

Barn at Cooper House
Magson House Road, Luddenden Foot, West Yorkshire:
Historic Building Record



March 2015
NGR: SE 04122 24601
Historic township: Warley

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SUMMARY

The barn at Cooper House, Luddenden Foot (NGR: SE 04122 24601) bears the date 1789 and though there is some doubt over the authenticity of the date-stone, the architectural details of the building are in keeping with this, or an early nineteenth century date. The barn is of particular interest as it incorporates a former textile workshop at one end, comprising two floors with a storage attic over. It was recorded in December 2014 for the owners and developers, Mr & Mrs Davies, to fulfil a condition of planning consent for conversion to residential use.

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BARN AT COOPER HOUSE, MAGSON HOUSE ROAD, LUDDENDEN FOOT, WEST YORKSHIRE:

HISTORIC BUILDING RECORD

1 Introduction

- 1.1 This report presents the results of historic building recording of the barn at Cooper House, Luddenden Foot, near Halifax, West Yorkshire. The work was commissioned by the owners Mrs and Mrs Davies, to fulfil conditions attached to planning and listed building consent from Calderdale council for the conversion of the building to a dwelling, and was carried out in December 2014.
- 1.2 The barn at Cooper House bears the date 1789, which may be the year of construction, and though there is some doubt over the authenticity of the date-stone, the architectural character and many details of the building do indicate that it was built in that period, or a slightly later one. It is a large, handsome stone-built structure of three bays, which originally combined agricultural and equestrian functions with a textile processing workshop, a distinctive aspect of the barn, which is characteristic of the Calder Valley district.
- 1.3 The recording work was carried out in accordance with a specification from the West Yorkshire Archaeology Advisory Service (WYAAS) (Appendix 1), and comprised photographic, drawn, and written elements, as well as some research into the building's historical background. This report will be submitted to the clients, the West Yorkshire Historic Environment Record and the West Yorkshire Archive Service, and will be published on the internet via the OASIS project.

2 Location and current use

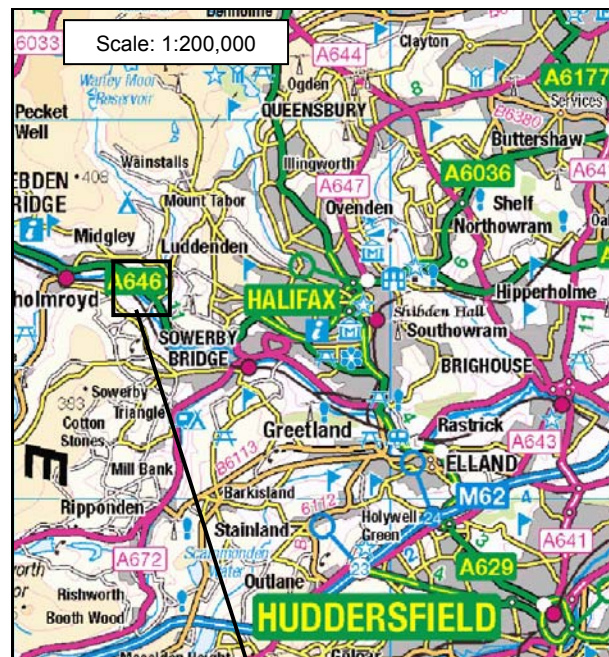
- 2.1 Cooper House stands on the west side of Magson House Road, some 500m south-east of Luddenden Foot in the Calder valley, about 5km west of Halifax town centre (figure 1). It is a detached, former farmhouse which was gentrified in the nineteenth century, and the barn stands across the yard 30m to its north-west, its gable end-on to the road, and its front elevation facing south-east towards the house (figures 2 & 3). The national grid reference for the site is SE 04122 24601 and its height above Ordnance Datum (sea level) is approximately 145m.
- 2.2 The barn currently serves as domestic storage and does not appear to have been used for farming or any other of its original functions for many years.

3 Planning background

- 3.1 The barn is listed (grade II) as having special architectural or historic interest, as “Barn with cottage approximately 27 metres to north west of Cooper House”¹. Planning and listed building consent for “Conversion of former barn with cottage into single dwelling and removal of outbuilding to create garage” was granted by Calderdale Metropolitan Borough Council on 3 August 2011 (application nos: 10/00852/LBC & 10/00853/CON). Both consents contain a condition, imposed on the advice of Calderdale MBC’s advisor the West Yorkshire Archaeology Advisory Services, requiring a programme of architectural and archaeological recording, which this report and its associated archive are intended to satisfy.

4 Previous investigative work

- 4.1 A detailed historic fabric assessment and analysis of the building was submitted as part of the planning applications for the site in 2011, by Hawdon Russell Architects², which gives a good account of the building’s form and development, though the present study does cast doubt on some of the assumptions and conclusions in that report. The West Yorkshire Archaeology Advisory Service have also visited the site and a record of the barn appears in their Historic Environment Record³.



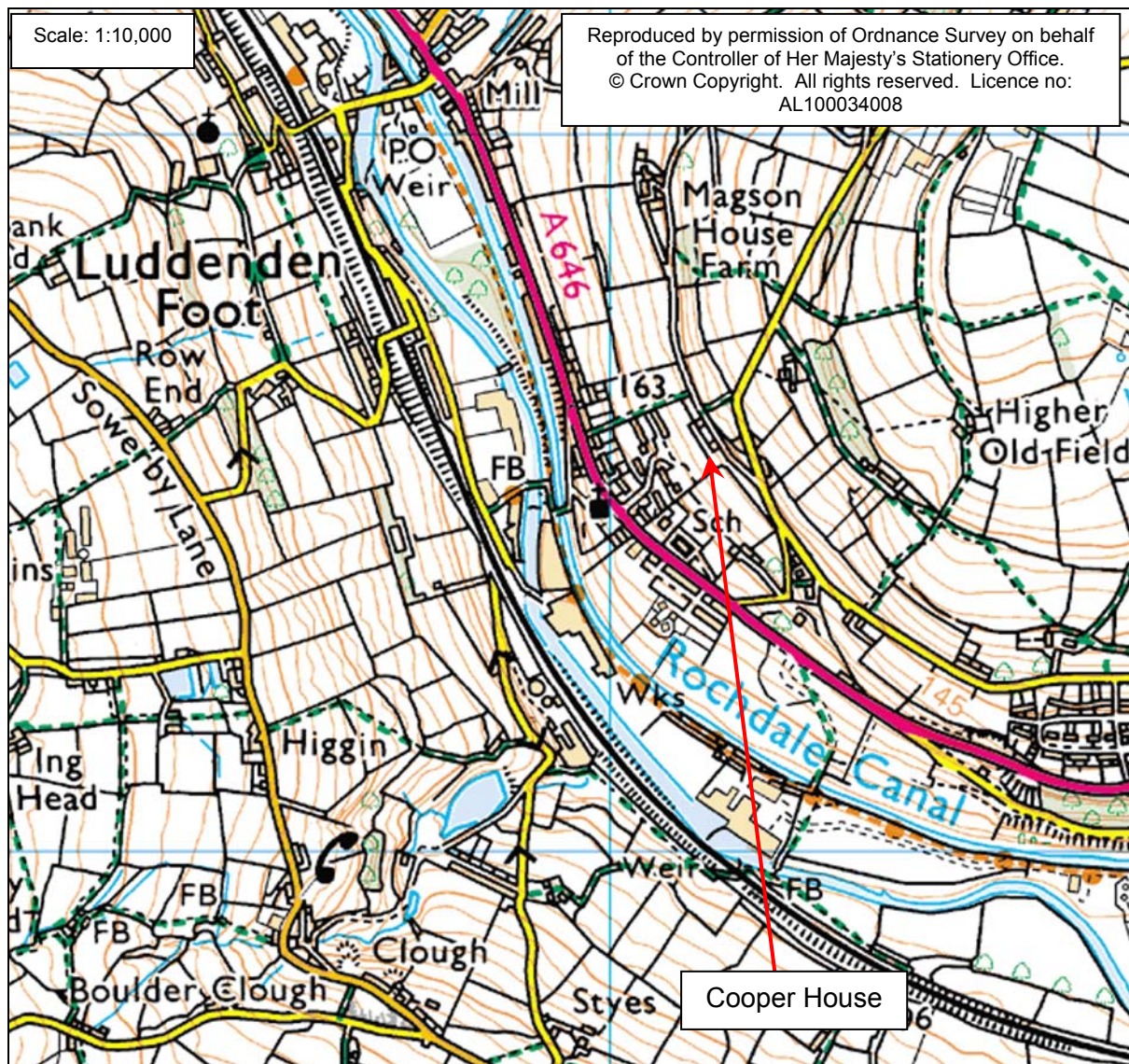
1: Location map (i)

see figure 2

¹ National Heritage List no: 1313733

² Hawdon Russell Architects, 2010 *Cooper House, Magson House Road, Luddenden Foot. Former barn with cottage: historic fabric assessment and analysis*

³ PRN 10464



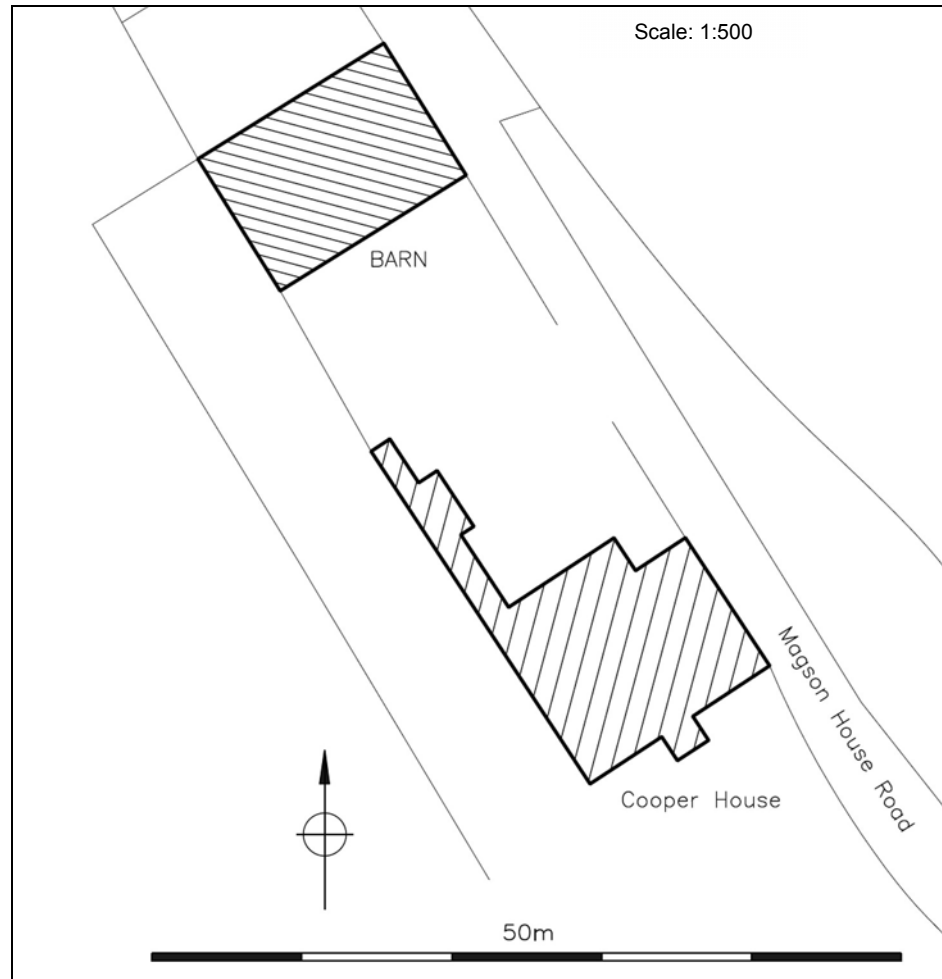
2: Location map (ii)

5 Historical background

- 5.1 As part of this recording work, historic maps and other sources at Halifax Library and the Calderdale office of the West Yorkshire Archive Service were consulted, though it should be noted that this did not constitute exhaustive research into the site's history.
- 5.2 The settlement at Luddenden Foot forms part of a distinct pattern in the upper Calder valley, which owes much to the late medieval and post-medieval development of the textile industry, in combination with small scale farming⁴. Domestic cloth-making emerged as an important element of local society towards the end of the medieval period and later gave rise to the "dual

⁴ Jennings, B ed 1992 *Pennine Valley*

economy”, of which the yeoman-clothier was a relatively prosperous member; the landscape abounds with the homes and buildings of this independent class, and Cooper House was originally one such property, though in its later years, and during the period when the present barn was built, it can be seen as belonging to a wealthier class of individuals.



3: Site plan

Owners and occupiers

- 5.3 Documentary sources indicate that there has been a dwelling known as Cooper House at this location since the early sixteenth century, with the earliest identified owner being one Edward Longbottom, who left the property to his five daughters on his death in about 1558. However, the name of the property suggests it was established by someone of the name Cooper or Cowper, also used in conjunction with “stubbing” in a place-name, in 1492⁵. The next known owner was Richard Midgley, described as a yeoman in 1608, and subsequently it seems to have passed through a number of hands, including those of Abram

⁵ Smith, A H 1961 *The Place Names of the West Riding of Yorkshire*, Vol III, Morley Wapentake

Normanton, Ambrose Spencer and James Tetlaw, until being acquired by the Revd Richard Sutcliffe in 1769, who for a number of years was master of Hipperholme Grammar School. Sutcliffe appears to have let the property for at least some of the time while owner, as a lease was drafted in 1772 between him and James Garnett for the “messuage called Cooper House... and several closes of land”⁶. Sutcliffe’s will of 1786 left the property to his niece Catherine Robinson, though between at least 1794 and 1822 it seems to have been owned by, or lived in by, a cloth manufacturer called Joshua Crowther, possibly a tenant or her husband⁷. However it is also reported that by 1800 one John Turner had purchased Cooper House and in 1838 he was listed as its resident⁸; he worked as a mill manager and later ran a textile business in his own right, establishing the nearby Cooper House Mill; Turner died in 1848.

- 5.4 Census returns made every ten years between 1841 and 1901 suggest that for much of the nineteenth century there were two dwellings at Cooper House, but whether or not that meant the existing house was divided into two, or there was occupation of another building at the site (either the workshop in the barn, or another, now demolished building), is unclear. For example in 1841 John Turner and his family formed one household at Cooper House, with another being that of Joshua Ward. Neither individual’s trade or profession is stated. In 1851 Abraham Turner (John’s son?), described as a woollen manufacturer, lived there with his three sisters, who were all annuitants and therefore of a wealthy social stratum, but under “Cooper House” there was also the household of Joseph Ratcliffe, a 22 year-old hand-loom weaver of woollen cloth; it is possible that he occupied the workshop in the barn, though that would not necessarily mean that it was originally intended to be inhabited.
- 5.5 The 1861 census recorded that William Thompson lived at Cooper House, and he was a corn miller and maltster, so quite probably a tenant of the Turner family, while at “Cooper House Cottage” lived John Pickles, a wool comber, with his wife and eight children, many of them employed as factory hands. Ten years later Sarah Turner was resident at Cooper House, and described as a “proprietor of houses and land”; also listed at the same address was Jeremiah Wadsworth, a worsted overlooker, with his wife and six children. The 1881 census again recorded two households, while the 1891 recorded two households, and an uninhabited dwelling; Joseph Longbottom, a wool dyer, seems to have represented a more wealthy household, and he remained there in 1901.

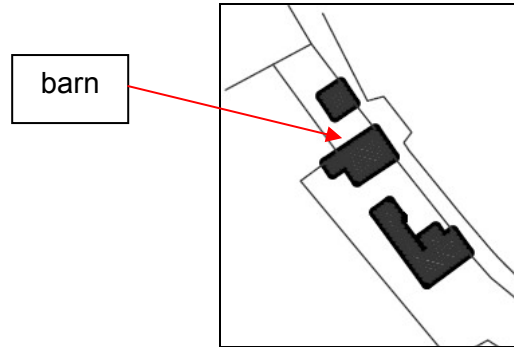
⁶ Sutcliffe, T 1926 “A Tour Through Lower Warley”, pp 101-122 in *Transactions of the Halifax Antiquarian Society*, 1926; West Yorkshire Archive Service, RP:924, Draft lease for 17 years, 23 Jan 1772

⁷ West Yorkshire Archive Service, SPL:396 Copy Will of Joshua Crowther, 4 Dec 1794; Baines, E 1822 *History, Directory and Gazetteer of the County of York*, p628

⁸ White, W 1838 *History, Gazetteer and Directory of the West Riding of Yorkshire*, p492

Historic maps

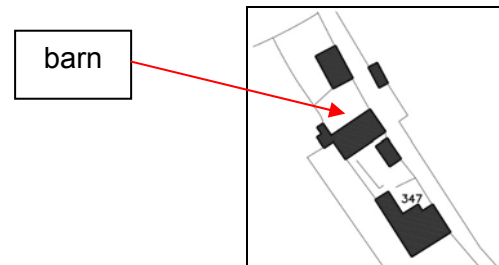
- 5.6 Cartographic evidence, in the form of the 1804 township map⁹, shows that the barn was certainly extant by that year, and had a small adjoining structure at its western corner (since demolished). The house itself formed a large L-shaped building, and there was another detached building to the north of the barn, which is no longer extant, and may have been a cottage (figure 4).



4: Warley township map, 1804

Traced and enlarged from the original: West Yorkshire Archive Service, HXT:675

- 5.7 Another, later source is a survey of the township made in 1838¹⁰, which shows the barn in a generally similar fashion, but with another, detached building to its south-east, next to the road (figure 5); this second outbuilding has not survived either.



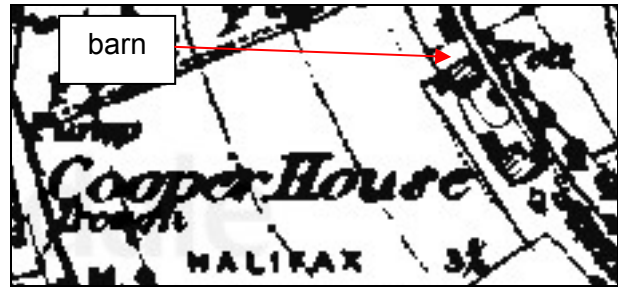
5: Warley township map, 1838

Traced and enlarged from the original: West Yorkshire Archive Service, HXT:676

- 5.8 The first edition 1:10560 Ordnance Survey map (figure 6) is likewise at a small scale and does not add significant further information to an understanding of the site, though it appears to show a broadly similar arrangement of buildings as the earlier maps.

