Location: 112 & 114 Preston Crowmarsh, Nr Wallingford, Oxfordshire
Client: Crowmarsh Battle Farms Ltd

A STABLE WORKING ENVIRONMENT

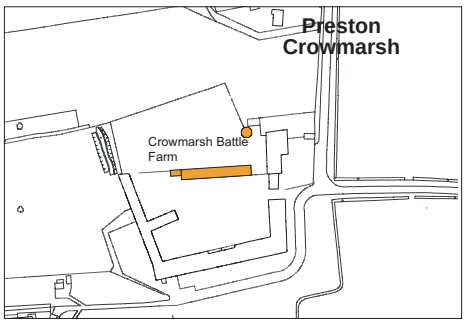
Redevelopment of redundant stables block to office use and repair of existing Dovecote

Crowmarsh Battle Barns in Preston Crowmarsh near Wallingford, Oxfordshire is a redevelopment of a large range of redundant agricultural buildings converted to office use over the last six years.
The stables block of this study forms the second phase of redevelopment and its conversion to B1 office use completes the development around a central farmyard.

The Grade II listed stables block is predominantly constructed of local stone, with red brick quoins at corners and openings and knapped flint banding to the south elevation. A timber frame first floor and roof construction enclosed a hayloft above the stables which was accessed through dormers in the south elevation. At each end of the main stables block, outbuildings - including the farmhouse potting shed - are constructed from red facing brick.

Initially, a new reinforced concrete slab, or raft foundation was cast within the existing stables, from which internal blockwork walls were built parallel with the external walls. These new inner leafs serve to transfer the increased additional loads of the first floor offices down to the new raft foundations within the building without imposing additional stresses on the existing walls, which had already spread significantly. Steel ties were installed at regular intervals at first floor level and secured with discrete pattress plates on opposing elevations to prevent further spread.
The original walls themselves were constructed from stone on each face with a rubble infill. On inspection, this had begun to subside between the stone faces, and a proprietary stitching system was installed from the inside and tied back to the new inner leafs to prevent further movement.

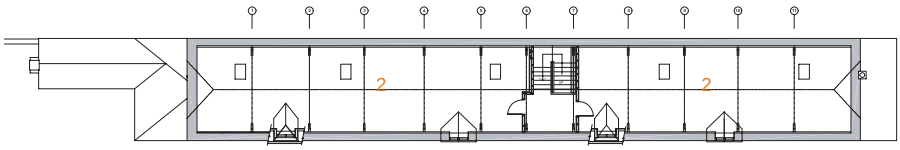
Above *Refurbished stables block following completion.*
Below *Location plan.*
Bottom *Composite photograph of stables south elevation prior to refurbishment. Dovecote visible in background, right.*



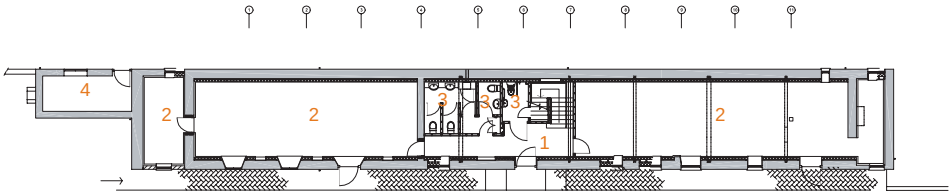
External walls have been repointed using a traditional lime mortar, however the degree of repointing was limited to only that which was necessary to avoid losing the aged character of the walls.

The timber frame above first floor had also suffered a lot of movement over many years, mainly due to failed dowel connections. Timber frame specialists were involved in the gradual re-straightening of each truss using tensioning straps, before re-pegging the joints in place. The specialists also undertook traditional repairs and modifications to the roof structure after it had been cleaned back and treated for rot and insect infestation. The roof of the building now incorporates two additional dormer windows in the southern roof slope, and the reinstatement of an original hayloft access dormer. To the north, conservation style rooflights have been added and the entire roof has been re-laid using the original clay plain tiles, with the shortfall made up in clay plain tiles to match.

