THE HISTORICAL DEVELOPMENT OF IGHTFIELD HALL FARM BARN IGHTFIELD, NORTH SHROPSHIRE

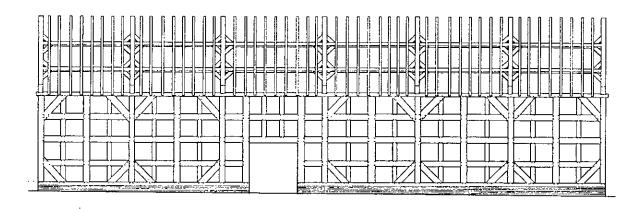
by

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The historical development of Ightfield Hall Farm Barn, Ightfield, North Shropshire



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Introduction

Ightfield Hall Farm Barn is a timber-framed structure, dating to 1567 and probably built by Sir Richard Mainwaring, then lord of the manor of Ightfield. The barn was originally of six bays, and although the end bays have now collapsed, the barn retains much of its original framing and form as a high status building of some ambition.

During summer 1997 members of the Historical Analysis and Research Team of English Heritage visited Ightfield Hall Farm, Shropshire, in order to undertake an archaeological analysis and historical study of the barn. Documentary research was also carried out by the team, dendrochronology was commissioned and drawings were provided by an independent consultant.

The work was aimed at setting out in more detail the architectural and historic interest of the barn as a basis for the English Heritage case at a forthcoming public inquiry. This statement sets out the initial results of this work.

The barn forms part of a group of farm buildings, including Ightfield Hall, a stable block and several more recent structures. The Hall lies within the earthworks of a medieval moated site, with the barn just outside. Ightfield Hall Farm Barn, Ightfield Hall and the stable block are all listed grade II, and the moat, although unscheduled, is likely to be of national importance.

Summary history of the building

The barn is a timber-framed structure originally of six bays but now somewhat reduced in length following the partial collapse of the two outermost bays. The building has been tree-ring dated to 1567 (i.e. the felling date of the trees which provided the timbers for the construction of the barn).

The original barn was a very high quality building of box-framed construction throughout with small, square panel wall framing and a tenoned purlin roof. The timbers used in its construction were heavy and well-carpentered. The spaces between the timbers on all sides were filled with close-set horizontal boarding.

Some parts of the original timber frame were constructed using second-hand timbers salvaged from an even earlier building; these have been identified as originating in a cruck structure, quite possibly another timber-framed barn. The precise former location of the earlier cruck structure is not known, however there is every possibility that it may have itself have formed part of the medieval moated farmstead at Ighttfield Hall. The reused cruck timbers have been tree-ring dated to the late-15th century.

The building underwent a major alteration during the late-17th or 18th century. The original boarded infill panels were replaced with brickwork, a new tiled roof was added, a new brick sill was constructed, and an upper floor was inserted throughout the length of the building. These changes may have been associated with the change of use of the building away from grain storage towards cattle accommodation, following the general transition from arable to dairy farming which occured in the region in the post-medieval period.

The building took on its present form around the end of the last century following the rebuilding of the first floor framing and addition of low internal dividing walls and a brick outshut against the west side wall. The farm as a whole seems to have been upgraded at this time with most of the present brick structures surrounding the barn exhibiting broadly similar late-19th century characteristics.

Ightfield Hall Farm is still a working dairy farm, with the dairy herd itself accommodated in a large modern steel farm shed situated on the opposite side of the farmyard facing the 16th century barn.

History of the ownership of the site 1072-1997

Medieval

Ightfield is a parish and village approximately 4 miles south-east from Whitchurch in North Shropshire. The centre of the village is the 14th century parish church of St John. A church dedicated to St John the Baptist was extant by 1072 and the Domesday book of 1086 records that there was a priest there. Ightfield was listed at the Domesday survey among the manors held by Gerard de Tournay, the earliest recorded inhabitant. In 1211 it was held by Walter Hose (Hussey) and Roger de Ichtfield, 'on condition of their providing one foot soldier for the ward of the castle of Shrawardine.' Roger de Ightfield, in 1240, was the sole tenant and 15 years later he exchanged Ightfield with Griffen de Warren, probably a son of William de Warren of Whitchurch. Griffen was succeeded by his son John who was a minor in 1292. In 1310 this John was returned as one of the 'servientes men-at-arms to be prepared at Tweedmouth to discharge the military service due from Fulk Le Strange, Lord of Whitchurch'.

Hereafter the ownership of the manor of Ightfield belonged to two important Shropshire aristocratic families, the Mainwarings and the Needhams or Earls of Kilmorey, until the present owners, the Heywood-Lonsdales, took over the farm in 1884.

The Mainwarings of Ightfield

Around the middle of the 15th century William Mainwaring, second son of Randle 'Hawkin' Mainwaring of the house of Over Peover in Cheshire, married Margaret daughter and heiress of Griffen Warren, Lord of Ightfield and descendent of Griffen de Warren. William and his brother Thomas were responsible for the rebuilding of the church and adding a north aisle. William and his daughter Margery both have memorial brasses dedicated to them in the church (Figure 1). William died in 1497, his brass shows a figure in civil costume representing 'the good William Maynwaring, second son of Hawkyn Maymaring and Margaret his wife, daughter and heiress of Gryffen Warren, Lady of Ightfield.'In the new north aisle they endowed a chantrey chapel dedicated to St Werberg, a 7th century abbess. Because they had no children, William's next brother Thomas inherited Ightfield manor. He had two sons, John and William. The said Sir John Mainwaring was suceeded by Sir Richard (who we know lived at Ightfield in 1577) in turn suceeded by his son Sir Arthur, a soldier, and sheriff in 1563, who died in 1591. Sir Arthur had a son George and two daughters, Mary married to Sir Cotton of Combernere and Elizabeth, to Thomas Aston of Aston in Cheshire. (Lawrence Bostock's 'Church Notes from Ightfield').

Sir George Mainwaring, (who was High Sheriff of Shropshire in 1605 and has a bell dedicated to him in the church inscribed' As my sweet sound from me doth pass the daies of man gro less'), was succeeded by his son Arthur, later Sir Arthur, a well known figure at the court of James I and a favourite of Prince Henry (he became Carver to the Prince). His eldest son Charles married the daughter of Charles Cholmondeley of Cheshire. The hearth tax returns for this part of Shropshire show that in 1672 Charles Maynwaring was paying tax for 26 hearths. This large number suggests that Ightfield Hall had been rebuilt

by this time. They had one son and heir, Arthur, born at Ightfield in 1688. Arthur became well known in the literary world in the reign of William and Anne. His early education was in London where he studied law. When his father died in 1693 he inherited the Ightfield estate upon which he immediately raised £4,000 and devoted himself to politics and culture. He finally sold Ightfield manor in 1707. He was M.P. for West Looe from 1710 until his death. He died without legitimate heirs at St Albans in 1712: this was the end of the line for the Mainwarings and their involvement at Ightfield.

The Mainwarings of Ightfield had once been a great family. They had a tradition of Court service and loyalty to the Crown and had suffered loss as a result of the civil war. In recompense for their loyalty to the Crown Charles II relaxed for them the statute by which ecclesiastical lands were to be leased for terms of 21 years only and allowed them to take up their old lease of the manor of Prees from the Bishop of Lichfield and Coventry for the term of their lives. They did not however recover their position and in the late 17th and early 18th centuries they sold off a good deal of their properties. in 1697 they sold an estate in Edstaton, near Wem. The last in the line, the writer and politician Sir Arthur Mainwaring, sold Ightfield in 1707, to the Needham family of the neighbouring estate, Shavington.

The Needhams of Shavington

Robert Needham of Cheshire had a seat at Shavington since 1483 (DNB). His descendent Sir John married Margaret, youngest daughter of Randal Mainwaring of Over Peover in Cheshire, and thus formed alink with the Mainwaring family. They had no heirs so his many estates were divided amongst Sir John's siblings: Shavington was settled on his brother Thomas Needham. Thomas had two sons Robert and Charles. The eldest son Robert was created first Viscount Kilmorey of County Clare, Ireland, in 1625. In 1654 Sir Robert surrendered to his brother Charles his interest in the family estate at Shavington and in 1657, on Robert's death, Charles became fourth Viscount Kilmorey. He died in 1660. Two of his sons Robert and Thomas, succeeded to the family honours as fifth and sixth viscounts respectively. The second son Thomas Needham, the sixth viscount, rebuilt Shavington Hall in 1685. It survives today and is described in the Shropshire volume of the 'Buildings of England' as 'the grandest house of its date in Shropshire'. Alterations were made in 1822, and in the 1870s by Richard Norman Shaw, and in 1903 by Sir Ernest Newton.

The sixth viscount did not long survive the completion of Shavington. He died in 1687 and was succeeded by his son Robert as seventh viscount, when he was only four years old. This Lord Kilmorey married, in 1701, at eighteen, Mary, the daughter of John Offley and Mrs Crew Offley of Crew Hall. It was this occasion that prompted Mrs Crew Offley to acquire Ightfield to settle on her daughter and son-in-law: the greater portion of Miss Offley's fortune was invested in the purchase in 1707 of the manor and estate of Ightfield, a which adjoined Shavington on the west side and which, as described above, had been in the possession of the Mainwaring family for centuries.

Ten years after his marriage Robert died aged 28, in 1710. He was buried in the chancel of Adderley church with the following inscription: 'Near this place is interred the Right

Honourable Robert, Lord Viscount Kilmorey. He left four sons Robert, Thomas Francis and John and 4 daughters Ann, Mary, Elizabeth and Henrietta by the Right Honourable Mary Lady Viscountess Kilmorey, widow of the said Viscount, who departed this life the 9 April 1765 aged 81.' The first son Robert succeeded aged 4 but died aged 14 in 1716; his brother Thomas succeeded in 1716 and died in 1768 without an heir so his youngest brother John (Francis having died 8) succeeded in 1768 (aged 58) and died in 1791.

John's descendent Francis Jack Needham, twelth viscount Kilmorey was also created first Earl of Kilmorey. He was an army general who fought in the American War of Independence, in France and in Ireland during the rebellion in 1798. He died in 1832. Major changes were made to the park at Shavington under his occupancy: both William Emes and Humphrey Repton produced schemes for Shavington.

