COMMITTEE DRAFT

KENNET District Council

Keeping Kennet Special

Conservation Guidance Note :

Thatching

Planning Services

Development Control & Conservation

Forward Planning & Transportation

Building Control & Property Management

1. Introduction

From being the poor man's roof a century ago, the thatched roof is now an expensive asset whose maintenance requires both specialist skills and knowledge of heritage legislation. There is a shortage of informed, impartial advice and this document seeks to provide initial information for owners and designers operating in the Kennet district area.

The district council first adopted a policy towards the thatching of historic buildings in 1993. This was last re-affirmed and up-dated in September 1998 in a leaflet headed *Re-thatching*. Since that time there have been a number of developments and the aims of this document include bringing the council's approach up-to-date. Particular issues taken into account are: recent research on the evolution of thatching, English Heritage policy towards thatching, the availability of materials, recent practice, the closure of the Council's grant scheme for the repair of historic buildings, experience with fires to thatched roofs, and government policy regarding a new type of planning system which emphasises the importance of community involvement in the preparation of policy guidance.

The document also helps explain local traditions, and interprets general policy at the local level. With the increasing emphasis on the use of environmentally friendly building materials in new construction the pamphlet also introduces brief guidance on the design of new thatched structures. The new guidance note has been re-named under the title *Thatching*.

2. Background

The design of historic roofs developed as a response to the environmental and geographic characteristics of the area. The use of thatch is a demonstration of the skill applied by the populace to take best advantage of local resources for the provision of shelter, and thatching as a craft has probably been well developed since the Iron Age. A vernacular tradition developed over the generations that is now greatly admired and cherished. Indeed, if one had to choose a single traditional construction material that is characteristic of central and eastern Wiltshire it would have to be thatch. The District has more than 1,150 thatched properties of which no less than 900 are listed for their architectural or historic interest. Government policy towards thatched roofs is encapsulated in PPG15 Planning and the Historic Environment, which states:

> *Thatched roofs should be preserved, and consent should not be given for their replacement by different roof coverings. Where medieval thatch survives with characteristic smoke blackening on the underside it should be retained in situ and overlaid. When roofs are re-thatched, this should normally be done in a form of thatch traditional to the region, and local ways of detailing eaves, ridges and verges should be followed.*

This leaflet sets out the district council's detailed stance towards the re-thatching of listed buildings but it will also be instructive for anyone with the responsibility for maintaining any thatched building. The leaflet also highlights five key *policy* statements that seek to clarify the council's attitude towards re-thatching when formal applications for listed building consent and planning permission are under consideration. It concludes with sections on new thatched buildings and extensions.

(front cover: Image of The Wagon and Horses P.H. at Beckhampton)

3. Re-thatching

3.1 Assessing when to re-thatch

Evaluating the remaining life of a thatch is not easy as the rate of deterioration varies greatly according to location, quality of material, thickness of the top coat (see Diagram 1), depth of fixings and the skill and technique of the original thatcher.

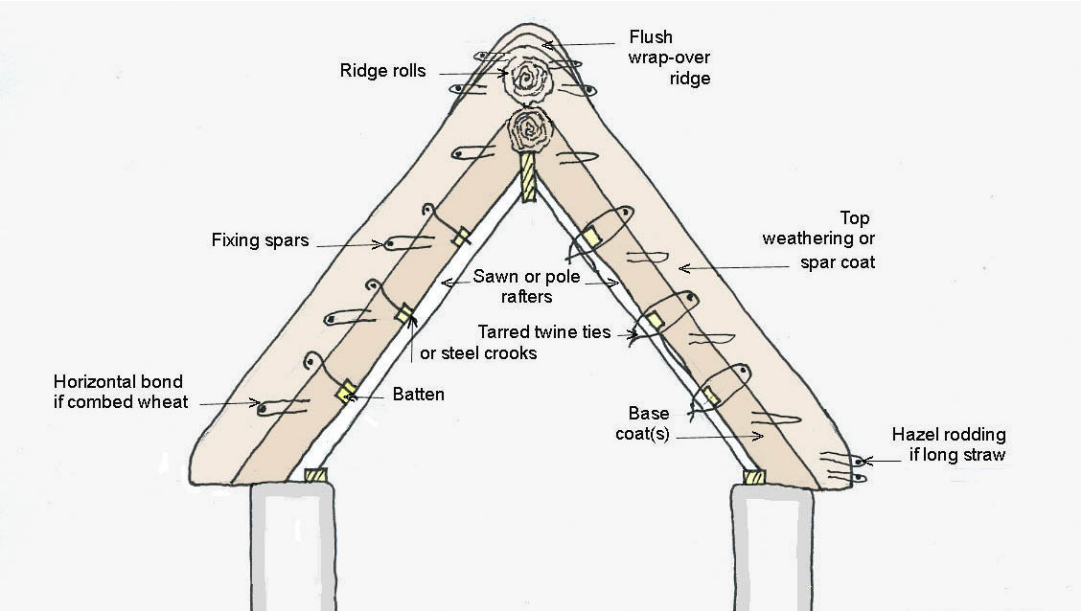


Diagram 1. Simplified cross-section through a typical thatched roof and ridge

Ideally, the plane of a roof will weather-back slowly and evenly. The time for re-thatching can be ascertained when the knuckles of the hazel spars that fix the top straw coat become apparent uniformly over the whole roof. The rate of weathering, however, will not always be consistent so there is a need to watch out for depressions, vertical lines or slippage in the thatch. Dark stains on the underside of the eaves may indicate how far rain is penetrating into the coats. Patches of moss and fungus may also indicate permanently damp areas, although the growth of certain lichens can act as a beneficial binder as the thatch gets older.

