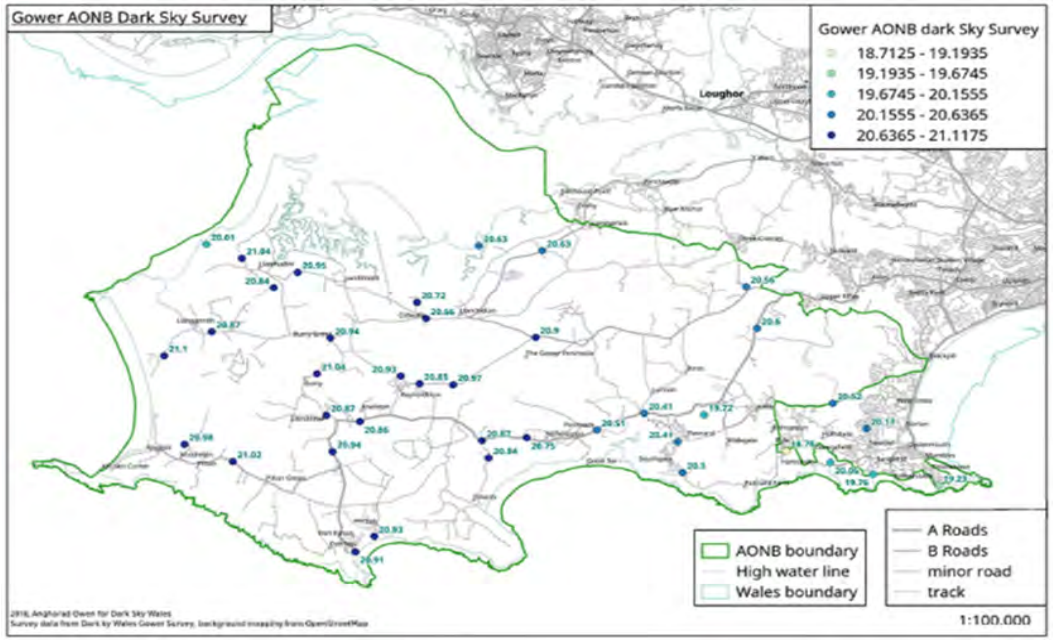


Figure D: Gower AONB Dark Sky Survey

I1.46 It is important that the design process considers how a proposal will interact with the night time environment; how it will be used at night; and how the design minimises the need for exterior lighting. Illumination should be appropriate to the surroundings and character of the area as a whole. The spill of lights from large open glass windows and sky lights often present a greater source of light pollution than externally mounted lights. Consequently, it is important to control lighting coming from these types of developments. The design of buildings should reduce the impact of light spill from internal lighting of suitable mitigation measures should be put in place. Developers are encouraged to refer to - and apply - other published professional guidance on the reduction of obtrusive light within projects; key guidance is referenced at the end of this module.

I1.47 Lighting design should comply with the obtrusive light limitations in Table 1: Obtrusive Light Limitations for Exterior Lighting Installations – General Observers, with a preferred dark curfew (lights-off) time of 2300 hours.

I1.48 Box 1 identifies some general lighting principles for any lighting projects affecting the AONB.

BOX 1

GOWER AONB – GENERAL LIGHTING PRINCIPLES

'Think before you light - the right amount of light, where needed, when needed'

- New lighting should not degrade the sky quality beyond the immediate area to be lit
- Angle lights downward – no unnecessary light above or near the horizontal
- Lamps of 500 lumens or less are appropriate and sufficient for most domestic purposes
- Lamps above 500 lumens should be installed in dark sky friendly fixtures that prevent upward light
- Direct light to where it is needed, not in a direction that disturbs neighbours or wildlife
- Switch off when not needed, Use proximity sensors and timed circuits
- Light to the appropriate illuminance – do not over-light needlessly
- Avoid bright white and cooler temperature LED's of over 3000 Kelvin
- Install at the lowest possible height to achieve lighting levels
- Technological advanced glazing, such as electrochromic glass or smart glazing should be used where it would help prevent demonstrable harm and eliminating excessive new artificial light pollution from large window voids
- Use and shut curtains and blinds at night
- Extinguish or dim external lighting after 2300 hours

Table 1: Obtrusive Light Limitations for Exterior Lighting Installations – General Observers

Zone	Sky Glow (ULR) [Max%]	Light Intrusion (into windows) E_{AV} [lux]		Luminaire Intensity *I* [candelas]		Building Luminance Pre-curfew
		Pre-curfew	Post-curfew	Pre-curfew	Post-curfew	Average *L* [cd/m²]
E1 – Natural, intrinsically dark	0	2	0 (1*)	2500	0	0

ULR = Upward Light Ratio of the installation is the maximum permitted percentage of luminaire flux that goes directly into the sky. Some lighting schemes will require the deliberate and careful use of upward light, e.g. ground recessed luminaires, ground mounted floodlights, festive lighting, to which these limits cannot apply. However, care should always be taken to minimise any upward waste light by the proper application of suitably directional luminaires and light controlling attachments.