⁹ West Yorkshire Archive Service, HXT:675 *A Plan of the Township of Warley in the Parish of Halifax.. made in 1804 by Jonathan Taylor*

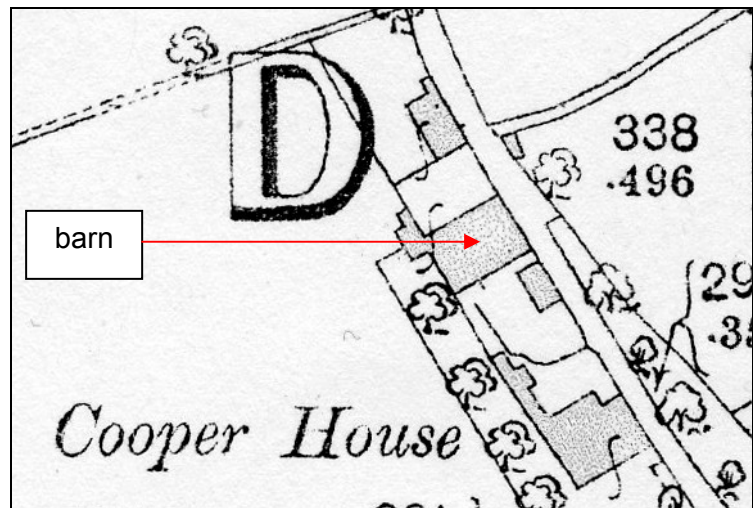
¹⁰ West Yorkshire Archive Service, HXT:676 *A Plan of the Township of Warley in the Parish of Halifax.. 1838 S Washington, surveyor*



6: OS 1:10560 map, 1854

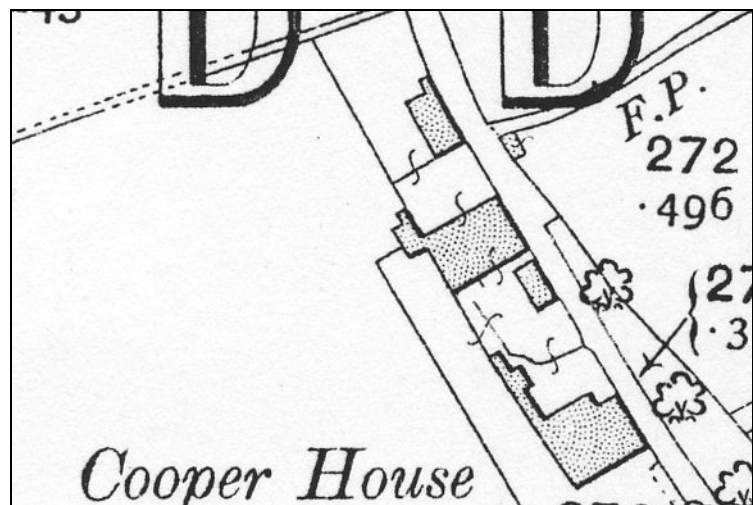
Surveyed 1848-50; sheet no: Yorkshire, 230

5.9 The more detailed 1:2500 maps show that house, barn and two outbuildings still stood at the site up to the mid twentieth century, but that between 1931 and 1961 the two outbuildings were demolished (figures 7 to 11).



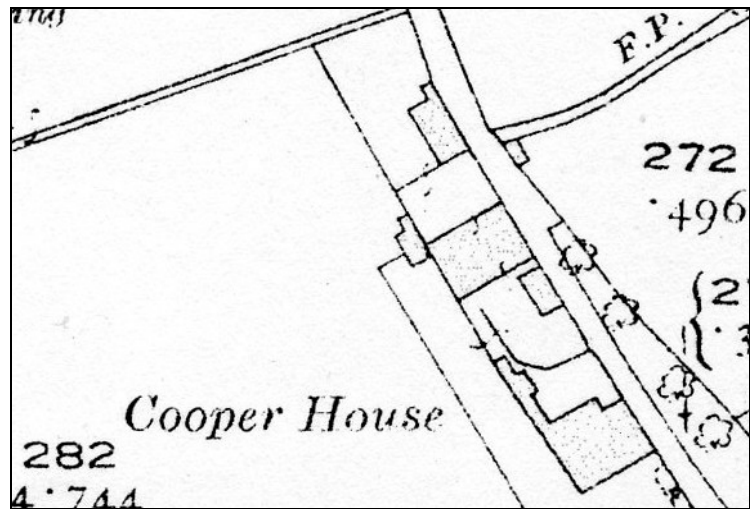
7: OS 1:2500 map, 1894

Surveyed 1888-93; sheet no: Yorkshire, 230.11 (enlarged to 1:1250)



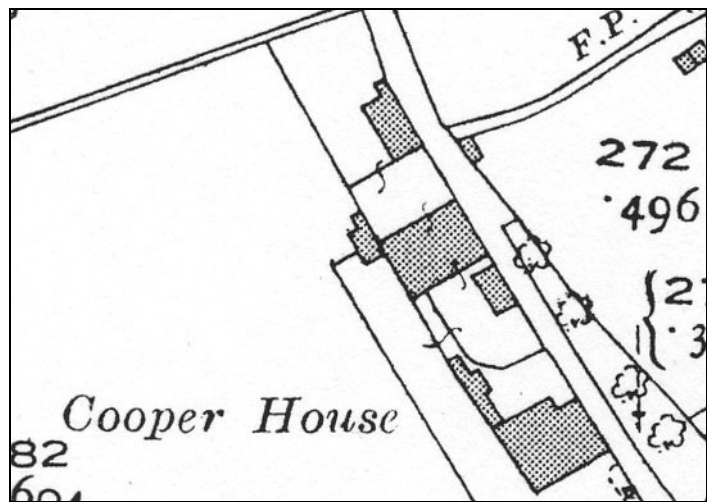
8: OS 1:2500 map, 1907

Revised 1905; sheet no: Yorkshire, 230.11 (enlarged to 1:1250)



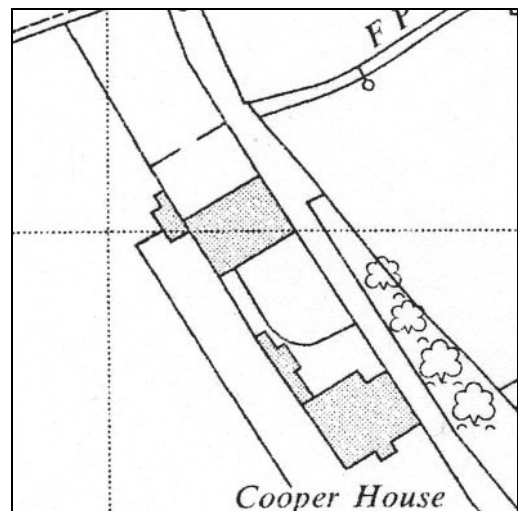
9: OS 1:2500 map, 1919

Revised 1914; sheet no: Yorkshire, 230.11 (enlarged to 1:1250)



10: OS 1:2500 map, 1933

Revised 1931; sheet no: Yorkshire, 230.11 (enlarged to 1:1250)



11: OS 1:2500 map, 1964

Revised 1961-2; sheet no: SE 0424/0524 (enlarged to 1:1250)

- 5.10 In summary, the historical evidence shows that Cooper House had become the home and property of wealthy individuals by about 1800, and although there was at least one other dwelling at the site for much of the early nineteenth century, it cannot be established with certainty whether or not that was situated in a detached building which has since been demolished, or whether the workshop in the barn was occupied for domestic as well as industrial use.

6 Recording methodology

- 6.1 The recording, carried out during a site visit on 11 December 2014, involved a detailed inspection, drawn survey, and photographic recording of the barn, in accordance with the specification (Appendix 1).
- 6.2 The drawn survey comprises floor plans on three levels of the building, at 1:100 scale, and longitudinal and cross sections at 1:50 scale, all based on an existing record by Hawdon Russell Architects, but checked for accuracy and amended to show all significant archaeological detail, and to use conventions based on those specified by English Heritage¹¹.
- 6.3 The photographic record was made using a medium format camera with perspective control and other lenses, and black and white film for archival stability. External and internal photographs were taken of all parts of the building using a 2m ranging pole marked with 0.5m graduations as a scale, or a 0.5m baton with 0.1m graduations. These black and white photographs have been printed at approximately 7" x 5" or 10" x 8", and are all copied in this report, where they are referred to by numbers in **bold**. A small number of photographs was also taken using a digital camera (see Appendix 2), to be deposited in digital form only with WYAAS. Locations of all photographs taken are marked on copies of the site and floor plans.

7 Architectural description

Exterior

- 7.1 The barn measures 14.7m long by 10.3m wide and is a substantial example of its type, built with its long axis running down the slope towards the south-west (hereafter west, for simplicity), with ground level dropping by about 4.5m over the building's length. All four walls are built of local gritstone, laid in courses of varying depth, there are gritstone dressings to openings, and small square, stone corbels support the rainwater troughs on the long elevations. The roof is of local stone slate laid in diminishing courses to a stone ridge.

¹¹ English Heritage 2006 *Understanding Historic Buildings: A guide to good recording practice*

- 7.2 The barn's south front faces the yard and Cooper House itself, and indicates the three divisions within the building: the shippon (or mistal) and stable at the west end; the central bay or cart/trap house; and the workshop at the upper, east end, each of which is served by its own doorway (1). The entrance to the stable is plain with monolithic jambs, and has a modern door within it; close to it is a small window or former ventilation opening (2). The doorway to the cart or trap bay has quoined jambs and a large stone lintel, but the opening has been reduced in size by modern timber associated with the later sliding door, which replaced a pair of traditionally hung doors, surviving but detached, inside the building (see below) (3). To the right of here is the entrance to the workshop, similar to the stable doorway, but with the original door in place. To the right and above it are windows of two and four lights, all with the same monolithic, flat-faced jambs, and fitted with modern casement windows; the ground floor window is partly obscured by a later wall (4). Over the central entrance is the entrance to a pigeon loft, comprising a flagstone with pair of entry holes and landing ledge, the flagstone inscribed with the date 1789; the authenticity of this date is not entirely convincing (to judge from the form in which it is cut into the stone), and it is possible that this is a relatively modern feature of the barn, added as ornamentation, but with some factual basis (5).
- 7.3 The foot of the barn's east gable is at road level (higher than that of the yard) and has two pedestrian entrances: a doorway at first floor level (directly at ground level here), now hidden by a twentieth century sliding door, and a taking-in door at attic level, flanked by a pair of two light windows (6-8). The doorways are of the same form as the workshop entrance to the south elevation, but the two windows have plain chamfers, in contrast with the larger workshop windows, so are likely to have been re-used from an earlier (seventeenth or eighteenth century) building. A chimney stack formerly rose from the apex of the gable, but it has been almost entirely taken down to roof level (9,10).
- 7.4 The north side of the barn mirrors the south in many respects, though there are some differences: the former workshop doorway has been altered to form a two-light window at some date, and later blocked altogether, and the wider doorway to the central bay is also blocked with masonry (11,12). Above it, but aligned neither with this doorway nor with the workshop windows, is a two-light window, also blocked, and apparently inserted as a secondary feature (see below). The doorway to the shippon, at the far right-hand end of the elevation, is essentially similar to the stable doorway opposite, but slightly narrower and lower, suggesting that it was intended for the cattle which occupied this corner of the building, rather than the horses which were housed towards the front of the barn (13,14).

- 7.5 The area to the north of the barn appears once to have formed a paddock or garden area, though now overgrown, and within it are traces of former buildings as well as features within the wall which retains the road (15,16). These relate to the structures shown on historic maps, though an analysis of them is beyond the scope of this study.
- 7.6 The only openings within the west gable are a number of tall ventilators, with well-made flagstone surrounds: three serve the ground floor, and six the upper part of the building, arranged in a symmetrical pattern (17,18). Built up to the south end of this gable is a garden wall of brick, probably early nineteenth century (19,20).

Interior

Stable/shippon

- 7.7 At the lower, west end of the barn, the original arrangement was for a two-stall stable at the south end, and a five-stall shippon for cattle to the north, though the latter was adapted to provide additional stabling for horses, probably in the mid to late nineteenth century, and this seems to represent an historic change in function of the barn from one involving agriculture, albeit at a small scale, to one more concerned with housing the equestrian requirements of a more affluent household, deriving their income from manufacturing alone, rather than the land.
- 7.8 The two-stall stable at the south-west corner retains some historic (some probably original) fixtures, including parts of the stall divider, hay rack and timber manger, and the stone flagged floor with shallow drainage channels is also partly intact (21-24). Narrow steps at the south side give internal access up to the central bay of the barn, from which feeding would have been carried out, and the loft over the stable is borne on re-used oak timbers.
- 7.9 To the north, the former shippon, now stable, has similar fixtures to those described above, but its original function can be deduced in part from the previously lower loft, as the four beams which support the loft over have been raised by 0.3m, and by the pattern within the floor, which differs from that within the south end of this bay. The ventilators which serve both the ground floor and the very high loft area are clearly visible in the gable (25-29).

Central bay

- 7.10 The stable and former shippon are separated from the central bay by an irregularly constructed plank partition of secondary date, attached to two upright

posts which also support a loft over the bay, and these divisions were probably also nineteenth century introductions, put in as part of the gentrification of the property (30,31). In contrast the east side of the bay is formed by a wall of brick, an unusual material for Calderdale in the late eighteenth or early nineteenth century, but which is structurally original to the building, as can be seen from its incorporation between the quoins of the front and rear doorways, and the line of joist ends within it, supporting the attic over the workshop end of the building (32-37). The wall incorporates a horizontal timber as a means of fastening pegs for hanging harness or other equestrian paraphernalia (38); a second such rail has been fastened to the wall nearby, to supplement this, perhaps required when the number of horses housed was increased. There is a doorway at first floor level within the brick cross-wall, the threshold of which has been raised when the inserted loft across this bay was put in; however the loft seems originally not to have continued to the south wall, but this gap is now filled by the pair of horizontally laid doors, believed to have been removed from the main entrance below (39). Before the loft was inserted the doorway may have functioned as a covered taking-in door for materials from the first floor of the workshop to the east.

- 7.11 Above the central, inserted loft, the building is open to the roof, but contains the remains of a simple timber frame at the south side, which perhaps once held a pigeon loft as it is next to the pair of openings in the south wall, though no enclosure or nesting boxes are present (40,41). In the opposite wall, the inserted (and now blocked) window can be seen, and its creation here can be attributed to the need for light at this level, once the new loft was built within the central bay (42).

Workshop

- 7.12 Although the internal arrangements within the workshop (occupying the barn's east bay) have been modified in recent years, it is relatively easy to establish which divisions are original, and how this area may have functioned. The front entrance, complete with its original broad plank and batten door, fitted with lock case for security (43), leads to the foot of a staircase to the first floor (44), as well as into a large ground floor room, in which the only partitions now present (including loose boxes for horses) are modern; however there may have been earlier, lightweight divisions, similar to one on the first floor, which have not survived. This room has an unusual form to the east wall, in the presence of four brick arches which support the floor above, together with a brick chimney breast, in which the fireplace has been blocked, while in the west side the brick cross-wall has piers at intervals, also supporting the floor beams overhead (45-49). The first floor itself is of softwood, all members being squarely sawn, and clearly

of imported origin (50). The first floor also had a fireplace in approximately the same position, its form more readily discernible as having held a narrow grate, rather than a large range occupying its full width (51), but in this case it is located within a room two-fifths the size of the floor, separated from the larger, unheated part by a lightweight partition constructed from horizontal boards which is certainly historic, if not original to the building (52,53). The windows to this room, and all the other windows serving the lower two floors of the workshop bay, have (or did have) pintles for horizontally hung internal shutters, which would have been fastened by vertical battens held within large staples below the mullions, and these are fixtures which together with the lock to the entrance door, imply that there were items, tools or goods of value within the workshop (54-56). They are not typical of domestic buildings.

- 7.13 Over the workshop's first floor is an unheated attic level, presumed to have been used for storing materials, either or raw or finished, and which could have been taken in or out of the building directly by means of the gable doorway; access to the attic from within the building appears only to have been by ladder, although it is possible that a simple staircase to the hatch has been removed (57). The attic is open to the roof and lit by the two gable windows, and its west end is defined by the eastern roof truss, up to which the brick cross-wall rises (58,59). It has a sturdy plank floor, but no evidence for any hoisting aids, divisions, or other definitive features of its former function.
- 7.14 The roof structure is fully visible through the barn's length, and is of some interest in itself, being constructed entirely from imported pine, with the tie beams having a span of 9.1m (60,61). It is reasonable to suppose that such timber would have been brought by canal: the Calder and Hebble Navigation opened for traffic to Sowerby Bridge (two miles from Cooper House) in 1770, but the Rochdale Canal above Sowerby Bridge, which would have made a much shorter land transit, was not begun until the 1790s. The trusses have queen struts, pegged to the principal rafters but strapped and bolted to the tie beams, and there are outer and raking struts, as well as a curved brace between the head of the queen struts. The purlins run for one bay each, their ends having "tusk tenons". Many of the joints on the trusses are numbered on the east side, with "I" used on the west truss and "II" on the east (62-65).

8 Discussion and conclusion

- 8.1 The barn can be recognized as an unusual building type, which combined textile processing and livestock and equestrian housing under one roof, and although such buildings are known in the Calderdale area, this is a well-preserved example and displays a number of distinctive features, including the workshop

fireplaces and taking-in doors to the road. Quite how the building was intended to be used is not entirely certain, but the most likely function was for wool processing and particularly combing, an early stage in the manufacture of worsted cloth. Wool combing was late to be mechanized and was still being done by hand up to the 1850s; it involved separating the short fibres (*noils*) from the longer ones (*tops*), by the use of metal combs, which were first heated on stoves. The tops produced would be supplied to worsted spinners, and by the date at which the workshop had been built, such spinning was mostly carried out in powered factories, whose great capacity and demand resulted in increased numbers of wool-combers in the district, usually based in small workshops¹², and perhaps accounting for the particular form of the construction of the barn at Cooper House. There is also a possibility that the workshop was used as a dwelling in the nineteenth century, but if so it would have been an improvised function. Other aspects of the barn are of lesser interest, but they do illustrate the changing role of the building, from being partly agricultural in function at the outset, to forming stables for a wealthy household in the late nineteenth century, and as a whole, the building has a form and character which exemplify the local architecture from the period of about 1800.

¹² For a comparable example of a local wool combing workshop see *2/4 Brier Hey, Burnley Road, Mytholmroyd, West Yorkshire: Archaeological Building Recording* Stephen Haigh, 2002

Appendix 1: WYAAS Specification

Specification For Drawn and Photographic Building Recording at Cooperhouse Barn Magson House Road, Luddendenfoot, Halifax (SE 04122 24601)

Specification prepared at the request of the Mr Mark Davis on behalf of Calderdale District Council (Planning Permission 10/00852/LBC & 10/00853/CON)

1 Summary

1.1 A building record (drawn and photographic survey) is required to identify and document items of archaeological and architectural interest prior to the conversion of this 18th century barn and mistal with inserted warehouse/cottage to a dwelling. This specification for the necessary work has been prepared by the West Yorkshire Archaeology Advisory Service, the curators of the West Yorkshire Historic Environment Record.

NOTE: The requirements detailed in paragraphs 6.1.1 to 6.1.5 inclusive, 8.3 and 8.4 are to be met by the archaeological contractor **prior** to the commencement of fieldwork by completing and returning the attached form to the WY Archaeology Advisory Service.

2 Site Location and Description

2.1 Location

(Grid ref. **SE 04122 24601**) Cooperhouse Barn is located on a south-west facing slope of the Calder valley 1.5km south of Luddenden on the southern side of Magson House Road. The barn has a footprint of 153m² and is in the historic township of Warley.

