

**Historic building recording
of a barn at Cowlass Hall Farm,
Radwinter End,
Radwinter, Essex,
February 2017**



report prepared by Chris Lister

commissioned by Alex and James Archer

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1 Summary

A programme of historic building recording was carried out by Colchester Archaeological Trust on a historic barn at Cowlass Hall Farm, Radwinter End, Radwinter in February 2017. The barn lies within the remains of a post-medieval farm complex and is curtilage-listed to Cowlass Hall farmhouse, a 17th-century Grade II listed building (NHLE no. 1217246, EHER 36393). The barn comprises the original 18th-century agricultural structure, two 19th-century extensions and a 19th-century lean-to outbuilding, abutting an early 18th-century brick stable block to the south (which is outside the scope of this survey). Although lacking the original roof, the barn remains an example of an Essex threshing barn dating to the 18th century which has characteristics of design not usually found in buildings of this type.

2 Introduction (Fig 1)

This is the archive report on the historic building recording at Cowlass Hall Farm, Radwinter End, Radwinter, Essex, undertaken in response to an application for the conversion of a historic barn to residential use. The work was commissioned by Alex and James Archer and carried out by Colchester Archaeological Trust (CAT) in February 2017. The site comprises an 18th-century threshing barn which is curtilage-listed to Cowlass Hall farmhouse, a 17th-century Grade II listed building (NHLE no. 1217246, EHER 36393). These are surviving elements of a much larger post-medieval farm complex. The barn is centred at NGR TL 61386 38473 (Fig 1).

A planning application was submitted to Uttlesford District Council in July 2015 (planning ref. UTT/2063/15/FUL) proposing the conversion of the barn to a single dwelling. Given the historic significance of the barn, it was recommended that a Historic England Level 3 historic building record be undertaken prior to the conversion. This recommendation was in line with the guidance given in Paragraph 141 of the National Planning Policy Framework.

In response to this condition a Written Scheme of Investigation (WSI) was prepared by Colchester Archaeological Trust (CAT 2017) and agreed with the Historic Environment Advisor of Essex County Council's Place Services. All work was carried out in accordance with this WSI.

All work was carried out according to standards and practices contained in the Chartered Institute for Archaeologists' *Standard and guidance for archaeological investigation and recording of standing buildings or structures* (2008), *Management of research projects in the historic environment* (MoRPHE), and *Standards for field archaeology in the East of England* (EAA 14). In addition, the guidelines contained in *English Heritage: Understanding Historic Buildings, A guide to good recording practice* (2006) and *RCHME: Descriptive Specification 3rd Edition* were followed.

3 Aims

The aim of the building recording was to provide a detailed record and assessment of the building prior to conversion. The building recording was carried out to Level 3 (English Heritage, 2006).

In particular the record considered:

- Plan form of the site.
- Materials and method of construction.
- Date(s) of the structure.
- Function and internal layout.
- Fixtures and fittings.
- Original and later phasing, additions and their effect on the internal/external fabric and the level of survival of original fabric.
- Context of the farm building within its immediate contemporary landscape.
- The significance of the site on a regional context.

4 Building recording methodology

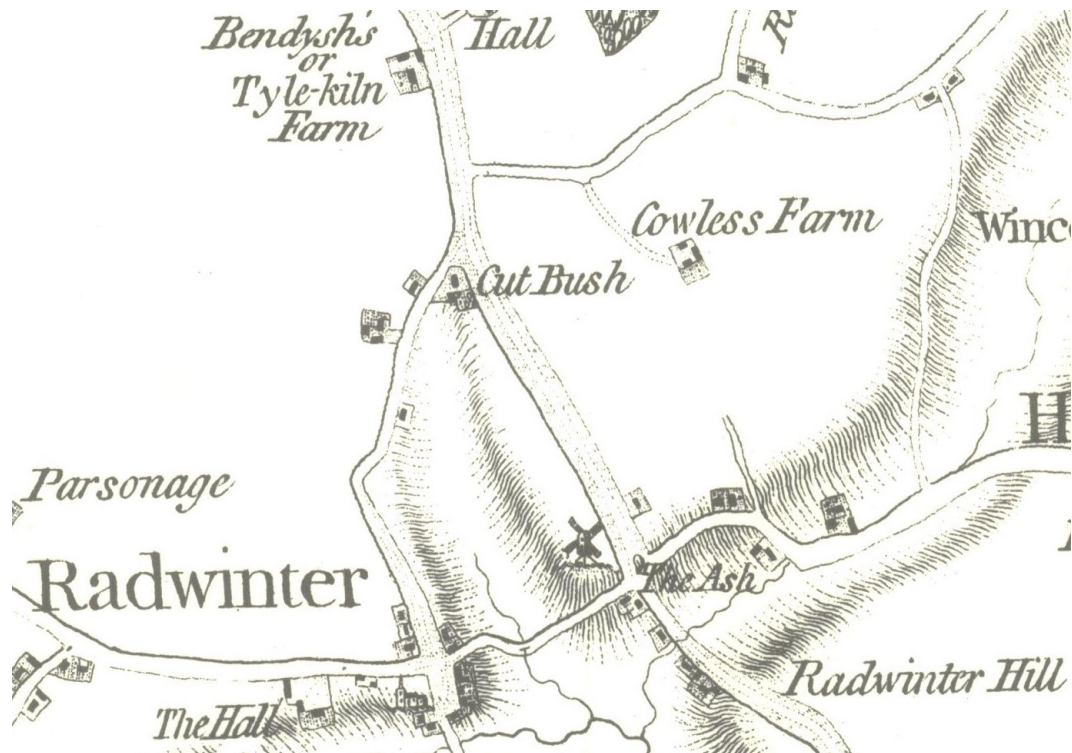
The following are included in this report:

- A brief documentary and cartographic survey of the evidence pertaining to the history and evolution of the barn.
- A large-scale block plan of the site based on pre-existing architects' drawings.
- Scaled current floor plans and elevations, based on existing architects' drawings, using the English Heritage (2006) drawing conventions. The floor plan depicts positions of doors, framing including studs and rafters, windows, internal partitions, stairs, bay divisions/truss positions and the positions of surviving technology, fixtures and fittings plus later additions and evidence of phasing.
- A 1:50 section of the barn based on existing architects' drawings and using the RCHME (1996) conventions. This includes a truss, that least impacted by modern alterations and its position is accurately located on the plan (ie A, A1). The cross section shows all major components, carpenters' marks, joints and evidence of phasing.
- A detailed description of the building. The description addresses features such as materials, dimensions, method of construction including brickwork, joinery, fenestration, spatial configuration, phasing, re-used timbers, carpentry marks/graffiti and any evidence of original fixtures and fittings.
- A discussion of the history and development of the building, including its design, date, form and function and any significant modifications/reuse.
- A full photographic record, comprising digital photographs and monochrome 35mm prints of both general shots and individual features (external and internal).

Selected examples of the digital photographic record are clearly tied into the drawn record and reproduced as fully annotated photographic plates supporting the text (Appendix 1). The digital photographic record is accompanied by a photographic register detailing location and direction of shot (Appendix 2). The monochrome 35mm photographic record is accompanied by a photographic register detailing location and direction of shot (Appendix 3).

5 Historical background (Maps 1-6)

Cowlass Hall Farm is a post-medieval farm complex in the parish of Radwinter dating from the 17th century, although court rolls make reference to a *Kowleys* in 1538 so it would appear there was an earlier farmstead on the site (Reaney, p514). The farm complex formed part of the manor of Faulkbourne and Radwinter which passed to the Bullock family in around 1637 and was recorded as *Cowleas* in a 1642 rental agreement. Although the farmhouse dates to the 17th century, the surviving barn is believed to date to the 18th century. The farm complex is shown on the 1777 Chapman and André map of Essex (sheet 2 - Map 1), on which it is called *Cowless Farm*. The Chapman and André map shows a complex of three buildings, one of which is long and rectangular and probably represents a barn. However, the 1777 layout does not resemble what is depicted on later mapping so it is not possible to confirm an 18th-century date for the barn from this cartographic source.



Map 1 1777 Chapman and André map of Essex (sheet 2)

