



AGRICULTURAL BUILDING DESIGN GUIDELINES

for the

**Mendip Hills
Area of Outstanding
Natural Beauty
(AONB)**

*Supplementary
Planning Guidance*



**Agricultural Building Design Guidelines for the
Mendip Hills Area of Outstanding Natural Beauty (AONB)
Supplementary Planning Guidance**

Produced by the Mendip Hills Joint Advisory Committee

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and

**Bath & North East Somerset Council
Somerset County Council
Mendip District Council
North Somerset Council
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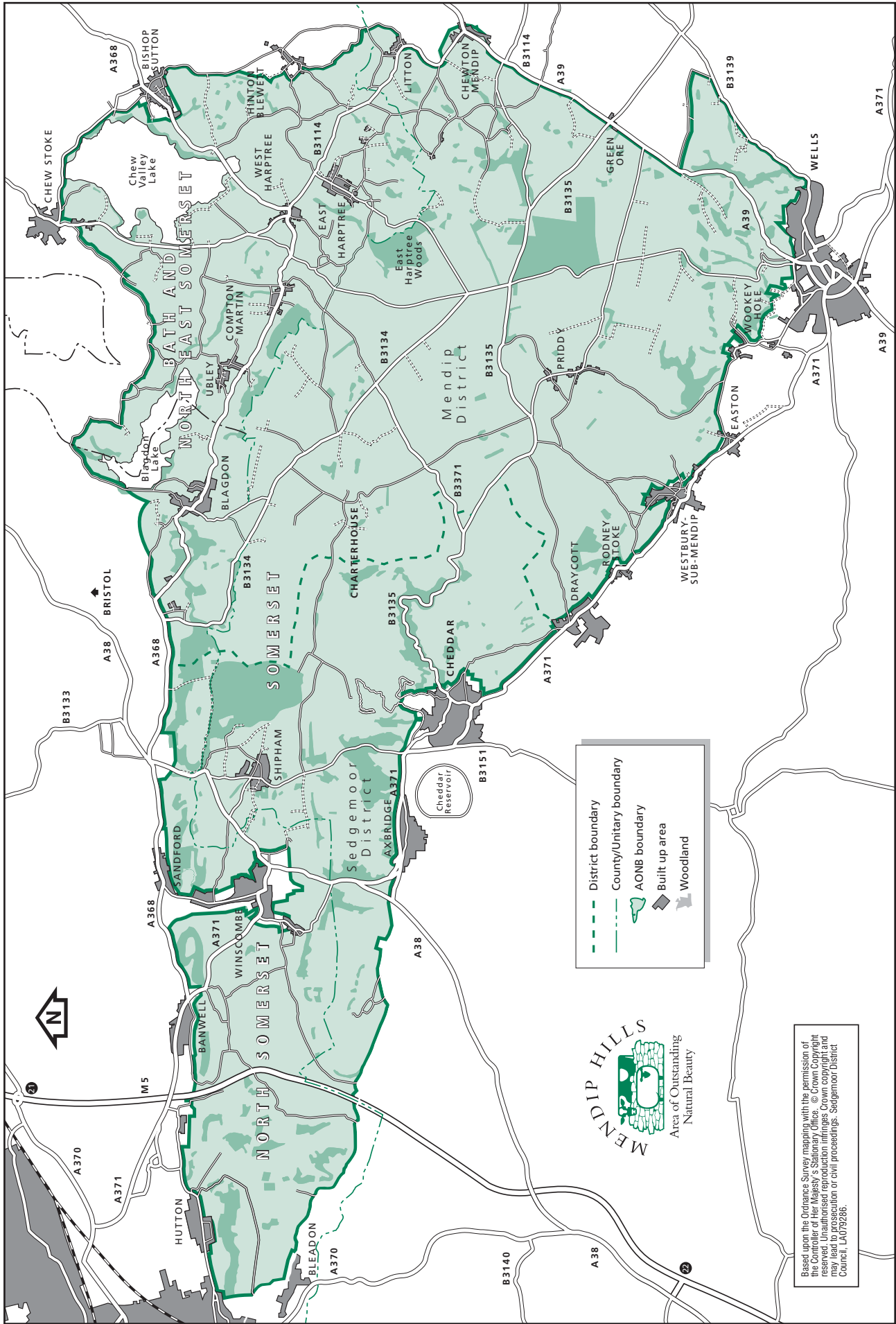




Agricultural Building Design Guidelines for the Mendip Hills Area of Outstanding Natural Beauty (AONB) Supplementary Planning Guidance

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1 INTRODUCTION

Status of this document

This document has been published as Supplementary Planning Guidance (SPG). It has been formally adopted by North Somerset Council, Bath and North East Somerset Council, Sedgemoor District Council and Mendip District Council as SPG. It has been drawn up to supplement the policies and proposals of the Development Plan (see below) and must be read in conjunction with relevant policies contained in the development plan for the area in which the particular proposal lies. It is intended that the guidance contained within this document will be a material consideration in the determination of planning applications or the imposition of planning conditions.

The approval and adopted Development Plan covering the AONB comprises:-

- ❖ Somerset and Exmoor National Park Joint Structure Plan (for the part of the AONB within the county of Somerset)
- ❖ Avon County Structure Plan (for the part of the AONB within the former Avon area)
- ❖ Mendip Hills Local Plan (for those parts of the AONB lying within B&NES, Mendip and Sedgemoor local authority areas).
- ❖ North Somerset Local Plan (for those parts of the AONB within North Somerset Council's area).

Reference should also be made to the following emerging Structure and Local Plans, currently at varying stages of preparation:-

- ❖ Joint Replacement Structure Plan (B&NES, Bristol, North Somerset and South Gloucestershire). This will on adoption supersede the Avon County Structure Plan.
- ❖ Wansdyke Local Plan
- ❖ Mendip District Local Plan
- ❖ Sedgemoor District Local Plan

These Local Plans will, on adoption, supersede the Mendip Hills Local Plan (1989).



The scope of this document

The Mendip Hills Area of Outstanding Natural Beauty (AONB), designated in 1972, is situated to the south of Bristol and stretches from Bleadon in the west to Chewton Mendip in the east as shown on the map opposite the contents page. The AONB falls under the authority of two district councils, two unitary councils and one county council whose addresses are listed in Appendix I.

The AONB designation is recognition that the distinctive character and natural beauty of the area are so outstanding that it is in the nation's interest to safeguard them. The primary purpose of the designation is to enhance and conserve the natural beauty, to consider local economic and social needs and to promote sustainable development. For planning purposes, AONBs are treated as the equal of national parks.

The AONB landscape has evolved through centuries of settlement, industry and agriculture into a unique place, which often evokes strong feelings of wildness and remoteness. The open, weather-beaten plateau contrasts with the soft character of the Chew Valley, whilst the steep wooded slopes of the hills have a character all to themselves. This variety in landscape has been largely influenced by the underlying geology but also by human activities of mining, quarrying and agriculture.

Like everything the countryside is always changing and the AONB is no exception, but the area continues to be a living and working landscape where agriculture remains the primary land user despite increasing pressures from 'non farming' interests. The Mendip Hills AONB Joint Advisory Committee (JAC) recognising this pressure amongst others has produced the Mendip Hills AONB Management Plan (1998) to provide a framework for action for the care of the AONB. These Design Guidelines have been produced as part of the suggested list of actions from this Plan.