2.2 Description

The barn is a designated heritage asset and grade II listed building (National Heritage List for England 131733, West Yorkshire Historic Environment Record PRN 10464). Cooper House which dates to the 17th century and is also listed lies to the south west across a yard (No.11300001 and PRN 10463). The 3 bay barn is constructed in coursed local sand stone with a stone slate roof. The lower part of its north-eastern gable is built to earth due to the sloping valley side with Magson Road passing at first storey height. This slope is usefully employed to the south-west end of the barn where a mistal is sited at a lower level than the barn's principal floor level.

The central cart way with single piece flat stone lintel is open on the southern side but blocked to the north. Both cart ways are flanked to the east by pedestrian doors (blocked and altered to the north side). The mistal is also served by doorways on both long faces of the barn. A stone bearing the "+1789+" with paired pigeon entrances and a stone perch is located high in the centre of the southern façade whilst a blocked two light window takes this position on the north façade (parts of the pigeon loft, constructed in timber survive inside the barn). The inserted workshop accommodation has extensive glazing to both floors which is mirrored on both the northern and southern facades. Both facades have projecting stone brackets to support guttering at the wall head.

The eastern gable has a modern sliding industrial door on to Magson House Road at first floor height and a taking indoor and two paired two-light stone mullioned windows to the attic above. A chimney protrudes from the top of the north-eastern gable. The western gable has six inwardly splayed ventilators set high in the gable and three "breathers" at ground level.

Internally both barn and workshop are relatively plain. The barn has a pair of softwood queen post roof trusses with a curved straining beam, princess posts and diagonal braces. Although originally pegged iron straps with square headed retaining nuts have been added

at the bases of the queen posts. The queen post trusses are set on reused timber pads suggesting that they may have replaced an earlier roof structure.

The barn is largely open but a floor has been inserted over the cart way to create a garage/workshop. The remains of the pigeon cote mentioned above were also noted by the WYAAS. The mistal is largely of wooden construction with a stone sett floor.

The division between barn and workshop is constructed in hand made brick backed with brick pillars. The ends of substantial ceiling beams rest on these pillars projecting through the wall in to the barn where they are cut off. The scantlings of these beams suggests a heavy industrial use rather than domestic purpose. Brick is also used in the construction of the workshop's chimney flues and a series of 4 raised arches in the ground floor room that retain the hill side and Magson House Road at first floor height. The work shop is entered via a ground floor door on the southern façade, this opens in to a small lobby with staircase to the first floor and the single ground floor room. The second floor has been sub-divided into 2 rooms. The attic can be reached by either a taking in door off Magson House Road or a hatch in the first floor ceiling. The latter is offset to the north so as not to lie below the threshold of the taking in door. A now partly overbuilt door connected the first floor of the workshop with the barn's axial cart way.

3 Planning Background

The site owners, Mr Mark Davis (Cooperhouse, Magson Road, Luddenfoot ☎ 07886850995) has obtained planning consent (Planning Application No. 10/00852/LBC & 10/00853/CON) to change the barn/warehouse's use to a dwelling. The WY Archaeology Advisory Service (as Calderdale District's archaeological advisor) has prepared this specification in order to allow the owners to meet the terms of an archaeological condition which has been placed on the consent.

4 Archaeological Interest

4.1 Historical Background

With the exception of some reused timbers there is little evidence to suggest that the barn occupies the site of an earlier structure. The provision of a mistal and pigeon cote along with an axial cart way and flanking pedestrian doorways points to it having been conceived as a purely agricultural structure which was altered at a later date to incorporate a workshop or small warehouse. The possibility that two storey section was a dwelling cannot be ruled out but a productive use is indicated by the provision of taking-in doors to the first floor and attic.

Whilst it is not currently known what activities were carried out at Cooper House Barn a connection with the textile industry during the late 18th and early 19th centuries seems highly likely. The area had specialised in the manufacture of woollen cloth until the 18th century from when worsteds were increasingly produced by individual craftsmen and their families. From the late 18th century the worsted trade declined and the Calder Valley increasingly focused on the manufacture of cotton thread and cloth and Hebden Bridge became a centre of fustian manufacture (corduroy and moleskins). Whilst most historical research has focused on large powered mills although these were presaged by hand powered machines requiring modest business premises which leave little physical evidence of their former presence. Large numbers of hand weavers persisted well into the 19th century but the organisation of this sizeable industry, either in domestic locations or centralised in unpowered loomshops has been generally overlooked. Fustian production, organised by small cooperatives, also required premises to house their various processes and stock. The workshop at Cooperhouse Barn was clearly adapted to receive goods or raw materials, store and process them on two well-lit floors as evidenced by the provision of heavy beams and floors, and taking-in doors for ease of loading.

4.2 Impact of proposed development

The approved change of use will alter the internal plan of the building and may remove evidence of past agricultural and industrial processes. Minor alterations to the envelope will alter the appearance of the building.

5 Aims of the Project

5.1 The first aim of the proposed work is to identify and objectively record by means of photographs and annotated measured drawings any significant evidence for the original and subsequent historical form and functions of the building, and to place this record in the public domain by depositing it with the WY Historic Environment Record (Registry of Deeds, Newstead Road, Wakefield WF1 2DE).

5.2 The second aim of the proposed work is to analyse and interpret the building as an integrated system intended to perform specialised function. The archaeologist on site should give particular attention to reconstructing as far as possible the functional arrangements and division of the buildings. The roles of historical plan form layout and circulation and process flow should all be considered in this process of interpretation.

Its role in the dual economy of farming and textile production (or perhaps more accurately the barn's part conversion to an industrial use) should be explored and, if possible, dated. In addition to topics considered in the WYAAS Research Agenda covering Historic Buildings (Medieval & Post Medieval to 1914 (Giles 2013 p.78 - 83) the buildings archaeologist should also be familiar with current research in to vernacular workshops, in particular Colm Giles' article 'Yorkshire Textile Loomshop : From Weaver's Cottage to the Factory (in Barnwell, Palmer and Airs 2004 The Vernacular Workshop: From Craft to Industry 1400-1900, The Council for British Archaeology pp 90).

6 Recording Methodology

6.1 General Instructions

6.1.1 Health and Safety

The archaeologist on site will naturally operate with due regard for Health and Safety regulations. Prior to the commencement of any work on site (and preferably prior to submission of the tender) the archaeological contractor may wish to carry out a Risk Assessment in accordance with the Health and Safety at Work Regulations. The archaeological contractor should identify any contaminants which constitute potential Health and Safety hazards (e.g. weak floors) and make arrangements with the client for making safe as necessary and appropriate. The WY Archaeology Advisory Service and its officers cannot be held responsible for any accidents or injuries which may occur to outside contractors engaged to undertake this survey while attempting to conform to this specification.

6.1.2 Confirmation of adherence to specification

Prior to the commencement of any work, the archaeological contractor must confirm in writing adherence to this specification (using the attached form), or state in writing (with reasons) any specific proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of the WY Archaeology Advisory Service to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor (see para. 8.3, below). Modifications presented in the form of a re-written project brief will not be considered by the West Yorkshire Archaeology Advisory Service.

6.1.3 Confirmation of timetable and contractor's qualifications

Prior to the commencement of *any work*, the archaeological contractor must provide WYAAS in writing with:

- a projected timetable for the site work

- details of project staff structure and numbers
- names and CVs of key project members (the project manager, site supervisor, any proposed specialists, sub-contractors *etc.*)
- details of any specialist sub-contractors

All project staff provided by the archaeological contractor must be suitably qualified and experienced for their roles. In particular, staff involved in building recording should have proven expertise in the recording and analysis of industrial and agricultural buildings. The timetable should be adequate to allow the work to be undertaken to the appropriate professional standard, subject to the ultimate judgement of WYAAS.

6.1.4 Site preparation

Prior to the commencement of work on site the archaeological contractor should identify all removable modern material which may significantly obscure material requiring an archaeological record, and should contact the owner in order to make arrangements for their removal (if necessary, under archaeological supervision). It is not the intention of this specification that large-scale removal of material of this type should take place with the archaeological contractor's manpower or at that contractor's expense.

6.1.5 Documentary research

Prior to the commencement of work on site, the archaeological contractor should have access to the Historic Fabric Appraisal and Analysis produced in support of the planning application (Hawdon and Russell Architects 2011) and undertake a rapid map-regression exercise based on the readily-available map and photographic evidence held by the Local Studies section of Halifax Central Library and the West Yorkshire Archive Service (WYAS, Calderdale Central Library Northgate House, Northgate Halifax HX1 1UN Telephone: 01422 392636 Email: calderdale@wyjs.org.uk) and maps and secondary sources held by the West Yorkshire Historic Environment Record (Registry of Deeds, Newstead Road, Wakefield WF1 2QP ☎ 01924 306797 wyher@wyjs.org.uk).

All available 19th- and 20th-century Trades and Postal directories, the appropriate census returns and all other available primary and relevant secondary sources should be examined. This work is intended to inform the archaeological recording by providing background information with regard to function and phasing. Please note that this exercise is not intended to be a formal desk-based assessment, and should not represent a disproportionate percentage of the time allowed for the project overall.

Please note that the HER makes a charge for commercial consultations.

6.1.6 Use of existing plans

Hawdon and Russell Architects have produced plans as existing of buildings. If appropriate, these plans may be used as the basis for the drawn record and for any annotation relative to photographic record. Additional information should be indicated on the plans, which shall be re-drawn as necessary. It is the responsibility of the archaeological contractor to check the accuracy of these drawings and to make any necessary adjustments or corrections. Contractors are therefore advised to determine prior to the submission of tender whether major re-survey/re-drawing will be necessary. For this purpose, the WY Archaeology Advisory Service would suggest that the tendering contractor check a small number of randomly selected measurements across the site, e.g. a few long face measurements, the position and size of a selection of doors and windows, and a random series of internal diagonals (it is accepted that the contracting archaeologist will not be able to identify isolated and unpredictable errors by using this method). It is the archaeological contractors' responsibility to obtain the appropriate copyright permissions for any original material employed as a basis for further work.

6.2 Sequence of recording

As a result of the modern partitioning and remodelling of the site, recording work should take place in two stages. The structures should initially be recorded as extant, with due provision made for the removal of any debris or modern material which may obscure fabric or features requiring an archaeological record (para 6.1.4 above).

6.3 Written Record

The archaeologist on site should carefully examine all parts of the building prior to the commencement of the drawn and photographic recording, in order to identify all features relevant to their original use and to obtain an overview of the development of the building and of the site as a whole. As part of this exercise, the archaeologist on site should produce written observations (e.g. on phasing; on building function) sufficient to permit the preparation of a report on the structure. This process should include the completion of a Room Data Sheet or similar structured recording pro-forma¹³ for each room or discrete internal space within the volume of the structure. The crucial requirement is that each room/space should be examined individually, that the results of that examination should be noted in a systematic fashion, and that these objective observations should be used to inform an analytical interpretation of the overall development and operation of the site.

6.4 Drawn Record

6.4.1 Drawings required

The drawn record should comprise:

- Ground Floor showing the mistal, barn and workshop/warehouse
- First floor plan workshop/warehouse
- Attic floor plan of the workshop/warehouse
- Section of the barn showing the roof truss and wall of the workshop/warehouse. The floor levels of the workshop/warehouse should be indicated on this drawing
- North-east to south-west (long) section of the barn, mistal and workshop

Drawings should be made at an appropriate scale (not smaller than 1:100 for plans; not smaller than 1:50 for sections). The structures should be recorded as existing, but a clear distinction should be made on the final drawings between surviving as-built features and all material introduced in the structure during the late 20th-century.

6.4.2 Provision for Additional Drawings

6.4.2a The recording requirements outlined above are based on a brief inspection of the site by the WY Archaeology Advisory Service. However, detailed examination and analysis of the site by the archaeological contractor may reveal features which merit detailed recording beyond what has been specifically required. In addition to what is requisite to complete the work specified above, the archaeological contractor should tender for a contingency period of one days recording on site (with two days drawing-up time off site – three days in total) in order that features so identified may be adequately recorded. This contingency should be clearly and separately identified in any tender document.

6.4.2b If features requiring additional drawing are identified during the course of work on site, the WY Archaeology Advisory Service should be contacted as soon as possible, and should be provided in writing with a schedule of proposed additional work. A site visit will then be arranged by the WYAAS to examine the features in question and to assess the need

¹³ The WY Archaeology Advisory Service would recommend the employment of the attached pro-forma, but will consider any suitable alternative which the archaeological contractor may wish to submit (Note that agreement for the employment of an alternative *schema* must be obtained in writing from the WY Archaeology Advisory Service prior to the commencement of work on site).

to apply the contingency (this visit will usually be combined with a routine monitoring visit). Implementation of the contingency will be at the decision of the West Yorkshire Archaeology Advisory Service, which will be issued in writing, if necessary in retrospect after site discussions.

6.4.3 Scope of record

All features of archaeological and architectural interest identified during the process of appraisal should be incorporated into, and clearly identified in, the final drawn record. Typically, items of interest would include:

- All original structural elements, including roof structure/truss form and arrangement (note that timber type should be identified in each instance, and that all timber structural elements should be examined for re-use)
- Any carpenters' marks, setting out marks, merchants' marks or apotropaic marks visible on the timbers
- Evidence for original and subsequent historical arrangement of the interior, including: original fittings (tethering rings etc), evidence for animal stalls or boxes and mangers
- Internal wall finishes, including surviving areas of plaster and white-wash
- Evidence for original and subsequent historical arrangement of the interior
- Evidence of the pigeon cote's construction
- Evidence for original/historic ladders, hatches and other means of access
- Evidence for date-stones and initials or any historic graffiti
- Evidence for mortices to the exterior walls (which might suggest extensions or attachments which have now been removed)
- Evidence for historic floor surfaces – such as flagged or cobbled floors and any drains set therein
- Historic harness or gear hooks
- Evidence for original heating and lighting arrangements including candle recesses, and any evidence for previously removed fireplaces or flues

but this list should not be treated as exhaustive. The archaeologist on site should also identify and note:

- any significant changes in construction material – this is intended to include significant changes in stone/brick type and size
- any blocked, altered or introduced openings
- evidence for phasing, and for historical additions or alterations to the building.

6.4.4 Dimensional accuracy

Dimensional accuracy should accord with the normal requirements of the English Heritage Architecture and Survey Branch (at 1:20, measurements should be accurate to at least 10mm; at 1:50, to at least 20mm; at 1:100, to at least 50mm). Major features such as changes in structural material may be indicated in outline. The recording of individual stones or stone courses is not required unless greater detail is needed in order to adequately represent a particular feature of interest.

6.4.5 Drawing method

The survey may be executed either by hand or by means of reflectorless EDM as appropriate. In accordance with national guidelines¹⁴, drawings executed on site should be made either on polyester-based film (minimum thickness 150 microns) with polymer-bonded leads of an appropriate thickness and density, or on acid-free or rag paper. If finished drawings are generated by means of CAD or a similar proven graphics package, recorders

¹⁴ English Heritage 2006, *Understanding Historic Buildings – a guide to good recording practice*, 7.1.1ff

should ensure that the software employed is sufficiently advanced to provide different line-weight (point-size); this feature should then be used to articulate the depth of the drawings. CAD repeats or cloning of features should **not** be used. What is required as an end product of the survey is a well-modelled and clear drawing; ambiguous flat-line drawings should be avoided. Drawing conventions should conform to English Heritage guidelines as laid out in English Heritage 2006, *Understanding Historic Buildings – a guide to good recording practice*, and the WYAAS would recommend that the CAD layering protocol detailed in the same volume (8.3, Table 2) should be adhered to.

6.5 Photographic Record

6.5.1 External photographs

An external photographic record should be made of all elevations of the building, from vantage points as nearly parallel to the elevation being photographed as is possible within the constraints of the site. The contractor should ensure that all visible elements of each elevation are recorded photographically; this may require photographs from a number of vantage points. A general external photographic record should also be made which includes a number of oblique general views of the building from all sides, showing it as a whole in its setting. In addition, a 35mm general colour-slide survey of the building should also be provided (using a variety of wide-angle, medium and long-distance lenses). While it is not necessary to duplicate every black-and-white shot, the colour record should be sufficiently comprehensive to provide a good picture of the form and general appearance of the complex and of the individual structures. The colour slide record should include some internal shots (and see digital photography below).

6.5.2 Internal photographs

A general internal photographic record should be made of the building. General views should be taken of *each room* or discrete internal space from a sufficient number of vantage points to adequately record the form, general appearance and manner of construction of each area photographed. In areas which are wholly modern in appearance, character and materials, a single shot to record current appearance will suffice.

6.5.3 Detail photographs

In addition, detailed record shots should be made of all individual elements noted in section 6.4.3 above. Elements for which multiple examples exist (e.g. each type of roof truss, column or window frame) may be recorded by means of a single representative illustration.

6.5.4 Equipment

General photographs should be taken with a Large Format camera (5" x 4" or 10" x 8") using a monorail tripod, or with a Medium Format camera which has perspective control, using a tripod. The contractor must have proven expertise in this type of work. Any detail photographs of structural elements should if possible be taken with a camera with perspective control. Other detail photographs may be taken with either a Medium Format or a 35mm camera. All detail photographs must contain a graduated photographic scale of appropriate dimensions (measuring tapes and surveying staffs are not considered to be acceptable scales in this context). A 2-metre ranging-rod, discretely positioned, should be included in a selection of general shots, sufficient to independently establish the scale of all elements of the building and its structure.

6.5.5 Film stock

All record photographs to be black and white, using conventional silver-based film only, such as Ilford FP4 or HP5, or Delta 400 Pro (a recent replacement for HP5 in certain film sizes such as 220). Dye-based (chromogenic) films such as Ilford XP2 and Kodak T40CN are unacceptable due to poor archiving qualities.

6.5.6 Digital photography

As an alternative to our requirement for colour slide photography, good quality digital photography may be supplied as an alternative, using cameras with a minimum resolution of 8 megapixels. Note that conventional black and white print photography is still required and constitutes the permanent record. Digital images will only be acceptable as an alternative to colour slide photography if each image is supplied in three file formats (as a RAW data file, a DNG file and as a JPEG file). The contractor must include metadata embedded in the DNG file. The metadata must include the following: the commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name, the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph. Images are to be supplied to WYAAS on gold CDs by the archaeological contractor accompanying the hard copy of the report.

6.5.7 Printing

6.5.6a Record photographs should be printed at a minimum of 5" x 4". In addition, a small selection of photographs (the best of the exterior setting shots and interior shots) should be printed at 10" x 8" (it is considered that 6 such prints are required). Bracketed shots of identical viewpoints need not be reproduced, but all viewpoints must be represented within the report.

6.5.6b Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but **not** in a manner which alters detail or perspective). All digital prints must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the WY Archaeology Advisory Service, with supporting documentation indicating their archival stability/durability. Written confirmation that the materials are acceptable must have been received from the WYAAS prior to the commencement of work on site.