E_{AV} = Vertical Illuminance in Lux – measured flat on the glazing at the centre of the window.
(1*) - is permitted ONLY for public road lighting installations

I = Light Intensity in Candelas (cd)

L = Luminance in Candelas per square metre (cd/m2)

Curfew = the time after which stricter requirements (for the control of obtrusive light) will apply.
For Gower AONB, curfew is 2300hours.

Refer directly to the ILP Guidance for any further clarification.

I1.49 For those developments where a lighting plan is required to accompany a planning application, the design and assessment should aim to address the key points in Table ?: Contents and Key Aspects of a Lighting Assessment . Further detail to each of these is provided in the referenced paragraphs.

I1.50 Pre-application discussions are useful in helping developers identify the issues to be covered and information that will be needed to support any application for planning permission, which in turn can help minimise delays in processing the application.

I1.51 **Lighting Need** - From the outset it is important to justify the need for lighting – only that which is essential for the task should be considered. The Council recognises that there is a duty of care for lighting to meet health and safety requirements and other such legitimate needs; however, not all lighting is needed or appropriate on Gower. Examples include architectural or 'mood' lighting, illuminated signage or access pathways. Lighting proposed as a duty of care should be shown to be essential - and not justified on a general perception that lighting is always needed.

I1.52 **Existing Light Levels** - Existing lighting levels should be taken into account when considering new installations that illuminate areas. If existing street lighting, safety or security lighting already provides direct lighting on to a task area, then a lighting design should take that into account. New lighting should not be added if existing conditions already provide sufficient lighting. Ambient levels of sky glow should not be taken into account.

I1.53 **Overall Footprint** - The overall footprint of a lighting design may be reduced by offsetting against existing lighting that has been poorly installed. Older systems are less likely to have been installed with regard to dark sky standards and should be improved where possible. This may not need a complete replacement, but an adjustment to a fitting or installation of sensors. Reducing the light pollution of the existing stock may help in lowering the cumulative impact of the proposed lighting, which may present a design more favourably.

I1.54 **Dark Sky Discovery Sites and SQM Monitoring Points** - Dark Sky Discovery Sites (DSDS) are local places that allow good access to observe the dark sky and are often centred on rural car parks. DSDS are part of a growing UK network of sites and it is probable that the number in Gower AONB will increase in the near future. Details of DSDS sites are available here: https://www.darkskydiscovery.org.uk/dark-sky-discovery-sites/map.html

Table 2: Contents and Key Aspects of a Lighting Assessment and Plan

	Inclusions	Description	Ref
	Need		
1	Statement of client needs and parties comments	Is the lighting needed?	6.3
	Baseline Conditions		
2	Existing lighting environment of the site	• What is the current lighting on site? • How is it used and what for? • Is the current lighting dark sky compliant? • Is there potential for improvement?	6.4, 6.5
3	Survey of surrounding night environment	• What is the surrounding lighting environment? • Are there streetlights nearby?	6.4, 6.7
4	Identification of critical viewpoints	• Are there Dark Sky Discovery Sites nearby? • Are there any SQM monitoring points nearby? • Is there nearby important habitat/wildlife sites? • Is the site visible from any viewpoints, public routes or sites?	6.6, 6.7, 6.8, 6.11
5	Identification of Dark Zone limits	• What are the applied Obtrusive Light Limitations?	6.9
	Design		
6	Lighting Design Objectives	• What are the general lighting objectives? • What standards or policies are to be referenced? • Is it an expected design for the task?	6.3, 6.12
7	Task Illuminance	• What guidance/standards have been used to reference lux levels? • What levels of illuminance are to be used and why? • Does the illuminance exceed the Dark Zone limits?	6.9, 6.10
8	Calculated Predictions	A lighting design should include: • A horizontal plan showing illuminance and uniformity levels across the site • A vertical plan showing illuminance and uniformity levels across the site if buildings are to be intentionally illuminated • Maintained averages (E_{AVE}) calculation for task lighting areas – to be compared to guidance standards.	6.9, 6.10