The need for design guidelines

As the principal land-use of the AONB agriculture has played a particularly important role in the development of the landscape. The JAC has recognised that without the continued stewardship by farmers and landowners the characteristic stone walls, hedgerows, limestone grassland and stone buildings would be lost. A thriving agricultural economy must be encouraged and therefore new agricultural development must be considered. It is vital, however, that any new development is a positive addition to the landscape, which enhances the distinctiveness and diverse qualities of the AONB.

The agricultural industry is currently undergoing major restructuring as a result of its developing crisis. Farmers that will survive these difficult times will be those who have been able to either diversify or more commonly expand. This will increase the pressure for new development.

Aim of the design guidelines

Consequently these guidelines have been produced to encourage those requiring and/or designing new agricultural developments to consider their impact on the landscape carefully. The open landscape of the AONB means that new development can be particularly intrusive unless careful attention is paid to siting and design. This guide is written to assist: farmers, landowners, advisors, designers, planning authorities and building manufacturers.

It was felt that one of the most important considerations in producing this guide was to ensure that it could be easily understood by all. Every effort has been used to ensure that the guide is as simple and user friendly as possible.

With this overall aim in mind, the main purpose of the guide is:-

- ❖ **To encourage farmers to consider carefully new development so that it can be practically integrated into the landscape with due regard being taken of planning principles.**
- ❖ **To balance the functional need of new development with the need for minimal intrusion on the landscape.**
- ❖ **To raise awareness of good design principles and the ease at which early planning can greatly improve the physical appearance of buildings.**
- ❖ **To provide practical suggestions and ideas for improving the design of farm buildings.**
- ❖ **To reduce surface run-off from high ground into the lower reaches of the catchment.**

It is beyond the scope of this guide to set out the detailed planning requirements for agricultural development in each of the local authority areas that would detract from the main purpose of the guide. All new farm buildings and structures now fall within the scope of the planning system and therefore early contact should be made with the local planning department who will be able to advise on specific cases.

It is suggested that all farmers seek planning advice as soon as possible when considering new agricultural development.

General advice can be obtained from Annex E of Planning Policy Guidance Note 7 "The Countryside - Environmental Quality and Economic & Social Development" (1997) available at HMSO, and on the website of the Department for Transport, Local Government and the Regions (www.dtlr.gov.uk).

Agricultural buildings may require planning permission, especially if they are to cater for livestock and are within 400 metres of a dwelling or exceed 465 square metres in area.

In other cases, a notification should be sent to the local planning authority. If no objections are raised, the building can be erected without the need for planning permission.

In all cases, consult the planning authority for advice.



2 THE MENDIP HILLS AONB

The main characteristics of the Mendip Hills AONB landscape

There are eleven distinctive landscape character areas within the AONB identified in the *Mendip Hills Landscape – landscape assessment (1998)* Countryside Commission (CCP 545). These areas are summarized in the Mendip Hills AONB Management Plan (1998).

The geology of an area influences the shape of the landscape and its use. The AONB is characterised by the underlying Carboniferous Limestone, which outcrops in the dramatic gorges cut into the hills. The limestone ridge was created as a result of the rock being folded and uplifted. On the hilltops where the limestone is eroded the underlying Devonian Old Red Sandstone can be seen. Around the edges of the hills and within some of the more fertile valleys the land is underlain by Dolomitic Conglomerate, a hard rock which is known for its attractive red colouration.

This geology and interaction between the three rock types have combined to produce the bold landforms of the plateau, the slopes and hills to the west and dictated the availability of water and thus settlement patterns. The interaction between limestone and water created a karst landscape of dry valleys, swallets sink holes and closed basins. These indentations in an otherwise flat and harsh landscape offered ideal shelter for settlements, so that today we see villages located in the larger valleys whilst smaller indents, some man made and some of archaeological importance, were only suitable for isolated farms. The lack of water and harsh conditions on the plateau has had an important influence and are the main reasons for the sparse colonisation of the hills.

What makes the AONB so important is that limited 19th and 20th century development has meant that the characteristic openness and simplicity has been retained, it also means that new development is even more visible.



The main characteristics of local buildings and architecture

Human groups exploited the Mendip landscape intermittently in the warmer intervals which occurred during and between the successive phases of the last ice age. Continuous use of the area began with the retreat of the last ice age, some 10-12,000 years ago. **The AONB has a rich and diverse historic environment.** This important heritage includes buried archaeological sites, artifacts and features, cave archaeology, individual historic buildings, structures, sites and features and extensive historic landscapes. Among the best known historic features are the many Bronze Age barrows, the lead working remains and the large geometrically-shaped fields set out in the late 18th century. During the medieval and early post-medieval periods, settlement was mainly concentrated in the villages and hamlets which ringed the hills and in the few settlements which dotted the plateau – for example, Priddy, Chewton Mendip and Rowberrow. With the Parliamentary Enclosure activity of the late 18th and 19th centuries came a new development phase, which saw the foundation of farmsteads among the freshly created fieldscapes.



Most settlements in the AONB are in the form of small villages, hamlets and isolated farmsteads. **The typical Mendip farmhouse** was built in the late 18th or early 19th century. The design is generally simple; a rectangular building of local stone, roofed with grey slates or red tiles. The front elevation is usually symmetrical, with a central doorway, and windows placed on either side. The first floor windows sit above the ground floor ones, and there is often a small central window on the first floor. **Ancillary buildings** are often placed at right angles to the farmhouse, although sometimes they may continue on the same alignment as the house. A square or rectangular yard with ranges of buildings or walls on each side is an arrangement often found on Mendip farmsteads. To enable easy access to a number of fields, the farmsteads were sited where a number of fields met, and not in an open fieldscape situation.

The two principal building stones of the AONB are Carboniferous Limestone and Dolomitic Conglomerate the later being a very rich and varied material often deep red. Occasionally in some of the grander buildings Douling Stone, a warm honey coloured oolite was used. The use of local stone gives local colour, texture, harmony and distinctive character linked back to local geology. Tile or slate roofs are now the norm across the Mendips, however, most early buildings would have originally been thatched.

A characteristic of the buildings within the AONB is their **scale in relation to their surroundings.** Agriculture on the hills has always been difficult due to the lack of water and poor soils. As a consequence the impact of modern farming techniques took a relatively long time to arrive. Intensive farming was only possible in the 1950's with the advent of mains water for the first time. These factors have combined to mean that a relatively high number of the small traditional stone cow byres and sheep pens have remained. Unfortunately, despite being characteristic of the AONB, traditional farm buildings have few uses for today's farmers and the demand is for large modern single span buildings.

3 NEW AGRICULTURAL BUILDINGS

SUMMARY OF MAIN POINTS

First Stages

- ❖ Seek professional advice as soon as possible when considering new agricultural development. Contact your local authority planning department and speak to the landscape officers as well as planning officers. Both the Royal Institute of British Architects (RIBA) and the Royal Institute of Chartered Surveyors (RICS) have members accredited in conservation. RIBA offers a free Client Advisory Service to potential clients on their projects. See Appendix 1- Useful Contacts (page 23) for details.
- ❖ The first stage of any planning process is to ensure any new building is absolutely necessary and if so that it meets the current needs of the farm and also has regard of any possible future needs. These factors will influence the siting of the building.
- ❖ Before applying for planning permission it is a legal requirement to notify the Environment Agency who will advise as to whether the proposed site will be acceptable in the water environment (See Pollution considerations on page 20).

Design principles

- ❖ Consider function and suitability to surroundings. See pages 18 to 20.
- ❖ If requiring a large building two smaller units may be a more sympathetic to the location and surroundings with an L – shape and or stepped roofline to reduce the impact. See Building Form page 14.
- ❖ Take care when considering the roof structure and materials. Consider stepping pitches and ridges, creating shadow lines to help merge the building with its surroundings. See Roof Construction pages 14 and 15.
- ❖ Construction materials should be chosen carefully to preserve the local character of buildings and to blend in with the surrounding landscape. See Use of Materials page 15.
- ❖ Roof materials/paint should be matt - dark colours against existing planting and light colours (slate blue and light grey) where viewed against the sky. See Colour of Materials page 15.