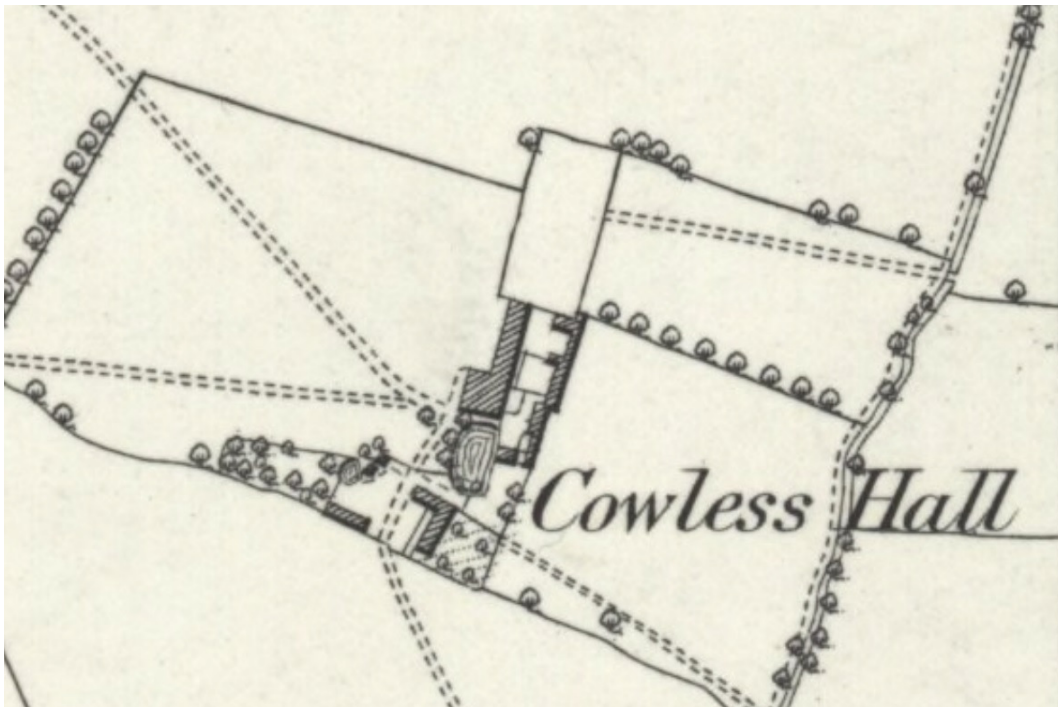
The farm was still known by this spelling in 1833 when the deeds of Falkbourne Manor (ERO D/DU 167/31) record that Cowless Hall Farm was 141 acres in size and leased to Thomas Welch. This is supported by the 1838-9 tithe map and award (ERO D/CT 279) which simply records the farm complex as Cowless Hall. The tithe map offers a clear illustration of the layout of the farm buildings in 1838 (Map 2). This shows a plan form for the farm complex identical to the 2017 layout, a linear arrangement on a north-east to south-west alignment, with the barn separated from the farmhouse by a pond. The 18th-century barn, complete with its extensions to the south abutting the brick stable block, is clearly visible, as is the lean-to outbuilding projecting from the western side (OB1). However, the 1838 plan form has several significant differences to the 2017 layout. The barn is shown as being the full width of the brick stable block at the south end of the range and has a small, centrally-located projection on the east side. The barn as surveyed in 2017 is neither as wide as the brick stable nor does it have this projection on the east side, so the 1838 layout must have included an additional structure extending the full length of the barn, probably a lean-to or shelter shed for livestock. A free-standing building is shown to the east of the barn (possibly a granary?) and there are two smaller free-standing structures to the east of the pond. The tithe award lists the owner of Cowless Hall Farm Homestead as Jonathan Bullock, with the occupier as Thomas Welch. Land associated with the farm was predominantly arable.



Map 2 1838 tithe map for Radwinter (ERO D/CT 279)

Accounts from the farm for 1873-5 record James Gowlett as the tenant, farming 171 acres of land, 143 acres of which were arable (Leyton, pp22-23). The farm was better equipped than most, with five pairs of horses capable of pulling ploughs, horse hoes and harrows, a cultivator, a roller, a seed drill, a chaff box and a threshing drum, all of which attest to the prosperity of the farm at this time.

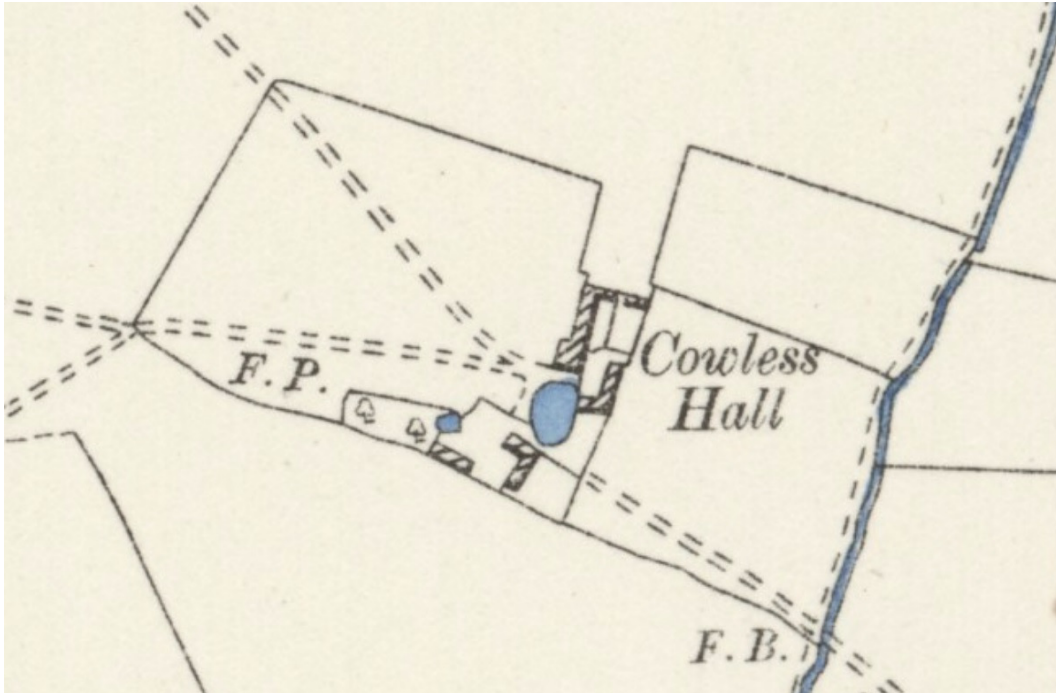
The 1877 edition of the Ordnance Survey (Map 3) shows a large degree of expansion/alteration to the earlier layout. The 18th-century barn, complete with its extensions to the south abutting the brick stable block and the lean-to outbuilding projecting from the western side, appear unaltered. However, the map shows that additional buildings to the east and the south-east of the barn have been erected, probably replacing the buildings shown in this location on the tithe map. These comprised a range of structures parallel to the barn with a second range to the south, slightly offset to the range above it, and a short range perpendicular to this. These were probably stables or livestock sheds. None of these buildings were present at the time of the survey. The lines shown between the two ranges probably represent brick walls for livestock pens. The reason behind this expansion is probably the prosperity of the tenant, James Gowlett.



Map 3 1877 6 inch edition Ordnance Survey (sheet IX)

A record of the rental of farms and property included in the marriage settlement of the owner, W H Bullock Esq from 1883 (ERO D/DU 167/36), confirms that Cowless Hall Farm was still being leased to James Gowlett for a rent of £170.

The 1896 edition of the Ordnance Survey (Map 4) shows that further changes were made to the farm complex after 1877. The northern range to the east of the barn has been removed and a new structure built against the east side of the barn (a cart lodge surviving only as ruins at the time of the survey - OB2). The layout of the livestock pens has also been altered.

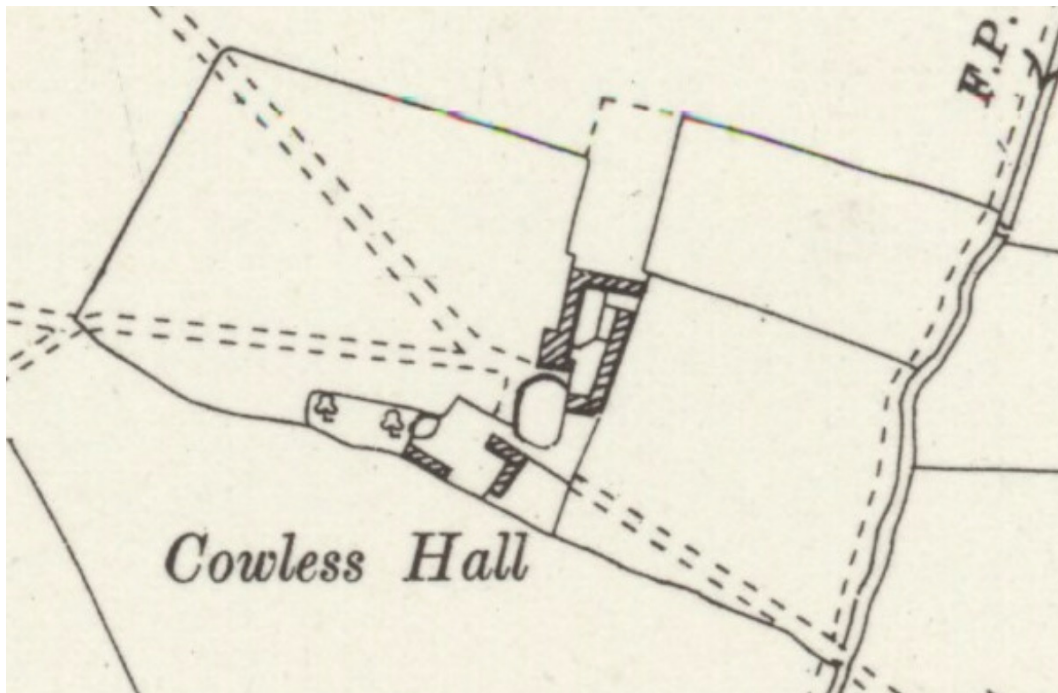


Map 4 1896 6 inch edition Ordnance Survey map (sheet IX NE)

