

Report for  
**Mill farm, Mapledurham, Oxfordshire**

*Site Code: MDM-A*

*from*

The Medieval Peasant House in Midland England

by

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Fig. 1. View of the house from the east.

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***Oxbow Books***

**MDM-A: MILL FARM, MAPLEDURHAM, OXFORDSHIRE**

Grid reference: SU 6764 7777      Survey dates: 1992 and later      By: D. Miles

Illustrations:	Page
1. View of the house	1
2. Ground floor plan	2
3. View of roof during rethatching	3
4. Sections of trusses T1-T4	4-5
5. Halved joints in truss T1	6
6. Framing of the north end	6
7. The windbrace-purlin dovetail joint	7
8. The louvre base plate and louvre post mortice	8
9. Reconstruction of the louvre	8
10. The fireplace in bay III	9
11. Mill farm on the Blagrave map of 1587	10

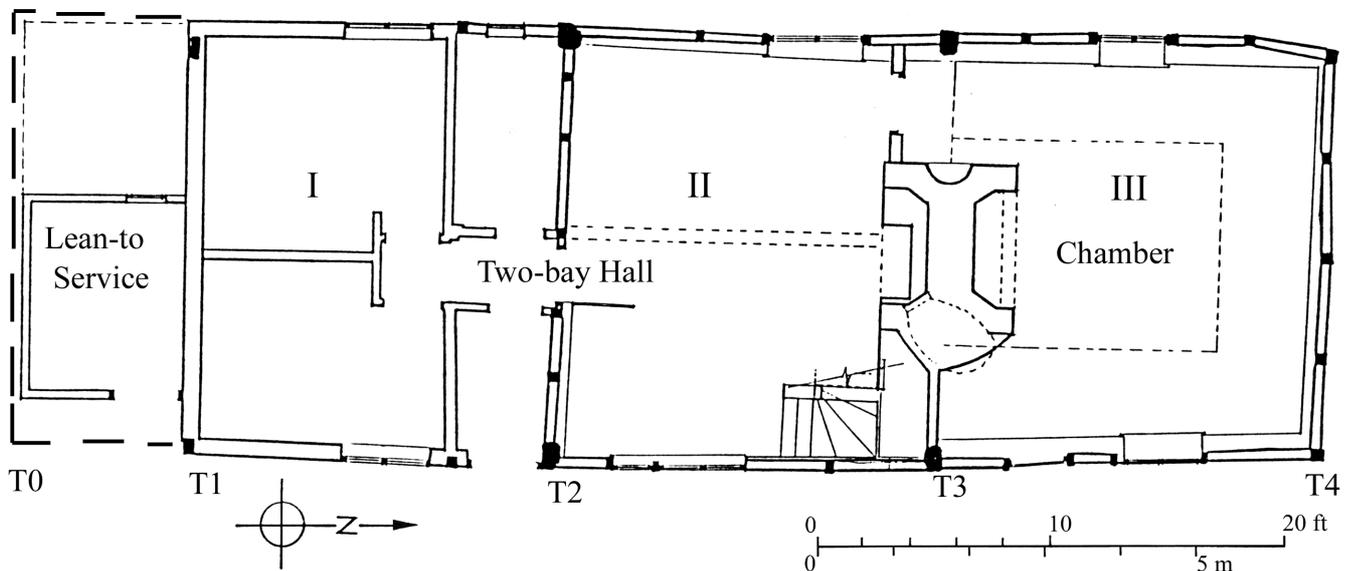


Fig. 2. Plan, showing truss and bay numbering.