Siting and location (see pages 17 to 20)

- ❖ The siting and location of a new farm building are two of the most important factors to consider. It must be remembered that it does not matter how well a building is designed, if it is poorly sited or located it will be intrusive in the landscape and appear as an eyesore.
- ❖ Regard must always be had of the integration of the new building and the existing farmstead or farm buildings and on a broader basis with the landscape as whole.
- ❖ When choosing a site check that it is not a significant archaeological, wildlife or geological interest site.

Integration with Existing Buildings (see pages 17 and 18)

- ❖ New buildings should relate to existing buildings and where possible be retained within the farmstead.
- ❖ A degree of separation from traditional buildings will be desirable.
- ❖ Height of new rooflines should not exceed existing that of adjacent buildings.
- ❖ If breaching a well defined boundary the scheme should include appropriate enclosure by walls or hedgerows.

Integration with Surrounding Countryside (see pages 18 to 20)

- ❖ Always view the proposed site from near and far and take advantage of any existing natural screening, whether it be natural dips, hills or woodlands.
- ❖ Integrate the new building with existing stone walls or hedge lines.
- ❖ Avoid skylines and sites where the building may dominate the landscape such as on the plateau or where visible from public viewpoint.

Landscape Treatment (see pages 20 to 22)

- ❖ It is important to look round and judge the character and pattern of existing vegetation cover before designing a tree planting scheme.
- ❖ New planting can help to integrate the building into the surrounding landscape. It is not necessary to totally screen the building; fuzzing and blurring effects of partial tree and shrub planting will generally look more natural.
- ❖ Avoid planting in rows, particularly on banks and avoid using Leyland Cypress or other fast growing non native species.

Pictorial Key Siting and Design Summary illustrating some of the points mentioned above

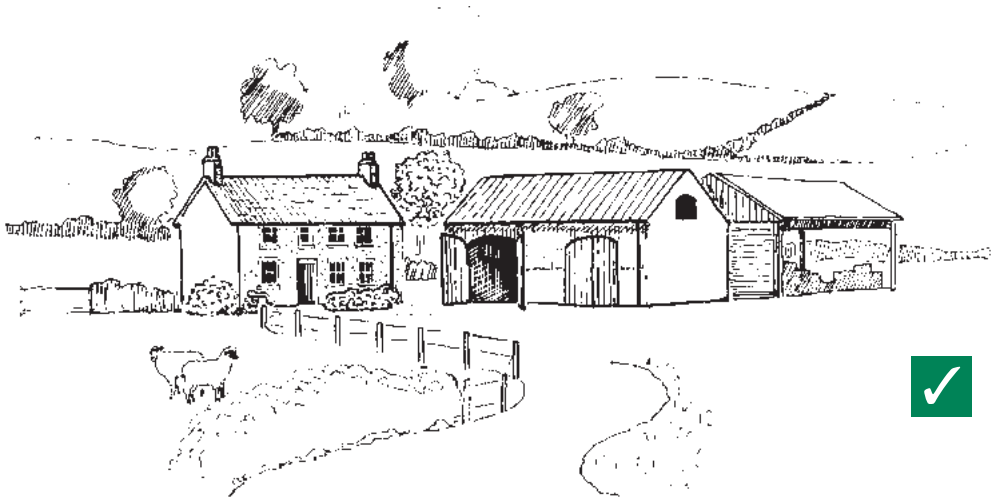
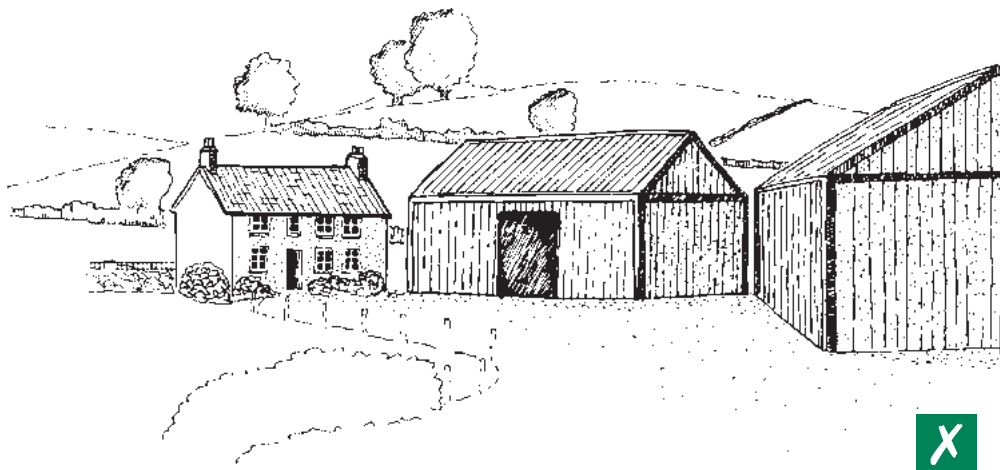


Figure 1a (above) and Figure 1b (below)

New farm buildings to be developed in sympathy with the existing, traditional pattern of the farmstead.

Ridge and eave height should be in scale with existing buildings.

New build at right angles to existing buildings work well but the contour of the site should be considered.



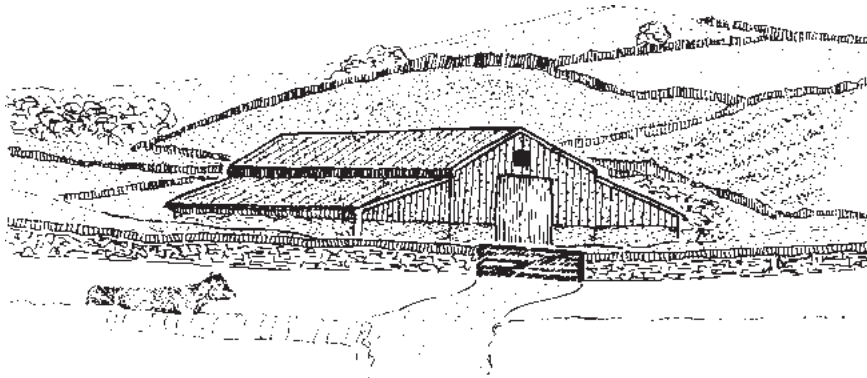


Figure 2a (above) and Figure 2b (below)

New farm buildings should be integrated into the surrounding countryside. Regard should be taken of the background when choosing colour of roofing material.