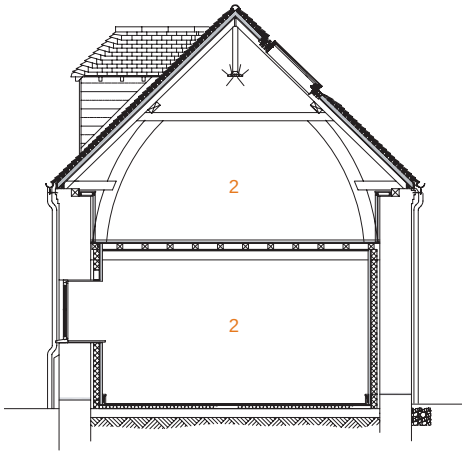
Top *First floor, prior to occupation.*
Above left *Old tack equipment within loft space prior to works. Lighting provided by one of numerous holes in the roof following high winds.*
Far left *Single remaining loft access dormer, through which hay would be passed and stored, later to be fed through to stables below .*
Centre *The external walls were repaired with a selective approach to repointing, so as not to lose the character of the original clunch stone and flint banding. Remedial pattress plates are visible at first floor level.*



first floor



ground floor



The external walls and roof are lined internally to satisfy current thermal requirements, while some panels of stonework and the entire timber frame have been left exposed. The first floor is insulated and lined between the timber frame to give the required acoustic and fire separation.
The four office suites created from the stables building are now occupied by two companies, who share a common entrance foyer, stairway and toilet facilities at the centre of the building.
By arranging the offices around a single core, the impact of the new services is limited to a single bay of the building, and the original volume of the stables block can be easily read. This is especially the case at first floor, where the roof structure and stone gable walls are entirely exposed to view.

Concurrent with the conversion of the stables block, the repair and refurbishment of a 17th Century Dovecote standing in the garden of the farmhouse was undertaken. Octagonal in plan, the dovecote is a good

1 Foyer
2 Office
3 Toilet
4 Garden store

Top(L-R): *existing stone internal wall repaired and left exposed within office; new lighting deliberately separated from original fabric; original timber frame and hay feeders retained (photo prior to final decorations)*
Above *Stables block: floor plans, typical section.*
Left *Refurbished dovecote*
Below *Looking up from the central potence column to the roof structure of the dovecote. A white breather membrane (exposed) was used in favour of roofing felt to reflect the light within the roof structure.*
Below left *Perforated wall structure of dovecote.*

example of its type, but showed signs that subsidence had occurred with large cracks evident at each of the corners and within many of the elevations. More recent repairs in the form of concrete buttresses cast against one elevation were unsightly. Following a programme of complete underpinning of the structure and the subsequent removal of the buttresses, repairs to the brickwork were twofold: initially, bed joints at the corners were chased out at regular intervals, into which steel reinforcement was placed before being repointed. There followed a process of painstaking repair to individual bricks that had cracked, involving sourcing handmade bricks to match the varied course heights around the building and the use of traditional lime mortar.

Internally, repair work was carried out to the timber roof structure by the specialist involved with stables conversion, who made repairs to defective timbers using traditional carpentry methods.

The roof was relaid with reclaimed clay plain tiles and bonnet hips over a plain white breathable underlay, especially chosen to highlight the existing timber frame and reflect light as much as possible within the space, since there is limited daylight available internally. The degree to which this has been successful is evident in the accompanying photographs.

In addition to the pure repair work undertaken, an existing telegraph pole, which had been installed at a later date to prop the centre of the roof, was removed and replaced with a traditional 'Potence'. This comprises an arrangement of a rotating post and gallows bracket onto which a ladder was fixed. This would have been part of the original structure and facilitated the efficient removal of eggs from within the perforated walls of the dovecote itself.

In summary, the repair works and reinstatement of the potence mechanism within the Dovecote have further enhanced a fascinating building, which will continue to attract interested visitors to open days and talks arranged by the owner. Equally, the repair and conversion of what was already a unique stables block completes the development of offices around the farmyard and provides additional office space in a natural environment which retains its rural character. Together, the two projects demonstrate a diverse approach to conservation and preservation within feet of each other. KJB

Contract Period: July - December 2002
Contract Value: £490,000

Right *Stables north elevation, facing the private garden to the farmhouse. Conservation rooflights were employed to bring light into the offices while maintaining privacy to the garden and the character of the solid clunch stone wall.*

Below L-R *Elevations were repointed following remedial stitching at each corner which had shown signs of spread; Potence ladder rotates within dovecote for the collection of eggs; Dovecote situated in garden behind stables building in foreground.*

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