**ARCHITECTURAL DESCRIPTION**

**SUMMARY AND HISTORICAL DEVELOPMENT**

PHASE 1: Mill Farm stands on an isolated site, facing east (Fig. 1, 11). The house is of three bays, although as built it had an additional lean-to half-bay at the south end (partitioned off in 1445/6 and later removed). Samples from trusses T2 and T3, plus the roof structure, have been tree-ring dated to 1335. As well as this early date, the house is of particular interest due to its mainly unaltered state. The original house was fully single-storeyed, the two southernmost bays (bays I and II) being the open hall, bay III (north) the chamber and the removed bay 0 a small service space (not divided from the hall). The chamber was partitioned off from the open hall by truss T3, a closed truss. It is not possible to determine the original door position, but the house now has external doors into bay III just north of T3 and bay I just south of T2. Both these doors were probably in position by the eighteenth century. The drawing of the house in 1587 (Fig. 11) shows a door towards the southern end of the house, in either bay 0 or bay I.

Three cruck trusses remain. The arch-braced open truss (T2) has a short king post standing on a saddle (type 'F1' apex) and the closed truss (T3) has a saddle apex (type 'C'). Cruck truss T1 is now at the end of the house but was previously internal. It is half-hipped and was originally open below the collar which carried the lean-to rafters of the removed bay 0. The other end truss (T4) is box-framed, with posts and a tiebeam in reversed-assembly, giving a fully hipped end to the house. The end truss of bay 0, beyond T1, was no doubt of the same form as T4, giving the house an overall fully-hipped profile.



Fig. 3. View of Mill Farm during re-thatching in 2004.

Elements of the smoke louvre survive, just south of T2. Soot blackening is present in all areas of the roof, including the chamber end. It is particularly heavy on the upper faces of the purlins adjacent to the smoke louvre, although the ridge at the other end of bay I was almost clean.

An analysis of the use of timber in the house is presented in Chapter 5.

LATER PHASES: In 1446, the tiebeam was inserted in T1, and the lower part of the truss was probably infilled. In the late fifteenth to the early sixteenth century, a chimney stack was inserted just inside the chamber, serving two fireplaces back to back.<sup>1</sup> Later, probably in the seventeenth century, the northern half of the hall (bay II) was floored over. The chamber was also floored at some stage, as the brick stack contains beam sockets averaging about 5-6in wide. This upper floor would have been very dark and low, essentially only a loft, and by the seventeenth century it had been removed and this bay was plastered up to purlin level. The southernmost bay (I) has always been of one storey, with the smoke-blackened roof rafters only plastered over in the twentieth century. Possibly as late as 1900, the lean-to bay 0 was removed and a brick and tin outhouse constructed on part of its footprint; truss T1 was then covered in weatherboarding. The cottage was re-thatched in 2004, and the opportunity was taken to photograph the surviving roof timbers (Fig. 3 and other detail photographs).

### STRUCTURAL FEATURES

PHASE 1: The structure consists of three bays with three cruck trusses, the northernmost truss being boxed framed (Figs. 4(a)-(d)). Each bay measures approximately 15ft 6in long between the trusses, and externally the building is 18ft wide. The southern truss, T1 carries a half hip, whose profile was almost certainly continued by the rafters of the lean-to bay 0. As it exists now, it would be classified as a type 'V' cruck (truncated end truss), but originally it would have been of type 'W' (truncated internal truss). The truss carries a primary collar, strengthened by straight braces, and the crucks terminate above this. The collar is attached with an early type of skew-pegging and the braces use notched halvings (Figs. 5a-b); the present tiebeam was added in 1446. The whole roof structure here is deformed, with this truss par-

<sup>1</sup> The date is assigned from the brick sizes. Nathaniel Lloyd (1925) *History of English brickwork*, London, H G Montgomery.

ticularly affected, as a result of the western corner subsiding by almost two feet. The rafters of the half-hip are now supported by an early twentieth century strut.

