## Agricultural Buildings, Abbey Farm, Culpho, Suffolk <br> CUP 027

## Historic Building Record

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Leigh Alston MA (Oxon), Architectural Historian on behalf of
Suffolk County Council Archaeological Service

The Archaeological Service (Field Projects Team)
Suffolk County Council, Shire Hall
Bury St Edmunds IP33 2AR
Tel. (01284) 352446

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#### Abstract

This report provides a written and photographic record at English Heritage (2006) Level 2 of a complex of redundant agricultural buildings in the curtilage of a grade II-listed farmhouse. It has been prepared to a brief written by Suffolk County Council's Archaeological Service (ref. SpecHBR\&Mon(EM)AbbeyFarm_Culpho_0191_09, Edward Martin, 26th October 2009), and is intended to fulfil a condition of planning permission for conversion (Suffolk Coastal District Council application C/07/0191/FUL, condition 9).


## Introduction

The report is accompanied by a CD containing a photographic record in the form of 100 digital images (Appendix 1), but also includes 14 printed photographs of key features to illustrate the text (Appendix 2). Each image is described in a separate schedule and wherever possible includes a scale rod with half-metre divisions in red and white. The site was inspected on $30^{\text {th }}$ April 2010.

## Summary

Abbey Farm lies in open, arable countryside approximately 350 m north-west of Culpho parish church. The farmhouse is a grade II-listed early- $17^{\text {th }}$ century building of modest proportions but occupies an exceptionally large and well-preserved moat of 1.4 acres which is locally reputed to be the site of a medieval abbey. The parish did not possess an abbey but its church and one of its two manors (known as Abbots) belonged to Leiston Abbey between circa 1182 and its dissolution in 1536 . Two nearby $16^{\text {th }}$ and $17^{\text {th }}$ century houses at Culpho Hall and Culpho Manor lay claim to manorial status, however, and the origins of Abbey Farm remain unclear, although the scale of its moat indicates a site of high social rank.

The agricultural buildings flank the entrance to the moat and form a large mid $-19^{\text {th }}$ century complex of red-brick cattle yards and sheds with an early- $19^{\text {th }}$ century timber-framed and weatherboarded range to the rear. At over 46 metres or 150 feet this range is of exceptional length and incorporates a barn with two threshing floors and a single-storied stable and granary to the east. The western end of the barn towards the moat incorporates four early- $17^{\text {th }}$ century bays that originally formed a smaller barn of three bays which faced the entrance to the moat. This adjoins an unusual single-bay structure of similar or slightly earlier origin and was extended to form a barn of 9 bays with two threshing floors in circa 1820 . The $17^{\text {th }}$ century structures are contemporary with the present farmhouse but probably reflect a much older layout and may occupy the position of $13^{\text {th }}$ or $14^{\text {th }}$ century agricultural buildings which formed part of a gated 'base court' through which the moat was approached. They are accordingly of considerable historic significance, but have probably been too heavily altered to meet the strict English Heritage criteria for listing. The original roofs of the $17^{\text {th }}$ and early$19^{\text {th }}$ centuries were replaced with pantiled softwood later in the $19^{\text {th }}$ century when the older buildings were refurbished to reflect the new cattle complex, and the eastern granary had largely collapsed at the time of inspection. It is unusual to find a site which illustrates all three key periods of agricultural expansion in Suffolk, viz. the early- $17^{\text {th }}$ century, early- $19^{\text {th }}$ century and mid- $19^{\text {th }}$ century.


Figure 1 Current Ordnance Survey Site Plan.
Enclosing the complex of agricultural buildings in red, and showing the moated $17^{\text {th }}$ century farmhouse to the west with the unmade farm track approaching from the south.

The linear barn to the north of the complex was evidently positioned to flank the entrance to the moat.

