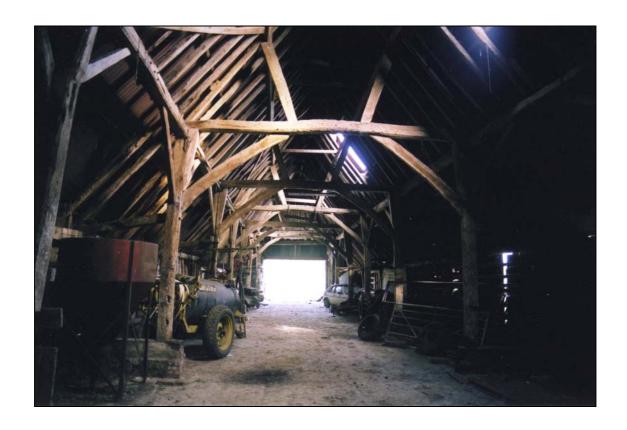
SHEERING HALL BARNS, SHEERING ESSEX HISTORIC BUILDING RECORDING AND ARCHAEOLOGICAL MONITORING





Field Archaeology Unit

November 2007

SHEERING HALL BARNS, SHEERING ESSEX

HISTORIC BUILDING RECORDING AND ARCHAEOLOGICAL MONITORING

Signature:
Date: 9th November 2007
Signature: Date: 9th November 2007

Document Ref.	1676rep
Report Issue Date	9th November 2007
Circulation	Mrs J. Tasker
	ECC Historic Environment Management
	Essex Historic Environment Record

As part of our desire to provide a quality service, we would welcome any comments you may have on the content or the presentation of this report.

Please contact the Archaeological Fieldwork Manager at the

Field Archaeology Unit

Fairfield Court, Fairfield Road, Braintree, Essex CM7 3YQ
Tel: 01376 331431
Fax: 01376 331428

Email: fieldarch@essexcc.gov.uk

© Field Archaeology Unit, Essex County Council, c/o County Hall, Chelmsford Essex CM1 1LF

CONTENTS

1.0 INTRODUCTIO	N
-----------------	---

- 2.0 BACKGROUND
- 2.1 Site location and description
- 2.2 Planning background
- 2.3 Farming in the medieval and post-medieval periods
- 2.4 Archaeological and historical background
- 3.0 OBJECTIVES
- 4.0 DESCRIPTION OF WORKS
- 5.0 HISTORIC BUILDING DESCRIPTIONS
- 5.1 General description
- 5.2 Barn 1
- 5.3 Barn 2
- 5.4 Wagon lodge 3
- 5.5 Former stables 4
- 6.0 RESULTS OF ARCHAEOLOGICAL MONITORING
- 7.0 DISCUSSION AND PHASING
- 8.0 CONCLUSION

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

APPENDICES

Appendix 1: Contents of archive

Appendix 2: EHER Summary

FIGURES

- Fig. 1 Site location and block plan
- Fig. 2 Chapman & Andre map of Essex, 1777 (plate 11
- Fig. 3 Sheering tithe map, 1839 (D/CT 313B)
- Fig. 4 First Edition 6" OS map, 1884 (sheet 41)
- Fig. 5 Second Edition 25" OS map, 1897 (sheet 41.3)
- Fig. 6 Barn 1 floor plan
- Fig. 7 Barn 1 East wall internal elevation
- Fig. 8 Barn 1 West wall internal elevation
- Fig. 9 Section A-A1 across early barn
- Fig. 10 Section B-B1 across later barn
- Fig. 11 Barn 2 floor plan
- Fig. 12 Section C-C1, Barn 2
- Fig. 13 Wagon lodge floor plan
- Fig. 14 Section D-D1 through wagon lodge
- Fig. 15 Plan of Stable 4
- Fig. 16 Areas of archaeological monitoring

PHOTOGRAPHIC PLATES

Plate 1 Barns & wagon lodge viewed from east
Plate 2 Barn 1 viewed from north-west
Plate 3 West elevation of barn 1
Plate 4 Barn 1 porch
Plate 5 Rear, south elevation of barn 1
Plate 6 Interior of barn 1 from 1a to south gable wall
Plate 7 Interior of barn 1 from 1b to north gable wall
Plate 8 internal bracing in barn 1a
Plate 9 Primary bracing and plastered panels in barn 1b
Plate 10 Partly rebuilt north wall in barn 1a
Plate 11 Former motor and drivebelts for grain processing in barn 1a
Plate 12 Belt rack and motor in butt-purlin roof in barn 1a
Plate 13 Comparison of two builds at southern end of barn 1a
Plate 14 South-east elevation of barn 2
Plate 15 Barn 2 & wagon lodge viewed from east
Plate 16 South-west elevation of barn 2
Plate 17 Interior of barn 2a
Plate 18 Interior of barn 2b
Plate 19 Reused wall plate connecting aisle plates in barn 2
Plate 20 Edge-halved and bladed scarf joint connecting two builds in barn 2
Plate 21 Comparison of two builds at intersection of barns 2a & b
Plate 22 South-western wall framing, barn 2a
Plate 23 Framing in north-east bays of barn 2b
Plate 24 Interface between barn builds 2a & 2b
Plate 25 Wagon lodge viewed from north-east
Plate 26 Wagon lodge viewed from south-west
Plate 27 Interior of wagon lodge viewed to south
Plate 28 Interior of wagon lodge viewed to north-east
Plate 29 Remains of former stables incorporated into pig shed, viewed from east
Plate 30 Interior of building 4 viewed to south
Plate 31 Original king post roof truss
Plate 32 Gault brick floor in former stall

HISTORIC BUILDING RECORDING & ARCHAEOLOGICAL MONITORING AT SHEERING HALL BARNS, SHEERING **ESSEX**

Client: Mrs J. Tasker

FAU Project No.: 1676

Site Code: SHESH 06

NGR: TQ 4961 1292

OASIS No.: essexcou1-29403

Planning Application: EPF/0598/06

Dates of Fieldwork: November 2006 & May 2007

1.0 INTRODUCTION

A programme of building recording and archaeological monitoring was undertaken by Essex County Council Field Archaeology Unit (ECC FAU) on two Grade II listed aisled barns and curtilage listed buildings at Sheering Hall, prior to conversion to residential usage. The work was commissioned by the owner, Mrs J. Tasker, and carried out in accordance with a brief issued by the Historic Environment Management team of Essex County Council (ECC HEM), who also monitored the work.

Copies of the report will be supplied to ECC HEM and to the Essex Historic Environment Record (EHER) at County Hall, Chelmsford. The archive will be deposited with Epping Forest

District Museum. An online OASIS record has been created.

The farm structures stand to the east of the hall and comprise the following, based on list descriptions and results of the survey:-

Barn 1: Aisled barn built c.1600, incorporating a reconstructed medieval barn

• Barn 2: 17th-century aisled barn with two-bay extension

Wagon lodge 3: Early 18th-century, with 20th-century alterations

• Former Victorian stables 4 rebuilt as 20th-century pig shed

Of the existing four buildings, only buildings 1 and 4 are to be converted at the present time.

The other two are still in agricultural use and it is intended they will be converted at a future

1

date (J. Tasker pers. comm.) As the latter two structures were still in good condition and architects drawings (floor plans and sections) were available from a previous planning application, the opportunity was taken to record all the structures together.

2.0 BACKGROUND

2.1 Site location and description (fig.1)

Sheering Hall is situated to the south-west of Sheering village, along Sheering Road toward Harlow (TQ 4961 1292). The barns and hall are reached by a long gravel driveway on the south-east side (fig.1).

The barns are situated on high ground to the north of the hall and separated by a farm trackway that leads over the Pincey Brook bridge. The surrounding landscape is arable in nature, bisected by the M11 Motorway to the north east. The house is Grade 2* listed and comprises a 'unit system' group of a 15th-century Wealden house (rare in Essex) and early 16th-century hall house (LBS 118249). The list description is extensive.

The farm buildings are arranged in a roughly west to east line. All except the modern structure 4 are timber-framed and aisled and in very good condition. The most important of these is barn 1 (LBS 118250), dated to c.1600, whose northern bays, according to the list description, are built around a reconstructed medieval aisled barn. Barn 2 is also listed (LBS 118251) but has a less-specific 17th-century construction date (Listed Buildings Online). The wagon lodge is surprisingly not listed and probably dates from the 18th-century or earlier. The fourth structure is a 20th-century pig shed, which contains remnants of a probable 19th-century stable, the only surviving element of the 19th-century planned farm.

Aisled buildings were a method of constructing large structures from limited lengths of timber, common on large farms with large acreages for crop storage. English oak rarely provides lengths of over 7m (Padfield 1998). The aisles formed enclosed 'lean-tos' either side of the nave, effectively doubling the internal space. Most of the existing c.90 timber-framed halls in England and Wales date to the medieval period, but its use in barns continued well after in East Anglia, southern England and areas of Yorkshire. In some cases in Kent and East Anglia, the tradition carried on into the 19th-century (Harris 1993).

The land falls to the north and east to the floodplain of the Pincey Brook (fig.1), and then rises toward the M11 motorway to the east. The surrounding farmland is undulating and

planted with oil seed rape. Beneath the ploughsoil, the natural geology is a mix of clay sand with clusters of flint whose level varies across the site depending on the natural contours of the land. A system of earthworks to the south of the hall may belong to an earlier moated site predating the hall.

Apart from the barn awaiting conversion, all the structures detailed within this report were occupied and in good order at the time of the survey. Barn 2 contained several cars/tractors/farming implements and the wagon lodge many more, but not enough to impact greatly on the recording process. The areas around the barns are grassed over, thus obscuring evidence of earlier yard surfaces or divisions.

2.2 Planning background

Epping Forest District Council received a planning application for conversion of the main barn 1 and pig sty 4 to residential usage in March 2006: The main element, the barn, is intended as family accommodation, while the rebuilt 20th-century structure 4 will be reinstated as a garden store. The other barn and wagon lodge are still in agricultural use.

Mindful of the possible effects on the historic integrity of the farm structures and impact on any below-ground archaeological remains, the ECC HEM team attached a full archaeological condition to the planning permission, based on advice given in Planning Policy Guidance Note 16: Archaeology and Planning (DOE 1990). Initially the work was to focus on barn 1 and building 4 but, after contact with the client, it was decided to incorporate the other two structures into the study so they could be considered as an integrated whole. This was mutually agreed between the client, FAU and HEM. Depending on the results of the archaeological monitoring around barn 1, additional monitoring would be carried out on the other two structures when appropriate. The results of any subsequent monitoring works would be issued as an addendum to the main report.

2.3 Farming in the medieval and post-medieval periods

Medieval farm buildings tended to adopt an unplanned plan form, scattered around the farm house rather than around a central courtyard. Farms in the south-east of the country were generally 'mixed', producing cereals and livestock and consisted of a barn, where crops were threshed and stored, granary to store the grain (or farmhouse) and stable, built with internal hay lofts. Except for the horses, animals were kept outside or in temporary shelters. Implements (ploughs, etc) and wagons were stored in sheds or on the threshing floor of the barn. Arable and livestock farming were mutually dependent on each other. Cereals were

produced as a cash crop and for animal feed. In return the animals provided transport, power, manure for the crops, and wool, meat and dairy products.

In the late 17th century, improvements in crop rotation, with the introduction of improved grasses and winter feed crops, heralded the end of the medieval three field system. Improvements in animal husbandry meant larger animals could be bred and increased winter feed meant that more could be kept for fattening.

Agricultural improvements led to the establishment of larger, more efficient farms. From the 1740s, the courtyard 'planned' or 'model' farm, established by improving landlords, began replacing the earlier scattered farmsteads. Cattle were fed in one or more enclosed yards, usually with an entrance to the south and a barn to north for shelter. In the yards manure was trod into threshed straw and the mixture added to the fields, further increasing crop and straw yields.

Such improvement accelerated between 1840 and 1870, the period known as the 'Golden Age of Agriculture,' based on an increased demand for milk, meat and bread by the urban centres, aided by the growing railway network for distribution purposes. New planned farms were established on the courtyard principle and others were adapted to incorporate philosophies on efficiency based on the Victorian factory system. Great debate was had in influential circles on the merits of different husbandry techniques and efficiency/labour saving devices to increase productivity.

The expense of the planned model farm in its purest form was a barrier to smaller landowners. So, rather than demolish and build afresh, many farmers remodelled their farms utilising the courtyard system. Like at Sheering Hall, the larger buildings, inevitably barns, were retained, with new housing for livestock inserted around the existing farmyard. This was the prevailing trend in Essex.

The golden age came to an end in the 1870s with bad harvests and competition through cheap imports of American grain and refrigerated beef from Argentina. With protectionism a thing of the past, farmers survived by cutting costs and improving efficiency still further. The worst of the depression was over by the end of Victoria's reign, but continued to inhibit agricultural prosperity until after the First World War.

Many Essex farmsteads today are composites of post-medieval buildings (barns) integrated into a 19th-century courtyard layout and supplanted by 20th-century pre-fabricated structures, usually to one side of the traditional farm core. Inevitably in Essex, Britain's entry

into the EEC in the 1970s accelerated the move to more intensive agriculture, amalgamation of estates and a shift away from mixed to arable farming. With larger economies of scale through larger machinery and crop yields, the smaller traditional farm buildings no longer have a role and in a booming economy, alternative uses are sought through conversion.