9	Obtrusive Light Calculation	A design should show: • How it meets the criteria as set out by the ILP Zone E1 when installed (not as bought) • Do any luminaires exceed any of the ILP Zone E1 limits?	6.9
10	Comparison with Baseline Values	• What is the assessment of the expected cumulative impact? • Does the design negatively affect the dark sky environment?	6.4, 6.5, 6.7, 6.10, 6.11
11	Luminaire Schedule	• Luminaire light distribution type • Lamp type and Wattage • Mounting Height • Orientation • Tilt • Lumens • Colour Temperature (CCT) • Spectrum Does the colour temperature exceed 3000Kelvin? Does the tilt when installed exceed ILP guidance?	6.12
12	Windows	Number of windows over a certain size, which will be determined for each individual application, taking account proposed design and surrounding landscape context	
13	Mitigation	Have other controls been used to bring design into compliance, such as: • Curfews • Proximity sensors • Shielding • Baffles and louvres • Infra-red CCTV • Surfaces Can curfews be used to prevent harm under astronomically dark conditions? Use of smart glazing with controllers which activate by light sensors and set to astronomical time, thereby forgoing the reliance on the end user (unlike curtains and blind which are reliant on the occupier).	6.9, 6.12, 6.13

I1.55 The SQM Monitoring Points have been selected as roadside (or otherwise easily accessible) points for taking SQM measurements as a way of monitoring the dark sky on Gower. These points are referenced in evidence documents that can be found at Swansea.gov.uk/AONB and should be used to inform a lighting strategy where necessary. As key observation and meeting points, these need to be free of any direct sources of light pollution. Any lighting installations proposed close to these sites should aim to avoid any illumination towards or within them.

I1.56 Biodiversity - Lighting plans should appraise the impacts on biodiversity. Whilst any lighting will have some impact on all species and habitats, there are some particularly significant considerations:

Bats – all bat species are susceptible to impacts from artificial light. All bat species are protected in law and it is illegal to kill, capture or disturb bats, obstruct access to bat roost or to damage/destroy roosts. Lesser Horsehoe Bat populations on Gower are considered to be a distinct genetic clade and their conservation is vitally important. Lighting in the vicinity of a bat roost could be regarded as disturbance. Development proposals should:

- Survey area for bat species/activity
- Not directly illuminate bat roosts
- Avoid illuminating foraging areas and routes
- Review and apply the detailed guidance published by Institute of Lighting Professionals and the Bat Conservation Trust

Birds – exposure to artificial light can reduce sleep in birds, disrupting long-term Circadian Rhythm that determine the onset of breeding. Birds are also likely to be influenced by changes in insect behaviour due to artificial lights. Lighting proposals should avoid the direct illumination of important areas for nesting birds.

Invertebrates – Artificial light can disrupt feeding, breeding and movement that may reduce and fragment invertebrate populations. This disruption can significantly reduce plant pollination rates in lit areas. Lighting design should:

- Avoid illuminating water or reflective surfaces
- Avoid the direct illumination of ecologically sensitive areas
- Use lighting of no more than 3000 Kelvin CCT

Wildlife Sites – All important wildlife sites may be disturbed by artificial lighting. As Gower AONB includes a very high concentration of wildlife sites, lighting proposals should note the presence of any nearby sites and avoid their illumination. Wildlife sites include areas of international importance (e.g. Special Areas of Conservation), national interest (e.g. Sites of Special Scientific Interest) and local interest (e.g. Sites of Importance for Nature Conservation).

I1.57 All development within Gower AONB6with external lighting should meet the ILP guidance levels for environmental zone E1 (Guidance Notes for the Reduction of Obtrusive Light GN01:2011, Institute of Lighting Professionals (ILP) Guidance). These levels will also be applied to developments outside of the AONB - where their lighting proposals may impact on the sky quality of the AONB. These are recommended limits for the control of the main sources of light pollution – sky glow, glare and light spill and are shown in Table1: Gower AONB - Obtrusive Light Limitations for Exterior Lighting Installations – General Observers (above).

Maximum Lux – Maintained Average Illumination

I1.58 Lux is a measure of light on a surface and it can be used to describe the level of light needed on a surface required to do a particular task. Tasks that need high levels of lighting, (e.g. sports) will require greater Lux levels than other areas where lower light levels are acceptable (e.g. pedestrian pathways). For nondomestic lighting, Lux is generally calculated as an average of the maintained illuminance (E_{AV}) across a surface, as levels will be vary significantly over a large task area. It is important that any lighting scheme is designed with the correct levels of light.