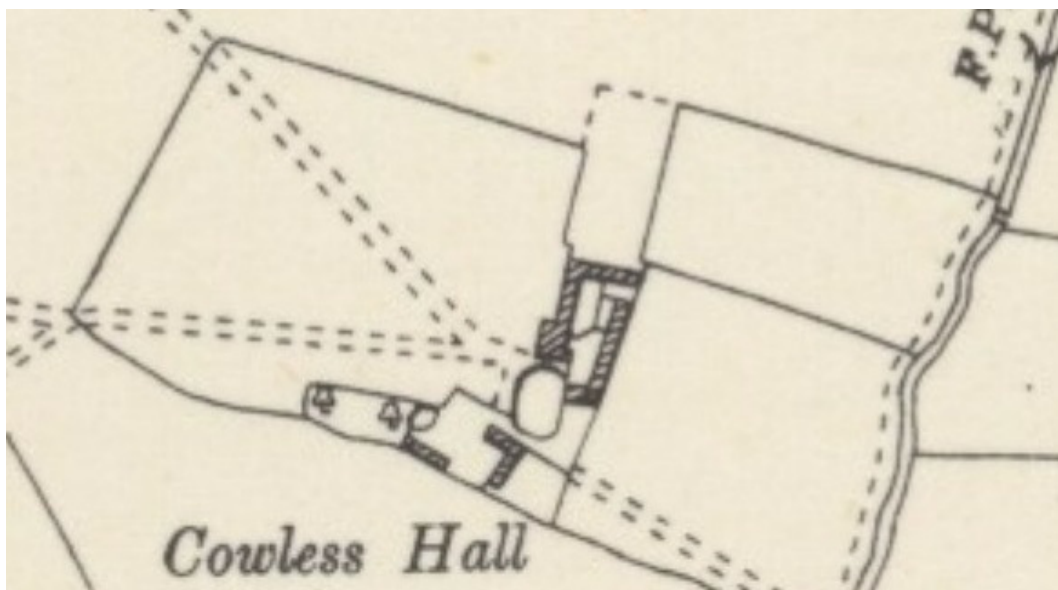
The apparent prosperity associated with Cowless Hall farm in the late 19th century is perhaps best shown by the fact that by 1900 James Gowlett was able to afford a steam traction engine when he moved to Radwinter Hall, leaving his son John to continue farming at Cowless.

The prosperity appears to have continued throughout the First World War. By 1919 the northern half of the eastern range had been rebuilt, this time without the offset of the earlier structure, and an additional building constructed next to the cart lodge. This had the effect of creating an enclosed farmyard, one with entrances in the south-west and north-east corners (Map 5). The structure shown on the 1877 Ordnance Survey extending the length of the east side of the barn appears to have been removed by this time as the brick stable block at the south end of the barn is shown projecting further east than the main range of the barn which is also now shown at its correct width.

This layout stayed the same until at least 1948 (Map 6). It is unclear when the east and south ranges were demolished but this probably occurred in the late 20th century.



Map 5 1919 6 inch edition Ordnance Survey map (sheet VIII)



Map 6 1948 6 inch edition Ordnance Survey map (sheet VIII)

6 Descriptive record (Figs 2-7)

For the purposes of the following descriptive record the barn, including its extensions, will be discussed in terms of its bays, numbered 1-10, whilst the lean-to and the cart lodge have been designated OB1 and OB2.

Barn: External description

The barn comprises a main range of ten bays, aligned north-east to south-west, built up against the rear wall of the brick stable block and is 31.1m long by 5.1m wide (Fig 2). At the south-west corner there is a single-storey lean-to (OB1) and projecting from the north-east corner are the ruins of a single-storey cart lodge (OB2). The barn has a gabled roof of corrugated iron sheeting and the exterior is clad in black-painted horizontal weatherboard.

The north-west elevation (Photograph 1, Fig 3) has two non-projecting midstreys at bays 3 and 6, which indicate the barn was used for threshing. These midstreys have gabled pediments rising from the eaves. The opening for the barn doors of the midstrey to bay 3 has been diminished with the northern barn door completely replaced by studwork and the southern door replaced by a smaller door with two lights above it. The opening for the barn doors of the midstrey to bay 6 retains full height cart doors as well as the threshold leap, although these are replacements for the originals. The majority of the north-west frame sits on a plinth of red brick with dimensions of 230 x 120 x 66mm, laid in a rough Flemish bond. The top course of this is chamfered. Approximately 1.5m to the right of the midstrey to bay 6 this plinth stops, with the remainder of the barn to the south (19th-century extensions) carried on a much lower plinth (Photograph 2). A doorway provides access to bay 7 (Photograph 3). A much smaller doorway is located next to this, the purpose of which is unclear but may be linked to machinery located inside. The remainder of the north-west elevation is obscured by OB1 but visual inspection within the lean-to shows that the horizontal weatherboard continues and that there is an entrance to bay 10 with a hatch directly above this (Photograph 4).

The majority of the south-west elevation of the barn is obscured by the 18th-century brick stable block (Photograph 5, Fig 4). All that is visible is the gable end, clad with horizontal weatherboarding. A weathervane with a canine motif is affixed to the apex of the gable.

The south-east elevation is plain weatherboard above areas of render and brickwork (Photograph 6, Fig 5). This clearly shows that the plinth walls of the extensions to the south end of the main barn are significantly higher than the plinth wall of the main barn. Two buttresses to the plinth wall of bays 9 and 10 are probably modern additions. An entrance to bay 8 is the only access to the barn on this side. The original cart door entrances on this elevation have been blocked, although it is clear where these were originally located. The north end of this elevation is partially obscured by the ruins of OB2.

The north-east elevation has been completely converted to accommodate full height doors formed from galvanised sheets on a steel frame (Photograph 7, Fig 6). The gable end above this is horizontal weatherboard and has probably been completely rebuilt.

Barn: Internal description

The interior of the barn comprises ten bays, labelled 1 – 10 on Fig 2. These ten bays incorporate the original 18th-century barn (bays 1-6) and the early 19th-century extensions to its south (bays 7-8 and 9-10).

The frames forming bays 1-6 are of softwood (probably of Baltic pine although no Baltic marks were observed). The sill beam is 140mm wide by 80mm high, with straight principal posts of 140mm², a wall plate 140mm wide by 75mm high and studs averaging 80mm wide by 140mm deep. Straight primary braces (75mm wide by 140mm deep) fall from either side of the principal posts to the sill beam, generally at one stud removed from the adjacent posts. All of these timbers are hand-sawn, although the quality is of such a standard as to appear machine-cut. Above the sill beam the gaps between the feet of the studs have been filled with five courses of brick, suggesting the barn was converted to house livestock at one point. The original floor has been replaced with concrete and no trace of the threshing floors has survived (Photographs 8, 9). Each pair of posts supports a tie beam (180mm high by 75mm wide) which carry the principal rafters of the roof trusses (Fig 7). The rafters of the trusses (110mm by 75mm) are the only rafters present in the roof and these carry a single purlin to each pitch. The trusses are completed by inclined struts (110mm by 75mm) and a steel king bolt. The corrugated iron sheeting that forms the roof covering is attached directly to the purlins and a ridge board at the apex of the trusses (Photograph 10). Some, but not all, of the trusses have straight braces from principal post to tie beam (110mm by 75mm). These are nailed into position rather than having traditional scarf joints (Photograph 11). Scarf joints in the purlins are simple splayed joints and are also nailed. The timbers of each truss are machine-cut and the trusses themselves are all late 19th or early 20th-century replacements.

There are chiselled carpenters' marks throughout the barn, on both the original timbers and the modern timbers of the roof trusses. In bays 1 and 2 (Photographs 12, 13) there is a 'I' to the foot of each stud and primary brace and a 'III' to the head of each stud and primary brace on the south-east side. On the north-west side this is a 'I' at the feet and a 'II' at the heads (Photograph 14). Each of the joints to truss A has a 'I' and the braces from the principal posts to the tie beam are missing. The purlins to both pitches are scarfed above bay 2. The timbers of truss B have 'V' and 'VI' marks at the joints.

Bay 3 was originally one of the two threshing bays with cart door openings on both sides. These have been substantially altered (Photographs 15, 16). On the south-east side the cart door opening has been infilled by a modern frame with studs of 35mm wide by 105mm deep with block work below to replicate the plinth wall. There is also an edge-halved scarf joint in the wall plate. On the north-west side the cart door opening of the midstreys has been partially infilled and the opening reduced to a narrower doorway with a window above this. There are scarf joints in the purlins above bay 3. The timbers of truss C have 'II' marked on the joints.

The south-east side of bay 4 (Photograph 17) has 'II' marked on the feet of the studs and bracing with 'IIV' to the heads. The north-west side (Photograph 18) has a combination of 'IIII' and 'IV' to the feet and 'III' to the heads. Truss D has 'IIII' at the joints and 'V' where the tie beam and principal post are braced on the north-west side (Fig 7).

The south-east side of bay 5 has 'V' marks to both feet and heads of the framing timbers (Photograph 19) whilst the north-west side has 'V' marks to the feet and a combination of 'IV' and 'IIII' to the heads (Photograph 20). Truss E has 'IV' marked on the south-east side post and brace and 'V' on the north-west side, although the brace itself is absent. There are no other marks to the remaining joints of the truss. There are scarf joints in the purlins above bay 5.

Bay 6 was originally the second threshing floor. The cart door opening in the south-east wall has been infilled in the same manner as bay 3 (Photograph 21) but the opening in the north-west side retains a set of full-height cart doors complete with threshold leap, although these are replacements to the original doors (Photograph 22). Truss F has 'V' marks on the south-east post and brace whilst the brace to the north-west side is absent and there are no apparent carpenters' marks to that side or the remainder of the truss timbers.

Curiously there is a narrow bay, two studs wide, between truss F and the gable end. Although the narrowness of this bay (and indeed the overall plan form of the barn) would suggest that the gable end is a later insertion this does not appear to be the case. The plinth to the gable end is constructed from bricks with the same dimensions as the rest of the barn and appears continuous rather than keyed in (Photograph 23). The framing of the gable end is identical to that of the bays, with primary bracing falling from the central post. A doorway has been inserted through the plinth and the framing, providing access into the extensions beyond, bays 7-10. Any doubt about this frame being the original south end to the 18th-century barn is dispelled when bays 7 and 8 are examined.