2.4 Archaeological and historical background

Cartographic and documentary research at the Essex Records Office (ERO), Chelmsford, was undertaken to understand the development of the farm within the context of the hall and surrounding area. Information on the archaeological background of the site was obtained through the Essex County Council HER. The full results are presented below.

Finds of prehistoric and Roman date have been found within the vicinity of Sheering Hall (ECC HEM 2006), pointing to occupation of the landscape during these periods.

The parish was known as 'Sceringa' in 1086, at the time of the Domesday book, possibly deriving from a personal name (Reaney 1967) in the Saxon period. After the Conquest, the manor of Sheering and Sheering Hall, comprising 30 acres, passed to Peter de Valognes.

In the medieval period, the manor was held by the Fitzwalter family (1290-1505). A medieval moat to the south of the hall (EHER 3597) is associated with an earlier hall or farmstead; the present hall stands on its north-east arc. A moated chapel (EHER 3596) formerly stood to the north-west of the hall. Both are shown in fig.5.

The Grade II* listed Wealden house was constructed under the ownership of the Fitzwalter family in the 15th century on the north-eastern arm of the moat (EHER 3597). In the 16th-century the remainder of the hall was constructed, most likely under the Radcliffes, Earls of Sussex (VCH 1983), whose stewardship (1505-1617) probably covers the dates when the two barns were built. Being a wealthy landowning family, living at the heart of a medieval manor, the resources would have been there to expand the farming estate and provide barns to cope with the increased yield.

Chapman and Andre's 1777 map of Essex (fig.2) indicates the hall with some clarity, but less attention is given to the post-medieval farm. Some structures may be inferred to show the core of the farmstead around an enclosed yard. However the main elements, the two barns, are indistinct. The wagon lodge is not included on the map, even though it is likely to have been built by this time. No other discernable detail may be inferred.

Following a series of residents during the 17th and 18th-centuries, the hall came under the ownership of the Glyn family in the 19th-century. Plenty of map evidence survives from this period to show the layout and acreage of the farm during the agricultural 'Age of Improvement'. To begin with, the Sheering tithe map of 1840 (fig.3) shows the barns and wagon lodge incorporated into a new courtyard layout. The two barns are linked by a range to enclose a yard, with another to the east defined by barn 1 and a range adjacent to the brook. The tithe award (D/CT 313A) shows the hall to be owned by Mrs Henrietta Glyn 'and others', and occupied by the executors of Peter Pavitt esq. A holding of 251 acres is recorded, the majority of which is arable (c.200 acres), with a rent of £81 p.a. due to the Rector.

The first edition Ordnance Survey map of 1884 (fig.4) shows further evidence of 'improvement' with the addition of structures attached to the north ends of the two barns. The latter forms a second yard divided from the early-Victorian site layout (fig.3) by an open-sided cattle shed facing both yards (fig.4). Some of the east range buildings are no longer present. However, by the time of the second edition OS map of 1897 (fig.5), the eastern range has been rebuilt along with a canted range to the north-west. They are shown enclosed and may have been stables and loose boxes. Areas of walling and floor remains incorporated into building 4. The square structure built onto the end of barn 2 was probably a granary with an open shed attached. The wagon lodge is clearly shown as open-sided on the map and there are sties attached to the east side of barn 1 that have been recently demolished. In all then, at the height of the Golden Age of Agriculture, the plan form was centred on three enclosed yards, based on the more haphazard layout established by the two early barns and perhaps the fall of the land to the east and north-east which would impose natural limitations. A circular trackway leads, as it does today, from the main road and out across the fields to the north-east.

The farm retained its layout until after the end of WWII, as shown by the OS provisional edition of 1948 (sheet 42SW, not included). After this date, all but two of the Victorian farm buildings were removed. The only one still standing, part of the east range, was rebuilt as a pig shed in concrete blockwork.

When the farm was bought in 1970 by the client's father, the barns had undergone some refurbishment. The thatched roofs had been replaced with modern corrugated plastic sheeting and wall fabric removed to form large entrances for farm machinery (perhaps). Until recently, the main barn, barn 1, was used for grain processing/storage, evidenced by the odd remnants of machinery, whilst the second barn and wagon lodge are still being used to store

farm machinery and other items. The farm is currently worked by Mrs Tasker's brother, based at Housham Hall (Hudspith 2003).

3.0 OBJECTIVES

3.1 Building recording

The purpose of the historic building survey was, as outlined in the brief (ECC HEM 2006), to investigate and record the traditional farm buildings to RCHME level 3 standard prior to conversion. As the development comprises two or more stages, potentially lasting several years, it seemed better to record all built elements together in order to understand the group as a whole. Due to its more recent age, the modern addition (building 4) was recorded to a lower level, although it is clear it retains some 19th century fabric. It is hoped that as the development progresses, frame surveys of barn 2 and the wagon lodge will be provided for inclusion in the archive.

In addition, the survey was required to consider the following: plan form of the site, materials and method of construction, building chronology, development and phasing, function and internal layout and any surviving fixtures and fittings relating to original function or change of use. The record also aimed to provide information with which to consider the context of the farm within its immediate contemporary layout.

3.2 Archaeological monitoring

The aims of the monitoring work were to examine below ground evidence for medieval occupation in and around barn 1 to assess its development and that of the wider farmstead.

The contractor's excavation of service and underpinning trenches were monitored around the standing building as well as drain runs to the brook (fig. 16).

4.0 DESCRIPTION OF WORKS

Each structure was assigned a number and referenced to the phased block/location plan (fig.1). Copies of the architect's drawings were supplied by the client and used as part of the survey to produce annotated floor plans and sections of the structures to be converted. Barn 1 was the only structure to have had a full frame survey. The pertinent elevations are reproduced in the report (figs. 7 & 8) to enhance the understanding of the building, though

they were not a specific requirement of the brief. Important detail to aid understanding of the structure is indicated and labelled where necessary. Cross sections through the other main buildings are also shown within the report in addition to their plans.

External and internal architectural descriptions were made and the function of each building was assessed, along with its relationships to others in the agricultural environment. Any evidence of later adaption or change of use is included in the appropriate description and discussion.

A series of photographs (digital, medium format and 35mm black & white print) were taken to record the buildings internally and externally. Specific shots were taken of any areas of important architectural detail, fixtures or fittings. A representative selection of all photographs is reproduced at the back of the report as plates 1-32. The remainder can be found in the archive.

Research was undertaken at the Essex Records Office and HER to understand the origins and development of the buildings within their agrarian environment. The results are presented in section 2.4.

5.0 HISTORIC BUILDING DESCRIPTIONS

5.1 General description

The buildings are arranged roughly west to east across the edge of the valley (fig.1). The wagon lodge and barn 2 stand to the west of the farm, with the wagon lodge open to the trackway. Spatially the two form their own group. A modern crate shed is attached to the barn within the main yard between barns 1 and 2, which is now overgrown. Demolished concrete stalls stand on the eastern side of the main barn, terraced into the natural slope, which are now largely demolished. Further to the east, on the floodplain of the brook, stands a modern pig house that is built on the ground plan of a 19th-century farm building. All the main historic structures, the two barns and wagon lodge (plate 1) are timber framed and weather-boarded, with modern corrugated plastic roofs that have ensured dry interiors.

The stock yard between barns 1 and 2 is bordered by an ivy-covered wall to south, against the access road to the hall that was probably also a droveway to pasture. The yard is overgrown. There has been very little in the way of modern built impact on the farm. The large interiors of the two barns retain important medieval/post-medieval carpentry of a quite

complex nature and are difficult to date exactly. They reflect a considerable sized estate in the post-medieval period. The wagon lodge is also interesting. In all three of the main structures, the original built fabric and ambience of the historic structure survives.

5.2 Barn 1

Barn 1 is believed to contain some of the oldest structural elements of the farmstead. Certain constructional variations indicate the three northern bays belong to an earlier barn, interpreted in the list description as a reconstruction of a medieval barn. However, this interpretation is not as clear-cut as it could be, and the development of the barn remains something of an enigma.

The main barn stands centrally within the existing complex, aligned north to south. Originally its walls were daubed and the roof thatched. It is approximately 11x27.5m (c.2 by 5 chains) and laid out over six bays. The two builds are clearly marked as 1a and 1b on figures.6-8 and their features discussed in the following text.

The brick plinth, probably added in the19th-century, comprises large 9" handmade reds with crease marks, specific dimensions 225 x 110 x 70mm, laid in English bond in lime mortar. Brick size and the inclusion of occasional London stocks give a clear 19th-century date. As the same mixture is found on the demolished sties on the east side of barn 1 so a contemporary 19th-century date may be extrapolated.

A small 19th-century weather boarded shed with single pitch pantile roof is attached close to the south-east corner (plates 1 & 5). It appears from the map evidence to have been built onto the flint yard wall/sties (mid-late 19th-century) some time in the 20th-century, but would seem to be older.

At the time of the survey, the barn was clear and ready for the conversion works to begin. The concrete floor had been removed onto the natural subsoil and trenches dug to inspect the footings.

5.2.1 External description

Externally, the most obvious feature is the corrugated plastic-clad long and deep hipped roof with Perspex skylights on the western side (plates 2 & 3). The rafters inside are mostly original and indicate a 45° roof pitch of suitable steepness to carry thatch. The brick plinth that surrounds the barn is higher to the east,

On the east elevation, the ground falls away and the plinth is 2m-high, forming the rear wall of the 8-stall modern pig sheds here, terraced into the slope. Little of the shed remains apart from its concrete floor and inserted concrete block stall partitions (plate 1). A high double heck doorway stands towards the south end, perhaps indicating original ground level height (fig.6 and plate 1, left) before the sties were built. There are no cart doors on this side. Two 19th-century ovolo-style windows have been inserted into the weatherboarding at the northern end.

The short north elevation (plates 1 & 2) had a second structure attached to it in the mid-19th-century, but there are no outward signs evident now. The main entry door was boarded up during the survey for security reasons. It too has a slight canopy over. From the inside it is apparent that the door is modern, inserted into an earlier, although not, it would seem, original opening. Another inserted doorway stands to the east, partly obscured by vegetation (plate 2). A pitching hatch is located just below the roof hip. On such a large barn it is just as likely to be for light and ventilation as tossing the straw in from a cart.

The porch is located towards the south end of the west elevation (plates 3 & 4), opposite barn 2 (fig.1). Its off-centre position is due to it being contained within the shorter c.1600 bays rather than the wider rebuilt ones. The cart doors are typical 19th-century ledge and batten construction and open out onto the former yard above the threshing floor leap (plate 4). This kept the muck out from the yard, contained the grain and prevented livestock entering the barn during threshing. On this side the 19th-centurty plinth is fairly low, located on relatively even ground at only c.0.35m to the sill plate. There are no other features in evidence on this elevation.

The gable at the southern end has been partly rebuilt, although this is not apparent from the outside. A half-heck door stands roughly-central beneath a plain, quite ragged, boarded canopy. Beside it is a second opening blocked with weatherboarding (plate 5). A second canopy further up the ridge may be associated with a small central square aperture just below, the right size to carry a modern grain chute (plate 5) for easy transference.

5.2.2 Internal description

As previously stated, the barn comprises two similar but distinct elements brought together in one build. It would appear that three bays of a medieval barn (barn 1a) were rebuilt c.1600 alongside a new barn (1b). The two builds are built independent of one another using the similar techniques and joined in the middle by the arcade and wall plates. Apart from constructional variations, the timbers in 1b are simpler and lighter. Strangely, there is no

internal evidence for windows or vents to light the huge area inside, though there are rush light burn marks on the north-easternmost aisle post (fig.6).

Layout

The interior is laid out in six bays. Those on the northern side (1a, plate 6) are c.4.5m-wide, while the others on the south side (1b, plate 7) are considerably narrower at 3.5m. The midstrey, which is often for harvest-laden carts and for threshing, is wider at 5m and lies within the first bay of barn b. The porch is enclosed within the western aisle wand displays the same built characteristics as the rest. A single side door is positioned adjacent to the porch for general barn access. A second single door is positioned on the opposite wall, instead of corresponding cart doors. Later timber boarding now practically obscures the door from the inside, lined out to form a separate storage or livestock area in a later phase of development. Further panelling partitions the southern bay from the penultimate bay on the east side (fig.6) providing an enclosed area. The stud walls in the final two bays have lime plaster infill to the walls that may indicate a singular use to the whole eastern aisle south of the porch (fig.6). It seems unlikely the whole barn was plastered internally, as there are no further remains. Certainly, the penultimate bay was separated from the main area, as the sawn off ends of rails were recorded. Elsewhere it is likely that important evidence for layout and function within the barn has been lost.

Main framing

The main structure of the aisled barn is consistent to both builds (1a and 1b) and is fairly typical of medieval and post-medieval aisled construction. The main frame consists of braced heavy oak posts and beams. Both ends of the barn retain bark on major timbers, which would indicate that good wood was in short supply. Generally the size of timber, length and craftsmanship is better in the early side (1a), due perhaps to there being a good supply of English oak in the earlier period.

