

THE CARADON *DESIGN* GUIDE

SECTION F

C O N V E R S I O N S



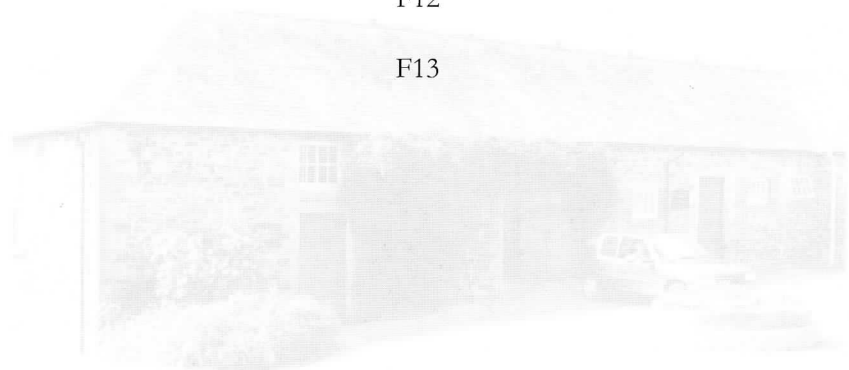
Supplementary Planning Guidance

July 2000

C O N V E R S I O N S

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I N T R O D U C T I O N

A former farmyard sensitively converted to business use by the Duchy of Cornwall.

Caradon District Council has produced the Design Guide to help conserve and strengthen the special character of the built environment in Cornwall, especially its traditional towns and villages. This section is to help you submit a planning application for converting a traditional rural building such as a barn, mill or chapel. Other sections of the Design Guide will provide valuable background information.

- *Section A* Explores the concept of local distinctiveness.
- *Section B* Provides information on Design within the Planning System (see B8 for specific policy issues relating to the conversion of rural buildings).
- *Section C* Looks at fitting development into the landscape.
- *Section D* Focuses on local context.
- *Section E* Promotes good housing design.

CONVERSIONS

These guidelines will be used by the Council in making decisions on any appropriate planning application. In addition, Building Regulation requirements will be applied as flexibly as possible in order to accommodate well designed and sympathetic conversions.

The adaptation and reuse of existing buildings is an important principle of sustainable development, being good stewardship of materials and energy. Traditional rural buildings, which are normally constructed of stone or cob walls with slated roofs, are important features of our countryside. The many Methodist chapels built in the last century are also valuable features of our local cultural and architectural heritage. Frequently these buildings no longer serve their original uses, but nevertheless are distinctive aspects of the district, and worth putting to good use. Until recently, many farm buildings and chapels were converted to residential use; however, current government guidance strongly favours conversion to business or commercial uses, thereby encouraging employment and a mixed economy in rural areas.

PLANNING APPLICATIONS

The District Council cannot accept Outline Planning Applications for conversions because 'change of use' is involved. Plans should be submitted which show the existing building as well as the proposed changes.

Details submitted with a planning application should be sufficient to demonstrate that the scheme can meet all technical and aesthetic requirements without major modification later. Where the condition of the building is in doubt a structural report will be required.

DESIGN PRINCIPLES

Former farm buildings and chapels can create very special and attractive properties, but it is very important that the conversion should respect and retain the essential character of the original building.



Chapen conversion at Pelynt - the dormer windows create an interesting roofscape which is in keeping with the building's character and former use.



Barn conversion near Lostwithiel. Note the stainless steel flue and the unusual sky light - both features are appropriate to a conversion.



Chapel conversion at Minions which retains the charm of the original building, but has lost some of the ecclesiastical character by the addition of casement windows and chimney.

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Attempting to convert a barn or chapel into an 'average' business premises or house is always detrimental to the original fabric and character and results in an uneasy compromise. However, very successful conversions can be achieved with a flexible and imaginative approach which maximises the unique features of the original buildings. For example, large airy rooms with an open roof and exposed trusses can create a spectacular interior.

The general appearance and massing should be simple and uncluttered with no attempt being made to over-domesticate or 'prettify', which would lead to loss of character. Conserve and enhance the building's original idiosyncrasies.

Good quality natural materials are enhanced by age and weathering and wherever possible should be of local origin.

The original storey heights and eaves lines must be respected. An obviously single storey building should not be converted into two storeys by the raising of the roof structure, which would completely change the character and appearance.

The interior room layout should be designed so that the original structure, openings and features can be retained or adapted with as few external changes as possible. The insertion of floors may not be appropriate in large volume buildings such as barns and chapels, especially if listed.

