

HISTORIC BUILDING  
RECORDING  
AT  
COURT FARM, HANLEY CHILD,  
TENBURY, WORCESTERSHIRE

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INVESTOR IN PEOPLE

Project P3066  
Report 1561  
WSM 37302



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## **Historic building recording at Court Farm, Hanley Child, Tenbury, Worcestershire**

**Georgina MacHugh**

### **Part 1 Project summary**

Historic building recording was undertaken at Court Farm, Hanley Child, Tenbury, Worcestershire (NGR SO 6510 6517). It was undertaken on behalf of Mr E.C. Yarnold, who intends to convert traditional farm buildings to residential use for which a planning application has been submitted.

The buildings subject of this report, consist of a threshing barn, stable and animal sheds now enclosing a yard. The barn and stable appear to pre-date the animal sheds and may date from the 17<sup>th</sup> century, but more probably are 18<sup>th</sup> century. The seven-bay barn retains roof trusses and bay divisions, a threshing floor and original square oak wattle panelling above red sandstone coursed rubblestone walls with two types of ventilation holes. Adaptations to the north wall and remaining metal fixtures may relate to a horse-powered threshing machine and housing. The stable is of similar construction without panelling. It contains a three-horse manger and hay chutes leading from an upper floor hayloft and a separate loose box with small tack room. The construction of the 19<sup>th</sup> century animal shed completed enclosure of the farmyard and the roof trusses are of King Post type with metal bolts between tie beam and post with some details of the animal stalls remaining. The adaptations and repairs visible in the buildings reflect the changes in agricultural processes and practices in this area throughout the period.



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## Part 2 Detailed report

### 1. Background

#### 1.1 Reasons for the project

Historic Building Recording was undertaken at Court Farm, Hanley Child, Tenbury, Worcestershire (NGR SO 6510 6517; Fig 1), on behalf of Mr E.C. Yarnold. The client intends to convert traditional farm buildings to residential use and has submitted a planning application to Malvern Hills District Council (reference MH/05/1681), who consider that a site of archaeological interest may be affected (WSM 36968-9).

#### 1.2 Project parameters

The project conforms to the *Standard and guidance for the archaeological investigation and recording of standing buildings or structures* (IFA 2001)

The project also conforms to a brief prepared by Worcestershire County Council (WHEAS 2007a) and for which a project proposal (including detailed specification) was produced (WHEAS 2007b).

The project includes a watching brief on building works and related groundworks, which have not yet been undertaken. The results of these will be added to an amended version of this report. This report relates only to an evaluation of the extant buildings.

#### 1.3 Aim

The aim of the project was to determine, as far as is reasonably possible, the nature of the archaeological resource associated with the specific buildings and provide a detailed analysis and description of the history, character, date, techniques of construction, phasing and significance of the structures.

### 2. Methods

#### 2.1 Documentary search

Prior to fieldwork commencing a search was made of the Historic Environment Record (HER) Sites and Monuments Record (SMR). In addition to the sources listed in the bibliography the following were also consulted:

##### *Cartographic sources*

- A Survey of the Manor of Lower Hanley in the County of Worcester The Estate of Edmund Pitts Esq by L Green Surveyor 1731 (WRO ref: BA1545 705:255)
- Tithe Map of Hanley Child (1840) (WRO ref: BA1572/315 r760:315)
- 1<sup>st</sup> Edition Ordnance Survey Map dated 1885 at 1:2500 scale
- Great Britain Road Atlas 2005 Edition by Geographers' A-Z Map Company Limited

##### *Aerial photographs*

- 2005 Historic Environment Record GIS County Coverage

## 2.2 **Fieldwork methodology**

### 2.2.1 **Fieldwork strategy**

A detailed specification has been prepared by the Service (WHEAS 2007b).

Fieldwork was undertaken between 9<sup>th</sup> May 2007 and 29<sup>th</sup> June 2007. The site reference number and site code is WSM 37302. Building recording consisted of a photographic survey of the interior and exterior of the building, REDM (Reflectorless Electronic Distance Measurement) survey, drawn survey and building analysis. The photographic survey was carried out with a Nikon D70 camera and included illustrative ¾ views of the buildings, all external elevations, all internal room spaces and roof structures (where accessible), details of architectural or functional fixtures and features relating to either the function or development of the buildings.

The survey drawings produced for the planning application were not considered by the Historic Environment Planning Advisor to provide the level of detail necessary as part of the historic building recording and a “more detailed measured survey” including “all architectural and functional details, changes in building material/vertical phasing etc” were required (WHEAS 2007a). Both electronic and hand-drawn surveys were therefore carried out. The REDM survey was carried out using a Leica TCR805 Total Station. Original hand drawings were produced of all elevations, external and internal, roof trusses and cross-sections.

Dendrochronological investigation and sampling took place on 21<sup>st</sup> May 2007 and nine samples were found suitable for analysis. The full dendrochronological report is incorporated within this project report (see below).

### 2.2.2 **Building analysis**

Analysis of the buildings were based on visual interpretation and analysis on site, study of the photographic record and original drawings made of the buildings and was informed by the documentary sources listed above. This allowed plans to be drawn up showing the structural development of the buildings.

## 2.3 **Building recording methodology**

The project conformed to the specification for a level 3 survey as defined by the English Heritage document *Understanding Historic Buildings: a guide to good recording practice* (EH 2006). This level of survey is described as “an introductory description followed by a systematic account of the buildings origins, development and use” (EH 2006, 14).

This required the following elements of survey:

- An illustrative view of the buildings
- All external elevations
- All internal room spaces and roof structures
- Details of any architectural or functional fixtures and features relating to either the function or development of the building
- Photographs illustrating the building’s relationship to surrounding buildings and setting



- Survey drawings produced for the planning application do not provide the level of detail required as part of the historic building recording and a more detailed measured survey to include all architectural and functional details, change in building material/vertical phasing etc.
- Illustrative sections through the principle axis of the building.
- A phased plan of the building

#### 2.4 **The methods in retrospect**

The buildings were generally accessible (excepting limited access to the first floor of the stable) and external elevations free of obstructions. The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

### 3. **Topographical and archaeological context**

Hanley Child lies in the far north-west corner of Worcestershire which projects into Herefordshire and Shropshire. The VCH entry for Hanley Child describes it as being within the parish of Eastham with Hanley Child and Orleton (VCH 1924, 265) although outside the Worcestershire Diocese and within the Hereford Diocese. It is approximately 5 miles from Tenbury Wells.

The village lies in an area of upland to the south of the River Teme known as the Kyre Upland, divided by the valley of the Kyre Brook. Hanley Child is bounded on the north by a tributary of this brook. The Kyre Brook is bounded to east and west by a pronounced scarp and while the valley is sheltered the scarp “suffers locally from excessive exposure” (Hodgson 1972, 4). The present small villages of the area may reflect the early conversion of small nucleated settlements into estates or parks (eg. Kyre Park by 1329 and Croft by 1081) but over time such estates splintered, allowing tenants to become owners (Hodgson 1972, 25).

The early history of Hanley Child (also referred to as Chynderne Hanleye, Childermehanele, Chidldrehanle, Children and Hanley (in the 13<sup>th</sup> century); Child Hanley (14<sup>th</sup> century); Hanley Child, Nether Hanley (16<sup>th</sup> century) is complex. The manor of Hanley Child probably belonged to Robert Burnell, Bishop of Bath and Wells as part of his lands at ‘Hanley’ recorded in 1281. In 1349 the Beauchamp family had acquired the manor which was in the later 14<sup>th</sup> century divided between the Guise and Croft families. By 1604 Sir Edward Pytts owned the reunited Manor along with Kyre Wyard (VCH, 1924 Vol 4, 282).

Pevsner’s entry on Hanley Child describes the ‘church’ of St Michael, built in 1807 formerly with a west tower, which fell in 1864 (Pevsner 1992, 188). Nash states that “Here formerly stood a poor chapel” (Nash 1782, 366) and that the village attend the church at Eastham. The Court House is mentioned: “The Court House, to the south-east of the church, now a farmhouse, is an early 17<sup>th</sup> century building of half-timber, brick and stone.” (VCH 1924, Vol 4, 266). During the 1800s the population of the Parish of Hanley Child varied from 151 (in 1811) to 217 (1881) and acreage of the joint Parish of Eastham with Hanley Child was recorded as 3,300 (VCH, 1924 Vol 4, 467)

In view of the unusual source of oak timber (see dendrochronological report below) it is interesting to note that Kyre Wyard was well-known for its oaks. John Wyard received a licence from Edward III to impark his woods of Kyre Wyard in 1329 and was described by Habington as “...adorned with so many and mighty oakes as scarce any ground in England within that quantity of Akers can shew so many” (VCH, 1924, Vol 4, 283). References are made to it from the 15<sup>th</sup> century and in 1779 it was described as having reduced from 500 acres to 180 acres in the previous fifty years. (VCH 1924, Vol 4, 283). A deer park of 170 acres, 60 of which were pasture existed in 1892 and the estate contained avenues of oaks and

beech. A landscape park and lake were laid out at the Kyre Estate in 1753-56 and considerable planting took place throughout the 18<sup>th</sup> and 19<sup>th</sup> centuries resulting in a “formidable arboretum” of a variety of trees (Lockett 1997, 157)

There are a number of sites recorded on the Historic Environment Record, including the farm buildings and farmhouse in the area around Court Farm. These are summarised below.

Her Reference	Name	Monument Type	Dates	OS Reference
<b>BUILDING</b>				
WSM05803	Court Farmhouse, Hanley	FARMHOUSE	1600 to 2050	SO6506765187
WSM08113	Church of St Michael and All Angels, Hanley	CHURCH	1066 to 1539	SO6500065225
		CHURCH	1807 to 2050	
WSM22177	Pheasantry, Tenbury	UNASSIGNED	1540 to 1900	SO6579064950
WSM29257	Historic Barn, Hanley	BARN	1540 to 1900	SO6500464985
WSM36965	Stoneyford, Hanley	HOUSE	1600 to 2050	SO6449965013
WSM36967	Malthouse adjoining Court Farmhouse to the south west	MALT HOUSE	1600 to 2050	SO6506165186
		OUTBUILDING	1600 to 2050	
		Store	1600 to 2050	
WSM36968	Stable approximately 15 yards south east of Court Farm, Hanley	STABLE	1600 to 2050	SO6510665168
WSM36969	Barn and Cow House, Court Farmhouse, Hanley	BARN	1600 to 2050	SO6510565188
		COW HOUSE	1600 to 2050	
WSM36981	Hill Farmhouse, Hanley	FARMHOUSE	1750 to 2050	SO6559265277
WSM36982	Barn and Cow House about 20 yards north of Hill Farmhouse, Hanley	BARN	1700 to 2050	SO6561365298
		COW HOUSE	1700 to 2050	

Her Reference	Name	Monument Type	Dates	OS Reference
<b>MONUMENT</b>				
WSM11254	Shrunken Medieval Village, Hanley Child	SHRUNKEN VILLAGE	1066 to 1539	SO6508165285
WSM22178	Quarry, Hanley	QUARRY	1540 to 1900	SO6570864971
WSM22187	Ford, Hanley	FORD	800 to 1539	SO6445864949

**Table XXXX HER entries within 1.5km of Court Farm, Hanley Child as at 4/6/07, Worcestershire County Council**

## 4. Results

### 4.1 Structural analysis

The buildings are shown in Figures 1 to 42. Analyses of the photographs, drawings and records have allowed phasing of the buildings to be produced and these are presented below as Figures 21, 31 and 42. Photographs of the buildings have been reproduced as Plates 2 to 39 with their locations shown on Figure 43.

### 4.2 History

Court Farm consists of a farmhouse and outbuildings. The farmhouse is described in the VCH as “The Court House”, “...an early 17<sup>th</sup> century building of half-timber, brick, and stone.” (VCH 1924, Vol 4 266). Also, a photograph of the farmhouse, contained in a series of document transcriptions from 1900, is entitled “Court House” (Plate 1) (F C Baldwyn-Childe, 1900 WRO BA4958-2)

An estate plan of the Manor of Lower Hanley (Hanley Child) of 1731 (Figs 44 and 45) shows two areas of land next to the chapel meadow which equate with Court Farm and describes them as Jones’s farmhouse, fold garden and orchard (No 1 of 3 roods and 37 perches) and Jones’s meadow (No 2 of 1 acre, 2 roods, 6 perches). The extract from the tithe map of Hanley Child of 1840 (Fig 46) shows a similar area with five buildings around the triangular ‘yard’ and describes a house and yard (No 108: 1 rood, 14 perches), stables, yards, barns (No 109 of 3 roods, 1 perches); and a pig orchard and yard (No. 110 of 1 acre, 2 roods, 33 perches).

The farm buildings described in this report lie to the east of the farmhouse and are recorded on the HER as WSM 36968 (stable) and WSM 36969 (barn and cow house). The cow house was not included in the project. Further outbuildings to the east which connect the stable to the barn were not previously recorded on the HER but were included in the project

No	Date	Document	Parties
1	1593	Court Roll entry	Earliest mention of a Court held at Hanley Childe
2	1581	Lease of Manor House of Hanley Chylde	Sir Edward Pytt of Kyre Esq to Robert Jurden, Christian his Wife and

			Thomas their son.
3	1630	Lease of Chief manor House of Hanley Childe for 3 lives	Sir John Pytts of Kier Wyard to Susan Jorden widow, William and Nathanaell her sons
4	1635	Lease of the Farm of Hanley Child	Sir James Pytt of Kier Wyard kt and Anne Freeman (wife of John Freeman of Hanley Childe, Thomas her son and his wife Mary)
5	1718	Lease of Court House	Samuel Pytts to Robert Gurden (or Jurden)
6	1766	Lease of Court House	Edmund Pytts to William Webb
7	1822	Copy of Memorandum of the Seats and Kneelings in Hanley Chappel 1805-1822	made by Wm Webb, Chapel Warden (showing "Wm Webb for Court House Farm" as entry 16)

**Table Documentary records from transcription of Estate records by F C Baldwin Childe c1900 (Worcestershire County Record Office, WRO BA4958-2)**

#### 4.3 Description

Court Farm lies among fields south-east of the chapel of St Michael and not far from the Hanley Child village centre (Plate 2). The farm buildings, the subject of the planning application and Brief, are shown on the attached plans (Figs 2, 22 and 32 and Plate 3) and are described as barn A (the Barn), Barn B (the Animal Shed) and Barn C (the Stable) Although the buildings partly enclose a yard the layout is irregular and they are not directly aligned to each other, a variation of layout described as "an irregular courtyard resulting from amalgamation of buildings" by Brunskill (Brunskill, 1971, 137).

##### 4.3.1 The Barn

The Barn (Plate 4) stands along the length of the north side of the open yard aligned slightly east of due north. It is a large rectangular seven bay building of (probably local) red sandstone rubblestone, coursed and mortared with a timber wall plate resting on the stone walling, square panelling above with posts supporting a roof plate (Plate 5). The panels were all originally filled with oak wattling (consisting of split oak laths woven around triple oak staves) without daub (Plate 6) and similar panels but diamond-shaped made up the gable ends (Plate 7). Two large double doorways on its south side align with opposing openings in the north side. The stone walling is built to a higher level at the east and west ends and weatherboarding covers the gable of the west end and the east gable is presently open. There is a small door in the south-west corner. The timber roof is tiled with ridge tiles along the apex.

Incorporated within the walls are two types of ventilation holes, the lower level range being rectangular while those at the higher level are triangular (Plates 8 and 9). There is indication of considerable weathering of the stonework and repairs throughout the building. That the Barn was originally built as a barn for storage and processing of grain is evidenced by the layout of the building. Two opposing doorways for allowing access into the barn for carts (Plate 10), also provided a through-draught for winnowing, and a flagstone floor gave a

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surface for threshing. Ventilation for the storage of the grain was also required, and this was provided by the ventilation holes and wattle panelling, including that in the gable ends of the barn.

Internally the Barn is one unit partially divided by the roof trusses into its seven bays, which are numbered here 1 to 7 from west to east (Plate 11). Of the two south doorways (Bays 3 and 6), Bay 3 has a tiled floor, which was probably a threshing floor (Plate 12). The floor between Bays 5 to 7 appears to have been broken up at some stage so Bay 6 may also have been originally tiled. Either side of each doorway lies a further bay, as was usual for grain processing. The extra bay at the west end had a small external door (Plate 13), no longer in use, and therefore may have had a role ancillary to threshing. Trusses 2 and 4 appear to have divided the barn across its width - Truss 2 (Plate 14) has the remains of original boarding from floor level and Truss 4 incorporates a beam, posts and empty mortices showing that it would have divided the Barn, floor to roof, at this point. The carpenters' marks on Truss 4 (Plate 15) suggest that it is in its original form and probably dates from the building of the barn. Empty mortices in Trusses 3, 5 and 6 indicate that they had further timber structure beneath them, although simpler than 2 and 4. Truss 1 is the only King Post in the building and is held together entirely by wooden pegs (Plate 16).

#### 4.3.2 **The Animal Shed**

The Animal Shed (Plate 17) consists of three separate units – two small rooms and a large, seven bay room. The north-east and south-east elevations are of coursed red sandstone rubblestone, as is the dividing wall between Rooms B and C. Although this construction material is similar to that of the other farm buildings the coursing is not as strict as that of the Barn and the Stable and it includes other materials such as tile within it (Plate 18). The other walls are of breeze block. Five doorways face onto the yard, three face east and all windows but one face onto the yard and are a glazed, metal-framed type.

Throughout the building the roof trusses are of the King Post type each with a long metal bolt inserted through each tie beam at the midpoint rising up through the King Post and secured by a nut visible in a slot in the post (Plate 19). At each truss in Room C marks on the underside of the tie beam coincide with the remains of bases of posts and indicate that the room was formerly divided into separate stalls (Plate 20). At the southern end a timber partition and door remains suggests that a corridor ran along the north-west wall (Plate 21). Some stone flooring remains in Rooms A and B (Plate 22).

#### 4.3.3 **The Stable**

The Stable (Plate 23) stands to the south of the yard, opposite the Barn and aligned slightly to the west of due north. Constructed of the same material as the Barn the tiled, timber roof rests directly on the wall plate and there is no panelling above. It has two modern timber doors and two wooden barred windows in the north wall and an upper door in the west wall, leading via steps to a first floor. The recent collapse of the south wall led to its rebuilding together with the south window (pers comm Mr E Yarnold). The gable ends of the building are both weatherboarded. The roof trusses consist of a tie beam, principal rafters, collar and struts and were constructed with wooden pegs, similar to those in the Barn.

The stable is of two storeys, with both the ground and first floors divided into two by a stone dividing wall. The western part is now one room but contains the remains of three mangers and a trough with the remains of three partitions (Plate 24), suggesting that the room was earlier divided into stalls for housing three horses (partitions would have separated the horses and prevent kicking and biting between them). The timbering of the roof in the north-east corner of this room indicates the site of former steps to the first floor and the remains of plaster on the wall (Plate 25) suggest that it was designed to a higher standard than the eastern part of the building. The standard of joinery and decoration used in the manger also suggests a higher level of care was used in this western part of the building. In addition the

two ceiling beams running east to west are chamfered (Plate 26), although they are stopped at the west end but not the east.

The eastern part is a single unit with two wooden partitions approximately 1m high (Plate 27) and a small, enclosed room or cupboard (Plate 28). This unit may have acted as a loose box for working or sick horses, or foaling mares. The small room may have been used for storing tack and equipment (a saddle or rein rack, fixed to the room's timber-frame seems contemporaneous). There is evidence of a number of earlier windows, now blocked. Three, which are visible only from inside the building, are equally spaced across the south wall, one centrally placed in the east wall with another towards the north-east corner.

The upper rooms are now only partly accessible as the floor is unsafe. The western part of the first floor is a single room and, similar to the stabling below, there are the remains of lath and plaster on the timber division between it and the eastern part (Plate 29). In its timber floor three rectangular holes with chutes leading into the mangers below (Plate 30) probably indicate that this room was a hayloft or granary and the chutes would have allowed the mangers to be filled directly from above. The gap in the partition dividing the two upper rooms appears to be part of the original joinery suggesting that the eastern upper room was also used for hay or grain storage. Only some of the timber flooring of the eastern part remains.

#### 4.4 **Phasing**

Authors who are expert in dealing with historic buildings consider timber buildings and farm buildings as difficult to allocate to a certain date: "...the vast majority of timber structures can only be approximately dated if at all." (Brunskill 1994, 84) "Datable features of buildings tend to be the non-functional extras such as mouldings and decorative additions – which are noticeably absent from farm buildings" (Wade-Martins, 1991, 78).

Dendrochronological sampling was carried out at the site but it was not possible to obtain any dating of the buildings by this method. However, the assessment of the timbers revealed that all timber was oak and may have come from a managed source in relatively recent centuries (see dendrochronological report below). By analysing the development of the buildings, and referencing to documents and the changes in general agricultural practices, phases in the development of Court Farm can be identified. The following phasing only takes account of the farm buildings included in the brief.

##### 4.4.1 **Phase 1 (17<sup>th</sup> century to mid 1800s)**

The layout of Court Farm suggests that it is an amalgamation of buildings of different periods rather than a planned design. The first phase appears to consist of Barns A and C which were both originally free-standing buildings. Their wall construction is of similar materials and construction technique and their roof trusses are of similar design. Although the Barn additionally has panelling and ventilation holes which the Stable does not have, this is explained by the differences in use of the buildings – the Barn requiring more ventilation for grain storage and processing. The location of the ventilation holes in the the Stable confirm that it was originally free-standing and that when the building to the west and the Animal Shed to the east were added, the ventilation here was blocked (Plate 31).

The Estate Plan of 1731 (figs 44 and 45) shows a triangle of land on which there are three distinct buildings which, although they cannot be directly identified with the present buildings, does suggest that the Barn had not yet been built. Buildings marked on later maps and plans suggest that the Barn and the Stable had been built by 1840 and, although the yard was not enclosed by this date, by 1885 the current layout was in place (fig 47).

The original construction of the Barn as a large barn for hand threshing suggests an 18<sup>th</sup> century date or earlier. Square panelling appeared in buildings in the west midlands in the

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mid-15<sup>th</sup> century (Harris 1999, 71) but the examination of the timber suggests a more recent date. Division of the building into bays appears to be original and as such would date from the 17<sup>th</sup> century or later as the date when this practice began. Division helped to keep the loose crop or straw inside the bay and separate from the threshing floor. Sometimes these divisions were also boarded and then could be used to house sheep for shearing or for sorting livestock, and a small door was also added. Evidence that this took place in the Barn is visible at Truss 2 (Plate 14). Such framing lasted in Worcestershire and Herefordshire up until the second half of the 19<sup>th</sup> century (Peters 2003, 16).

The Stable appears to be in its original form with variations in wall construction, which coincide with modern replacement walling (see above) and blocked windows. The three southern windows appear contemporary and were probably original as the eastern part of the building is insufficiently lit without them. As the two windows in the east wall, now blocked, are currently inside the Animal Shed they relate to the period when the Stable was free-standing. All the windows respect the upper floor joists, indicating that the whole of the upper floor is original.

The pegged timber joints of the manger (Plate 26) coincide with those of the small room in eastern the Stable and the small central door in the west wall (Plate 32) and various timber fittings on the dividing Trusses in the Barn, suggesting that these may all be contemporary and therefore original. The anomaly with the stopped chamfered beams in western the Stable may indicate that the timbering of the manger covers eastern chamfer stops and was therefore installed after the decorative beams. However, it has been constructed of pieces of wood of various sizes and levels of decoration so all the timbers in this room, including the beams, may have been made of re-used timber from elsewhere. It is possible that, as Court Farm was within the estate of Edmund Pitts, timber was being supplied from another part of the estate.

#### 4.4.2 **Phase 2 (c.1800-1840)**

Phase 2 appears to have occurred with the addition of a horse-powered threshing machine, which required alterations to be made to the central north wall of the Barn and metal fittings remain (Plates 33 to 36) possibly together with a semi-circular wheelhouse, the shape of which may be visible on the 1840 plan. Most of these were built between 1800 and 1850 (Harvey 1980, 135) and were in turn replaced by steam powered machines. The development of these machines replaced threshing by hand and required less height and floor space so that by the late 19<sup>th</sup> century threshing barns were being adapted to other uses.

It may have been also during this phase that the original roof truss of Truss 1 was replaced with the later king post type, which was generally adopted in the 18<sup>th</sup> and 19<sup>th</sup> centuries (Harris 2003, 85).

#### 4.4.3 **Phase 3 (c. 1825-1870)**

The Animal Shed is a later addition built onto the pre-existing Barns A and C and designed to link them and enclose the yard. The irregular shape of the Animal Shed supports this idea. Although the building is of similar construction material to Barns A and C it seems to have been less carefully built. The low roof, length of the main room and lack of windows indicate that it was originally built to house cattle, with most openings onto the yard for ease of feeding and manuring.

After the first quarter of the 19<sup>th</sup> century dramatic increase in population increased demand for grain and livestock and mixed farming became more widespread and intensive. However, from the 1870s agricultural production was undercut by imports from abroad and agricultural prices fell (Barnwell and Giles 1997, 5-7). It therefore seems likely that at Court Farm building improvements to house livestock would have taken place between approximately 1825 to 1870.

The construction method of the Animal Shed itself also suggests it post-dates Barns A and C. The roof trusses, although King Post Trusses as Truss 1 in the Barn, are a later version which incorporates the metal bolt which strengthened the Truss and prevented separation of the tie beam from the King Post which had become a recognised problem. Throughout the Animal Shed the trusses are of the same design but the two to the east (Trusses 1 and 2) incorporate timbers with empty or over-sized mortices (Plate 37) suggesting that they have been re-used from elsewhere. The timbers making up the wall plate also show empty mortices suggesting that these, too, were re-used timbers (Plate 38).

#### 4.4.4 Phase 4 (20<sup>th</sup> century)

20<sup>th</sup> century changes include a new wall at the north and north-west elevations of the Animal Shed built of breeze block; and concreting over of the floors, probably to conform to health regulations. In the Barn, repair of the north-east corner and insertion of a brick window and new door at the west end has taken place, along with several adaptations to the original trusses in order to support the roof. Most doors and windows are modern replacements and it is probably during this period that the weatherboarding was added over the original gable end ventilation and thin boards over the wattle panelling in the Barn.

## 5. Synthesis

Court Farm is one of several farms in this area (Plate 39). This may reflect early nucleated settlements which became incorporated into local estates, as Hanley Child had by 1281. Such farms in hamlets or forming part of very small groups of farms are normally associated with pasture or mixed farming with a high pastoral content (Brunskill 1971, 136). By the 15<sup>th</sup> and 16<sup>th</sup> centuries cider and perry orchards in the area had increased and in the 17<sup>th</sup> and 18<sup>th</sup> centuries many small farmsteads with orchards and hopyards were established. The 18<sup>th</sup> century map shows the area around the site of the current farm was orchard at that date. A report on Worcestershire agriculture in 1813 said that although the County's orchards were successful "Fruit is an article of uncertain or casual production, some years producing little, or nothing..." (Pitt 1813, 148). This uncertainty was probably the reason why fruit growing allied with grain production at Court Farm. A doubling of population between 1760 and 1821 (Barnwell and Giles 1997, 5) led to greater demand and improvements to increase agricultural production, suggesting that this is a likely period of investment and expansion at the farm and may be the period when Barns A and C would have been originally constructed.

Documents show that the house may have been leased from Sir Edmund Pytt from the 16<sup>th</sup> century (Leases of "The Manor House", 16<sup>th</sup> century and "Court House", 17<sup>th</sup> century were made to the Jurden family and may relate to the current Court Farmhouse). With a large supply of oaks at the Kyre Estate (probably still the freeholder of the farm in the 18<sup>th</sup> century) timbers for the buildings would have been readily available and this period coincides with a vast reduction in number of the Estate oaks (see 3 above).

Mechanisation of threshing from the beginning to the mid-19<sup>th</sup> century led to substantial alterations to Barn A to include this machinery, which could improve efficient grain processing. Continuing growth in population led to increased demand for grain and livestock, and until the 1870s further investment in the farm took the form of the construction of the Animal Shed. After this date agriculture took a downturn as prices of grain and wool fell, undercut by imports and investment in farm buildings was unattractive. The 20<sup>th</sup> century changes in modern agricultural practices, such as replacement of the horse by the tractor, have led to the removal of the original uses of the farm buildings at Court Farm. However, the amount of change and repair to the farm throughout its life shows that the buildings have consistently been adapted to suit the agricultural needs of the time. Wholesale re-design and rebuilding has not taken place here. The buildings at Court Farm therefore represent a record of the changes which have occurred in the agriculture of the area. Research frameworks



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Although there is no specific research framework for buildings in Worcestershire., the recording of Court Farm has added to the broader study of vernacular farm buildings within the County enabling an understanding of their development and the economic and social conditions which influenced such development.

## 6. **Publication summary**

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

*Historic building recording was undertaken on behalf of Mr Edward Yarnold at Court Farm, Hanley Child, Nr Tenbury, Worcestershire (NGR ref SO 65106517; HER ref WSM 37302). Court Farm outbuildings consist of a threshing barn, stable and animal sheds now enclosing a yard. The barn and stable appear to pre-date the animal sheds and may date from the 17<sup>th</sup> century, but are more probably 18<sup>th</sup> century. The 7-bay barn retains roof trusses and bay divisions, a threshing floor and original square oak wattle panelling above red sandstone coursed rubblestone walls with two types of ventilation holes. Adaptations to the north wall and remaining metal fixtures may relate to a horse-powered threshing machine and housing. The stable is of similar construction without panelling. It contains a three-horse manger and hay chutes leading from an upper floor hayloft and a separate loose box with small tack room. The construction of the 19<sup>th</sup> century animal shed completed enclosure of the farmyard and the roof trusses are of King Post type with metal bolts between tie beam and post with some details of the animal stalls remaining. The adaptations and repairs visible in the buildings reflect the changes in agricultural processes and practices in this area throughout the period.*

## 7. **Acknowledgements**

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Mr E.C. Yarnold. Dr Martin Bridge contributed the dendrochronological report. Mike Glyde, the Planning Archaeologist, for providing the Brief.