The bays are defined by trusses comprising arcade post, tie beam and queen post strut roof frame linked together by arcade plates run along the length of the barn. The posts have 'gunstock' jowls, making a broad platform to house the joinery to the arcade plate and tie beam. The earlier part has sharply-defined diagonal jowls whilst those in the later barn have a more square profile (plates 6 & 7). Arcade posts in 1a are between 25-30cm-wide, while those in 1b are narrower, at c.25cm. Wall plates and ties are a good 20cm square in the older part, while those in barn 1b are around 16-18 cm square.

The jowled arcade posts connect to the arcade plates and tie beams through slightly curved arch bracing. In addition, there are struts in the spandrels of the trusses of barn 1a (fig.9). This is an original and unusual feature, but not, as far as is known, a typically medieval one. The arch bracing continues downwards from the arcade post, through the aisle tie and onto the wall plate by shores, parallel to the roof line (fig.10). Shores replaced the passing brace of early medieval aisled buildings. Many complete shore sections are either missing or have been replaced with smaller timbers. In some cases, later short horizontal struts link between aisle post and principle rafter (fig.9). Both parts of the barn have secondary aisle ties parallel and above the main tie to carry purlins (fig.10).

Joinery

Commonly, the arcade plates are joined by a mixture of side-halved and bridled and edge-halved and bladed scarf joints (fig.6). The former is a later medieval technique of joining large structural timbers, dating from c.1370 up until the 17th century. The latter appeared in the 16th-century and is a common post-medieval form. The two were still used together in the 17th-century (Walker 1994). Ironically, there are as many of the earlier joint in the later part as there are in the earlier part, and visa-versa. This either shows the barns are closer in date than originally believed or else new plates were scarfed in when the earlier barn was reassembled, which is the more likely. Interestingly, the arcade plates of the two barns are connected by the earlier bridle scarf joint (figs.7 & 8, plate 13).

Most of the ground sill is hidden behind later render and the only scarf joint recorded was a bridle scarf in the older part of the building (fig.7). The sill in the old part is rotted but dry.

Wall framing

Much of the original wall framing survives in both halves of the barn, each conspicuously different and perhaps giving a more precise indication of dating. The earlier, northern end (1a) has a combination of close-studding and narrow internal bracing, in parts trenched into the studwork and nailed or simply nailed to the face. Both types are shown in plate 8, although the rebated brace on the left is missing. The internal trenched form can last from the late 15th-century well into the 17th century, but the use of nailed rather than pegged construction indicates the later date, when the barn was rebuilt. Some bays are rebuilt in modern, machine-sawn primary bracing (fig.6). The southern part of the barn (1b) is built of partly-pegged primary-bracing (plate 9), a form that developed in the 16th-century but became more widespread in the 17th and 18th-centuries.

On the north part, the existing braces and empty rebates and post mortices for former braces show a regular pattern to the eastern bays. The two bays on the west side have been rebuilt in 19th-century or later machine-sawn primary bracing, while the northern bay contains close, but not trenched studding (fig.6 & 8), the reason for which is unknown. The early studwork has a big variation in scantling between around 8 x14 and 11 x 8cm, with gaps of between 26 and 40cm per stud, with 8-9 studs in the wider bays. In barn 1b the studwork is of smaller scantling at c.10 x 9cm and slightly uneven at times, following the grain, but still fairly straight and true. Gaps between are somewhat shorter at c.32cm, but still vary. As the bays are narrower, there are only 8 studs per bay.

The southern gable end contains a neat close-studded wall in the lower register on the east side of the doorway (fig.6), that is more reminiscent of the early barn 1a (plate 6), although the narrower spacing is more like that of the later barn. The rest of the wall has been rebuilt in the 19th or 20th-century in machine-sawn softwood.

At the northern gable end, the crude jowls on the bay posts and primary bracing, amongst other things, show this wall was built with the later barn (plate 10). Again there is quite lot of replaced studwork, some of which is nailed to the beam with a diagonal tongue that reaches behind onto the outer face. This method is seen in later barns where wall plates have rounded profiles because younger timber is being used. Often these are combined with weather-boarded exteriors where a flush exterior was needed for fixing, hence the development of these tongues on studs in these instances.

Later developments/features

The main entry points on the north side are secondary, cut through original studwork, though this is not to say original openings have not been enlarged for modern usage. The main door here is modern and so is the smaller door. When the attached Victorian farm building stood at this end, the small door probably connected the two. The large doorway post-dates its demolition (post-1940s). The two events are most likely linked to the fitting of grain processing/transfer machinery inside the barn and the need for space to drive tractors into the barn. A small electric motor operated a belt-driven mechanism in the roof space, with bands passing through a wooden guide frame attached to the north bay tie beam (plate 10). There is no other evidence for grain processing apart from a motor in the ceiling (plate 12) and the small possible chute aperture on the south gable wall (section 2.1). Indeed, further evidence may have been stripped out with the floor along with features representing other associated activities.

Roof framing

Certain noticeable features are common to the roof trusses in barns 1a and 1b, namely the heavy queen struts and collars, which are pegged and tenoned to the principle rafters of each bay. In Essex, the use of the queen strut truss in barns appears to have emerged in the 16th century. In the case of barn 1, additional support is given by a high collar braced by soulaces pegged to the rafters (plates 6 & 13) at bay and half-bay intervals.

However, the roof-frames on each part are completely different. Barn 1a has a high quality medieval—style in-line tenoned-purlin roof (fig.9) while barn 1b has a simple clasped purlin roof (fig.10). The tenoned-purlin (also known as the butt-purlin) was used to prevent the rafters on large roofs, such as on aisled barns, from bowing by using heavy framing (similar to medieval wall-framing) to form the structure. Examples may be found in high-quality medieval structures in upland areas of England. Later on they are found in the lowland zones as an alternative to the clasped purlin roof (Harris 1993). In Essex therefore, they are seen as a post-medieval construction and Essex examples have staggered purlins, typical of the post-medieval period. The first known example is believed to be the re-built roof of the late 16th-century Cressing Temple granary, dated to 1623 (E. Watkin pers. comm.). In view of this the fact that barn 1a displays the in-line medieval form is highly unusual.

The purlins are in half-bay lengths, double-pegged and tenoned between thick principle rafters to form cross shapes (plate 12). The upper sections have curved wind bracing to prevent racking (figs.7 & 8). The roof timbers have heavy framing of medieval proportions compatible to the timbers used in the wall-framing below. Conversely, the clasped purlin roof of barn 1b is built from slightly slender, lighter timbers with no wind-bracing. Plate 13 shows the interface between the two builds.

Carpenter's marks

There are some interesting carpenter's marks on the older reassembled part of the building. Carpenters marks were made when the main parts of the barn were assembled in the timber yard, to ensure correct assembly on site, when the whole frame was secured with green oak pegs. In the case of Barn 1a, they are chiselled rather than scored, suggesting an early 17th-century or later date to the structure (McCann c.1980), which would suit its rebuilding. The sequence is rather hard to decipher as most of the timbers have been rearranged during the rebuild. Presumably only the best timbers were kept and others, perhaps rotten or even fire-damaged, were discarded and replaced. So the carpenter's marks in the reassembled barn do not always tally, which is often the case with such old structures. The best example is from the remaining end wall of the original barn that shows several double-tagged marks

(fig.11), which is unusual. Other examples are included in the archive on the annotated site drawings.

5.3 Barn 2

Barn 2 stands to the west of the earlier barn 1 (fig.1) adjacent to wagon lodge 3. In many ways, barns 1 and 2 share similar construction techniques suggesting they are roughly contemporary in date. It too was built timber-framed with wattle and daubed walling and most likely a thatched roof. Of course, being a wealthy farm, it is possible that the barns were tiled, although it is more likely a thatched roof was replaced rather than a tiled one. During the survey, the barn was still in use storing farm machinery and old vehicles by the farmer though this did not hinder the recording works unduly.

This barn is another Grade II listed aisled building, although its listing description is far briefer than the main barn (Listed Buildings Online). It is dated to the 17th-century and closer inspection shows the barn was built in two phases, each different to barn 1, providing further complexity in the development of the site. It appears to comprise a five bay barn (2a) with a two-bay extension (2b). Though similar in style to barn 1, the build quality is lower than barn 1a, but more like barn 1b, which should after all, provide a general date for the existing structure.

5.3.1 External description

The barn has external weather-boarding and hipped ends, although the one at the north end now lies underneath a modern gable, added when the barn was re-roofed in corrugated plastic sheeting c.1970. There are low cart doors and a threshold leap on the north-west side that faces onto the yard and barn 1.

Perspex roof lights are inserted on the north-east elevation of the roof of the barn to catch the morning light (plate 14). The pitch is steeper than barn 1, at 55°, and the aisles either side more pronounced, on a slightly shallower pitch (fig.14). The plinth is high, at 1.4m, exposed through the wear and cleaning out inside the yard. Some lower parts are hidden behind cement render and overgrown ivy. The hard red bricks of the plinth appear to be shorter than in barn 1 but are the same in character. The main east door opens out onto the yard and is held on pintel hinges. Like barn 1 there is no porch. Underneath the door, the threshold has been raised on a bed of fletton bricks. There is a small hatch between the doors and crate shed. The crate shed is attached to a concrete block-built yard wall (plate 15) and is an open-sided four-bay structure with a corrugated plastic roof. The shed replaced a 19th-century range adjoining the two barns that fully enclosed the main stockyard here.

On the north-east elevation (plate 15), heavy modern corrugated iron doors have replaced the former cart doors that are evidenced by infilling to the top section (plate 15). A second low cart door is located on the opposite south-west gable elevation (plate 16), facing onto the track to the hall. Above is a second door, perhaps a pitching door, and a vent made from wooden slats to bring the light in and circulate air inside.

The rear north-west elevation between barn and wagon lodge (plate 16) is overgrown with ivy and impossible to assess in detail. However, there are no signs of later adaptations from the inside, from the construction of the wagon lodge or any other changes to the site.

5.3.2 Internal description

Inside (plates 17 & 18), the large open interior is broadly similar to barn 1 in terms of scale, style and construction techniques, although there are marked differences. There are also marked differences between the two builds in barn 2, not only in the quality of the timber but in their construction.

Layout

The barn is approximately 9.5 x 30.5m, slightly longer but narrower than Barn 1. It is laid out in seven bays, with a concrete floor. The main five bays are narrower (3.8m-wide) part of the original 16th-or 17th-century aisled barn, while the two north bays (4.8m-wide) belong to a 17th-century extension (fig.11). The midstrey, part of the early barn, is the same width as the bays of the later part.

Currently, the barn is open-planned, although it is clear that in the past the end south bay was partitioned off and some other parts were divided into animal pens or different storage areas. Either side of the aisle is partitioned off with 5½" boarding to a height of 1.4m. Rail housing on the aisle posts suggests the partition extended into the nave on this side at least (fig.11) to form a low partition.

Main framing

The arcade posts are slender at c.23 x 17cm in the main part (2a) with smooth jowls (plate 17). Those in the northern part have similar scantling but more angular 'gunstock' jowls (plate 18). In both parts of the barn, the later posts have more angular jowls. Whether this was down to fashion or simply the grain of the wood is not known. Bracing to tie beams and arcade plates tends to be fairly straight or slightly curved in the main part (2a), but slightly more waney and slender in the north part (2b) of the structure (plate 23). Bridled and bladed scarf joints fix the frame together at approximate 11m intervals in the earlier part, but do not

exist in the later extension, which is solely bladed. Where the two parts meet, within the third bay from the north, both types of joint are used (fig.13). On the west side, the arcade plates are bridle scarfed to a short section of reused wall plate (plate 19). On the other side, a much neater edge-halved and bladed joint ties the two builds together. The combination of both joints would suggest a build date in the transitional period c.1600.

Those timbers in the barn extension (2b) have more rounded profiles and retain bark, a further sign that good timber was running out. No shores or struts are used and the frame is lighter.

Wall framing

Close studding is used as wall farming in barn 2a almost universally (fig.11), a form used in houses during the 16th and much of the 17th-century as a display of wealth (Harris 1995). The studs are typical in size for this era, around 15 x 10cm (6 x 4") and spaced fairly widely apart, between 38 and 45cm (up to $1\frac{1}{2}$ '). All are pegged and there are between seven and eight in each bay where the bays are not separated by wall posts. Consistent grooving to the wall plate soffits show where wattle staves were fixed to carry daub. Many of the studs contain cut marks for wattles.

The south-west gable wall of 2a is perhaps a later rebuild, containing studs more narrowly-spaced (c.36cm), not always pegged, and trenched external bracing (plate 22). External bracing began in the medieval period (14th-century) as a decorative form exposed within daub walling and lasted to the 17th-century (Walker 1994). The end arcade posts are slightly larger here and show signs of reuse. The midrail is not grooved on the underside for wattles and perhaps the whole end wall was brought in from elsewhere.

One of the major differences between the two builds is the arrangements of the outer walls. The 2b extension is lower in height by 0.5m (plate 21) and was subsequently raised. It would therefore seem to be a complete reused section from an existing barn rather than a new build. Secondly, the aisle walling includes bay posts with swelling jowls (plate 21), completely absent in the main part of the barn. At the east end of the barn (2b, fig.13), both internal and external bracing was found, either side of the studs. On the west side the south bay has been replaced with machine-sawn primary-bracing (fig.11). The other bay is close-studded, presenting a rather disorganised picture, but typical of reuse. Studwork size is the same as the main part but the gap is narrower, between 28 and 35cm (c.1'). The wall plates are of similar size, though none of them have grooved soffits indicative of daub.