The interior of bays 7 and 8 shows that this extension to the barn was constructed after the main barn, but also after bays 9 and 10 were constructed, although both extensions appear to have been built relatively shortly after the main barn was built. Photograph 24 shows the gable end of the main barn, clad in weatherboard and Photograph 25 shows the exterior of bays 9 and 10, also clad in weatherboard. This indicates that bays 7 and 8 were previously open space between the main barn and the extension comprising bays 9 and 10. Further evidence for this theory is found in the height of the plinth walls carrying the frames. The north-west frame is carried on a low brick plinth, only a few courses high. However, the south-east frame is built off a brick wall of thirteen courses which extends from the corner of the main barn through bays 7 and 8 and also through bays 9 and 10, joining up with the rear wall of the 18th-century brick stable block. The bricks have dimensions of 220 x 105 x 66mm and are laid in an irregular bond. This is most likely a farmyard wall that is contemporary to the main barn and brick stable block. The timbers of both frames comprise sill beams 140mm wide by 75mm high, wall plates of 140mm wide by 80mm high and studs 80mm wide by 140mm deep. The primary braces are 140mm deep by 70mm wide. The

studs of the south-east frame have carpenters' marks ('I' - 'X') with a 'II' on the brace. This was not replicated on the opposite frame. All timbers are hand-sawn. The wall plates are scarfed to bays 6 and 9 with splayed and nailed joints. A grain hoist (probably dating to the mid 20th century) is located on the north-west side of bay 8 (Photograph 27). A truss (truss G) identical in form to trusses A-F is located off centre to the extension. A doorway with a timber ramp provides access to bays 9 and 10. This doorway is directly in line with the doorway inserted to the gable frame of the main barn suggesting that this was inserted when the space between the main barn and the extension was infilled by bays 7 and 8.

Bays 9 and 10 originally formed a separate structure. This was added to the main barn and incorporates the rear wall of the 18th-century brick stable block and the contemporary farmyard wall discussed above in its construction. The dividing wall between bays 8 and 9 comprises a timber frame built on a low brick plinth. The plinth and the sill beam were obscured by corrugated sheeting but enough of the frame was visible to record that the studs were 75mm wide by 140mm deep rising to a wall plate 75mm high by 140mm wide, with primary braces of 75mm wide by 140mm deep, all hand-sawn (Photograph 28). The primary bracing is off centre, an intentional design to accommodate the doorway. The rear wall frame to bay 10 uses the rear wall of the 18th-century brick stable block as a plinth but comprises machine-cut timbers and has clearly been rebuilt (Photograph 29). The south-east framing has a wall plate 75mm high by 140mm wide and studs 75mm wide by 140mm deep. The sill beam was obscured by zinc sheeting but the entire frame sits on the farmyard wall. Primary bracing was present to bay 10. The north-west framing has timbers of the same dimensions as the opposite frame, although the bracing is limited to a single timber falling from the corner post to the frame of the doorway. A roof truss (truss H) identical to the other trusses in size divides the extension into two bays. No carpenters' marks were observed in bays 9 and 10 but a set of initials (J.A.K) were carved into the south-east wall plate of bay 9. These initials do not correspond to anyone identified in the historical research but may belong to the builder of the structure or a farm worker.

OB1

Outbuilding 1 is a single-storey structure located on the south-west corner of the barn (Fig 2). This straddles bays 8-10 and part of the 18th-century brick stable block (Photographs 1, 5). Its catslide roof is covered in the same corrugated iron sheeting as the barn indicating that the roof is not original. The exterior has vertical boarding to both short sides with weatherboard covering the north-west elevation, which has a pair of large doors (Fig 3). The interior has a concrete floor and a large iron-lined concrete trough in one corner but is otherwise unremarkable. Although the map regression indicates that there was a structure of comparable size and shape in this location since at least 1838, the state of the timbers comprising the OB1 could indicate that this structure has been substantially rebuilt since that time.

OB2

Outbuilding 2 was a three-bay cart lodge projecting from the north-east corner of the main barn. Constructed of softwood timbers on a low brick plinth, this had a gabled roof of corrugated iron sheeting, probably not the original roof covering. At the time of survey this had collapsed completely (Photograph 6) and no detailed investigation was carried out due to safety concerns.

7 Discussion

Cowlass Hall Farm barn is a structure with components dating to the late 18th century, but which evolved over a relatively short period of time into a much larger complex of structures and then maintained its plan form into the 21st century. In addition to 20th-century alterations, five distinct phases of construction were identified.

Phase 1 comprises the six bays of the main barn and probably dates to the late 18th century, based on the cartographic evidence. Associated with this phase are the brick stable block and the farmyard wall that bays 7-10 were built on. These three features are obviously contemporary and formed one side of the 18th-century farmyard.

Phase 2 comprises bays 9 and 10, which were originally constructed as a building attached to the rear of the brick stable block and were not associated directly with the barn. This was probably built very early in the 19th century, certainly prior to 1838.

Phase 3 comprises bays 7 and 8, built to join the two structures into a continuous range. This was also carried out prior to 1838.

Phase 4 comprises OB1 which is built up against bays 8-10 and part of the brick stable block. Once again, the cartographic evidence indicates this was completed by 1838.

Clearly if the main barn was constructed in the late 18th century, there was shortly afterwards a sustained programme of extension that incorporated the structures represented by Phases 2-4.

A fifth phase was also identified, comprising the cart lodge OB2 which is dated 1877-96.

If Phases 1-4 represent a short timespan of rapid building at Cowless Farm, then there must have been a reason for this. As the main barn was constructed as a threshing barn, it fits the county-wide model of construction and renovation of agricultural buildings that was taking place at the end of the 18th century and the start of the 19th century. Stimulated by rising population in the 18th century and high grain prices resulting from the Napoleonic Wars, England at this time saw an expansion in arable production that culminated in the Victorian High Farming period in the mid 19th century. Consequently farm buildings were added to and extended to cope with this increased production which required additional processing and storage facilities.

The barn itself is quite interesting because it does not appear to conform to the normal layout for a threshing barn. There is a lack of symmetry to the main barn which is unusual for a threshing barn. Usually the midstreys are evenly distributed to the bays, presenting a symmetrical façade but this is certainly not the case at Cowless Hall Farm. The non-

projecting midstreys are also unusual for an Essex threshing barn. One theory for their omission from the barn's design (which might also explain the lack of symmetry) could be that not enough timber was available or could be afforded to complete the barn in the more usual fashion. However, this theory does not sit well with the apparent prosperity of the farm during this period, so it is unlikely to be correct. Another explanation could be that the builder was not particularly competent, but the quality of the framing would seem to suggest this was not the case.

The original roofs of the main barn and its extensions have clearly been replaced as the existing roof trusses are identical along the entire length of the barn and are formed of machine-cut timbers with steel king bolts and nailed joints, whilst the framing of the structures comprise hand-sawn timbers pegged together. The date for this replacement roof is either late 19th century or early 20th century, but as it seems to have been designed to carry corrugated iron sheeting which became popular as an agricultural building material after the First World War, it seems more likely that an early 20th-century date would be accurate.

The chiselled carpenters' marks that appear on the wall framing and on some of the truss timbers are problematic. Either these all date to when the roof was replaced, which seems unlikely, or an attempt was made to tie in the trusses to the appropriate bays by replicating or continuing existing assembly marks.

The barn at Cowlass Hall Farm is an example of how farm buildings in England have continuously been adapted to meet changing agricultural trends and practices. Although initially designed to process and store grain crops, the barn evolved to house livestock (evidenced by the brick infill between the feet of the studs) and appears to have ended its working life as a machine store (evidenced by the large doors inserted into the north gable and the sturdy concrete floor). The conversion to a dwelling is the latest chapter in the evolution of this building.

8 Acknowledgements

Colchester Archaeological Trust would like to thank Alex and James Archer for funding the building recording.

Plans are adapted from surveys carried out by Kay Pilsbury Thomas Architects.

The building recording was carried out by Chris Lister and Ben Holloway with additional research by Laura Pooley.

The project was monitored by Richard Havis, Essex County Council.