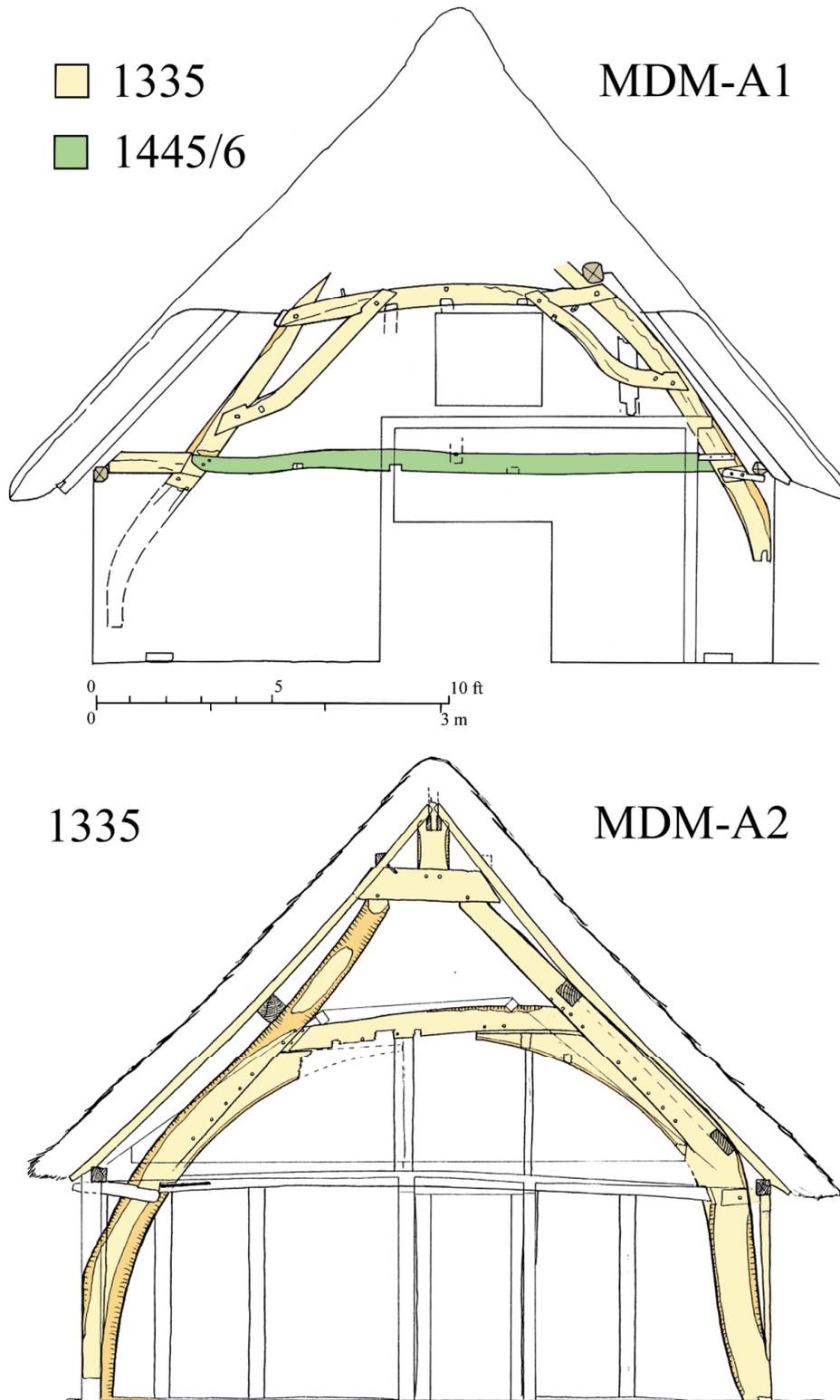


Fig. 4a-b. Sections of trusses: (a) T1, from south; (b) T2, from south.