The design of external areas is often of equal importance to the conversion of the building.



This modern oak boarded door is simple, robust, and weathers to a silver grey which tones in well with the local stone.



Barn conversion, East Taphouse. Note the deep reveals to the door and window openings. The use of traditional barn door and window vent joinery, and the use of dark stain rather than mahogany colour would have been more appropriate.



Note the infill panel under the windows, reminiscent of the slatted vents often found in stables or sheds. Subtly but significantly different to tongue and grooved boarding, which is to be generally avoided.



A well converted barn which retains its original character.

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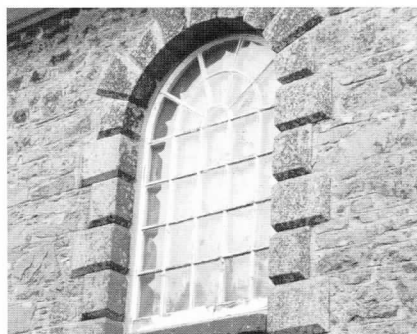
BUILDING ELEMENTS

Chimneys and Roofs

- The addition of an external 'domestic' chimney stack is almost always unsuitable. Flues should be taken up internally and emerge near the ridge of the roof as a stainless steel twinwall stack, painted black. This should be positioned on the least visible part of the roof if possible.
- Old roofs have a special appeal. The bowed ridges and pale silvery grey of old slates have a picturesque charm all of their own. Don't try to over-restore a roof; it should not look new!
- Retain an uncluttered expanse of roof.
- Preserve the existing roof structure and shape wherever possible. The diagrams below show common roof shapes.
- Rooflights should be of narrow/vertical format and laid flush with the roof using the special flashings available for slate roofs.
- It makes sense to salvage materials. Existing slate roofs must be re-laid to the original pattern whenever possible. Graduated roofs with large slates at the eaves diminishing towards the ridge should be replaced to match.
- Roof coverings should be of real slate of a pale/mid grey colour, preferably from a local quarry.
- Hips should be re-laid using lead soakers and mitred slates. This gives a lighter and more traditional appearance. Hip tiles should not be used.



Avoid the use of horizontal tongue and groove boarding and decorative lead flashings on conversions - they are too domestic.



Original arch top chapel window joinery - such elements should be retained, or replaced with exact replicas if replaced.



Mitred hips, slate roofs with terracotta ridges and chimney are traditional details in the district.

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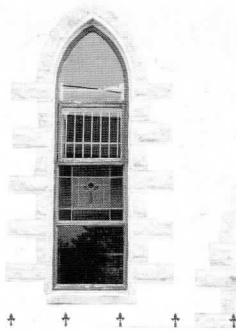
Ridges should be plain red clay ridge tiles. Re-use originals or obtain second hand to match if possible. Concrete and interlocking tiles are not acceptable.

Walls

- The majority of rural buildings are constructed from coursed rubble of the locally occurring stone. See the geology map on Section A for further information on the type of stone found in your area. Cob is also found throughout the area.
- New stonework (size of stone, coursing, joint width and pointing) should match the original as closely as possible. Use salvaged stone if at all possible, but avoid damaging valuable walls or buildings to obtain it. See Appendix 3 for a list of quarries in the district.
- New or rebuilt walls should have an outer skin of at least 250mm thick. This allows for a good proportion of larger stones to be built-in, which will match the original stonework more accurately.
- Sawn faces of stonework should not be exposed as machine-cut stone never matches the original walling.
- Stonework should be laid and pointed to avoid over wide mortar joints.
- All stone should be laid in the direction of its natural quarry bedding and never laid vertically.
- New pointing or re-pointing should be carried out using a lime putty:sand mortar or coarse sand:lime:cement mortar with flush brush-finished joints. Under no circumstances should the mortar be proud of, buttered over or deeply raked out from the stonework. A subtle off-cream/buff ready-made mortar may be an acceptable alternative. Mortar colour should match the stonework as closely as possible.



Church conversion at Looe which retains the wealth of original features, but the use of powder coated metal windows provides a more contemporary feel.



Chapel window with stained glass panel to disguise the floor zone, which retains the integrity of the original opening.



The 'reordering' of this large chapel at Upton Cross has included the insertion of an additional floor to create rooms in the roof, while retaining the original fabric and character.

C O N V E R S I O N S

Cob walls are strong, durable and energy efficient as long as water is kept out. Regular application of lime render and wash is required and the tops and bottoms of cob walls need to be well protected.