Francis was succeeded by his son Francis who became the second Earl of Kilmorey. His estates included the 3,000 acre Shavington Estate and were heavily mortgaged from 1863, principally by his grandson Lord Newry. By 1874 the mortgages amounted to £180,000. The second Earl died in 1880 and in 1884 the third Earl sold the Shavington Estate for £125,000 to Mr A.P. Heywood-Lonsdale. In 1864, the Cloverly Estate just south-east of Ightfield was bought by Mr J.P.Heywood, a wealthy banker; it was his nephew who bought the Shavington Estate, including Ightfield, in 1884 from the third Earl of Kilmorey. Mr Heywood-Lonsdale became lord of the manors of Ash Magna, Ightfield, Millenheath, Shavington, Styche and woodlands, and Willaston, and landowner in Moreton Say (VCH Salop iv 209,211). He gave up Shavington Hall as the principal seat and moved in to the Old Laundry, at Shavington.

In summary: Ightfield was the principal seat of the Mainwaring family from the midfifteenth century until the late seventeenth century, and in their ownership until the sale of 1707, when the Needhams, Earls of Kilmorey became owners but not occupants as they were located at Shavington Hall. The Shavington Estate, including Ightfield, was sold in 1884 to Mr Heywood-Lonsdale. From 1707 until present day the Ightfield Hall Farm has been occupied by tenant farmers.

Historical development of the site

Medieval

The moated site- a wide, partly water-filled ditch about 2 metres deep, oblong in shape with a causeway leading to a single island of dry ground (approximately half an acre in area)- could date from the eleventh century, considerably earlier than the peak period for moat building in this area, around 1250. It is situated in open countryside a little way from the village: there has not been any excavation in the area or other evidence to suggest that there was a shrunken settlement closer to the site.

Moats were constructed more to impress as symbols of wealth and power than as defensive works for military might. They were constructed by all seigneurial sectors of medieval society, both lay and ecclesiastical. The original Ightfield manor house was situated on the island. We can only presume that it was a timber-framed building although an article dating from 1889 refers to a stone bearing the date 1579 having been built into the south wall of the present house; but we cannot be certain that this was the date of the entire manor house. Harrod in his 'History of Shavington', suggested:' The original house was surrounded by a moat, which can still be traced, and was little bigger than a cottage.' How he arrived at that conclusion is not made clear. The present house mentioned in the list description as dating from the 17th century, allegedly incorporates earlier fabric such as oak beams, but the interior has not been inspected recently. It was extended and refenestrated in the 19th century. The house appears to have been tenanted from 1707, when the Viscount Kilmorey lived at Shavington Hall.

The moat was described in the article of 1889 entitled 'Extinct moated mansions of Shropshire' as follows:

'The greater part of it is dry; there is water in a part of the south west side and in a small portion of the north east side; the remainder is occupied by shrubs. The moat is broad, and the square area within it is larger than those already described in this series. The surrounding country is flat, mostly well-cultivated and within half a mile of the boundary of the county on the north east.'

This site is situated in an area of concentration of sites, and is built on relatively low-lying land. It is not yet clear whether the island was built up with spoil from excavating the moat. Rather than channels and inlets, the moat was more likely to have been fed from an underground spring. It is not clear either whether the present causeway is the original one or later, or what kind of flora and fauna abound within its precincts. Nevertheless, the site is likely to be of national importance. Moated sites are currently being reviewed by the English Heritage Monuments Protection Programme.

16th and 17th centuries: Ightfield Farm in the time of the Mainwarings

There has been parkland at Ightfield since 1577, it lay within a well-wooded park (VCH Shropshire I p. 493). Saxon notes a deer park at Ightfield in 1577: 'Syr Richard

Manoring, chefe of that name, dwelleth 3 miles away east from Prees village, at a village caullid Hightfelde, having a parke and great plenty of wood about him.' This Sir Richard Mainwaring may well have been responsible for improving his land management and building, or rebuilding, the large barn outside the precinct of the moat at Ightfield. Cattle husbandry was an inportant aspect of Shropshire farming in the period 1540-1750 and the shelter and feeding of the cows was likely to have been the impetus to build.

The park was mapped in 1611 on Speed's map of Shropshire but this gives little detail. A fuller sense of the landscape and buildings around the site can be gleaned from the documents relating to mortgages being raised on the manor by one of the Mainwaring family from the 1620s. The manor of Ightfield is described as follows:

'The capital messuage and Mansion House of Ightfield aforesaid and the park and grounds known as the Park or Ightfield Park and all singular messuages, edifices, buildings, barns, stables, dovehouses, yards, gardens, lands, meadows.'

This description is repeated in all the documents concerning Ightfield in the Shavington Records deposited in the Shrewsbury Record Office throughout the 17th century and up to the time of the sale in 1707. The conveyance specifies the extent of the property and specifically mentions the farm, in separate occupation from the house, for the first time:

'The capital messuage and manor house of Ightfield in Salop, where Thomas Pagrott doth now inhabit and dwell, and the demesne lands adjoining the said capital messuage and manor house, now in the several occupations of Thomas Prisrott the Elder, Thomas Prisrott the Younger, Thomas Smith, John Sharpe and others undertenants; the farm in the possession and occupation of Edward Lowcute and Peter Indislit and all the singular messuages, land, tenements, houses, edifices, buildings, barns, stables, dovehouses, gardens, orchards yards, warrens, woods, wooded lands, meadows and pastures. (Shropshire Record Office C VI iii/313).

The Ightfield lands thus became absorbed into the Shavington Estate.

18th and 19th centuries: Ightfield Farm in the time of the Kilmoreys of Shavington

By the 1660s there had been a dramatic increase in dairy production in north east Shropshire that rivalled that of Cheshire-it is, after all, part of the same dairying country. By the 1720s Shavington, the adjacent parish to Ightfield, was the foremost cheesemaking parish in the region, with a large dairy herd feeding in enclosed pastures (Figure 2). The later enclosure of Ightfield Heath, south of the village of Ightfield, which followed an Act of 1795 helped to improve the quality of grassland and this, together with the development of spring sown fodder crops, helped to provide additional feed for the rising animal population of north east Shropshire in the late 18th century. The cattle in the area were called black Longhorns, and produced excellent milk for cheesemaking. Cheese production was the main activity of this northern district well into the 20th century with the largest cheese fair being held at Whitchurch: an annual average of 1,411 tons was sold between 1925 and 1929 (V.C.H).

During the 18th century the barn at Ightfield was modernised and adapted to this dairy expansion: an upper flooor was inserted to provide additional storage space for fodder, the timber boards on the exterior were replaced by brick infill panels and the roof was retiled.

Ightfield Hall Farm and estate remained the possession of the Earls of Kilmorey throughout the 18th and most of the 19th centuries, and occupied by tenant farmers. A list of the fields around Ightfield Hall Farm in 1838, when a John Holland is tenant, survives in the record office. This list ties up exactly with the tithe map of 1845 (Ref. 2794 parcels 5/1 and 4/19) which is the first clear map evidence of the site and buildings identifiable today. The annotated map lists the parish of Ightfield as comprising 1,558 acres, of which 278 acres was arable land and 557 acres was meadow or pasture land. The owner in 1845 was the Rt Hon. Francis Jack, Earl of Kilmorey, 'owner of the demesne lands in the several occupation of Thomas Nunnerley, William Nunnerley and George Burgess', and the lands amounted to 725 acres, about half of the entire parish.

The apportionment accompanying the tithe map cites the Earl of Kilmorey as owner of the hall and Thomas Nunnerley as occupier. Plot 42 comprises the 'hall, outbuildings, moat and road.' The large barn is clearly shown with three other outbuildings; no.40 immediately to the north of the moat is the old orchard; no. 41 to the east is the barn meadow (so-called, obviously, because of the large barn that is the subject of this inquiry); no.43 to the south is the garden meadow. On the other side of the road is 'kiln meadow': brick-making activity in this field accounts for its pitted appearance. The outlying plots 37, 38, and 39 are described as the 'further park, middle park and bowling green, components of the 'Park' referred to from the 16th century. No. 98, the straight, tree-lined road is called 'church walk': this is the first time that this has appeared on a map.

The Post Office Directories from 1856 state that Lord Kilmorey was Lord of the manor and principal landowner owning most of the 1568 acres. The main farms in the parish were those at Upper and Lower Kempley, (Kempley House was also an ancient residence with traces of a moat), Ightfield Heath, the Dairy House and Ightfield Hall. In in that year a Joseph Cheetham was the farmer at Ightfield Hall. He is listed at Ightfield in 1863 and again in 1875 ('Ightfield Hall, the residence of Mr Cheetham, is an ancient house surrounded by a moat'). Joseph and his son Isaac were still there in 1877. In that year the Directories described the soil at Ightfield as 'loam and clay, and the chief crops were wheat, barley, oats and turnips.' This last list suggests a diversification from a concentration on dairy farming.

1884-Present Day: Ightfield Farm in the time of the Heywood-Lonsdales

The hall was sold to Mr Arthur Pemberton Heywood-Lonsdale B.A., D. L., J.P. of Gredington, in the summer of 1884. He resided at Shavington Hall, south east of Ightfield. It was he who paid for the restoration of the Mainwaring brasses in the church, and was clearly a figure of high standing in the community. One John Wood became a new tenant farmer at the Hall, replacing Isaac Cheetham. Wood was replaced by John Fitton, farmer, in 1891. Arthur Heywood-Lonsdale was succeeded in 1912 by Major

Henry Heywood Heywood-Lonsdale, who, by 1929 had become Lt. Col. Heywood-Lonsdale D.S.O., T.D., D.L.S.P. By then the land was described in the Directories as 'chiefly pasture'. The farmer at the Hall in the 1929 was Richard Fitton, presumably a descendent of John Fitton. Ightfield Hall and farm is still in the possession of the Heywood-Lonsdale family, as part of the Shavington Wood Estate.

Changes to the buildings on the site at Ightfield Hall can be seen by study of the Ordnance Survey maps. The 1880 map shows additions to the number of farm buildings near the barn, and an extension to the rear of the house and the stable building. By 1921 an extra aisle has been added on the meadow side of the barn, and by 1926 more outbuildings and a partial refilling of the moat. Internal changes were made to the barn such as the installation of cattle stalls. More recently, since 1983, the two end bays of the barn have collapsed.