## 8. **Personnel**

The fieldwork and report preparation was led by Georgina MacHugh. The project manager responsible for the quality of the project was Simon Woodiwiss, and illustration by Carolyn Hunt.

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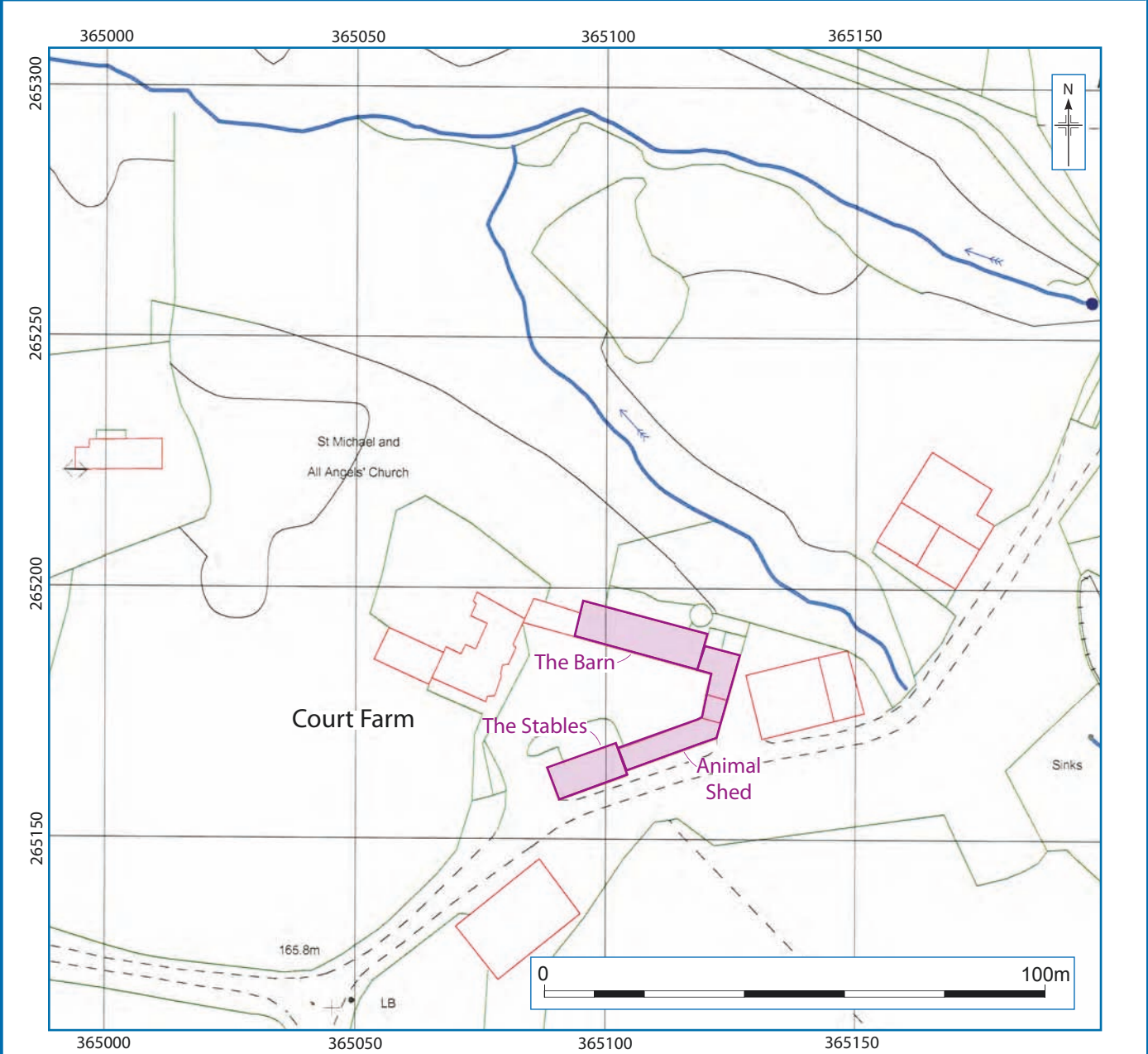
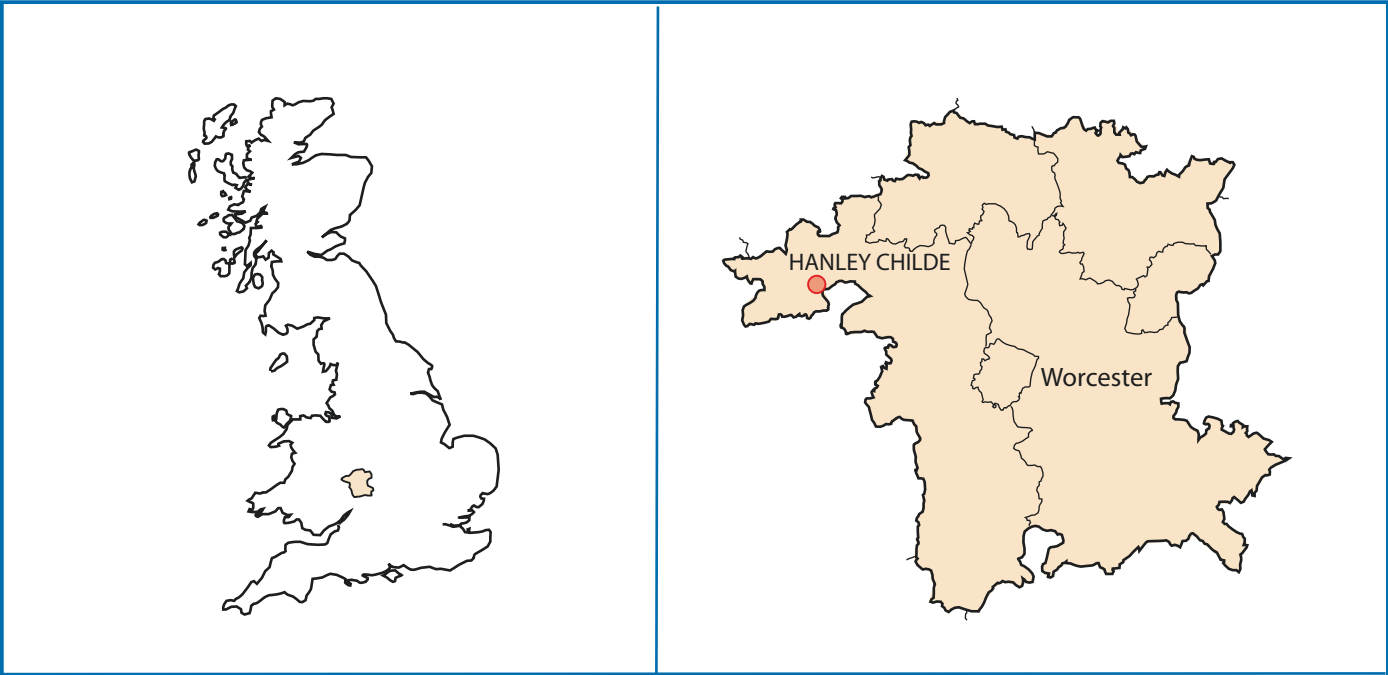
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## Figures

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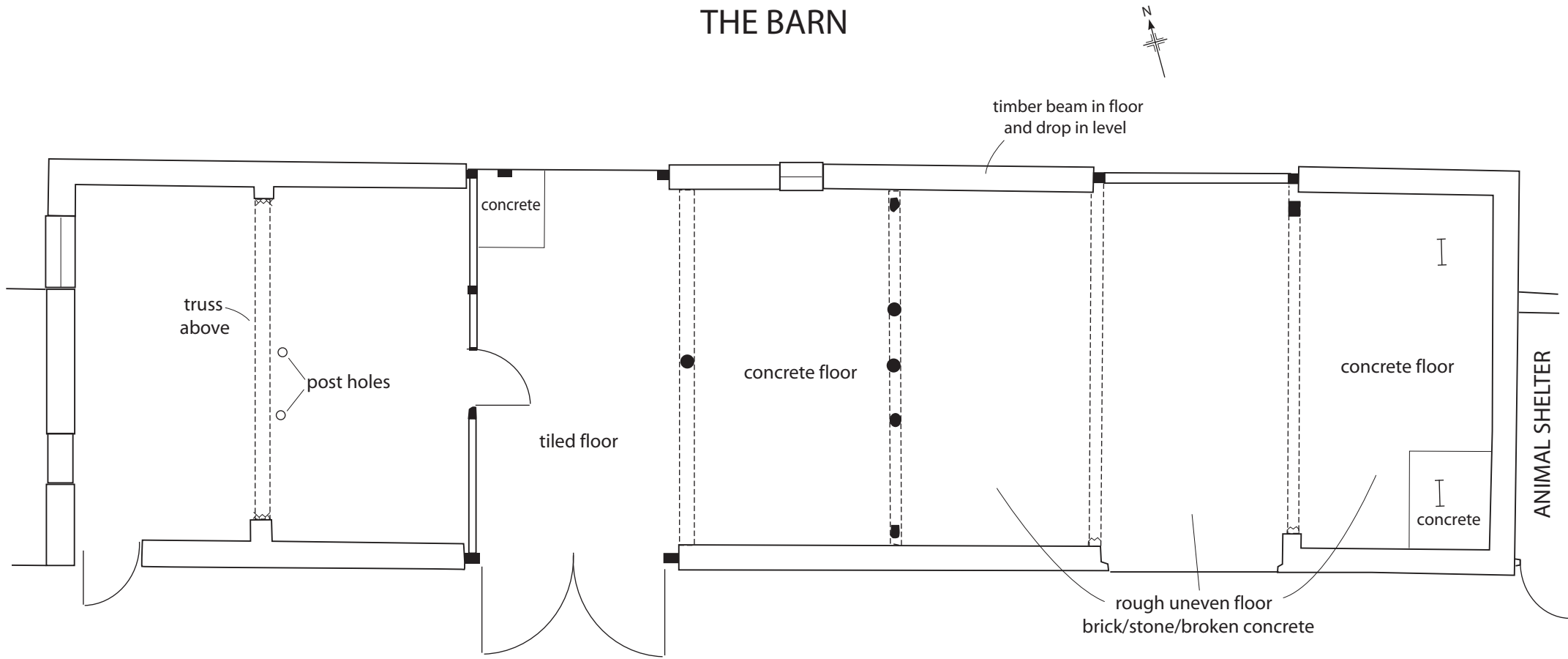


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Location of Court Farm

Figure 1

# THE BARN

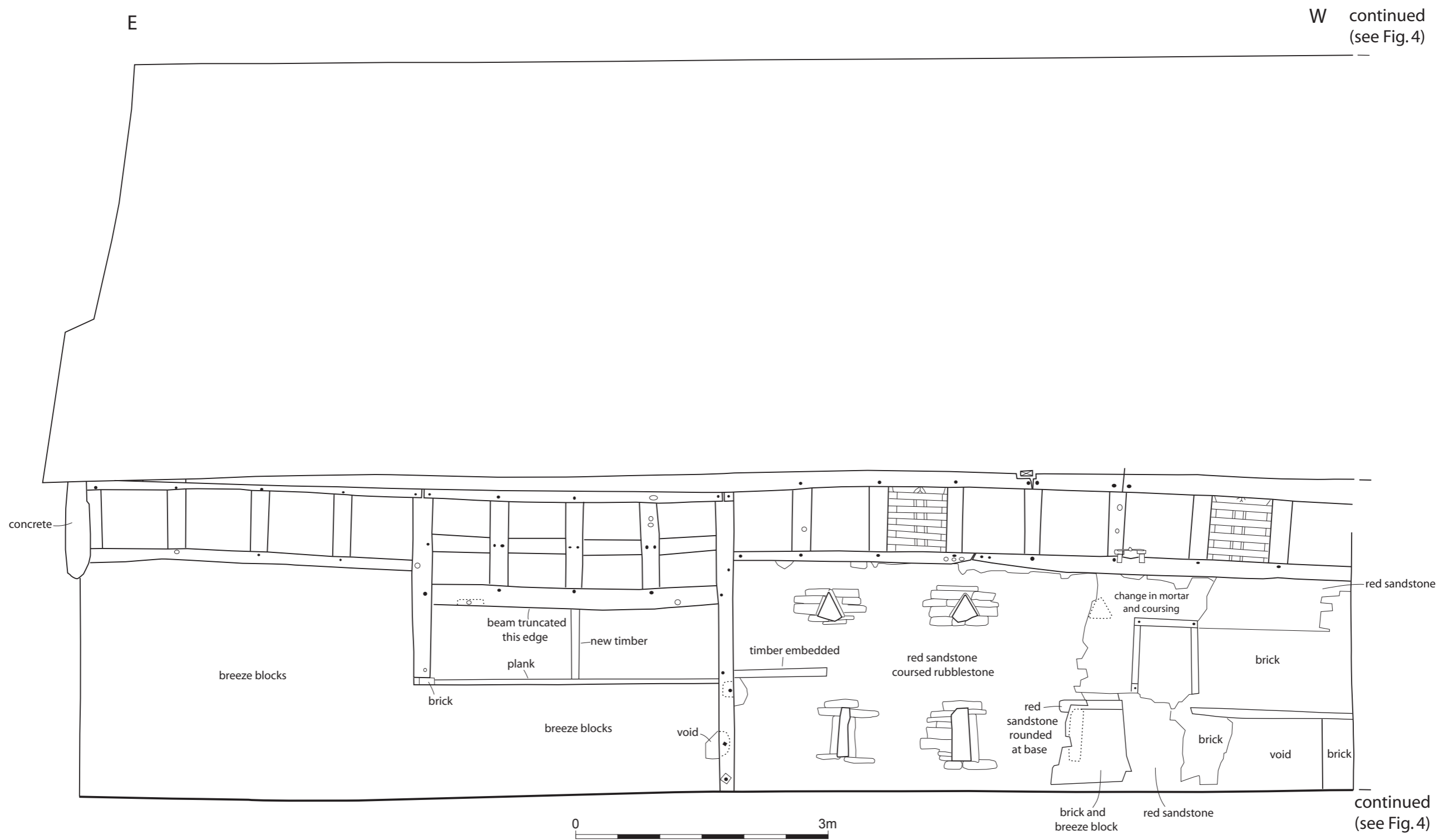


0 5m

*Plan of The Barn*

*Figure 2*

THE BARN EXTERIOR: NORTH ELEVATION, EAST END



The Barn exterior: North elevation, East end

Figure 3

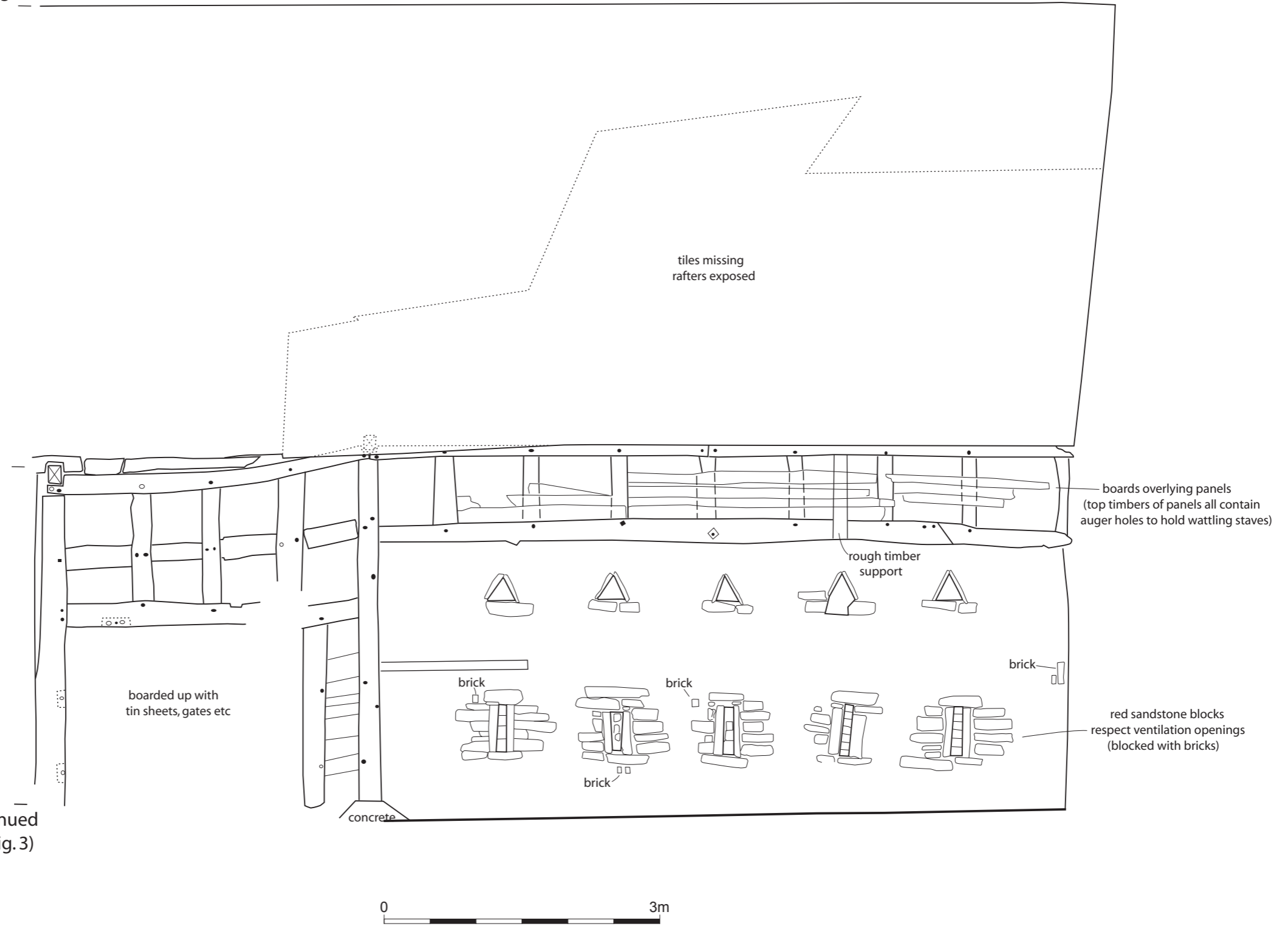
THE BARN EXTERIOR: NORTH ELEVATION, WEST END

W

E

continued  
(see Fig. 3)

continued  
(see Fig. 3)



The Barn exterior: North elevation, West end

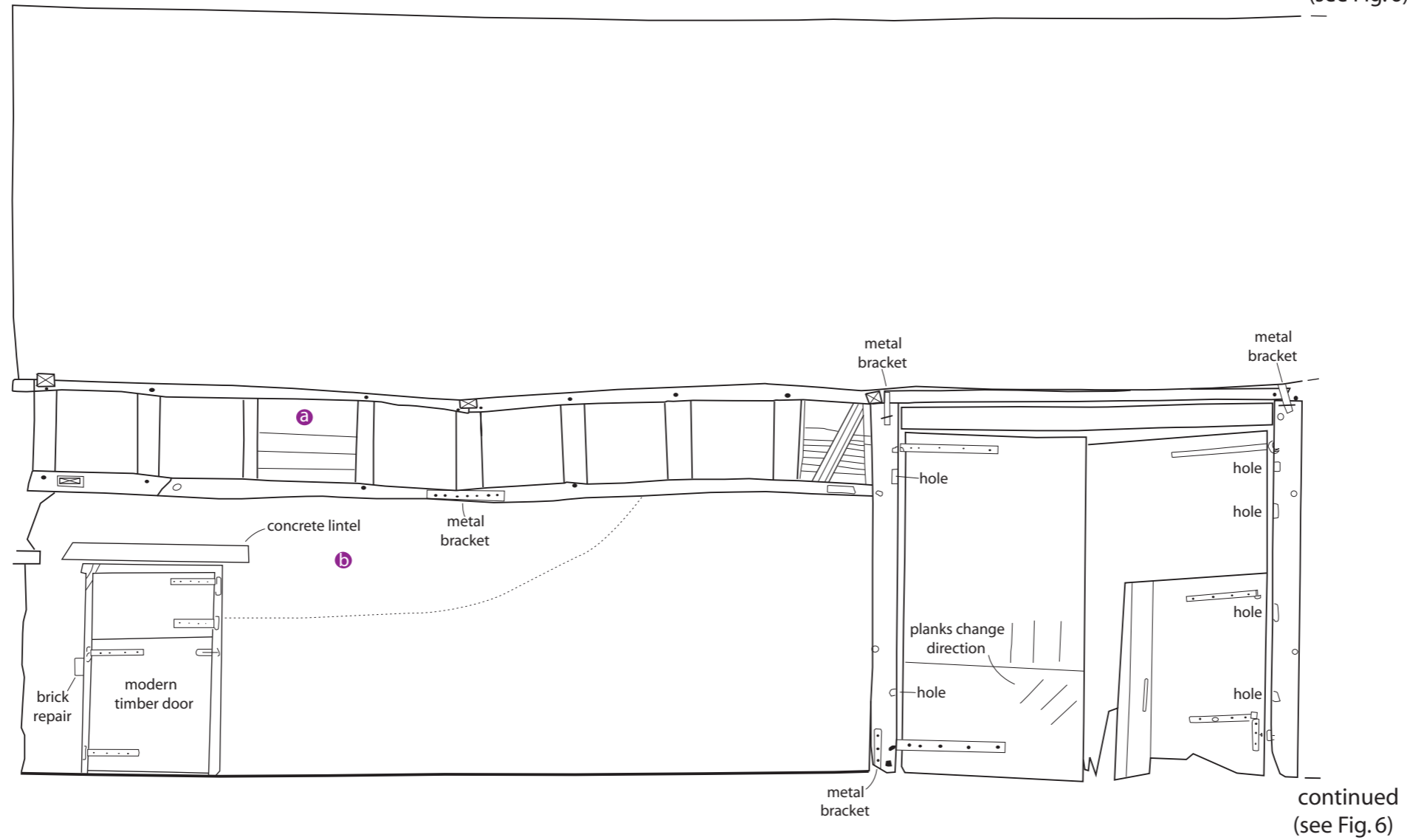
Figure 4

THE BARN A EXTERIOR: SOUTH ELEVATION, WEST END

W

E

continued  
(see Fig. 6)



- KEY
- a** Where boarding missing, timber unpainted and unblackened and evidence of original wattling.
  - b** The stonework of the upper level of this wall differs from the rest. It includes stone other than red sandstone, tile and brick within an orange coloured mortar