6.5.7 Documentation

A photographic register detailing (as a minimum) location, direction and subject of shot must accompany the photographic record; a separate photographic register should be supplied for any colour slides or for colour digital photographs. The position and direction of each photograph and slide should be noted on a copy of the building plan, which should also be marked with a north pointer; separate plans should be annotated for each floor of each building

7. Post-Recording Work and Report Preparation

7.1 After completion of fieldwork

Prior to the commencement of any other work on site, the archaeological contractor should arrange a meeting at the offices of the WY Archaeology Advisory Service to present a draft of the 1st- stage drawn record (fully labelled and at the scale specified above), a photo-location plan, and photographic contact prints adequately referenced to this plan (material supplied will be returned to the contractor). Copies of the slides or digital photographs should also be brought in for checking. **N.B.** if full-sized prints or digital versions of contact sheets are supplied for this purpose, they must be accompanied by a sample of the processed negatives. If appropriate, the WY Archaeology Advisory Service will then confirm to Calderdale District Planning Services that fieldwork has been satisfactorily completed and that other work on site may commence (although discharge of the archaeological condition will not be recommended until a copy of the full report and photographic record has been received and approved by the West Yorkshire Archaeology Advisory Service). Please note that as of the 1st April 2011, the WYAAS will charge the archaeological contractor a fee for each fieldwork verification meeting.

7.2 Report Preparation

7.2.1 Report format and content

A written report should be produced. This should include:

- an executive summary including dates of fieldwork, name of commissioning body, and a brief summary of the results including details of any significant finds
- an introduction outlining the reasons for the survey
- a brief architectural description of the building presented in a logical manner (as a walk around and through the building, starting with setting, then progressing to all sides of the structure in sequence, and finally to the interior from the ground floor up)
- a discussion placing the building in its local, historical and technological contexts,, describing and analysing the development of individual structures and of the complex as a whole. This analysis should consider the site type as an integrated system intended to perform a specialised function, with particular attention being given to historical plan form, technical layout and process flow.

The architectural description should be fully cross-referenced to the drawn and photographic record, sufficient to illustrate the major features of the site and the major points raised. It is not envisaged that the report is likely to be published, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers. A copy of this specification and a quantified index to the field archive should also be bound into the back of the report. The cover sheet should include a centred eight-figure OS grid reference and the name of the township in which the site is located (Warley).

7.2.2 Report Illustrations

Illustrations should include:

- a location map at a scale sufficient to allow clear identification of the building in relation to other buildings in the immediate area
- any relevant historic map editions, with the position and extent of the site clearly indicated
- a complete set of site drawings completed to publication standard, at the scale stipulated in Para. 6.4.1 above (unless otherwise agreed in writing by the West Yorkshire Archaeology Advisory Service)
- a complete set of site drawings at a legible scale, on which position and direction of each photograph has been noted
- any additional illustrations pertinent to the site
- a complete set of good-quality laser copies of all photographs (reproduced at a minimum of 6" by 4").

The latter should be bound into the report in the same logical sequence employed in the architectural description (Para. 7.2.1 above) and should be appropriately labelled (numbered, and captioned in full). When captioning, contractors should identify the individual photographs by means of a running sequence of numbers (e.g. Plate no. 1; Plate no. 2), and it is this numbering system which should be used in cross-referencing throughout the report and on the photographic plans. However, the relevant original film and frame number should be included in brackets at the end of each caption.

7.3 Report deposition

7.3.1 General considerations

7.3.1a The report should be supplied to the client and identical copies supplied to the West Yorkshire HER, the WY Archive Service and to the Oasis project. A recommendation from WYAAS for discharge of the archaeological condition is dependant upon receipt by WYAAS of a satisfactory report which has been prepared in accordance with this specification. Any comments made by WYAAS in response to the submission of an unsatisfactory report will be taken into account and will result in the reissue of a suitably edited report to all parties, within

a timescale which has been agreed with WYAAS. A .pdf copy of the report including drawings and plates should be included on a gold CD.

7.3.1b The report copy supplied to the West Yorkshire HER should include a complete set of photographic prints (see Para. 7.3.2 below). The finished report should be supplied within eight weeks of completion of all fieldwork, unless otherwise agreed with the West Yorkshire Archaeology Advisory Service. The information content of the report will become publicly accessible once deposited with the Advisory Service, unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposit.

7.3.1c **Copyright** - Please note that by depositing this report, the contractor gives permission for the material presented within the document to be used by the WYAAS, in perpetuity, although The Contractor retains the right to be identified as the author of all project documentation and reports as specified in the *Copyright, Designs and Patents Act 1988* (chapter IV, section 79). The permission will allow the WYAAS to reproduce material, including for commercial use by third parties, with the copyright owner suitably acknowledged.

7.3.1.d The West Yorkshire HER supports the Online Access to Index of Archaeological Investigations (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The archaeological contractor must therefore complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/> . Contractors are advised to contact the West Yorkshire HER officer prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, the West Yorkshire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer at the West Yorkshire HER.

7.3.1e With the permission of the developer, the archaeological contractor are encouraged to consider the deposition of a copy of the report for this site with the appropriate Local History Library.

7.3.1f A brief note for 'Post-medieval Fieldwork in England and Northern Ireland' should be submitted to the Journal of the Society for Post Medieval Archaeology.

7.3.2 Deposition with WY Archaeology Advisory Service (West Yorkshire Historic Environment Record)

The report copy supplied to the WY Archaeology Advisory Service should also be accompanied by both the photographic negatives and a complete set of labelled photographic prints (mounted in archivally stable KENRO display pockets or similar, and arranged in such a way that labelling is readily visible) bound in a form which will fit readily into a standard filing cabinet suspension file (not using hard-backed ring-binders). Labelling should be on the *back* of the print in pencil giving film and frame number only and on applied printed labels on the front of the appropriate photographic sleeve which should include:

- film and frame number
- date recorded and photographer's name
- name and address of building
- national grid reference
- specific subject of photograph.

Negatives should be supplied in archivally stable mounts (KENRO display pockets or similar), and each page of negatives should be clearly labelled with the following:

- Township name

- Site name and address
- Date of photographs (month/year)
- Name of archaeological contractor
- Film number

Colour slides should be mounted, and the mounts suitably marked with – ‘Warley’ (the Township name) with ‘Cooperhouse Barn’ under, at the top of the slide; grid reference at the bottom; date of photograph at the right hand side of the mount; subject of photograph at the left hand side of the mount. Subject labelling may take the form of a numbered reference to the relevant photographic register. The slides should be supplied to the WY Archaeology Advisory Service in an appropriate, archivally stable slide hanger (for storage in a filing cabinet).

7.4 Summary for publication

The attached summary sheet should be completed and submitted to the WY Archaeology Advisory Service for inclusion in the summary of archaeological work in West Yorkshire published on the WYAAS website. During fieldwork monitoring visits WYAAS officers will take digital photographs which may be published on the Advisory Service’s social media feeds as part of an ongoing strategy to enable public access to information about current fieldwork in the county.

7.5 Preparation and deposition of the archive

After the completion of all recording and post-recording work, a fully indexed field archive should be compiled consisting of all primary written documents and drawings, and a set of suitably labelled photographic contact sheets (only). Standards for archive compilation and transfer should conform to those outlined in *Archaeological Archives – a guide to best practice in creation, compilation, transfer and curation* (Archaeological Archives Forum, 2007). The field archive should be deposited with the Calderdale District Office of the West Yorkshire Archive Service (Calderdale Central Library Northgate House, Northgate Halifax HX1 1UN Telephone: +44 (0)1422 392636 Email: calderdale@wyjs.org.uk), and should be accompanied by a copy of the full report as detailed above. Deposition of the archive should be confirmed in writing to the WY Archaeology Advisory Service.

8 General considerations

8.1 Technical queries

Any technical queries arising from this specification should be addressed to the WY Archaeology Advisory Service without delay.

8.2 Authorised alterations to specification by contractor

It should be noted that this specification is based upon records available in the West Yorkshire Historic Environment Record and on a brief examination of the site by the West Yorkshire Archaeology Advisory Service. Archaeological contractors submitting tenders should carry out an inspection of the site prior to submission. If, on first visiting the site or at any time during the course of the recording exercise, it appears in the archaeologist’s professional judgement that

- i) a part or the whole of the site is not amenable to recording as detailed above, and/or
- ii) an alternative approach may be more appropriate or likely to produce more informative results, and/or
- iii) any features which should be recorded, as having a bearing on the interpretation of the structure, have been omitted from the specification,

then it is expected that the archaeologist will contact the WY Archaeology Advisory Service as a matter of urgency. If contractors have not yet been appointed, any variations which the WY Archaeology Advisory Service considers to be justifiable on archaeological grounds will be incorporated into a revised specification, which will then be re-issued to the developer for redistribution to the tendering contractors. If an appointment has already been made and site work is ongoing, the WY Archaeology Advisory Service will resolve the matter in liaison with the developer and the Local Planning Authority.

8.3 Unauthorised alterations to specification by contractor

It is the archaeological contractor's responsibility to ensure that they have obtained the West Yorkshire Archaeology Advisory Service's consent in writing to any variation of the specification prior to the commencement of on-site work or (where applicable) prior to the finalisation of the tender. Unauthorised variations may result in the WY Archaeology Advisory Service being unable to recommend discharge of the archaeological recording condition to the Local Planning Authority and are made solely at the risk of the contractor.

8.4 Monitoring

This exercise will be monitored as necessary and practicable by the WY Archaeology Advisory Service in its role as 'curator' of the county's archaeology. The Advisory Service should receive at least one week's notice in writing of the intention to start fieldwork. A copy of the contractor's Risk Assessment should accompany this notification.

8.5 Valid period of specification

This specification is valid for a period of one year from date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

Any queries relating to this specification should be addressed to the WY Archaeology Advisory Service without delay.

West Yorkshire Archaeology Advisory Service
David Hunter

November 2014

West Yorkshire Archaeology Advisory Service
Registry of Deeds
Newstead Road
Wakefield
WF1 2DE

Telephone: (01924) 306798.
Fax: (01924) 306810
E-mail: dhunter@wyis.org.uk

Appendix 2: List of digital photographs

CD of photographs (in JPG, NEF & DNG formats) deposited with the West Yorkshire Historic Environment Record

Number	Subject
d01	The front (south) elevation
d02	Doorway to stable in west end of front elevation
d03	East end of front elevation, containing workshop
d04	Detail of date-stone and landing ledge to pigeon loft, front elevation
d05	General view, from the south-east
d06	General view, from the north-east
d07	General view, from the north-east
d08	East gable, with doorways to first floor and attic of workshop
d09	East gable, with doorways to first floor and attic of workshop
d10	The rear (north) elevation
d11	East end of rear (north) elevation
d12	West end of rear (north) elevation
d13	General view, from the north
d14	Detail of breathers at foot of west gable
d15	View towards garden wall and Cooper House, from the north-west
d16	Stable within south-west corner of barn, from the west
d17	Passage in stable/shippon, from the south
d18	Secondary timber partition between central bay and stable/shippon, from the south-east
d19	Blocked north doorway to central bay, with later harness pegs to right
d20	Ground floor of workshop: south-east corner
d21	Blocked fireplace on ground floor of workshop, from the west
d22	Blocked fireplace on first floor of workshop (south part), from the west
d23	Internal view of first floor window in workshop (south side), showing hinge pintles and barring staples
d24	Attic over workshop, with gable taking-in doorway, from the south-west
d25	The east roof truss (central part), from the east
d26	Detail of joints and numbering on east side of east roof truss

Appendix 3: Contents of the project archive

To be deposited with the Calderdale office of the West Yorkshire Archive Service

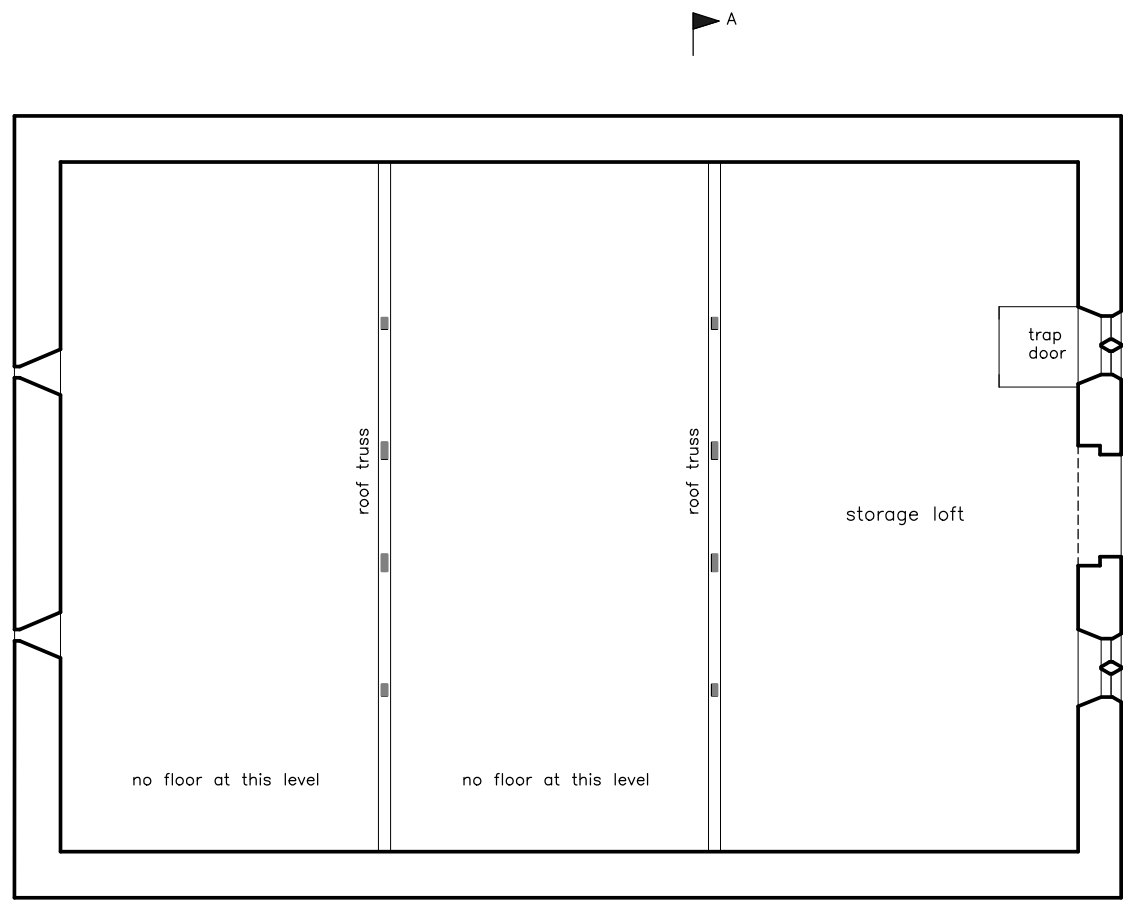
1 file, containing:

- a copy of the report
- photographic contact sheets (5 no)
- site notes including “room data sheets” and annotated plans and section drawings

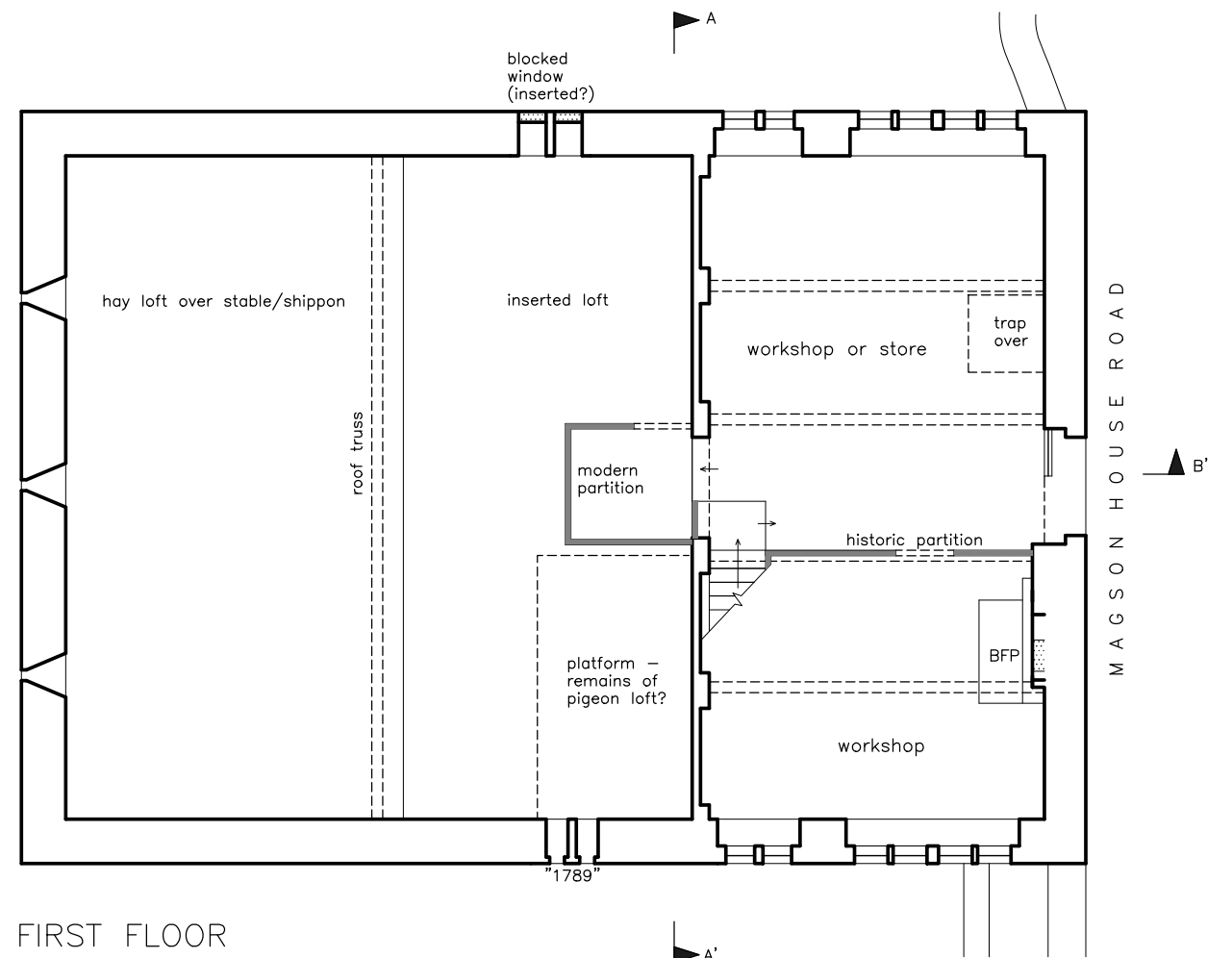
Complete list of photographs taken, in film order