Summary

The records of the Shavington Wood Estate deposited at the Shropshire Record Office in Shrewsbury were helpful in so far as they made clear the line of ownership and the extent of the property in the 17th and early 18th centuries. From these and other sources we know that the site was occupied from the eleventh century, and by the Mainwarings from the mid-fifteenth century until 1707. We can assume that the barn was built under the ownership of Sir Richard Mainwaring, residing at Ightfield Hall, for the needs of an expanding dairy herd. From 1707 the house was occupied by tenant farmers managing the farm on behalf of the Kilmoreys of Shavington, and the barn was adapted and renewed in parts. This adaptation and modernisation continued throughout the 19th century.

The structural development of the building

Phase 1: late-16th century

Dendrochronological analysis of the timber frame has established that the barn was built in AD 1567, or soon after. Some parts of the timber frame were constructed using second-hand timbers salvaged from an earlier building (or buildings), with most of the principal rafters of the roof frame having been fashioned from the blades of an earlier medieval cruck-built structure. Dendrochronological analysis has shown that these reused cruck blades date from the late-15th century. One other timber, a short vertical stud forming part of a roof truss, was dated by dendrochronology to the early-16th century.

The building follows an approximately northwest-southeast alignment and stands some 40 metres to the south-east of Ightfield Hall. For the sake of convenience a nominal north-south alignment has been adopted throughout this report, with site north being at the end of the building closest to the house and site west the main elevation facing onto the farmyard (Figure 10).

The original building was of timber-framed construction throughout with the open framework of the walls built up off a low brick plinth. The roof may have been tiled from the outset as opposed to thatch. The building was divided into six bays of equal length with each bay open from ground to roof, apart from the entrance bay (bay 3 from north) which was somewhat longer than the others and contained an upper floor.

The barn was constructed using a traditional carpentry technique known as box-framing. As a method of construction, box-framing is characterised by the sub-division of the building into a number of structural bays by one or more cross frames. The roof is supported on a series of roof trusses which rise above the cross frames and which in turn transfer most of its load to the ground. The three main distinguishing features of box-framed carpentry are the sill beam, the trussed roof, and the tiebeam lap-dovetail assembly found at the junction of the tiebeam, post and wall plate.

Box-framing could be used in conjunction with different wall-framing techniques to produce a variety of decorative effects. In the West Midlands there developed during the medieval period a marked preference for a wall-framing technique which divided the frame into a series of small, square panels. The design of Ightfield barn shows that it was constructed very much in the mainstream of the prevailing regional style, with the simple repeat patterning of its long side walls and profusion of structural bracing combining to produce a visually striking, as well as structurally robust, physical effect (Figure 11).

In most timber-framed buildings of the period the open spaces between the wall timbers would have been filled using lath and plaster or sometimes (especially in agricultural buildings) infill panels of woven oak laths. At Ightfield, a different technique was used, one more often associated with high status houses rather than farm buildings. Instead of laths, the spaces were filled with wooden boards, the individual boards laid horizontally one above the other, and with their ends held in position in continuous square-section grooves cut into the sides of the vertical framing members. This boarded infill was certainly an original feature of the building, since the method of construction allowed no

other method of fixing the timbers other than by slotting the boards into position whilst the timber frame was being erected.

With the exception of bay three, the same pattern of vertical and horizontal posts, rails and studs, and diagonal corner braces was repeated at bay intervals along the length of the building. Each bay was divided vertically into four by a central wall post with intermediate studs on either side, and horizontally also into four by three rows of midrails, each interrupted by the central wall post. In the upper and lower corners of each bay was a straight brace connecting the wall post with wall plate and sill beam respectively.

Bay 3 included an entrance doorway on either side of the building. The door openings were of equal size and were each provided with a timber pentice supported on short projecting timber brackets. Both the pentices are now missing. The brackets were attached to the wall posts using double mortice and tenon joints. There is no definite evidence of any further primary door openings in either of the side walls at either ground or first floor level.

Of the six bays of the barn, the entrance bay (bay 3) alone appears to have been provided with an upper floor from the outset. The floor itself is now missing, but evidence for the floor frame and the method of its construction survives in the pattern of empty mortices, housings, rebates, etc, to be seen in the faces of the adjacent side walls and cross frames. The floor was supported on three sets of common floor joists running across the building from east to west. The joists were supported on two parallel floor beams which ran longitudinally between cross frames 3 and 4. At the side walls, the ends of the joists were carried on small-section timber rails. The floor beams and side rails supporting the floor were clearly an integral part of the original timber-framed structure, the timbers having been framed into the building using mortice and tenon joints. The joint used between the floor beams and strainer beams had double tenons and diminished shoulder, and was pegged twice (Figure 25). The surviving strainer beam of cross frame 3 includes a mortice in its soffit for a central post, now missing. The post would probably have extended downwards to meet the timber sill beam of the cross frame, which is also missing.

Cross frames 2, 5 and 6 also incorporated a strainer beam below the tie beam, but these were at a lower level than those of cross frames 3 and 4. Below each of these lower strainer beams was a framework of studs, braces and sill beam. No direct evidence now exists to show whether or not the cross frames were infilled at these positions, or the framing left open. Any evidence for original door openings through the cross frame partitions at ground floor level has similarly been lost.

The wall plates include a series of scarf joints (four along each side of the building). All the scarfs are of bridled tenon type, with sloping abutments and joined with two pegs. The direction of assembly of the scarf joints, and therefore the wall plates and timber frame as a whole, was from north to south.

The barn retains an original tenoned-purlin roof with a later tiled roof covering. The roof features two tiers of purlins on each side and has no ridge piece. At every bay interval

the upper and lower purlins are braced upwards and downwards to the principal rafters, a decorative arrangement with the windbraces reflecting the pattern of braces in the side walls and cross frames, and the pattern of angled struts within the roof trusses.

The roof was constructed largely from re-used timbers, evidently taken from a cruck-built structure and probably medieval in date. On some of the timbers the signs of re-use are quite clear: empty mortices and peg holes, etc, none of which have any functional connection with the present building. On other timbers the signs of re-use are less obvious: differences in tool marks, carpenters marks, weathering marks, etc, and to establish the date(s) of these timbers would require a combination of detailed fabric analysis and tree-ring dating.

Of the clearly re-used timbers the most obvious elements are the principal rafters, purlins and some of the struts within the roof trusses. From the pattern of redundant peg holes, halvings and mortices to be seen in the principal rafters, it is quite clear that these elements are in fact re-used cruck blades, the originally curved timbers having been trimmed square, reduced in length and turned so that the side which was previously the outer face now faces inwards.

The re-used timbers, apart from adding visual interest to the building, are themselves of significant historical importance and well worthy of study in their own right. From the length of the timbers, the position of the empty joint mortices and the angle of the empty mortices and halvings, etc, it is possible to gain some idea of the dimensions and overall scale of the parent cruck structure from which the timbers were salvaged during the sixteenth century. At least four of the seven roof trusses employed re-used cruck blades as principal rafters. If, as would seem likely, the timbers were taken from the same building, this would show the parent cruck structure to have been of at least three bays in length, or five bays if hipped. To judge from the pattern of empty mortices in the re-used purlins, in the early cruck building the individual bay lengths were somewhat longer than in the present building. The cruck building included windbraces which were halved and pegged (two pegs to each joint) to the backs of the purlins, and a tenoned purlin roof with the common rafters resting over the backs of the purlins and secured with a peg. The spacing of the empty peg holes in the re-used purlins suggests that the rafters were spaced rather further apart in the cruck structure than in the present building.

The barn displays an interesting assortment of carpenter's marks, which appear to be confined mainly to the roof timbers. A different marking system can be seen to have been used for each of the five extant roof trusses. The framing members of each roof truss were numbered in sequence from east of west, except the fourth roof truss from the north which was numbered west to east. A variety of marks were used, ranging from small, deeply-cut chisel marks (truss no.2 from north), semi-circular gouge marks (truss no.3 from north), small, feint, scribed marks (truss no.4 from north), long, deeply-incised scribed marks (truss no.5 from north), through to painted (or crayoned) marks (truss no.6 from north). Traces of similar painted or crayoned carpenter's marks are to be seen in other locations around the building, for example near the tops of the wall posts at the point of intersection of the main tie beam braces.

The high quality of the structural carpentry is matched by the wealth of smaller decorative detail to be seen throughout the barn. Practically all the main structural timbers are finished with plain chamfers, with each chamfer terminating in a neat, stepped run-out stop at each end. The jowled heads of the wall posts are carefully shaped, some with a curved profile, others more angular (Figure 39). Some of the wall posts were also finished with a jowl at their base.

Phase 2: late-17th and 18th century

This period saw a major remodelling of the barn presumably brought about by a change in the use of the building from grain storage to cattle accommodation.

The roof covering of the barn may have been of thatch originally but could have been tiled. It is considered likely that the present tiled roof covering dates from this later period of alteration of the barn. The tiles are set on wooden battens, with a lime/sand cement backing applied to the tiles after they were laid. The tiles appear to be handmade; they are hard-fiored and have been vitrified, giving a hard, glazed surface. The tiles have a nib on their upper edge, for resting over the battens rather than pegging.

The original boarded panels were removed from the walls and replaced with brick infill. Parts of the timber wall frame were refaced with wooden planking, applied with nails. The original timber sill beams were replaced or repaired, and the entire building was underbuilt in brick. The new brick infill panels of the walls included small ventilation openings constructed in geometric patterns (Figure 41).

Cross frames 2 and 6 were closed with brick infill, apparently from ground level to roof apex. There are now one or two openings present in the brick infill, but whether or not they are original is uncertain.

Various openings were made at 1st floor level along the west side wall. There appears to have been one opening per bay. Some, but apparently not all, of the openings were decorated with plain chamfer around the surrounding framing members.

Phase 3: 19th and early-20th century

The barn was renovated around the end of the last century. On the ground floor, low partition walls were added to create separate cattle stalling areas. These walls were built of brick and given timber capping plates.

The framing of the upper floor was renewed throughout with the new floor constructed of softwood. The common floor joists throughout are carried on a central longitudinal floor beam. The floor beams are supported on short posts at bay intervals, standing on the low partition walls.

The ground floor is given to cattle stalls/pens throughout, with animal accommodation carried through into the outshot on the east wall. The outshot and the granary adjoining the barn to the south both probably date from this period of alteration.