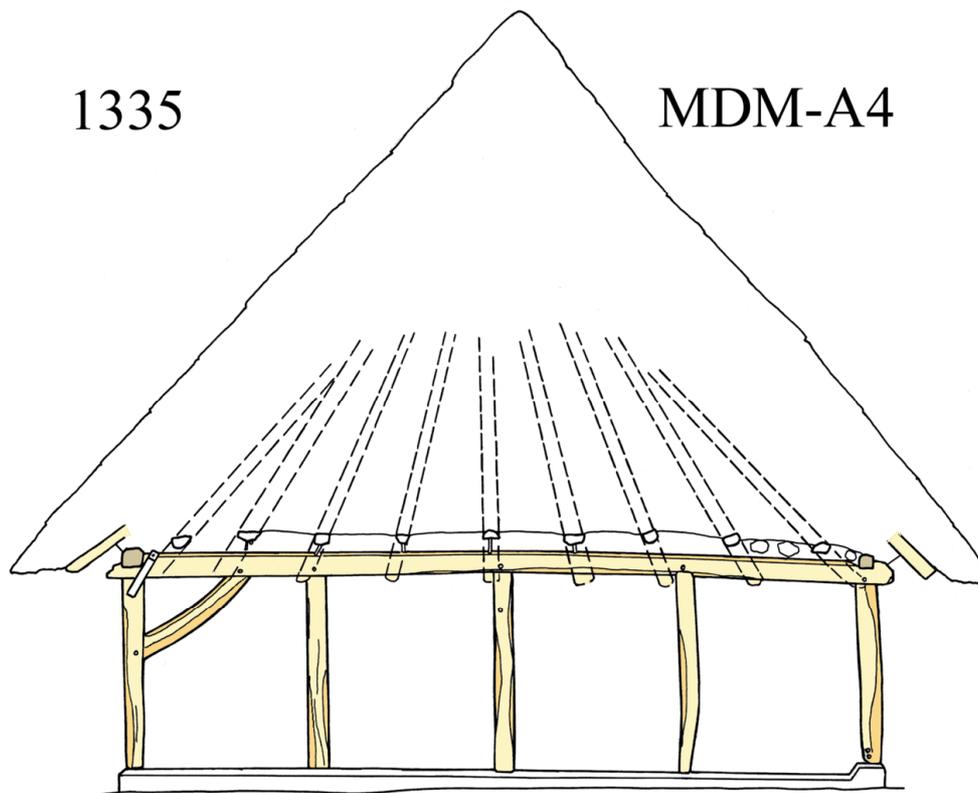
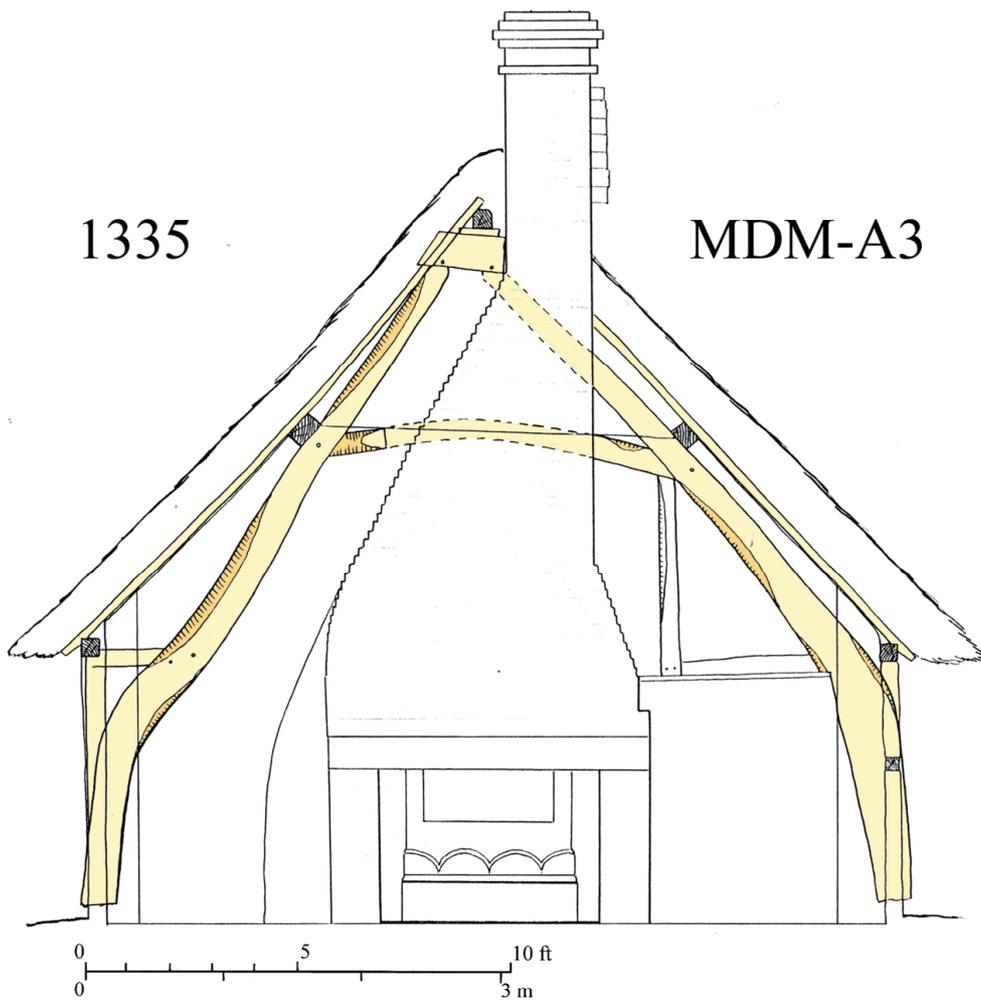


