1. Introduction

1.1 Archaeological Services WYAS were appointed on 12th July 2004 by Mr Adrian Hill of Ben Bailey Homes Limited, Elizabeth House, Cliff Street, Mexborough to carry out archaeological recording of the exposed timber roofs at Woodland Farm, Treeton.

1.2 The site is located between Front Street and Rodwell Close in the village of Treeton, to the south of Rotherham, Grid Reference: SK 4336 8780

1.3 Buildings on the site (for recording) comprise a stone built block of three wings of barns and mixed agricultural buildings and a small detached barn to the west. Roof cladding had been removed from both buildings and a scaffold access provided.

1.4 The archaeological recording was required to satisfy a condition placed on Planning Application Number RB2003/0302 in advance of re-roofing, and the conversion of the historic farm buildings to eight new dwellings.

1.5 The purpose of this investigation is to identify and objectively record by photographic means the form and structure of the exposed roofs.

2. Methodology

2.1 Weather conditions on the survey day were dry with good natural light. Additional artificial lighting was not required.

2.2 A risk assessment had been prepared in advance. This highlighted the need to take care when working at height, to ensure that the scaffold was regularly checked for safety, and to ensure ladders were secured.

2.3 Drawn survey. No drawn survey was required. Sketch plans provided by the client were amended for use to locate directions of photographs.

2.4 Photographic record. A 35mm (Nikon F-601) camera was used to provide a comprehensive black and white record.

2.5 A limited map regression study was undertaken on readily available Ordnance Survey maps dating from 1900 to 1923.

2.6 Data were processed in August 2006 and November 2006 and a report and archive produced.

3. Historical Data

3.1 A series of three Ordnance Survey maps at a scale of 25 inch to 1 mile of the area were researched. They are detailed below.

3.2 Enlarged portion from Ordnance Survey 25 inch to 1 mile, sheet 295 NE, published 1900 (Figure 3). The plan of the older barn, to the north-west, is as today, as is the plan of the three-wing building with additions to the south-east.

3.3 Enlarged portion from Ordnance Survey 25 inch to 1 mile, sheet 295 NE, published 1904 (Figure 4). This map is very similar to that of 1900 and no changes to the plans of the buildings were noted.

3.5 Enlarged portion from Ordnance Survey 25 inch to 1 mile, sheet 295 NE, published 1923 (Figure 5). Very similar in detail to the earlier two plans.

4. Description of the roof structures

4.1 For the purpose of this report the roofs over buildings on the site have been named 1 to 4. Detailed descriptions follow.

Roof 1

4.2 The roof is over a two storey three bay stone structure (Photograph 3) with a first floor external door in the south-west gable (Photograph 4). At the bay divisions in the roof are open 'A' frame trusses in oak (Photograph 30). Principal rafters are morticed into tie-beams (Photographs 31, 43 and 46) are are pegged in place. The ends of the tie-beams rest on wall-plates set on the wall tops (Photographs 51, 52 and 53). At the apex of the roof the principal rafters are lap-jointed and pegged (Photographs 36 and 41). Both trusses are noted at the top to take a diamond-set ridge (Photographs 41 and 54). The ridge is scarfe jointed at each truss (Photograph 36). A single line of overlapped purlins runs down the centre of each side (Photographs 45 and 51). All are trenched into the principal rafters and fixed with pegs (Photographs 33, 34, 39, 40 and 45). A number of timbers have been reused. Many of the purlins (Photographs 35, 44, 48 and 50) have mortices on more than two faces and may have been wall plates or mid-rails from earlier timber-framed structures. Both tie-beams show similar evidence of reuse (Photographs 32, 37 and 38). Notches in the upper faces of

the principal rafters are for an earlier positioning of purlins (Photographs 52 and 54) and possibly to take a wind brace (Photographs 31, 43 and 46). Carpenters marks were noted on some timbers. At either end of the roof timbers (the ridge and the purlins) were set into the gable walls.

Roof 2

4.3 Set over the north-west wing of the later building range, probably a barn (Photographs 2 and 6). At the south-west end the timbers are set into the gable wall; at the north-east end they are hipped where they form a corner with the end of Roof 3. The roof is divided into six bays with a braced kingpost truss at each division (Photograph 15). The soft-wood trusses are held together with iron strapping, nails and bolts. On each side of the roof are two lines of overlapping purlins, set on the upper edge of the principal rafters and held in place with triangular wooden wedges. The queen posts rise above the apex of the principal rafters to take a narrow ridge board. Common rafters run up to the ridge (Photographs 11 and 12). A diagonal set timber forms the hip at the northern corner (Photograph 13). The hip timber, common rafters and principal rafters are all nailed to a wall plate that sits over the top of the stone wall (Photograph 14). A valley is formed at the inside southern corner between Roofs 2 and 3 (Photograph 16).

Roof 3

4.4 Set over the north-east wing of the later stone building, the roof is of similar style to Roof 2 and was probably constructed at the same time. It is hipped at either end (Photographs 14 and 21) and has two lines of purlins to either side. The structure is supported on four king post trusses and four cross walls (Photograph 17). All principal and common rafters are nailed to the wall plate that sits on the top of the external wall (Photographs 18 and 24). Within the roof space at the south-east end was a length of line-shafting and belt-drive wheels (Photograph 19).

Roof 4

4.5 The final roof structure runs north-east to south-west along the south-east side. The roof is of nine bays and is of similar construction to Roofs 2 and 3. At the north-east end the hipped corner is tied into the wall plate that is attached to the wall top with iron strapping (Photographs 20 and 21). The roof is supported on a series of soft-wood king post trusses (Photographs 26 and 27) which in turn support two lines of purlins to either side (Phiotographs28 and 29). At the south-west end the purlins and narrow vertical ridge are set into the gable wall.

5. Conclusion

5.1 The timbers in Roofs 2 to 4 are all softwood, of the same king post design and appear to be of contempary build. The roof was almost certainly built at the same time as the walls that support it, around the middle of the 19th century.

5.2 Roof 1, over the detached building, appears to be rather older. The majority of the timbers are of oak. Those that are not probably represent more recent repairs. The lapped and pegged apex joints to the trusses appear to belong to the 17th century, although it is possible that the entire trusses have been re-used. The building below the roof structure may be late 17th century, more likely early 18th century. The re-used timbers that can be identified indicate use in a timer framed or half timbered building, not necessarily agricultural, but more likely so. It is therefore possible that the roof was constructed at the same time as the walls, making heavy use of timbers from an earlier building.

6. Acknowledgements

Photography
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Report
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Appendix 1
Rotherham Metropolitan Borough Council Brief

Appendix 2:
Photographic Register