

Bucklawren Farm Case



ADAS Building Design were asked by their clients, Robert and Jean Henly, to produce a feasibility study for the re-use of a redundant traditional farm building on their farm in Cornwall.

Conversion of the traditional 19th Century stone barn was considered a way of conserving the stone barn as it was redundant for modern farm practices as well as complementing the existing tourism complex.

Robert and Jean, along with their two daughters, had moved to the dairy and arable farm in 1987. Shortly after arriving they decided to offer bed and breakfast in the farmhouse which led to them winning the prestigious 1988 West Country Tourist Board Farm Holiday Award. Further diversification followed with the conversion of the former stables into three self catering holiday cottages, this also proved successful and was followed in 1999 with the conversion of an additional barn into a spacious 4 bedroom holiday unit, providing ample accommodation for two families. Grant assistance was made available through the European Objective 5b revitalising farm tourism scheme to help finance this latest venture.

With the above tourism development carried out, there still remained the biggest and most impressive traditional stone barn within the farm complex. A feasibility study established the demand for a farm restaurant together with the further conversion of a single storey barn to provide either staff accommodation or holiday accommodation. This appeared a logical progression in the development of the farm tourism business, especially in light of existing farm income. The development would enhance overall farm profitability whilst establishing existing employment on the holding and providing additional local employment.

The restaurant project would utilise a redundant farm building that would integrate with the existing tourism enterprise, offering meals to existing residents, non-residents and locals, with the aim of providing home made good quality food using fresh, locally sourced produce.

Initial discussions were undertaken with the planning authority and following positive responses, full planning consent was applied for and obtained. The only conditions were the provision of a number of intervisible passing bays along the approach road for a clear divide to be made between the working farm and the tourism enterprise.

The proposals were, and still are,



Top: holiday unit barn prior to conversion.
Above: inside of barn prior to conversion.

very much in accordance with Government policy for diversification and the re-use and adaptation of rural buildings. The most relevant document for anyone considering diversification is PPG7 (Planning Policy Guidance Note 7 revised). Particular reference should be made to Annex g and Section 3 which covers rural business, tourism, sport and recreation, and re-use of buildings and houses. The Department of Environment Planning and Diversification: A Good Practice Guide is also worth consulting which advises on assessing the economic and social needs of rural areas.

The design philosophy was to ensure that the building would retain its charac-

ter and appearance, with minimal alterations, whilst providing a flexible and functional alternative use.

The concept tended towards the appreciation of innovative and interesting design that would excite comment and encourage customer loyalty and repeat business.

Typical of most traditional buildings the barn had been the victim of modern farming methods, with the removal of the majority of the first floor to accommodate grain bins. Fortunately this had not affected the structural integrity of the building, which is so commonly the case.

The design brief was to maximise the available space, whilst taking account of the existing features and emphasising the appeal of a traditional building.



Roof construction of the holiday units



Restaurant mid construction.

It was decided to re-introduce the first floor, which although constructed in steel, was sized and clad in timber to resemble the original floor structure. The barn is typical of many Cornish barns, being built into the hillside, affording level access to the first floor from the rear. It is from this side that the main entrance leads into a spacious bar reception, complete with open fire and gallery overlooking the main ground floor restaurant. On the first floor the existing king post roof trusses are exposed overhead creating and maintaining a spatial openness to the barn.

Further function rooms lead from the main area providing a flexible arrangement for accommodation that can cater for smaller parties and larger meetings and conferences alike.

The ground floor accommodation includes two dining areas with access to the rear terrace as well as the kitchen and cloak rooms. The state of art kitchen, designed and installed by Musitano Ltd., includes two dumb waiter lifts up to the first floor.

The scale, design and materials were carefully chosen to ensure a sympathetic conversion that would retain the character of the building both internally and externally. Despite a floor area of almost 400m², the proposals only included the addition of one new opening (from a window into a door) to provide access to the barrel store.

A lot of thought went into the heating of the barn with underfloor heating being the preferred system. This has the advantage of being unobtrusive and works by circulating warm water around a network of pipes installed within the floor. Pipes are zoned, fitted with a continuous looped pipe which starts and finishes at a central manifold. Here the returning water from the floor area is mixed with heated water from the boiler, before being re-circulated back around the pipes. A thermostat ensures that each zone can be independently regulated.

Apart from the obvious benefits of no radiators, which are alien to a barn, and the flexibility of freedom to place furniture and fittings wherever you want, another benefit is the higher levels of comfort that such a system

of fans.

Although this is more easily experienced than explained, most of the heat output from underfloor heating is in the form of radiant heat, which transfers directly from the heating system to you, without excessively raising the temperature of the surrounding air. Underfloor heating keeps your feet warm and your head cool, creating a more comfortable environment. Radiant heat dissipates after about three metres, eliminating the wasteful build-up of heat under the ceiling, proving especially economical in barns such as this one, with high ceilings, where energy savings can be as high as 50%.

To ensure heating costs were kept to a minimum, insulation was added to the structure wherever possible without unduly affecting the appearance of the barn.

The roof was insulated with 60mm thickness of extruded polystyrene to form a warm roof, together with the addition of a breathable membrane before re-cladding using the original slates. The new concrete floors also included 35mm of rigid insulation before being overlaid with 40mm thickness of Readymix floor screed. The existing 500mm thick random rubble stone walls were not insulated but either retained as exposed stonework or rendered. All rendered walls incorporated a waterproof additive, whilst the back wall below ground level was also tanked using a thorough waterproofing system.

The only unforeseen works required during the conversion resulted in the lowering of the existing floor level to provide sufficient headroom to the kitchen wing. Typical of a vast majority of old barns the building had no foundations and so an approved underpinning design was required before building operations could proceed.

With due regard to the loss of barns and the natural habitat for owls, boxes were provided in the gable ends of both the restaurant and the staff unit.

Despite the complexity of the project and inclement weather experienced, the works were completed in

under seven months. The building contract was carried out by a local contractor, Minerva (South West) Ltd, for around £800/m² including associated external works, specialist equipment and internal decoration.

The restaurant was opened in the summer of 2000, and is managed by the Henly's daughter Kate, who has an honours degree in Hospitality Management.

An amazing coincidence arose during the conversion project whilst locating old bricks through the existing window reveals arches. The sourced bricks were found to come from a farm in Wiltshire, over 200 miles away, a farm previously owned by the Henly's. The history of the farm also makes interesting reading. The original



Inside barn following conversion to restaurant

Bucklawren Manor was mentioned in



Barn Converted to restaurant.

the Domesday Book. At that time it belonged to the Launceston Priory and

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