Photo	Film	Frame	Subject
5	1	1	Detail of date-stone and landing ledge to pigeon loft, front elevation
1	1	3	The front (south) elevation
4	1	4	East end of front elevation, containing workshop
3	1	6	Doorways to central bay and workshop, front elevation
2	1	8	Doorway to stable in west end of front elevation
19	1	9	General view from the south-west, showing adjoining garden wall
17	1	10	Detail of breathers at foot of west gable
18	1	11	Detail of high level breathers in west gable
20	1	12	View towards garden wall and Cooper House, from the north-west
6	1	14	General view, from the south-east
9	1	15	East gable, with doorways to first floor and attic of workshop
10	1	17	East gable, with doorways to first floor and attic of workshop
8	1	18	General view, from the north-east
14	2	1	General view, from the north
11	2	2	The rear (north) elevation
15	2	4	Remains of arch in retaining walls and adjoining buildings, to north of barn
12	2	5	East end of rear (north) elevation
13	2	6	West end of rear (north) elevation
16	2	7	Remains of adjoining buildings, to north of barn
7	2	9	General view, from the north-east
25	2	10	Passage in stable/shippon, from the south
26	2	11	Stable fixtures in former shippon, from the west, with raised loft beams overhead
28	2	12	Internal view of breather in west side of stable, with raised loft beams above
27	2	13	Detail of floor in former shippon, from the west
21	2	15	Stable within south-west corner of barn, from the west
22	2	16	Stable within south-west corner of barn, from the west
24	2	17	Internal view of doorway and window to stable, from the north
23	2	18	Detail of floor to passage with drain, in stable
61	3	1	Underside of roof, from the south-west
35	3	3	Blocked north doorway to central bay, with later harness pegs to right
32	3	4	Brick wall on east side of central bay, from the south-west (note harness pegs)
36	3	5	South doorway to central bay, with internal hinges for original doors
30	3	6	Secondary timber partition between central bay and stable/shippon, from the south-east

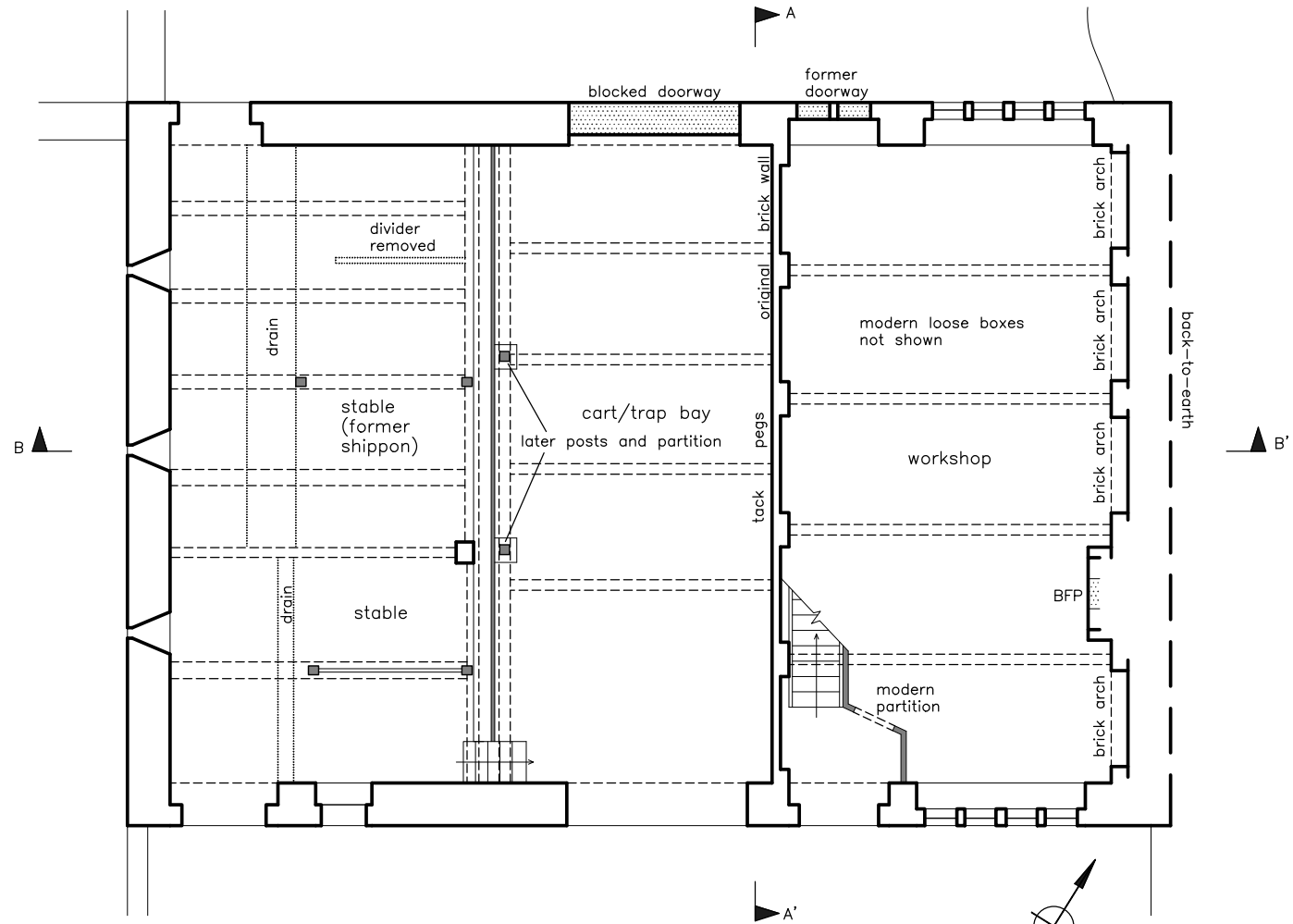
31	3	7	Secondary loft over central bay, from the south
39	3	9	View of original(?) front doors, now serving as loft over south end of central bay
34	3	10	Detail of brickwork within wall on east side of central bay, at junction with front wall
38	3	11	Detail of original timber for harness pegs in east side of central bay (later pegs to top left)
33	3	12	Detail of brickwork within wall on east side of central bay
29	3	13	Internal view of west gable at upper level
40	3	15	Timber structure at south end of central bay, first floor level – possible remains of pigeon loft
41	3	16	Internal view of entrance to former pigeon loft in central bay, with remains of timber structure
42	3	17	Internal view of inserted and blocked north window to central bay
37	3	18	Detail of brick wall to east of central bay, at first floor level
60	4	1	The east roof truss, from the south-west
55	4	2	Internal view of first floor windows in workshop, south side
54	4	4	Internal view of first floor window in workshop (south side), showing hinge pintles and barring staples
53	4	5	First floor of workshop (south part), from the south-east
51	4	6	Blocked fireplace on first floor of workshop (south part), from the west
56	4	7	First floor of workshop (north part), from the south-west
52	4	9	First floor of workshop (north part), from the north-west – the partition with ranging pole appears original
57	4	10	First floor of workshop (north part), with gable doorway to road level
58	4	11	Attic over workshop, with gable taking-in doorway, from the south-west
59	4	12	Attic over workshop, with gable taking-in doorway, from the north-west
62	4	13	The east roof truss (south end), from the north-east
63	4	15	The east roof truss (central part), from the east
64	4	16	The east roof truss (north part), from the south-east
65	4	17	Detail of joints and numbering on east side of east roof truss
43	4	18	Internal view of south door to workshop
44	5	1	Ground floor staircase in workshop, from the south
49	5	2	Ground floor of workshop: north-west corner (blocked doorway)
45	5	4	Ground floor of workshop: north-east corner
46	5	5	Ground floor of workshop, from the south-west
48	5	6	Blocked fireplace on ground floor of workshop, from the west
47	5	7	Ground floor of workshop: south-east corner
50	5	9	Underside of first floor of workshop, from the south



ATTIC LEVEL



FIRST FLOOR



GROUND FLOOR

10m

KEY

- BFP - blocked fireplace
- blocking or infill
- step up

BASED ON ORIGINAL SURVEY BY
HAWDON RUSSELL ARCHITECTS

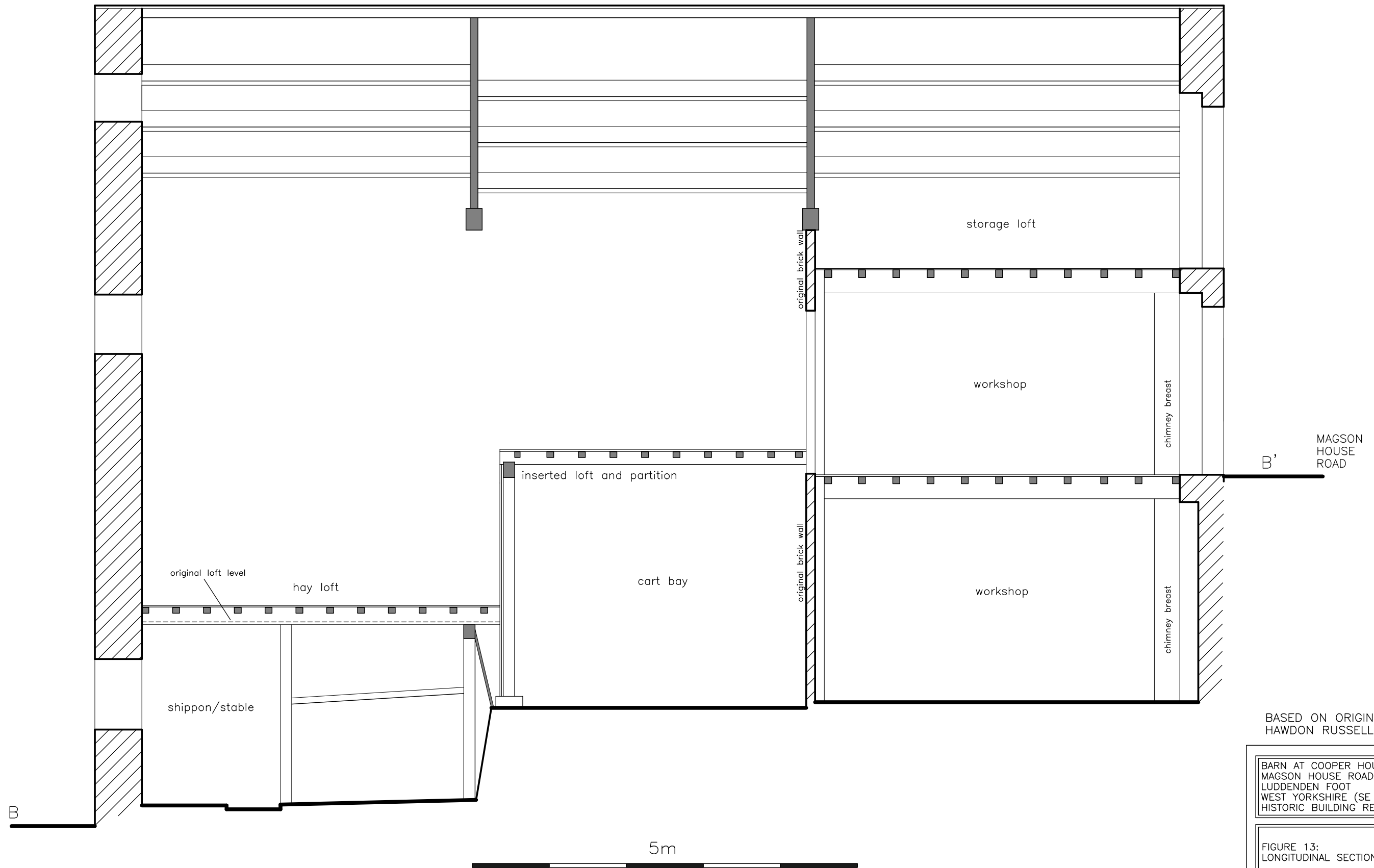
BARN AT COOPER HOUSE
MAGSON HOUSE ROAD
LUDDENDEN FOOT
WEST YORKSHIRE (SE 04122 24601):
HISTORIC BUILDING RECORD

FIGURE 12:
FLOOR PLANS

SCALE: 1:100 (at A3)

DATE OF SURVEY: DECEMBER 2014

STEPHEN HAIGH
Buildings Archaeologist



BASED ON ORIGINAL SURVEY BY
HAWDON RUSSELL ARCHITECTS

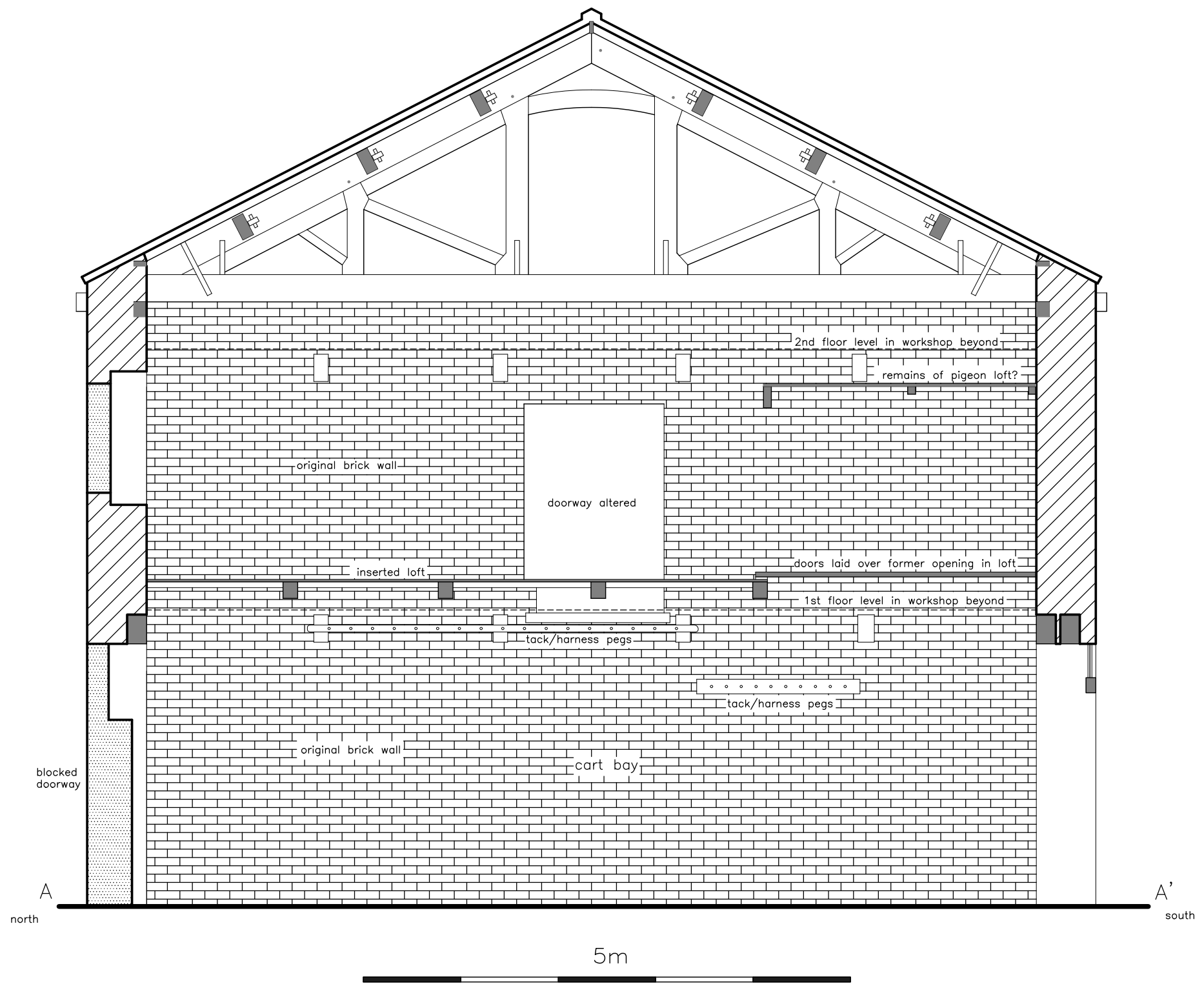
BARN AT COOPER HOUSE
MAGSON HOUSE ROAD
LUDDENDEN FOOT
WEST YORKSHIRE (SE 04122 24601):
HISTORIC BUILDING RECORD

FIGURE 13:
LONGITUDINAL SECTION

SCALE: 1:50 (at A3)

DATE OF SURVEY: DECEMBER 2014

STEPHEN HAIGH
Buildings Archaeologist



BASED ON ORIGINAL SURVEY BY
HAWDON RUSSELL ARCHITECTS

BARN AT COOPER HOUSE
MAGSON HOUSE ROAD
LUDDENDEN FOOT
WEST YORKSHIRE (SE 04122 24601):
HISTORIC BUILDING RECORD

FIGURE 14:
CROSS-SECTION

SCALE: 1:50 (at A3)

DATE OF SURVEY: DECEMBER 2014

STEPHEN HAIGH
Buildings Archaeologist

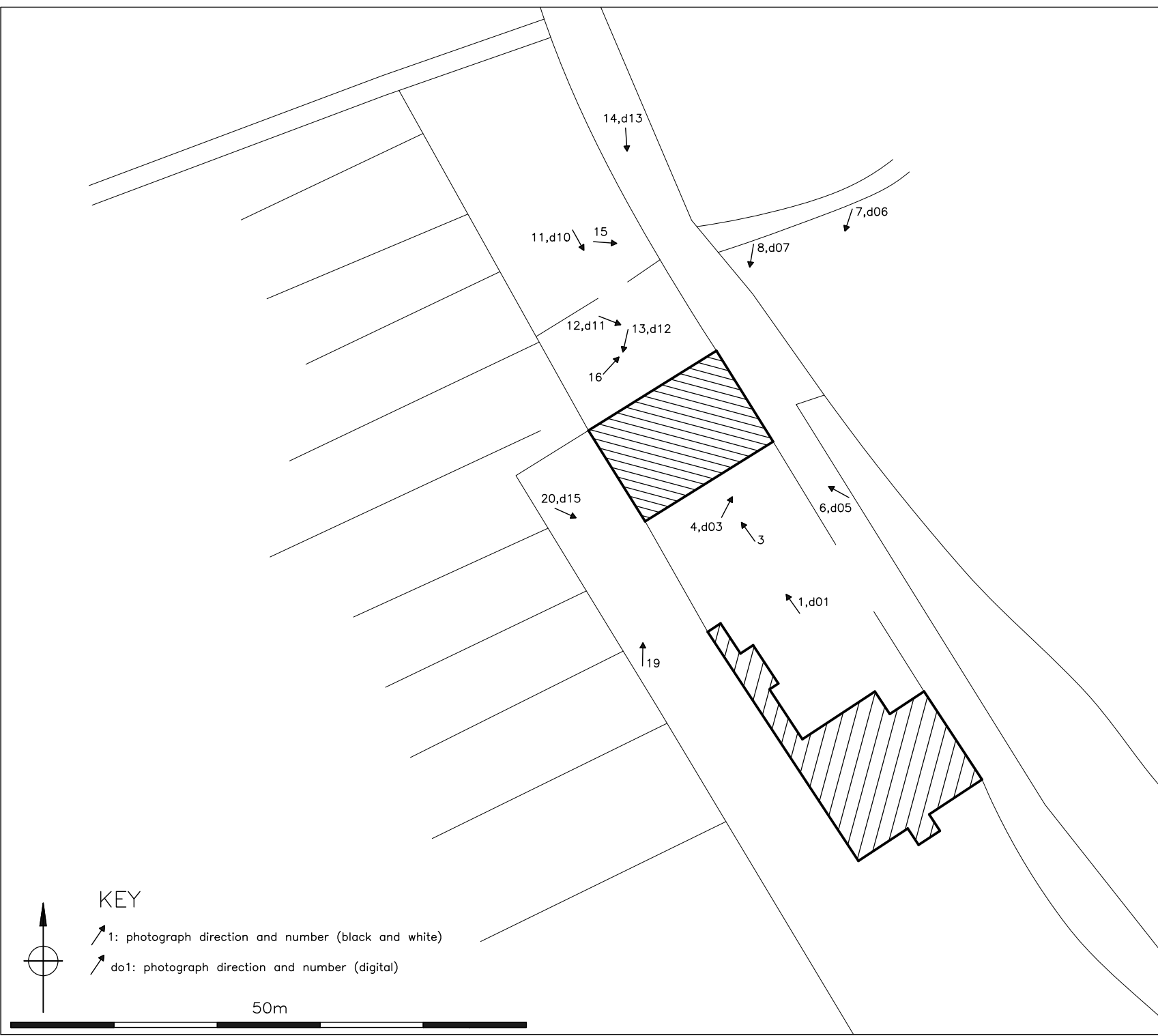
BARN AT COOPER HOUSE
MAGSON HOUSE ROAD
LUDDENDEN FOOT
WEST YORKSHIRE (SE 04122 24601):
HISTORIC BUILDING RECORD