9 References

Note: all CAT reports, except for DBAs, are available online in .pdf format at

<http://cat.essex.ac.uk>

CAT	2017	<i>Written Scheme of Investigation (WSI) for historic building recording at Cowlass Hall Farm, Radwinter End, Radwinter, Essex CB10 2UD</i>
CAT	2014	<i>Health and Safety Policy</i>
CIFA	2014a	<i>Standard and guidance for the collection, documentation, conservation and research of archaeological materials</i>
CIFA	2014b	<i>Standard and guidance for archaeological investigation and recording of standing buildings or structures</i>
DCLG	2012	<i>National Planning Policy Framework. Dept of Communities and Local Government.</i>
ECCPS	2017	<i>Archaeological brief for building recording at Cowlass Hall Farm, Radwinter End, Radwinter</i>
English Heritage	2006	<i>Management of Research Projects in the Historic Environment (MoRPHE)</i>
English Heritage	2006	<i>Understanding Historic Buildings, A guide to good recording practice</i>
Gurney, D	2003	<i>Standards for field archaeology in the East of England, East Anglian Archaeology, Occasional Papers, 14 (EAA 14).</i>
Harvey, N	1984	<i>A History of Farm Buildings in England and Wales, David and Charles</i>
Kay Pilsbury Thomas Architects	2015	<i>Heritage and design and access statement report: conversion of agricultural barn to dwelling house at Cowlass Hall Farm</i>
Leyton, L	2000	<i>In Radwinter 1900 Life in an Essex Village One Hundred Years Ago (ed Tim Pratt)</i>
Medlycott, M	2011	<i>Research and archaeology revisited: A revised framework for the East of England. East Anglian Archaeology Occasional Papers 24 (EAA 24)</i>
RCHME	1996	<i>Recording historic buildings, a descriptive specification</i>
Reaney, P, H	1935	<i>The Place Names of Essex</i>
Stenning, D and Andrews, D	1998	<i>Regional variation in timber-framed buildings in England and Wales down to 1550, Essex County Council</i>
Wade, M, S	1991	<i>Historic Farm Buildings, Batsford</i>

10 Abbreviations and glossary

carpenters' marks	symbols scratched, incised or chiselled into timber to assist in assembly
CAT	Colchester Archaeological Trust
CIfA	Chartered Institute for Archaeologists
collar	horizontal member in a roof spanning between a pair of inclined members such as principal or common rafters
EHHER	Essex Historic Environment Record, held by the ECC
ERO	Essex Records Office
HE	Historic Environment
girding beam	a timber beam placed horizontally in a wall frame at a level between the sill and the tie beam or wall plate.
modern	period from the 19th century onwards to the present
NGR	National Grid Reference
NHLE	National Heritage List for England
post	in wall frames vertical members which rise the full height of the frame, being either main posts at the bay divisions or intermediate posts within the bay
post-medieval	after Henry VIII to around the late 18th century
purlin	longitudinal roof timbers, intermediate between wall-plate and ridge, carried by roof trusses and giving support to rafters
sill beam	the beam at the foot of a timber-framed wall from which rise the all the

	studs (and usually the posts)
tie beam	beam tying together the post-heads of a timber-framed wall or the upper surfaces of a solid wall
truss	a frame consisting of several pieces of timber, jointed and triangulated in order to retain its shape under load
wall plate	a timber running horizontally along the top of a wall to receive the ends of common rafters

11 Archive deposition

The paper and digital archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, Essex CO2 7GZ, but will be permanently deposited with Saffron Walden Museum under accession code SAFWM:2017.4.

12 Contents of archive

One A4 document wallet containing:

1 Introduction

- 1.1 Copy of ECC Place Services Brief
- 1.2 Copy of WSI produced by CAT
- 1.3 Risk assessment
- 1.4 Copies of existing plans and elevations

2 Site archive

- 2.1 Digital photographic record
- 2.2 Digital photographic contact sheet
- 2.3 Monochrome 35mm photographic record
- 2.4 Monochrome 35mm contact sheet
- 2.3 Attendance register
- 2.4 Site photographic record on CD

3 Research archive

- 3.1 Client report
-

Distribution list

EHER

Richard Havis, ECC Place Services Historic Environment Advisor
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checked by: PC
date: 14/07/2017

Appendices
Appendix 1
Selected photographs



Photograph 1 North-west elevation of the barn, with OB1 to the right - view south-east.



Photograph 2 North-west elevation, showing plinth of main barn to the left with 19th-century extension to the right built on a much shallower plinth - view north-east.



Photograph 3 North-west elevation, door to bay 7 (19th-century extension) with small modern door to the right - view south-east.



Photograph 4 Entrance to bay 10 in the 19th-century extension to the main barn, with contemporary hatch above - view south-east.



Photograph 5 South-west elevation, mainly obscured by the 18th-century brick stable block and with OB1 to the left. The gable of the barn has a weathervane with a canine motif - view north-east.



Photograph 6 South-east elevation of the barn with the 18th-century brick stable block to the left and the ruins of OB2 to the right - view south-west.



Photograph 7 North-east elevation of the 18th-century barn with modern full height doors formed from galvanised sheets over steel frames; the ruins of OB2 are on the left - view south-west.



Photograph 8 Interior of the 18th-century barn, with the 19th-century extensions behind the gable frame – view south.



Photograph 9 Interior of the 18th-century barn, with the partially blocked midstrey of bay 3 to the left and the 20th-century doors replacing the north gable frame – view north.



Photograph 10 Replacement roof truss (truss B) of machine-cut timbers in 18th-century barn, with nailed brace and steel king bolt – view north-east.



Photograph 11 Nailed brace to south-east post of truss B and iron cramp to later tie beam - view south-east.



Photograph 12 South-east framing to bays 1 and 2 - view south-east.



Photograph 13 North-west framing to bays 2 and 1- view north-west.



Photograph 14 North-west framing to bays 2 and 1 showing carpenters' marks 'll' on heads of studs and principal post to truss A - view north-west.



Photograph 15 South-east framing to bay 3 replacing original cart door opening - view south-east.



Photograph 16 North-west framing to bay 3 showing partially blocked cart door opening to midstrey and replacement door – view north-west.



Photograph 17 South-east framing to bay 4 – view south-east.



Photograph 18 North-west framing to bay 4 – view north-west.



Photograph 19 South-east framing to bay 5 – view south-east.



Photograph 20 North-west framing of bay 5 – view north-west.



Photograph 21 South-east framing of bay 6 replacing original cart door opening – view south-east.



Photograph 22 Replacement cart doors to original midstrey in bay 6 – view north-west.



Photograph 23 Gable end framing separated from bay 6 by a narrow bay, with inserted doorway to the 19th-century extensions beyond – view south-west.



Photograph 24 Weatherboard to exterior face of bay 6, viewed from bay 7, with the frames of the 19th-century extension built up against the main barn and raised on taller brick plinths – view north.



Photograph 25 Weatherboard covering the north-east frame of bays 9 and 10, an earlier structure incorporated into the barn, viewed from bay 8. The frames of bay 7 and 8 are built up against this early 19th-century structure - view south-west.



Photograph 26 South-east framing of bays 7 and 8 showing the frame built up against the exterior of the main barn and sitting on a much taller brick plinth, which is probably an earlier farmyard wall. The doorway to the right appears to be an original opening through this wall. The primary bracing crosses both bays – view south-east.



Photograph 27 North-west framing of bays 8 and 7 showing the frame built up against the exterior of bays 9 and 10. The primary bracing crosses both bays. The machinery is a grain hoist and probably dates to the mid 20th century – view west.



Photograph 28 South-west framing of bay 9, with the locations of the primary bracing indicating that the doorway to the right is an original feature – view north-east.



Photograph 29 South-east frame of bay 10, constructed upon the rear wall of the 18th-century brick stable block – view south-west.

Appendix 2

Full list of digital photographic record (images on accompanying CD)