The northern wall in 2b has been affected by inserting the large doors this end, which are cut through the midrail. Studs have been replaced in the aisles either side, removing any evidence of bracing at this end. The hipped roof remains trapped beneath the modern gable.

Roof framing

The roof trusses are formed from roughly-hewn pegged queen struts connected to the purlins (fig.12) rather than to the collars. Intermediate collars are located between the bays (plate 24), either pegged to the purlins or birdsmouth-jointed. Additional collars in the trusses struts are secondary machine-sawn components. Purlins, splay-scarfed together, continue the whole length of the building but there is a clear break where the two builds join.

In barn 2a, the rafters are not cogged to the studwork, but in the later build they are. In all cases they are uniform in scantling. Nailed diagonal wind braces in alternating bays help to spread the load on both sides. Some of the aisle rafters were replaced when the plastic sheet roof was laid.

Carpenter's marks

There are far fewer marks in Barn 2 than Barn 1, which does not make the construction any easier to understand. In the older part (2a) they are scored, but in the later part, which contains reused timbers, they are scored and chiselled. The sequences are variable. As soon as a pattern is followed it is lost. Working from north to south in fig.11, the first set (III) is tagged one side, but this does not relate to its truss number. The second set (also III) is in the correct position but has no tagged side and one side is chiselled while another is scored (fig.12). Of course, it would be easy enough for a carpenter to recognise which brace was for which side if the fair face was marked. Finally, the sequence is topsy-turvy on the penultimate bay, each side is scored its own number (III & IIII) and both sides of the truss are tagged. This would, however, work if each side of the truss had its own number, but with no other mark-evidence, this cannot be proven.

5.4 Wagon lodge 3

This is a far simpler structure, built in one phase, with the only replaced timbers belonging to clear adaptations to the building in the last century. Originally this was built as a single-aisled wagon lodge, probably during the early 18th-century. The front was in-filled in the 20th-century to provide secure storage for farm implements. This is its current function and some small areas of walling were obscured because of this, though this did not affect the quality of the record. It stands parallel to Barn 2, with its frontage facing the circular farm track (fig.1).

Although not listed separately, it is cartilage listed with the barn and hall. Its framing is in softwood that has turned an orange-brown colour over time.

The building is 21.4 x 7.9m, with the aisle to the rear, facing barn 2. It stands on a 0.45m-high brick plinth comprising 9" orange bricks (the same as those used in the barns), arranged in English bond and set within a sandy lime mortar. The roof is pitched at 45°.

5.4.1 External description

Unlike the barns, this building was never daubed; rather it is likely to have been boarded and thatched. Like the others, the roof is now clad in corrugated plastic. Perspex panels light the north-western elevation facing the trackway to the main road. This side has four inserted double cart doors (fig.13, plate 25). The furthest two to the south-west side are higher than the others and the eaves have been raised to accommodate them (plate 26).

The rear north-east elevation, close to Barn 2, is suffering from damp and badly overgrown with ivy (plate 26). In some cases the timber boarding has suffered, but the interior is dry.

5.4.2 Internal description

Inside there are seven bays, all fairly uniform at almost 3m-wide on a dirt floor (plates 26 & 27). Heavy timbers, similar in form to the barns but less regular cut are used in its construction. The rear is aisled. Aisle plates (18cm-wide) and tie beams are pegged to 17x14cm-wide posts supported by neat curved braces (some missing), fairly large to tie beam but smaller to aisle plate. The tie beams (c.26 x 16cm) are uneven and roughly-shaped. The aisle ties are strapped to the posts. Edge halved and bladed scarf joints are consistently used to link short spans of aisle plate from one bay to the next (fig.13). There are several chiselled carpenter's marks, some with special identification tags such as circles cut with a race knife, and reverse 'P's (fig.14). A few are scored. Some are hidden by the joinery, making the sequence hard to follow.

Original wall framing forms the two gable ends and part of the rear wall to the aisle. Much of this and the front (east) side are replaced in machine-sawn timbers, as are the aisle rafters. In the primary build, the studs are quite waney and occasionally tenoned to the plates. They are primary-braced, with the main members pegged together. Studs are c.6 x 10cm and spaced c.34cm-apart.

Empty mortices on the penultimate southern truss indicates the end bay was originally enclosed by a stud wall, perhaps forming stables for cart horses (fig.13). No other internal

features were recorded, although it was noted that the aisle may have been a later addition, because the wall plate is more roughly-worked and crudely scarfed together and the walls taper inwards slightly (fig.13). However, there is evidence for an earlier rear wall, nor do maps show the rear as open-sided.

Like the two barns, the roof is clasped purlin with queen strut trusses (fig.14). Some rafters and struts are replaced in machine-sawn timber, but most appear original.

5.5 Former stables 4

From the outside this would appear to be an unremarkable modern pig shed, but in reality it contains earlier elements suggesting a late 19th-century date, perhaps of a stable. It stands to the east of Barn 1, bordering the yard as part of the later farm improvement (fig.5) and is the only survivor from this era, albeit only partial. Only parts of the southern end bay and the original floors survive, the rest has been demolished and built over in concrete block in the modern period with a corrugated plastic roof.

The surviving southern end is built from vertical timber boarding on a concrete block plinth (plate 29). The gable above is weather boarded. A single doorway leads inside. The remaining rear wall has a single brick-built bay but is mainly re-built in concrete blockwork. Low apertures are positioned along both long walls for pig access. Both these and windows above are boarded up. Part of the original wall extends to the south where it terminates, perhaps marking a former entrance to the yard (fig.15).

The floor in the modern rebuilt part is made from 4" granite setts contemporary with the primary build. Above, the roof is supported on modern bolted queen post trusses (plate 30). At the southern end, which is partitioned off from the main area, is the remains of the original king post strut roof (plate 31). This part has a gault brick floor and circular drain (plate 32) and functioned as a separate stall. It is also clear from plate 32 that the rear brick wall is built in two stages, first as a yard wall, up to the on edge coursing, and then to full height for the structure. Both builds are in Flemish bond using 19th-century bricks the same as those found in the other structures on the site.

6.0 RESULTS OF ARCHAEOLOGICAL MONITORING

Underpinning trenches were dug around barn 1 and long drainage runs were cut to the northeast, up to 1.5m deep, providing a good cross-section of deposits in this area (fig.16). Natural clay subsoil was recorded immediately below topsoil, 0.35m below the present ground level in all areas. A trench was cut along the centre line of the barn interior to investigate natural deposits inside to a depth of c.0.5m. No archaeological deposits or features were recorded and no finds recovered from any of the areas monitored during the groundworks phase.

7.0 DISCUSSION AND PHASING

Of the four structures recorded at Sheering Hall, the most important and complex buildings are the two aisled barns. Each contain built elements from different phases, but it is difficult to prove in the case of the main barn 1 whether an earlier barn was extended or parts of a disassembled barn were added to a new barn at the time of its construction.

Barn 1

The earliest barn is clearly built in two roughly-equal parts of three bays, joined in the middle. It is included in the list description as "a reconstruction c.1600 of a medieval aisled barn, with lesser resources of timber and workmanship" (Listed Buildings Online). Indeed, the main part 1a has constructional elements that date from the late medieval (c.15th-century) to the post-medieval (c.17th-century), a broadly transitional phase in English carpentry. The relative size of the main framing timbers and studwork support a late medieval or early post-medieval date. Jowled posts, curved arch bracing, close studding, internal and external trenched bracing all began in the medieval period and tend to finish by the 17th-century. The use of queen strut or 'raking struts' in the trusses, a system, as Hewett states, "used in many Elizabethan barns in Essex", i.e. mid to late-16th-century (1980, 271) but was used earlier for structures where the more elaborate crown post was unnecessary. More specific dating evidence is the in-line tenoned-purlin roof, which is medieval in style in a later context outside the region where it was prevalent. There is little doubt that the scantling and spacing of the roof timbers match those in the walls, making it unlikely for the roof to have been newly added when barn 1a was re-built, especially as the roof in barn 1b is very different.

It is unlikely the three bays of barn 1a were brought in from outside the farmstead, as this would be quite an undertaking. It is more likely they came from the main barn of an already existing scattered farmstead centred around the hall. After all, no evidence was found for an end wall or removed southern bays, either on the standing building or from archaeological monitoring, though similarities between the two gable ends suggest the end southern gable wall may contain main framing belonging to the missing end wall of barn 1a.

Despite some of the queen struts and collars being made from reused timbers (and placed high up out of sight) there is no reason to suggest they are not contemporary with the barn. There is no peg hole evidence to show the tie beams carried crown posts, nor that there were additional collars to carry a crown plate. The addition of new wall plates during reassembly explains the combined use of bridled and bladed scarf joints in 1a but also gives a good a transitional date of between 1575 and 1650 (Hewett 1987) for the completion of barn 1 in its present form.

Barn 2

Barn 2 is a five bay aisled barn with a two-bay extension built in the same form as barn 1 with timbers of similar scantling to its second phase. However, if logic dictates, the erection of barn 2 pre-dates barn 1, because it predates the use of primary braced wall construction, a form that was to dominate barn timber-framing during the 17th and 18th-centuries. Instead, the main part (2b) is close-studded, widely-spaced and consistently pegged, more like the earlier forms. Again, the two types of scarf joints are used, and all things considered, the combination of these factors suggests a slightly earlier date than barn 1, although they are likely to be broadly contemporary.

The main difference between the two builds of barn 2 is the height between 2a and 2b, which clearly indicates the two northern bays were a reassembled addition. Other differences are the fact that barn 2b has some internal bracing (in one bay) and jowled bay posts, absent in the main part and plain in barn 1. The fact that these differences are confined to the wall framing suggests it is these two sections of framing that were reused rather than the main framing and roof which are fairly consistent throughout.

Wagon lodge 3 and stable 4

The remaining farm structures, the single-aisled wagon lodge and stable remains, have clearer cut developments. The wagon lodge most likely belongs to the late 17th or early 18th-century and appears to be built on a softwood frame. Apart from 20th-century infilling of the open-sided front and removal of a partition (probably stables for carthorses) the wagon lodge has survived virtually intact. This cannot be said for the stables, which retains a mere half-bay and granite sett floor subsumed by later 20th-century concrete block pig shed.

Phasing

An outline phasing of the structures recorded during the survey is given below, based on the standing evidence, above discussion and the list description as well as prevalent features and common themes within the buildings. All main phases of known farm development are

included in the standing buildings, from the post-medieval through to the Victorian and modern periods. This phasing is also discussed within the wider development of the farm complex.

Phase 1: Late medieval

The present hall is built in two phases with origins dating to the 15th and 16th-centuries. It post-dates the moat complex whose focus was concentrated to the south, where earthworks survive. Apart from the physical evidence and some documentary evidence on ownership, little is known about the site during the period. This knowledge was not improved upon by the negative results of the monitoring works.

Barn 1a has proportions and timbers of medieval characteristics and a medieval tenonedpurlin roof. It could therefore be contemporary with the late-medieval Wealden house, or the early-post-medieval hall, as part of a scattered farmstead.

Phase 2: c.1600

Both standing barns are likely to have been built around this time, probably coinciding with an expansion of the estate and reorganisation of the farm. Based on its wall-framing, barn 2 is probably the earliest; a large barn that was already standing when barn 1 was constructed. As the old scattered farmstead was broken up, a more compacted farm layout was created. Barn 1 was built incorporating a large part of a reassembled late-medieval barn. Salvaged wall frames, probably from a smaller farm building, provided raw materials for an extension to barn 2 at the same time.

Phase 3: Late 17th- to early 18th century

The open-sided aisled wagon lodge 3 is dated to this period through its more consistent construction, which has definite post-medieval elements. It is also the first of the surviving structures to have been built with boarded (or perhaps lath and plaster) walling rather than wattle and daub.

Phase 4: 19th century

Agricultural improvement in the 19th-century led to a reorganisation of the farm. By the end of the century, shelter sheds, stables and other buildings enclosed a series of yards created around the existing barns to accommodate cattle, horses and probably pigs. Of these, one bay of former stable 4 remains, whose machine-sawn timbers suggest a late 19th-century date.

Phase 5: 20th century

The 19th-century planned farm elements were demolished in the post-war period, apart from stable 4 that was partly demolished and incorporated into a concrete-built pig shed. By 1970 the thatched roofs of the barns and wagon lodge had been replaced with modern roofing materials and grain processing machinery added to barn 2. The open side of wagon lodge 4 was in-filled, as these buildings continued to find function within the working of the modern farm.

8.0 CONCLUSION

As working structures, agricultural buildings develop over time as farming practices change. The four structures studied at Sheering Hall demonstrate the development and improvement of the farm from the late-medieval period through the Victorian Golden Age and up until the late 20th century.