Fig. 4c-d. Sections of trusses: (c) T3, from north; (d) T4 from north.



Fig. 5. Joints in truss T1 (left) notched-lap joint (refined entry) between cruck and brace; (right) halved joint between collar and cruck

Truss T2 is an open truss with the rear blade being of elm and the front one of oak. Both have been dated and are coeval. The blades are 10in deep at the bottom, tapering to 6in at the top. They are joined by a saddle carrying a king-post to support the ridge (type 'F1' apex). The saddle measures 6 by 10-11in, and the king post is 10in wide by 4½in deep, with run-out chamfers on all four arrises. The two arch braces have 1¼in chamfers, and the western brace has been mutilated at some stage. The collar is tenoned into the cruck blades and measures 8in wide by 4in deep. The crucks have cruck studs outside them which are notched into the back of the crucks and rise to meet the short cruck spurs (halved onto the blades).

Truss T3 is a closed truss with a collar and tiebeam, both jointed into the cruck blades with half-lapped joints. Most of this truss is now incorporated into the chimney stack. At the front, it retains a similar cruck stud to that in T2. The end truss T4 is box-framed with a full hip and is clearly part of the 1335 work. The roof in this bay is smoke blackened although the soot deposits are considerably lighter than in bays I and II. The truss has two 5½ by 6in corner posts and uses reversed assembly, the elm tiebeam resting directly on the corner posts with the wall plates, again of elm, being trenched into the top of the tiebeam. This end wall has the best preserved of any of the original framing (Fig. 6). The framing comprises three studs, the sill beam and one brace which is slightly ogee in shape and is flush with the external face of the truss. The studs are 5½in wide, the tiebeam 6½in square and the brace is about 4½in square. The panels still retain what may be their original wattle-and-daub infill.



Fig. 6. Framing of the north end of the house.

Little can be discovered of the front and rear wall-frames. Although the wall plates exist for the entire length of the house, they are either obscured by plaster, or by the brickwork which replaces most

of the external walls in bay I. Bay III has two studs in the rear wall frame which may be original. Immediately above these is a secondary wall plate fixed to the outside face of the rear wall plate. This appears to be a reused rail or tiebeam with rectangular stave holes in the underside; it measures 4½ by 5½in and is unlikely to come from the present structure.