The critical thing is to ensure that re-thatching should take place before rain penetrates into the base coats.

Photograph 1 – Time for action. Note the concave dip and fixing spars visible on the left hand hip, the stranded flashing around the chimney, and the heavy build up of moss indicating permanently damp areas.

In normal cases when there is a need for comprehensive action to renew the top coat, consideration needs to be given to the following considerations.

3.2 Local character

Historic buildings contribute strongly to local distinctiveness. In the same way that standard concrete tiles, or uPVC windows, can detract from the appearance of a building, changes to thatch materials or styles will tend to erode the character of an historic property. Threats to the local distinctiveness of thatch come from changes to farming techniques, difficulties in obtaining traditional materials, the ability of materials to be imported from abroad, and occasional influxes of thatchers from other parts of the country who tend to work in a style more appropriate to their place of origin. The thatching tradition of the locality has in fact contributed to very attractive and distinctive building forms that give rise to the architectural character of the district which is largely designated as an area of outstanding natural beauty. It is therefore generally important when re-thatching to complement the existing roof and respect local traditions. Indeed, in the case of listed buildings :

A change of design or a change from one type of thatch to another will require listed building consent from the Council.

Similarly, consent will be required for changes to the pattern or form of slopes, ridges, eaves, dormer windows or roof structure. Planning permission may also be required for some alterations.

English Heritage Guidance

In 2000 English Heritage published its document *Thatch and thatching: a guidance note (1)*. This provides useful background information on the national situation and urges local authorities to research their own local traditions. It also re-affirms that for protected buildings listed building consent is required for :

• the removal of material of archaeological or historic interest

• a change of thatching method between the main styles

• a change of external appearance, such as forming a different ridge

Any application for significant alteration would need to be fully justified (eg: written appraisal, survey drawings, photographs) and the following approach will be adopted in considering proposals to alter the roof of a thatched building.

Policy Statement 1

In considering applications for planning permission or listed building consent, the Council will seek to maintain traditional thatching techniques appropriate to the locality.

3.3 Long Straw Thatching

Contrary to many generalised articles on thatching, the long-established thatching material in the Kennet area is known as *long straw*. It is not uncommon for newspapers and magazines to suggest that *long straw* is restricted to the counties of East Anglia. The *long straw* style of thatching however was dominant in the district until the 1970s. An inspection of almost any old photograph of rural Wiltshire will demonstrate the prevalence of the *long straw* method (see *Photo 2*). This is supported by research undertaken by Keystone Historic Building Consultancy and encapsulated in reports published by English Heritage during 1999 and 2000. (2).

1. English Heritage - product code XH2010
2. Smoke Blackened Thatch, John B Letts ISBN 1 85074 0
   Thatch - Thatching in England 1790-1940 ISBN 1 873936 95 8
   Thatch - Thatching in England 1740-1994 ISBN 1 873936 96 6

Photograph 2. Burdett Street, Ramsbury at the end of the 19th century.

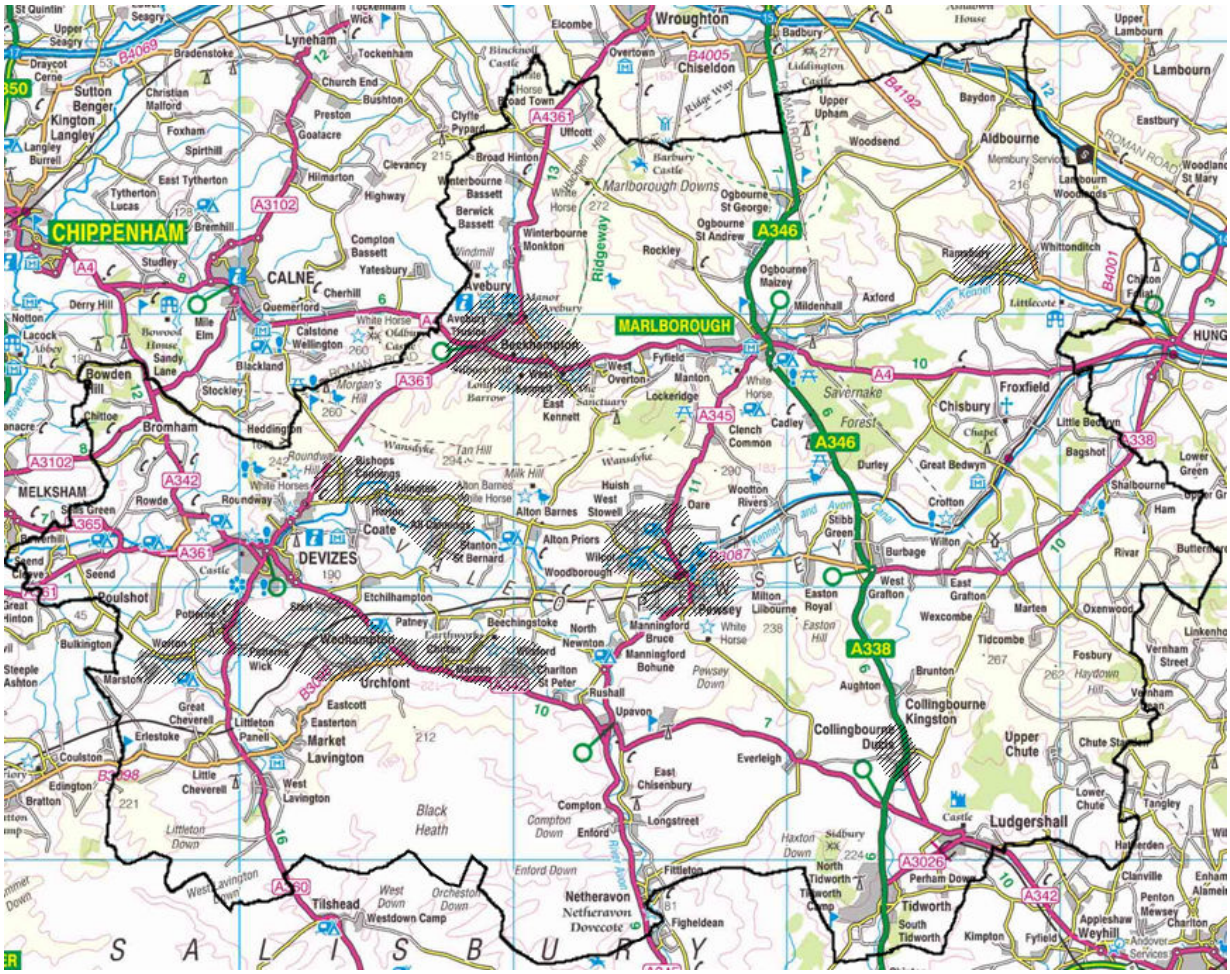
This technique of thatching has a distinctive appearance with its surface having an open texture, and the length of the stem visible on the surface of the roof, rather than the overall length of the material, giving rise to the term. Classically, after delivery to the site, the loose material is shaken and dampened into a bed from which yealms are pulled into manageable amounts ready for laying on the roof. In this area however the thatcher rarely built a bed and no great effort is made to ensure a 50:50 mix of butts and ears. The laying of the straw with the majority of butts on the outer surface is normal practice in the district. The thatch is fixed with hazel spars and laid to an even plane without the need to dress or beat it into position. At close range the thatch appears to have been poured on, enabling it to follow any irregularities in the plane of the roof without giving rise to rupture or stress. Also the provision of horizontal rodding of *long straw* eaves and gables is a necessary feature in controlling the loose mixed ends of the straw.