Window and Door Openings

Window and door openings should be retained unaltered whenever possible. Careful design will be required in order to co-ordinate the internal room layout and any new inserted floors with the existing openings.

Farm buildings generally have few door and window openings compared to the overall area of wall. The pattern and type of openings are important features, varying from large arched openings for threshing floors or cart sheds to small slit vents and pigeon holes for barns and other buildings.

Chapels generally have tall, characteristically styled windows set high in the walls.

Slate and dressed stone sills are the most appropriate. Projecting timber sills are not acceptable.

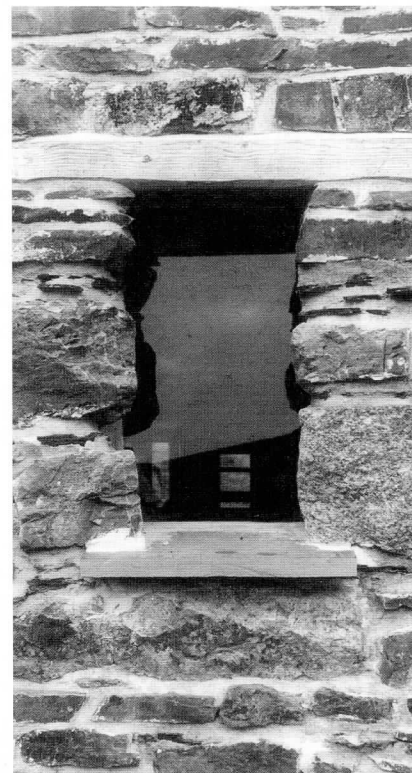
Too many new openings will spoil the appearance of the building, so they should be added very sparingly, and in a way that maintains the original mass of the building.

Original openings are nearly always strongly vertically proportioned and this emphasis should be maintained or introduced into new openings.

Tall openings should retain their original character and proportion. Used as doorways or glazed to the ground they provide the opportunity for light and airy interiors opening out onto courtyards, gardens or views. If it is necessary to fill the lower part of a tall opening, it should be treated as a partially glazed door, or pair of doors. Avoid timber boarding which does not sit within a frame. Horizontal boarding is not acceptable.

Careful design is required where an inserted floor runs across an existing opening. Whenever possible the original fenestration pattern should be retained unaltered. This may be achieved by isolating the floor from the window joinery, and creating the internal separation by the use of secondary glazing.

Remember to seek appropriate advice in order to provide access and facilities for the disabled wherever possible.



Glazed slot ventilator—note the invisible frame.

- Ventilation slots can be successfully glazed with fully recessed/invisible frames.

Door and Window Types

- To conserve the original character of farm and chapel buildings and to keep the existing openings unaltered it will be necessary for most window and door joinery to be purpose-made. Generally, the use of PVCu should be avoided in conversion work.
- The original doors and windows may be repaired or their pattern reused or adapted for new joinery.
- Simple symmetrical side-hung paired casements, of vertical emphasis, are the most acceptable for farm buildings.
- Small paned windows are generally too domestic for most conversions, and should be avoided.
- Door and windows should be set back at least 150mm. This creates strong shadow lines, an appearance of solidity, and gives good weather protection.
- A painted finish is most traditional. For farm buildings, solid oak weathers to an attractive silver grey colour. See Finishes (F10).

Lintels

- All openings in stonework should have a visible lintel. Traditionally these were:
 - Timber* - unpainted adzed or sawn (unfinished) oak for farm buildings
 - split rather than cut lintels may be best in certain circumstances e.g. some important historic buildings.
 - Granite* - segmental arches of large dressed granite blocks for farm buildings
 - large rectangular blocks for farm buildings
 - dressed ashlar for chapels
 - Brick* - segmental arches of smooth textured warm-red brick
 - gothic arches of smooth red brick for chapels

Dormers

- New dormers are too domestic in character for a barn or chapel conversion and are not usually acceptable. Flush fitting roof lights are more suitable for buildings with low eaves, provided that they are not too large or numerous.