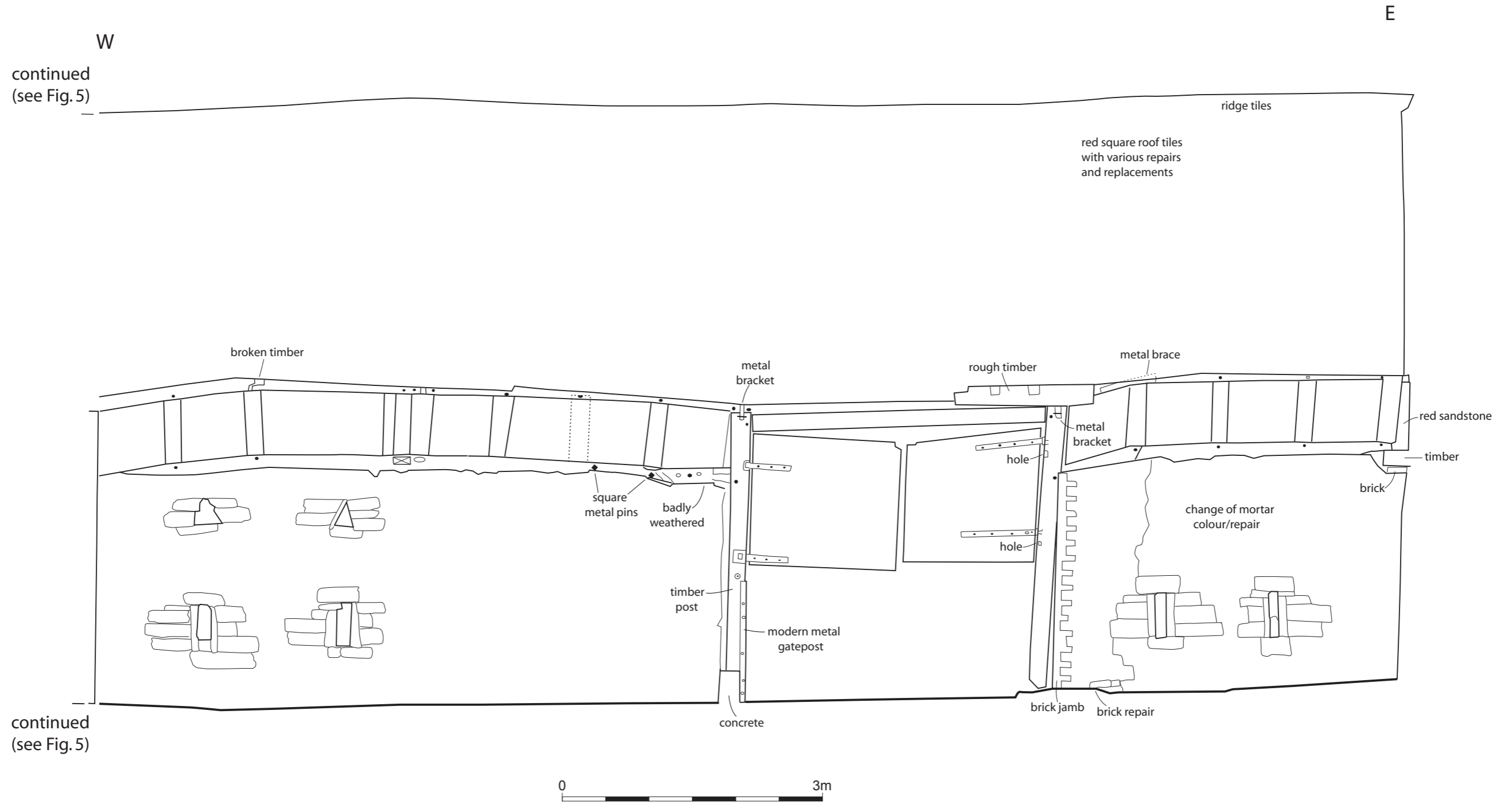


The Barn exterior: South elevation, West end

Figure 5



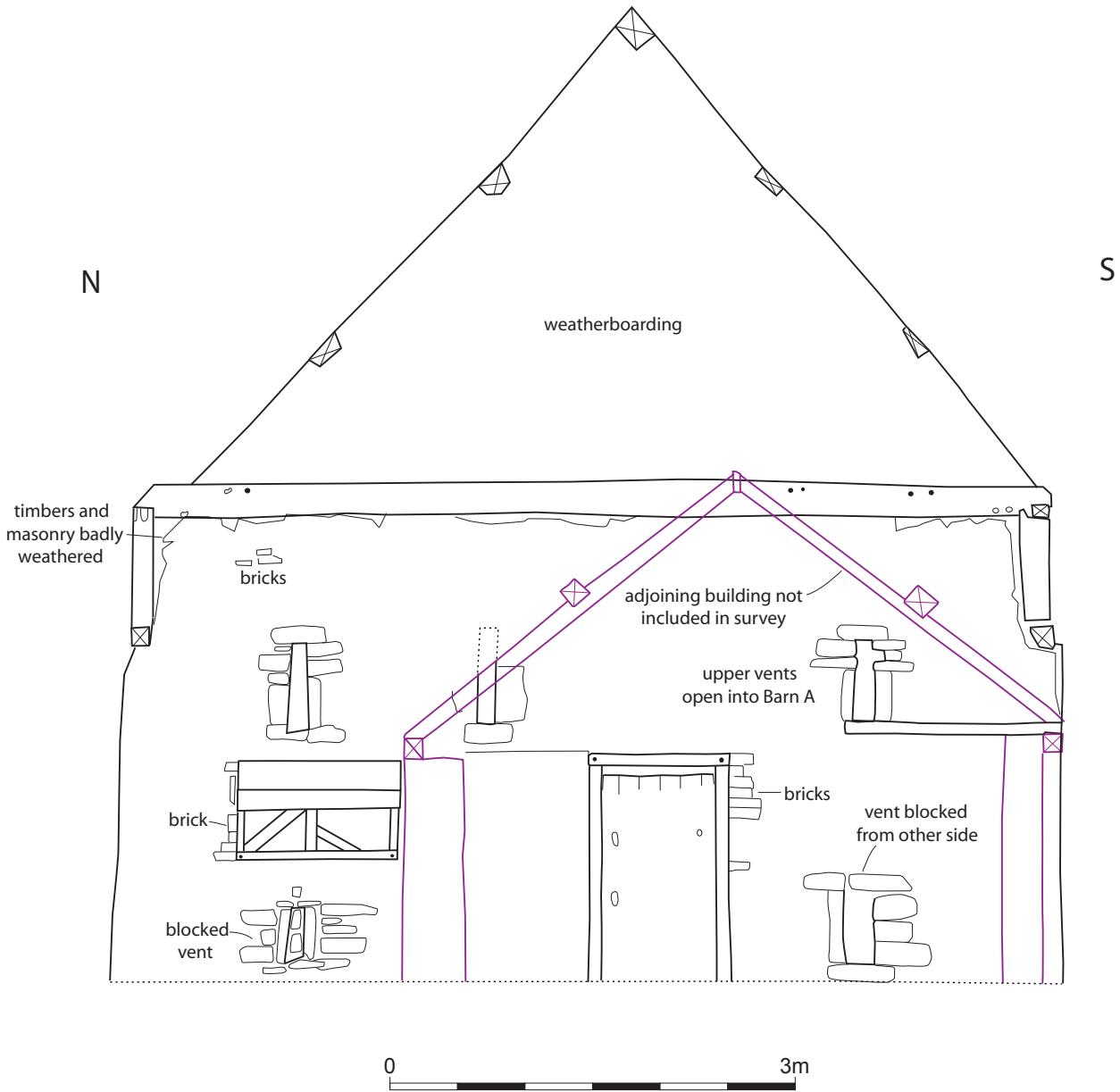
THE BARN EXTERIOR: SOUTH ELEVATION, EAST END



*The Barn exterior: South elevation, East end*

*Figure 6*

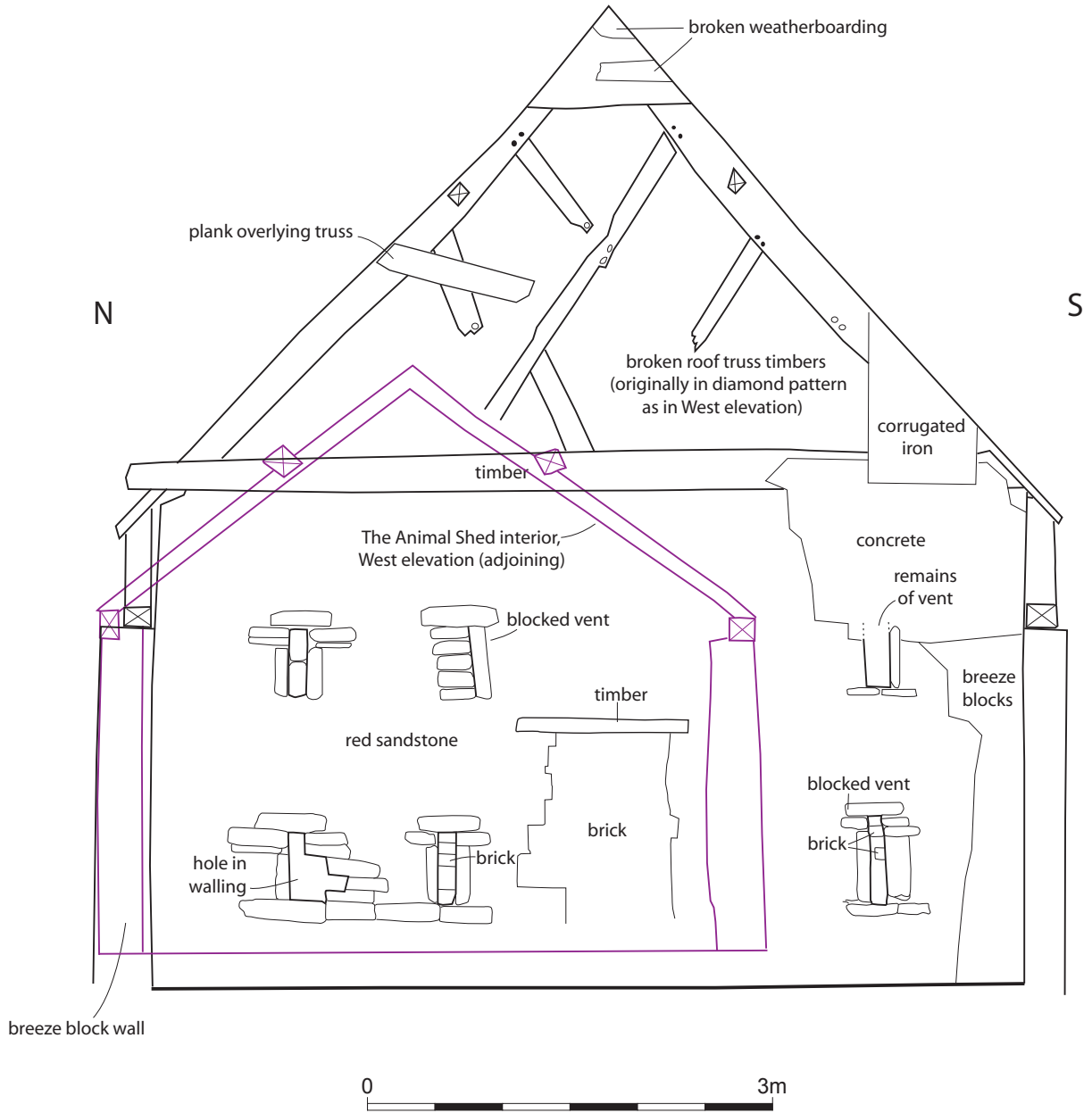
# THE BARN EXTERIOR: WEST ELEVATION,



*The Barn exterior: West elevation*

*Figure 7*

# THE BARN EXTERIOR: EAST ELEVATION



*The Barn exterior: East elevation*

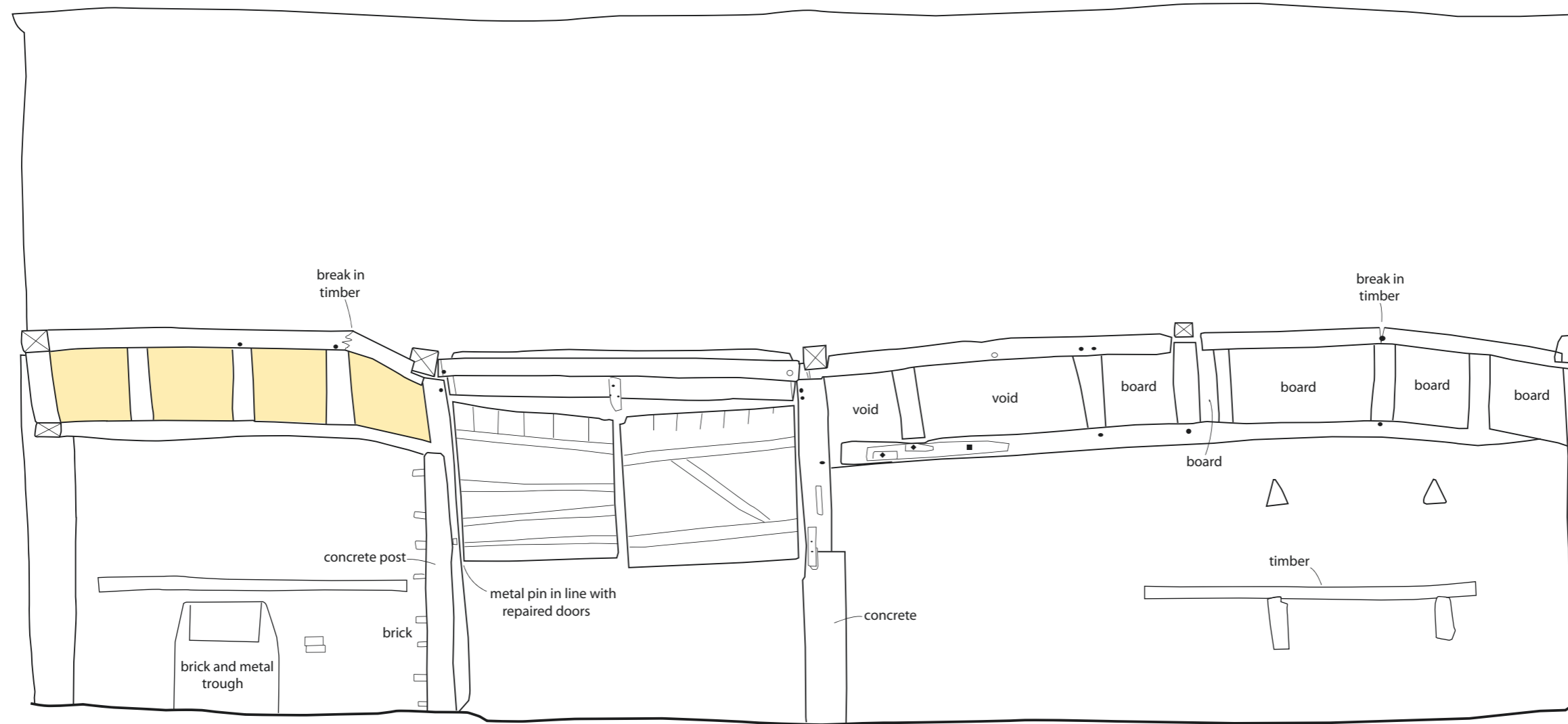
*Figure 8*

THE BARN INTERIOR: SOUTH ELEVATION, EAST END

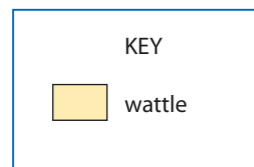
E

W

continued  
(see Fig. 10)



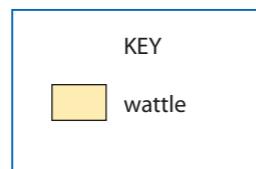
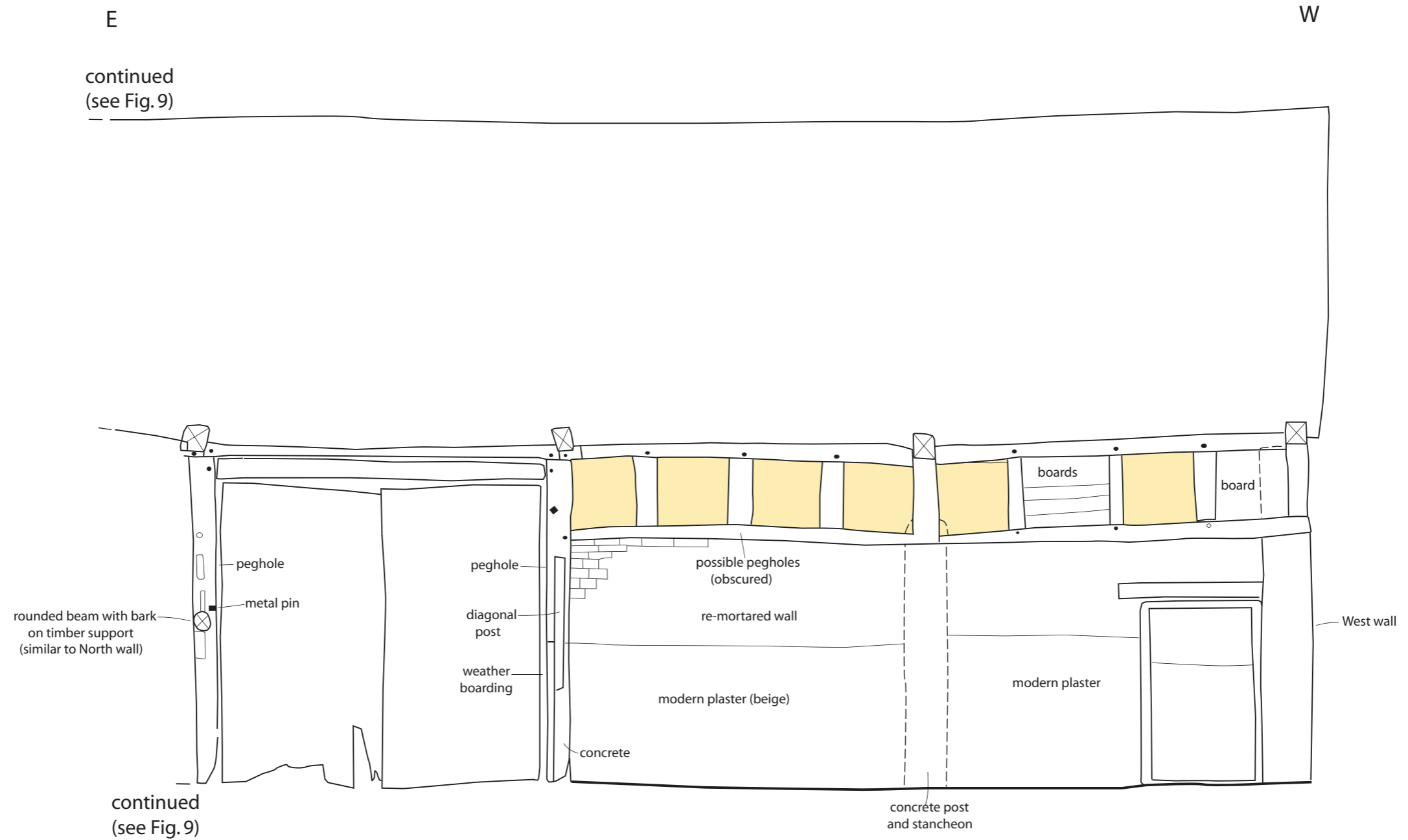
continued  
(see Fig. 10)



*The Barn interior: South elevation, East end*

*Figure 9*

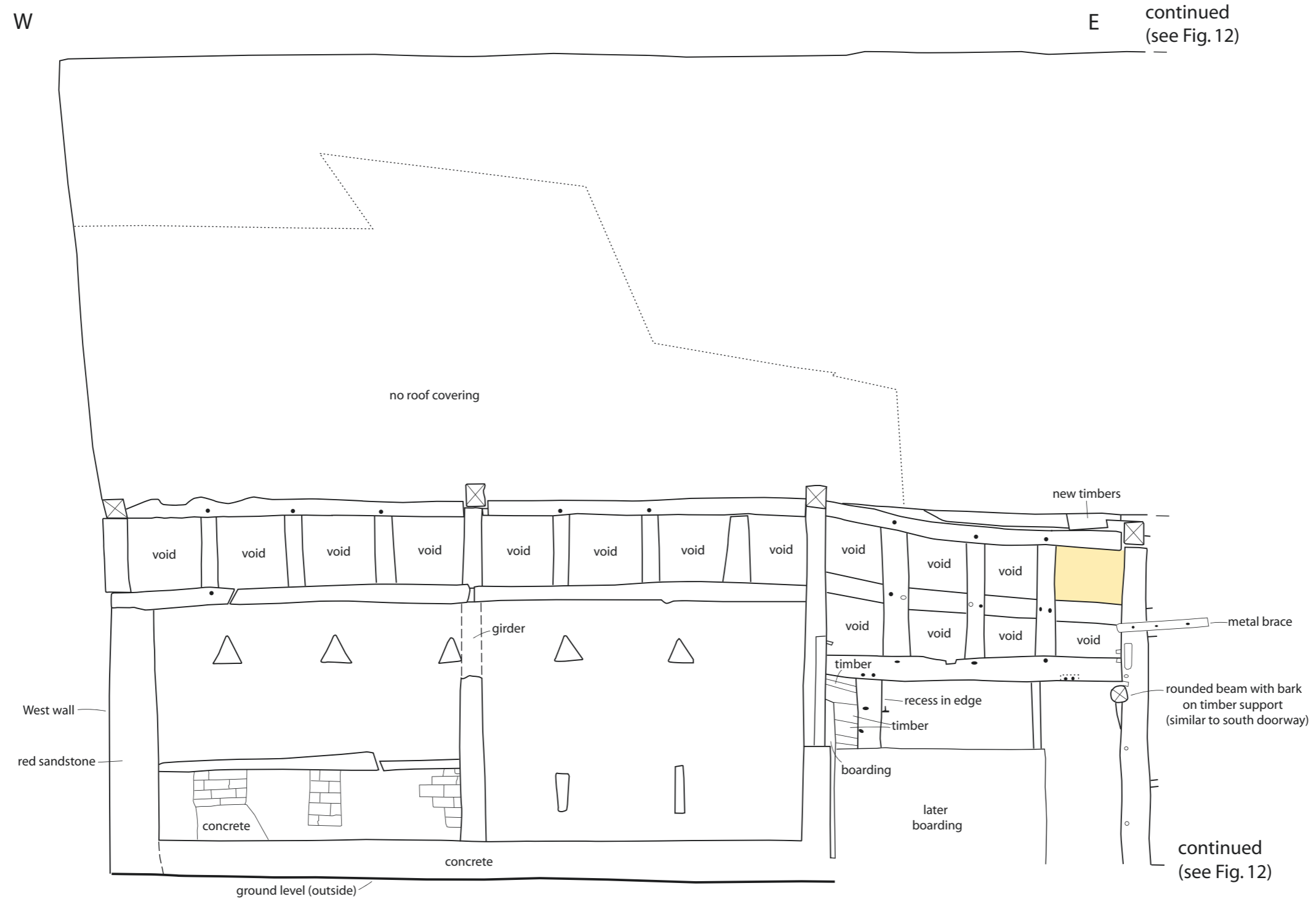
THE BARN INTERIOR: SOUTH ELEVATION, WEST END



The Barn interior: South elevation, West end

Figure 10

THE BARN INTERIOR: NORTH ELEVATION, WEST END



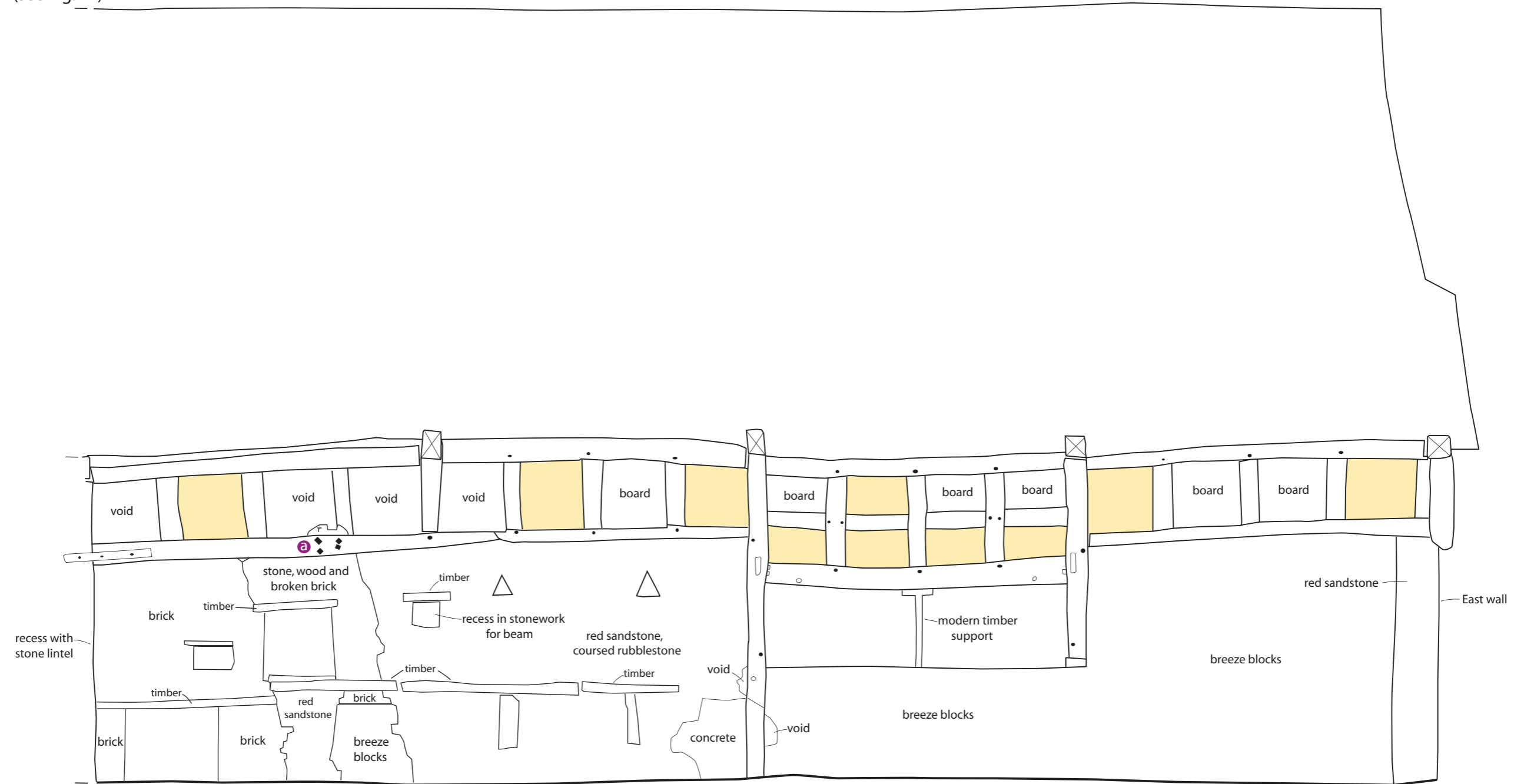
The Barn interior: North elevation, West end

Figure 11

THE BARN INTERIOR: NORTH ELEVATION, EAST END

continued (see Fig. 11) W

E



continued (see Fig. 11)

KEY

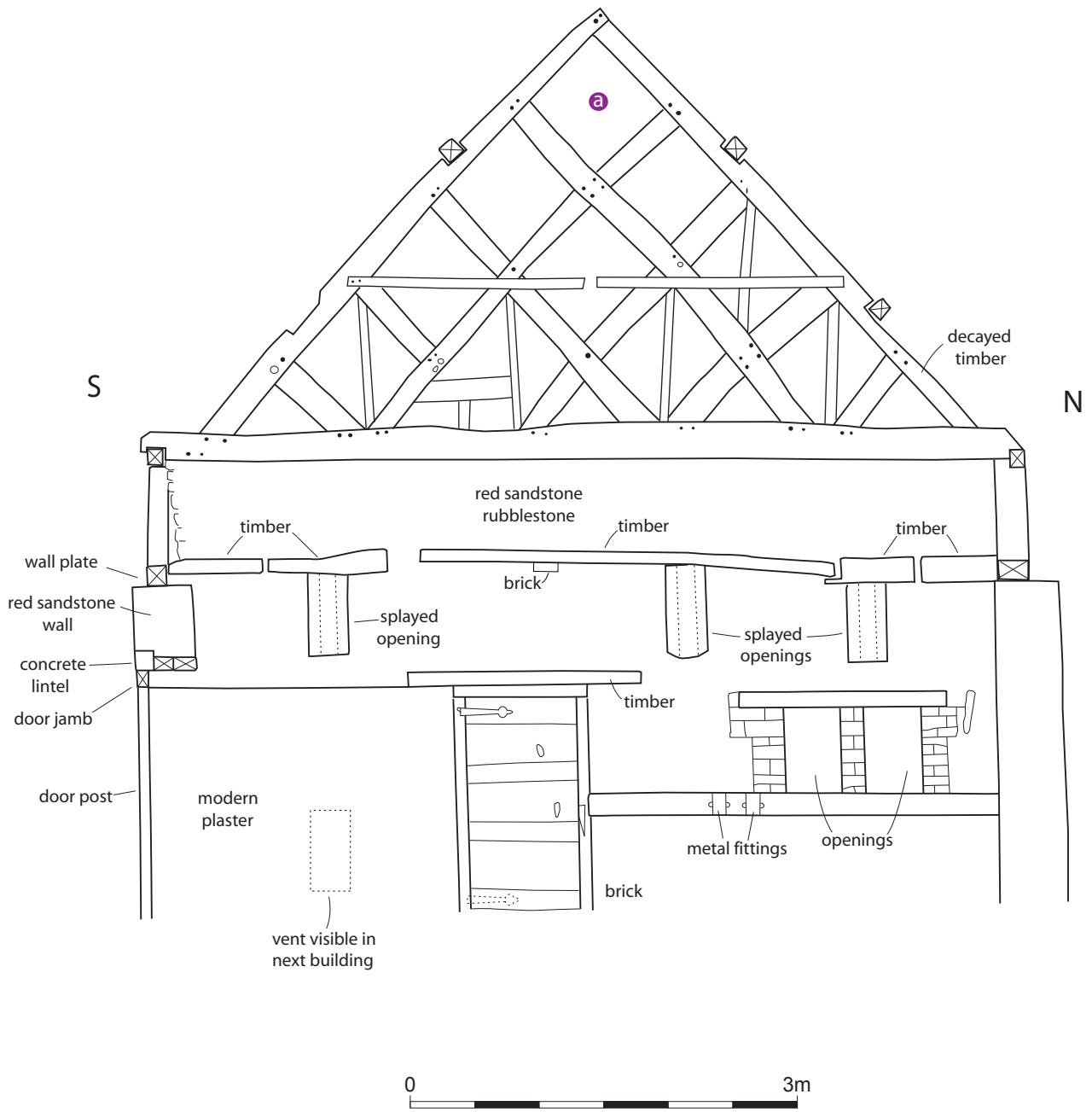
- wattle
- four nuts and bolts tying in with metalwork on the exterior



The Barn interior: North elevation, East end

Figure 12

# THE BARN INTERIOR: WEST ELEVATION,



KEY

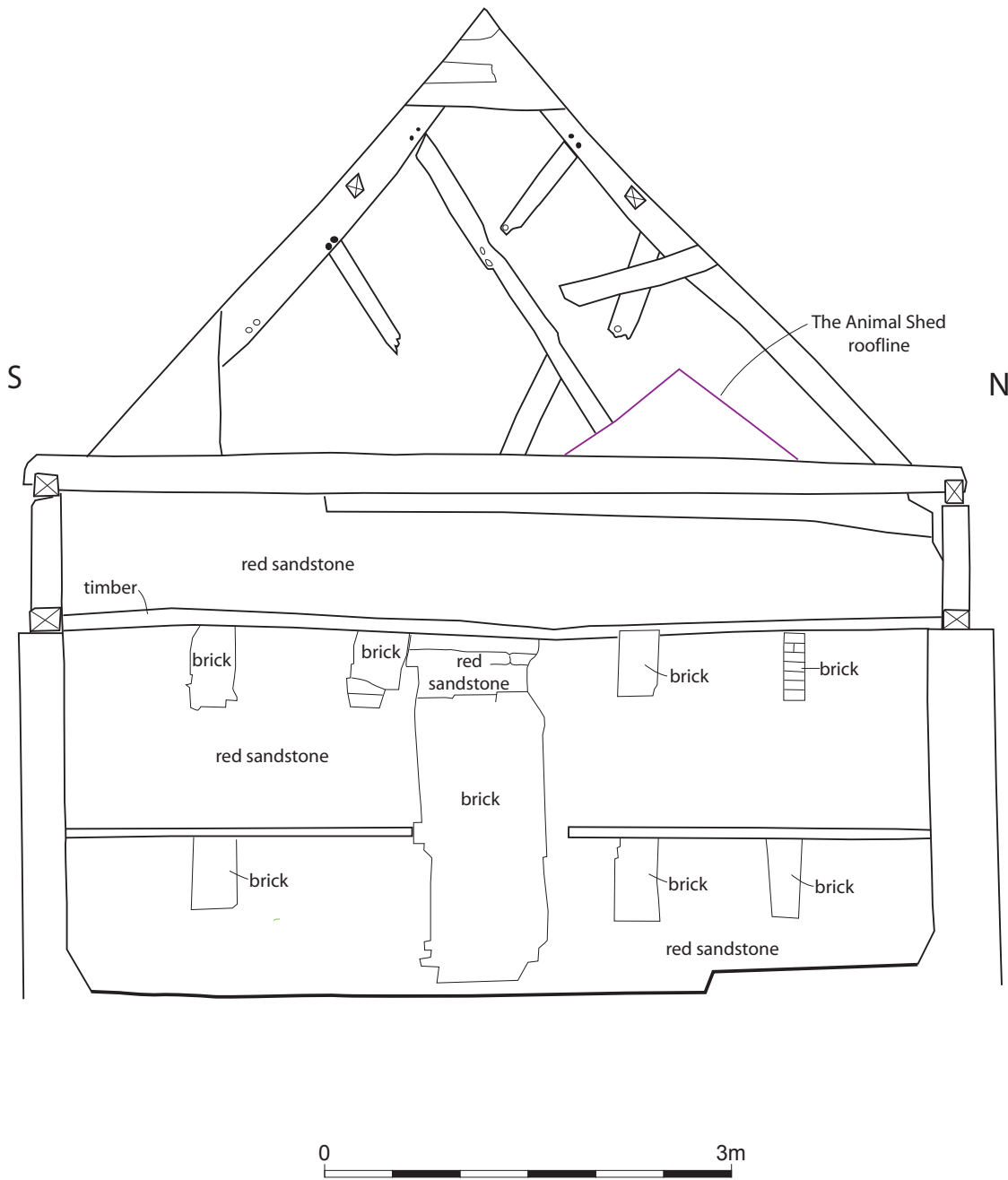
**a** Timbers show auger holes in each panel, evidencing earlier wattling within the panels.