Photograph 3 - Close up of long straw thatch – note distinctive straps fixed at the eaves

Long straw thatching developed from the cultivated cereals commonly found in arable areas. The Kennet area lies principally in the 'chalk' half of Wiltshire and its thatching tradition contrasts with the customs found in many other parts of the West Country. The district, and especially the Vale of Pewsey, may be regarded as lying towards the west edge of the long straw homeland. Thatching practises followed in surrounding areas, particularly to the west, can be significantly different and are not necessarily applicable to the local circumstances found in the Kennet district. *Long straw* thatching has been such a dominant factor that it

influenced the design of buildings and it is ideal for the rounded, mainly hipped or half-hipped, cottages and farm buildings found in the area.

Roofs thatched with *long straw* are still found throughout the district. A concentration in a number of parishes is however discernible. As explained below there was a diminution in the number of *long straw* roofs during the second half of the 20th century and this reduction has been most strongly felt in some of the eastern and southern parishes of the District. The concentrations however enable the detection of a number of long straw villages, most notably Urchfont, Wedhampton, Potterne, Marston, Bishop's and All Cannings, Pewsey and Wilsford.



Map 1. The shaded areas indicate the concentration of long straw thatched roofs (2006)

The *long straw* thatchers of today, working mainly on dwellinghouses, are capable of producing high quality work, in contrast to the situation after World War II when expectations were lower and thatching work was often slotted-in around other agricultural tasks.

3.4 Combed Wheat Thatching

A decline in thatching standards in the immediate post-war period, exacerbated by the break up of estates, led to an initiative by the then Rural Industries Bureau to promote the training of thatchers. A side-effect of this programme was the rise of a new thatching style in the District. By the 1960s a large amount of thatching began to be carried out in a style of thatching known as *combed wheat or combed wheat reed*. Although slightly more expensive some thatchers preferred this technique because it involves them in less preparation time. *Combed wheat* thatching also uses straw which can be sparred onto the original base coat. At the threshing stage, however, the straw is stripped of extraneous leaves by a comber. Unlike *long straw* it does not pass through a drum and the material departs the machine with the individual straws lying in the same direction. The laying technique links bundles beneath the eventual surface by a horizontal bond, and the material is dressed into position with a grooved bat called a leggett. With the exception of stripping the roof structure, the process is similar to the laying of

water reed, giving rise to the slightly confusing term 'combed wheat reed'. Indeed, in historic documents 'reed' is sometimes used to mean 'combed wheat' reed thatching. The finished *combed wheat* roof appears to have a slightly neater, close-cropped finish. The style originated mainly in the far west of the country and it is sometimes referred to as *Devon reed*. However, in taking up the new method local thatchers adapted the style to suit local circumstances by clipping the eaves and gables, and maintaining shallow ridges, characteristic of *long straw* roofs. *Combed wheat* roofs in the district thus became distinctive from those found elsewhere.

Photo 4 - Close up of combed wheat being laid. The provision of a horizontal bond formed of hazel liggers *(which will eventually be concealed – see Diagram 1)* ***highlights a major difference to laying in the Long Straw style. It should be noted however that the bond in most historic buildings within the District is formed by tying a small portion of each bundle to its neighbour – a straw bond.***

Photo 5 - a roof with a weathering coat of combed wheat – note the crisper lines and denser appearance of the thatch

Occasionally *combed wheat* is decorated to imitate the appearance of *long straw* but this should be avoided as the spars fixing the eaves rodding will tend to open-up the surface and increase the chance of rain penetrating the coat.