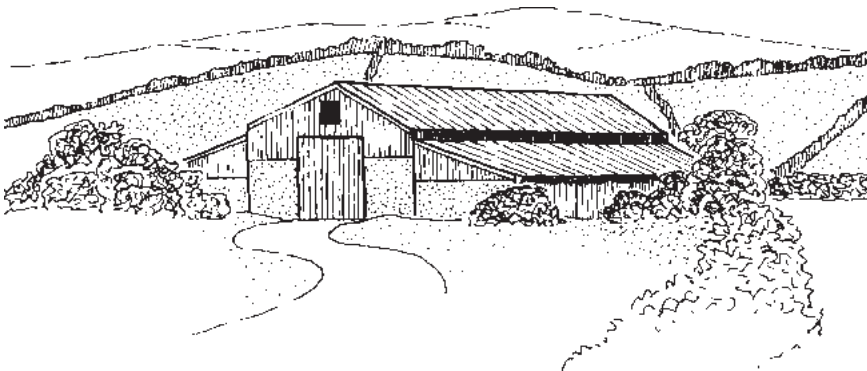
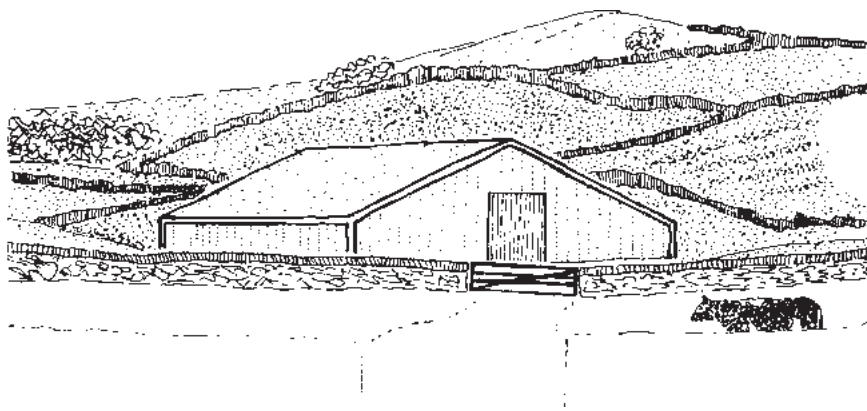
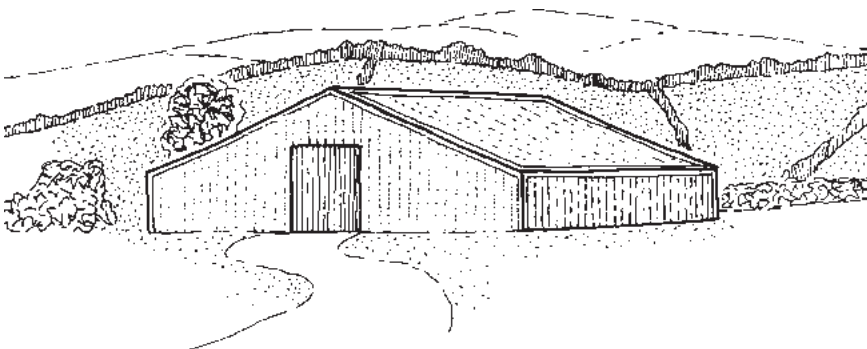


Figure 3a (above) and Figure 3b (below)

Stepped roof and appropriate planting can help integrate a large building into the landscape.



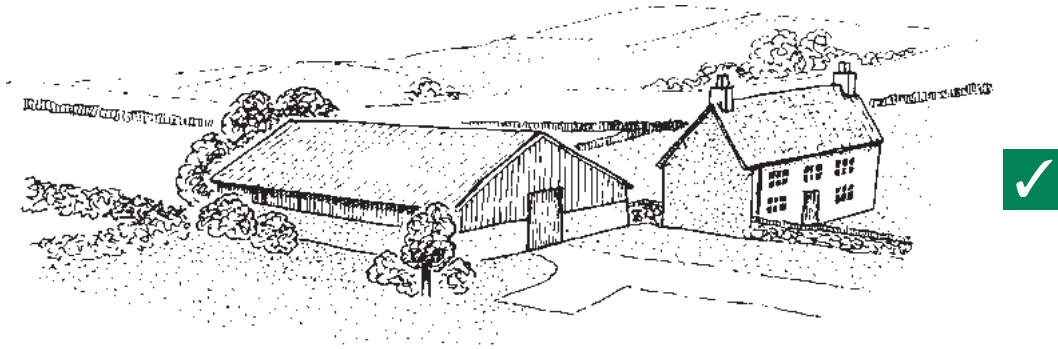
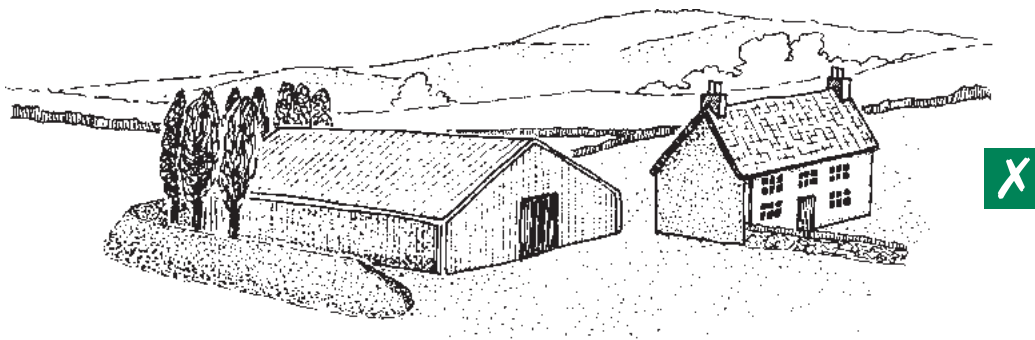


Figure 4a (above) and Figure 4b (below)

Sensitive landscaping and natural planting, rather than artificial bunds and non native trees is important.



COST CONSIDERATIONS

The design of agricultural buildings has generally concentrated on whether a design is suitable for its proposed use and its cost in monetary terms. Farming is a business and the construction of new buildings requires substantial amounts of capital, therefore new buildings must provide a favourable rate of return. This could be achieved by providing additional room for increased stock, improving efficiency by housing stock in a better location, by allowing the use of modern machinery or by improving production by providing a more favourable environment for stock. Often new buildings will be built for a combination of these reasons.

Adapting proposals to meet these guidelines does not necessarily increase building costs. It is intended this design guide will show how minor structural and siting changes can greatly improve the visual integration of a building without major expense. Adaption of existing buildings and/or reuse of traditional materials should always be considered.

The first stage of any planning process is to ensure any new building is absolutely necessary and if so that it meets the current needs of the farm. It should also have regard of any possible future needs. These factors will influence the siting of the building.

THE DESIGN PRINCIPLES

New development in an area of national landscape value, such as an AONB is challenged by the need to address all of the constraints this presents, to provide sensitively designed and located buildings.

When faced with the need for a new building farmers and designers should consider two design principles:

- 1 Function**
- 2 Suitability to surroundings**

BUILDING FORM

Modern farm buildings tend to be large single span structures with shallow pitched roofs based around a portal frame construction. The width allows flexibility for large numbers of livestock, machinery, crops, forage or feed to be housed under one roof at a cost-effective price. As a result of these changes modern buildings can often be out of scale with their surroundings especially if the landscaping design is poor.

This issue is especially relevant in an area of high landscape value such as the Mendip Hills AONB. The visual interest of areas of open ground like the Mendip plateau can be significantly affected by the introduction of a large farm building.

Considering the actual size required and its impact carefully can reduce this effect. By constructing two smaller units or an L-shape building it may still be possible to satisfy functional requirements and have less visual impact, although it is appreciated that this will not be the case in every situation.

If a particularly wide building is required it would be preferable to consider a stepped roofline.