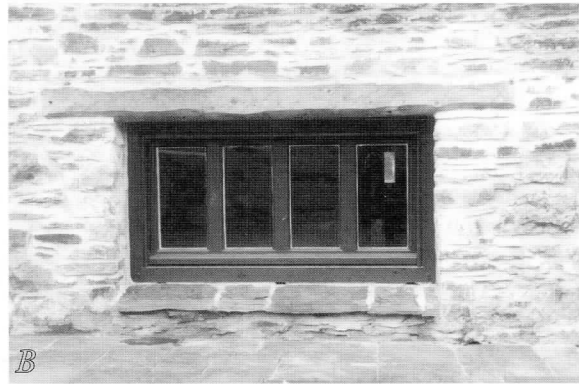
C O N V E R S I O N S

DOOR AND WINDOW IDEAS

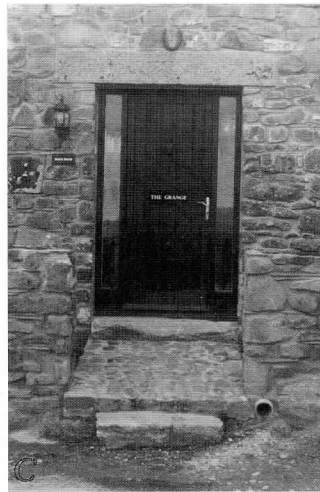
A Vertically slatted timber double doors with slate canopy.



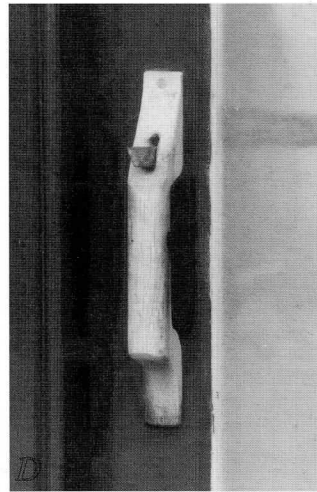
B Vertical emphasis introduced into a wide opening. Unpainted adzed lintel and slate cill details.



C Appropriate front door treatment with vertical emphasis.



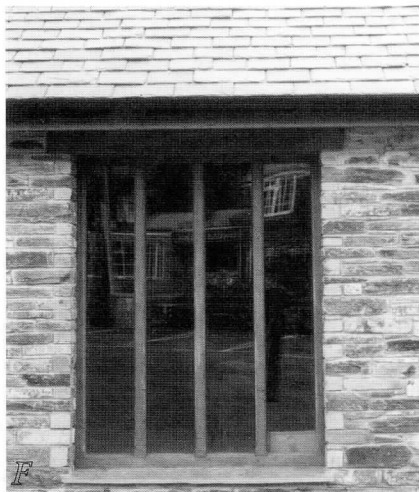
D Hand wittled timber latch detail.



E Segmental brick arches to new openings.



F Well detailed full height window opening.



G Appropriate window pattern. Note the massive granite lintels.



C O N V E R S I O N S

Eaves and Verges

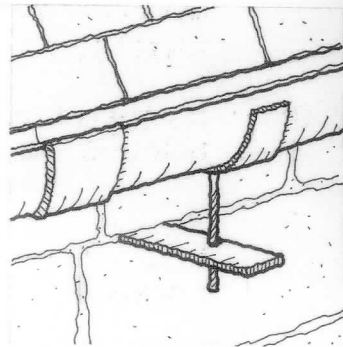
- Traditional buildings tend to have clipped eaves with no fascia board, although those built in late Victorian times may have timber fascia boards supported on extended rafter feet.
- Slate hung verges should always be kept, or re-hung to match the original.
- Standard modern box eaves with projecting fascia, flat soffit and projecting bargeboard should not be used.



Slate Verge

Rainwater Goods

- Originally most farm buildings did not have any guttering and chapels would normally have cast iron rainwater goods. Half round guttering and circular down pipes are recommended as being the least obtrusive. Cast iron, glass fibre reproduction cast iron or extruded aluminium (ogee section) would be preferable. A traditional and inexpensive detail is for guttering to be supported on metal rise and fall brackets where there is no fascia board. PVCu guttering will be discouraged but if used at all it should be black.



Rise and fall gutter brackets are a traditional detail.

Finish and Colour

- Traditionally woodwork was painted or, on farm buildings, left to weather to a pale silvery grey. A limited range of colours were used. Microporous paints, which provide a low sheen finish, have a rural appeal and similar characteristics to woodstains. Woodstain colours if appropriate should be chosen with care.
- Avoid bright strong colours.
- Dark green, dark grey, dark red, pale grey and grey green are all suitable colours.
- White may be suitable on chapels and some Victorian 'Estate/Model Farms'.
- Stains are not suitable for chapel conversions. Natural-colour, i.e. pine, oak, ash (mid tone), black and dark grey woodstains may be suitable for barn conversions. Avoid red-brown tones (mahogany).
- Rainwater goods are best painted black or mid/dark grey, or it may be appropriate to match the joinery colour.