The architectural and historical significance of Ightfield Hall Farm Barn

- 1. The overall scale of the building, the quantity of timber used in its construction, the decorative detailing of the timbers, and the quality of the structural carpentry throughout all point to the fact that the building was a high status structure, and constructed to standard which reflected the wealth and prestige of the Mainwarings as one of North Shropshire's leading landowning families in the second half of the 16th century.
- 2. The dating of the initial construction of the building to AD 1567 suggests that it is one of the earliest surviving box-framed barns in the West Midlands. There exist at present some 200-odd timber-framed barns in the county. Some of these, perhaps the majority, are likely to have been built in the 17th or even early-18th centuries. Although as a construction technique box-framing mixed with square-panel wall-framing continued until well into the 18th century, in the West Midlands relatively few examples are known which date to before AD 1500.
- 3. The use of boarding as an infill technique is comparatively rare in England and is always associated with buildings of high social status. Although none of the original boarding survives at Ightfield there is clear evidence for its existence throughout the barn in the grooves running along the edges of the vertical framing members.
- 4. The assorted timbers used in the construction of the barn are themselves of intrinsic historical and scientific interest and worthy of further detailed study. A fairly brief analysis (Groves, 1997) revealed that, of the newly-felled material most, if not all, of the timbers were probably produced from trees growing in hedgerows and open parkland (i.e probably from the extensive parkland which formed part of the Ightfield eastate in the 17th century. Some of the tie beams and strainer beams were produced by means of halving whole trees along the centre line of the trunk, in some cases (for example in cross frames 5 and 6) the tie beams can be seen to be matching halves cut from a single tree.
- 5. There is clear physical evidence to show that the reused timbers used in the initial construcion of the barn came from an earlier cruck-built structure. The timbers were dated by dendrochronology to the late-15th century. If the reused cruck blades all came from the same building (which, given the similarity between the reused timbers would appear to have been the case) this would give a building of at least four bays in length. None of the timbers are smoke-blackened, so this may indicate the building was a barn, rather than a house.
- 6. The documentary record shows that during the late-15th century the Ightfield estate was held by William Mainwaring, who with his brother Thomas was responsible for rebuilding Ightfield parish church. As a wealthy man keen to consolidate his family's holding in Ightfield, it seems

at least possible that William Mainwaring may have had a connection with the earlier cruck structure. It is possible to speculate even further, i.e. if the moated site was the site of the manor house, might not the reused cruck timbers have come from the original Ightfield manor/parish tythe barn? Was the present barn built as a 'post-dissolution tythe barn', with William Mainwaring having already acquired the possession of the parish (i.e. the medieval manor), and his heirs henceforth successively taking on the role of lay-rector (i.e. providing a vicar for the parish but collecting the tythes on grain, hay, etc, for themselves)? (Brunskill, 1982, 35).

7. The fact that North Shropshire became such a major dairy-producing region so early (from 1540 onwards), coupled with the evidence for a remodelling of the barn in the late-17th/18th century, points to the building having been used to house cattle from a relatively early date. To quote from a recent EH publication on listing farm buildings in East Anglia: '...Substantially complete 17th and 18th century barns which retain clear evidence of contemporary cattle housing will be candidates for listing.....Thematic survey work (in East Anglia) has shown that a major factor of agricultural advance lies with the management of livestock, and that the key building types are those which represent that development'.

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Appendix 1

The use of brick in the barn structure

Brick has been employed both as a primary and secondary construction material within the fabric of the building. The material is of great interest as a considerable variety of brick types have been utilised dating from the 16th to 20th centuries. The ten most commonly occurring types are discussed in the following text and illustrated on the appended drawing (Figure 24).

The earliest use of brick here is as a foundation element for the support of the timber ground cills and survives undisturbed, under the ground cill to cross-frame 2. This brick type can also be found below the raised ground cill of bay 3 of the west elevation of this structure (type E). The bricks are set in a hard pale brown lime/sand mortar with small particles of lime. The samples examined measured 235-240 x 100-105 x 55mm (thickness), orange to dark red in colour with pebble and angular flint inclusions. They were irregular in shape with irregular and slightly rounded arises and occasional striated upper surfaces. Finger marks were evident in bedding surfaces where exposed. They have many of the features that are usually found in bricks of the early 17th century, were almost certainly locally manufactured and would appear to date from the erection of this building. Close examination of the fabric of the extant farmhouse, which is thought to date from the seventeenth century, may indeed reveal brickwork of a similar type.

There would appear to be a period of major refurbishment of the building during the eighteenth century, when its extant external appearance was established. The earlier infilling material (open wattle with horizontal staves?) was completely removed and replaced with brick. The reason for this exercise is not abundantly clear although the principal framing members of the west elevation exhibit many signs of decay and loss of their external face. It could therefore be reasonably assumed that the barn had fallen into a state of disrepair which warranted this major intervention.

Brick is not generally a good material for infill panels: it is too heavy, tends to hold moisture and is a poor insulator. Despite these facts it is known to have been used at least from the sixteenth century and was widely adopted during the eighteenth century as brick became a more cost-effective construction material.

Much of the earliest panel infill brickwork survives (type A) on both east and west elevations. Bricks are typically 230-235 x 110-115 x 65-70mm, orange/purple in colour with large pebble inclusions, irregular arises and a rough texture to faces. Shallow, horizontal stacking creases were observed on stretcher faces, almost certainly created during the drying process. No surface vitrification was noticed although the bricks had been well fired. They are laid in stretcher bond and set in a hard lime/sand mortar, difficult to remove from the bedding faces. Geometric ventilation patterns, typical of the later eighteenth century, survive within the brickwork infill of the upper walls of bays 2 and 4. They were positioned to aid the drying of stored crops but, surprisingly, they only appear to have been placed on the eastern elevation, making cross ventilation difficult.

During the nineteenth a number of ancillary buildings were erected in brick on this site. This included the substantial three-bay, cart house, attached to the south of the barn and possibly the full-length lean-to that covers (and now braces) the east elevation. This brick is also found in several panels of the west elevation where alteration and repair have been undertaken (type B). These bricks are typically 225-230 x 110 x 70mm, a dull, constant orange colour with sharp regular arises and smooth faces with angular stacking creases on exposed faces. Some bricks have finger and palm impressions caused during handling. They are set in a hard lime/sand/(cement?) mortar with small slate inclusions with slate packing used against the timber frame members.

The former entrance to bay 3 has been crudely blocked using a similar brick ($type\ C$) to that discussed above ($type\ B$). However, these bricks are of inferior quality and may be seconds. Faint horizontal stacking marks are evident. They have been laid in a hard cement/sand mortar. This brick type rises from a crude mixed brick foundation ($type\ F$) of uncertain date.

The extant upper opening of bay 3 appears to be modern with a raising of the cill in hard-fired machine-made bricks ($type\ D$), typically 225 x 100 x 75mm, some with perforations and some with a regular, shallow upper face indentation. Dark firing marks on faces due to stacking in kiln. Common type bricks laid in hard sand/cement mortar.

There is evidence for repair/re-setting of some of the earliest brick infill panels to the west elevation in a hard sand/cement mortar ($type\ G$). These panels have also a modern, machine-made brick used as packing, typically 225 x 105 x 70mm, pale yellow/orange ($type\ H$).

A pale brown, machine-made brick, typically $225 \times 105 \times 75$ mm has been used in the repair of a small area of the brick plinth of bay 3 (type J). It has also found in other panel repairs on the west elevation and within other later structures on this site.

Appendix 2

D o E Listing descriptions

SJ 63 NW

6/3

Barn approx. 40 metres to southeast of Ightfield Hall

GV

Barn. Mid-C17. Timber framed with red brick nogging on brick plinth, partly rebuilt in red brick. Plain tile roof. Framing: tall rectangular lower panels and top tier of small square panels with straight braces. 6 framed bays. One storey and loft. 5 loft openings, some

with boarded doors. 7 ground-floor boarded

to

left.

Collar and tie-beam end trusses with queen struts and V-struts. Loft floor in left-hand bay with chamfered beam. Interior not inspected. The roof of the left-hand bay had collapsed at the time of survey (October 1986). The barn forms part of a complete farmstead group including Ightfield Hall (q.v.).

SJ 53 NE

5/1

Ightfield Hall

29.9.51

(Formerly listed as

Ightfield Manor)

GV

П

Farmhouse. Probably late C17 altered and extended in the early C19 and further altered and refenestrated in the late C19. Red brick with plain tile roof. T-plan. 2 storeys and attic. Beaded wooden fascia, parapeted gable ends with sandstone copings and shaped stone kneelers, and integral brick end stacks (rebuilt above roof in the late C19). 3 hipped eaves dormers with 2-light wooden casements. 3 bays; late C19 glazing bar sashes (upper leaf with small panes and lower leaf with large panes) with stone cills and slightly segmental heads. Central C19 four-panelled door (lower panels beaded flush and upper panels glazed) with rectangular overlight and late C19 timber framed gabled porch on chamfered brick plinth. Rear wing with external brick lateral stack, central brick stack off ridge to south-west, and parapeted gable end with chamfered grey sandstone coping and shaped stone kneelers. Reset strapwork datestone to south-east inscribed: "1672". Interior not inspected but owner (October 1986) reports oak staircase with large turned balusters. The rear wing has been extended, probably in the early C19 (see straight joint). The house stands within a moated site, still partly filled with water at time of survey. It forms part of a complete farmstead group including a timber framed barn (q.v.) and stable (q.v.).

doors,paired

SJ 53 NE

5/2

Former stable approx. 10 metres to southwest of Ightfield Hall

GV

H

Probably late C17 or C18 incorporating earlier Timber frame with red brick on brick plinth; red brick gable end. Graded slate roof. Framing: large rectangular panels, 2 from sole plate to wall plate. 2 framed bays. One storey and loft. North-east front: 4-pane loft window to right. Pair of central raised ground-floor windows, of one and 2 lights. Boarded doors to left and right. Left-hand gable end: 2-light attic wooden casement and 2 small ground-floor openings to left. Truss with collar, cut-through tiebeam with moulded lower edge, probably early C19 brick infill and pair of small dovecote openings in apex. Probably reused right-hand corner post with hewn bracket. Right-hand gable end with collar and tiebeam truss. Interior: chamfered spine beam in left-hand ground-floor room. Roof with pairs of purlins, straight wind braces and ridge piece. The hewn corner post and moulded tie beam are probably of domestic origin, possibly reused from a previous house on the site of the present Ightfield Hall (q.v.), which is a brick building dating back to the late C17. It is possible that the stable building was formerly a domestic building itself but the type of framing appears to be too late. The building stands adjacent to Ightfield Hall (q.v.), within a moated site.