3.5 Other Materials

Over the country as a whole, a variety of other immediately available vegetable materials have been employed for thatching but other than the occasional uncovering of rye there is no surviving or other historic evidence of these having been used in the Kennet area. A small number of traditional properties have had their straw roofs replaced by *water reed* but this mainly occurred during the 1970s. The use of water reed was restricted to certain coastal wetland locations and these days is usually imported from Turkey or Eastern Europe. The introduction of this material to an historic straw roof is not recommended for several reasons. It is a heavier material and will tend to slump if fixed over old base coats of straw. This leads to a temptation to completely strip the roof which often reveals old rafters which cannot be

entirely trusted to hold iron crooks securely thus prompting major carpentry repairs or rebuilding which would be unnecessary if the thatching took place in straw. The laying of *water reed* on bare timbers will also alter the appearance of an original roof because it will follow precisely the angles of hips, valleys, and dormers. The reduced thickness produces a shallower eaves overhang on a typically steep thatched roof thus increasing the risk that rain water dripping from the eaves will be blown back on to the walls of the building.

The stripping of the base coat will also, apart from adding to the cost, result in the loss of valuable historical evidence. Where, for example, medieval smoke-blackened thatch exists it will have captured a unique record of materials over the centuries, and The Society for the Protection of Ancient Buildings leaflet on 'The Care and Repair of Thatched Roofs' draws attention to features such as louvres, wattles, torching as well as old carpentry details in the roof structure. Good luck items such as old shoes or mummified animals are also important reminders of more superstitious times. Wattle frames as an alternative to fixing battens, and occasionally a solid thatch construction on small structures, are also worthy of preservation. The use of creeper stems rather than tarred twine, is sometimes found in the more rustic buildings within the District. The Council will therefore be guided by the following policy.

Policy Statement 2

In considering applications for planning permission or listed building consent, the Council will seek to resist proposals involving the stripping or removal of base thatch coats unless such work is proven to be essential for the restoration or preservation of the structure.

Occasionally circumstances arise where the base coats unavoidably need to be removed. This might occur, for example, following a major fire, or the failure of the supporting roof structure. When major reconstruction is under consideration, listed building consent will be required in the case of protected properties. Unless otherwise agreed, the council will expect the original character and profile of the roof to be re-created in the form of multiple thatch coats. Normally this can be achieved by the application of a 9" (230mm) base coat and a 12" (300mm) top coat. This will also prove to be the most-effective method of restoration. In cases where it is agreed there is no alternative to substantial stripping the applicant will be required to make arrangements for recording of the base coats.

In recent years – particularly during the restrictions imposed during the 'foot and mouth disease epidemic' of 2001 - suppliers and contractors have sought to cut costs by introducing new products such as plastic spars, and quadrant ramin or similar composite material. Neither is traditional or appropriate for use on a protected building during normal circumstances. They also suffer from technical difficulties. Plastic materials have caused severe difficulties for emergency services in the case of roof fires, and the inflexible nature of ramin makes it unsuitable as a substitute for split hazel liggers. Its tendency to fracture means spars cannot be firmly driven in so the material fails to provide a firm strapping for ridges and eaves.

Nationally there has been a growing portfolio of appeal decisions relating to rethatching works on listed buildings. Planning Inspectors are generally re-affirming that consent is required for alterations to thatched roofs and increasingly likely to dismiss appeals where a change of character would occur. Within the Kennet district the council has agreed a steady trickle of roofs restored back to their original *long straw* appearance, including a National Trust project at the Great Barn in Avebury. There has only been one case of an owner wishing to replace *long straw*. This case was refused and tested on appeal (3) which encapsulated many of the main issues. This case is described in greater detail overleaf.

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3. The Planning Inspectorate's appeal reference: APP/E3905/E/02/1093194.

In the Kennet case (2003) the Council had refused listed building consent for the removal of the long straw thatch on the grounds that the works would be detrimental to the character of the protected building and would weaken local distinctiveness.

The applicant appealed on the grounds that a number of other properties in the locality had been spar-coated in the combed wheat style and that the appointed thatcher did not have supplies of good-quality long straw. Also he suggested that the use of combed wheat reed would be more economical. That the long straw style of thatching has its own characteristics, which would be altered by the proposal, was not disputed.

The Council acknowledged that during the 1960s, long before vernacular buildings received statutory protection, the combed wheat style took a strong hold. The number of long straw roofs declined and there was concern that the number of remaining cases was reaching a critical level. This influenced the authority to adopt a protective stance. Unless surviving long straw roofs were conserved, who would maintain the threshing machines? Who would bother to train up as a long straw thatcher?

The council's policy, however, has not sought to turn back the clock, merely to maintain long straw roofs where they survive.

According to the local authority's records, by the early 1990s the proportion of roofs thatched in the long straw style had dipped to around 15% of all thatched roofs in the area. The number of surviving long straw roofs at the time of the appeal had grown to 170, about 19%. The appellant argued that this low proportion was a reason to accede to his request. The local authority contended that it was a compelling reason to protect comparatively rare surviving examples.