## Historic Context: Documentary \& Cartographic Record

Abbey Farm lies in open, arable countryside approximately 350 m north-west of Culpho parish church. The site is reached by a dedicated track from the lane between Grundisburgh and Tuddenham to the south. The farmhouse is a grade II-listed building of modest proportions which is described in the Schedule as an early- $17^{\text {th }}$ century timber-framed and plastered structure (not inspected for the purpose of this report) and lies in the centre of a large and exceptionally well-preserved ovoid moat containing 1.4 acres (according to the 1904 Ordnance Survey). The site is locally reputed to occupy that of a medieval Abbey but this is based on a misconception: the church of St Botolph at Culpho belonged to Leiston


Figure 2
First Edition 25 inch Ordnance Survey of 1881


Figure 2a
Detail of the first edition Ordnance Survey showing the farm complex much as it remains today but with a porch or lean-to shed projecting from the centre of the main barn's northern elevation.


Figure 3
Second Edition 25 inch Ordnance Survey of 1904


Figure 3a
Detail of the second edition Ordnance Survey showing the complex in more detail but without the northern projection of 1881. The detached cart lodge to the east (building 14 in figure 5) had not yet been built, but a smaller structure is shown on the site. The western animal yard had been provided with a roof since 1881 .


Figure 4
Third Edition 25 inch Ordnance Survey of 1927


Figure 4a
Detail of the third edition Ordnance Survey showing the detached cart shed to the east (14) and the lean-to northern shed (6) for the first time

Abbey from soon after its foundation in 1182 until its dissolution in 1536 (Victoria County History of Suffolk, vol. 2, 1975, pp. 117-119), but there is no evidence that a cell was established in the parish. The 'main manor' of Culpho also belonged to the Abbey (according to Peter Northeast, Historical Atlas of Suffolk, 1999, p. 71) although the Valor of 1535 mentions only land and rents here. The situation may have been more complex, however, as early- $19^{\text {th }}$ century manorial documents in the Suffolk Record Office refer to the manor of 'Watshams, Verdons, Huntlands and Abbotts' in Culpho, suggesting that several manors had been combined (e.g. EG32/L1/3). W.A. Copinger's Manors of Suffolk (1909) records two manors in the parish, tracing both from Domesday until the $19^{\text {th }}$ century, and names one as 'the manor of Culpho alias Verdons and Wachesham Manor' and the other as 'Abbots or Culpho Abbatis or Culpho Regis Manor'. The latter, held by Godric before the conquest and subsequently by Roger of Poitou, was given with the church to Leiston Abbey in circa 1282. The two other listed houses in the small parish, which contained just 704 acres of land and 70 inhabitants in 1844 (White's Directory of Suffolk), both claim manorial status (viz. Culpho Manor 400 m to the east and Culpho Hall 800 m to the south) and the location of the Leiston Abbey property is unclear. Abbey Farm may well derive its name only from the modern myth of an Abbey in the parish, particularly given its conspicuously ancient moat, but it may equally have been the site of a monastic grange or the medieval manor of Abbotts itself - or both.

Unfortunately the tithes of the great majority of Culpho parish were in the hands of a lay improprietor in the $19^{\text {th }}$ century (T.B. Gurdon Esquire, lord of Abbot's manor) and no tithe map exists for the area of Abbey Farm. The first available plan of the site is the first edition 25 inch Ordnance Survey of 1881 (figure 2) which shows much the same layout of the farm buildings. The various minor changes recorded on subsequent editions are described in the captions of figures 3 and 4 .

Building Analysis


Figure 5
Block Plan of Site (adapted from Ordnance Survey)
Identifying each area of the farm complex with a number for ease of reference in the text and photographic record. Scale in metres. The moat to the west is not shown.
N.B. The barn is a timber-framed and weatherboarded structure of 29.5 m in length by 6.1 $m$ in overall width ( 96.5 ft by 20 ft ) with an approximately east-west axis on the northern flank of the approach to the moat. Its walls rise to 3.2 m at their roof-plates ( 10.5 ft ) beneath a single mid- or late-19 ${ }^{\text {th }}$ century pantiled roof structure but it consists of four separate timber-frames in 9 bays as detailed below (1, 2, 3\&7). A lower range of 2.2 m in height at its roof-plates (7ft) adjoins the barn's eastern gable ( 4 \& 5), extending the entire range to an impressive 46 m in length ( 150.5 ft ). The red-brick yards and sheds to the south are additions of the mid-19 ${ }^{\text {th }}$ century (circa 1870).