Figure 1 William Mainwaring's memorial brass, 1497, Ightfield Parish Church



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> THIS BRASS WAS INCOME FOR THE COURSE WID VIDEW BY ADADDED TO THE TYPICAL VIOLENCE VOC

"THE GOOD" WILLIAM MAYNWARING, 1497.
AS RESTORED IN 1895.
IGHTFIELD, SALOP.

Figure 2 Rocque's map of Shropshire, 1752

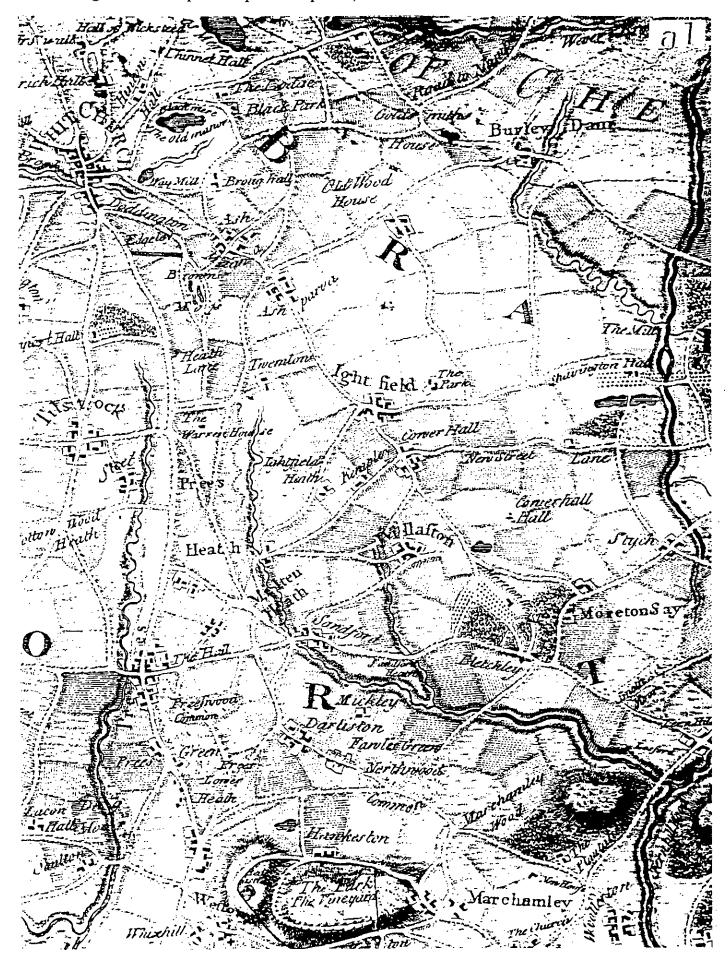


Figure 3 Baugh's map of Shropshire, 1808

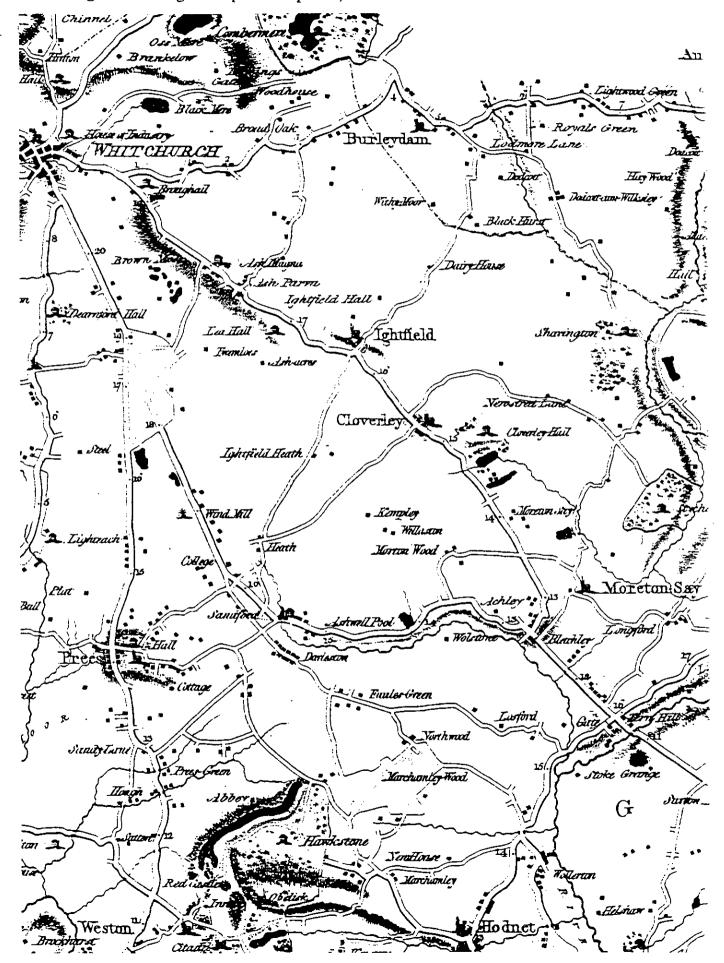


Figure 4 Tithe map, 1845

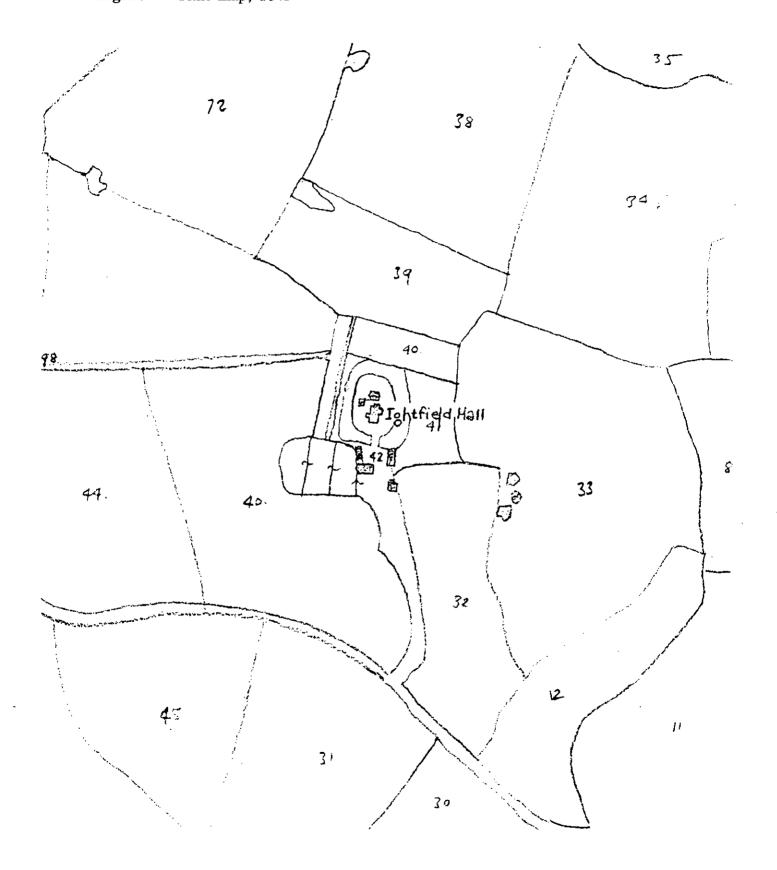
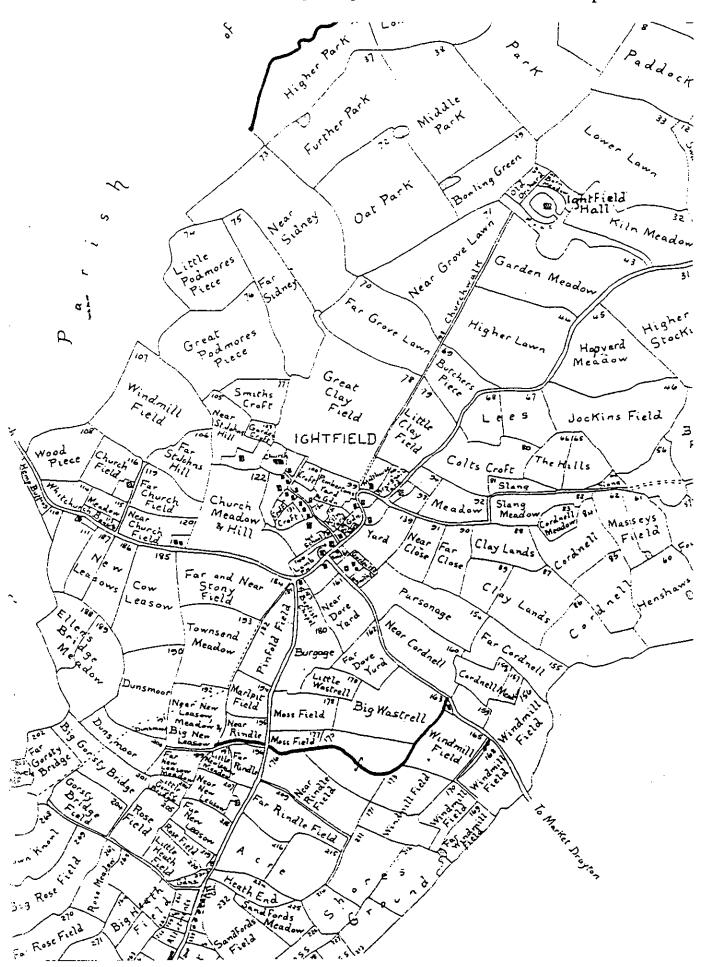