*The Barn interior: West elevation*

*Figure 13*



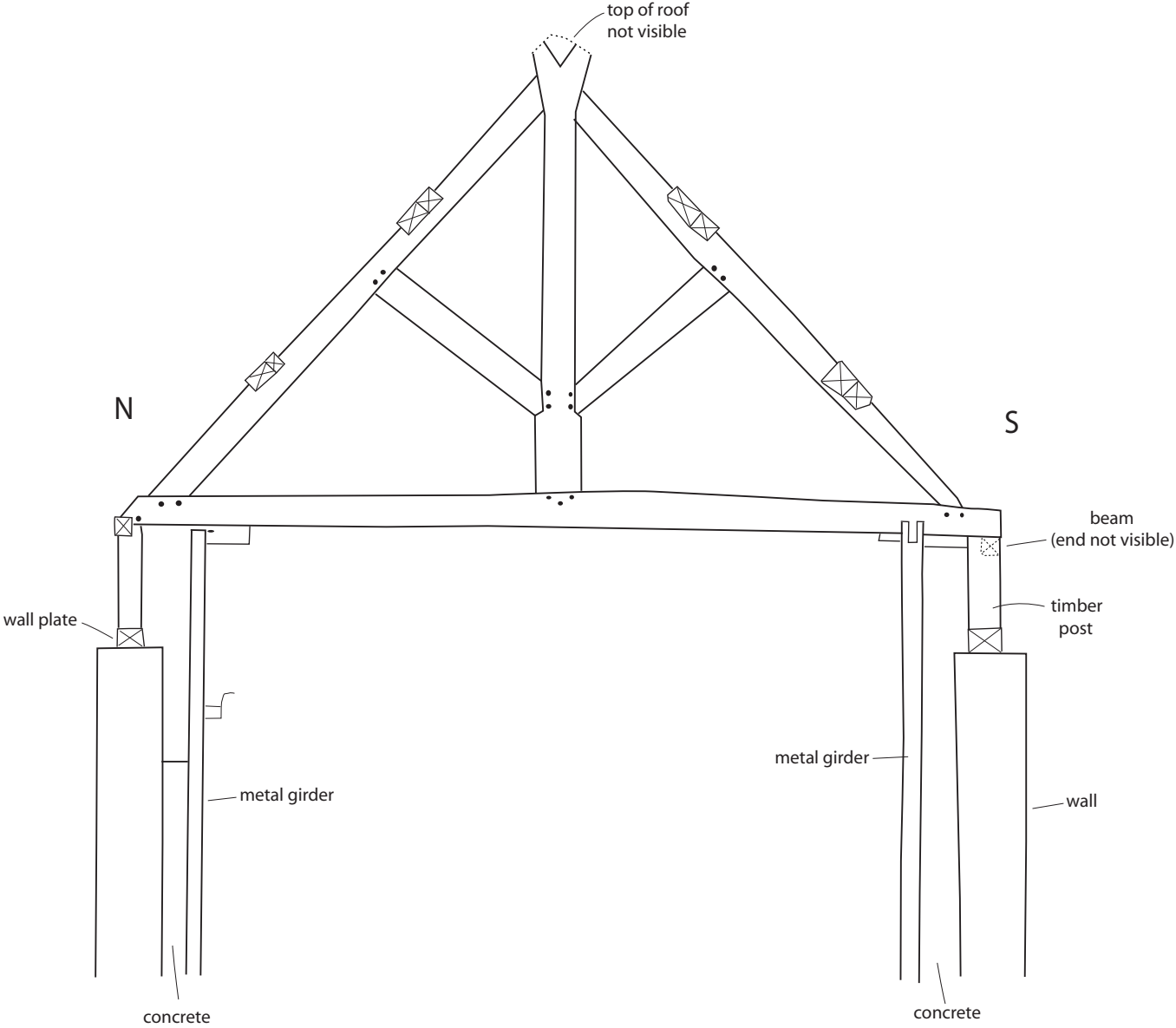
THE BARN INTERIOR: EAST ELEVATION,



*The Barn interior: East elevation*

*Figure 14*

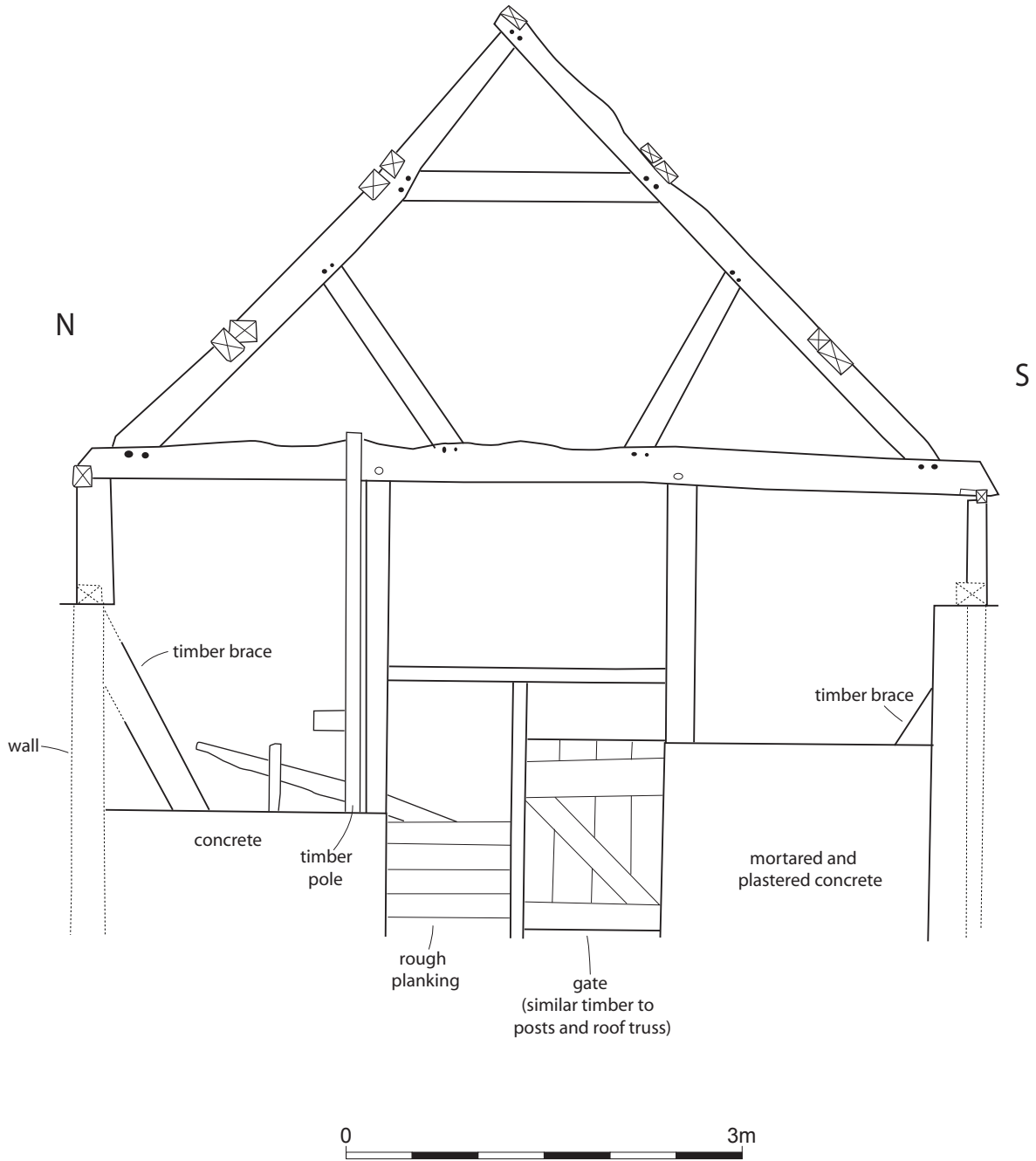
TRUSS 1



The Barn: Roof truss 1

Figure 15

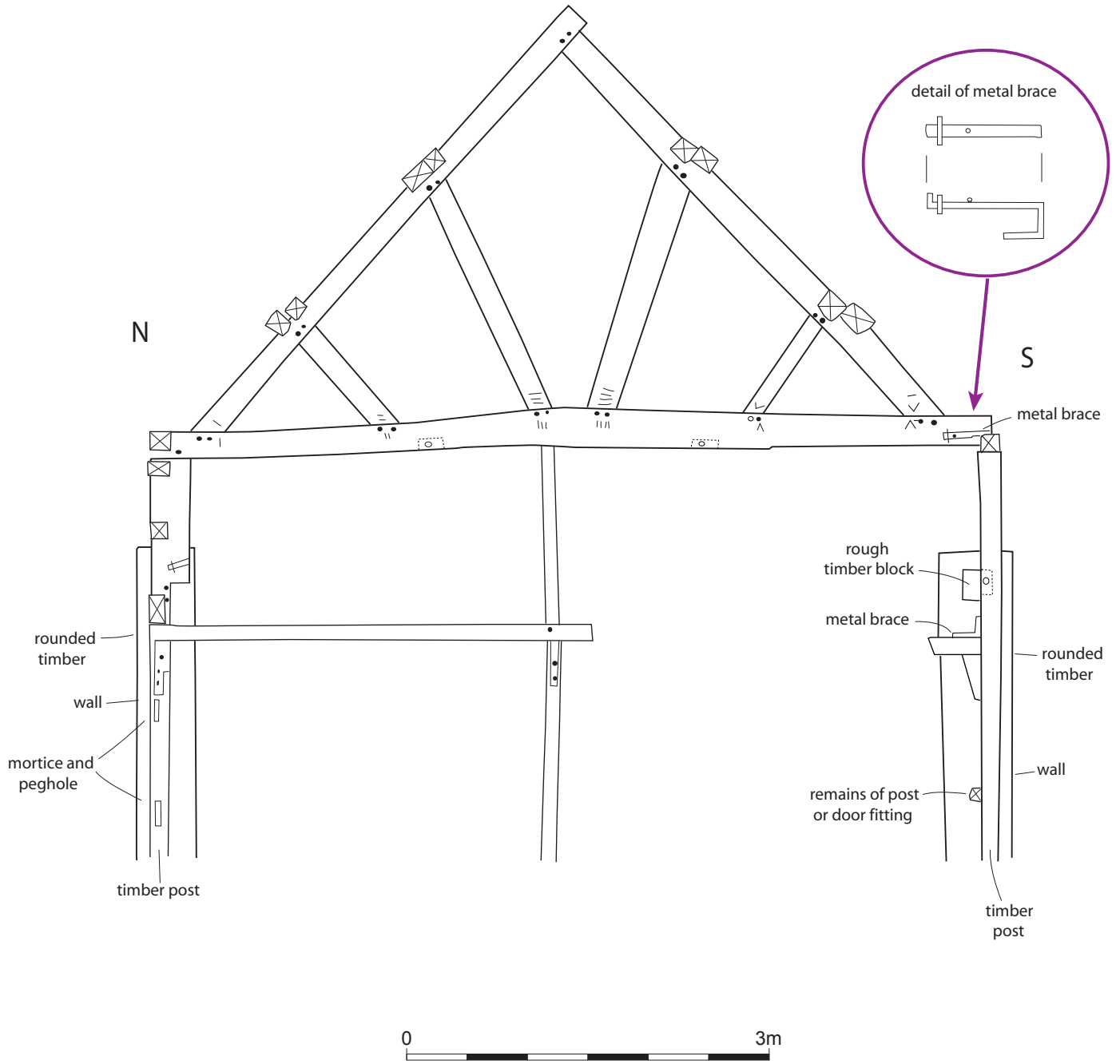
TRUSS 2



*The Barn: Roof truss 2*

*Figure 16*

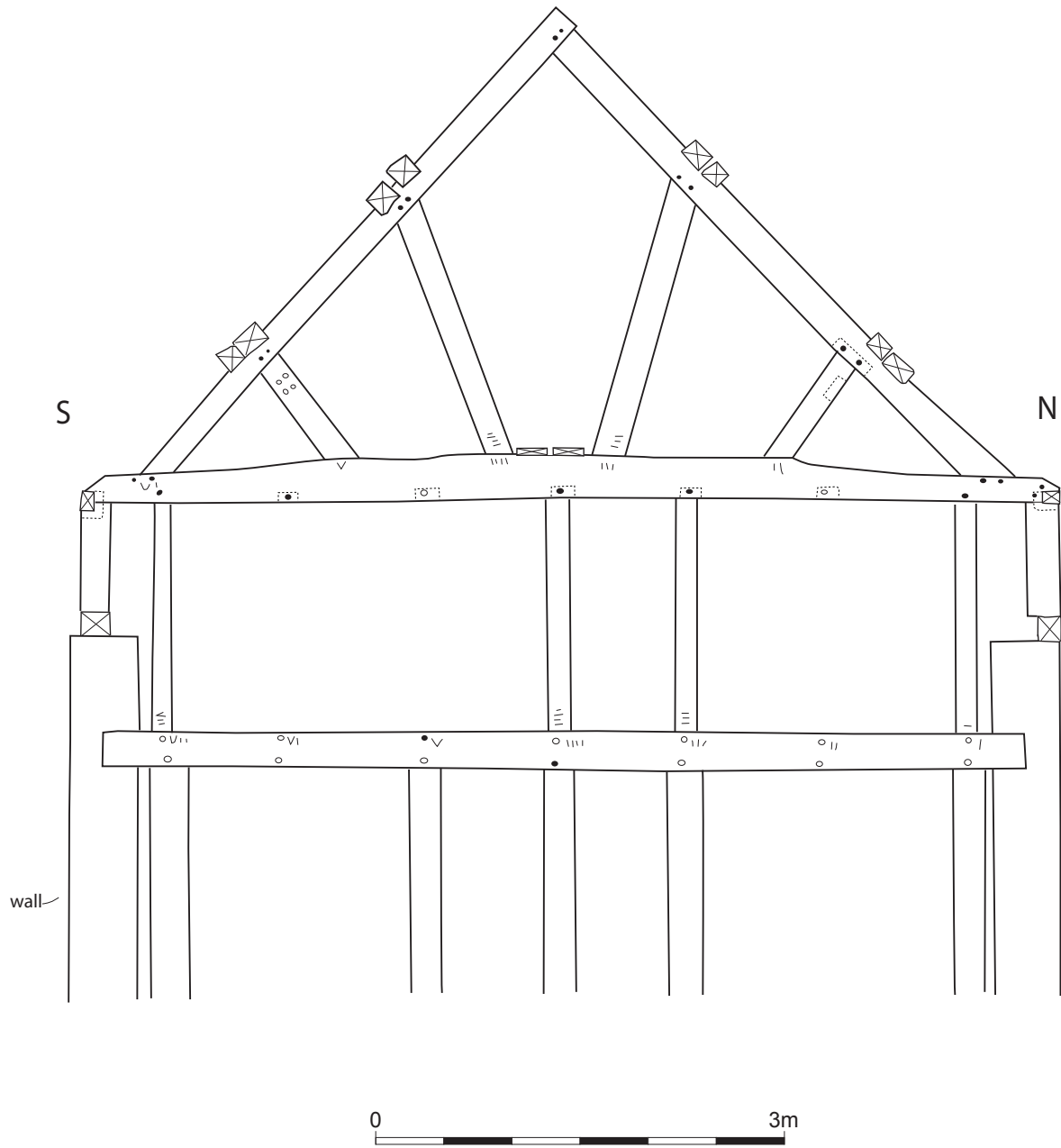
# TRUSS 3



The Barn: Roof truss 3

Figure 17

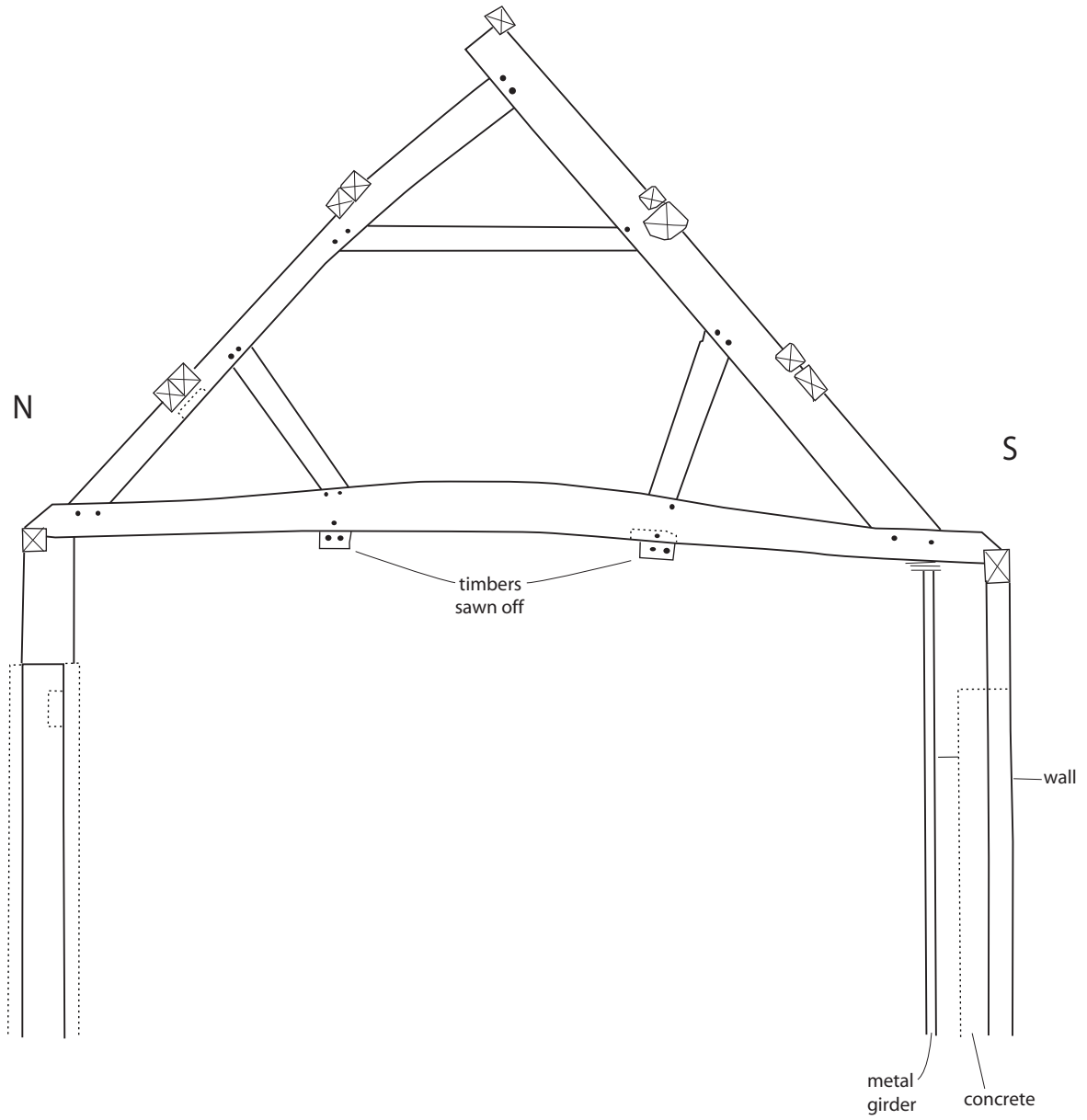
TRUSS 4



The Barn: Roof truss 4

Figure 18

# TRUSS 5

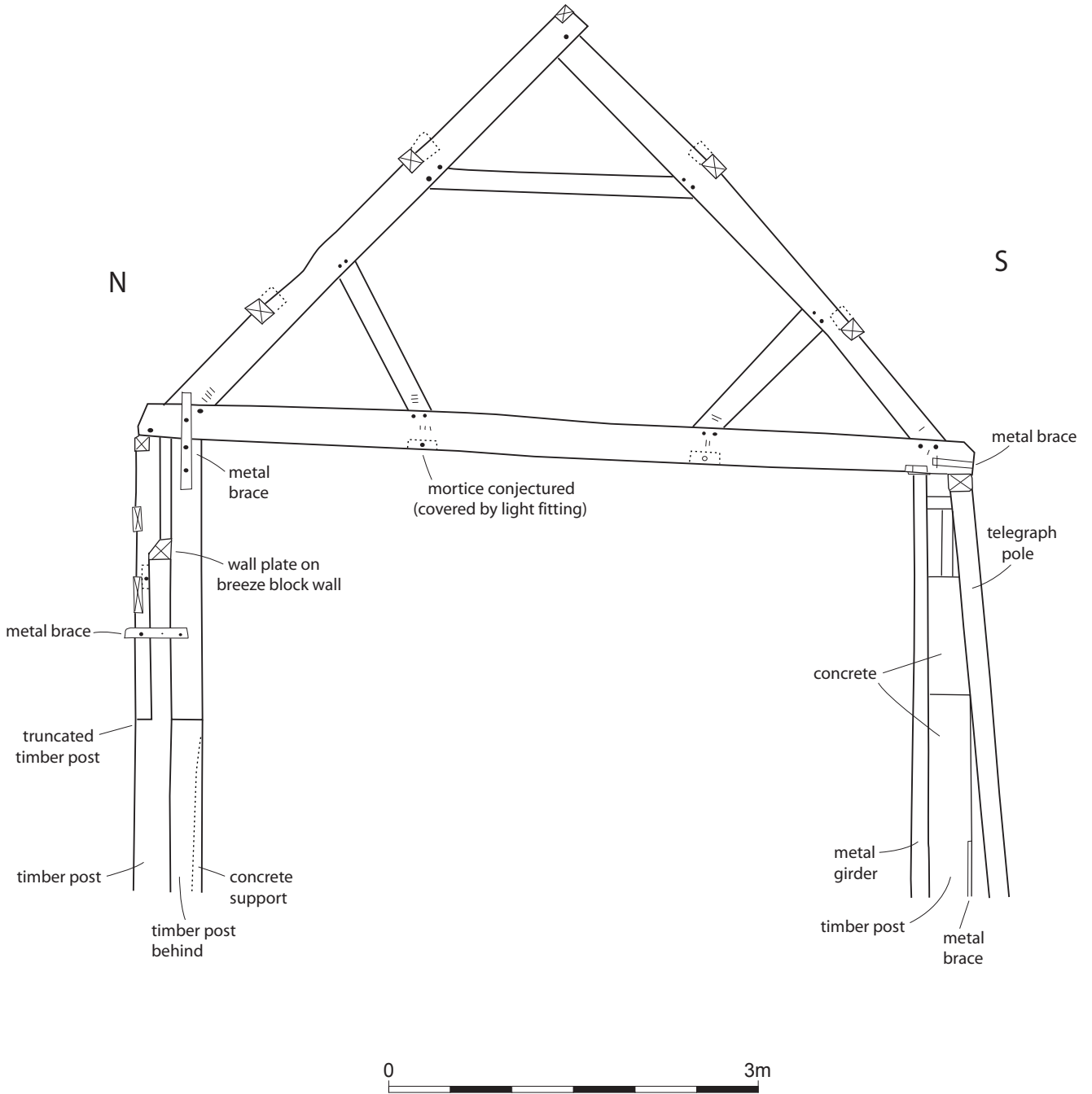


0 3m

*The Barn: Roof truss 5*

*Figure 19*

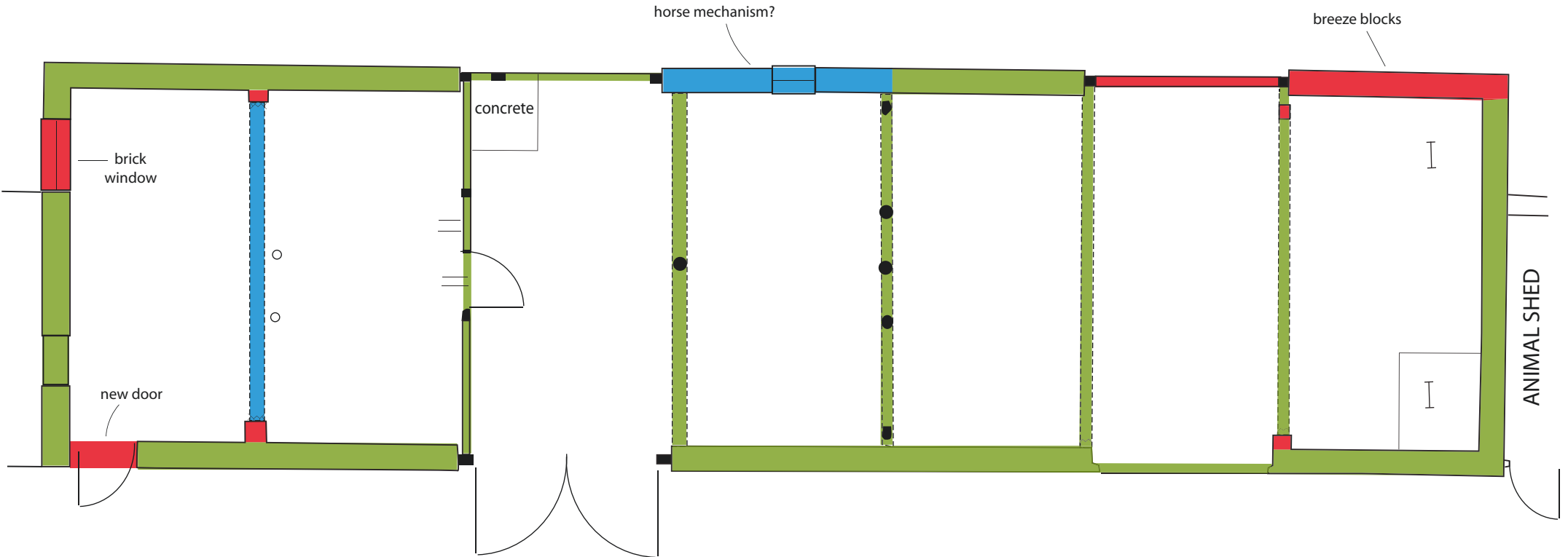
TRUSS 6



The Barn: Roof truss 6

Figure 20

# THE BARN



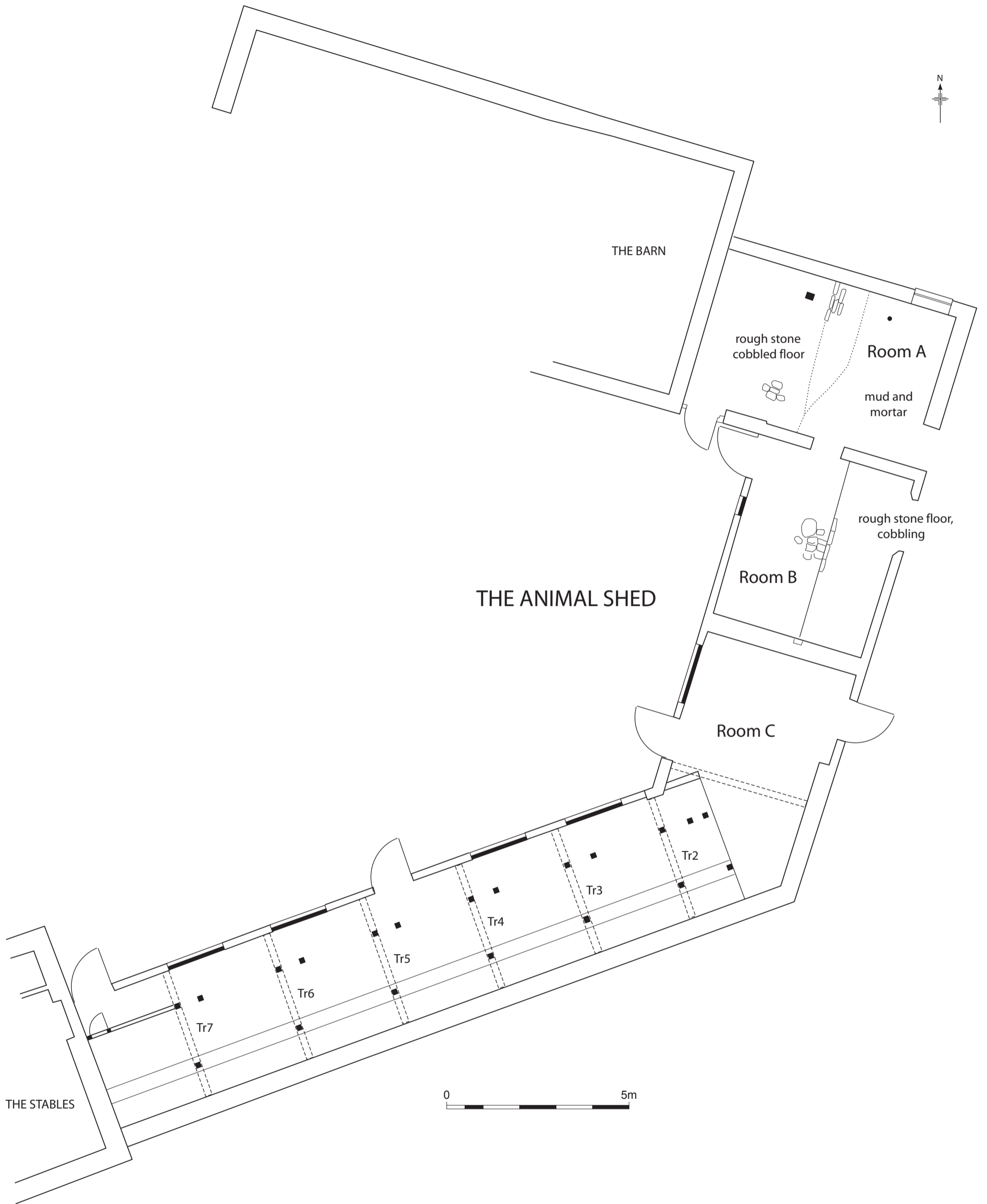
KEY	
<span style="display:inline-block; width:15px; height:15px; background-color: #8ebf42; border: 1px solid black;"></span>	Phase 1: original construction
<span style="display:inline-block; width:15px; height:15px; background-color: #3498db; border: 1px solid black;"></span>	Phase 2: early 19th century
<span style="display:inline-block; width:15px; height:15px; background-color: #f1c40f; border: 1px solid black;"></span>	Phase 3: late 19th century
<span style="display:inline-block; width:15px; height:15px; background-color: #e74c3c; border: 1px solid black;"></span>	Phase 4: 20th century changes



*Phased plan of The Barn*

*Figure 21*

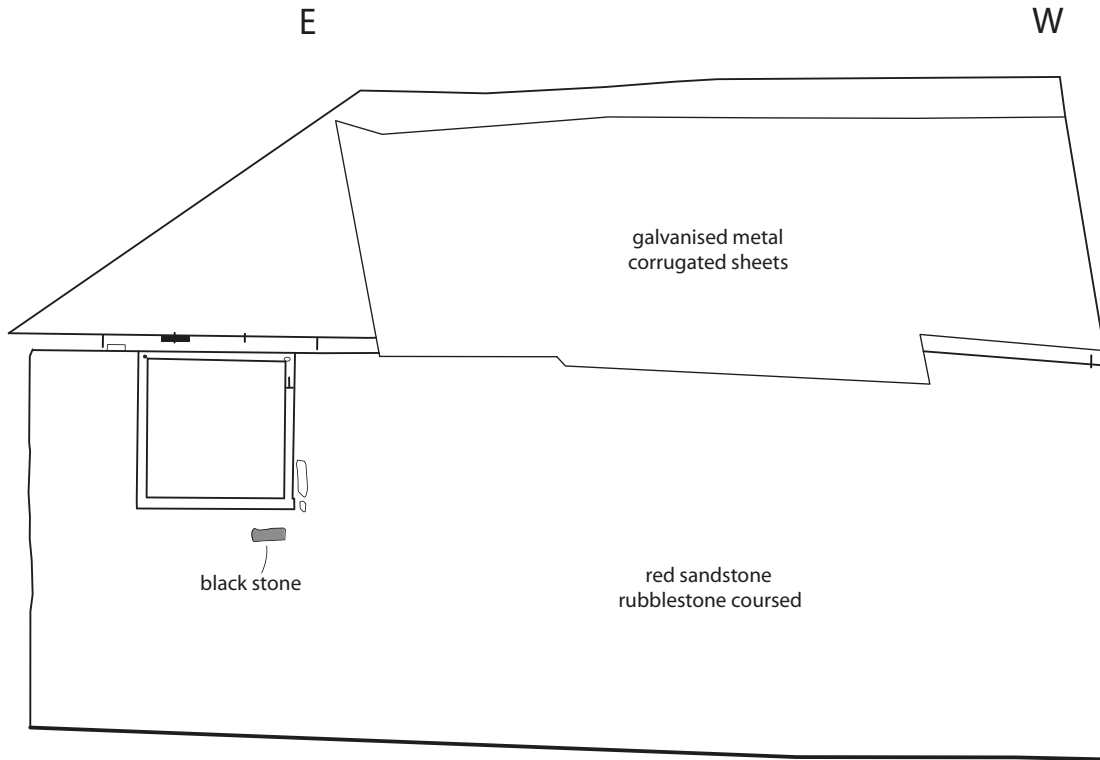




Plan of The Animal Shed

Figure 22

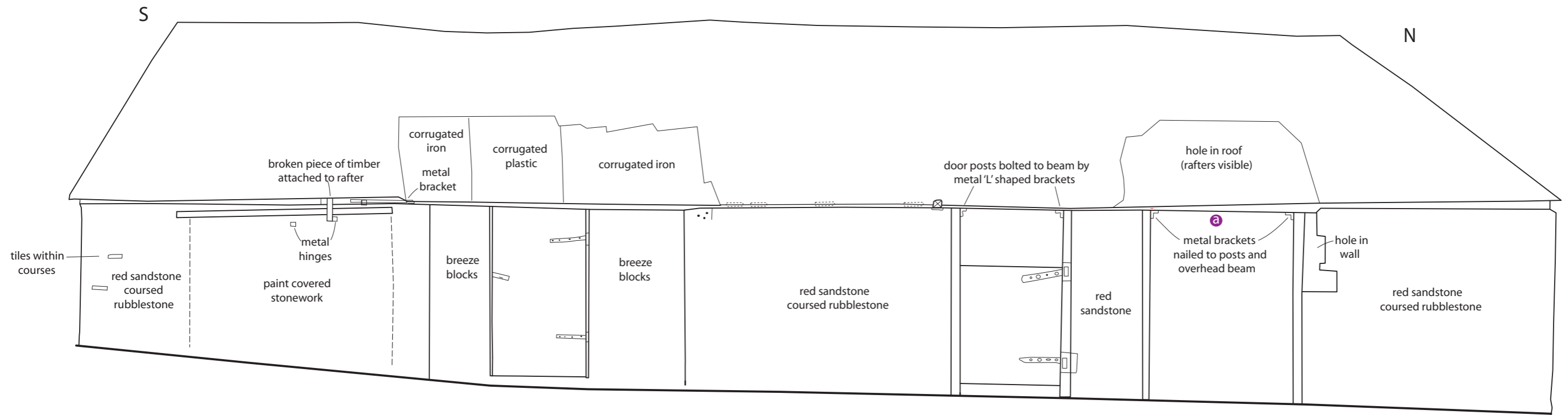
# THE ANIMAL SHED, EXTERIOR: NORTH ELEVATION