On the question of economics, the local authority accepted that the property had been last re-thatched 12 years ago and that the performance of the south-facing slope had been disappointing. However, it was not accepted that this was a consequence of the thatching style. Rather, right from the time of the last re-thatching, the tension of the casework looked to be uneven, and finishing details at the eaves, ridge and chimney were crude. The main problem had been the apparent quality of the craftsmanship, not the generic style.

Although longevity would not necessarily be a determining factor in an application for listed building consent, it is interesting to note that over the past decade the council had identified only five cases where there had been premature general erosion. One of these cases was the appeal property. The other four buildings had been coated in the combed wheat style. Although little could be inferred from these figures, it certainly cannot be claimed from these findings that long straw roofs are more likely to break down than those coated in the combed wheat style.

On the issue of the availability of high quality materials, the council argued that, while it had no reason to doubt that the chosen contractor was capable of producing a worthy job in either combed wheat or long straw, he was not a long straw specialist.

This explained why he did not have access to a stock of high-quality threshed straw. Buying-in at a late stage in the thatching calendar was a well known problem. In the council's view, expressed soon after the appeal was lodged, it would have been sensible to patch repair the south-facing slope and await the arrival of the next harvest, when the thatcher could be first in the queue for high-quality threshed straw. Alternatively the appellant could seek to engage a specialist long straw thatcher.

In deciding the appeal, the inspector took a straightforward view of the issues. The relatively short life of the present covering was to be regretted but was not necessarily an indication of how long a new straw roof would last.

In summary, he reasoned that that the appearances of the two thatching styles are quite different, even when they are covered with protective wire and have a weathered colour. Listed buildings can be robbed of their special interest as surely by unsuitable alteration as by demolition. Because features of special architectural interest would not be preserved, the appeal was dismissed.

3.6 Longevity

The presence and retention of moisture within a thatch is the key to straw breakdown. The way in which water is repelled or evaporates will ultimately determine the longevity of a thatched roof. Many factors - harvesting, ability of the thatcher, aspect, acid rain, and proximity of rivers and trees to name but few - can affect the life-span of thatched roofs. In recent years some thatchers have noticed an accelerated weathering of south facing slopes possibly due to the effects of global warming. Claims regarding the relative merits of particular techniques are however rarely supported by factual evidence, and the longevity figures referred to in 'The Thatcher's Craft' (a standard reference, dating from 1960) do not seem to accurately reflect the current state of affairs. Scientific research is beginning to help understanding of the processes of decay but based on the council's experience over thirty years there is, in this area, usually little to choose between the merits of well laid, good quality *long straw* or *combed wheat*. Indeed, although there are very few reported cases of premature breakdown there are more for combed wheat than long straw. It is, however, considered that the statistics are so limited that firm conclusions are not possible.

The straw should however always be grown specifically for thatching purposes and subject to strict control of fertilisers. Traditionally one of the following varieties was usually employed - Maris Widgeon, Maris Huntsman, Aquila, Square Headed Master and Masterpiece. The straw should have a minimum average length of 30" (750mm).

There have regrettably been difficulties of supply in recent years. There are complications in maintaining seed stocks on an approved list and the introduction of nitrate fertilizers appears to have progressively reduced the viability of some of the traditional varieties for thatching. It is now illegal to trade in seeds that are no longer on the statutory National Seeds List. The establishment of the list has resulted in thatching materials being by-passed by a mainstream that breeds progressively shorter straw that has a minimum of mass. The arable farmer wants all the carbon fixed by the plant to go into the grain; not the stem. In short, the list is prepared with reference to bread-making qualities rather than suitability for thatching. By 2002 only two - Maris Huntsman and Maris Widgeon - remained on the list and these were both under threat. This has caused the net to be cast wider in the search of possible alternatives. Imports from abroad have included reeds from Eastern Europe, and veldt grass from South Africa but this is far removed from indigenous thatching materials and may be prone to the absorption of water into a pithy core. One of the more promising possibilities is the use of locally sourced Triticale. The Purdy variety has the longest stem and naturally produces a high yield of straw to grain. It is an adventitious cross between wheat and rye that has a sufficiently long stem for thatching. It has been characterised for over a century but its resilience to some of the climatic problems, that have caused poor harvests in the past, has only more recently been appreciated as other long stem varieties have declined. On the roof its appearance is more or less indistinguishable from the traditional wheat varieties.

3.7 Ridges

The appearance of a roof is affected not only by the choice and quality of material, but also in the detailing, surface decoration, the design of dormers, and the treatment eaves. Ridges are common to all roofs and can be a particularly dominant feature.

Special care should be taken over the design of the ridge that covers the apex of the roof as it contributes greatly to the overall character. Early photographic evidence (such as *Photo 2* above) shows that cottage roofs in Kennet typically have minimal decorative work on the ridge.

Photograph 6 - A block cut ridge

Simple straw flush ridges are usually much more satisfactory than deep block-cut ridges which are more expensive and technically inferior. Block ridges also require extra fixings and surface strapping and produce a drip line.

Photograph 7 - decorative block ridge

Block ridges are typical of East Anglian roofs and tend to look out of place in the Wiltshire landscape. All other things being equal, flush, wrap-over ridges *(see Diagram 1 and Photo 5)*, sometimes called turn-over ridges, will prove to be the most aesthetically pleasing and more hard wearing. Butts-up ridges are more vulnerable to weathering but are sometimes justified if only one slope of the roof is being re-thatched. Accordingly the Council has adopted the following policy.