The stepped appearance and resultant shadow lines created by the eaves will help to reduce the impact of the large roof area. (See Figure 5 below)

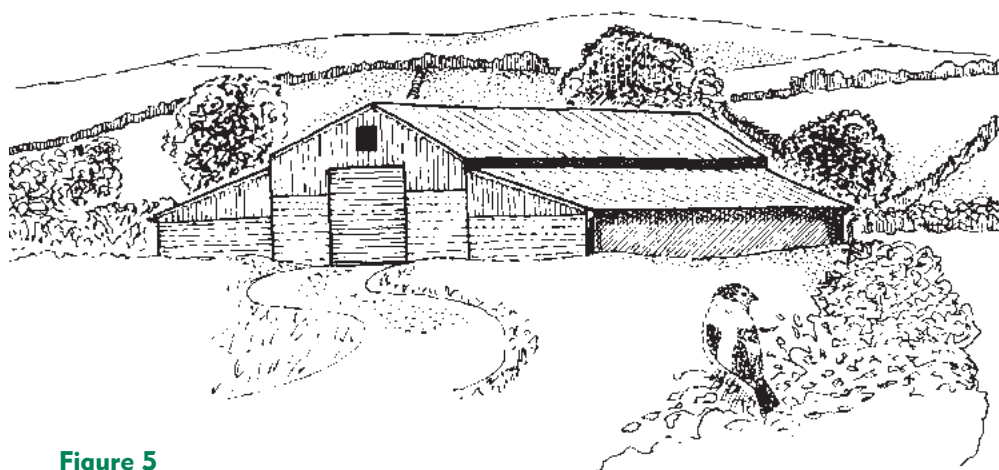


Figure 5

By stepping the roof of larger buildings the impact of large structures can be reduced. Cutting a rectangular hole into a blank gable can add interest and give a more traditional appearance.

ROOF CONSTRUCTION

The appearance of the roof is often the most important aspect of building design as it is usually the most visually prominent party of the new building. This is particularly true when the building is located in a prominent position in an open landscape where it may be visible from some distance. Accordingly great care is required when designing both the roof structure and in the choice of the most appropriate material and colour.

In most circumstances a modern building will have a roof pitch of 11 to 15 degrees, although generally a lower pitch will reduce the impact of the building in the landscape.

The appearance of a large building can be improved by stepping pitches and ridges (see Figure 5 above). Detailing of roofs can be improved by considering the impact of shadows, wide bargeboards and the design of gutters and down pipes. Shadow lines in particular can enable a new building to merge with its surroundings by giving the effect of reducing the scale of the building. An eaves overhang - extending the roof cladding beyond the eaves achieves shadow lines (see Figure 6 opposite). Care should be taken in exposed conditions as it may increase the potential for wind damage. There can also be a benefit with over-hung eaves if feeding stock with forage along the outside of a building via a feed fence.

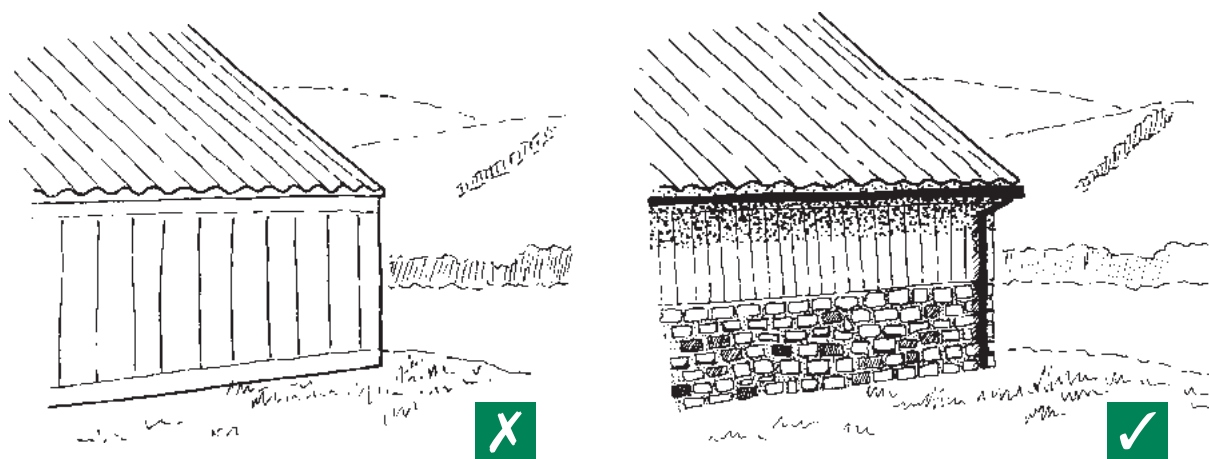


Figure 6a (above left) and Figure 6b (above right)

The illustration on the right shows how the creation of shadow lines at the eaves, together with use of traditional materials reduces impact of the building.

MATERIALS

Use of Materials

It is important to try to preserve the local character of buildings. There may be opportunity to re use material from on site demolition or depending on the location it may be important to incorporate stone walling as part of the design.

Modern materials are now available in a wide range of colours and this is often one of the most practical ways to improve the appearance of a new building. Unless the setting requires its use, traditional fibre cement, grey cladding or roofing is likely to be unacceptable for modern buildings unless treated with cattle slurry/lime to encourage growth of lichens etc. When weathered, fibre cement blends extremely well with the local stone and pattern of colours within the AONB. Use space timber for cladding in preference to sheet cladding materials. Do not use reflective or glossy cladding.

Colour of Materials

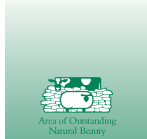
The choice of colour can have a considerable impact on the integration of a building with its surroundings. This is particularly so for the AONB, where there is an abundance of traditional farm buildings and a high degree of public interest. If the new building is to be constructed from traditional materials they should match the original materials. When using modern materials the colours should blend in with the surrounding landscape.

One of the most important rules concerning roof colouring is to ensure that the roof colour is darker than the walls. The only exception to this is when a building will be viewed against the sky, here light colours such as slate blue and light grey should generally be used. Dark colours such as green, slate grey or brown should be generally used where the roof of a building is being seen against existing planting/landscaping. The roof materials/paint should be **matt** rather than gloss in appearance.

Natural colour fibre cement (the asbestos cement replacement) may be particularly suitable as it has qualities that allow it to weather and has a rough surface attractive to lichens and therefore readily weathering into the surroundings (See *Use of Materials - above*).

VENTILATION AND LIGHTING

It is absolutely vital that buildings are both well ventilated and lit. Modern welfare standards are becoming increasingly demanding and failure to comply can result in lower stock prices at market. Many traditional buildings are now considered unsuitable for housing livestock on health and welfare grounds. Modern buildings offer greatly improved living conditions.



Natural ventilation is created by the entry of wind into the building below the eaves through timber space boarding which then descends, as it is relatively cold. The animals produce a cyclic effect through the heat generated by their bodies. Warm air rises to the ridge vent and exits the building, thus ensuring a constant supply of fresh air and reducing the risk from disease. The design of the space boards will affect the amount of air that can enter and will vary depending on the stock housed. The number of stock and type must be calculated carefully to ensure that the amount of air circulating is adequate.

Multi-span buildings will normally require some form of additional ventilation:

- ❖ If spans have different roof levels due to sloping ground, sufficient inlets can be built below the eaves.
- ❖ Battens can be placed between individual roof sheets so as to raise the roof sheets slightly (raised roof ventilation).
- ❖ Leave longitudinal gaps between each roof sheet (slotted roof ventilation).

The landscape around the new building will also effect the amount of ventilation to the building. A narrow valley is not an ideal location as they can often act as wind tunnels and create excessive draughts. Likewise a building located in a wider valley or one partly surrounded by high banks can suffer from inadequate ventilation.

In exposed parts of the AONB, depending on the position of the building, not all elevations will need to be space boarded. Some elevations can for example be close boarded, especially on the southwesterly side.

For most agricultural buildings natural light is the cheapest and easiest method of **lighting**. This can be provided by the use of translucent sheets in the roof but these should be put on least visible side of the building. However, if this is not suitable from a visual aspect, then side openings in the boarding should be considered.