FIGURE 15:
SITE PLAN
WITH KEY TO PHOTOGRAPHS

SCALE: 1:500 (at A4)

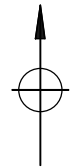
DATE OF SURVEY: DECEMBER 2014

STEPHEN HAIGH
Buildings Archaeologist

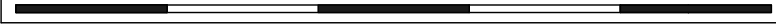


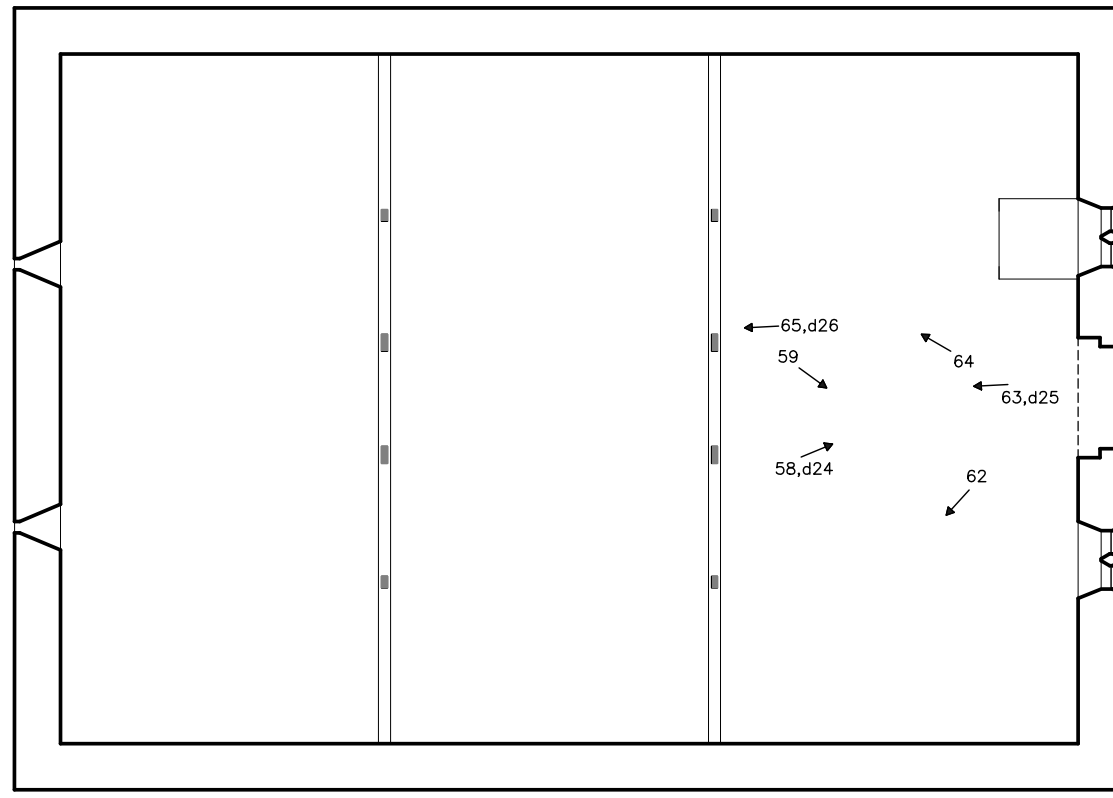
KEY

- ↗ 1: photograph direction and number (black and white)
- ↗ do1: photograph direction and number (digital)

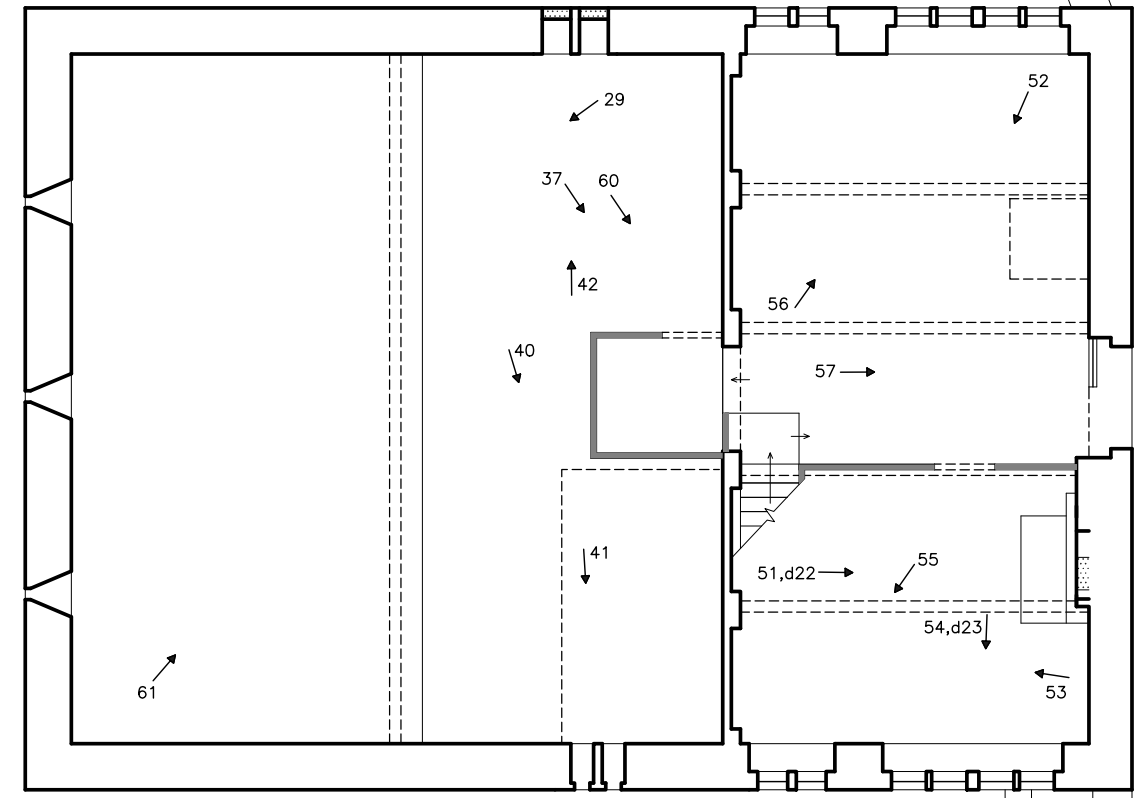


50m

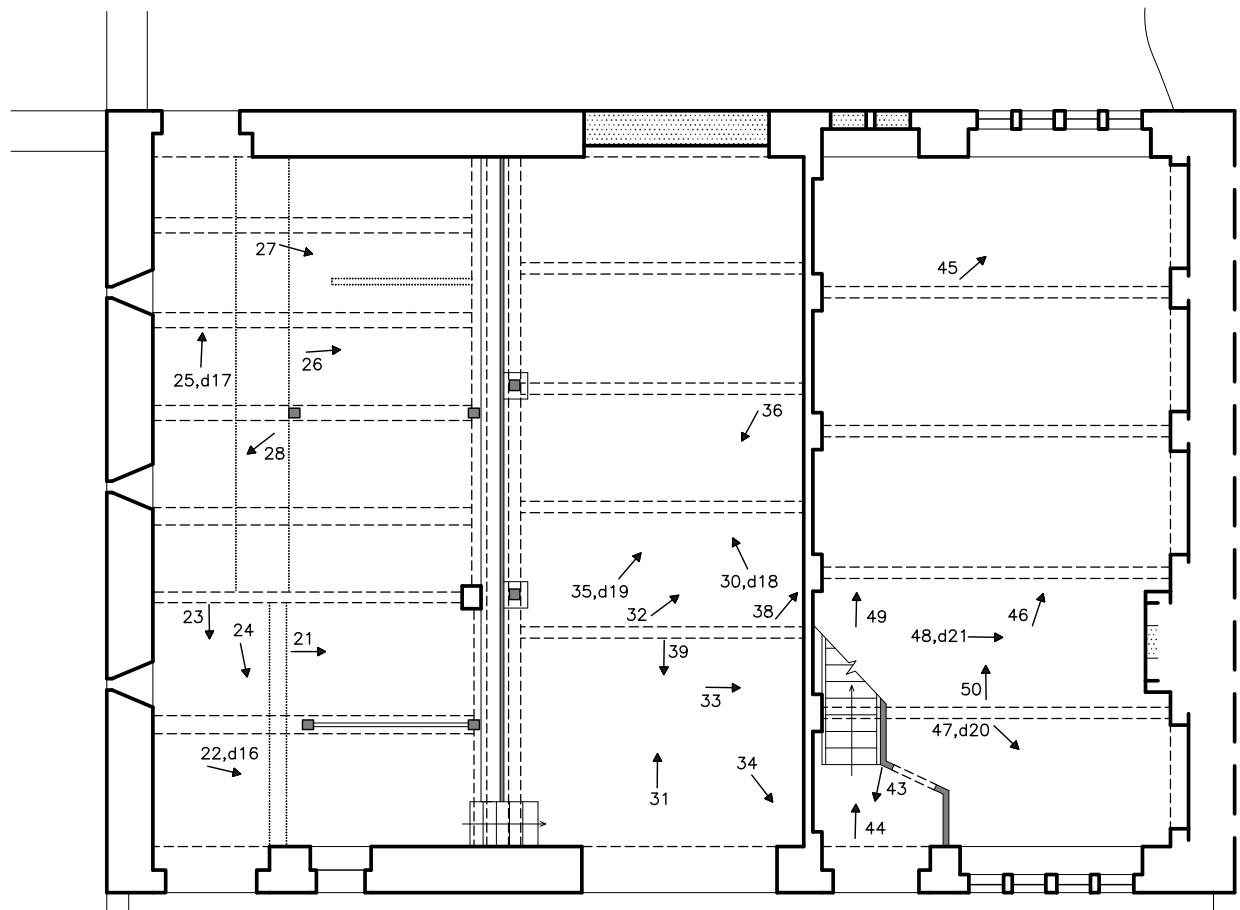




ATTIC LEVEL



FIRST FLOOR



GROUND FLOOR

10m

KEY

- ↗ 1: photograph direction and number (black and white)
- ↗ do1: photograph direction and number (digital)

BASED ON ORIGINAL SURVEY BY
HAWDON RUSSELL ARCHITECTS

BARN AT COOPER HOUSE
MAGSON HOUSE ROAD
LUDDENDEN FOOT
WEST YORKSHIRE (SE 04122 24601):
HISTORIC BUILDING RECORD

FIGURE 16:
FLOOR PLANS
WITH KEY TO PHOTOGRAPHS

SCALE: 1:100 (at A3)

DATE OF SURVEY: DECEMBER 2014

STEPHEN HAIGH
Buildings Archaeologist



Photo 1: The front (south) elevation (film 1, frame 3)



Photo 2: Doorway to stable in west end of front elevation (film 1, frame 8)



Photo 3: Doorways to central bay and workshop, front elevation (film 1, frame 6)



Photo 4: East end of front elevation, containing workshop (film 1, frame 4)



Photo 5: Detail of date-stone and landing ledge to pigeon loft, front elevation (film 1, frame 1)



Photo 6: General view, from the south-east (film 1, frame 14)



Photo 7: General view, from the north-east (film 2, frame 9)



Photo 8: General view, from the north-east (film 1, frame 18)



Photo 9: East gable, with doorways to first floor and attic of workshop (film 1, frame 15)



Photo 10: East gable, with doorways to first floor and attic of workshop (film 1, frame 17)



Photo 11: The rear (north) elevation (film 2, frame 2)



Photo 12: East end of rear (north) elevation (film 2, frame 5)



Photo 13: West end of rear (north) elevation (film 2, frame 6)



Photo 14: General view, from the north (film 2, frame 1)



Photo 15: Remains of arch in retaining walls and adjoining buildings, to north of barn (film 2, frame 4)



Photo 16: Remains of adjoining buildings, to north of barn (film 2, frame 7)



Photo 17: Detail of breathers at foot of west gable (film 1, frame 10)



Photo 18: Detail of high level breathers in west gable (film 1, frame 11)



Photo 19: General view from the south-west, showing adjoining garden wall (film 1, frame 9)



Photo 20: View towards garden wall and Cooper House, from the north-west (film 1, frame 12)



Photo 21: Stable within south-west corner of barn, from the west (film 2, frame 15)

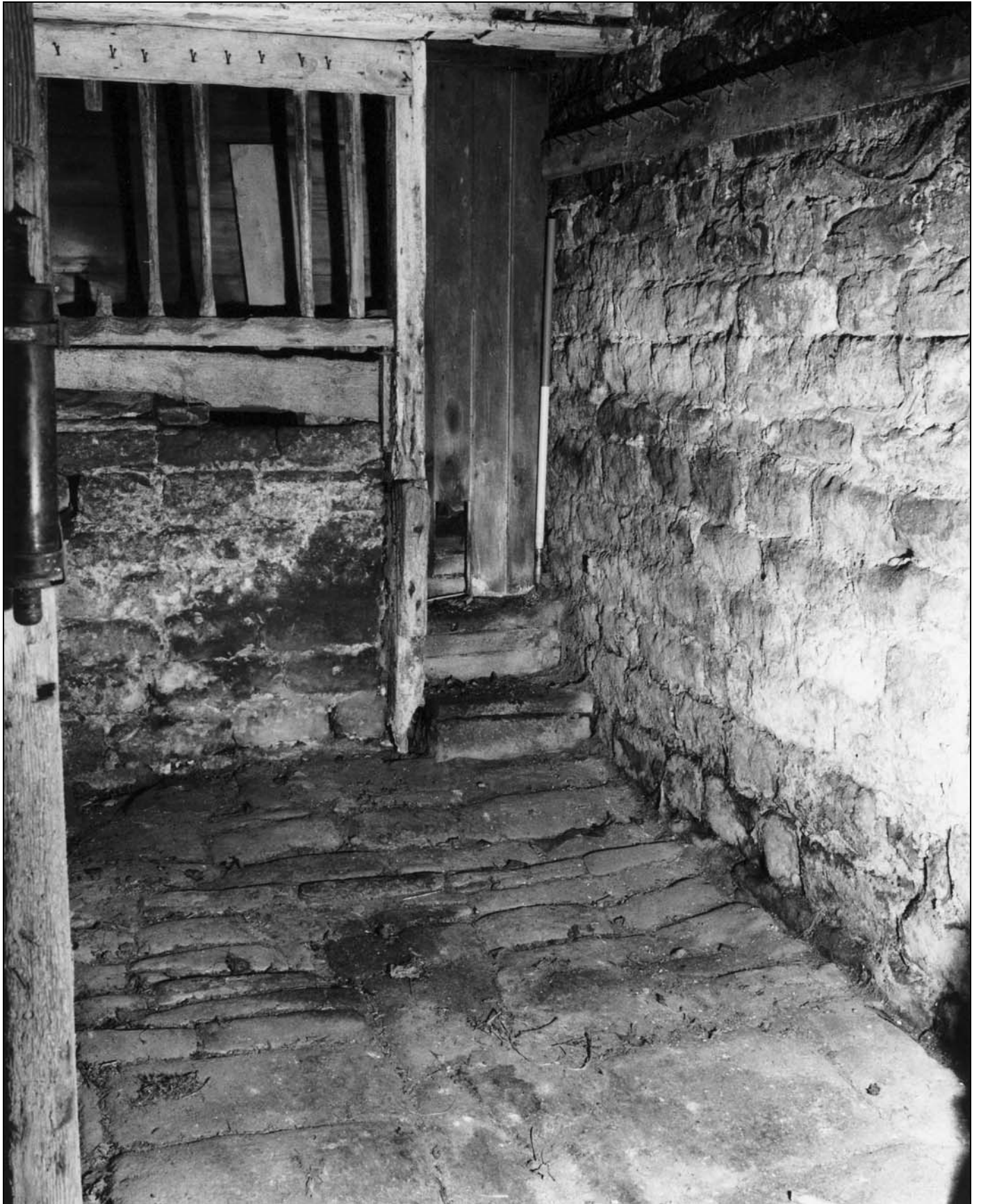


Photo 22: Stable within south-west corner of barn, from the west (film 2, frame 16)



Photo 23: Detail of floor to passage with drain, in stable (film 2, frame 18)



Photo 24: Internal view of doorway and window to stable, from the north (film 2, frame 17)



Photo 25: Passage in stable/shippon, from the south (film 2, frame 10)



Photo 26: Stable fixtures in former shippon, from the west, with raised loft beams overhead (film 2, frame 11)



Photo 27: Detail of floor in former shippon, from the west (film 2, frame 13)



Photo 28: Internal view of breather in west side of stable, with raised loft beams above (film 2, frame 12)



Photo 29: Internal view of west gable at upper level (film 3, frame 13)