The two aisled barns are the most significant and their chronology complex. Both contain elements of an earlier, late—medieval, scattered farmstead that formerly stood with the hall. They are broadly contemporary, but it seems likely that barn 2 is the earlier of the two. It was extended by two bays when the medieval farm was reorganised, at the same time as barn 1 was built, incorporating parts of a medieval barn. Reuse of old timbers is nothing unusual in farm buildings from the 17th and 18th-centuries, but wholesale reconstruction of this scale is very unusual. It is highly unusual to have a medieval-style tenoned-purlin building of this date and style in Essex before the 17th-century. Piccotts Farm Barn, Great Saling (built c.1450) has one section of in-line medieval roofing (probably reused), but the remainder is staggered, inserted in the post-medieval period (Letch 2006). At Sheering Hall, the grand design of the barn points to the estate's wealth and influence in the late-medieval period. In truth, however, its date can only be properly established through dendrochronological dating.

Perhaps the rarity of the medieval roof in barn 1 should not be viewed in isolation, as the hall also contains a structure rare in Essex, in the form of the late-medieval (15th-century) Wealden house. If this were built under the Radcliffe's tenure at the hall (1505-1617), as Earls of Sussex, this would make an interesting story.

With barn 2 and the wagon lodge yet to be converted, it is possible that archaeological deposits may be disturbed by associated groundworks. However, based on the negative results of the monitoring around the converted barn, there is little apparent potential for the

presence and survival of below-ground remains in and around these structures. Evidence of the earlier scattered farmstead is perhaps located to the south of the hall within the earthwork area.

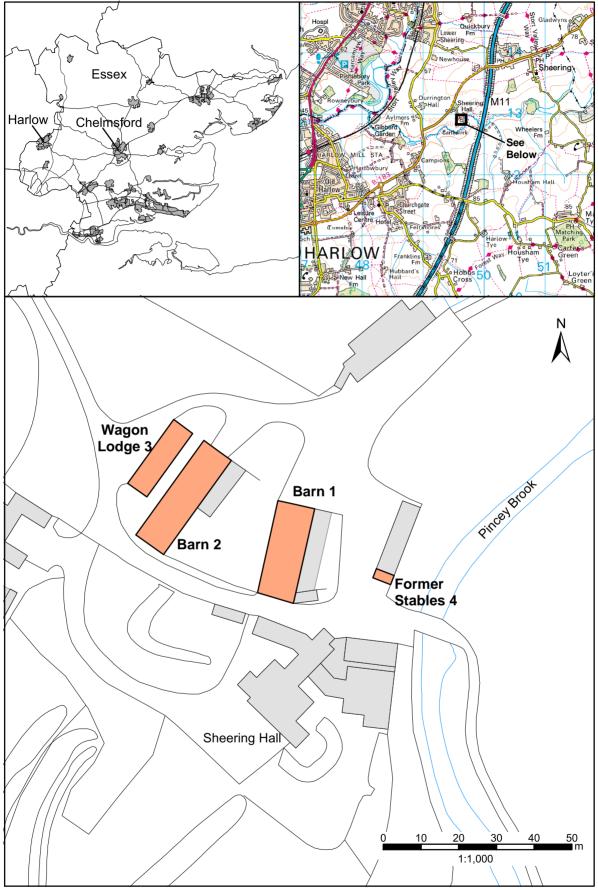
Taken as a whole, the aisled barns and wagon lodge are very significant survivals from the late medieval/early post-medieval period, largely unaffected by later development of the site and in excellent condition for their age. They retain important and interesting architectural elements illustrating phases of improvement and growth of a large farming estate. The reuse of structures chronologically close in construction is unusual and suggests the improvement of the scattered farmstead during the expansion of the Sheering Hall estate around the end of the 16th-century. At a later stage, their incorporation into the improved Victorian planned farm is typical of 19th-century farm development.

ACKNOWLEDGEMENTS

Thanks are due to the client, Mrs Jenny Tasker, for commissioning the works and supplying architect's drawings. Also to Elphin Watkin, buildings specialist, for his knowledge of roof-framing typology. The assistance of staff at the Essex Records Office is also acknowledged. Fieldwork, recording and photography were undertaken by the author. Illustrations were prepared by the author and produced by Andrew Lewsey. The site was monitored by Vanessa Clarke of ECC HEM on behalf of the LPA.

BIBLIOGRAPHY

Alcock, N.W. et al	1996	Recording Timber-framed Buildings: An Illustrated Glossary, CBA, York
Curl, J.S.	1999	Oxford Dictionary of Architecture, Oxford University Press, Reading
DOE	1990	Planning Policy Guidance Note 16: Archaeology and Planning HMSO, London
English Heritage	2007	Listed Buildings Online http://www.english-heritage.org.uk/lbonline
English Heritage	2006	Understanding Historic Buildings: A Guide to Good Recording Practice Swindon
ECC HEM	2006	Brief for Historic Building Recording & Archaeological Monitoring at Sheering Hall, Sheering, Essex ECC HEM
Letch, A.	2006	Piccotts Farm Barn & Outbuildings: Historic Building Recording (FAU report no. 1641)
Harris, R.	1993	Discovering Timber-Framed Buildings, Shire Publications Ltd, Haverfordwest
Hewett, C.A.	1980 (reprinted 2003)	English Historic Carpentry, Biddles Ltd, Guildford
Hudspith, P.	2003	Survey of the Barns of Special Architectural Interest or Historic Interest in the South of Essex
McCann, J.	c.1980	Reading the Timber: Part 5 Carpenter's Marks Period Homes vol. 2 no. 4
Padfield, A.	1998	Piccotts Farm, Great Saling: Desk-Based Assessment (unpub.)
Reaney, P.H.	1969	The Place Names of Essex Cambridge University Press
Walker, J.	1994	'Essex Medieval Houses: Type and Method of Construction' in Stenning D.F. & Andrews D.D. (eds.) Regional Variations in Timber-Framed Buildings in England & Wales Down to 1550, 5-15



Mapping reproduced by permission of Ordnance Survey on behalf of the Controller of HMSO. Crown copyright. Licence no.LA100019602.

Fig.1. Site location and block plan





Fig. 2 Chapman & Andre's map of Essex, 1777 (plate 11)

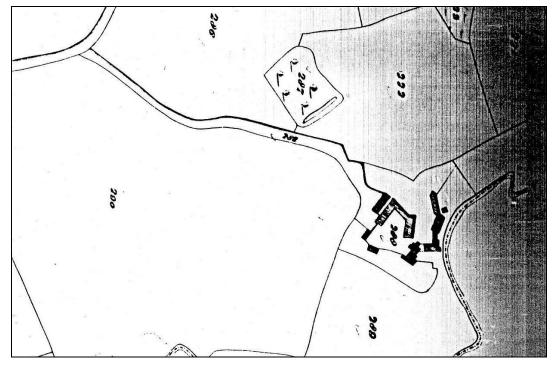


Fig. 3 Sheering tithe map, 1839 (D/CT 313B), orientated to north

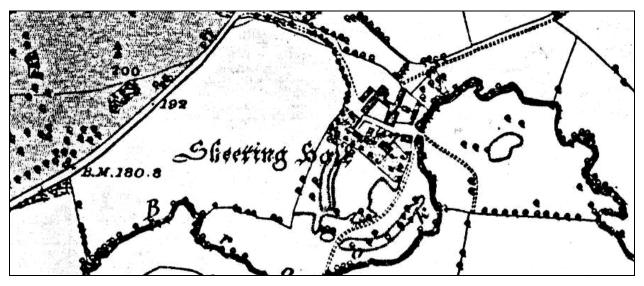


Fig. 4 First Edition 6" OS map, 1884 (sheet 41)

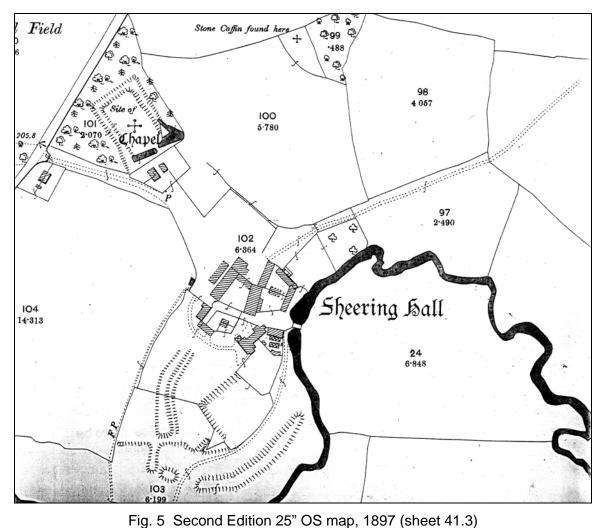


Fig. 5 Second Edition 25" OS map, 1897 (sheet 41.3)