I1.59 Obtaining the right level of lux can be a complex task and is likely to require a lighting engineer to model the design and calculate the average for the task area. The Lux level is affected by a range of design aspects, such as: lamp height and direction; number of lamps; Lumen output; and source intensity. Poor design and installation of task lighting may lead to areas being be over-/under- lit, which can impair its use as well as impact on dark skies. Table 3 provides example lux levels, showing that non-domestic needs require substantially more light which will have a greater impact in darker areas. The levels have been compiled by South Downs National Park (2018)[5] and sourced from a number of guidance documents. In designing a lighting plan, the average level of lux (E_{AV}) needed should be referenced according to standard guidance that recommends levels of lighting for different tasks.

I1.60 The table shows that the average lux level within the AONB is 10. Development must therefore be designed to ensure that levels are a maximum of 10 lux within the AONB in order to prevent a detrimental impact on dark skies. This should be evidenced within a lighting strategy.

Table 3: Examples of Lux Levels

Description/Activity	Lux
Overcast day	1000
Internal general office/ professional kitchen	500
Hockey/Equestrian/ Tennis	200
Cricket	100
Football	75
Internal family living room	50
Motorway	50
Building site	50
Distributor roads	30
Domestic security lighting - urban	20
Car oark - rural	15
Gower AONB - max. Average Illuminance	**10**
Residential roads	10
Safety and security general working areas	10
Domestic security lighting - rural	5
Full moon	1
Minimum emergency lighting	0.2

5 https://www.southdowns.gov.uk/wp-content/uploads/2018/04/TLL-10-SDNPA-Dark-Skies-Technical-Advice-Note-2018.pdf

lighting levels & mitigation measures

I1.61 Some useful guidance documents are included in the references, but where no specific guidance for a task can be found, the most appropriate and similar activity should be referenced. In some cases the level of required lux will be so great that the inherent surface illuminance will pose a significant threat to the dark skies landscape - no matter how well the design meets all other criteria. Designs requiring an illuminance greater than 10 lux in most situations in the AONB will produce this threat.

I1.62 **Key Viewpoints** - There are key viewpoints across and outside the AONB, identified in the Key Features/Views Map in Section 2. Proposals should consider the impact on these viewpoints, particularly in regard to the disruption of the continuity of the dark landscape. As large scale developments are more likely outside the AONB, consideration should be given to their impact on dark skies and key viewpoints within the AONB.

Luminaires – Physical Characteristics

I1.63 **Symmetrical luminaires** direct light in a symmetrical pattern around the unit and are useful for lighting large areas to a high level of uniformity – such as decorative installations.

I1.64 **Asymmetric luminaires** direct light in a certain path e.g. along a road or over a sports pitch. Asymmetric units allow a design to minimise light spill in unwanted areas and provide high illuminance to specific wanted areas. Many standard security light units have an asymmetric design, so the light, should be installed and directed to light intended task areas only.

I1.65 **Full cut-off lighting units** are designed with glass features that affect the path of light emitted about the horizontal. Only full cut-off units – where the glass is flat to the horizontal plane are recommended for use in the AONB, especially for those units over 500Lm.

I1.66 **Installation height** – to achieve the same illuminance, light sources further away from the intended subject will require brighter lights with a greater intensity than those closer to the surface. Installations should be as close to ground level as practicably possible. For example, footpaths could be lit with lower powered, low-level bollards or wall lights rather than overhead lighting.

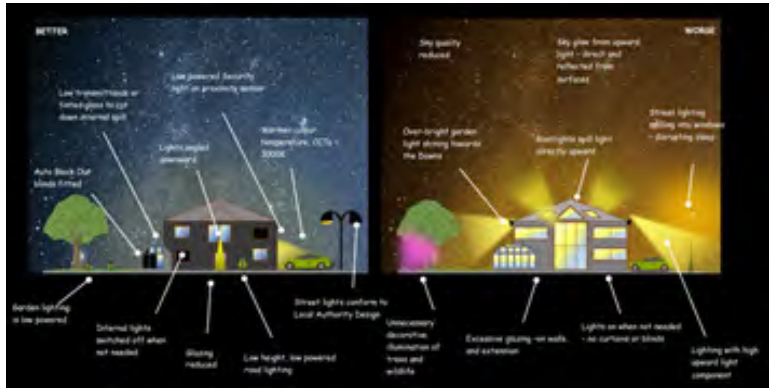
Mitigation Measures

I1.67 **Proximity PIR (Passive Infra-Red) sensors** fitted to external lighting will minimise the time that a unity is on and so reduce light pollution. Timed circuits should be used to turn off lights after a certain time. Timed circuits should be set to a maximum of 5 minutes after activation.