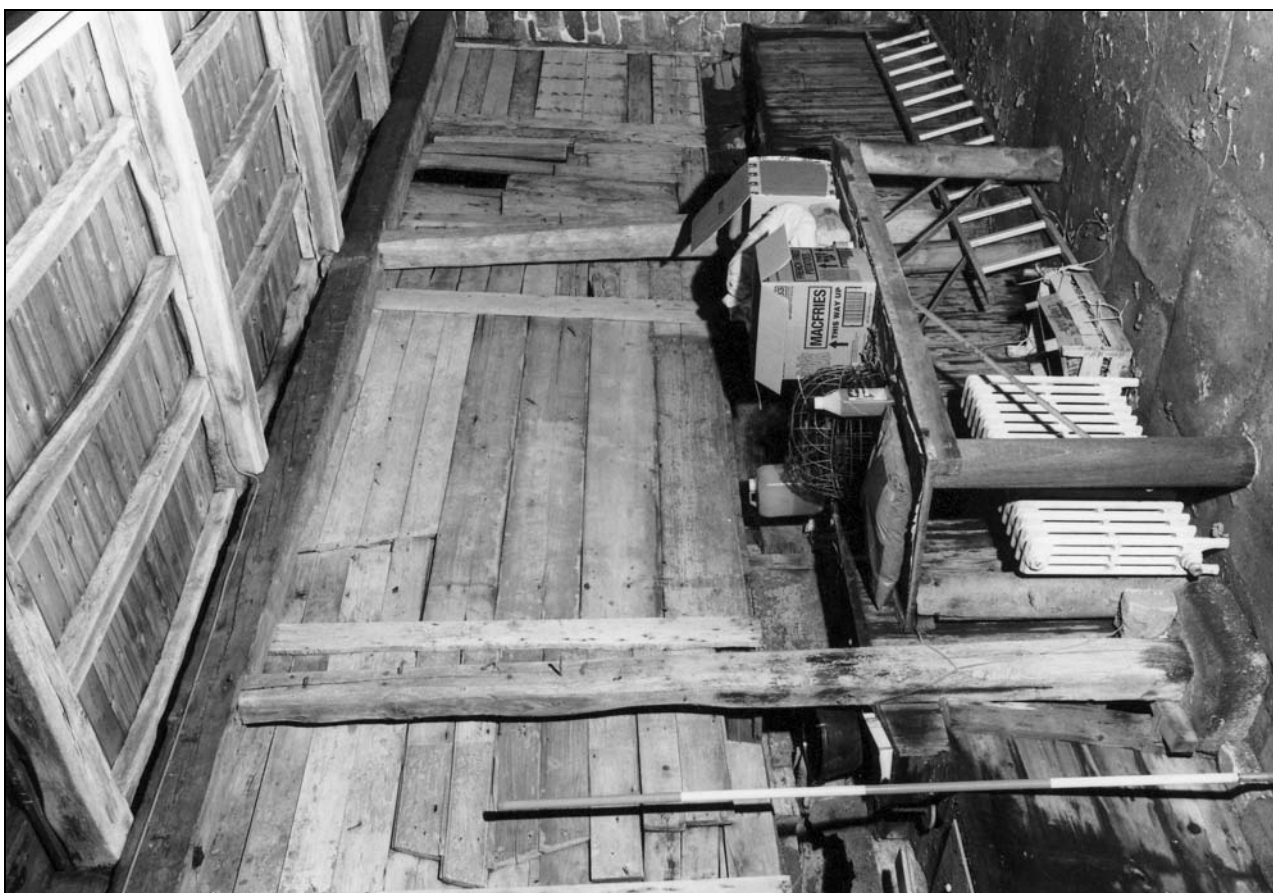


Photo 30: Secondary timber partition between central bay and stable/shippon, from the south-east (film 3, frame 6)



Photo 31: Secondary loft over central bay, from the south (film 3, frame 7)

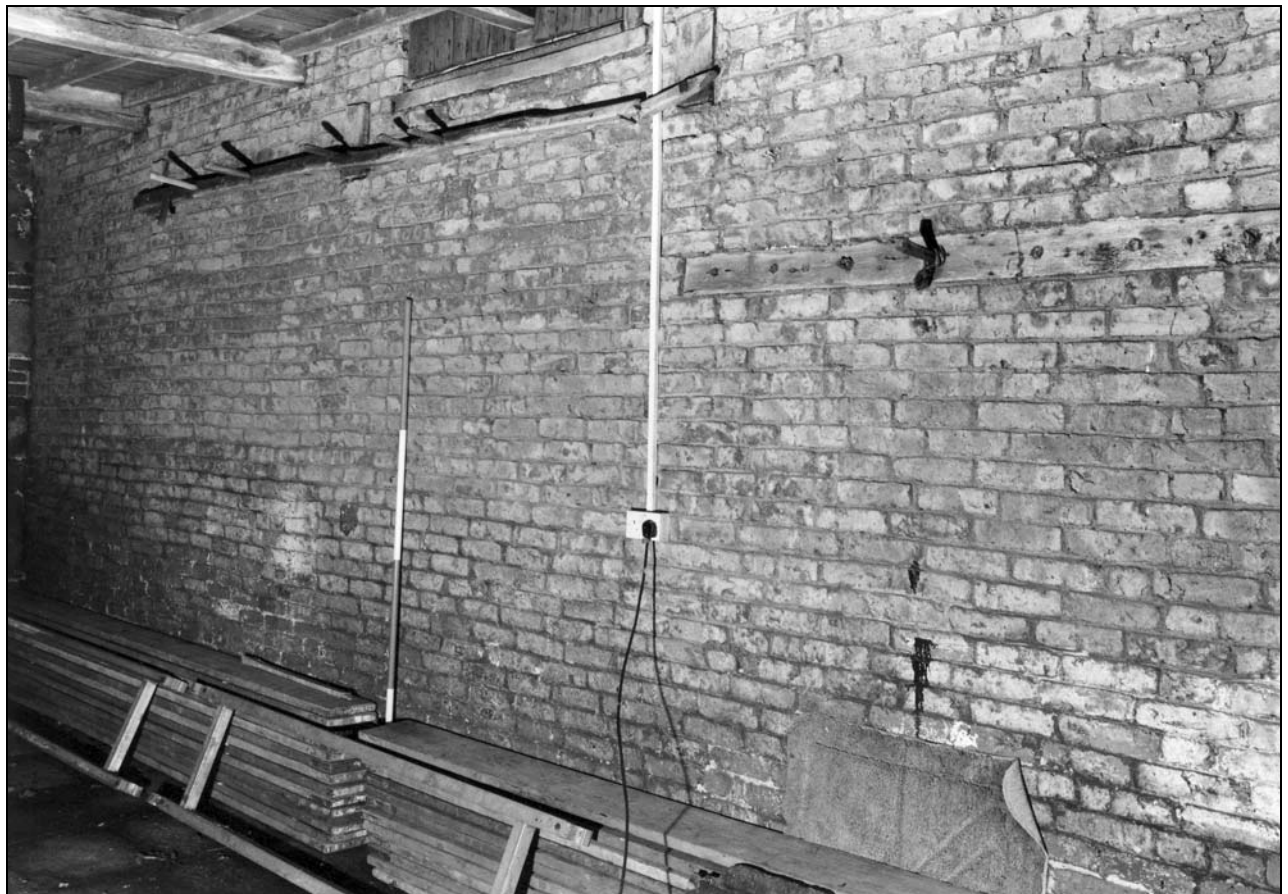


Photo 32: Brick wall on east side of central bay, from the south-west (note harness pegs) (film 3, frame 4)



Photo 34: Detail of brickwork within wall on east side of central bay, at junction with front wall (film 3, frame 10)



Photo 33: Detail of brickwork within wall on east side of central bay (film 3, frame 12)



Photo 35: Blocked north doorway to central bay, with later harness pegs to right (film 3, frame 3)



Photo 36: South doorway to central bay, with internal hinges for original doors (film 3, frame 5)



Photo 37: Detail of brick wall to east of central bay, at first floor level (film 3, frame 18)



Photo 38: Detail of original timber for harness pegs in east side of central bay (later pegs to top left) (film 3, frame 11)



Photo 39: View of original(?) front doors, now serving as loft over south end of central bay (film 3, frame 9)

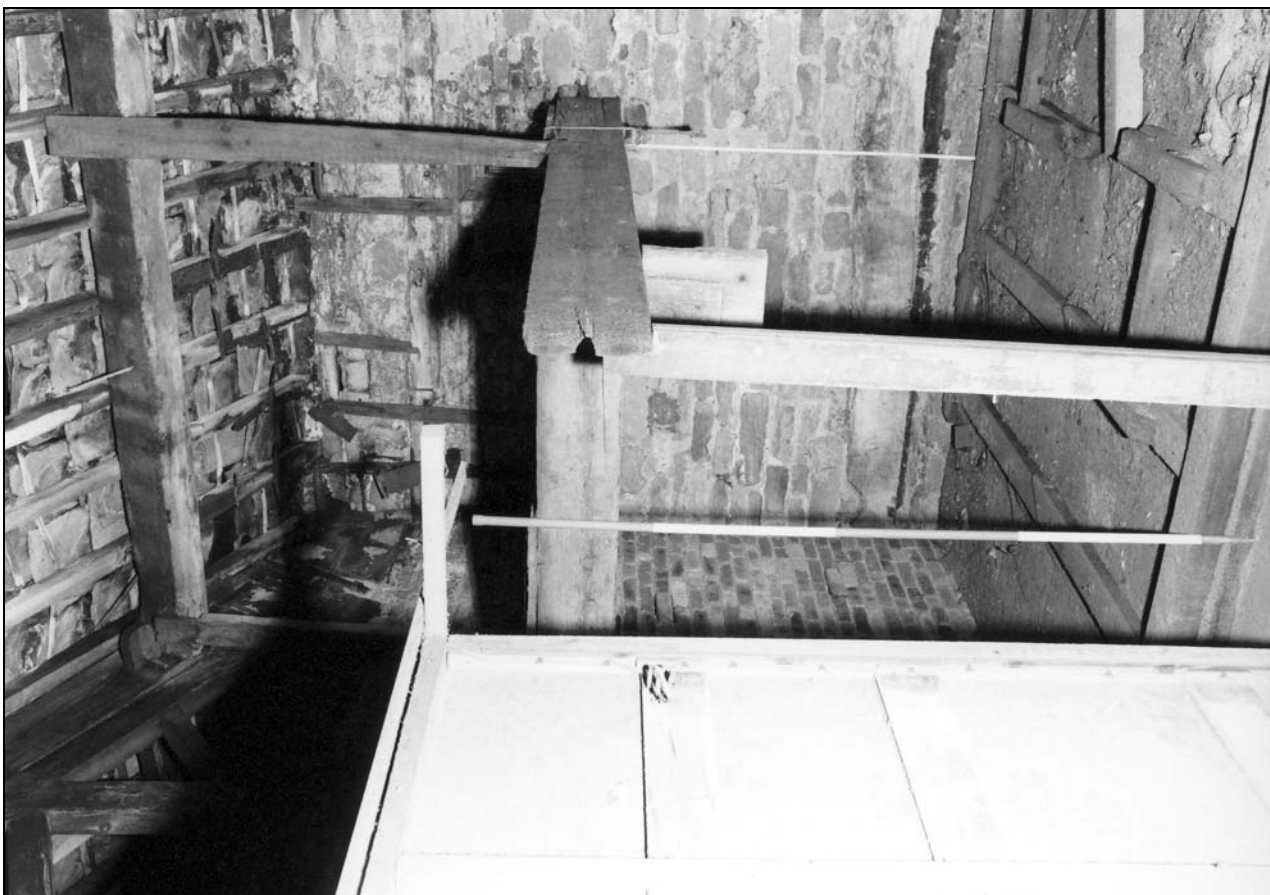


Photo 40: Timber structure at south end of central bay, first floor level – possible remains of pigeon loft (film 3, frame 1)



Photo 41: Internal view of entrance to former pigeon loft in central bay, with remains of timber structure (film 3, frame 16)

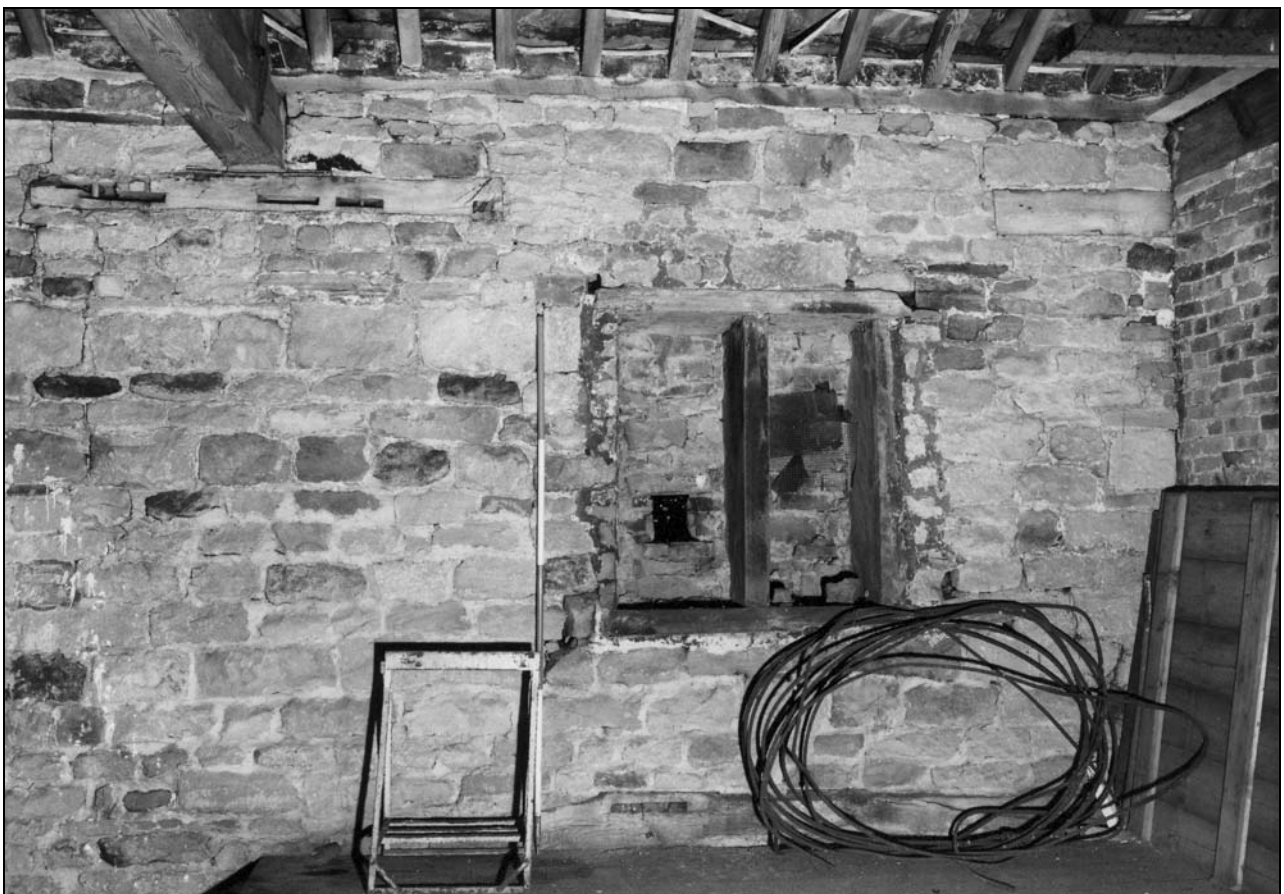


Photo 42: Internal view of inserted and blocked north window to central bay (film 3, frame 17)



Photo 44: Ground floor staircase in workshop, from the north (film 5, frame 1)



Photo 43: Internal view of north door to workshop (film 4, frame 18)

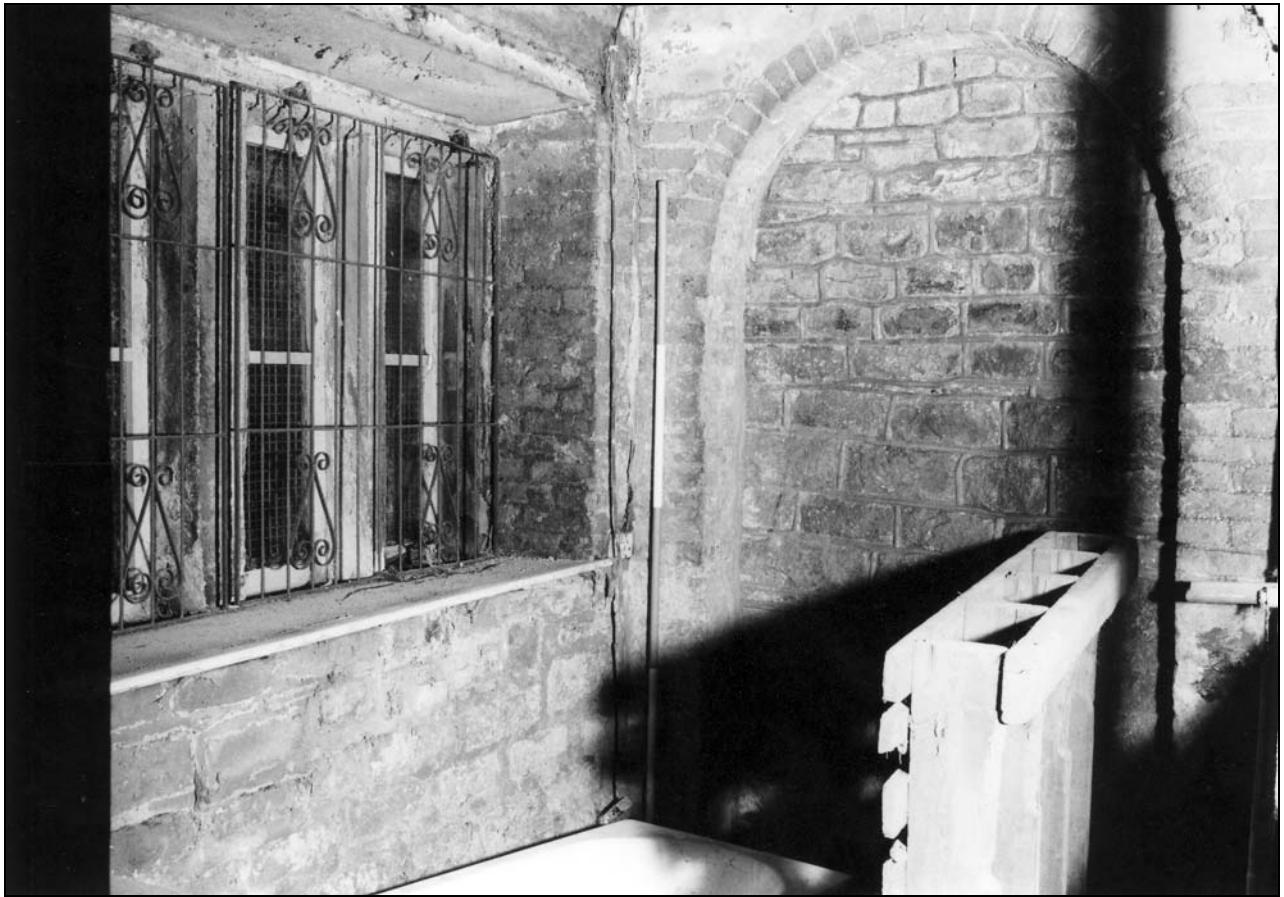


Photo 45: Ground floor of workshop: north-east corner (film 5, frame 4)



Photo 46: Ground floor of workshop, from the south-west (film 5, frame 5)