ANCILLARY DEVELOPMENT

Silage Clamps

Effluent from crops stored in any enclosed pit or silo is one of the most concentrated and harmful pollutants on the farm. Even small amounts in a watercourse can cause tremendous damage to the environment. The main causes of pollutions are silage clamps that are not designed or maintained properly. **The Control of Pollution (Silage, Slurry, and Agricultural Fuel Oil) Regulations 1991 regulates the construction of new silage clamps.**

Requirements include having an impermeable base with channels surrounding it to catch the effluent. Base and drains must be able to resist corrosion. They are therefore often made out of reinforced concrete. These requirements mean that there is little scope to alter the materials used in their construction, however their siting can be considered.

Although silage clamps should not be placed within 10 metres of a watercourse or field drain they can still be placed into sloping ground. This means that the excavated soil can be used to form screening banks outside the perimeter drains. However, the Environment Agency does not permit clamps made from purely earth banks. As with bunds, referred to earlier, any earth modelling needs to be gentle grading to provide slopes that are unobtrusive in their surround landscape. See also Pollution Considerations page 20.

Waste Storage

Slurry will be produced from beef, dairy or pig housing which does not use much straw or bedding material. There is, therefore, a need for a facility to store slurry. Dirty water is created from rainfall falling onto dirty surfaces, which will also need collecting. Under the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 slurry and dirty water must be kept in a reception pit or slurry storage tank, unless it is kept temporarily in a tanker.

Enamelled steel circular stores for liquid waste storage can, if sited poorly, be very intrusive. By using the natural contours of the site the visual impact of the store can be significantly reduced.

Some suppliers of stores can offer alternative colour schemes and this should be considered in the planning process. See Colour of Materials page 15.



Outdoor Feed and Grain Bins

Outdoor feed bins are generally very tall and constructed from galvanised steel to reduce the possibility of vermin attack. This is a very intrusive material due to its reflectivity and they should be carefully integrated with other buildings wherever possible, ie. in yard complexes. Therefore, colour and siting of such structures are very important.

SITING AND LOCATION

It should be appreciated that siting and location of a new farm building are two of the most important factors to consider in the context of these guidelines. Thus, however well a building is designed, if it is poorly sited or located it is likely to have a significant detrimental affect on the landscape.

Even if new buildings are to be placed within or close to existing farmsteads careful planning is required. Infilling of areas between existing farm buildings is not always the most appropriate solution as it can damage the appearance of the farmstead without actually improving the farm efficiency.

HISTORIC AND ARCHAEOLOGICAL FEATURES

During the planning process all applications will be checked with the local authority archaeologist to ensure that new buildings are not placed on sites of archaeological interest. However not all historical sites are recorded by English Heritage or the local authority and may not be easily distinguished. The AONB is noted for its historic landscape and often the dips and swallet holes can contain important historical information and are themselves important features. Great care should therefore be taken when choosing a site and advice can be obtained from the local planning officer and/or the local authority archaeologist.

WILDLIFE AND GEOLOGY

Local government has to consider the environmental impact of any new building and local planning authorities check all applications for their impact on sites of wildlife or geological interest. Accordingly it is advisable to avoid locating a new building on or close to a Site of Special Scientific Interest (SSSI), County Wildlife Site (CWS) or Regionally Important Geological Site (RIGS) To check location of these contact English Nature for SSSIs and the appropriate Wildlife Trust for CWSs and RIGs.

If the new build is to be sited on steep isolated ground it could be possible that the development may inadvertently destroy **unprotected** herb or flower rich grasslands. Care should be taken to avoid such sites, as wherever possible one should aim to maintain species rich habitats.

Take regard of existing trees and hedgerows by siting new buildings beyond branches and spread of hedges. Ensure that branches and roots are protected from construction work.

Consider taking the opportunity for making provision for barn owls and bat roosts within new building design.

For further information on wildlife and archaeology See Appendix 1 (page 23) for contact addresses.

INTEGRATION WITH EXISTING BUILDINGS

Most farms in the AONB will be characterised by a main farmhouse around which the farm buildings will be placed. It is vital that new buildings are well related to the farmhouse and it should not swamp the farmhouse or alter the appearance of the immediate setting.

Regard should be taken of the existing limits of the farm buildings and any new development should be retained within the farmstead, for example within existing stone-walled enclosures.

Usually farm buildings will be required on already developed farm sites, where they will be placed near existing buildings. In these situations the development should relate to the local pattern of farm buildings in the landscape by scale, style, and materials (*see Figure 7 below*). Generally this is desirable from a landscape point of view, however there are a number of factors that should be considered:

- ❖ New buildings orientated with the main alignment of buildings on the farm. Right angle relationships work well, but the contour of the site should be considered.
- ❖ Rooflines – actual height and perceived height relative to traditional buildings as viewed from key advantage points will be relevant.
- ❖ Buildings should relate to existing buildings rather than stand in isolation. They should have some degree of separation.
- ❖ Ensure that new building will not limit the future potential for further development.



Figure 7

New farm buildings to be developed in sympathy with the existing, traditional pattern of the farmstead. Ridge and eave height should be in scale with existing buildings. New build at right angles to existing buildings work well, but the contour of the site should be considered.

For those farms with a particularly high landscape value it may not be acceptable to site new buildings in the vicinity of the existing farm building complex. In these circumstances consideration should first be given to the repair or modification and re-use of existing buildings.

Regard should always be taken of listed buildings. As above, the construction of a new farm building may not be considered acceptable where it has a significant detrimental affect on the associated listed buildings.

INTEGRATION WITH SURROUNDING COUNTRYSIDE

The Mendip Hills AONB plateau is relatively flat and exposed and careful consideration should be taken of the siting of new buildings here. In particular, buildings should be located in sheltered positions **below the skyline** where possible. Similarly buildings on prominent hillsides need careful consideration, as they will be visible from some distance away.

In planning any development, viewpoints from which the building would be seen should be identified. Approach roads, public rights of way and high points surrounding the site should be investigated in order that the potential impact of the building can be judged. It is important to consider not only the building itself, but also the impact of associated features such as driveways, hard-standings, fencing and fuel tanks.

If new services are required, thought should be given to the effect on the landscape.

- ❖ New access tracks can be very damaging to features such as trees and hedges therefore use existing tracks wherever possible. If new tracks are unavoidable use stone or gravel which allows vegetation to grow through and encroach the edges to minimise impact on the landscape. New accesses and splays should be bounded with materials to match existing boundaries, such as hedges or dry stone walls.
- ❖ New gates – when considering new gates high sheet metal gates or other solid gates are inappropriate in AONB farm settings and may require specific permission if adjacent to the highway. Lower barred gates, preferably wooden are more in keeping with AONB character.

Wherever possible a site location should be chosen which takes advantage of natural dips, screens and hillsides. If sited and designed well, some buildings may not need significant additional landscaping.

There may be an opportunity to enhance poor hedges. However, badly designed buildings cannot be ameliorated by the use of an artificial earth bund or planting. Minor regrading of soil at low level in the immediate vicinity of the new building may be appropriate. (See Figure 8 below.)