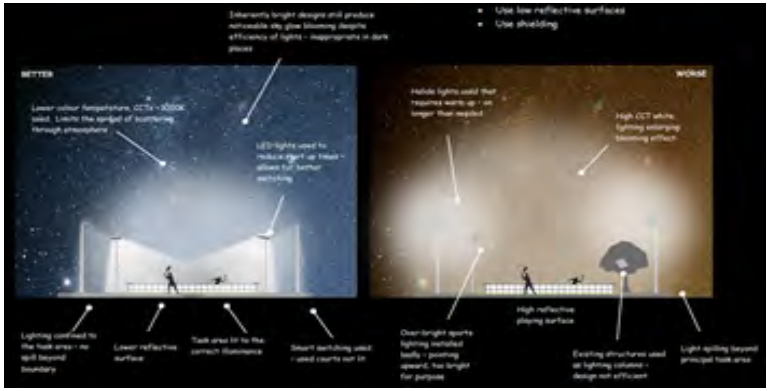
I1.68 **Shielding – Cowls, baffles or louvres** fixed to a light source (or reflection) will act as a physical barrier to an observer. LED lighting systems tend to limit the need for this type of mitigation.

I1.69 **Security Lighting vs CCTV** – there is little evidence to suggest that security lighting will directly deter criminals, and a poorly designed system may make things easier for intruders. Developers could consider the installation of night vision CCTV or wireless camera systems to avoid the need for security lighting.

I1.70 Gower AONB has adopted an **'exterior light curfew'** of 2300 hours. New lighting development within the AONB is expected to extinguish or reduce the quantity of lighting from this time.

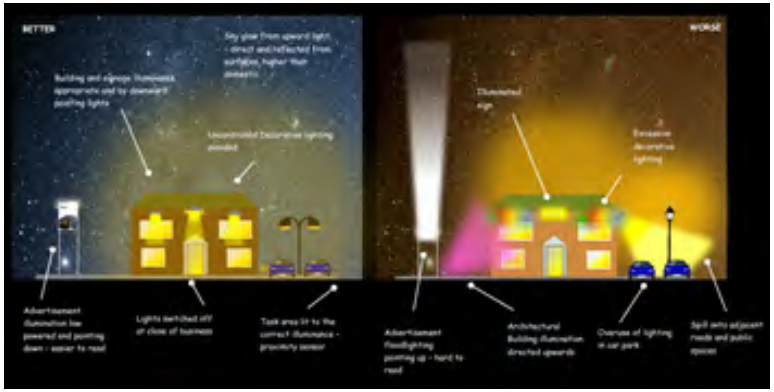


Above: Domestic – applying to single dwellings and estates

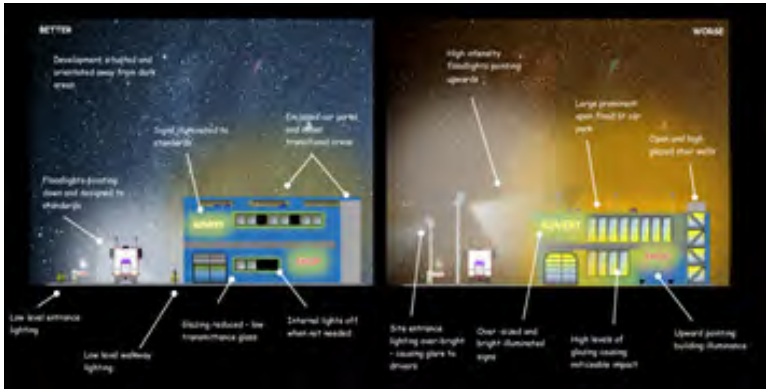


Above: Sports

Below: Commercial – applying to smaller retail/commercial properties and public houses



Below: Industrial – larger developments including offices, warehouses and retail centres



[All images courtesy of South Downs National Park Authority]

useful references

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British Standards Institute.
Various BS standards, including:
BS5489-1: 2013 Code of practice for the design of road lighting – Part 1: Lighting of roads and public amenity areas
BS EN 12193:2007 – Light and Lighting – Sports Lighting
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