## Key

1. A single-bay structure of the late- $16^{\text {th }}$ or early- $17^{\text {th }}$ century with externally trenched tension braces to its intact northern and southern elevations. $3.2 \mathrm{~m}(10.5 \mathrm{ft})$ in overall length. The western gable retaining only its original tie-beam with empty stud mortises and the eastern gable entirely lacking but apparently designed as a solid wall as the corner posts contain small mortises for wall braces rather than the arch-braces of an open truss. An unusually small structure, perhaps one of several identical stalls in a stable entered from the east or west.
2. A three-bay barn of the early- $17^{\text {th }}$ century extending to $9.1 \mathbf{m}$ in overall length ( $\mathbf{3 0} \mathbf{f t}$ ) with an entrance bay to the east and two enclosed bays with externally trenched tension braces to the west. The western gable now lacking but indicated by empty stud mortises in the tie-beam. All original arch-braces removed and replaced by nailed archbraces and bolted knee-braces. The eastern gable open-framed against the possibly earlier single-bay structure (1). Originally entered from the south (facing the approach to the moat) with a low, narrow door to the rear (north), but now with full-height $19^{\text {th }}$
century half-hung barn doors to the north and a mid- $19^{\text {th }}$ century lean-to porch to the south. Divided by a late $-19^{\text {th }}$ century boarded partition into two sections: the entrance bay (2b) to the east and the two open bays (2a) to the west. The northern elevation now open to the north (retaining only the upper sections of its studs) and forming a vehicle shed of 10.5 m ( 34.5 ft ) in length in conjunction with an early- $19^{\text {th }}$ century extension (7). This section of the barn (i.e. 2a \& 7) lacks a threshing floor and was possibly used as a stable or vehicle shed after the remodelling of the barn in the late $-19^{\text {th }}$ century (but with no obvious evidence of a hay loft).
3. A four-bay early- $19^{\text {th }}$ century barn with an original brick threshing floor in its penultimate western bay. Arch-braces to the tie-beams flanking the threshing bay and bolted knee-braces elsewhere. Open-framed against the $17^{\text {th }}$ century structure to the west (1) and now forming part of a six-bay barn of 19 m in length or 62 ft (i.e. areas 2 b , 1 and 3) with two northern entrances. Originally entered from the south but later altered: a porch or lean-to shed adjoined the present northern entrance in 1881 (figure 2).
4. An early-19 ${ }^{\text {th }}$ century single-storied stable formerly with a loft but now open to its original clapsed-purlin roof.
5. An early- $19^{\text {th }}$ century single-storied structure with a late- $19^{\text {th }}$ century boarded granary above its original ceiling, with a stair rising from the southern yard at its southwestern corner and Sampson posts supporting the centres of its binding joists. Possibly built as an open-sided cart lodge with a first-floor granary but its walls much rebuilt and its ceiling and roof largely collapsed at the time of inspection (hampering precise analysis).
6. An open-sided lean-to vehicle and implement shelter of the early-20 ${ }^{\text {th }}$ century with a pantiled roof of tall-sectioned softwood rafters. 5.5 m in depth ( 18 ft ). Shown on the Ordnance Survey of 1927 but not that of 1904.
7. An early- $19^{\text {th }}$ century extension of $4.4 \mathrm{~m}(14.5 \mathrm{ft})$ in length to the western gable of the $17^{\text {th }}$ century 3 -bay barn. Its western gable rebuilt in the late $-20^{\text {th }}$ century, and its northern elevation removed to create an open-sided vehicle and implement shelter.