Figure 5 Foxall's field name map, compiled from the 1845 field name maps



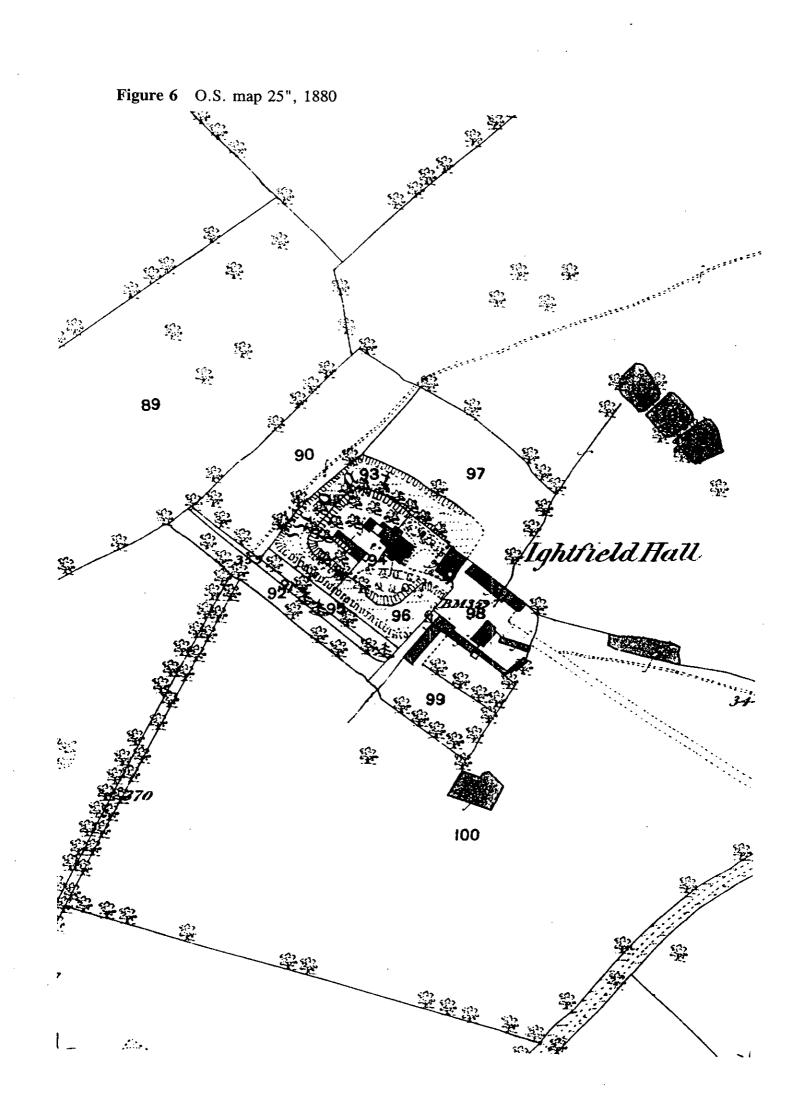


Figure 7 O.S. map 25", 1901 14 18-642 Mall ghtfield Hall 1 18 54 16-620

Old Marl Pit

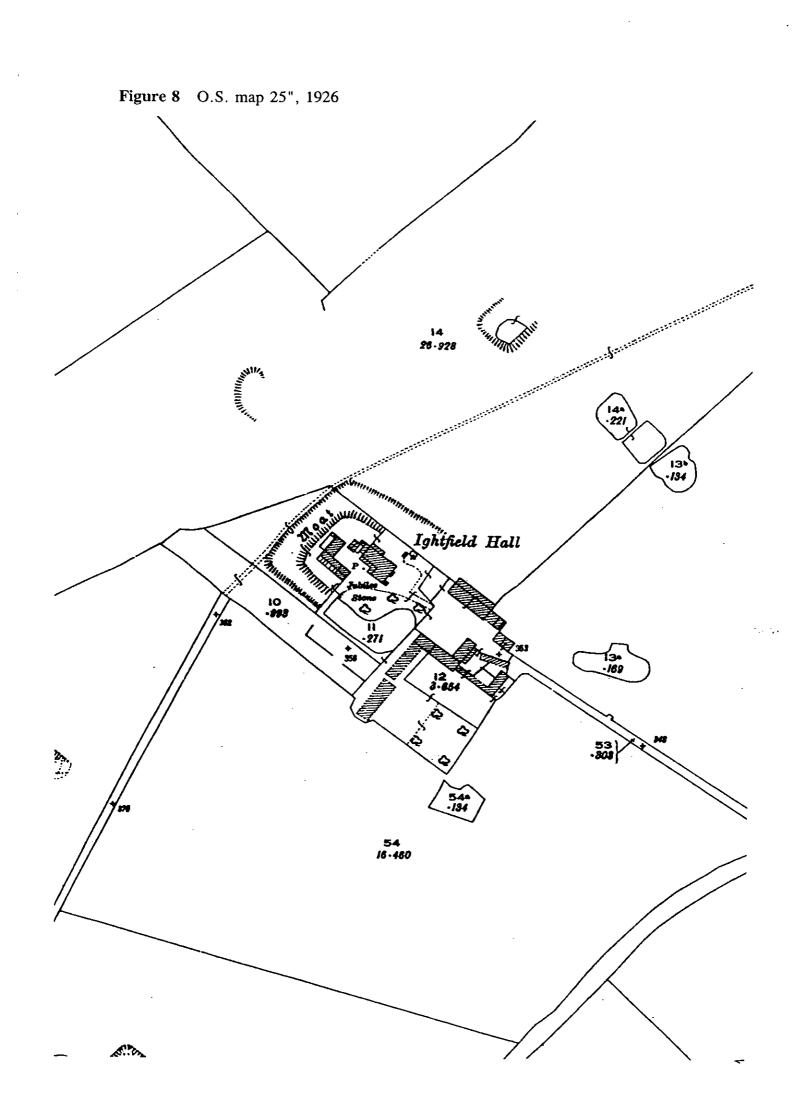
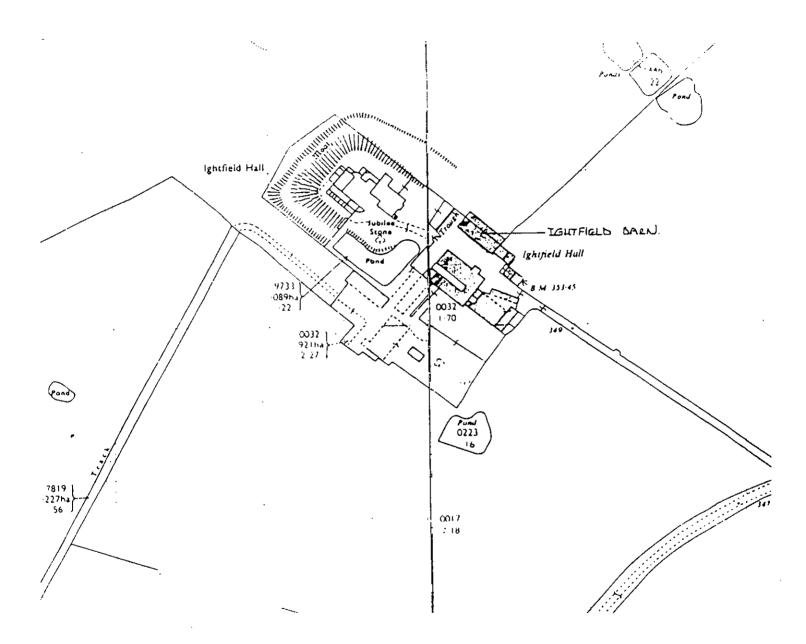
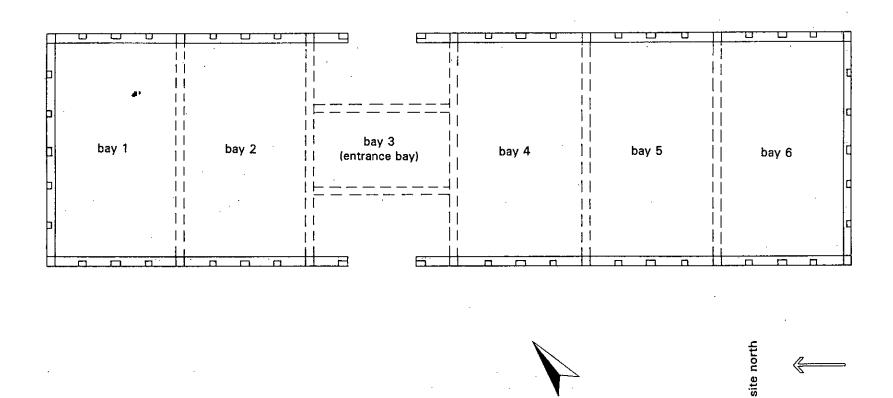


Figure 9 Current O.S. map

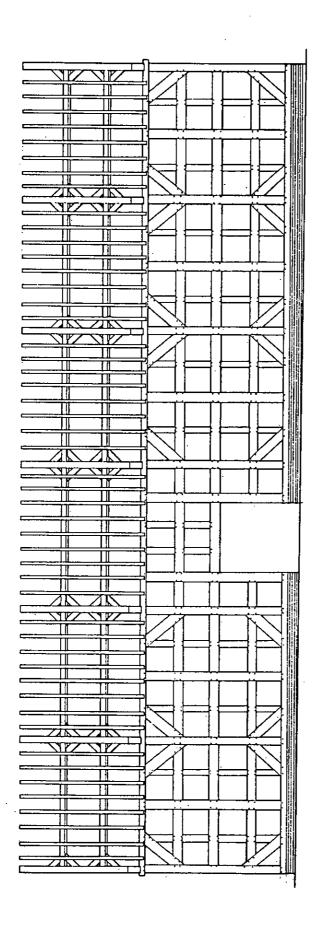




FEET

METRES

Figure 11 Exterior (farmyard) elevation of west wall and roof slope. Reconstruction of original timber frame.



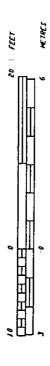
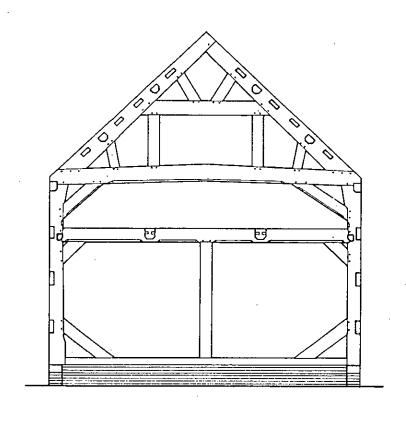


Figure 12 Cross frame 3. Reconstruction of original timber frame.



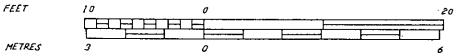
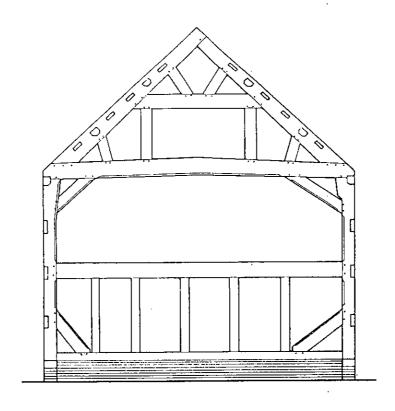


Figure 13 Cross frame 2. Reconstruction of original timber frame.



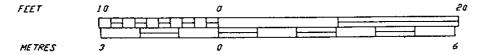


Figure 14 Internal elevation of east wall frame and roof slope, as existing.