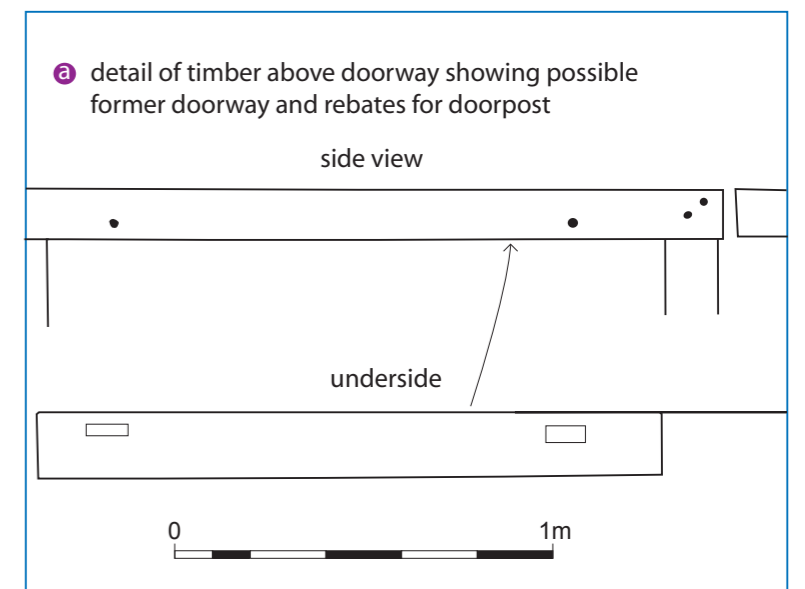
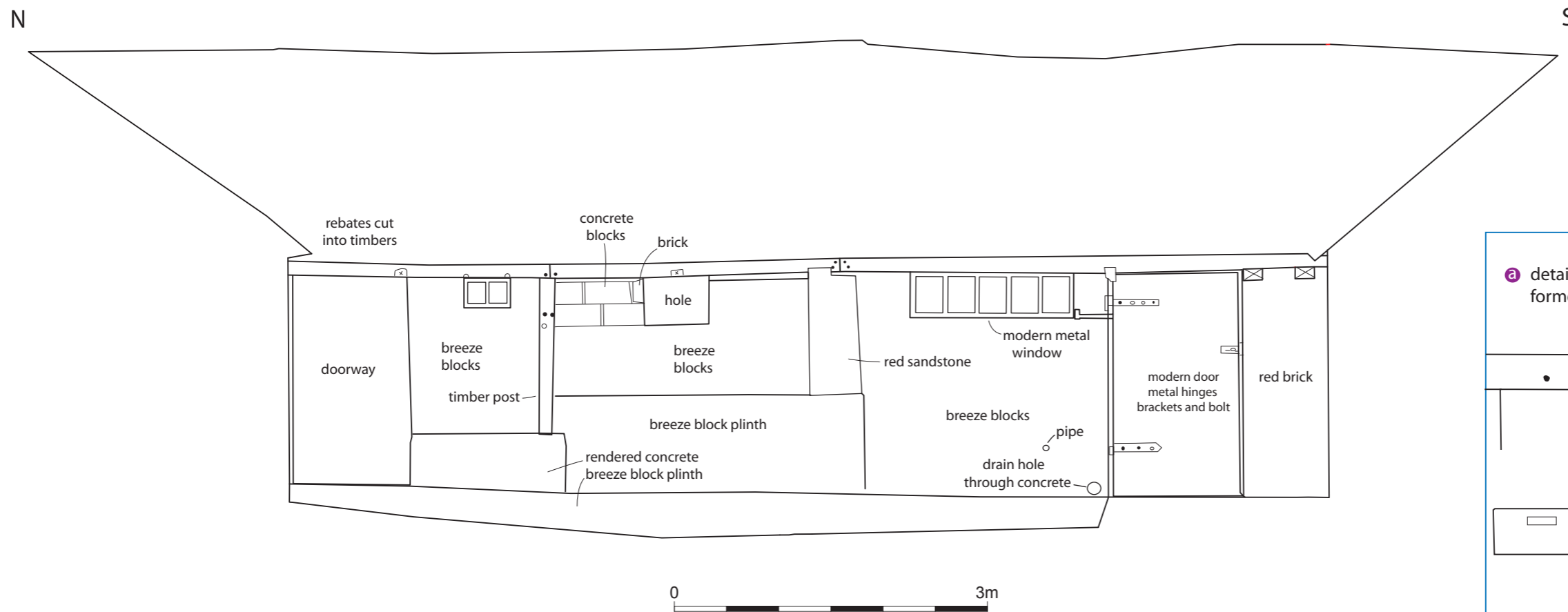
*The Animal Shed exterior: North elevation*

*Figure 23*

THE ANIMAL SHED, EXTERIOR: EAST ELEVATION



THE ANIMAL SHED, EXTERIOR: WEST ELEVATION



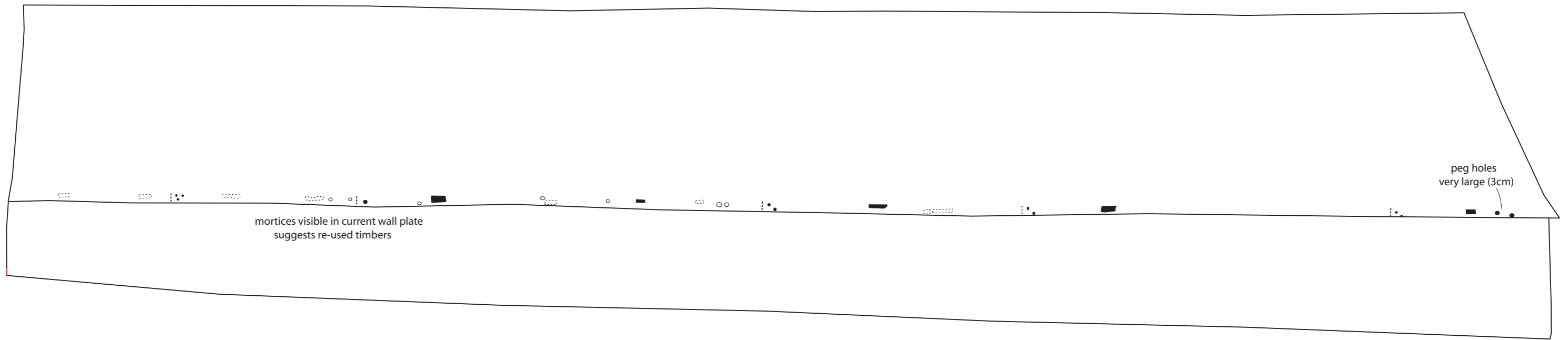
The Animal Shed exterior: East elevation and West elevation

Figure 24

THE ANIMAL SHED, EXTERIOR: SOUTH-EAST ELEVATION

SW

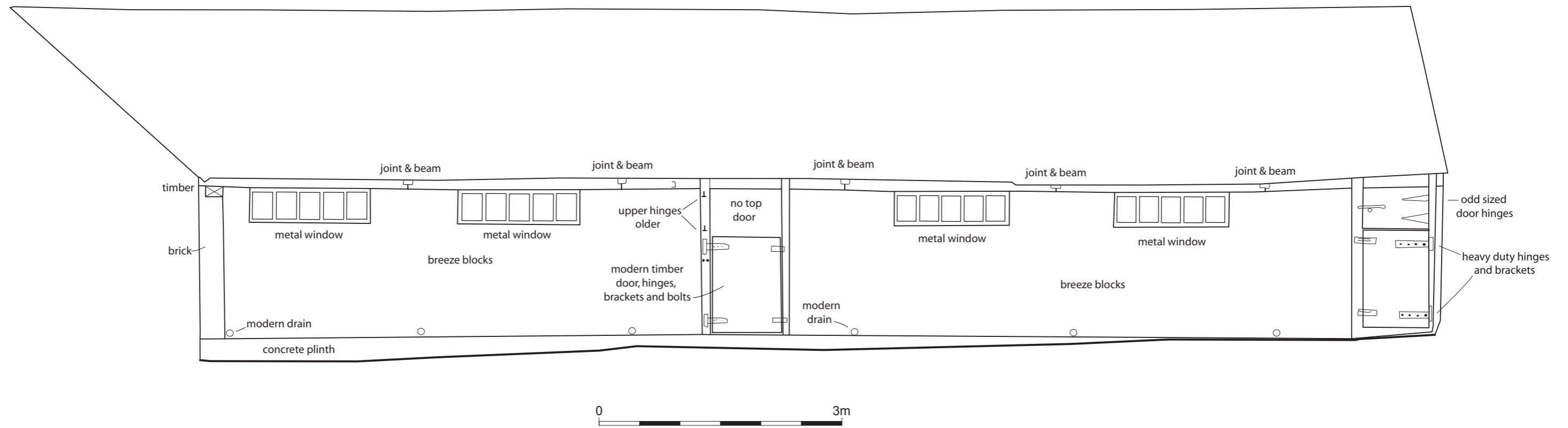
NE



THE ANIMAL SHED, EXTERIOR: NORTH-WEST ELEVATION

NE

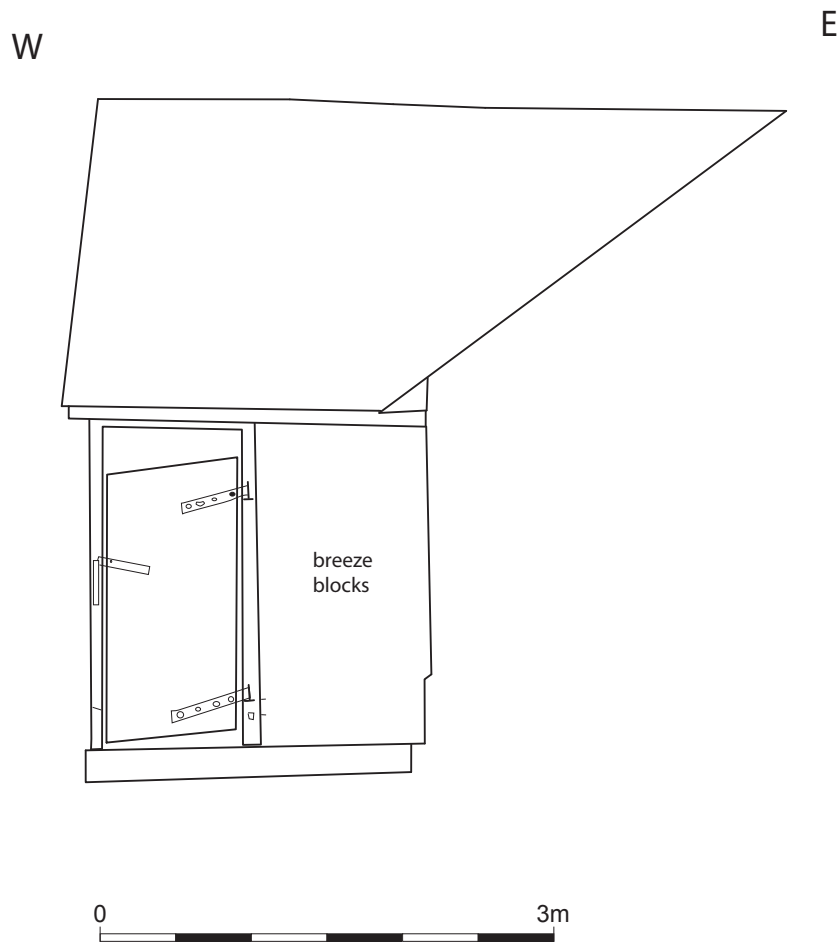
SW



The Animal Shed exterior: South-east elevation and North-west elevation

Figure 25

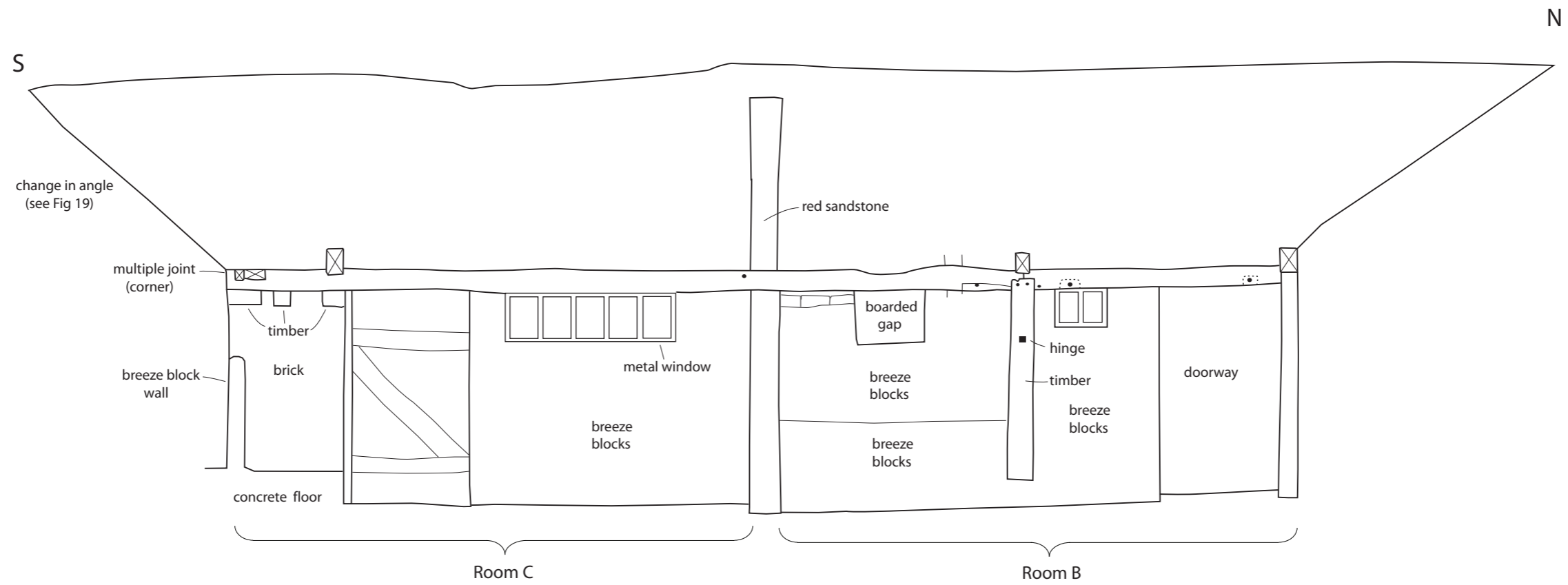
THE ANIMAL SHED, EXTERIOR: SOUTH ELEVATION



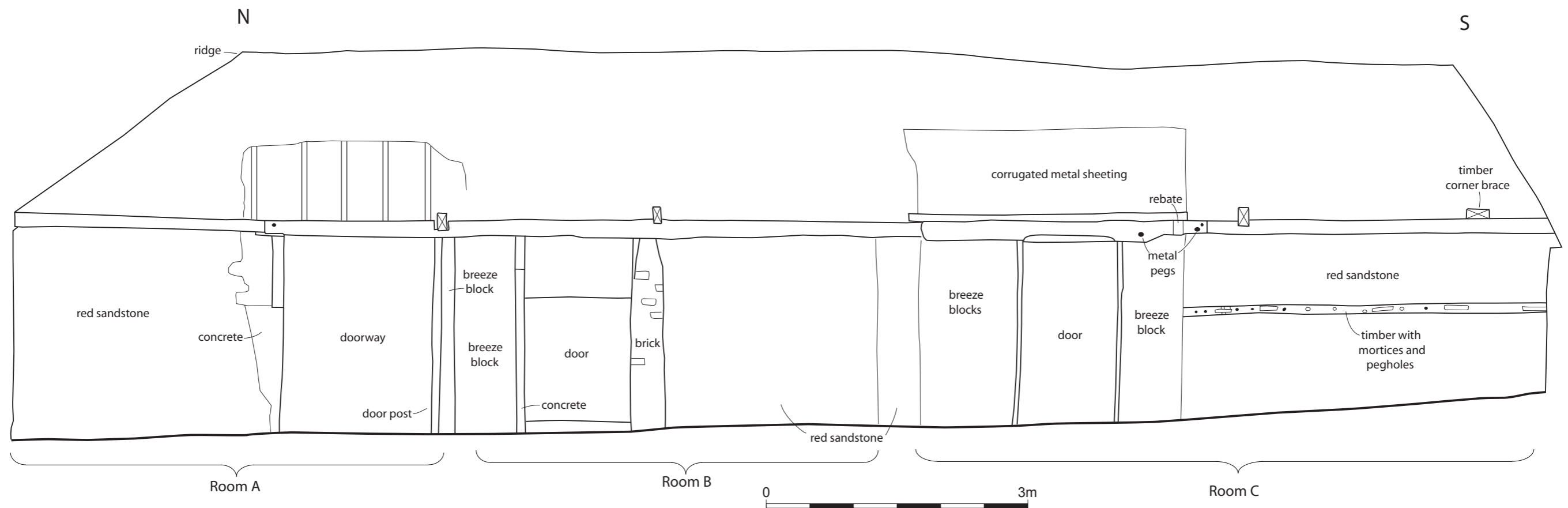
*The Animal Shed exterior: South elevation*

*Figure 26*

THE ANIMAL SHED INTERIOR: WEST ELEVATION (Rooms B and C)



THE ANIMAL SHED INTERIOR: EAST ELEVATION (Rooms A, B and C)