Most of the primary roof structure survives intact (Fig. 3). The ridge is 5in square in section, with the top inch being chamfered to give a seating to the rafters. It is in three lengths, with face-pegged splayed scarfs immediately to the north of trusses T2 and T3. These joints, combined with a similar scarf in the front wall plate immediately north of T2, indicate that the order of erection was from south to north. The purlins are of substantial section, averaging about 6 by 8in. They are lodged on the backs of the crucks, either on packing pieces or housed into the backs of the blades. A notable exception is that the purlins are butt-jointed (with bare faced soffit tenons) into the eastern blade of T2. Windbraces are still in place on the east side of bay I. They are ogee in shape, measuring 6 x 3in, and have notched lap joints into the top of the purlins (Fig. 7). The windbraces on the western side of the bay have been removed, as have those in bay III, if they ever existed. The purlins and rafters in bay II are plastered, concealing any windbraces which might exist.



Fig. 7. The windbrace-purlin lap joint, on the east side of bay I.

An interesting roof feature is the pair of mortices in the wall plates to the south of the hip end wall (T4). These received diagonal braces which rose to meet the ends of the purlins which extend into the hip-end bay from T3. Thus, they supported a fully-hipped roof without the need for an intermediate truss, as was used at AST-A (p. 163).

The roof seems to have been almost completely stripped and rethatched in the late medieval period, when many of the original rafters which measured approximately 3-4 by 2-2½in were replaced with much larger ones (about 7 by 2½in). Although the east and west sides of bay III were spared this rebuilding, the north hip and the whole of bays I and II were overhauled, resulting in only about ten original rafters remaining in bay II, and twelve in bay I. A number of smoke blackened thatching laths also remain over bay III. For the fully hipped roof of the northern end, the rafter pair at the top of the hip carries *two* yokes, one clasping the ridge piece, and the other set about 10in below it, on which the hip rafters are fixed. The present hip rafters, most of which are probably late medieval replacements, are hooked over the lower yoke.

A particularly intersecting feature is the substantial evidence for the original smoke louvre.<sup>2</sup> The louvre is located immediately to the south of the open truss (T2) and, as in other houses where we have

<sup>2</sup> Although a number of other houses have evidence for the position of the louvre, this is the only building in over a hundred inspected for this project in which a louvre base plate survive, and the only one with evidence for ridge posts.

evidence of the louvre position (cf. Pithouse Farm, Mapledurham, MDM-B; Kingsholm, East Hagbourne, DID-B; The Leopard, Bishop's Tachbrook, BIT-A), it was fixed to the rafters, about 18in down from the ridge (Figs. 8a-b). The evidence for its reconstruction is examined in Chapter 5, and Fig. 9 shows its suggested original form.



Fig. 8a-b. The louvre at Mill Farm, Mapledurham (MDM-A, 1335): (left) View of the louvre base plate. The fractured tenon of the ridge post can be seen behind the right-most front rafter, and the empty mortice is concealed behind the left-most rafter; (right) View of the ridge at Mill Farm, showing the empty mortice of the louvre post.



Fig. 9. Reconstruction drawing of the louvre at Mill Farm, Mapledurham (watercolour by Lynn Courtenay based on a sketch by Nat Alcock).

LATER PHASES: The principal later work comprises the reconstruction of truss T1 in 1446, discussed above, and the insertion in about 1500 of the chimney at T3, which severed the tiebeam and collar, and truncated the saddle (Fig. 4c). This chimney is built of narrow bricks (9½ by 4½ by 2in), and it serves back-to-back fireplaces in bays II and III. That in bay II is closed in, but in bay III the fireplace has been opened up to reveal a fine scalloped shaped fireback in moulded brickwork (Fig. 10). The jambs are splayed and the chimney breast is supported on a reused timber beam (inserted in the 1980s). A short section of the original timber mantel beam is visible to the side of the bay II fireplace. The chimney stack has an unusual protruding vertical band of bricks at the position of the dividing wiff (flue partition). To the west of the stack was a semi-circular recess for a copper, and to the east a bread oven, probably early nineteenth century, which collapsed in 1979 and was removed.