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EXTENSIONS

Subsequent large scale extensions to converted buildings can harm or dominate the original architectural character of a building and can be so out of proportion as to spoil its appearance. It could detract from the value of the original building's contribution to the local landscape. The District Council has a Local Plan Policy (Policy H10) for extending existing converted buildings. This states :

“Permission will be granted for the subsequent extension of converted buildings in the countryside, subject to there being no significant harm to the shape or character of the building as a result of the extension.”

GARAGES AND WORKSHOPS

Where possible, garaging and workshops should be provided within existing buildings on the site, for example by converting a cart shed or lincay.

If there are no suitable buildings then any new garage or workshop should be built of matching or complementary materials to the building to be converted.

New garages and workshops should be carefully sited so as not to spoil the setting of the main conversion or other buildings. Create attractive and useable external spaces between buildings. Traditional walls, hedges and hedgebanks can help link and delineate external spaces. Plan the buildings, spaces and enclosing features together to create a harmonious whole.

ARCHITECTURAL FEATURES

Some barns and chapels may be Listed Buildings (see Section B), and in such cases it may be that conversion is not permitted, in order to conserve examples of their type. However, any work that is carried out on buildings in this category will have to satisfy higher standards of design and quality of materials.

Where conversions are permitted to Listed Buildings, any alterations should respect the existing internal and external features and leave them in place wherever possible.

These features may include:

Massive floor beams

Roof structures

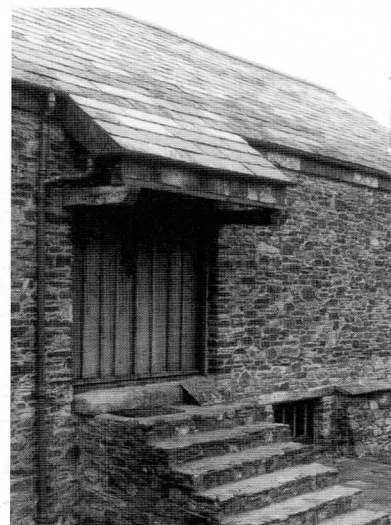
Datestones

External pigeonholes

Slate canopies

Original windows

Stone external stairs



Slate canopy

C O N V E R S I O N S

- Roundhouses and horse-engine houses always make attractive rooms and are worth keeping even though they may be a little more difficult to repair.

SETTING

- However well a conversion is carried out, inappropriate treatment of the external spaces can ruin the effect.
- Aim for a simple, open and uncluttered appearance, in keeping with the traditional Cornish landscape.
- Retain existing trees, hedges, banks, walls, fences and gates. Construct new boundary features to match the originals and the surrounding area.
- Avoid the use of standard timber fencing and 'suburban' details such as stained timber posts with interlinking chain or rope.
- Terracotta pots, granite troughs and timber tubs may provide an appropriate alternative to flower beds.
- Consider gravel, slate, granite or grey 'tumbled' concrete sett paving. Avoid large areas of tarmac, coloured concrete slabs and pavers, some artificial granite products, and white concrete copings, which are alien in colour and character.
- Site sheds, parking areas, greenhouses with great care; plan them with a mind to their place in the wider landscape, not just to suit domestic needs.



A charming front garden to a barn conversion.



Tumbled concrete blocks.



Garden furniture in keeping with a rural setting.



Traditional Herringbone walling pattern typical in some localities in the district.

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WILDLIFE

- Farm buildings have traditionally been the home of a wide range of species. Bats and Barn Owls are now protected species within the Wildlife and Countryside Act of 1981. It is an offence to destroy or obstruct the roosts of Bats and Barn Owls, and English Nature must be informed if you intend to refurbish a building used by either species. The District Council can supply advice on Barn Owl nesting boxes.
- Normally a site survey for the presence of Bats and Barn Owls should be undertaken and submitted with the appropriate applications.
- The design of external areas can be beneficial by creating new habitats for wildlife, e.g. meadows, hedges, copses and 'drystone' walls and banks. Your garden can become a mini-nature reserve and part of the wider landscape.