8. A mid-19 ${ }^{\text {th }}$ century pantiled red-brick shelter-shed with open-sided western elevation adjoining the eastern animal yard. Its timber piers replaced with Fletton brick in the $20^{\text {th }}$ century and the internal partition of an enclosed shed at its southern gable $(8 \mathrm{~b})$ removed. 4.5 m in width by 15 m in length ( 15 ft by 49.5 ft ). The present door in its southern elevation is ostensibly a secondary insertion which interrupts the brickwork, but a door adjoining the weatherboarded granary at the northern end of its eastern elevation is original.
9. A mid-19 ${ }^{\text {th }}$ century pantiled red-brick and rubble-bond shelter-shed with opensided western elevation adjoining the central animal yard. Uniform with 8 above, and retaining its original timber piers with shaped lintels and roof of tall-sectioned softwood rafters with clasped-purlins and nailed collars.
10. A mid- $19^{\text {th }}$ century lean-to red-brick shed in the south-eastern angle of the barn and its southern lean-to porch (2b). Probably designed as a grain or feed store (as typically found in this position) but stripped of any relevant fixtures or fittings. An original internal entrance from the porch and a secondary external door in the eastern gable. 6.4 m in length by 3.5 m in with ( 21 ft by 11.5 ft ). The Ordnance Surveys suggest this shed formerly adjoined a second lean-to porch against the southern elevation of the threshing bay in the early-19 ${ }^{\text {th }}$ century barn (3).
11. A mid-19 ${ }^{\text {th }}$ century lean-to red-brick shed divided by a boarded partition into two compartments: one entered from the lean-porch and probably designed as a grain or feed store (11b) and the other with a door to the barn and a second external door in its western gable (rebuilt in $20^{\text {th }}$ century cement blocks). 2.6 m in width by 10.5 m in overall length. Probably contemporary with the adjoining lean-to porch (2b).
12. A mid-19 ${ }^{\text {th }}$ century pantiled red-brick shelter shed with open-sided eastern elevation adjoining the western animal yard. Its roof structure consisting of poorly finished timber rather than the machine-sawn softwood of the two otherwise similar shelter-sheds to the west ( 8 and 9 ) and probably slightly earlier in date.
13. A $20^{\text {th }}$ century milking parlour of red Fletton brick with pantiled roof and ventilation louvers replacing an earlier shed on the same site shown on the Ordnance Surveys. Circa 1930. An inner shed adjoining the southern gable of the $19^{\text {th }}$ century shelter shed (9) at its eastern end and incorporating part of the $19^{\text {th }}$ century fabric probably served as a dairy. Retaining a concrete cattle trough and rails to its northern interior.
14. A pantiled $20^{\text {th }}$ century cart and implement shelter with three compartments open to the approach track on the west. Shown on the Ordnance Survey of 1927 but not that of 1904.
15. A mid-20 ${ }^{\text {th }}$ century steel-framed Dutch barn.
N.B. The red-brick shelter-sheds and buildings to the south of the linear barn are additions of circa 1870 with alterations of the $20^{\text {th }}$ century which formed a complex of cattle yards. They illustrate the typical development of Suffolk farms in the mid-19 th century as intensive mixed animal husbandry was introduced to compensate for the falling price of grain after the repeal of the Corn Laws in 1846 (encouraged by the opening-up of new urban markets for dairy and beef products by the railways). These buildings form part of the earlier barn's historic context, particularly as the entire complex was re-roofed and pantiled at the same time in order to present a uniform appearance, but they are not of special significance in themselves and are not discussed further in the following analysis which focuses on the earlier timber-framed fabric.