Fig. 10. The fireplace in bay III.

Bay II was floored rather late, probably in the seventeenth or eighteenth century, judging from the 7in wide axial beam with 1in chamfer and run-out stops. The joists are of elm, 3 to 4in deep. Perhaps at this stage (possibly earlier) the open truss (T2) was infilled with wattle and daub, both above and below an inserted tiebeam. Above the collar, only the side facing bay II was finished, with the space above the wall plates in bay I sealed off.

Most of the panels in the longitudinal walls were replaced in brick in the eighteenth and nineteenth centuries save for one rear panel immediately to the south of T3 which retained its wattle and daub until 1984. The walls of bay I were reconstructed in 9in brickwork in the early twentieth century.

## DENDROCHRONOLOGY

For dendrochronology abbreviations see page facing Introduction.

*Sampling Comments:* Seven samples were taken by D Miles in March 1990, all as cores from timbers considered to be original. One sample was of elm and the others had fairly short, wide ring sequences. Despite the unpromising nature of the samples, these were processed in the usual manner at the Ancient Monuments Laboratory of English Heritage and all the samples were matched together visually, with the elm sample matching the others particularly well. This site master was then cross-matched against other local and national reference curves and a single strong date was found at 1335. The shortness of the individual samples combined with the resultant low *t*-values for matches with each other here illustrates the importance of visual cross-matching as an adjunct to matching by computer. Since this building has been dated in a different laboratory by somewhat different methods to the main project sites, no confidence level is given, but the quality of the match corresponds approximately to category 2. Sample

MDM5.01 is of elm and it was not possible to distinguish heartwood from sapwood on seasoned timber, therefore no value is given for Sapwood Rings or LHR Date. This sample matched very well with the other samples and was included in the site master. Sample MDM5.08 was taken in Summer 2010 from the inserted tiebeam in truss T1.

TREE-RING SAMPLE RECORD AND SUMMARY OF DATING

Sample Code	Total Sample Location	Sapwood Rings	FMR Rings	LHR Date	LMR Date	LMR Date
MDM5.01	Rear cruck blade T2 (Elm)	43	C	1292	—	1334
MDM5.02	Collar T2	24	9	1310	1324	1333
MDM5.03	Front cruck blade T2	33	0	1284	1316	1316
MDM5.04	Rear cruck blade T3	51	14¼C	1284	1320	1334
MDM5.05	Collar T3	40	15¼C	1293	1319	1334
MDM5.06	Front (East) purlin bay III	30	10	1304	1323	1333
MDM5.07	Rear (West) purlin bay III	34	2	1291	1322	1324
MDM5.08	Inserted tiebeam T1	83	17C	1363	1428	1445

Site sequence MDM5: (composed of samples 01-07), 51 rings long dated to 1284-1334 with *t*-values of 7.08 (Oxford Mean), 6.27 (Lewknor), 6.26 (Zacharias\*), 5.83 (Queen’s Head\*), 5.1 (Reading). (masters included in Oxford Mean marked with \*.) Sample MDM5.08 83 dated to 1363-1445 with *t*-values of 7.17 (HALL); 5.53 (KLYNN\_SG); 5.42 (SHALFORD).

Felling dates: **1335** (samples with last measured rings complete to bark: MDM5.01 October 1334-March 1335; MDM5.04 about March 1335; MDM5.05 between April-May 1335); **Winter 1445/6** (sample MDM5.08 with last measured ring complete).

DOCUMENTARY HISTORY

The documentary history has not been extensively investigated, although the Mapledurham estate archives undoubtedly contain much information about the house. It is clearly shown on the Blagrave map of the Mapledurham estate in 1587, in a bird’s-eye view from the west, when it was in the tenure of Richard Page (Fig. 11).



Fig. 11. View of Mill Farm on the Blagrave map of 1587 (at Mapledurham House, reproduced with the kind permission of Mr J.J. Eyston).