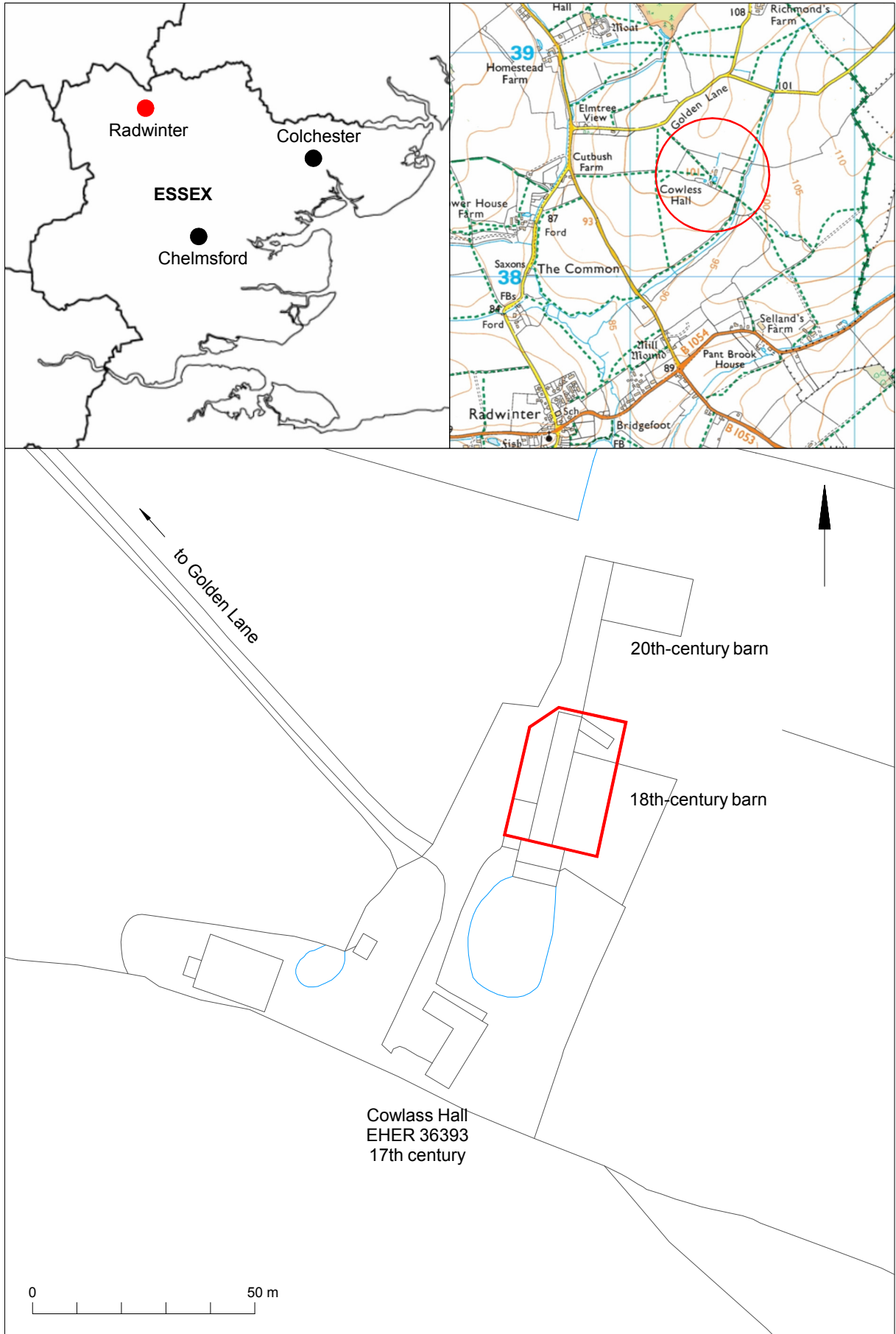
- 001.jpg North-west elevation of barn - view south-east.
002.jpg North-west elevation of barn - view north-east.
003.jpg Blocked midstrey to bay 3 - view south-east.
004.jpg Midstrey to bay 6 - view south-east.
005.jpg Detail of the joint between the brick plinth of the 18th-century barn and the lower brick plinth of the 19th-century extensions - view east.
006.jpg Detail of the brick plinth to the 18th-century barn, showing the chamfered top course - view south-east.
007.jpg Detail of lower strap hinge on replacement barn door to bay 3 - view south-east.
008.jpg Detail of upper strap hinge on replacement barn door to bay 3 - view south-east.
009.jpg Threshold leap to barn doors of south midstrey - view south-east.
010.jpg Door to bay 7 in north-east elevation of the 19th-century extensions, with inserted hatch to the right - view south-east.
011.jpg Vertical close-boarding to north-west elevation of OB1 - view south-west.
012.jpg 18th-century stable block at the south end of the barn - view north-east.
013.jpg Weathervane with canine motif on south gable of barn - view north-east.
014.jpg Weathervane with canine motif on south gable of barn - view north-west.
015.jpg South-east elevation of the 18th-century stable block - view north-west.
016.jpg ?original stable door to 18th-century stable block - view north-east.
017.jpg ?original fenestration to 18th-century stable block - view north-east.
018.jpg ?original door to tack room of 18th-century stable block - view north-east.
019.jpg Original iron harness hooks outside tack room of 18th-century stable block - view north-east.
020.jpg Well providing water for stable drinking troughs on south-east elevation of 18th-century stable block - view west.
021.jpg Interior of carriage store in 18th-century stable block - view north-east.
022.jpg Interior of tack room in 18th-century stable block with original brick pavior floor - view north-east.
023.jpg York stone slab in tack room floor of 19th-century stable block, original base for Butler sink - view south-west.
024.jpg South-east elevation of barn - view west.
025.jpg North-east elevation of barn and collapsed OB2- view south.
026.jpg North-east elevation of barn - view south-west.
027.jpg Interior of OB1 with iron-lined concrete trough set into the floor - view north-east.
028.jpg Interior of OB1 with entrance to bay 10 - view south-east
029.jpg Interior of OB1 - view north-east.
030.jpg Entrance to bay 10, 19th-century extension to 18th-century barn with a hatch directly above - view south-east.
031.jpg Interior of the 18th-century barn with the 19th-century extensions beyond - view south-west.
032.jpg Interior of the 18th-century barn with the 19th-century extensions beyond - view south-west.
033.jpg Interior of the 18th-century barn with the 19th-century extensions beyond - view south-east.
034.jpg Interior of the 18th-century barn - view north-east.
035.jpg Interior of the 18th-century barn - view north.
036.jpg South-east framing of bays 1 and 2 - view south-east.
037.jpg Plinth wall to south-east framing of bays 1 and 2 - view south-east.
038.jpg Replacement framing for original barn doors in south-east wall of bay 3 - view south-east.
039.jpg South-east framing of bay 4 with brick nogging between the feet of the studs - view south-east.
040.jpg South-east framing of bay 5 with brick nogging between the feet of the studs - view south-east.
041.jpg Replacement framing for original barn doors in south-east wall of bay 6 - view south-east.
042.jpg South-west framing of the 18th-century barn with inserted doorway to bay 7 - view south-west.
043.jpg Barn doors to midstrey of bay 6 - view north-west.
044.jpg Replacement doorpost to barn doors of bay 6 midstrey - view north-west.
045.jpg North-west framing of bay 5 with brick nogging between the feet of the studs - view north-west.
046.jpg North-west framing of bay 4 with brick nogging between the feet of the studs - view north-west.
047.jpg Partially blocked barn doors to midstrey of bay 3 - view north-west.
048.jpg Replacement door to midstrey of bay 3 - view north-west.

- 049.jpg North-west framing of bays 2 and 1 - view north-west.
- 050.jpg Inserted doors to north-east frame - view north-east.
- 051.jpg Chiselled carpenter's marks on north-west post and braces of truss A.
- 052.jpg Straight brace to post and tie beam of bay 3 - view north-east.
- 053.jpg Straight brace to post and tie beam of bay 3 with iron strapping and nailed joints - view south-east.
- 054.jpg Truss B roof timbers - view north-east.
- 055.jpg Pencil marks on tie beam aligned to strut of truss B - view north-east.
- 056.jpg Chiselled carpenter's marks at junction of strut and principle rafter of truss B - view north.
- 057.jpg Roof timbers to midstrey of bay 6 - view west.
- 058.jpg Edge-halved scarf joint in wall plate of bay 5 – view south-east.
- 059.jpg repeat.
- 060.jpg Manufacturer's marks "Tividale 494" on underside of the galvanized profile sheeting forming the roof of the barn.
- 061.jpg South-west elevation of the 18th-century barn - view north-east.
- 062.jpg South-west elevation of the 18th-century barn - view north-east.
- 063.jpg Doorway inserted into the south-west elevation of the 18th-century barn - view north-east.
- 064.jpg Grain hoist in corner of bay 8 - view south-west.
- 065.jpg North-east elevation of bay 9 - view south-west.
- 066.jpg South-east framing of bays 7 and 8 - view south-east.
- 067.jpg South-east framing of bay 7 - view south-east.
- 068.jpg South-east framing of bay 8 - view south-east.
- 069.jpg North-west framing of bay 7 - view north-west.
- 070.jpg North-west framing of bay 8, partially obscured by the grain hoist - view north-west.
- 071.jpg Ramp from bay 8 to bay 9 - view south.
- 072.jpg Interior of bays 9 and 10 - view south.
- 073.jpg South-west framing of bay 10, the 19th-century extension, constructed on the rear wall of the brick stables - view south-west.
- 074.jpg Interior of bay 9 - view north-west.
- 075.jpg North-west framing of bay 9 - view north-west.
- 076.jpg South-east framing of bays 9 and 10 constructed on an earlier farmyard wall - view south-east.
- 077.jpg South-west framing of bay 10 constructed on the rear wall of the earlier stable block - view south-west.
- 078.jpg Carved graffiti (JAK) on south-east wall plate of bay 9 - view south-east.

Appendix 3

Full list of 35mm film black and white photographs

- 001 South-east elevation of barn – south-west view.
- 002 South-east elevation of barn – south-west view.
- 003 South-east elevation of barn – north-west view.
- 004 South-east elevation of barn – north-west view.
- 005 South-east elevation of the 18th-century stable block - view north-west.
- 006 Door to bay 7 in north-east elevation of the 19th-century extensions, with inserted hatch to the right - view south-east.
- 007 18th-century stable block at the south end of the barn - view north-east.
- 008 18th-century stable block at the south end of the barn - view north-east.
- 009 Weathervane with canine decoration on south gable of barn - view north-east.
- 010 Hatch directly above entrance to bay 10, 19th-century extension to 18th-century barn - view south-east.
- 011 Weathervane with canine decoration on south gable of barn - view north-west.
- 012 Interior of tack room in 18th-century stable block with original brick pavior floor - view north-east.
- 013 Interior of the 18th-century barn - view north-east.
- 014 Interior of the 18th-century barn with the 19th-century extensions beyond - view south-west.
- 015 Doorway inserted into the south-west elevation of the 18th-century barn - view north-east.
- 016 Doorway inserted into the south-west elevation of the 18th-century barn - view north-east.
- 017 Straight brace to post and tie beam of bay 3 - view north-east.
- 018 Chiselled carpenter's marks on post and braces of bay.
- 019 Chiselled carpenter's marks on post and braces of bay.
- 020 Straight brace to post and tie beam of bay 3 with iron strapping and nailed joints - view south-east.
- 021 Truss B roof timbers - view north-east.
- 022 Pencil marks on tie beam aligned to strut of truss B - view north-east.
- 023 Pencil marks on tie beam aligned to strut of truss B - view north-east.
- 024 Roof timbers to midstrey of bay 6 - view west.
- 025 Roof timbers to midstrey of bay 6 - view west.
- 026 Edge-halved scarf joint in wall plate of bay.
- 027 Edge-halved scarf joint in wall plate of bay.
- 028 Grain hoist in corner of bay 8 - view south-west.
- 029 Grain hoist in corner of bay 8 - view south-west.
- 030 North-west elevation of barn - view south-east.
- 031 North-west elevation of barn - view south-east.
- 032 Blocked midstrey to bay 3 - view south-east.
- 033 Midstrey to bay 6 - view south-east.
- 034 North-west elevation of barn – view north-east.
- 035 North-west elevation of barn – view north-east.
- 036 North-west elevation of barn – view north-east.