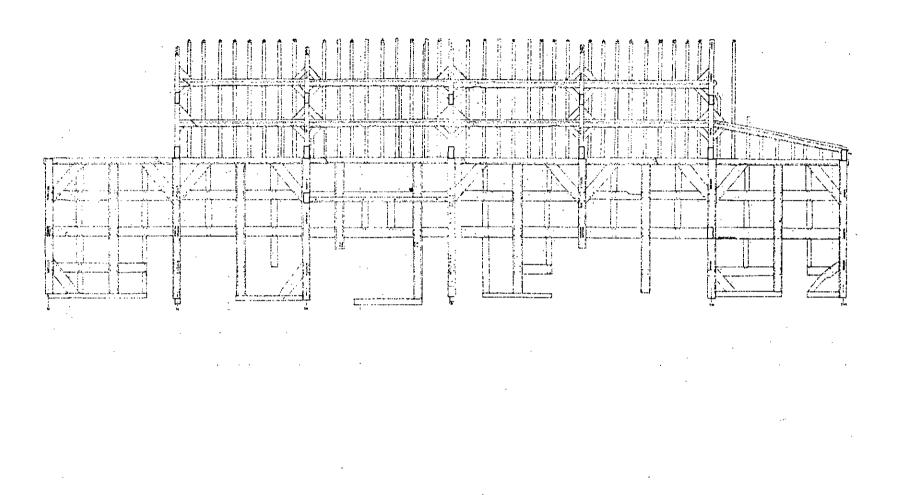


Figure 15 Internal elevation of west wall and roof slope, as existing.

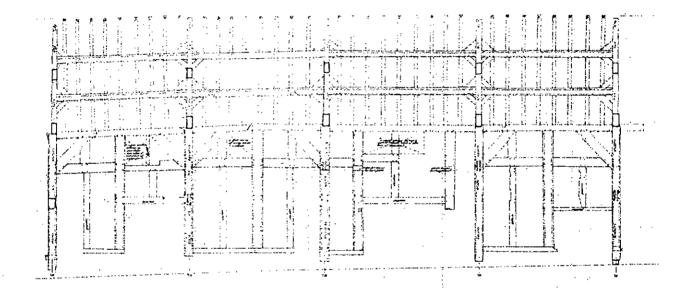


Figure 16 External elevation of west wall and roof slope, as existing.

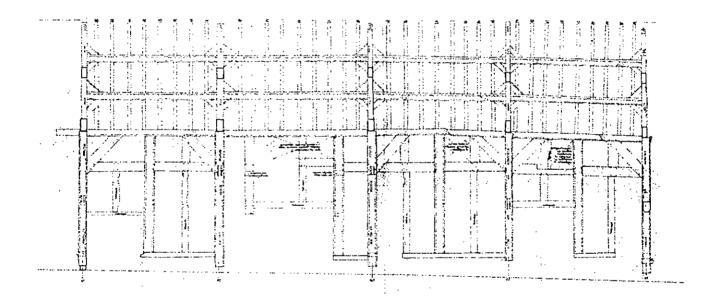


Figure 17 Cross frame 1 (dismantled).

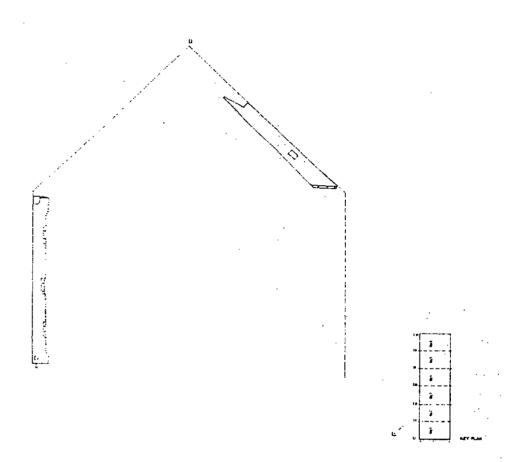


Figure 18 Cross frame 2 (upper face).

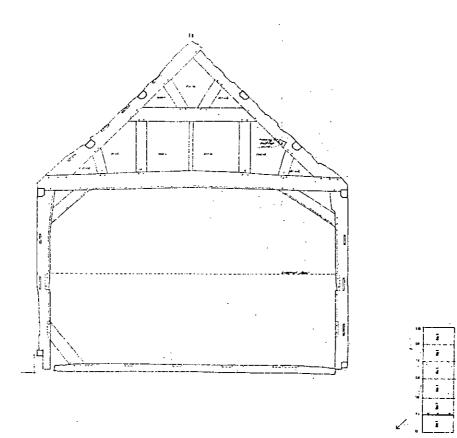


Figure 19 Cross frame 3 (upper face).

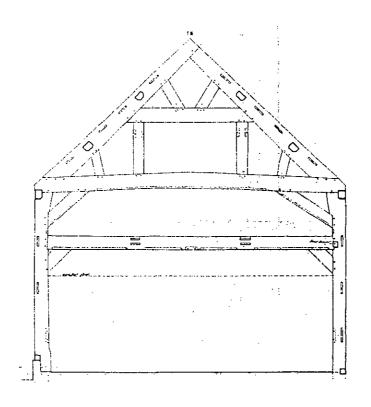


Figure 20 Cross frame 4 (upper face).

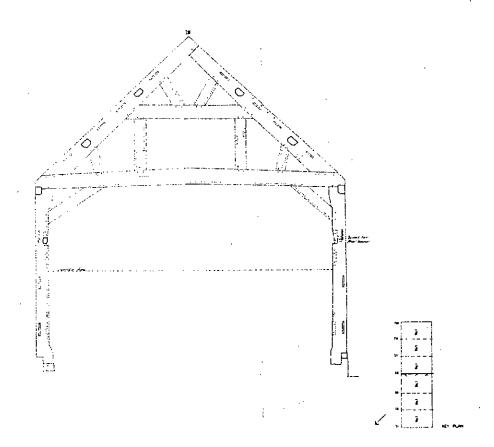


Figure 21 Cross frame 5 (upper face).

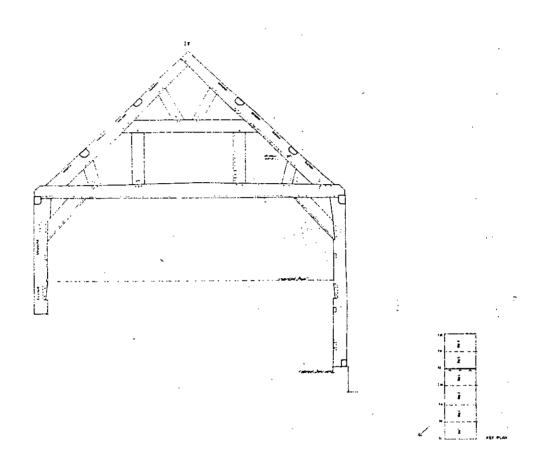


Figure 22 Cross frame 6 (upper face).

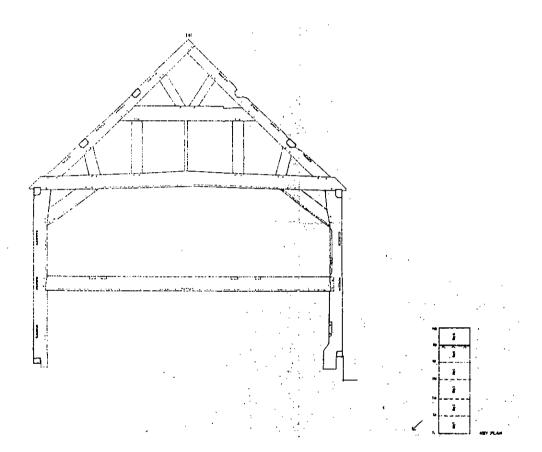


Figure 23 Cross frame 7 (lower face).

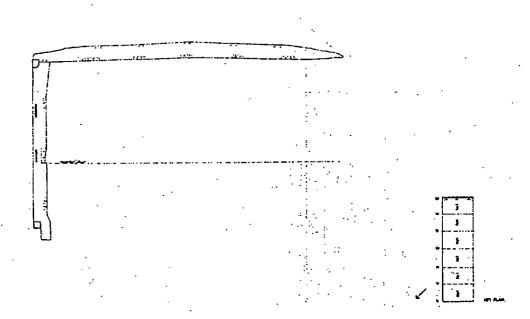
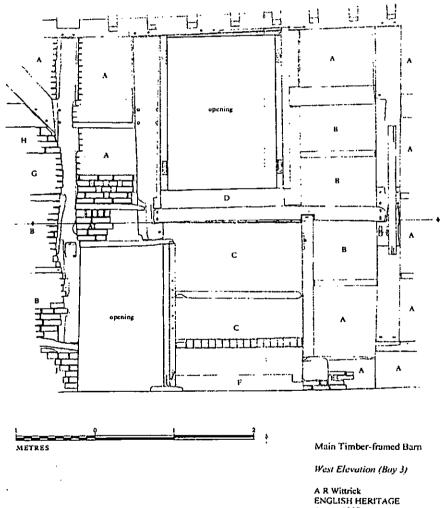


Figure 24 External elevation of west wall, bay 3, showing location of areas of historic brickwork.

IGHTFIELD FARM lghtfield Shropshire



A R Wittrick ENGLISH HERITAGE August 1997.

Figure 25 Tie beam, post and wall plate assembly. West end of cross frame 4 (annotated survey drawing).

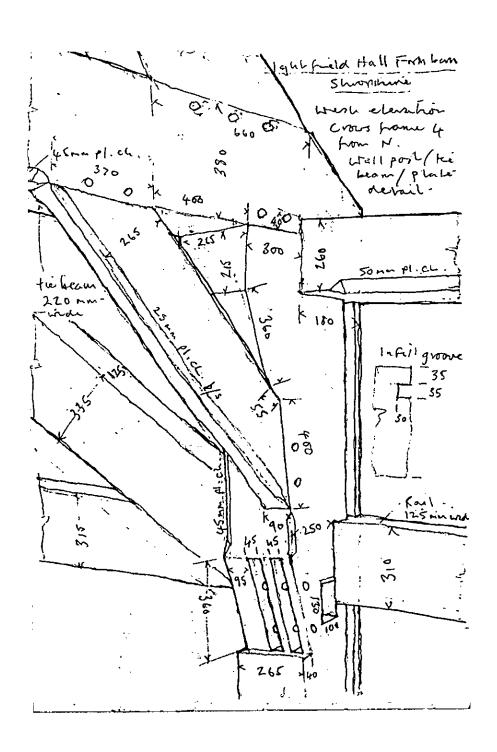


Figure 26 Typical carpentry details (annotated survey drawing).