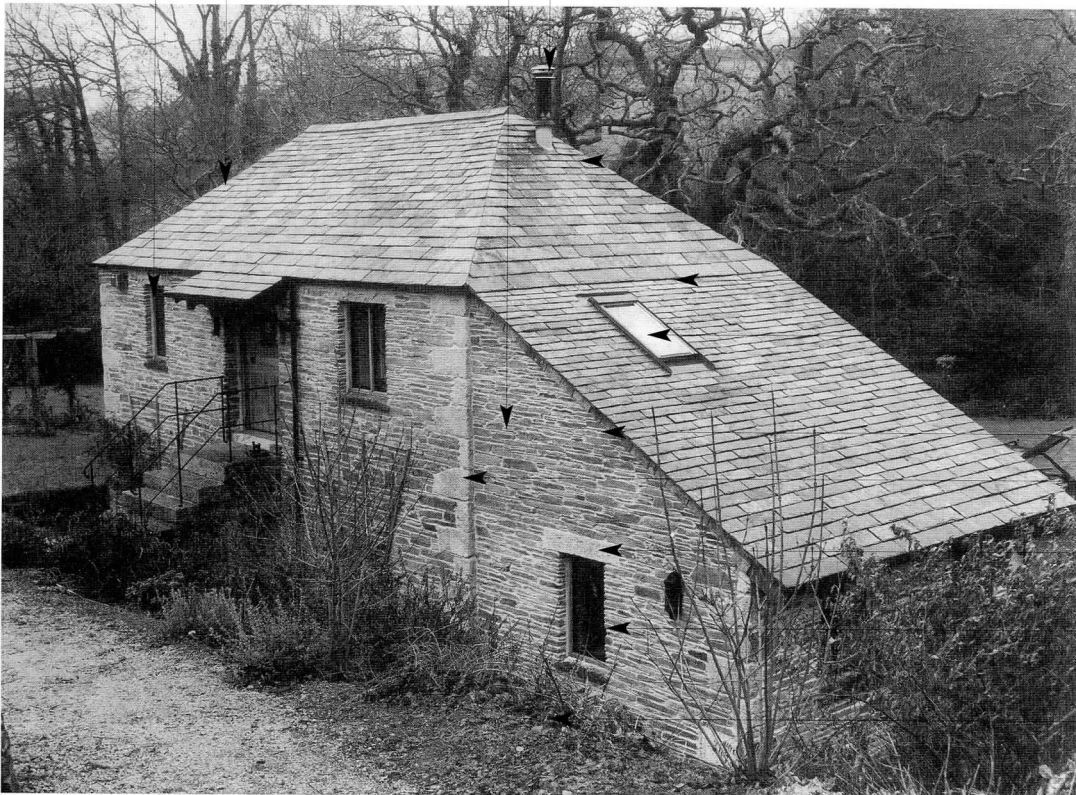
Small window openings with appropriate joinery

New stoneworks matches existing

Flue emerging at ridge and painted black

Mitred hip

This barn conversion illustrates many good practices highlighted in the guide



Local slate laid in diminishing courses

A break between the original and new roofs would be a more correct detail.

Small rooflight of vertical emphasis and correct flashing system

Slate hung verge

Extension slightly set back from original line

Simple granite lintels

Windows set well back in the wall with slate sills

Simple gravel drive and 'old fashioned' garden species.

GROUP SCHEMES

In appropriate situations, group employment schemes can provide a high quality environment, but to be successful neither the buildings nor the spaces between them should be developed piecemeal. Where permission is given, the developer will be expected to submit an external works and landscape scheme incorporating appropriate good quality materials, planting and boundary treatments, which is to be completed before the buildings are occupied, subject to planting seasons. External spaces should generally be hard landscaped to minimise problems of future maintenance; although sensitively designed planting should be used to suit the new use and reflect the original character of the buildings and their setting. External spaces should have defined boundaries and be within the curtilage of specific units. Each unit must be provided as a minimum with a screened external area for bins, etc.



A successful group conversion of a farm yard to a rural business park.

C O N V E R S I O N S

Avoid large boxy remodelling of roof. Retain the original building shape and scale. Several smaller well designed dormers may be appropriate.

Avoid numerous rooflights on the street elevation, place on garden side of roof if possible.

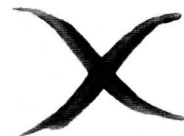
Avoid asymmetrical glazing patterns.

Avoid stained timber boarding

Avoid concrete tile hanging

Avoid the use of concrete tiles. Slate would be appropriate

Retain original features and aim to match or reuse existing window openings



Avoid placing meter boxes in visually prominent positions,

Inappropriate style of door (see section E).

Inappropriate boundary treatments. Avoid brick and picket fencing on the street facade. Railings or hedges would be appropriate.

The above example highlights common errors in the conversion of large single space buildings i.e. barns or chapels. Respect the character, shape and materials of the original as closely as possible.