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Fig 1 Site location.

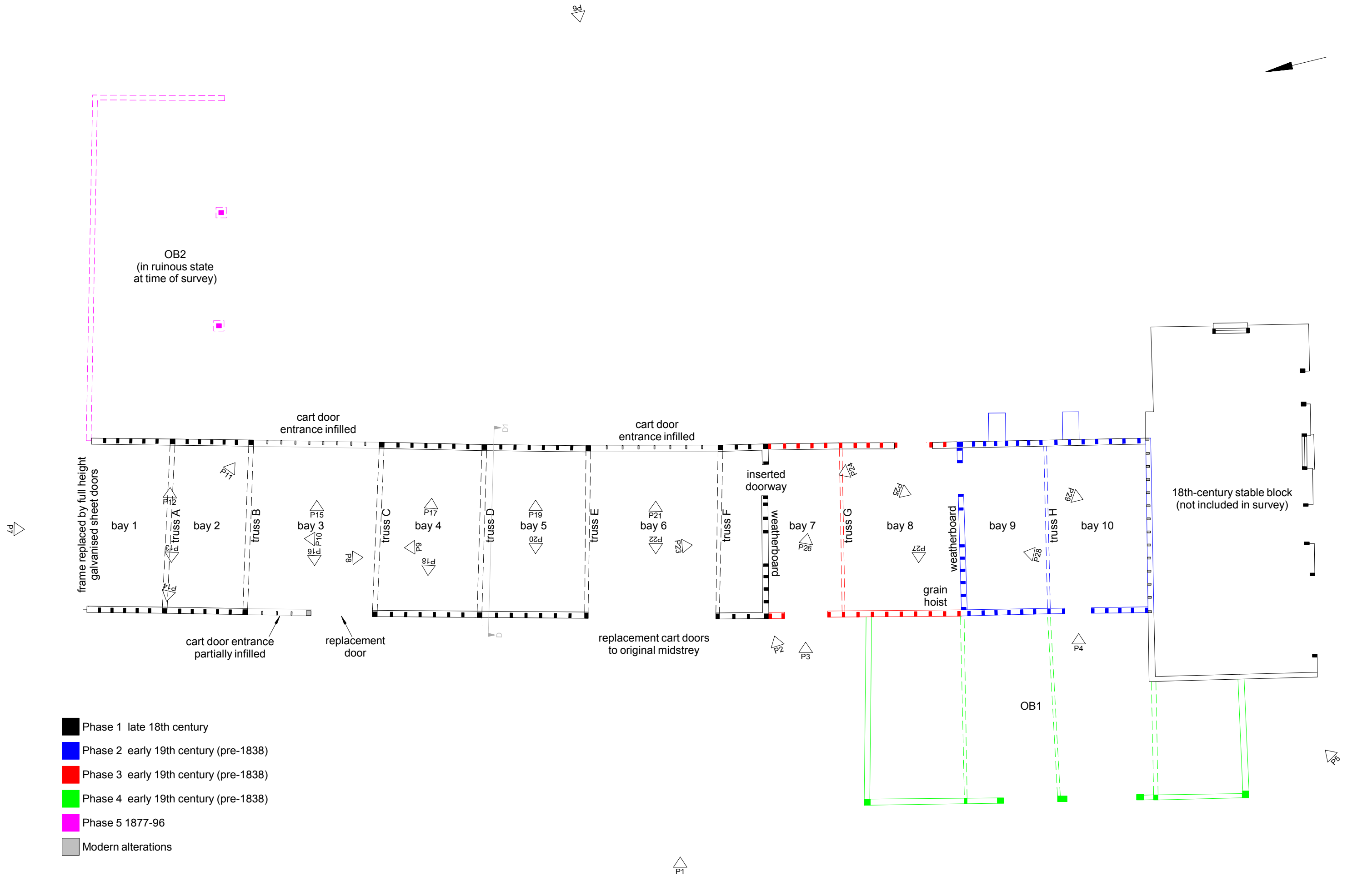


Fig 2 Plan of Cowlass Hall Farm barn with phasing.
 Location and direction of photographs reproduced in Appendix 1 indicated by the numbered arrows.

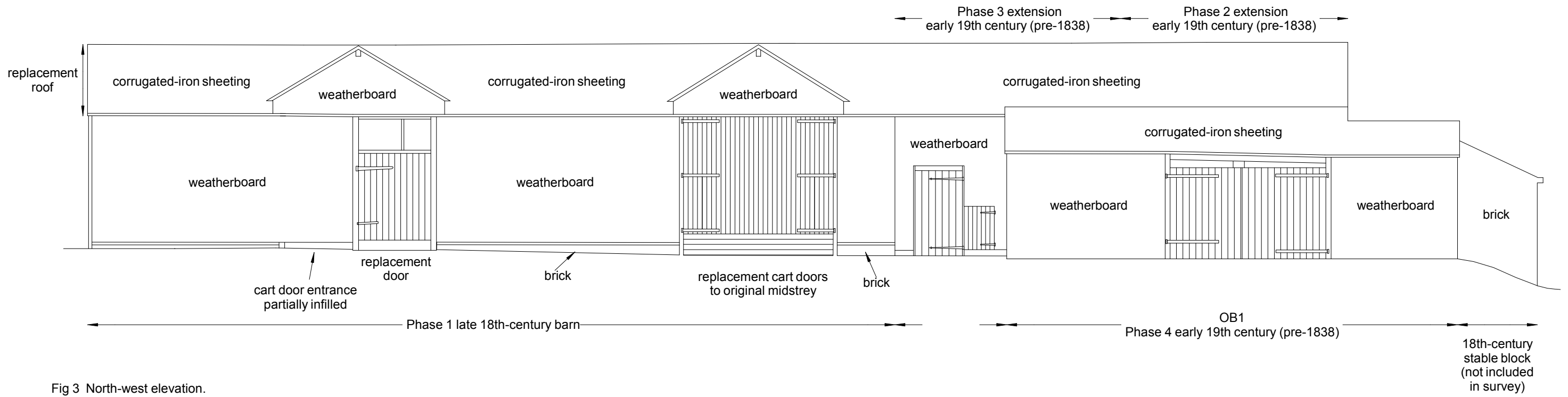


Fig 3 North-west elevation.

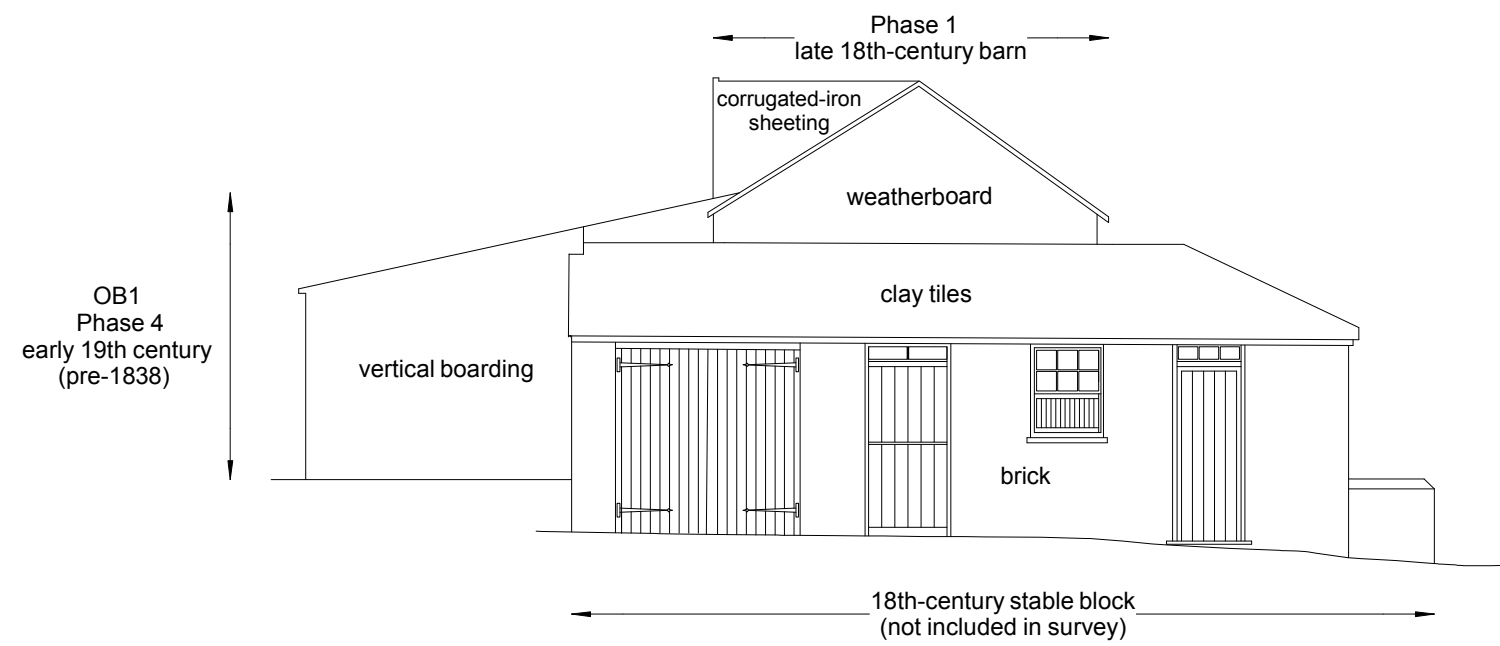


Fig 4 South-west elevation.