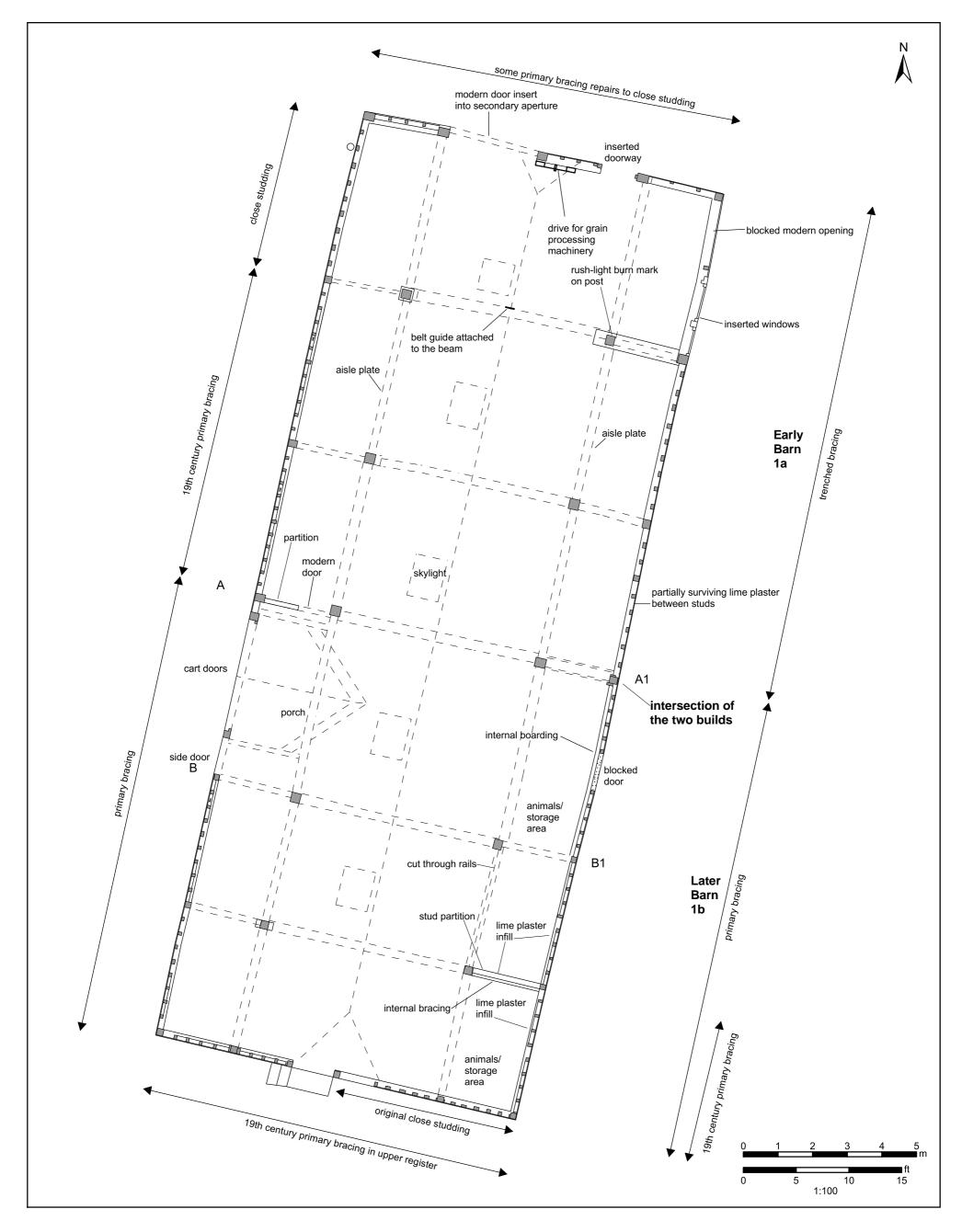


Fig.6. Barn 1 floor plan

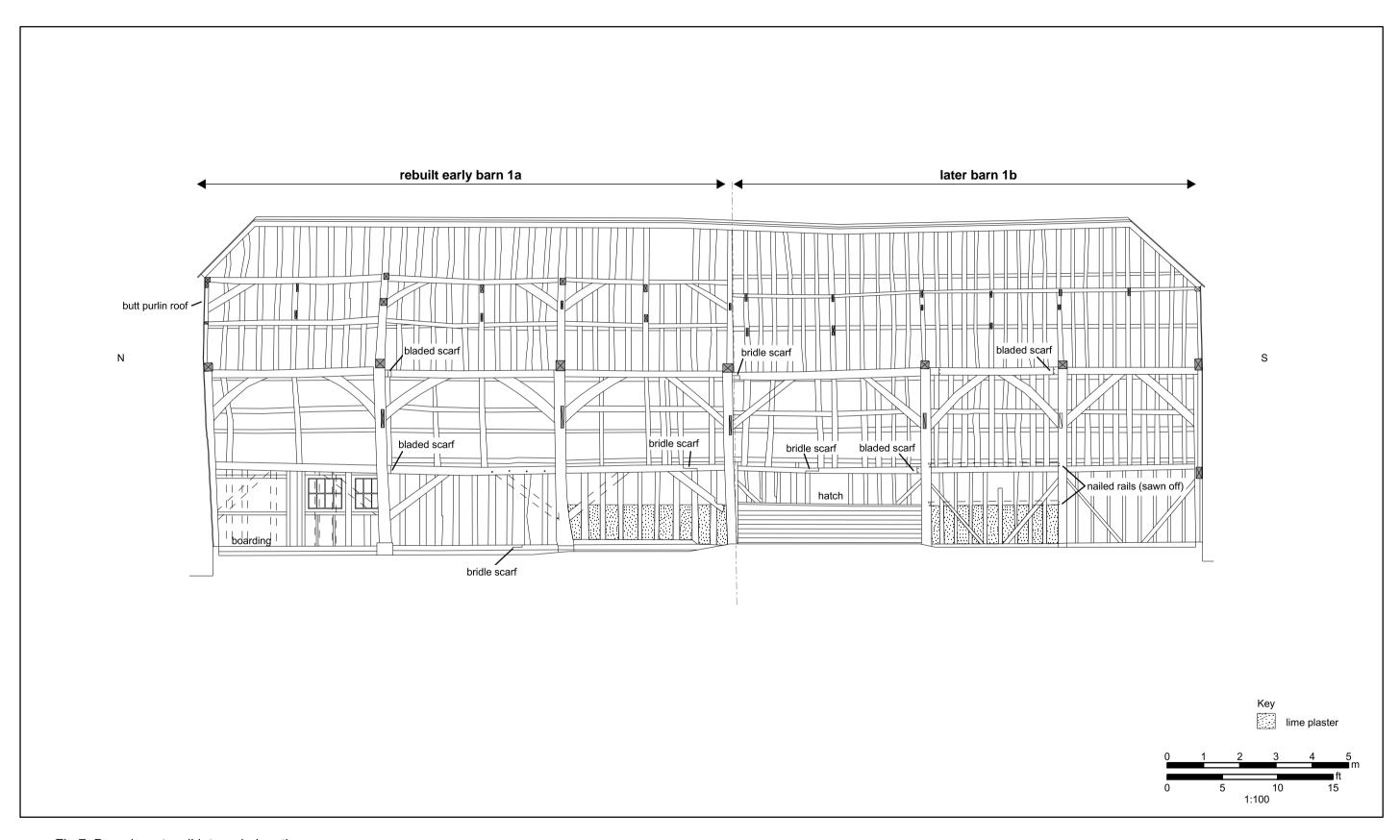


Fig.7. Barn 1 east wall internal elevation

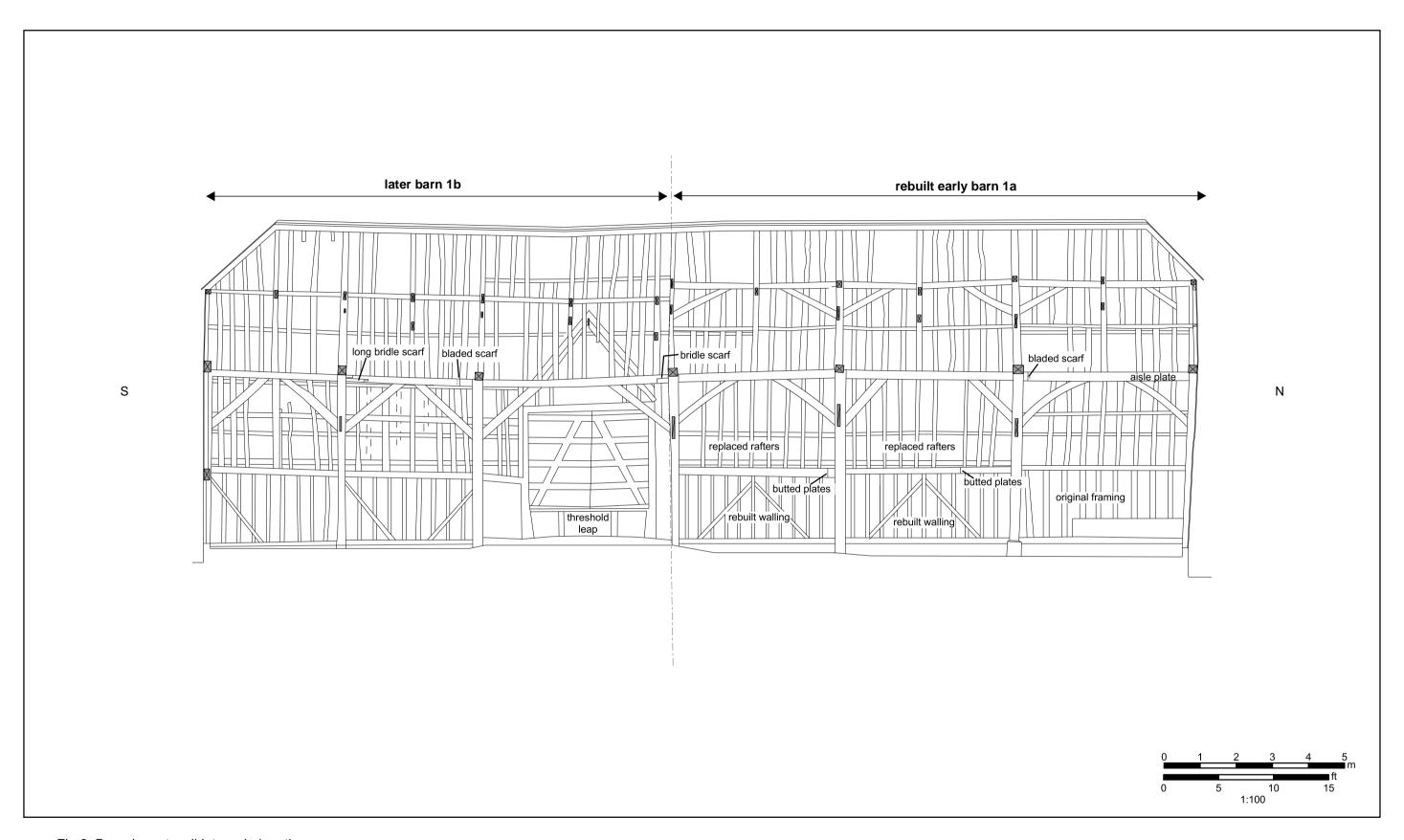


Fig.8. Barn 1 west wall internal elevation

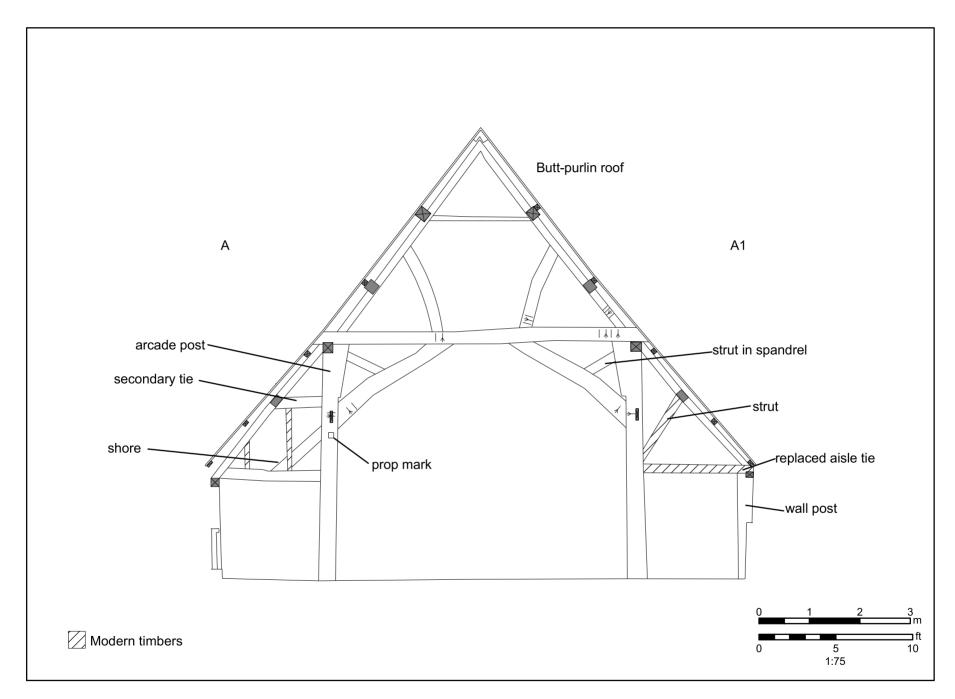


Fig.9. Section A - A1 across barn 1a

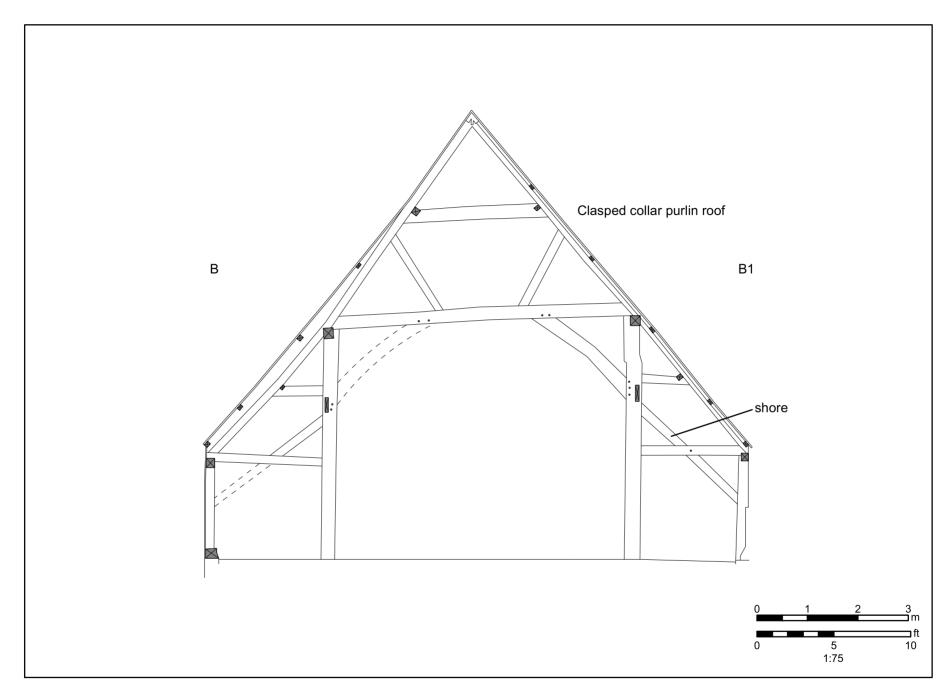


Fig.10. Section B - B1 across barn 1b

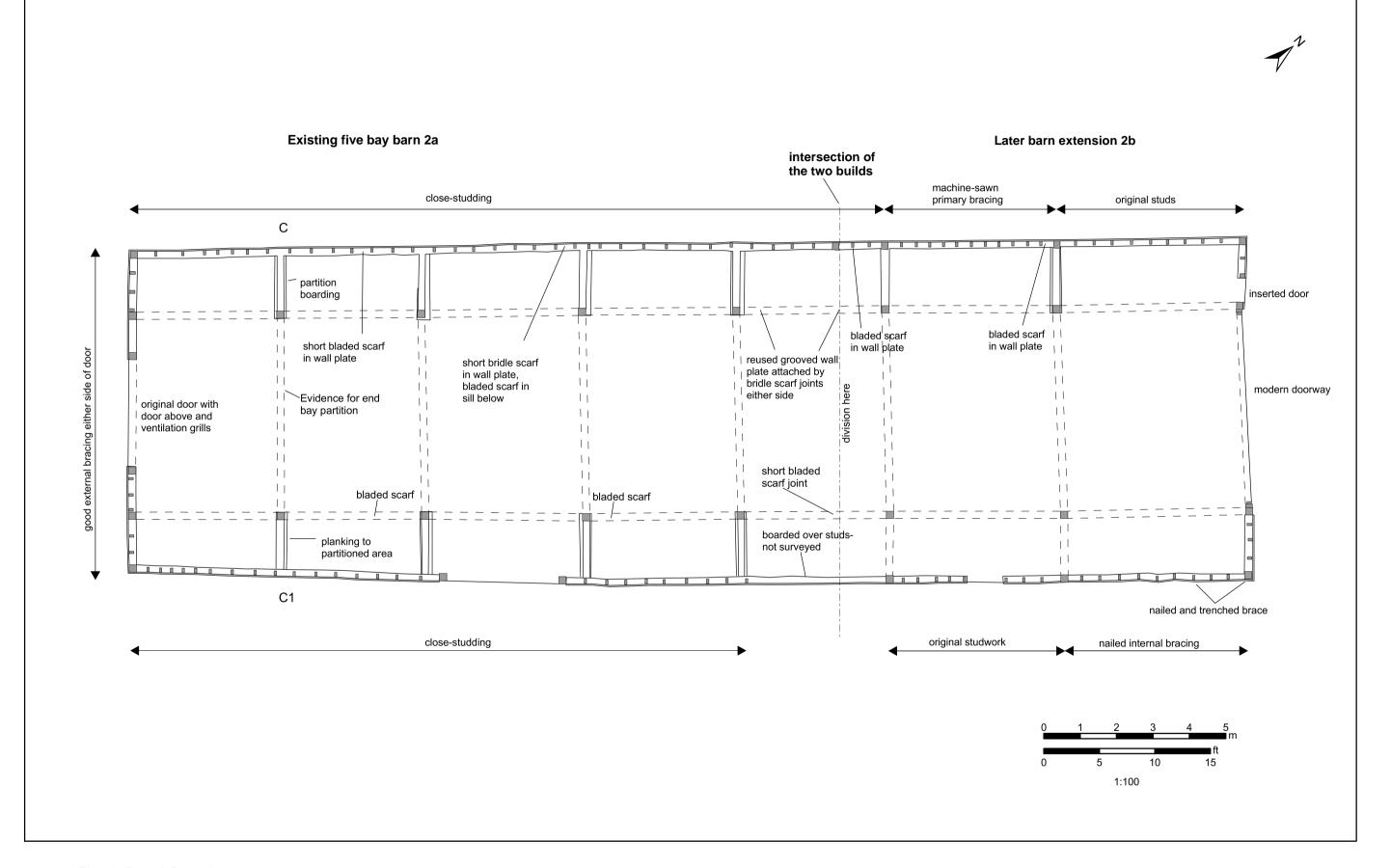


Fig.11. Barn 2 floor plan

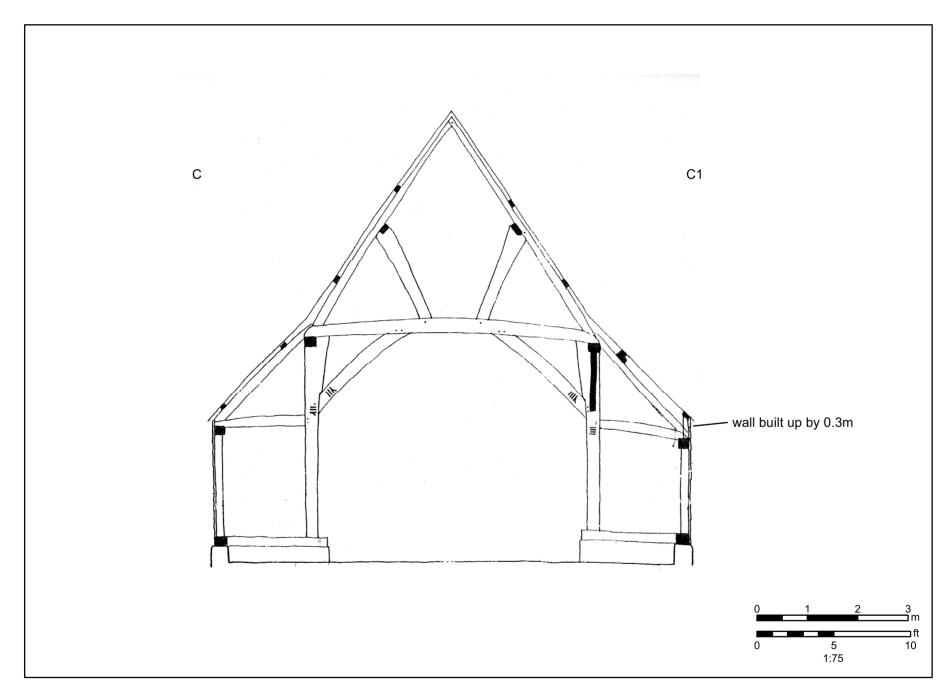


Fig.12. Section C - C1 across barn 2

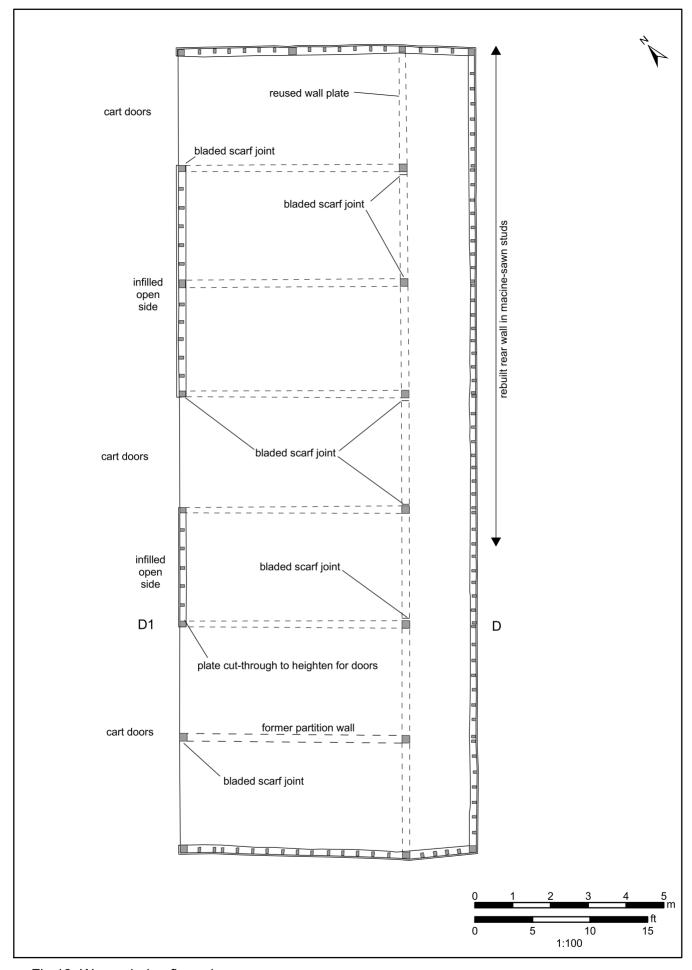


Fig.13. Wagon lodge floor plan

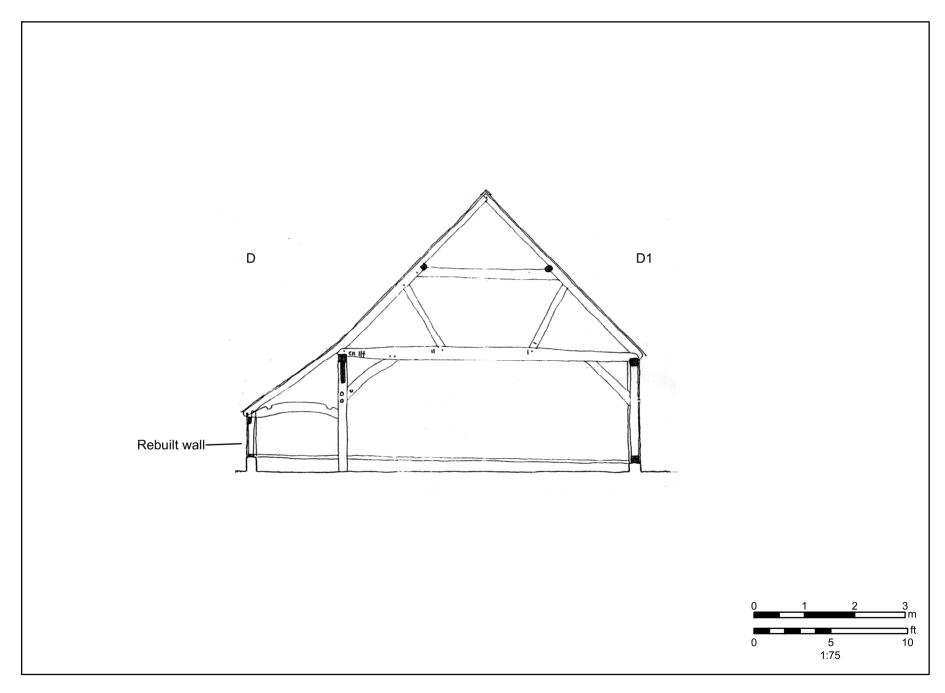


Fig.14. Section D - D1 through wagon lodge

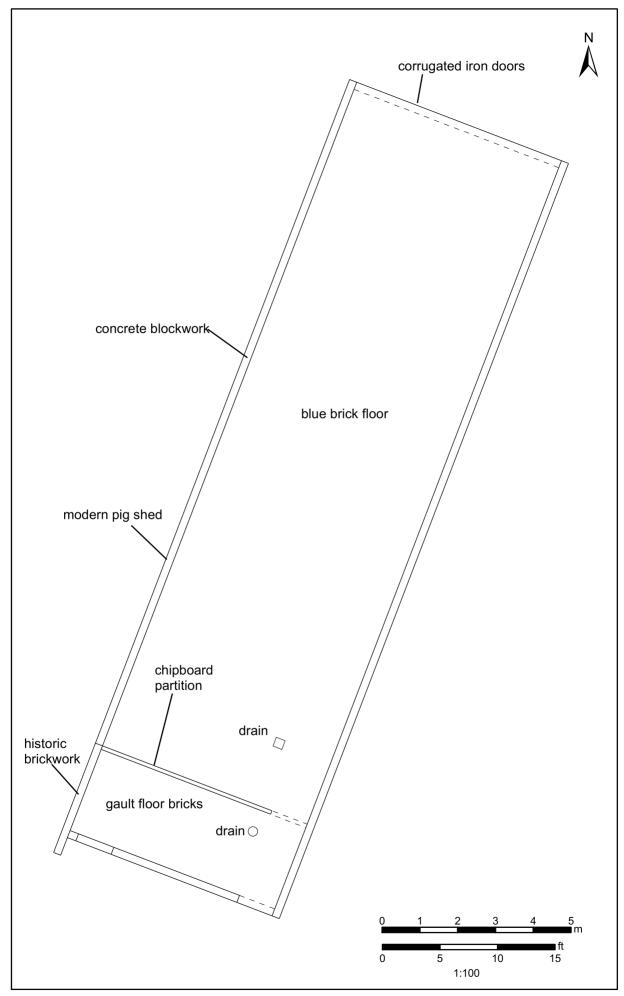


Fig.15. Former stables 4

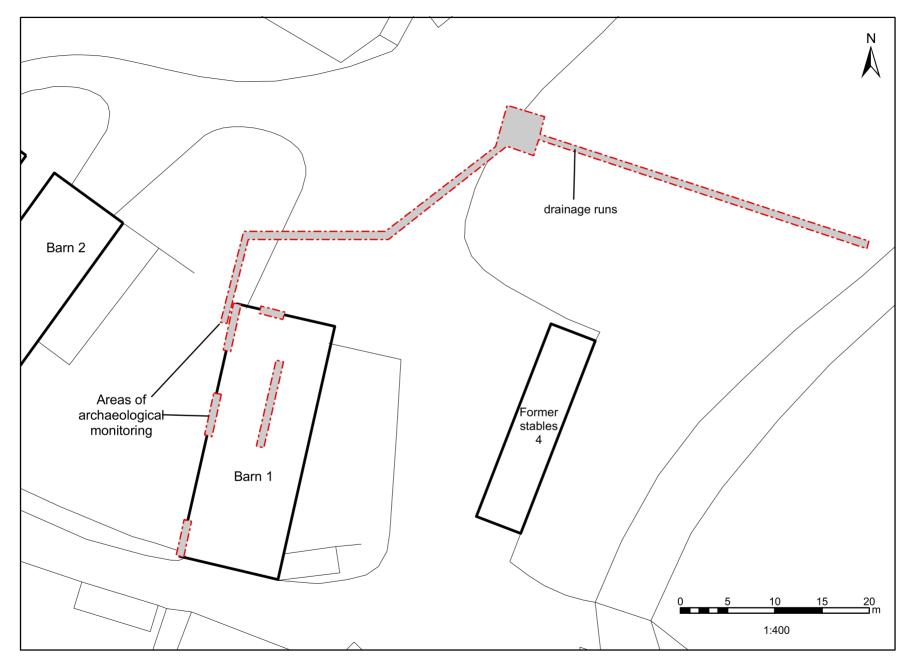


Fig.16. Areas of archaeological monitoring



Plate 1 Barns & wagon lodge viewed from east



Plate 2 Barn 1 viewed from north-west



Plate 3 West elevation of barn 1

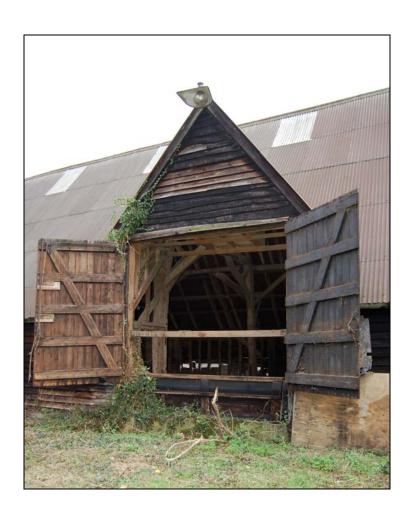


Plate 4 Barn 1 porch



Plate 5 Rear, south elevation of barn 1



Plate 6 Interior of barn 1 from 1a to south gable wall



Plate 7 Interior of barn 1 from 1b to north gable wall



Plate 8 internal bracing in barn 1a



Plate 9 Primary bracing and plastered panels in barn 1b



Plate 10 Partly rebuilt north wall in barn 1a



Plate 11 Former motor and drivebelts for grain processing in barn 1a



Plate 12 Belt rack and motor in butt-purlin roof in barn 1a

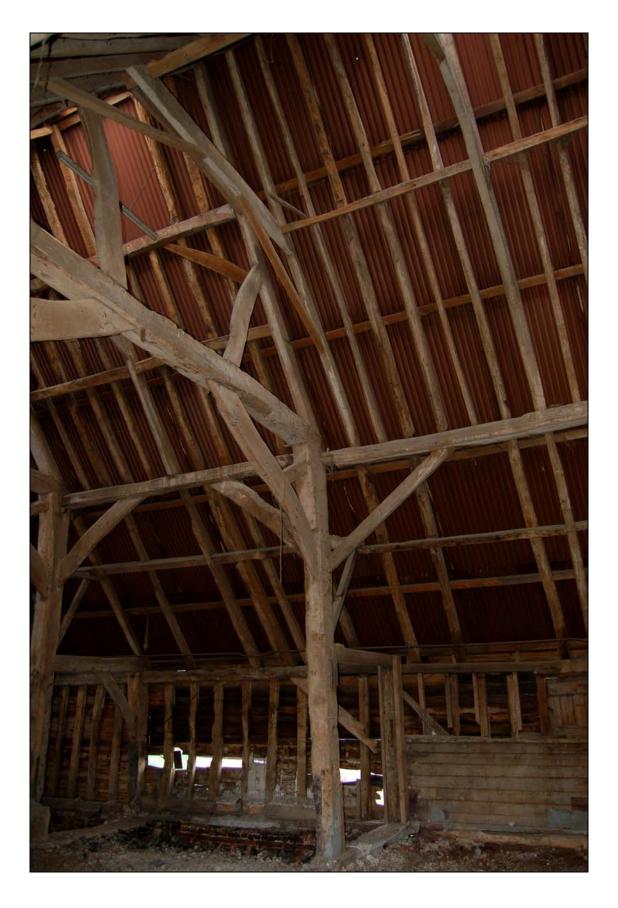


Plate 13 Comparison of two builds at southern end of barn 1a



Plate 14 South-east elevation of barn 2

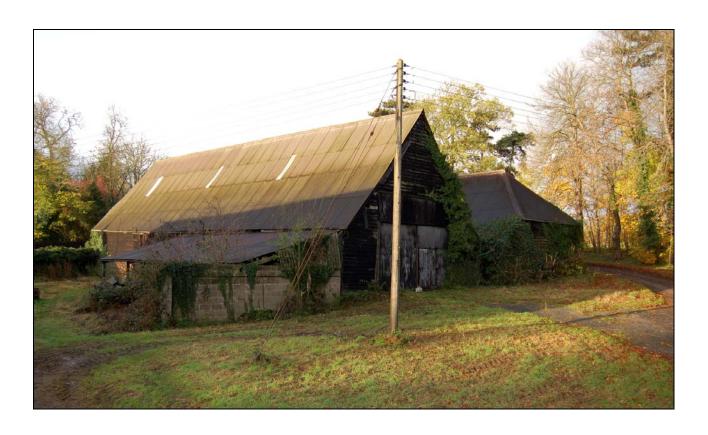


Plate 15 Barn 2 & wagon lodge viewed from east



Plate 16 south-west elevation of barn 2



Plate 17 Interior of barn 2a



Plate 18 Interior of barn 2b



Plate 19 Reused wall plate connecting aisle plates in barn 2



Plate 20 Edge-halved and bladed scarf joint connecting two builds in barn 2

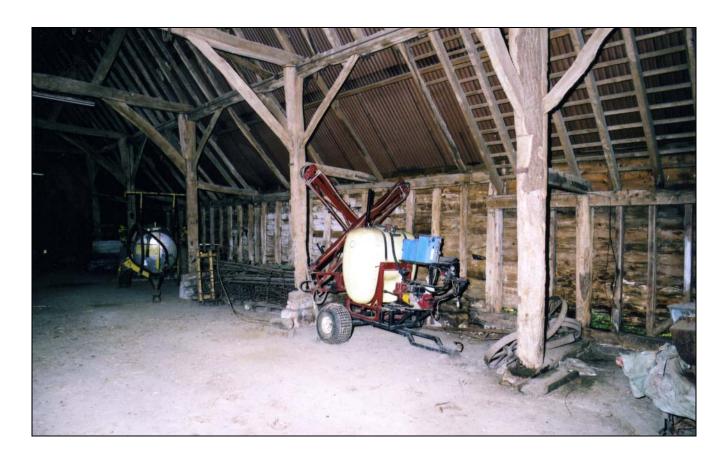