Development of the Linear Barn (1, 2, 3 \& 7)

## $17^{\text {th }}$ Century Structure

The northern side of the farm complex is formed by a long timber-framed and weatherboarded barn with two compartments under a single pantiled mid-19th century clasped-purlin roof and containing evidence of four separate phases of construction. The earliest phase is a four-bay structure of the early-17th century (or possibly the late-16th century) which may be contemporary with the present farmhouse and would have flanked the approach to the moat.

This early structure forms a three-bay threshing barn (2) with an entrance bay to the east (rather than in the central bay as usual) and two enclosed bays to the west. The entrance bay was open-framed against the gable of a separate structure of one bay with its own storey posts to the east (1). The three-bay barn extends to 9.1 m in length by 6.1 m in overall width $(30 \mathrm{ft}$ by 20 ft ) and its walls rise to $3.2 \mathrm{~m}(10.5 \mathrm{ft}$ ) at their roof-plates with uninterrupted studs of 2.9 $\mathrm{m}(9.5 \mathrm{ft})$ in height between the plates and ground sills. The walls contain externally trenched tension braces in both southern bays but only the outermost western bay to the north; these braces were probably exposed externally and designed to decorate the facade seen by visitors
to the house (hence the addition southern brace). The western gable has been removed and its position is now indicated only by seven empty stud mortises in its extant tie-beam. The southern roof-plate and south-eastern corner post of the entrance bay (2b) were removed in the $19^{\text {th }}$ century when the present lean-to porch was added, but the empty stud mortises of the northern plate contain a central gap of 1.1 m in width ( 42 ins ) indicating the position of a narrow rear door. Early barns invariably contained small rear doors opposite their principal entrances in the manner, and the barn was undoubtedly designed to face south before its entrances were moved to the north when the cattle yards were added in the mid- $19^{\text {th }}$ century. The northern roof-plate contains a face-halved and bladed scarf joint of a type rarely found before 1600 . The threshing bay was open-framed against the solid wall of the single-bay structure which also contains empty mortises for seven studs in its western tie-beam; the tiebeam of the threshing bay has been replaced but the mortise of an arch-brace survives in its north-eastern corner post with a gap of $35 \mathrm{~cm}(14 \mathrm{ins})$ between the two structures. All six arch-braces to the tie-beams have been removed and replaced by bolted knee-braces and unusually curved secondary arch-braces which are nailed to the frame. The single bay extends to $3.2 \mathrm{~m}(10.5 \mathrm{ft}$ ) in overall length (just 2.8 m or 9.25 ft internally) and differs slightly from the three-bay barn in that its tension braces (which rise from the storey posts to a common stud rather than a roof-plate) cross three studs as opposed to two. The eastern tie-beam has been lost but the storey posts contain small mortises for wall braces or door lintels rather than the arch-braces of an open truss and the gable was apparently solid. This small structure is unusual and fragmentary, but may have been part of a larger range extending to the east, perhaps forming a small stable (although there is no evidence of a loft), against which the three-bay barn was subsequently built as an extension.

## Early-19 ${ }^{\text {th }}$ Century Structure

The eastern end of the barn is an addition of circa 1820 which may have replaced an earlier structure on the same site. It contains four bays and extends to 12 m in overall length ( 39.5 ft ) with an original brick threshing floor in its penultimate western bay. It is currently entered by full-height half-hung doors to the north but appears to have been entered originally from the south as the northern roof-plate is a replacement and its southern equivalent lacks stud mortises (the existing studs above its low yard door are nailed insertions of the mid- or late$19^{\text {th }}$ century which interrupt a housing for a central door post). The structure combined tenoned arch-braces to the tie-beams of its entrance bay with bolted knee-braces elsewhere in the standard manner of the many 'Napoleonic' barns built across eastern Suffolk to accommodate the expansion of arable land in response to the high grain prices of the period (caused initially by wartime import restrictions and latterly by artificial maintenance). Two of these arch-braces survive to the south but those to the north have been replaced by the same unusually curved examples found in the $17^{\text {th }}$ century structure. The western bay (7) appears to be an addition of the same early- $19^{\text {th }}$ century date and the building was evidently enlarged to form a substantial barn of 29.5 m or 96.5 ft in length with twin threshing floors.

## Alterations

The northern and southern wall fabric of the barn remains largely intact, with good areas of late- $16^{\text {th }}$ or early $-17^{\text {th }}$ century framing, but its various closed and open trusses have been extensively altered (with only two early- $19^{\text {th }}$ century arch-braces extant) and the roofs of all four phases were replaced with the present uniform pantiled structure as part of the mid-19 ${ }^{\text {th }}$ century refurbishment. Having formerly faced south both entrances were moved to the north and a gabled porch or lean-to shed adjoins the eastern threshing floor on the 1881 Ordnance Survey. The boarded internal partition which currently divides the interior into two areas (i.e. $7 \& 2 \mathrm{a}$ and $2 \mathrm{~b}, 1 \& 3$ ) is an addition of the late- $19^{\text {th }}$ century, and the western section was subsequently converted into an open-sided vehicle shelter by removing the lower sections of the $17^{\text {th }}$ century studs.