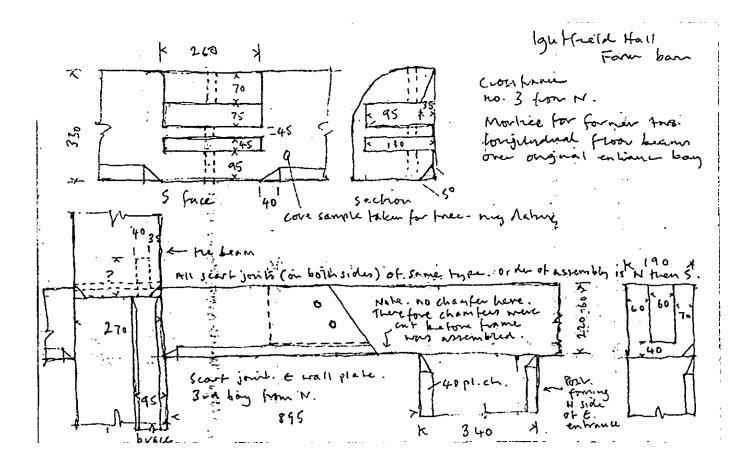


Figure 27 Sequence of later alterations to the building (annotated survey drawing).

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Figure 28 Ightfield church. View to south-east.

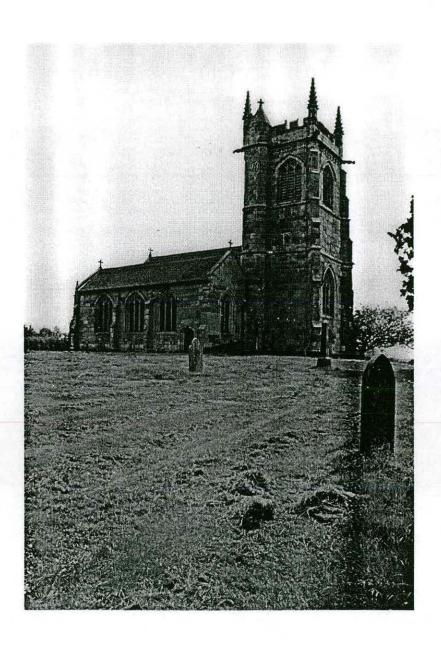


Figure 29 Ightfield Hall Farm. View to south.



Figure 30 Ightfield Hall with moat in foreground. View to north.



Figure 31 View of barn from farmyard (composite photograph).

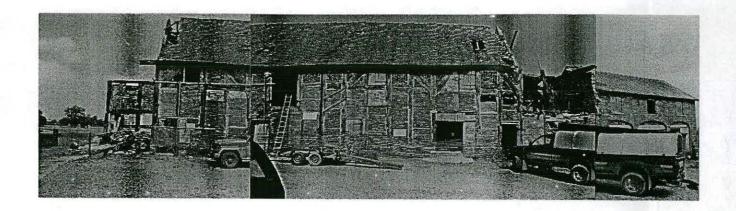


Figure 32 Detail of timber frame. West wall, bay 1.

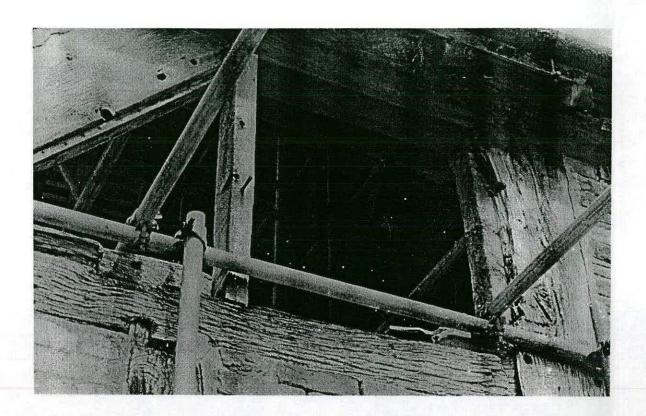


Figure 33 Detail of 18th century brickwork. East wall.

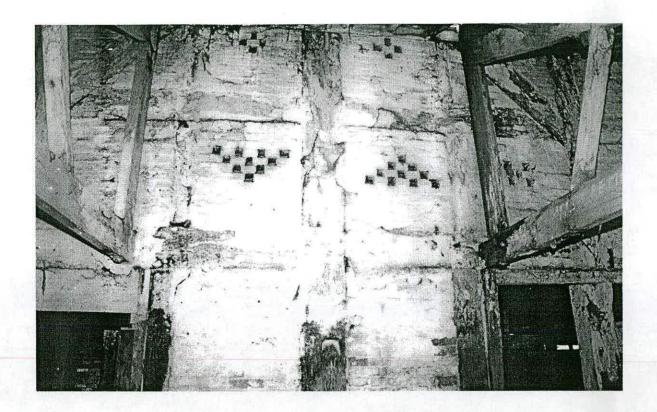


Figure 34 Detail of wall framing.

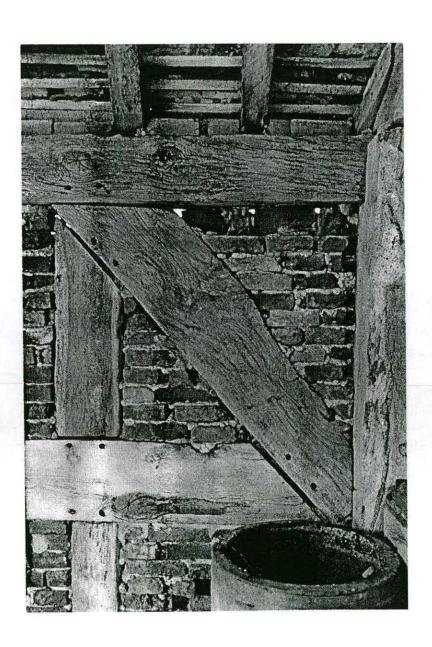


Figure 35 View into bay 3.

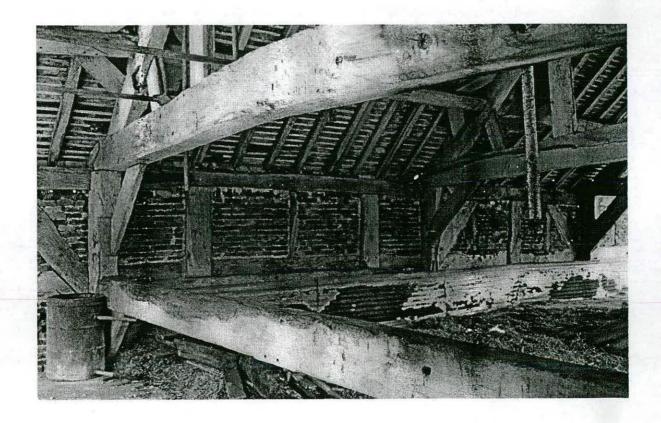


Figure 36 Roof frame. Detail of windbracing.



Figure 37 Detail of roof truss.

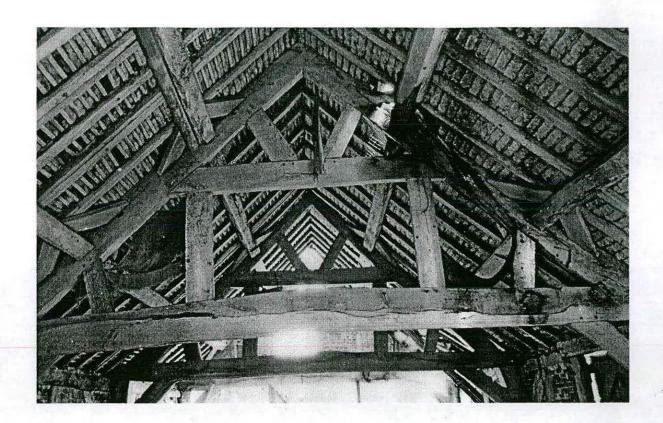


Figure 38 Interior view looking towards west wall.

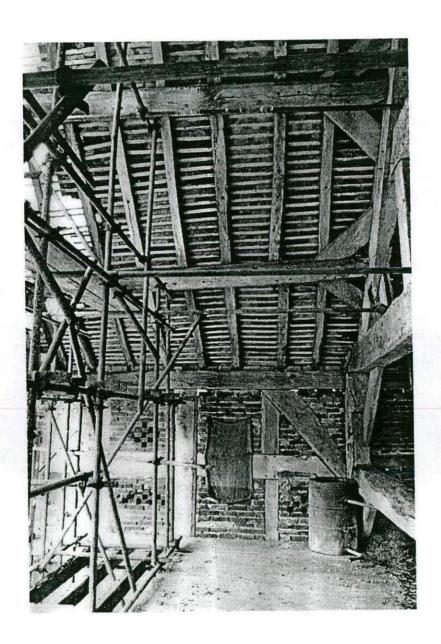


Figure 39 Wallpost/tie beam/principal rafter framing detail.



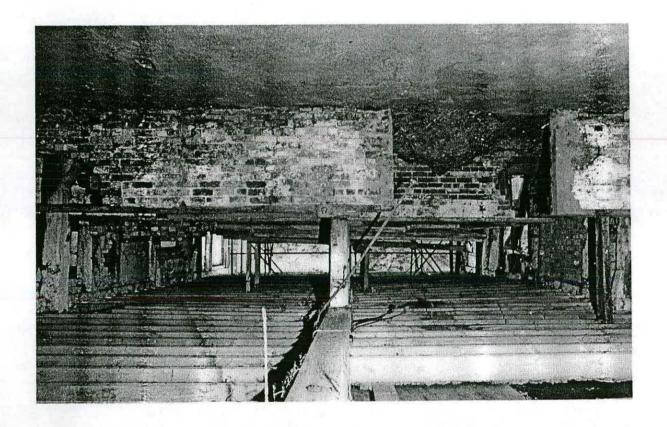


Figure 41 View of west wall of barn from inside brick outshot.



Figure 42 Exterior view of barn from farmyard. View to north.



Figure 43 Aerial photograph of Ightfield Hall Farm and surrounding landscape. Farm is at centre of photo, Ightfield village at bottom left.