Policy Statement 3

In considering applications for planning permission or listed building consent, the Council will seek, wherever practical, to maintain and encourage the provision of flush, wrap-over ridges to thatched roofs

Also, excessive build-up of the thatch at the ridge should be avoided as this can decrease the effective pitch of the roof, and create a fire hazard, as chimney openings should ideally be about 5ft (1.5m) clear of the thatch. Alterations to the shape, height or underlying structure of a roof, will in any case require consent in the case of listed buildings, and planning permission from the council in most other cases.

4. Specifying Re-thatching Work

Once a careful analysis of the situation has been undertaken it is important that proposed repairs are properly described in order to protect the integrity of an historic building and to continue local distinctiveness. Bald statements such as “re-thatch the front roof” are ambiguous and are not sufficient for potential contractors to gauge the quality of work required, or for the control of design. Thatching work and materials are one of the few areas of the building industry for which there are no accepted minimum standards. Every effort should be made to set down a schedule of required works. Roof plans and photographs can be used to identify areas requiring attention and features such as chimneys, dormer windows, valleys and hips.

4.1 Appointing a Thatcher

Finding a thatcher capable of offering the special care and understanding essential to maintain a listed building is of prime importance. The quality of the craftsmanship is one of the most important factors in determining the longevity of thatch. Skilled thatchers have generally undergone a minimum of a 4-year training period and may be a member of the local Master Thatchers Association. Some highly skilled thatchers however may stand outside of any organisation and therefore it is recommended, as a precaution, that in all cases potential contractors are asked to provide names and addresses of properties in the area where they have worked, so that their expertise can be inspected.

It is also suggested that a draft specification is discussed with potential thatchers. It should be noted, however, that the thatching industry is largely self-regulating and there are no legal restraints upon anyone describing himself as a *thatcher* or '*master' thatcher*. An individual thatcher may not always appreciate the holistic requirements of building maintenance nor give best advice with regard to materials; as such guidance may be swayed by limited experience of some thatching techniques. Further information on *The Industry* may be found on-line at www.alanlewis-masterthatcher.co.uk.

Estimates from at least two thatchers should be obtained but remember that the lowest price may not necessarily reflect the best value for money. Good thatchers welcome a precise specification, which can then be used to make proper comparison between quotations.

4.2 Checklist

The thatcher may need to respond to the requirements of a particular building but the following is a checklist of the main items that need to be addressed :

- **Preliminaries:**
- Identify the extent of required repairs
- Identify existing style/material
- **Preparation:**
- Removal of old netting and ridge
- Removal of weathered top coat if necessary to achieve a reliable surface
- Repair of base coat and eaves to produce a sound foundation
- Check timber structure where exposed, especially pole rafters – detail method of repair to timbers where necessary
- Check chimneys, including any accessible sections within the thickness of the thatch, for damaged masonry and loose mortar through which hot gases might leak, and defective flashings – detail repairs where necessary
- Check for the presence and condition of flue liners and allow for inspection by specialists.
- Repairs to masonry, roof structures, flue liners etc. may require expert help from allied trades and appropriate allowances should be made for their engagement when necessary.
- **The New Top Coat**
- Quality and length of new straw –usually at least 30" (750mm)
- New top coat should generally have a minimum thickness of 12" (300mm) - this will generally be near the optimum as thicker coats will slacken the pitch of individual straws. A 12" thickness will normally produce a barge/eaves overhang of around 1' 6" (450mm) and should never be less than 12".
- Consistency of pitch, density and tension – avoid concave areas wherever possible
- Each course to be fixed with hazel spars at a minimum depth of (150mm).
- Application of hazel sways to eaves and hips for long straw fixed by spars driven horizontally or upwards into the coatwork
- **Features**
- Any openings within the thatched planes should be correctly weatherproofed with lead flashings, including back gutters where necessary
- Abutments between the thatch and any stacks to be neatly flashed with lead or mortar fillets
- The design of ridge, usually a flush wrap-over, fixed by spars driven horizontally into the coatwork.
- **Finishing**
- Protection of the new work with galvanised 19mm 22 gauge wire netting, with maximum overlap of 3" (75mm)
- Clearance from the site of old thatch and other debris

5. Routine Maintenance

Once re-thatching is completed, routine maintenance can help extend the lifetime of new thatch and particular attention should be given to occasional upkeep around any valleys and to the ridge. Look out for corroded wire netting and birds or vermin nesting in the roof, and climbing plants. These items should be inspected every year with an anticipated need for remedial works every ten years or so. If the netting is required to be temporarily lifted, the opportunity can be taken to gently clean off any build-up of thick mosses. In addition, external factors such as overhanging trees may need attention occasionally. The longevity of thatch can also be prolonged if all access onto the roof, for such items as fixing of tv aerials and soil vent pipes, is very carefully managed. Care should also be taken to ensure that any plastic coated wiring in the loft space is protected in a rodent resistant conduit to avoid the risk of shorting.

Other recommended precautions include the routine sweeping of working chimneys. Only seasoned wood should be burnt in the fireplace. The use of blowtorches in the roof space, and hot equipment for stripping paint from dormer windows or other paint work near the thatch should be avoided. Although very few fires are started as a result of external threats, always take care to site bonfires and barbecues strategically.

Photograph 8 – climbing plants need to be kept under control

5.1 Chimneys

Although comparatively rare, fire represents one of the greatest threats to the conservation of an historic thatched roof. Even chimneys which appear to be in good order may have defective pointing or cracks below the ridge which allow hot gases to escape from the flue into the thatch. The leakage of hot gases creates hot zones which in time may combust and cause a thatch fire.