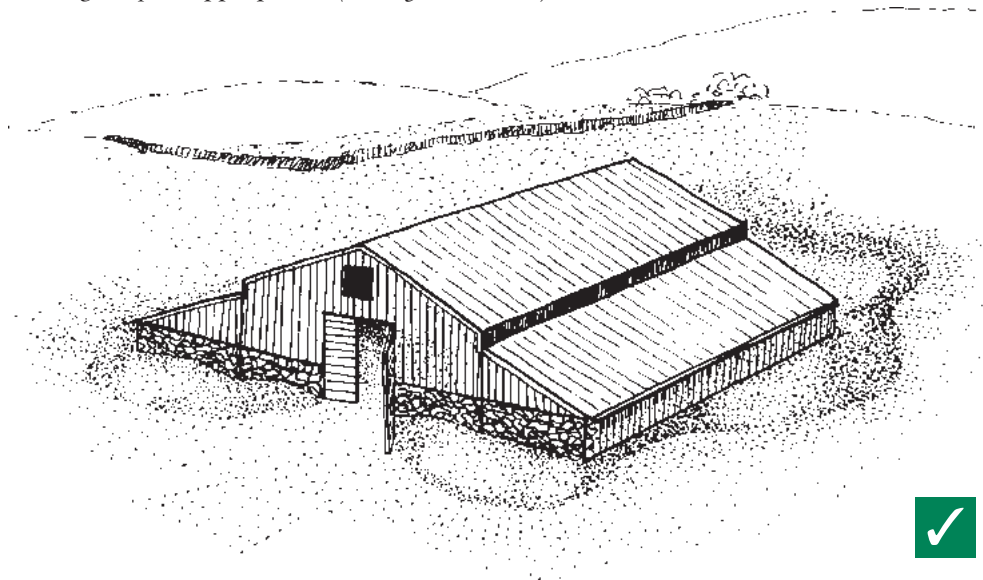


Figure 8

Avoid creating artificial shapes with earth bunds to screen buildings as they are out of place in the landscape. Minor slopes and regrading around the area can enhance buildings, as shown above.

When siting the building the importance of the background must be taken in to account. For instance a new building with a wood behind may appear less intrusive than where the background is open farmland. (See Pictorial Summary Sheet pages 11 to 13).

Things to avoid are:

- ❖ Sites on the skyline.
- ❖ Sites where a building will dominate the landscape such as in the middle of a flat plateau.
- ❖ Buildings which would be unduly prominent or particularly visible from a public viewpoint.
- ❖ Unnecessary removal of hedges and trees.
- ❖ Unnecessary removal of stone boundary enclosure walls.

Cut and fill - If the position of a building requires 'cut and fill' techniques it is important to have regard to existing contours of the land to reduce the extent to which the natural slope is altered around the structure. **On steep slopes it will always be difficult to achieve a satisfactory result.**

The implications of producing large amounts of excavated material should be considered. Aim for a balance to avoid issues of unsustainable removal of material from the site, particularly where it is unsuitable for spreading across the field or potentially damaging to wildlife. If spreading, do so over a large area to avoid producing unnatural earthworks such as bunds. Care should be taken to provide good ground cover and the provision of French drains to keep the proposed building safe from rising ground water. **Importation of fill is the least desirable option.**

POLLUTION CONSIDERATIONS

Before applying for planning permission it is a legal requirement to notify the Environment Agency who will advise as to whether the proposed site will be acceptable in the water environment. For further information please contact your local DEFRA office who can supply you with a copy of the 'Code of Good Agricultural Practice for the Protection of Water'. For address refer to Appendix I.

There is a specific legislation **Control of Pollution (Silage, Slurry, and Agricultural Fuel Oil (SAFFO))** concerning new farm buildings with which farmers must comply.

Under Section 85 of the Water Resources Act 1991 it is an offence to knowingly permit or cause a discharge of poisonous, noxious or polluting matter into any 'controlled waters' without the proper authority. It is obviously extremely important that any potential site for a new building is thoroughly checked to be within the law. Actual distances of buildings away from watercourses will vary according to bedding, type of building and the method of waste disposal.

LANDSCAPING TREATMENT

A new building should contribute to the overall landscape and in most cases be enhanced by new planting, thus landscaping schemes are encouraged. **New planting can sometimes be intrusive in its own right and should not be used to hide or screen a building that has been badly sited or designed.** Use the fuzzing and blurring effects of partial tree and shrub planting, rather than solid screens which may themselves become intrusive, both in front and behind buildings (*see Figure 9 below*).

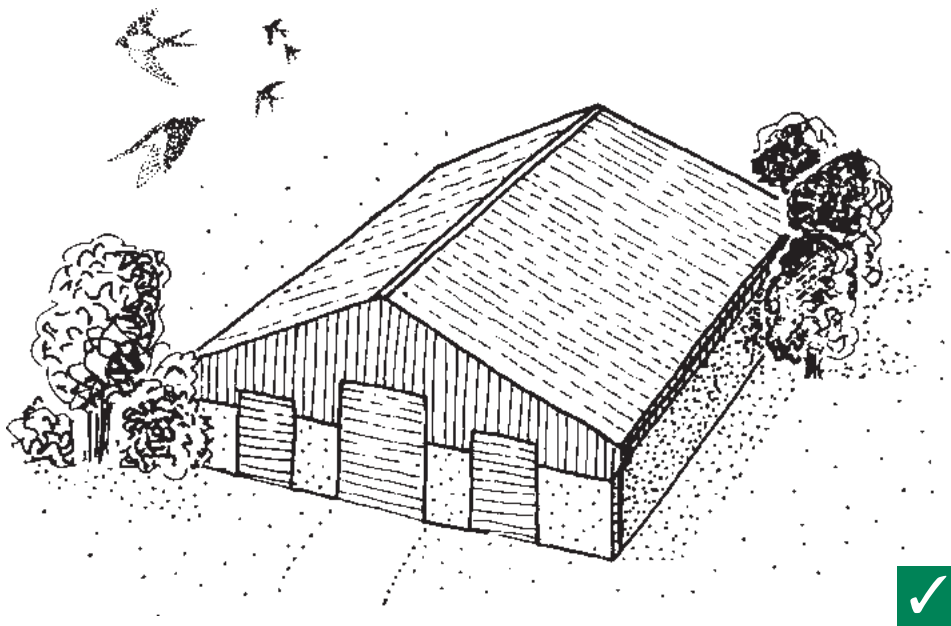


Figure 9

A new structure does not need to be surrounded by planting. A small pocket of planting can help soften a building and integrate it into the surroundings.

Earth mounding, sensitively done and echoing the local landform can be helpful: it is the straight or angular mounds that are obviously artificial and thus inappropriate (see Figure 10 below).

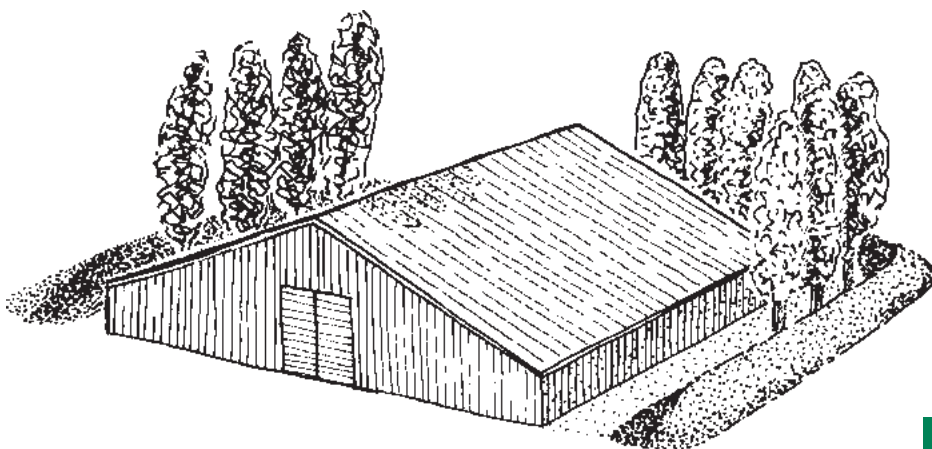


Figure 10

Avoid short, straight or angular earth bunds and planting in rows, especially with non native species such as Leyland Cypress. Trees of distinct form for example tightly columnar or very rounded should also be avoided.