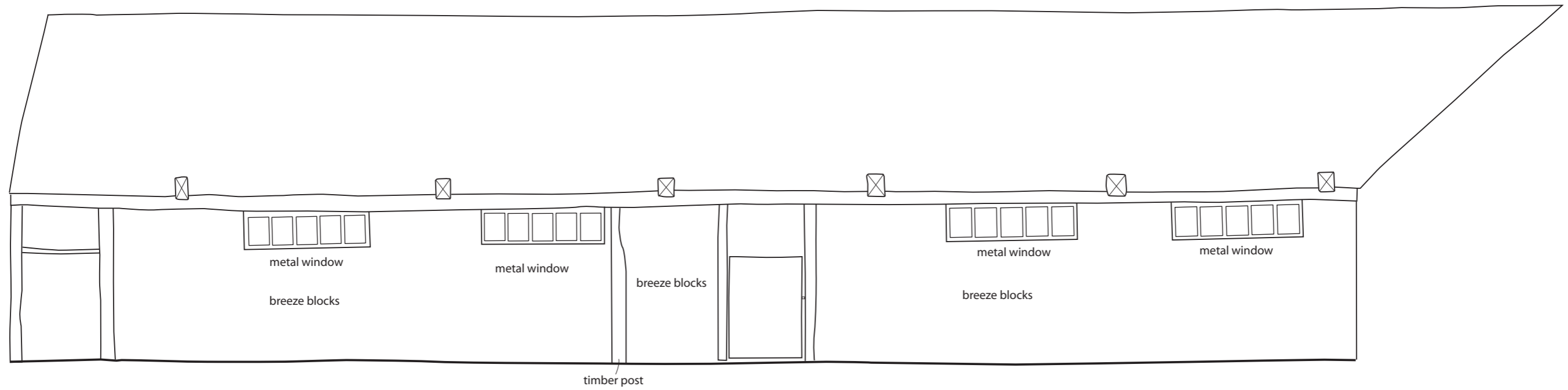


The Animal Shed interior: West and East elevations

THE ANIMAL SHED INTERIOR: NORTH-WEST ELEVATION

SW

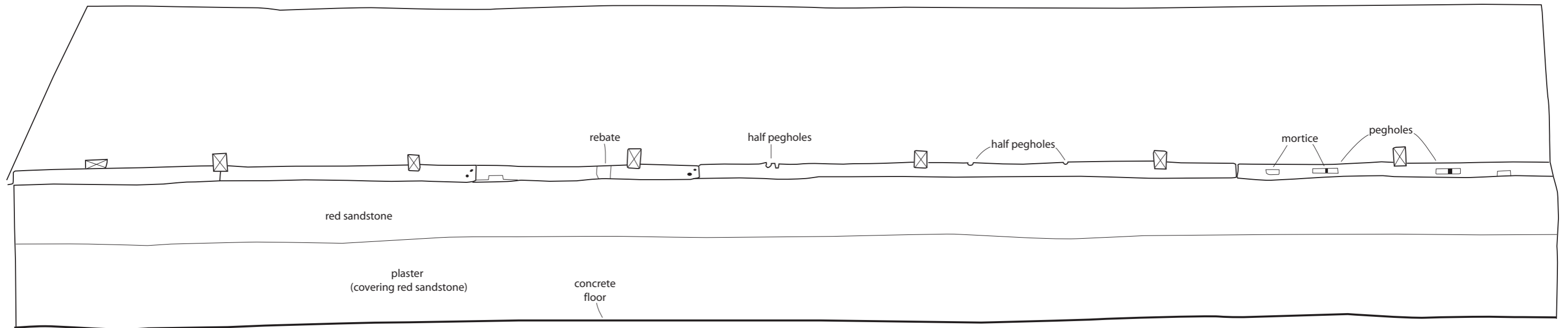
NE



THE ANIMAL SHED INTERIOR: SOUTH-EAST ELEVATION

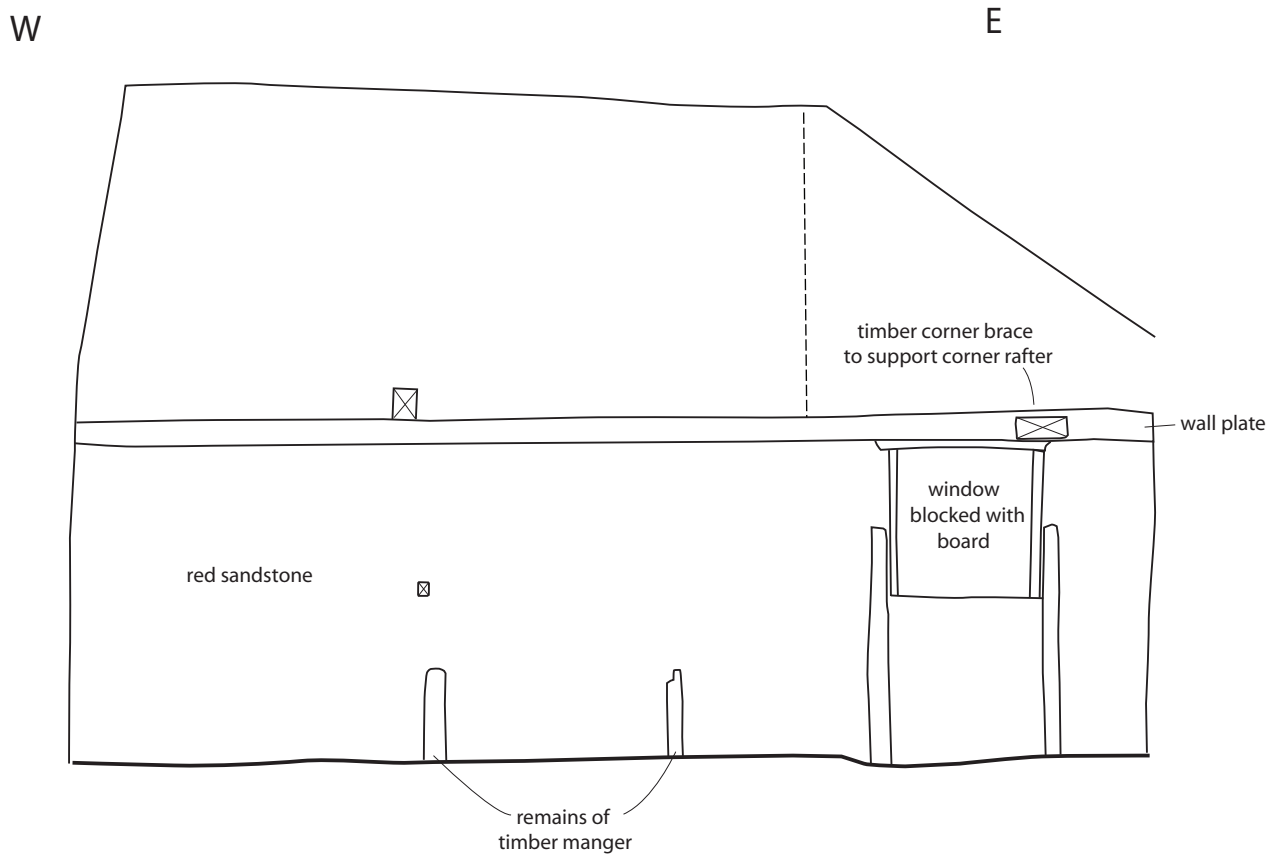
NE

SW

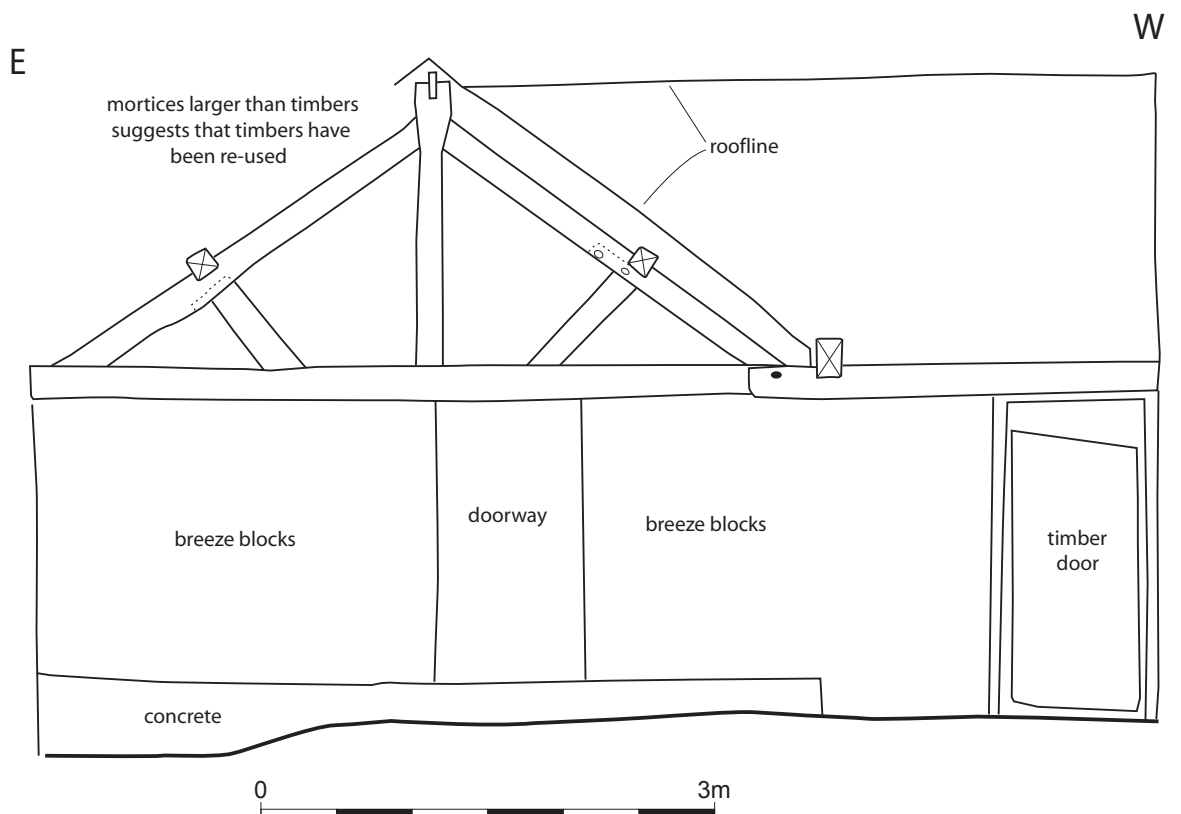


*The Animal Shed interior: North-west and south-east elevations*

## THE ANIMAL SHED INTERIOR: NORTH ELEVATION



## THE ANIMAL SHED INTERIOR: ROOM A, SOUTH ELEVATION

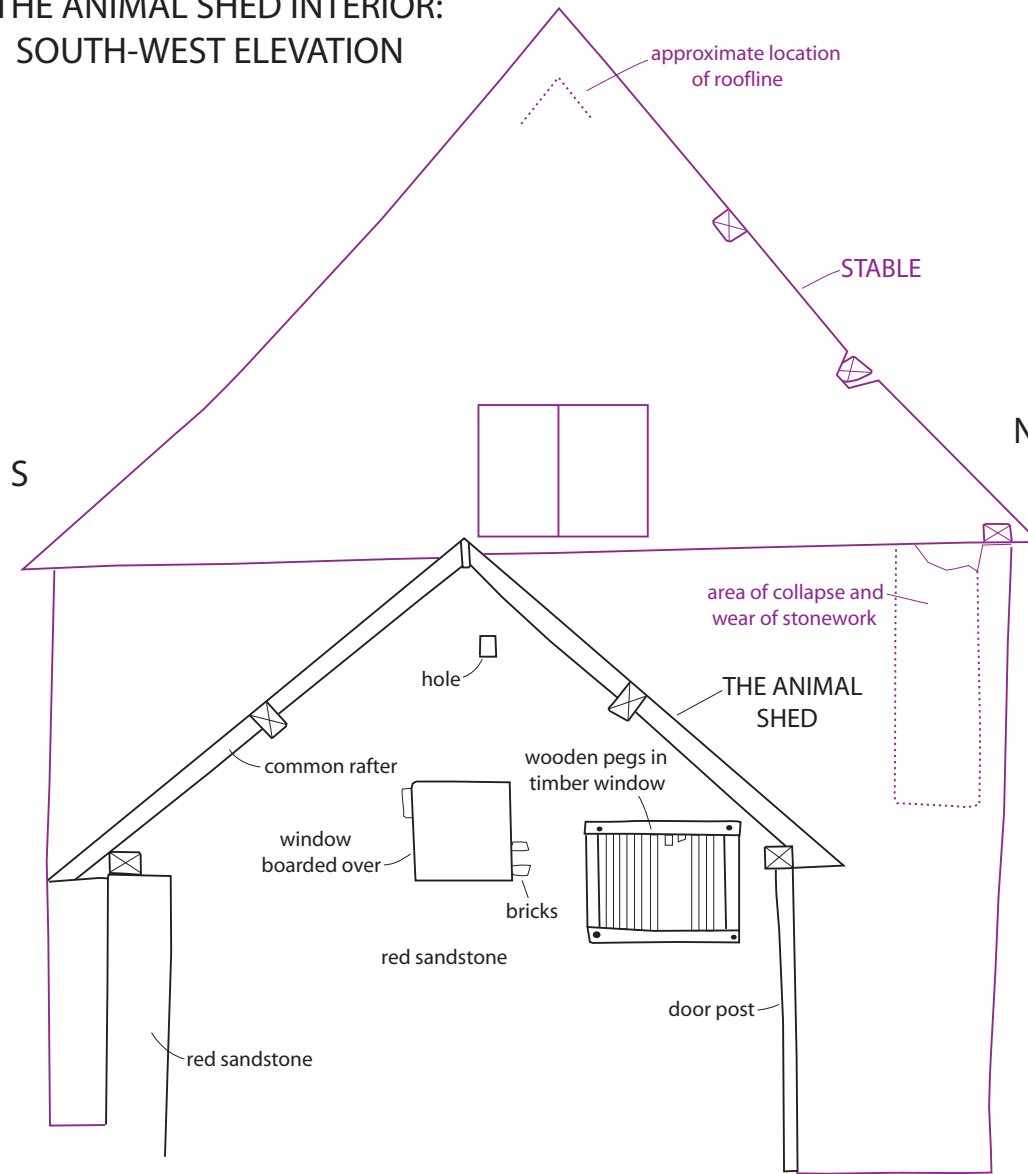


*The Animal Shed interior: Room A, North and South elevations*

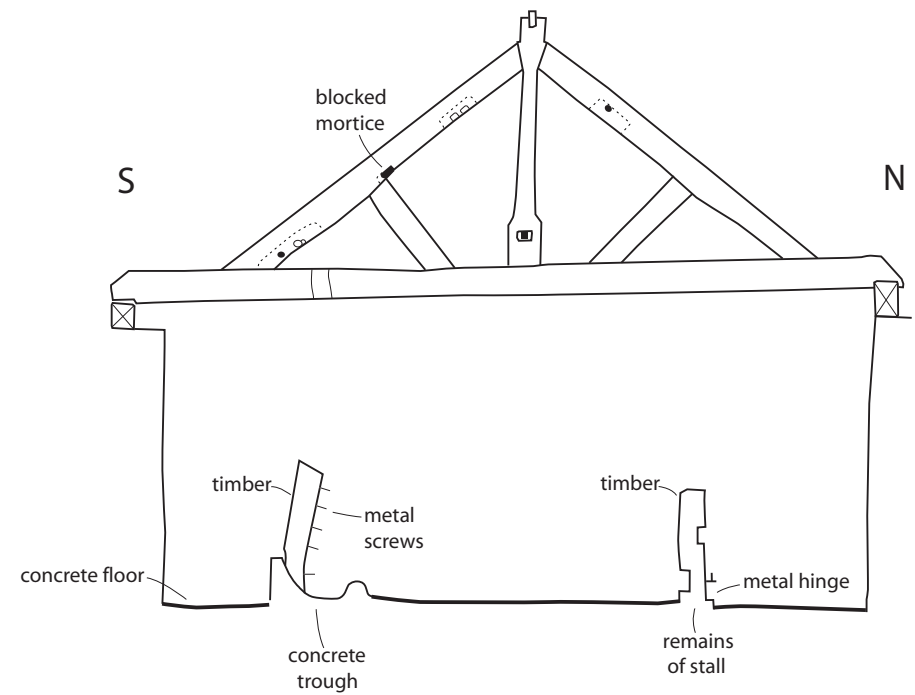
*Figure 29*



THE ANIMAL SHED INTERIOR:  
SOUTH-WEST ELEVATION



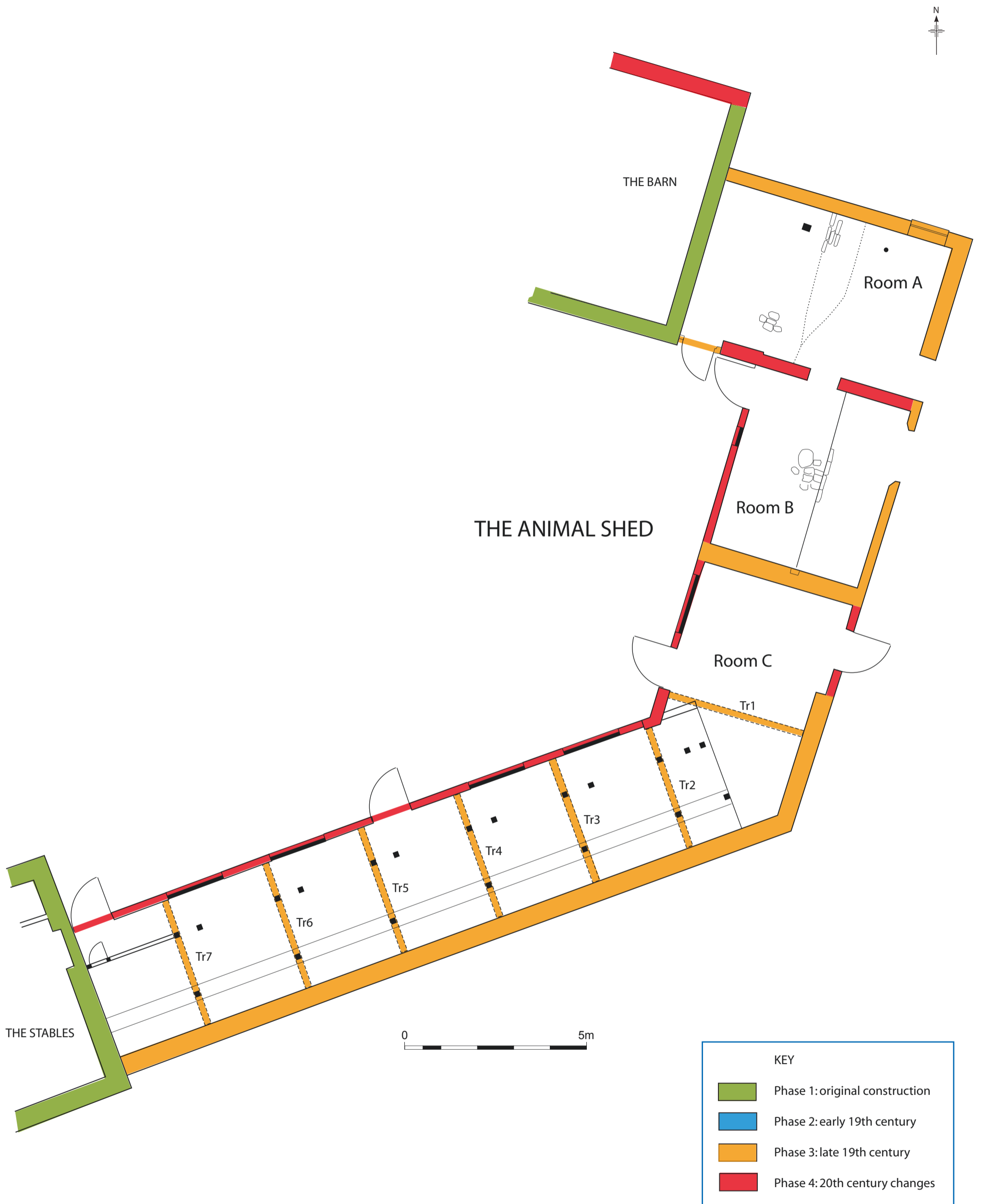
THE ANIMAL SHED INTERIOR: TRUSS 2



0 3m

*The Animal Shed interior: South-west elevation and Truss 2; Stable exterior North elevation*