Photograph 9 – damage apparently caused due to an imperfect chimney

Wood burning stoves produce extremely hot gases and faced with the difficulty of repairing a chimney the option of internally lining a chimney is often considered. Liners have the disadvantage of preventing the dissipation of heat into a large inglenook fireplace. The gases are concentrated within the liner and may still be hot as they pass through the level of the thatch. Metal liners should therefore always be adequately insulated. *Period Property* in fact advises against the use of metal liners and insulating wool, in favour of a ceramic liner with the open area backfilled with clay fireproof granules. Further advice on the lining of old chimneys is given by the Solid Fuel Technology Institute - www.soliftec.com.

6. New thatched buildings

There are few more ecologically sound and sustainable building materials than thatch. Traditionally it was grown with the use of natural fertilizers and then harvested, prepared and fixed on to roofs by local thatchers. The process involved the minimal use of transport, and resulted in a thermally efficient roof that is cool in summer yet cosy during the colder months. Thatch can be regarded as an environmentally friendly and ultimately renewable building material.

The use of a locally distinctive material whose production involves minimal carbon emissions, and is thermally efficient, is therefore strongly supported by the council. The conservation of existing thatched roofs and the provision of new thatched buildings ticks all the right sustainability boxes.

Indeed, there has been a small but steady growth in the construction of new thatched buildings in the district over the past thirty years. A number have been successfully assimilated into the heritage of the locality and attract premium prices when sold.

Photograph 10. An award winning cottage erected during 2005.

All too frequently, however, the use of thatch is not fully understood by designers and this has given rise to a number of disappointing results. Unless the building is designed with great care and perception, the thatch may not optimise its life expectancy and the appearance may be reduced to a mere parody of a time-honored tradition.

Some of the problems that can occur are illustrated in the following photographs.

Photograph 11. Uncharacteristic features :

- ***abnormally tall chimney***
- ***dominant block ridge***
- ***gable dormer on hip end***
- ***brickwork over and around dormer windows***
- ***a high proportion of the roof lying at a shallow pitch.***

Photographs 12 and 13. Narrow valleys, higher thatch draining onto lower thatch, anomalous vertical thatch panels over and on the cheeks of tall eye brow windows.

6.1 Design Guidelines

In order to achieve a harmonious and cost-effective use of thatch on new buildings the Council recommends the following guidelines:

◘ If a traditional appearance is being sought the main span of the building should be narrow - historic cottages do not normally exceed 5m.

◘ The footprint of the building should be of simple rectangular form without irregularities or acute angles - round or curved plans are practicable with thatch but any inside radius must be generous.

◘ The creation of narrow valleys and large or gabled dormer windows should be avoided.

◘ The materials should continue the established tradition of using wheat straw - laid in the *long straw* or *combed wheat* methods.

◘ The introduction of perpendicular wings and other features can easily reduce the pitch in the vicinity below a practical or visually acceptable level - the main casework should be pitched at 50° or more to ensure a minimum of 45° at eye brow windows, hips and valleys .

◘ Windows on the first floor should be eyebrow or eaves windows which readily allow the thatch to be swept over the top - dormer or gable windows however introduce shallow valleys that drain inefficiently. This may mean that reduced headroom must be accepted at first floor level.

◘ Windows, chimneys and vent pipes should be well clear of the gable verges and valleys.

◘ In order to comply with current Building Regulations new operational chimneys must have the opening 1.8m (6 ft) above the surface of the thatch – the introduction of a clay pot however can be helpful in reducing the mass of masonry by as much as a third.

◘ Early consultation with the Building Control authority is recommended for new buildings less than 12m from a site boundary - the overdrawing of roof rafters with 30 minute fireboards, and information in the Dorset model (www.dorset-technical-committee.org.uk), may provide useful mitigation against the spread of fire

◘ Ridges should be of the simple flush, wrap over design.

Policy Statement 4

In considering applications for planning permission for new thatched buildings, particularly within designated conservation areas, the Council will have regard to the design guidelines under section 6.1

7. Extensions to thatched buildings

The council is frequently confronted by poorly designed minor schemes. When new thatched additions are under consideration many architects, designers, builders and their clients fail to understand that thatched roofs need to be simple in form in order to achieve reasonable longevity. Over-complicated roof designs, or bulky and dominant extensions, particularly where they are proposed with a roof ridge at right angles to the existing ridge can easily spoil the character and appearance of a traditional building, or its setting within a Conservation Area. Furthermore, reductions in the effective pitch of a roof will

When the host building is an historic structure there is an additional need to respect its fabric including the roof structure and any surviving ancient base coats of thatch material. This can often pose difficulties for the design of any extension having two floors when designed as a perpendicular wing. In the case of a listed building an otherwise well-designed extension may not be acceptable if the scheme involves the loss of a significant extent of historic material.

The following guidelines should also be taken into account in designing extensions. In addition to the considerations noted in section 6.1 extensions to existing buildings in thatch need to respect the following principles:

7.1 Construction Guidelines

◘ Thatch should be pitched at 50° or more and should continue the local tradition of wheat straw thatching (long straw or combed wheat) found at the host building.

◘ The formation of junctions, valleys and / or gabled dormer windows should be avoided.

◘ Single storey extensions added to the rear of a 2-storey building are often best designed with a continuation of the main slope; often referred to as a 'catslide' roof - the span of the extension must be limited to allow the pitch of the thatch to continue at a consistent pitch.

◘ Rainwater drips from a higher roof should not shed onto a lower thatched roof.

◘ Thatch should not rest on an existing flat roof surface -clear ventilation and drip space under eaves is important.