The use of trees that follow the perimeter of a building and are unconnected with the existing landscape should be avoided. It is important to look around a site and judge the character and pattern of vegetation before adopting a tree planting scheme. In some cases tree planting may not be acceptable as the surroundings may be characterised by their open nature such as on the plateau. Any hedgerows should be retained and where possible a new building should link with such features so as to merge with the existing landscape. It is advisable to seek specialist landscape advice for the design of the planting scheme.

With all tree planting it is important to consider the passage of forty or fifty years. Trees, especially broadleaves, will dramatically change in size and stature over time.

Tree planting should avoid:

- Planting in rows, particularly on banks.
- Using Leyland Cypress or other fast growing non-native trees.

Good plans can aid integration:

- Planting should occur in groups of trees and shrubs, which link to existing hedgerows and copses.
- Planting can be used to integrate buildings and soften their impact and can help to offset the horizontal line of modern farm buildings.
- It may be necessary to consider planting at a distance from the building to ameliorate its impact on the landscape, for example strengthening hedgerows or planting individual trees.

Trees and shrubs used in the AONB should be native and characteristic of the location of the building. Contact the appropriate local authority Landscape Officer for advice on species and their management.

The table below lists acceptable species used in the AONB. Not all are appropriate to all sites.

Trees	Shrubs
Ash	Holly
Sessile Oak	Hawthorn
Common Oak	Blackthorn
Common Alder#	Hazel
Sycamore*	Dogrose
Beech	Common Privet
Field Maple	Field Rose
Silver or Downy Birch+	Guelder Rose
Whitebeam	Wayfaring Tree
Small Leaved Lime	Spindle
Willow	Goat and Grey Willow

Notes

- * Highly invasive and should be carefully sited.
- # Avoid over reliance as presently prone to infection by Phytophthora near water courses.
- + Downy Birch is more suitable in wet locations

The protection of new trees by shelters and weed control is essential if they are to get a good start. The level of protection depends on the presence of deer, rabbits and grazing animals. New hedges will need to be protected from grazing animals with appropriate fencing. Weed control reduces competition for moisture and nutrients and protects the landowner's initial investment.

As noted above with existing hedgerows, **the retention of hard landscaping features such as dry stone walls is extremely important** particularly on the plateau (see Figure 11 below). Once again regard must be taken of such features so that any new building blends into the existing landscape as unobtrusively as possible.

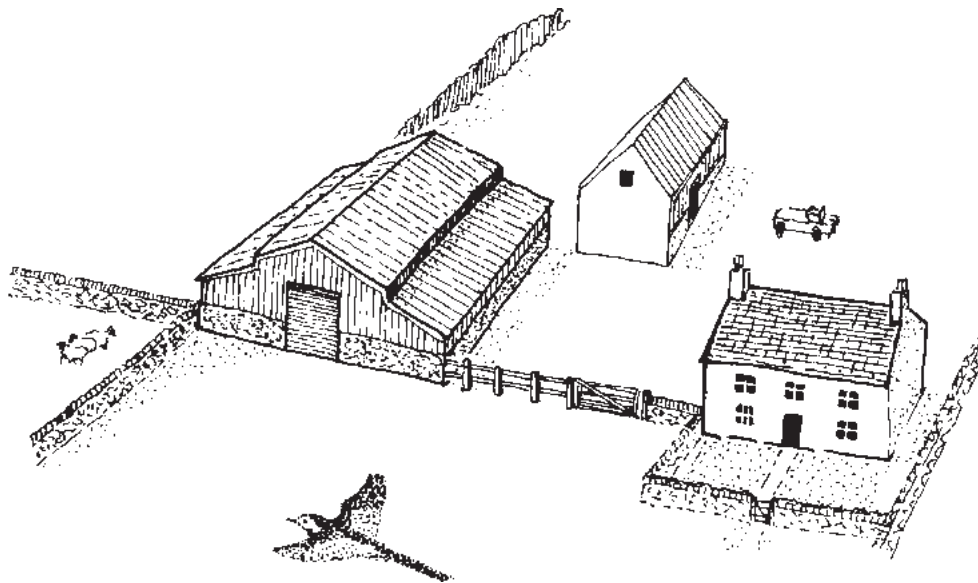


Figure 11

Landscaping can simply be the continuation of existing stone walls or hedgerows up to the new building, thus linking it to related structures and features. In some circumstances it could be achieved using fences or walls.

APPENDIX 1 - USEFUL CONTACTS

Local authorities

Bath and North East Somerset Council Trimbridge House, Trim Street, Bath BA1 2DP	Tel: 01225 477000
Mendip District Council Cannards Grave Road, Shepton Mallet, Somerset BA4 5BT	Tel: 01749 343399
North Somerset Council PO Box 141 Somerset House, Oxford Street, Weston-super-Mare BS23 1TG	Tel: 01275 888888
Sedgemoor District Council Bridgwater House, King Square, Bridgwater TA6 3AR	Tel: 01278 435435
Somerset County Council County Hall, Taunton TA1 4DY	Tel: 01823 355455

Statutory bodies

English Heritage 29 Queens Square, Bristol BS1 4ND	Tel: 0117 9750700
English Nature Roughmoor, Bishops Hull, Taunton TA1 5AA	Tel: 01823 283211
Environment Agency Rivers House East Quay, Bridgwater, TA6 4YS	Tel. 08459 333111
Department for the Environment, Food and Rural Affairs (DEFRA) Government Office South West, The Pithay, Bristol, BS1 2PB	Tel: 0117 900 1867

Publication contacts

Mendip Hills AONB Service Charterhouse Centre, Blagdon, Bristol BS40 7XR	Tel: 01761 463357 or 01761 462338
DEFRA Publications PO Box 9B, Thames Ditton, Surrey, KT8 0BN	Tel: 08459 556000
Countryside Agency Publications PO Box 125, Wetherby, West Yorkshire LS23 7EP	Tel: 0870 120 6466

Other specialist advice:

Hawk and Owl Trust 32 Hollis Avenue, North Weston, Portishead, BS20 8NB	Tel: 01275 849287
Somerset Wildlife Trust Fyne Court, Broomfield, Bridgwater Somerset TA5 2EQ	Tel: 01823 451587
Avon Wildlife Trust Bristol Wildlife Centre, 32 Jacobs Wells Road, Bristol BS8 1DR	Tel: 0117 9268018
The Landscape Institute 6-8 Barnard Mews, London SW11 1QU	Tel: 020 7350 5200
Royal Institute of British Architects Wessex Region 16 Narrow Quay, Bristol BS1 4QA	Tel: 0117 934 9966
Royal Institute of Chartered Surveyors (RICS) Surveyors Court, Westwood Way, Coventry CV4 8JE	Tel: 0207 2227000 or 02476 694757
Farming and Wildlife Advisory Group (FWAG) - Somerset c/o Countryside Services, Somerset County Council, County Hall Taunton TA1 4DY	Tel: 01823 355427
Farming and Wildlife Advisory Group (FWAG) - Avon Block 3 Burghill Road, Westbury on Trym, Bristol BS10 6NJ	Tel: 0117 9591000
Mendip Hills AONB Service Charterhouse Centre, Blagdon, Bristol BS40 7XR	Tel: 01761 463357 or 01761 462338



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