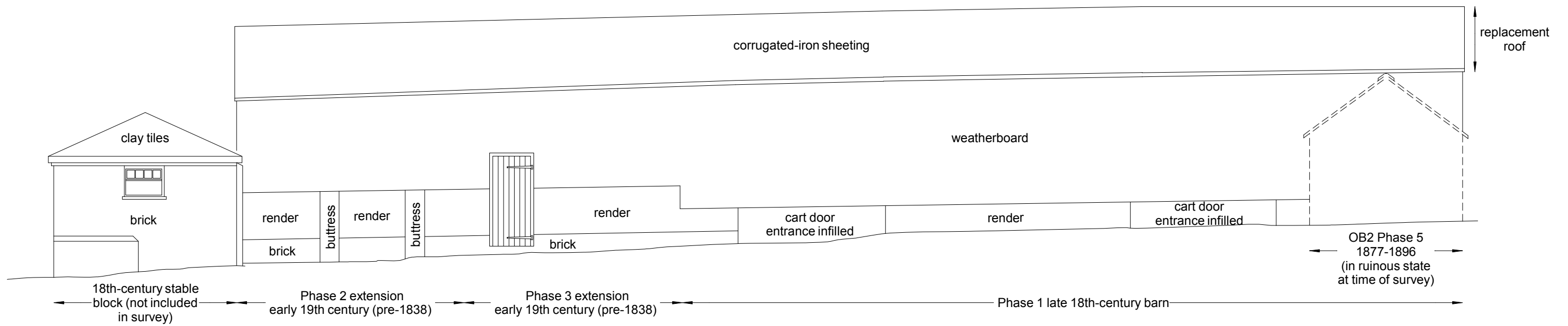


Fig 5 South-east elevation.

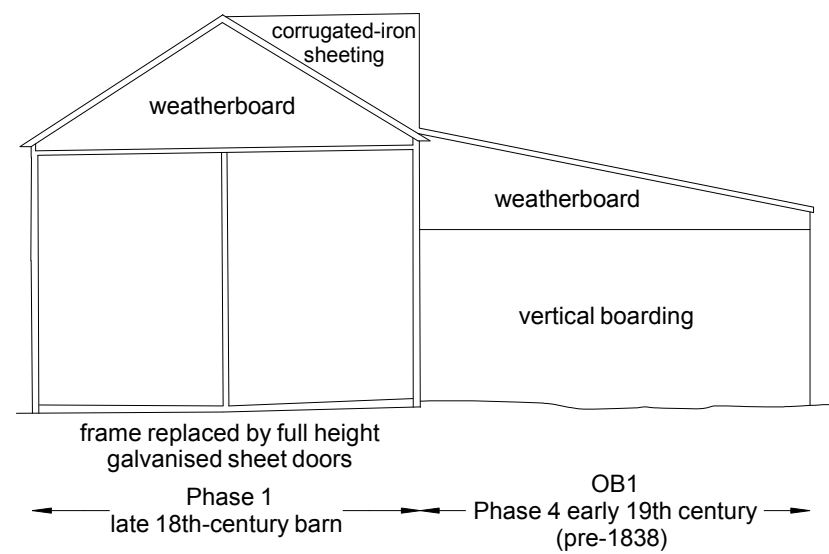


Fig 6 North-east elevation.



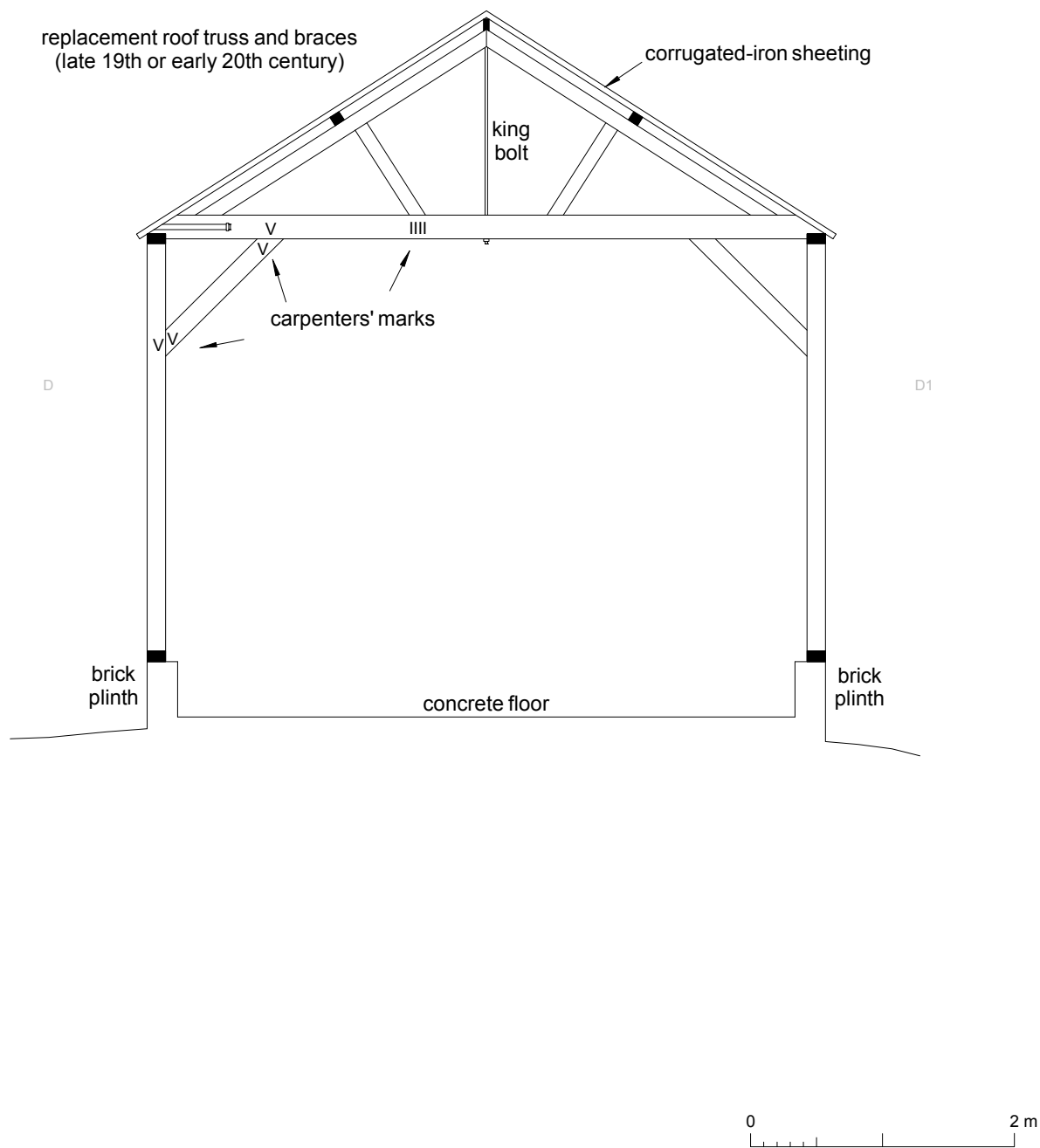


Fig 7 Cross-section of truss D.

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OASIS ID: colchest3-274129

Project details

Project name	Historic Building Recording at Cowlass Hall Farm, Radwinter End, Radwinter, Essex, CB10 2UD
Short description of the project	A programme of historic building recording was carried out by Colchester Archaeological Trust on a historic barn at Cowlass Hall Farm, Radwinter End, Radwinter in February 2017. The barn lies within the remains of a post-medieval farm complex and is curtilage-listed to Cowlass Hall farmhouse, a 17th-century Grade II listed building (NHLE no. 1217246, EHER 36393). The barn comprises the original 18th-century agricultural structure, two 19th-century extensions and a 19th-century lean-to outbuilding, abutting an early 18th-century brick stable block to the south (which is outside the scope of this survey). Although lacking the original roof the barn remains an example of an Essex threshing barn dating to the 18th century which has characteristics of design not usually found in buildings of this type.
Project dates	Start: 16-02-2017 End: 16-02-2017
Previous/future work	No / No
Any associated project reference codes	UTT/2062/15/LB - Planning Application No.
Any associated project reference codes	17/01j - Contracting Unit No.
Any associated project reference codes	UTT/0263/15/FUL - Planning Application No.
Type of project	Building Recording
Site status	None
Current Land use	Other 2 - In use as a building
Monument type	THRESHING BARN Post Medieval
Significant Finds	NONE None
Methods & techniques	"Photographic Survey", "Survey/Recording Of Fabric/Structure"
Prompt	Planning condition

Project location

Country	England
Site location	ESSEX UTTLESFORD RADWINTER Cowlass Hall Farm, Radwinter End
Postcode	CB10 2UD
Study area	250 Square metres
Site coordinates	TL 6138 3847 52.020684406805 0.352219047552 52 01 14 N 000 21 07 E Point

Project creators

Name of Organisation	Colchester Archaeological Trust
Project brief originator	HEM Team Officer, ECC
Project design originator	Laura Pooley
Project director/manager	Chris Lister
Project supervisor	Mark Baister
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Alex & James Archer

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Saffron Walden Museum
Digital Archive ID	SAFWM:2017.4
Digital Contents	"Survey"
Digital Media available	"Images raster / digital photography", "Survey", "Text"

Paper Archive recipient Saffron Walden Museum
Paper Archive ID SAFWM:2017.4
Paper Contents "Survey"
Paper Media available "Drawing","Photograph","Plan","Report"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
Title Historic building recording at Cowlass Hall Farm barn, Radwinter End, Radwinter, Essex, February 2017
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