◘ Balanced flue outlets should not be positioned so as to emerge from walls under a thatched eaves or close under a gable verge.

Policy Statement 5

In considering applications for planning permission or listed building consent extensions to thatched buildings, the Council will have regard to the design and construction guidelines under sections 6.1 and 7.1

8. Community Involvement and Adoption

Involving the community and raising public awareness is an integral part of the planning process. Publicity provides an opportunity to test and consolidate public support. The Council sent notifications of a draft document to interested organisations including English Heritage, the Society for the Preservation of Ancient Buildings, the Wiltshire Master Thatchers Association, The Wilshire Buildings Record, the National Society of Master Thatchers and relevant amenity groups including the Council for the Protection of Rural England. A general notice was also being placed in the local newspapers circulating within the District, and a consultation copy of the guidance was being made available on the Council's web site.

The consultative draft version of the document is being placed on deposit for eight weeks during May and June 2007. Comments received have been evaluated and adjustments made to the text in the final document. A summary of comments received and the Council's response is available in a separate document available from the Council.

The emerging new planning system has a focus on flexibility, sustainability and the use of evidence to underpin core strategies. Local Planning Authorities will produce local development frameworks consisting of a portfolio of local development documents. It is anticipated that the core strategy will supported by supplementary planning documents (SPDs) giving greater specific guidance. The legislation relating to listed buildings runs parallel with general planning legislation and there will be a need to ensure that appropriate linkages are in place. It is anticipated that this will be achieved by a new Heritage SPD which will in turn be supported by adopted and published policy guidance. This is where this document will fit in.

It is intended that understanding this important traditional building material, and providing clear policy guidelines, will be helpful to owners and practitioners, and provide a robust management framework through which applications for planning permission and listed building consent can be considered. A local authority's reasoning published in support of a SPD, will be taken into account by the Secretary of State for Communities and Local Government and the Planning Inspectorate, in considering related planning appeals.

Individual copies of the document are available free of charge from the Council or it can be viewed or downloaded from www.kennet.gov.uk.

Useful Information Sources:

: www.wiltshirethatchers.org.uk (Wiltshire Master Thatchers Association)
: www.alanlewis-masterthatcher.co.uk (locally based thatcher)
: www.english-heritage.org.uk (English Heritage)
: www.wiltshire.gov.uk/what-the-wiltshire-buildings-record-does
: www.spab.org.uk (Society for the Protection of Ancient Buildings)
37 Spital Square, London E1 6DY (NB. 'The Care & Repair of Thatched Roofs' – technical pamphlet @ £2)

This booklet is one in a series of Conservation Area Statements, and Appraisals and Managements Plans, and other general policy, technical and information leaflets produced by the Conservation Team at Kennet District Council. For an up to date list, please contact :

The Conservation Section. Planning Services, Kennet District Council, Browfort, Bath Road, Devizes, SN10 2AT

Tel : 01380 724911 Email : conserve@kennet. gov.uk www.kennet.gov.uk

Schedule of Representations received on the Consultative Conservation Guidance Note: Thatching

Section	Correspondent	Summary of Comment/ Representations	Summary of Response	Action
Materials	Wiltshire Buildings Record	Wattle frames, creeper stems, solid thatch, and good luck items such as old shoes or mummified animals have all been found and uninformed owners may not realize the significance of these features	Agreed	Adjustments made to para 3.5
	Wiltshire Master Thatchers Association	This is a good document but we recommend minor amendments, eg. A new base coat should be in the range of 8-10" thick	Agreed	Adjustments made to para 3.5
		In combed wheat thatching a straw bond is usually favoured over hazel liggers in the District	Agreed	Adjustment made to text supporting Photo 4.
		The use of plastic spars was not entirely motivated by commercial advantage but was to some extent enforced during the foot & mouth crisis	Agreed	Adjustment made to para 3.4
		It is agreed that veldt grass has a pithy core but so did one old wheat variety (Capel)	Even if true this does not change the nature of the original advice	Only minor adjustment made to para 3.6
Appointing a thatcher	A local thatcher	Some poor thatchers are not admitted to the local thatching association. However, as minimum standards are low a small number of highly skilled thatchers prefer to stand outside the association.	Agreed	Adjustments made to para 4.1
Checklist	Wiltshire Master Thatchers Association	The removal of the weathered top coat is not essential in all cases	Agreed	Adjustment made to para 4.2
		It may not be possible to avoid concave areas in all cases eg. where the design of an extension is inappropriate	Agreed	Adjustment made to para 4.2 together with acknowledgement that the thatcher will need to respond to individual needs of a particular building
		The cost of wiring is now comparatively low so there is little advantage in recommending 20gauge which will probably be disposed of during re-ridging	Agreed	Adjustment made to para 4.2 to indicate a preference for lighter 22 gauge wiring
Maintenance of chimneys	The National Society of Master Thatchers	The web site www.soliftec.com provides a good safety check list	Agreed	Adjustments made to para 5.1
Design Guidelines	The National Society of Master Thatchers	The Dorset model can be helpful in resolving conflicts between the Building Regulations and the design of new thatched buildings	Agreed	Adjustments made to bullet points in 6.1

The draft version of the document was placed on the consultation pages of the District council's web site for a period of eight weeks.

In addition to the correspondents listed above a draft version of the document was sent with an invitation to comment to:

Kennet Group CPRE
The Society for the Preservation of Historic Buildings
English Heritage
The Society for the Preservation of Ancient Buildings
The Conservation of Historic Thatch Committee

28th June 2007