Plate 21 Comparison of two builds at intersection of barns 2a & b

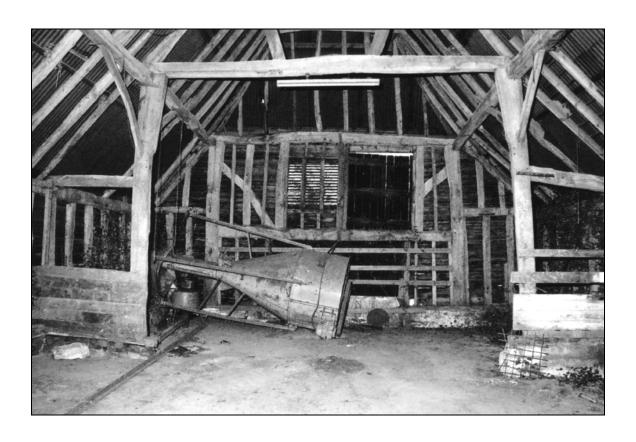


Plate 22 South-western wall framing, barn 2a

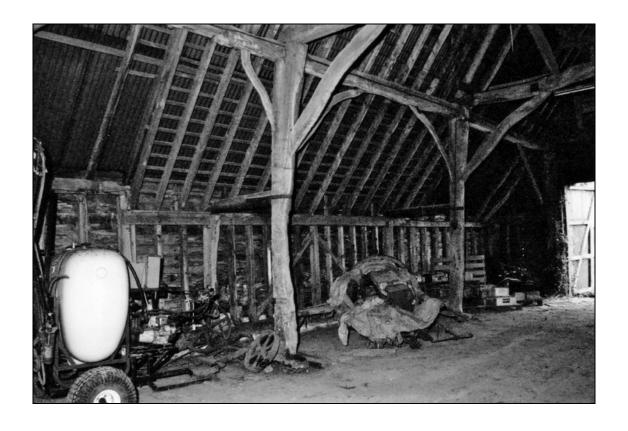


Plate 23 Framing in north-east bays of barn 2b



Plate 24 Interface between barn builds 2a & 2b



Plate 25 Wagon lodge viewed from north-east

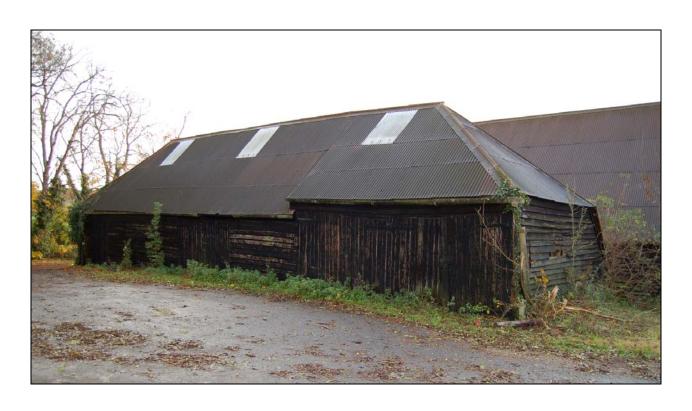


Plate 26 Wagon lodge viewed from south-west

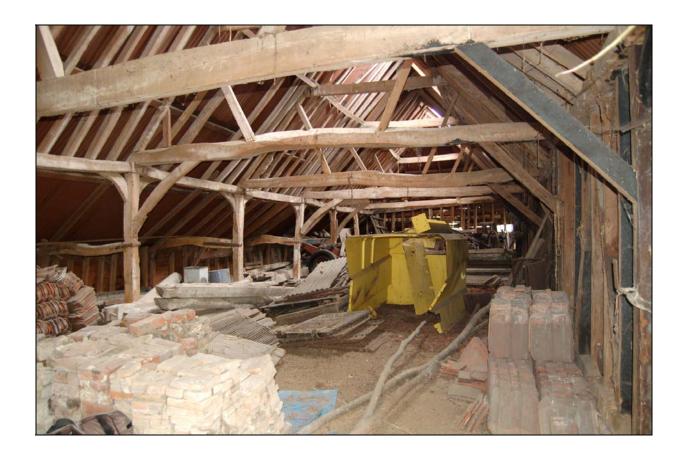


Plate 27 Interior of wagon lodge viewed to south



Plate 28 Interior of wagon lodge viewed to north-east



Plate 29 Remains of former stables incorporated into pig shed, viewed from east



Plate 30 Interior of building 4 viewed to south



Plate 31 Original king post roof truss

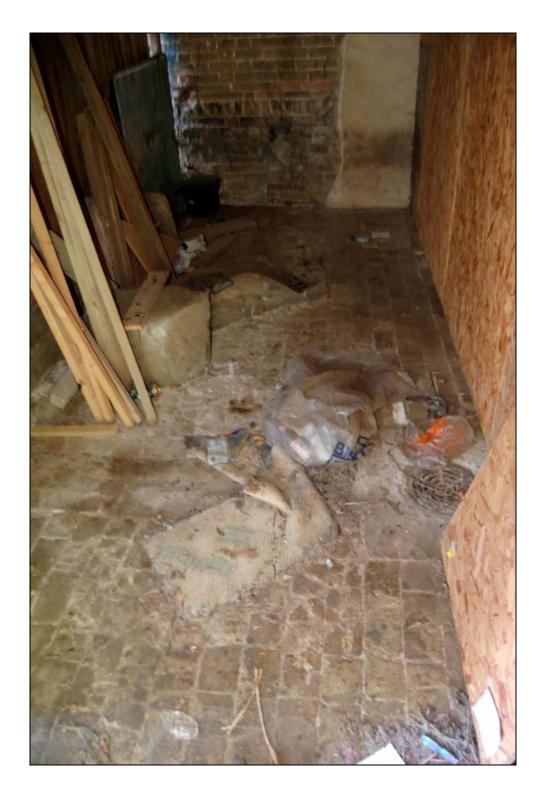


Plate 32 Gault brick floor in former stall

Appendix 1: Contents of Archive

Site name: Sheering Hall, Harlow, Essex

Project no. 1676

Site code: SHESH 06

OASIS no. 29403

Index to the Archive

Document wallet containing:

1. Research Archive

- 1.1 ECC HEM design brief
- 1.2 ECC FAU written scheme of investigation
- 1.3 Client/archive report (one unbound)
- 1.4 CD Rom containing digital images & copy of report pdf-formatted

2. Site Archive

- 2.1 Photographic register
- 2.2 Photographic record (digital images & prints, 120mm colour prints & 35mm monochrome prints & negatives)
- 2.3 Site notes & annotated survey plans
- 2.4 Architect's drawings

Appendix 2: EHER Summary Sheet

Site Name/Address: Sheering Hall Farm, Sheering Road, Sheering, Harlow, Essex	
Parish: Sheering	District: Epping Forest
NGR: TQ 4961 1292	OASIS record No.: 29403
Type of Work: Building recording & archaeological monitoring	Site Director/Team: Andrew Letch ECC FAU
Dates of Work: Nov 2006 & May 2007	Size of Area Investigated: N/A
Curating Museum: Epping Forest	Funding Source: Mrs J. Tasker
Further Work Anticipated? None	Related EHER Nos.: 33872 & 33873

Final Report: Summary in EAH

Periods Represented: Medieval & post-medieval (?15th to 19th-century), modern