*Figure 30*

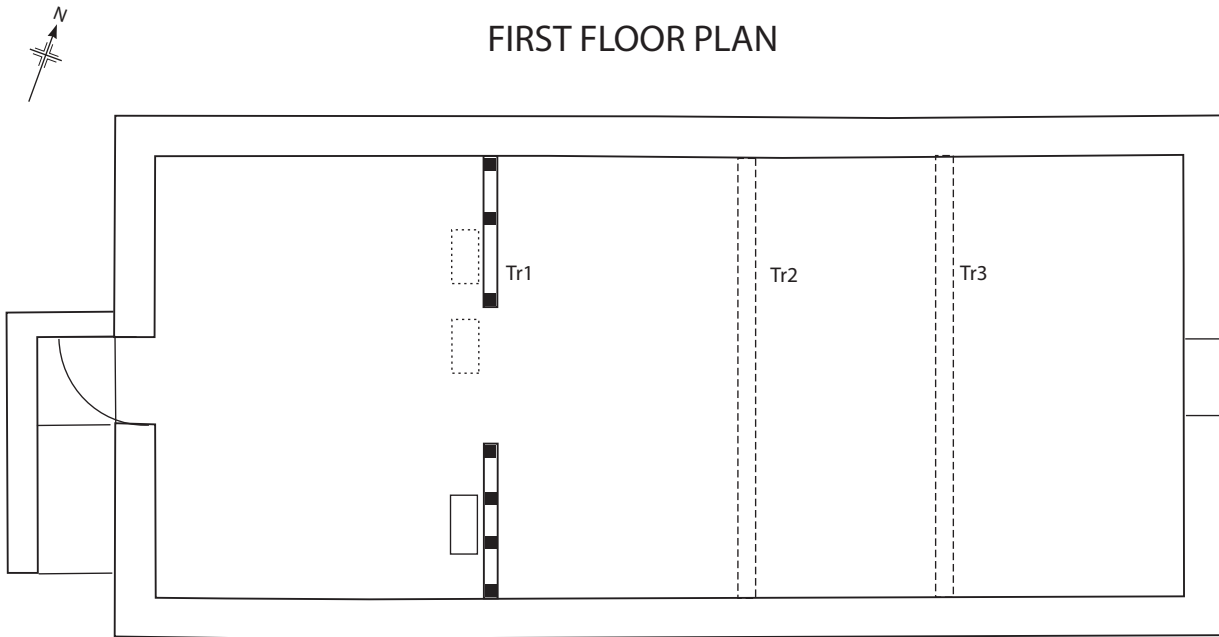


Phased Plan of The Animal Shed

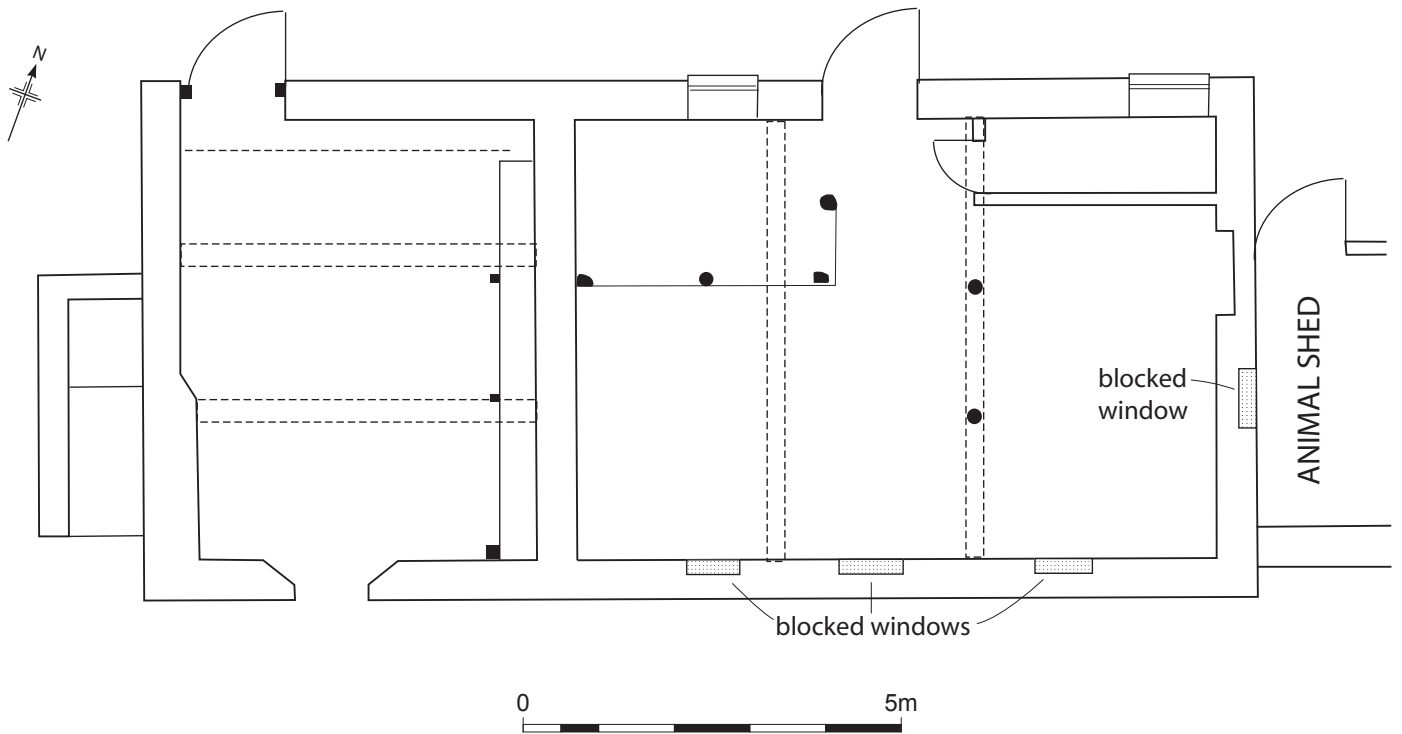
Figure 31

# THE STABLES

## FIRST FLOOR PLAN



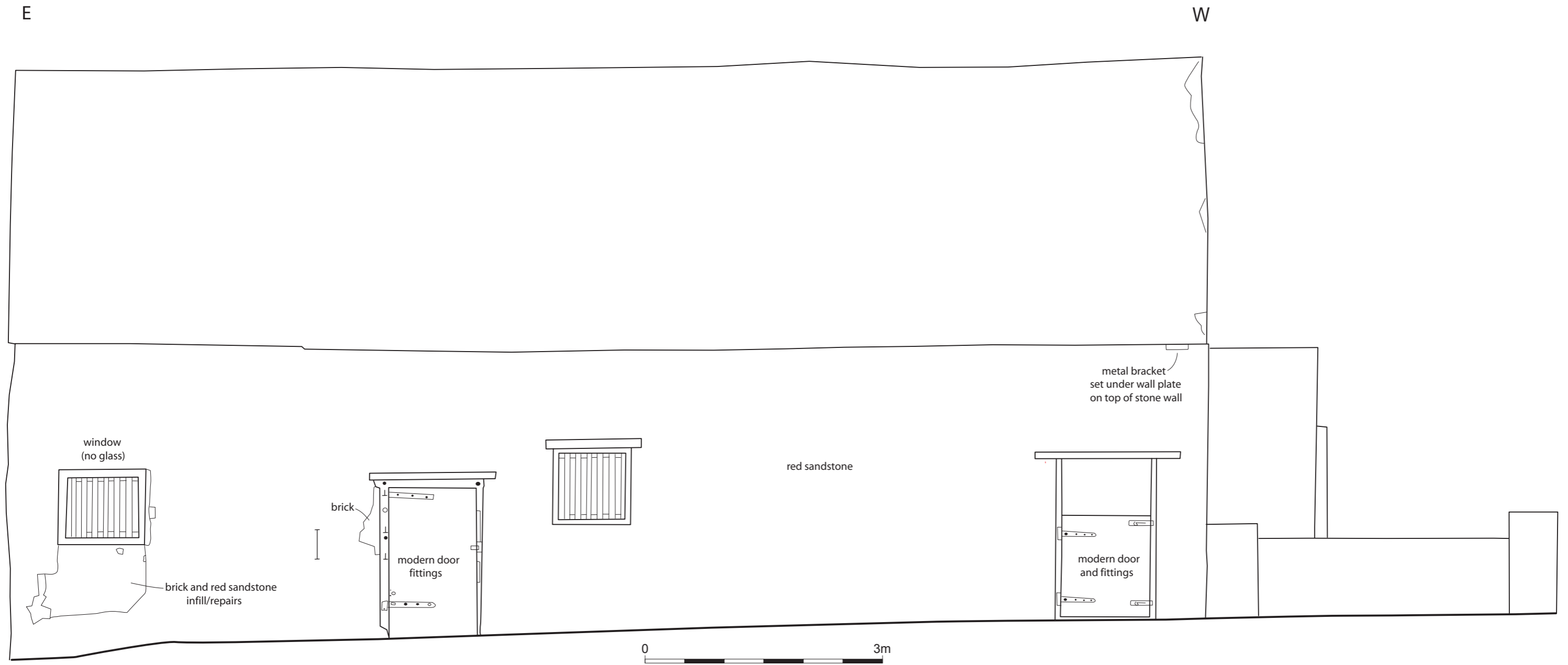
## GROUND FLOOR PLAN



Plan of The Stables

Figure 32

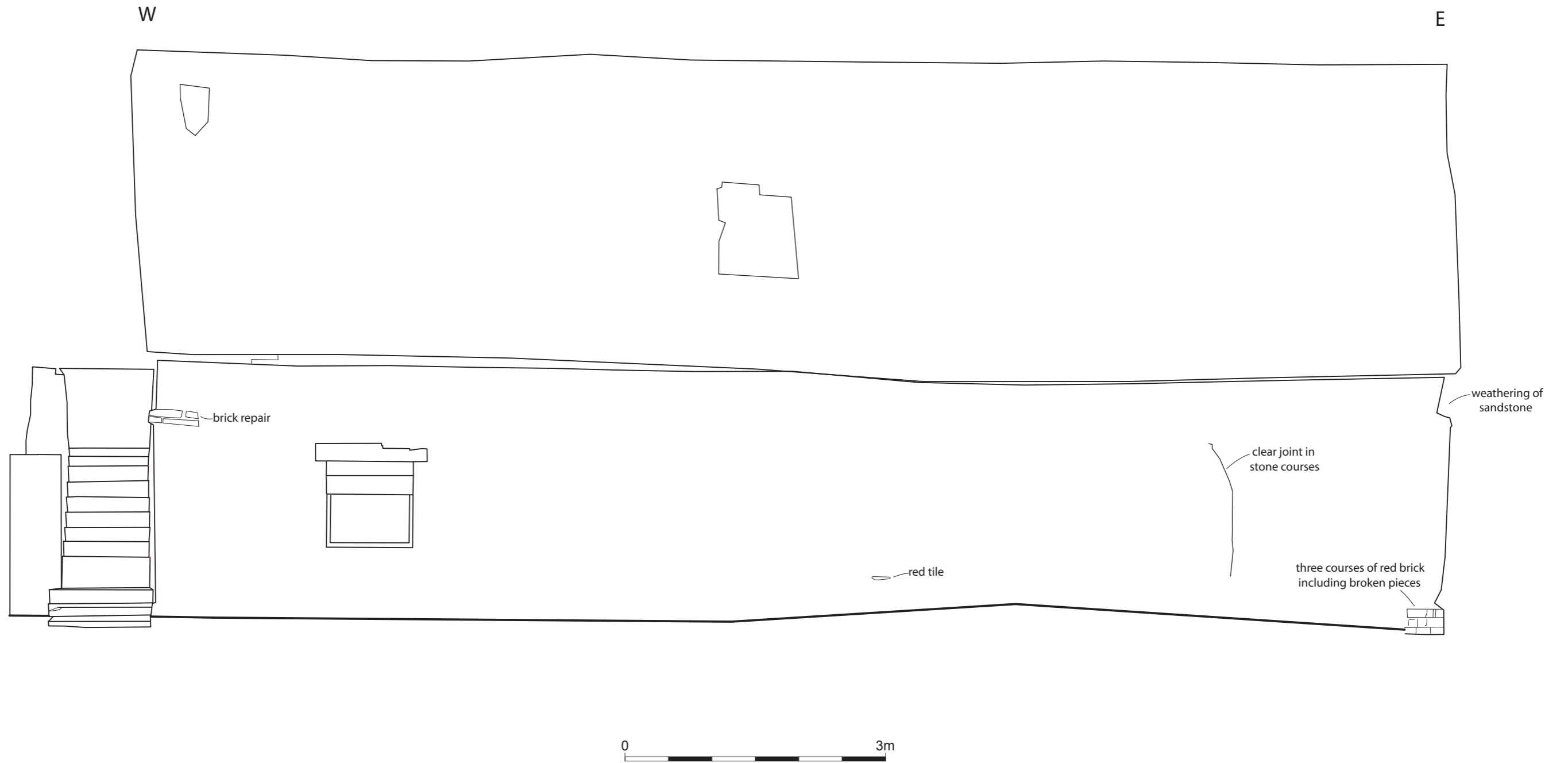
THE STABLES EXTERIOR: NORTH-WEST ELEVATION



*The Stables exterior: North-west elevation*

*Figure 33*

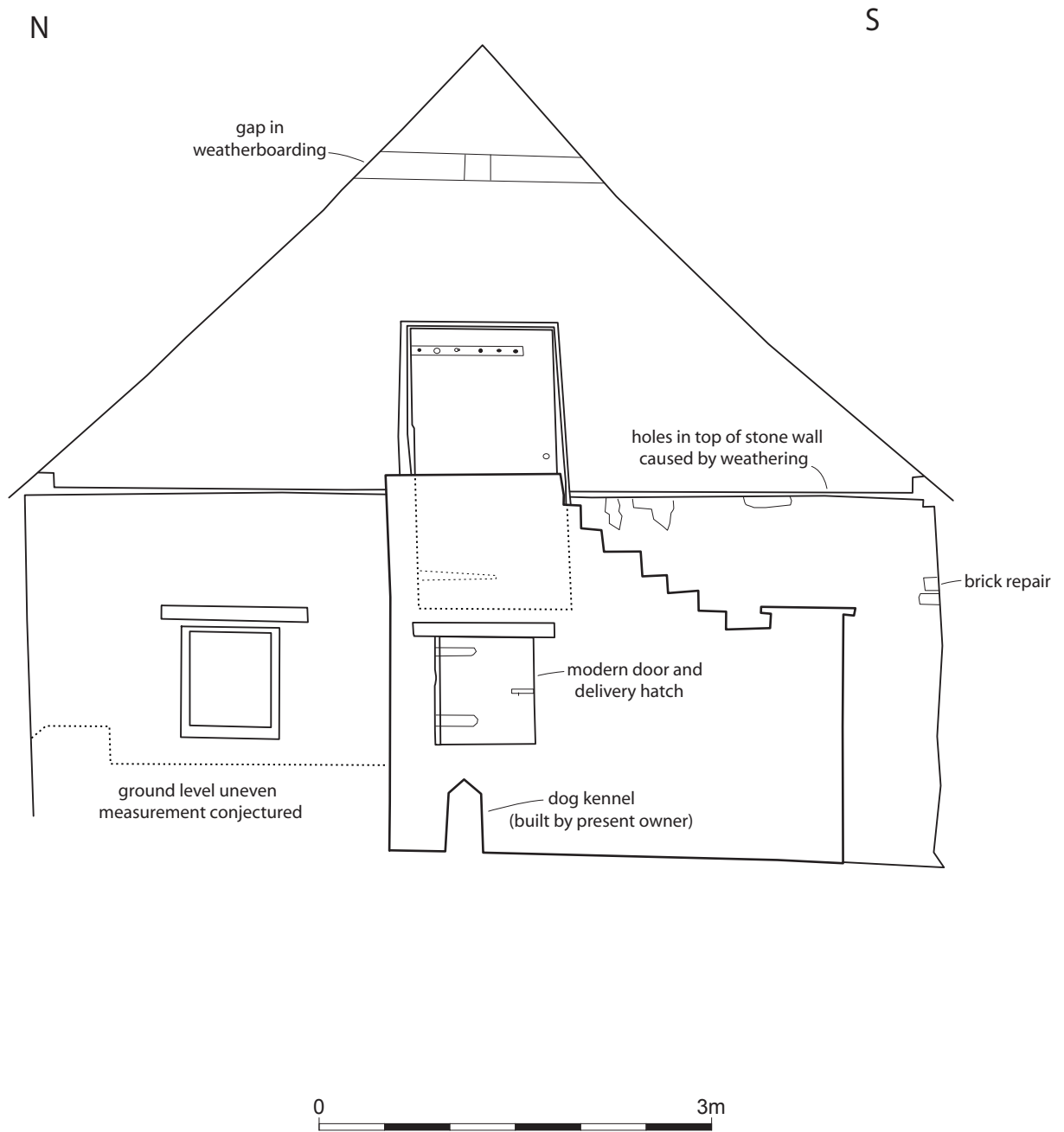
THE STABLES EXTERIOR: SOUTH-EAST ELEVATION



*The Stables exterior: South-east elevation*

*Figure 34*

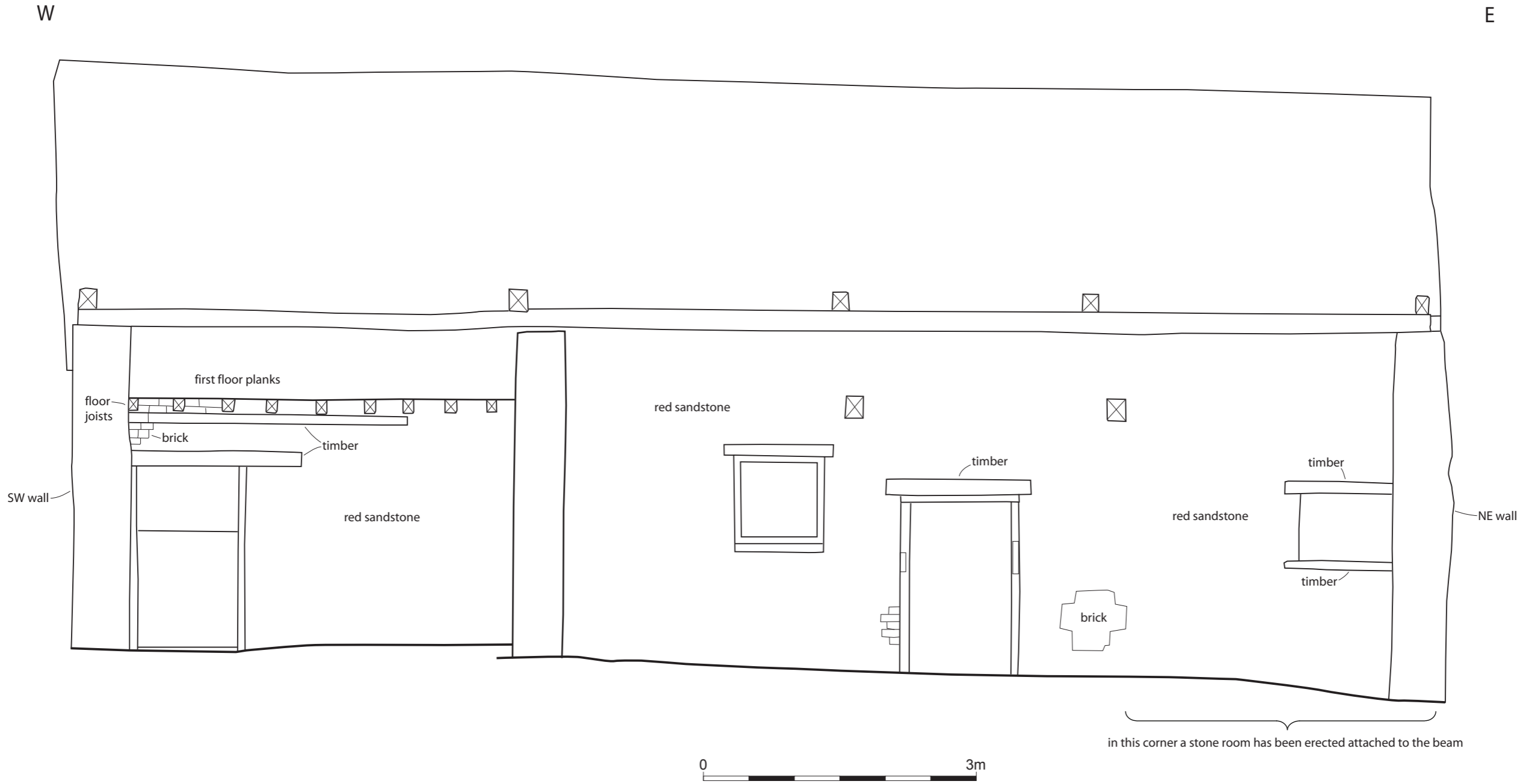
# THE STABLES EXTERIOR: SOUTH-WEST ELEVATION



*The Stables exterior: South-west elevation*

*Figure 35*

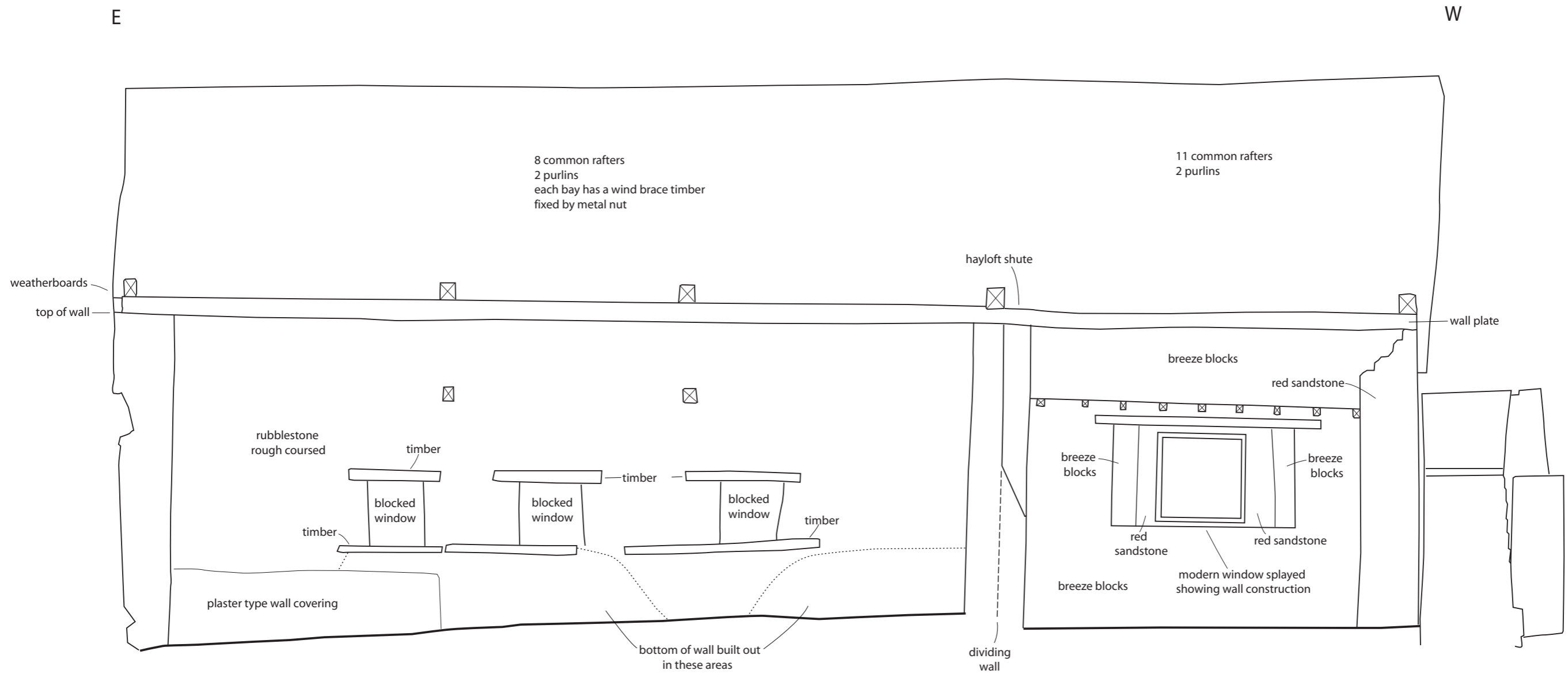
THE STABLES INTERIOR: NORTH-WEST ELEVATION



The Stables interior: North-west elevation

Figure 36

THE STABLES INTERIOR: SOUTH-EAST ELEVATION

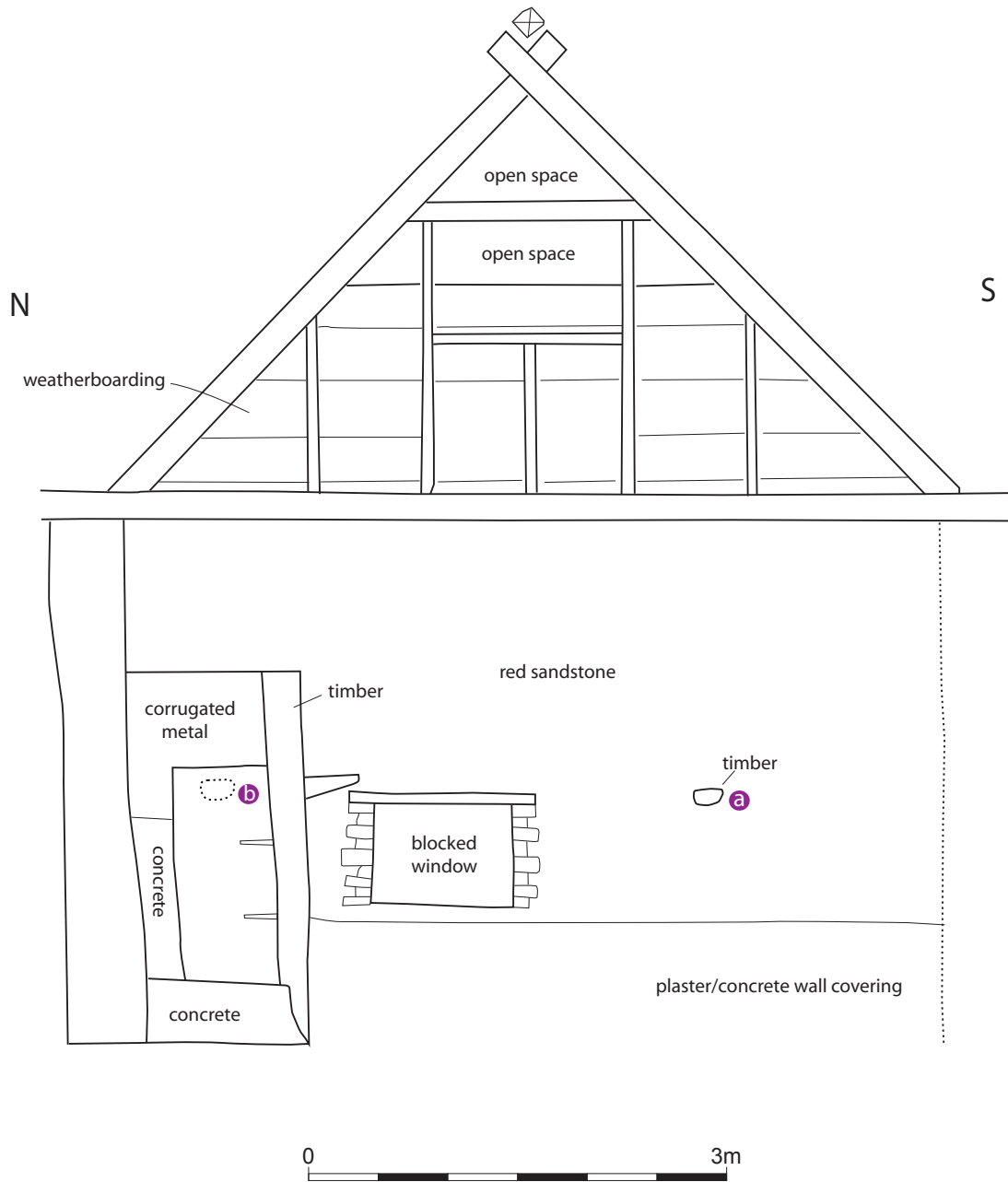


*The Stables interior: South-east elevation*

*Figure 37*



# THE STABLES INTERIOR: NORTH-EAST ELEVATION

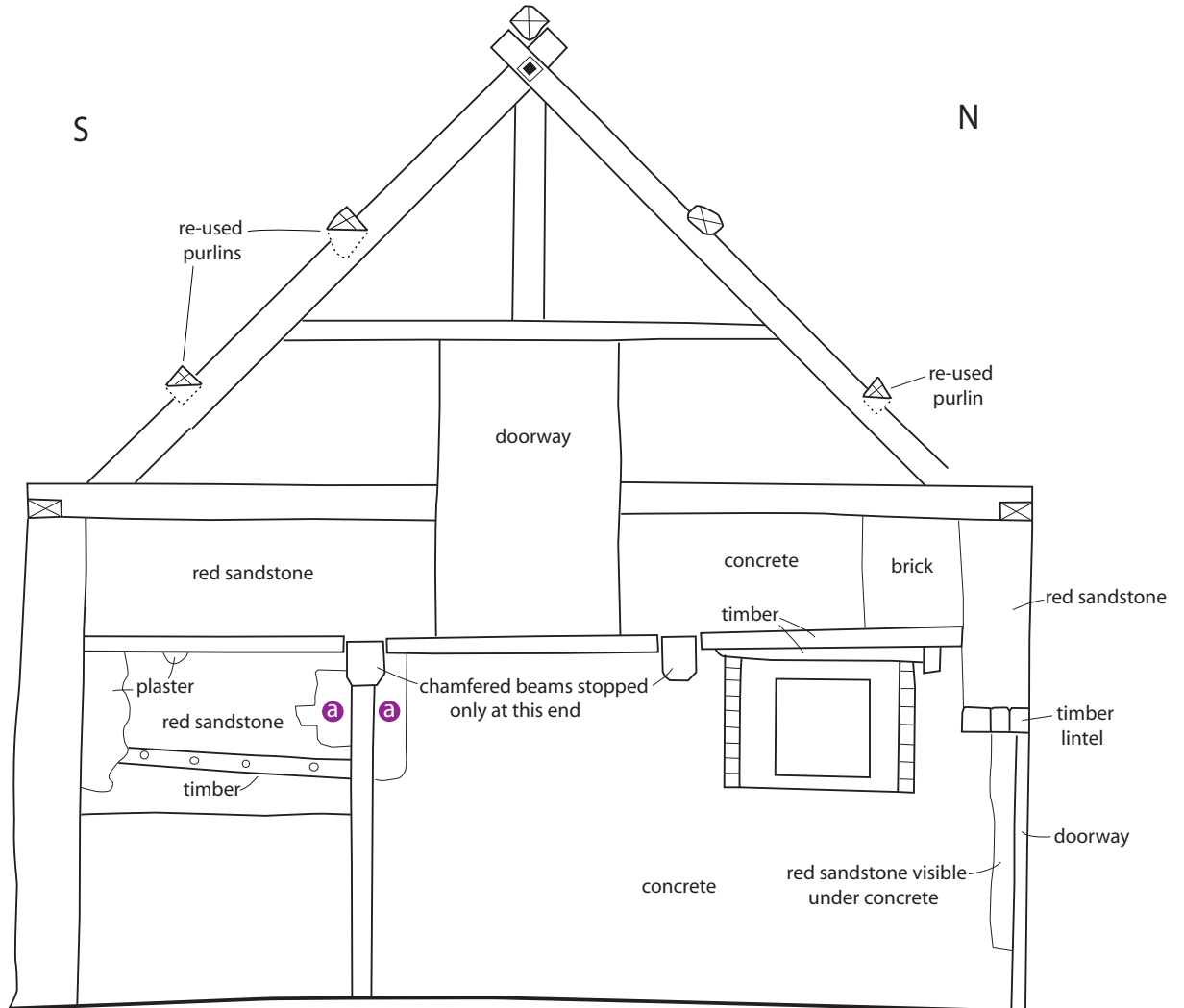


KEY	
<b>a</b>	timber corbel in wall
<b>b</b>	timber corbel visible in wall inside store room

*The Stables interior: North-east elevation*

*Figure 38*

# THE STABLES INTERIOR: SOUTH-WEST ELEVATION



0 3m

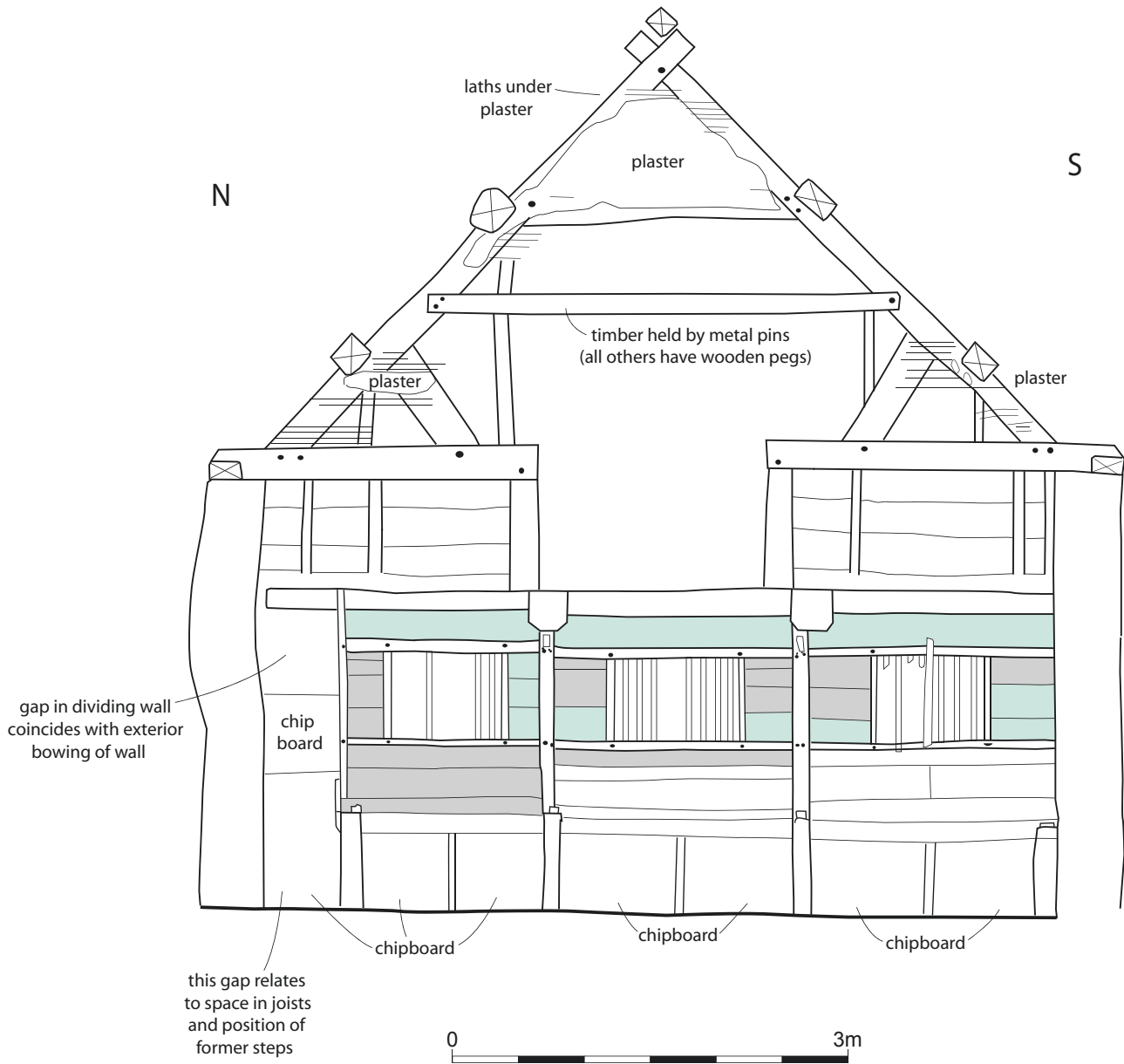
KEY



- a brick and rough pieces of timber visible behind concrete

*The Stables interior: South-west elevation*

*Figure 39*

# THE STABLES ROOF TRUSS 1 WITH HAYLOFT AND MANGER

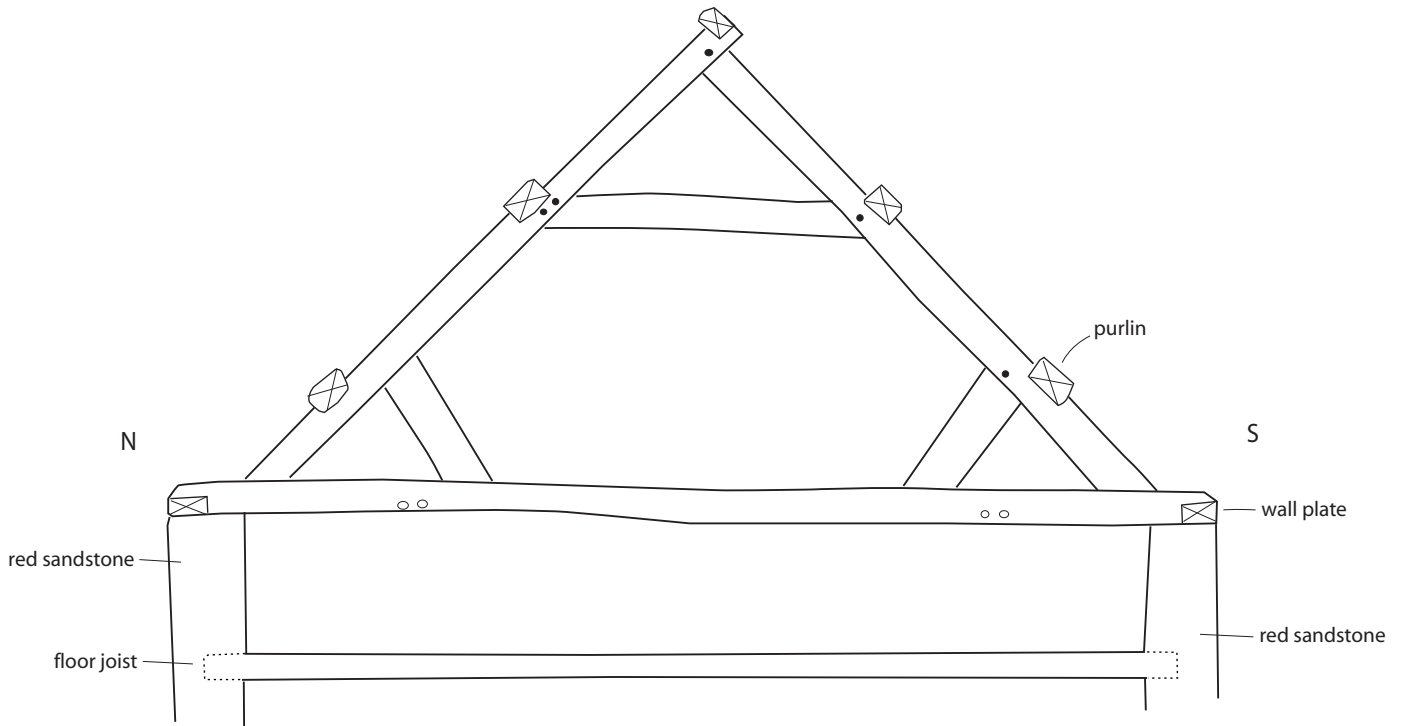


KEY	
	boards in manger/hay rack with one finished edge
	boards in manger/hay rack with two finished edges

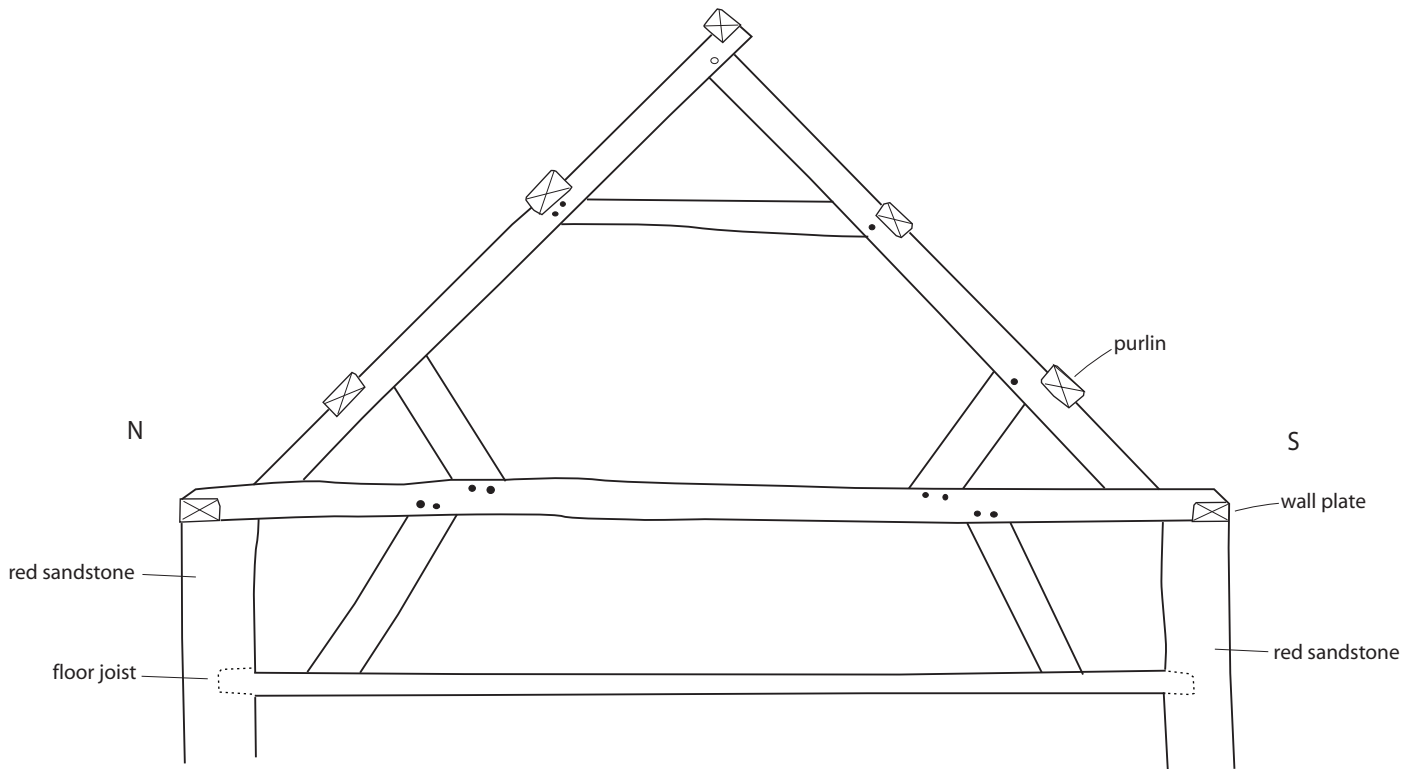
*The Stables: Roof Truss 1 with hayloft and manger*

*Figure 40*

TRUSS 2



TRUSS 3

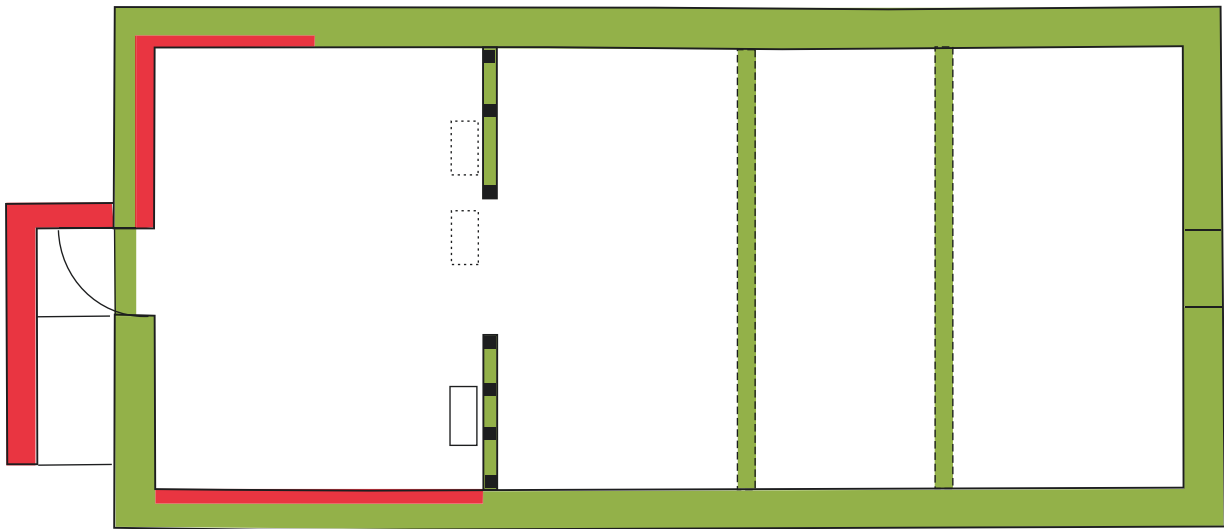


The Stables: Roof trusses 2 and 3

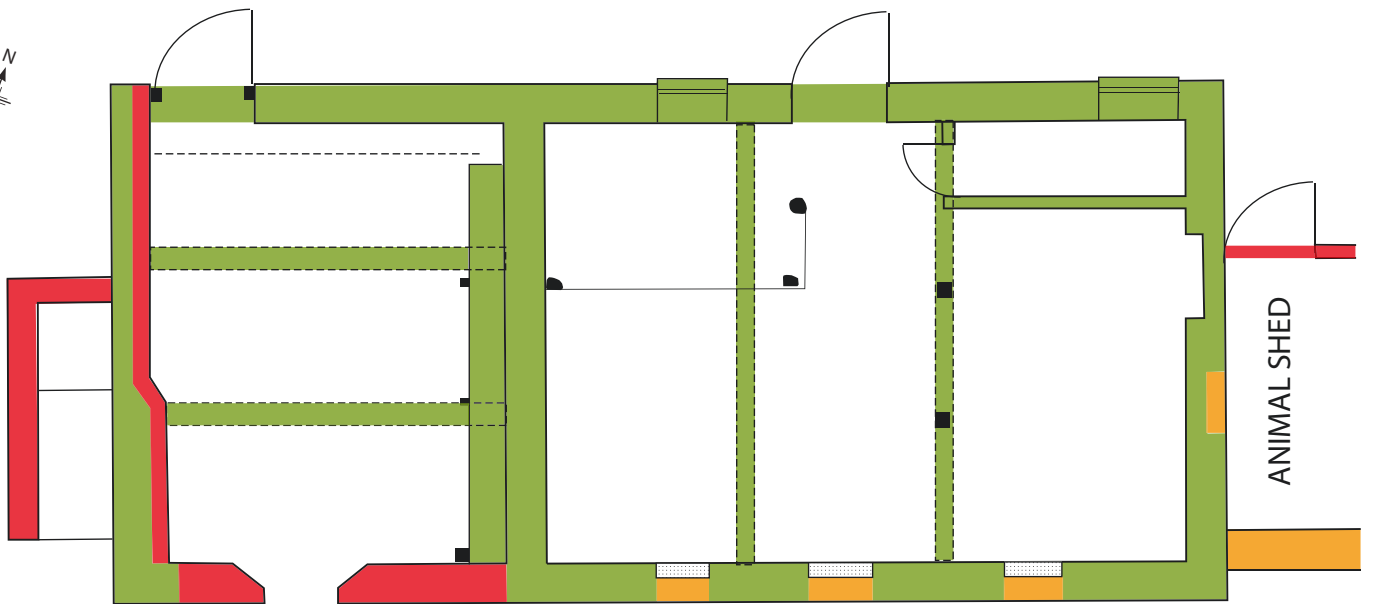
Figure 41

# THE STABLES

## FIRST FLOOR PLAN



## GROUND FLOOR PLAN



### KEY

- Phase 1: original construction
- Phase 2: early 19th century
- Phase 3: late 19th century
- Phase 4: 20th century changes