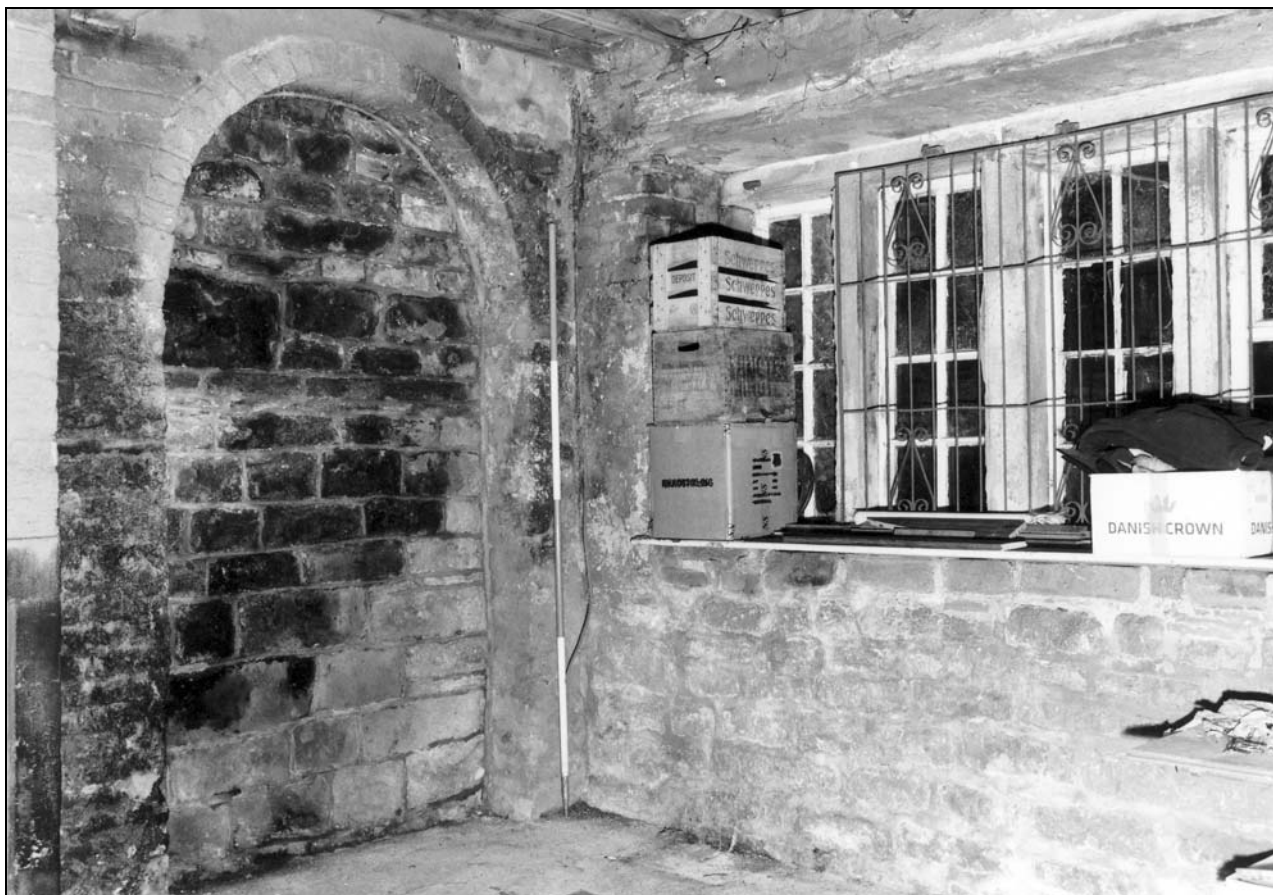


Photo 47: Ground floor of workshop: south-east corner (film 5, frame 7)

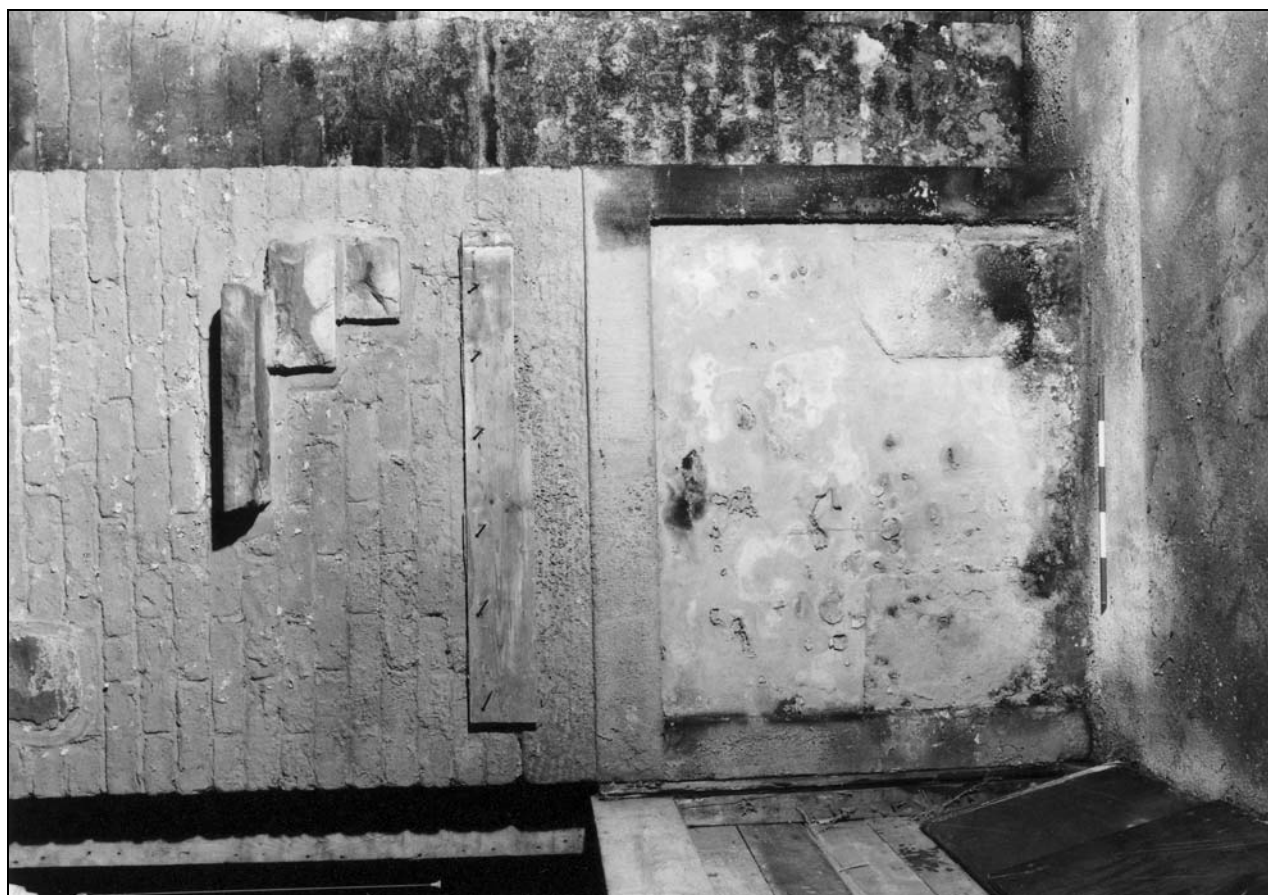


Photo 48: Blocked fireplace on ground floor of workshop, from the west (film 5, frame 6)



Photo 49: Ground floor of workshop: north-west corner (blocked doorway) (film 5, frame 2)



Photo 50: Underside of first floor of workshop, from the south (film 5, frame 9)

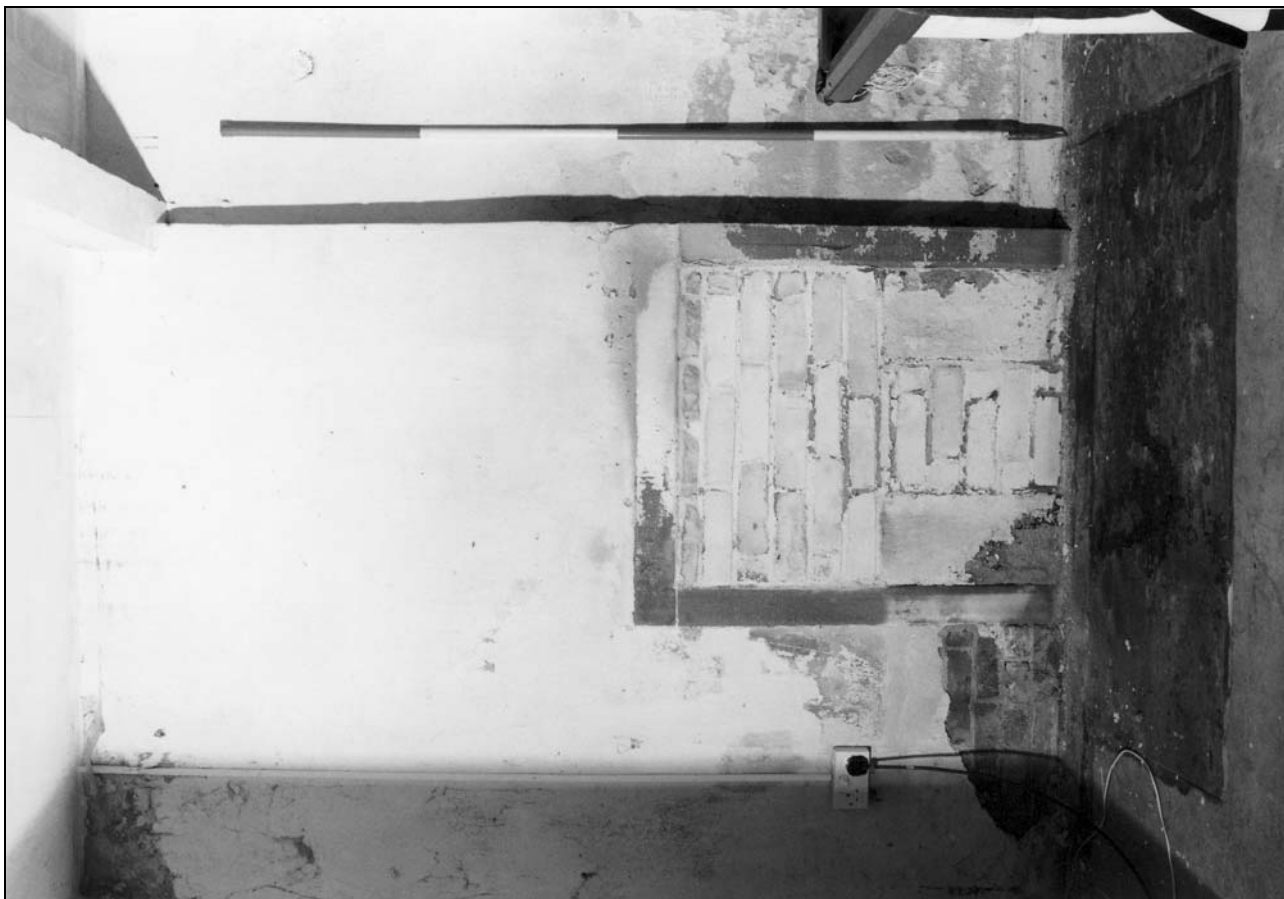


Photo 51: Blocked fireplace on first floor of workshop (south part), from the west (film 4, frame 6)



Photo 52: First floor of workshop (north part), from the north-west – the partition with ranging pole appears original (film 4, frame 9)

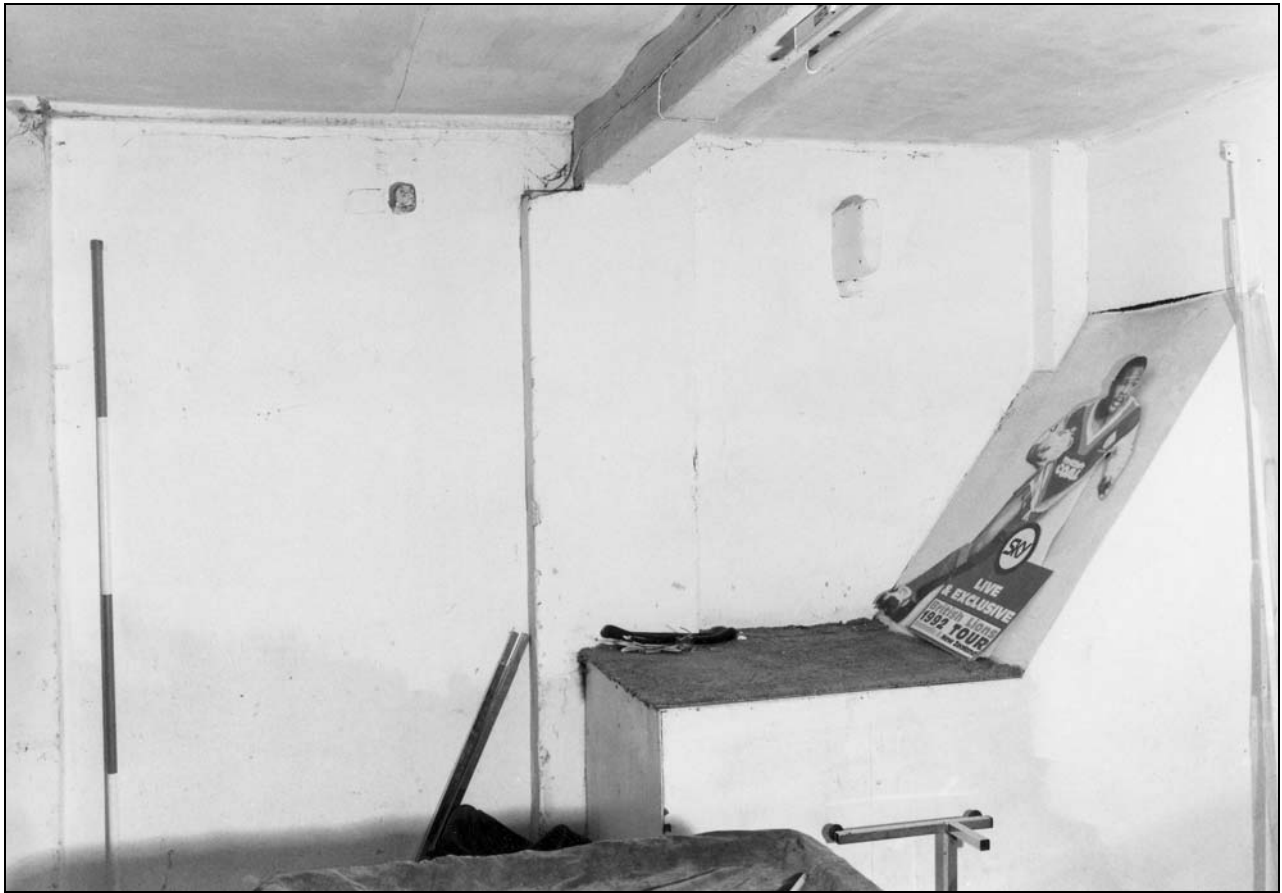


Photo 53: First floor of workshop (south part), from the south-east (film 4, frame 5)



Photo 54: Internal view of first floor window in workshop (south side), showing hinge pintles and barring staples (film 4, frame 4)



Photo 55: Internal view of first floor windows in workshop, south side (film 4, frame 2)



Photo 56: First floor of workshop (north part), from the south-west (film 4, frame 7)



Photo 57: First floor of workshop (north part), with gable doorway to road level (film 4, frame 10)



Photo 58: Attic over workshop, with gable taking-in doorway, from the south-west (film 4, frame 11)



Photo 59: Attic over workshop, with gable taking-in doorway, from the north-west (film 4, frame 12)



Photo 60: The east roof truss, from the north-west (film 4, frame 1)

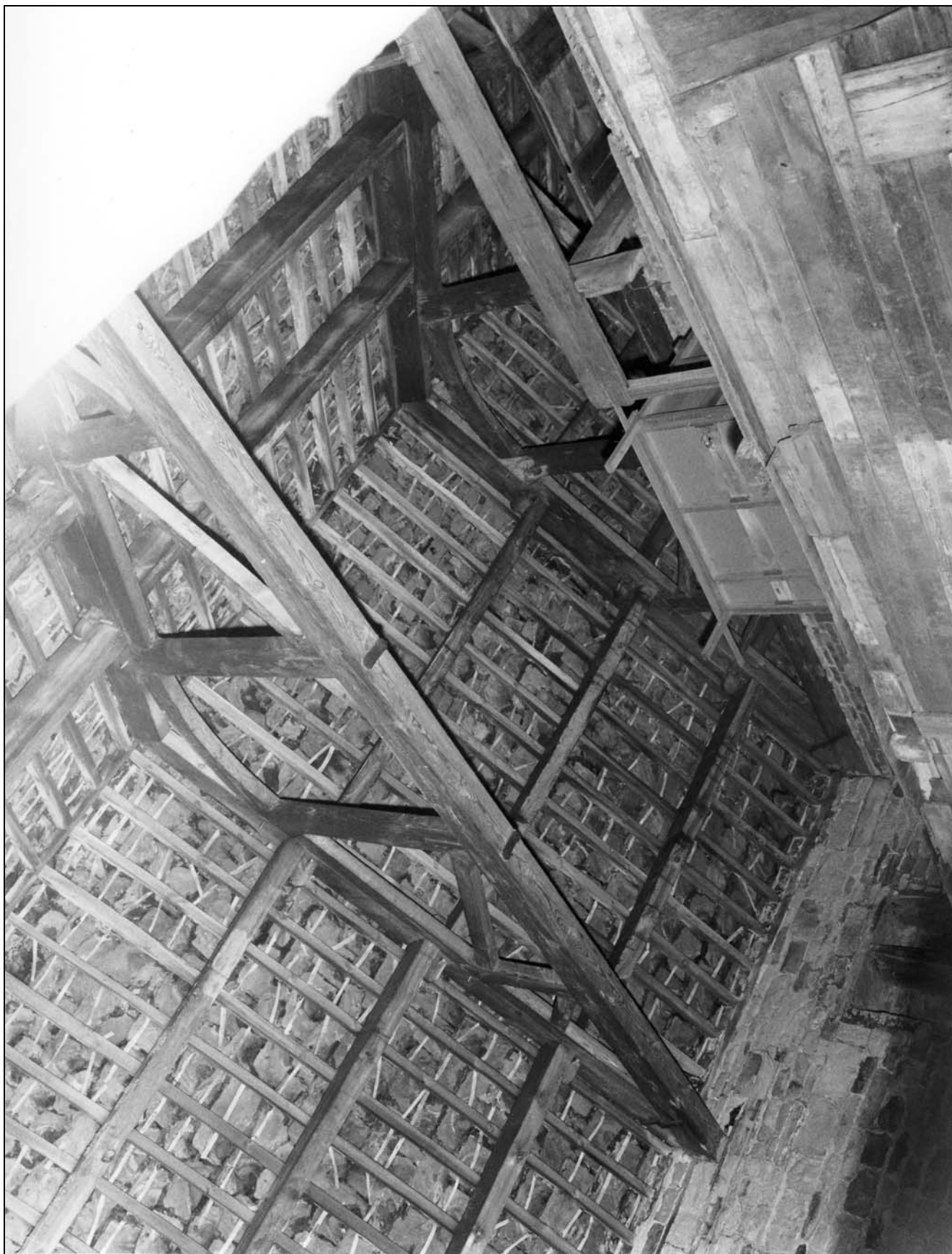


Photo 61: Underside of roof, from the south-west (film 3, frame 1)



Photo 62: The east roof truss (south end), from the north-east (film 4, frame 13)



Photo 63: The east roof truss (central part), from the east (film 4, frame 15)



Photo 64: The east roof truss (north part), from the south-east (film 4, frame 16)



Photo 65: Detail of joints and numbering on east side of east roof truss (film 4, frame 17)