SUMMARY OF FIELDWORK RESULTS:

Recording works were undertaken at Sheering Hall in advance of residential conversion of an aisled timber-farmed barn constructed c.1600 and a modern pig shed containing a small part of a 19th-century stables. A second aisled barn and wagon lodge were also recorded which will be converted sometime in the future, but are presently used as part of the farm.

The main barn contains three bays of a probable late medieval barn that appears to have been reassembled when the main barn was built. Its framing is robust and of high quality and likely to derive from an earlier scattered farmstead associated with the hall (15th & 16th-century) that was reorganised and consolidated c.1600. The second barn is also aisled and is contemporary, perhaps erected slightly earlier than the main barn. Its main five-bay part was extended over a further two bays at a later date, using walling salvaged from a smaller medieval farm structure, although it may have been built as one. The wagon lodge is not listed but has been dated to the early 18th-century or earlier on broad stylistic grounds. Only part of one bay remains from the 19th-century stable block, part of a Victorian planned farm around three yards, based on the existing layout and typical of Essex farm development. The stable was incorporated into a pig shed in the following century, after its contemporary structures were demolished.

The farm group is important in retaining two large timber-framed barns dating from transitional period between medieval and post-medieval period construction and contain built elements from both. Within a complexity of differing constructional details, of special note is the perceived instance of a medieval in-line tenoned-purlin roof in Essex, which is a rarity.

Archaeological monitoring around the main barn and general area did not identify any archaeological deposits or features, nor were any artefacts collected.

Previous Summaries/Reports: None	
Author of Summary: A. R. Letch	Date of Summary: 9th November 2007