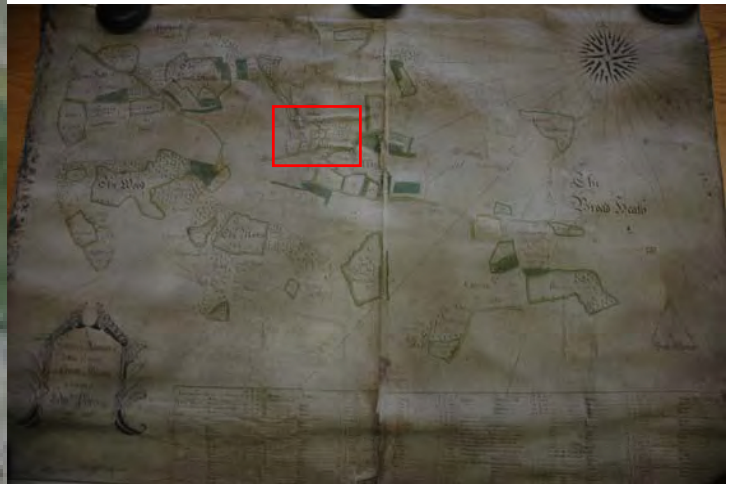
*Phased plan of The Stables*

*Figure 42*

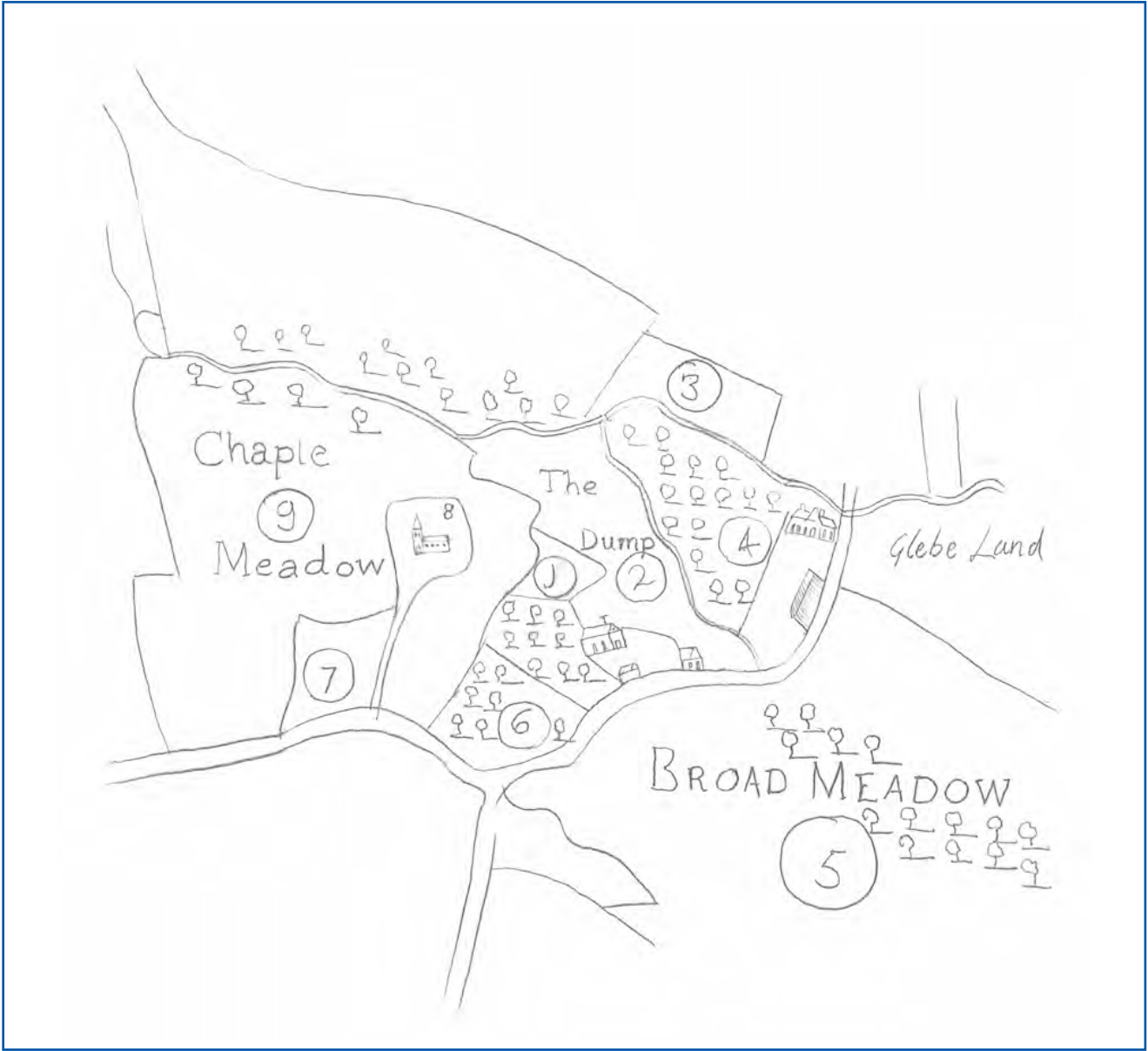


Location of photographs (numbers refer to Plates)

Figure 43



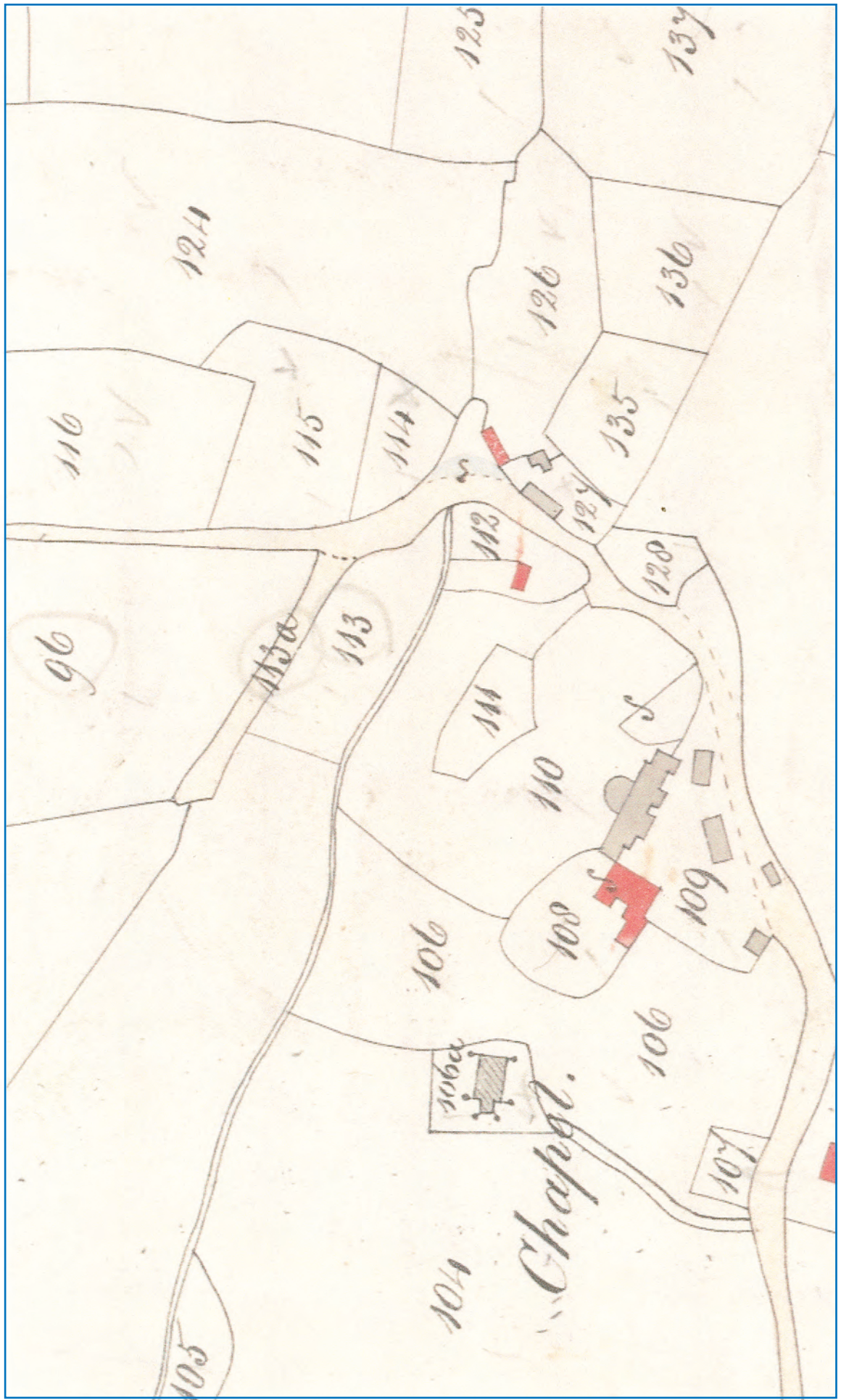
**Fig 44 Detail from the 1731 Estate Plan - Survey of the Manor of Lower Hanley, the Estate of Edmund Pitts (Worcestershire Record Office WRO ref BA1545 705:255)**



Tracing of the detail of 1731 Estate Plan (by Darren Miller)

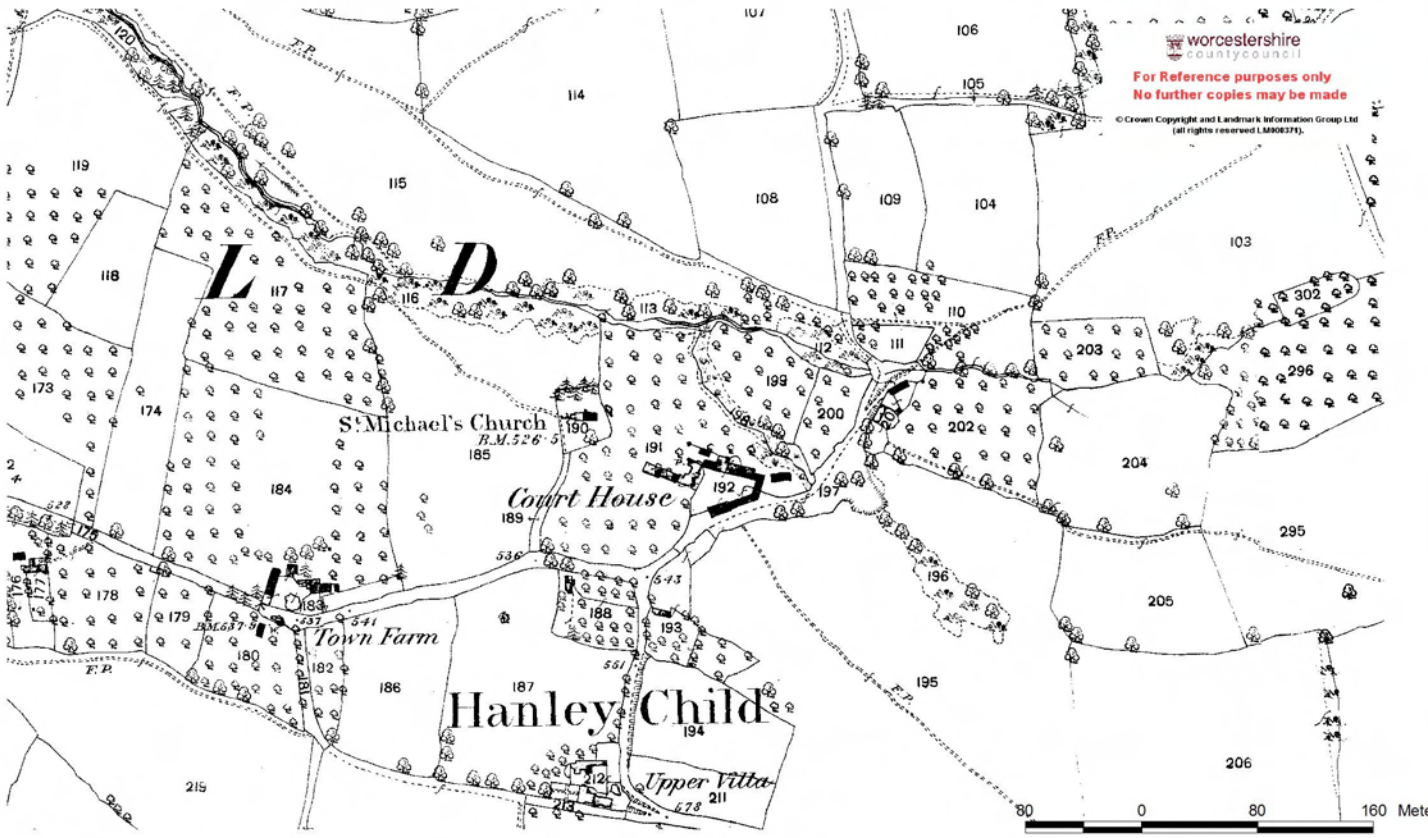
Figure 45





Extract from Tithe Map of Hanley Childe (1840) WRO ref: BA1572/315/315 r 760:315

Figure 46



worcestershire  
county council

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1:2500

Landmark digital mapping based on Ordnance Survey 1st Edition, 1885  
(Landmark reference number 39so6565. Original scale: 25" (1:2500))

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## **Plates**

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**P3066 COURT FARM BUILDINGS  
PLATES**



**Plate 1: Photograph of “Court House” from transcriptions by F C Baldwin Childe, c1900 (WRO BA4958-2)**



**Plate 2: General View of Court Farm and farm buildings from south.**



**Plate 3: View of farm buildings from yard**



**Plate 4: The Barn, south elevation**



**Plate 5: The Barn east end with Animal Shed adjoining, showing square panel with wall plate below and roof plate above.**



**Plate 6: The Barn, detail of square panelling and oak wattle and empty panel showing auger holes where wattle removed.**



**Plate 7: The Barn, east end showing diamond panelling. Auger holes in the panels show that original wattling has been removed.**



**Plate 8: The Barn, north wall interior showing two types of ventilation holes.**



**Plate 9: The Barn, showing detail of rectangular ventilation hole as originally built into the wall.**



**Plate 10: The Barn, north wall showing original panelling within original doorway opposing present south doorway.**





**Plate 11: The Barn, evidence of original divisions of barn into bays (see remains of lower timbers below truss in foreground)**



**Plate 12: The Barn, south west door and threshing floor.**



**Plate 13: The Barn, eastern wall with small central door**



**Plate 14: The Barn, Truss 2 with boarding and door of division across barn.**



**Plate 15: The Barn, Truss 4 and carpenter's marks**



**Plate 16: The Barn, Truss 1, King Post.**



**Plate 17: The Animal Shed, from the yard.**



**Plate 18: The Animal Shed, south western corner showing construction.**



**Plate 19: The Animal Shed, Room A, showing exterior of western wall of Barn A and King Post with metal bolt below the tie beam and small slot in Post above where nut inserted.**



**Plate 20: The Animal Shed, Room C, looking south east showing remains of the posts of stalls and a trough running down the building.**



**Plate 21: The Animal Shed, Room C, looking south east showing door in the distance and remains of corridor.**



**Plate 22: The Animal Shed, Room B, remains of stone flooring within middle room (looking east)**



**Plate 23: The Stable**



**Plate 24: The Stable, west room ground floor showing 3 mangers and troughs.**



**Plate 25: The Stable, west room, ground floor, showing plaster covering red sandstone in corner of western wall and remains of southern wall.**





**Plate 26: The Stable, west room, ground floor, showing chamfered beam to right of photograph.**



**Plate 27: The Stable, east room, ground floor showing partition.**



**Plate 28: The Stable, east room ground floor showing remaining post of partition and tack room with saddle attached to outside of door jamb.**



**Plate 29: The Stable, west room, upper floor showing remains of plaster on partition.**



**Plate 30: The Stable, west room upper floor showing shute to manger in lower room**



**Plate 31: The Barn, exterior of west wall within adjacent farm building with central door of The Barn at bottom of photograph and ventilation hole, now partly obscured by roof, at mid-left of photograph.**



**Plate 32: The Barn, detail of central door in west wall from within The Barn.**



**Plate 33: The Barn, north elevation from north**



**Plate 34: The Barn,  
north elevation mid-  
section, showing  
openings and brickwork  
which may relate to  
horse-powered threshing  
machine.**

**Plate 35: The Barn,  
,north elevation mid-  
section showing openings  
and brickwork which  
may relate to horse-  
powered threshing  
machine**





**Plate 36: The Barn, north elevation, mid-section showing metal fixture which may relate to horse-powered threshing machine.**



**Plate 37: The Animal Shed, Room C, King Post showing example of empty mortices suggesting re-used timbers were included in the construction of the building.**



**Plate 38: The Animal Shed, south wall exterior showing empty mortice suggesting re-used timbers were included in its construction.**

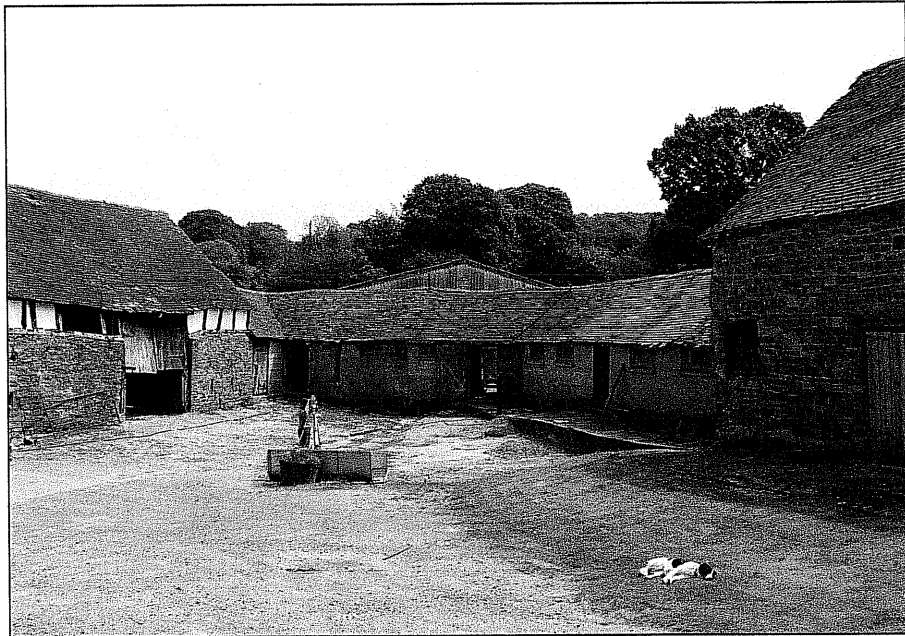


**Plate 39: Court Farm aerial view 2005 Historic Environment Record GIS County Coverage**

Oxford Dendrochronology Laboratory  
Report 2007/18

**THE  
DENDROCHRONOLOGICAL  
INVESTIGATION  
OF BARNS AT  
COURT FARM,  
HANLEY CHILD,  
WORCESTERSHIRE**

**(NGR SO 652 652)**



**Summary**

Many of the timbers in this complex of farm buildings were assessed as unlikely to be useful for dendrochronology because of a lack of rings, despite their often large dimensions. Nine timbers were sampled, three from the large barn (A) and six from the animal housing (B). Three timbers from the latter building matched each other, and were combined into a site master, but neither this, nor any of the individual series, gave acceptable replicated matches against dated reference material, and all the timbers remain undated.

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June 2007



**The Dendrochronological Investigation of Barns at Court Farm, Hanley Child, Worcestershire.  
(NGR SO 652 652)**

**BACKGROUND TO DENDROCHRONOLOGY**

The basis of dendrochronological dating is that trees of the same species, growing at the same time, in similar habitats, produce similar ring-width patterns. These patterns of varying ring-widths are unique to the period of growth. Each tree naturally has its own pattern superimposed on the basic 'signal', resulting from genetic variations in the response to external stimuli, the changing competitive regime between trees, damage, disease, management etc.

In much of Britain the major influence on the growth of a species like oak is, however, the weather conditions experienced from season to season. By taking several contemporaneous samples from a building or other timber structure, it should be possible to crossmatch the ring-width patterns, and by averaging the values for the sequences, maximise the common signal between trees. The resulting 'site chronology' may then be compared with existing 'master' or 'reference' chronologies.

This process can be done by a trained dendrochronologist using plots of the ring-widths and comparing them visually, which also serves as a check on measuring procedures. It is essentially a statistical process, and therefore requires sufficiently long sequences for one to be confident in the results. There is no defined minimum length of a tree-ring series that can be confidently crossmatched, but as a working hypothesis most dendrochronologists use series longer than at least fifty years.

The dendrochronologist also uses objective statistical comparison techniques, these having the same constraints. The statistical comparison is based on programs by Baillie & Pilcher (1973, 1984) and uses the Student's t test. The values of 't' which give an acceptable match have been the subject of some debate; originally values above 3.5 being regarded as acceptable (given at least 100 years of overlapping rings) but now 4.0 is often taken as the base value. It is possible for a random set of numbers to give an apparently acceptable statistical match against a single reference curve - although the visual analysis of plots of the two series usually shows the trained eye the reality of this match. When a series of ring-widths gives strong statistical matches in the same position against a number of independent chronologies the series becomes dated with an extremely high level of confidence.

One can develop long reference chronologies by crossmatching the innermost rings of modern timbers with the outermost rings of older timbers successively back in time, adding data from numerous sites. Data now exist covering many thousands of years and it is, in theory, possible to match a sequence of unknown date to this reference material.

It follows from what has been stated above that the chances of matching a single sequence are not as great as for matching a tree-ring series derived from many individuals, since the process of aggregating individual series will remove variation unique to an individual tree, and reinforce the common signal resulting from widespread influences such as the weather. However, a single sequence can often be successfully dated.

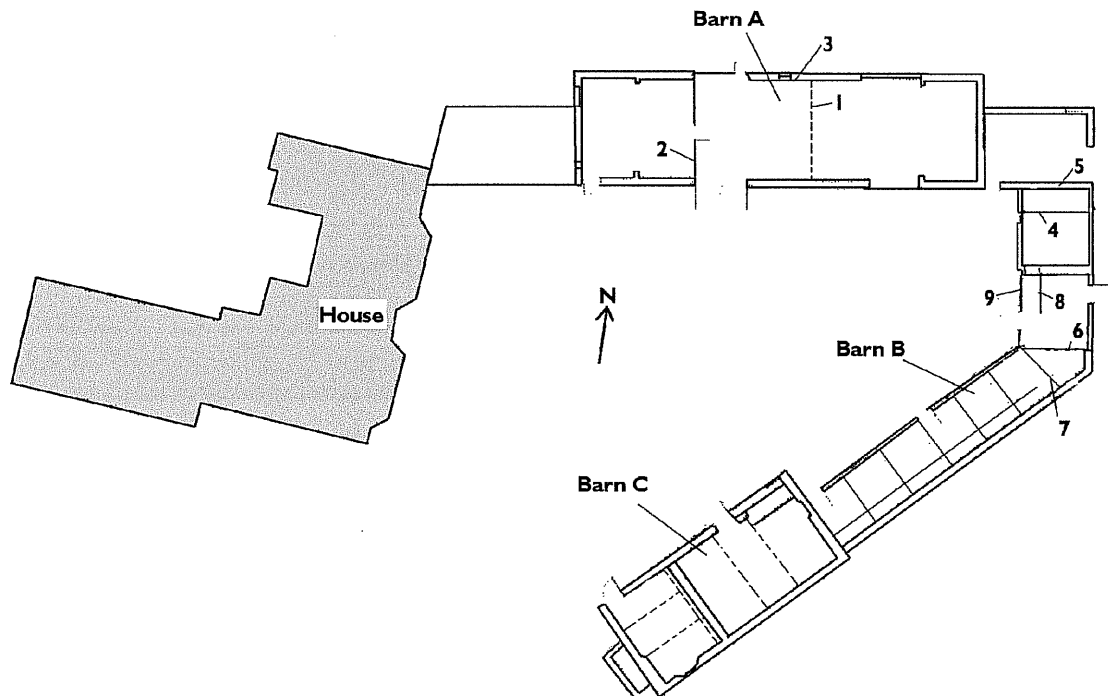
Growth characteristics vary over space and time, trees in south-eastern England generally growing comparatively quickly and with less year-to-year variation than in many other regions (Bridge, 1988).

This means that even comparatively large timbers in this region often exhibit few annual rings and are less useful for dating by this technique.

When interpreting the information derived from the dating exercise it is important to take into account such factors as the presence or absence of sapwood on the sample(s), which indicates the outer margins of the tree. Where no sapwood is present it may not be possible to determine how much wood has been removed, and one can therefore only give a date after which the original tree must have been felled. Where the bark is still present on the timber, the year, and even the time of year of felling can be determined. In the case of incomplete sapwood, one can estimate the number of rings likely to have been on the timber by relating it to populations of living and historical timbers to give a statistically valid range of years within which the tree was felled. For this region the estimate used is that 95% of oaks will have a sapwood ring number in the range 11 - 41 (Miles 1997).

Whenever possible, a *group* of precise felling dates should be used as a more reliable indication of the *construction period*. It must be emphasised that dendrochronology can only date when a tree has been felled, not when the timber was used to construct the structure under study. However, it is common practice to build timber-framed structures with green or unseasoned timber and that construction usually took place within twelve months of felling (Miles 2005).

## COURT FARM



**Figure 1:** Plan of the Court Farm complex of buildings showing the approximate positions of timbers sampled for dendrochronology (adapted from an original plan by N J Teale)

Many timbers were found to be from fast-grown oaks, with even large tiebeams and principal rafters containing too few rings to be useful for dendrochronology. Some samples were taken in the large long barn (A), which has a variety of different truss forms, and from the trusses and wall-plate in building B. The trusses in B appear to have re-used timbers forming the principal rafters in many cases, there being large mortices that do not relate to the present structure. Barn C did not contain any timbers which looked to have sufficient rings for analysis, despite the large dimensions of many of them.

## **SAMPLING**

Sampling was undertaken in May 2007. Core samples were extracted using a 15mm diameter borer attached to an electric drill. They were labelled (prefix **hcc**) and removed for further preparation and analysis. Cores were mounted on wooden laths and polished with progressively finer grits down to 400 to allow the measurement of ring-widths to the nearest 0.01 mm.

The samples were measured under a binocular microscope on a purpose-built moving stage with a linear transducer, attached to a desktop computer. Measurements and subsequent analysis were carried out using DENDRO for WINDOWS, written by Ian Tyers (Tyers 2004).

Only nine cores were eventually taken from the large number of timbers at the site.

In Barn A, samples were taken from a stud in Truss 4 (numbered from the west end), the tie to Truss 2, and a stud in the north wall of Bay 4. Many other timbers were inspected, but rejected for having too few rings.

In Barn B samples were taken from three tiebeams, two purlins and a wallplate.

## **RESULTS AND DISCUSSION**

All the timbers sampled were of oak (*Quercus* spp.). Details of the locations of the timbers sampled are illustrated in Figure 1 and given in Table 1, along with other basic information. Three timbers from Barn B matched each other (Table 2) and were combined into an 86-year site chronology **hcc789**, but neither this nor any of the other individual series gave acceptable replicated matches against the dated reference material, and all the timbers therefore remain undated.

In some cases this is not too surprising, **hcc02** for example showed several abrupt growth changes, perhaps resulting from management of the tree, but in other cases, e.g. **hcc05**, the growth did not seem unusual, and there was a long series available, albeit from a single tree.

Whilst Worcestershire and Herefordshire are generally good areas for dendrochronology, there are pockets within both counties where the timbers appear to have grown quickly and do not provide great potential for dating by their ring series. It may be significant that many of the timbers assessed and sampled at this site come from a later period than most buildings investigated, perhaps reflecting changes in the way trees in the landscape were managed in more recent centuries.

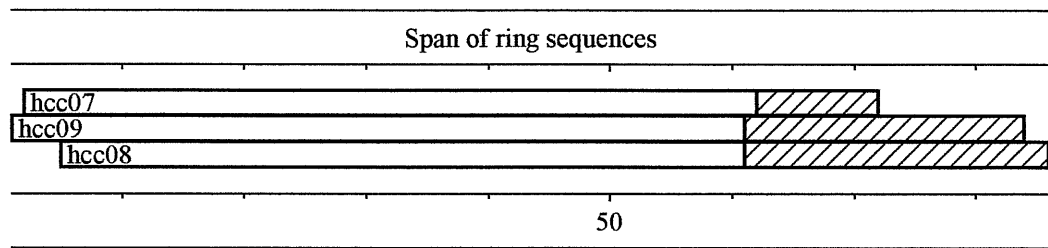
**Table 1: Timbers sampled from the building complex at Court Farm, Hanley Child, Worcestershire**

Sample number	Timber and position	Dates AD spanning	H/S bdry	Sapwood complement	No of rings	Mean width mm	Std devn mm	Mean sens mm	Felling seasons and dates/date ranges (AD)
Barn A									
<b>hcc01</b>	Stud in truss 4	undated	-	H/S	<50	NM	-	-	unknown
<b>hcc02</b>	Tie, truss 2	undated	-	H/S	87	1.50	0.74	0.247	unknown
<b>hcc03</b>	Stud, north wall, bay 4	undated	-	-	<50	NM	-	-	unknown
Barn B									
<b>hcc04</b>	Tie, truss 3	undated	-	H/S	62	2.16	0.81	0.231	unknown
<b>hcc05</b>	Tie, truss 2	undated	-	H/S	114	2.23	0.88	0.156	unknown
<b>hcc06</b>	Tie, south end of N/S section	undated	-	16¼C	62	2.60	0.83	0.211	unknown
<b>hcc07</b>	South purlin, east bay of angled section	undated	-	10	71	1.63	0.77	0.203	unknown
<b>hcc08</b>	West purlin, south bay of N/S section	undated	-	25C	82	1.81	0.73	0.177	unknown
<b>hcc09</b>	West wallplate, N/S section	undated	-	23	84	1.61	0.42	0.192	unknown
<i>Site Master</i>	<b>hcc789</b> (07+08+09)	<b>undated</b>			<b>86</b>	<b>1.67</b>	<b>0.56</b>	<b>0.169</b>	

Key: H/S bdry = heartwood/sapwood boundary – last heartwood ring date; std devn = standard deviation; mean sens = mean sensitivity; NM = not measured; ¼C = complete sapwood, spring felled; summer felled; C = complete sapwood, winter felled.

**Table 2: Cross-matching between the series from Barn B**

<i>t</i> -value	
<b>Sample</b>	<b>hcc08</b> <b>hcc09</b>
<b>hcc07</b>	4.2   5.2
<b>hcc08</b>	6.7



**Figure 2:** Bar diagram showing the relative positions of overlap of the three matching series from Barn B

### **ACKNOWLEDGEMENTS**

I would like to thank Georgina MacHugh of Worcester Archaeological Service for making the arrangements for my visit and introducing me to the buildings. The owner, Mr Yarnold, was most helpful and supplied a large ladder allowing closer inspection of higher timbers.

I thank my colleague Dan Miles for his helpful comments on an earlier draft of this report.

### **REFERENCES**

Baillie, M.G.L. and Pilcher, J.R. (1973) *A simple cross-dating program for tree-ring research*. **Tree Ring Bulletin**, 33, 7-14.

English Heritage (1998) *Guidelines on producing and interpreting dendrochronological dates*, **English Heritage, London**.

Miles, D. (1997) The interpretation, presentation, and use of tree-ring dates, **Vernacular Architecture**, 28, 40-56.

Tyers, I. (2004) *Dendro for Windows Program Guide 3rd edn*, **ARCUS Report**, 500b.

## **Appendix 2 Technical information**

### **The archive**

The archive consists of:

- 16 Fieldwork progress records AS2
- 4 Photographic records AS3
- 450 Digital photographs
- 1 Trench record sheets AS41
- 44 Scale drawings
- 1 Computer disk

The project archive is intended to be placed at:

Worcestershire County Museum  
Hartlebury Castle  
Hartlebury  
Near Kidderminster  
Worcestershire DY11 7XZ  
Tel Hartlebury (01299) 250416

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