## Single-storied Stable and Granary Range (4 \& 5)

The eastern gable of the early- $19^{\text {th }}$ century barn is adjoined by a contemporary or nearcontemporary single-storied structure of 2.1 m in height at its roof plates and 16.5 m in length. It retains its original clasped-purlin roof with pegged collars and was originally provided with a loft throughout. The ceiling has been removed from the western section of 9 m in length ( 29.5 ft ) and is now indicated only by joist notches in the original tie-beams (4), but it survives to the east (5) albeit in a state of collapse. The walls have been much altered and rebuilt in cement-blocks, particularly to the eastern section, and analysis is hampered accordingly. The eastern loft retains mid- or late- $19^{\text {th }}$ century boarded sides and evidently operated as a granary reached by both a loading in the eastern gable and an internal stair in the south-western corner rising from the adjoining yard. The principal joists of the grain floor are supported by central Sampson posts with bolted knee-braces and the area may have formed an open cart shelter, but this is no longer clear given its $20^{\text {th }}$ century alterations. The western section probably formed a stable given the presence of a loft.

## Historic Significance

The agricultural buildings form a good mid- $19^{\text {th }}$ century farm complex which illustrates the sophistication of 'Victorian High Farming' and involved considerable investment in refurbishing the older timber-framed buildings on the site to create a uniform pantiled exterior. The various cattle sheds and yards have been much altered however, and several structures shown on early-20 $0^{\text {th }}$ century Ordnance Surveys no longer survive. The early- $11^{\text {th }}$ century range to the north is an impressive linear barn, stable and granary range of over 46 metres or 150 feet in length which contrasts with the modest proportions of the farmhouse and suggests it was a tenanted property of some scale. This barn reflects the cereal boom of the early- $19^{\text {th }}$ century but incorporates a three-bay barn and an additional bay of uncertain purpose that are broadly contemporary with the house. The unusual layout of the $17^{\text {th }}$ century barn with a threshing floor to the east rather than at its centre, suggests it may have formed part of a longer complex flanking the entrance to the moat. The large size of the moat indicates a medieval site of high status and the $17^{\text {th }}$ century buildings probably reflect a much older layout and may occupy the position of $13^{\text {th }}$ or $14^{\text {th }}$ century agricultural buildings which formed part of a gated 'base court' through which the moat was approached. They are accordingly of considerable historic interest, but have probably been too heavily altered to meet the strict English Heritage criteria for listing in their own right.

## Appendix 1 (on accompanying CD): Full Photographic Record

## Descriptions of Photographs in Appendix 1

## Photograph no.

1. General view of site from south showing entrance track to right, farm complex in centre and farmhouse to left.
2. General view of site from north-east showing cart lodge (14) to left and Dutch barn (15) to right.
3. General view of site from south-west showing barn to left and cart lodge (14) to right.
4. General view of site from south-east showing farmhouse to left and farm buildings to right.
5. General view of site from north-west showing proximity of moat (right) to farm buildings.
6. Moat from north showing farmhouse to right and western end of barn to left.
7. Moat entrance from north showing proximity of barn to left.
8. Moat from north-east showing farmhouse in rear to left (included for site context).
9. Moat from south-east showing farmhouse to right (included for site context).
10. Grade II-listed 17th century farmhouse seen from eastern entrance to moat (included for site context).
11. View to east from moat entrance showing position of barn (left) flanking approach with shelter shed (12) to right.
12. Exterior of farm complex from south-east.
13. Exterior of farm complex from north-east showing collapsed granary (5) in foreground.
14. Exterior of Dutch barn (15) showing farm complex in rear and moat to right.
15. Northern elevation of barn from north-west showing open bays of 17 th century three-bay barn (2a) to right.
16. Open northern exterior of 17 th century barn (2a) showing 19th century extension (7) to right and original entrance bay (2b) to left.
17. Northern exterior of multi-phase barn showing early-19th century bays to left (3) with early-17th century structures to right ( $1 \& 2$ ).
18. Interior of 17 th century 3-bay barn (2) from west showing two now-open bays (2a) with later tie-beam braces.
19. 19th century roof structure of 17 th century barn (2a) from west showing mortises of original gable in foreground.
20. 19th century roof structure of 17 th century barn (2a) from east showing later tiebeam braces with 19th century extension (7) in rear.
21. Interior of east of 19th century extension to barn (7) showing rebuilt 20th century western gable $\&$ door to lean-to shed (11a) to left.
22. Internal southern elevation of 17 th century barn (2a) showing trenched tension braces with original western gable to right.
23. Detail of southern interior of 17 th century barn (2a) showing tension braces with 19th century extension (7) to right.
24. Detail of externally trenched tension brace in southern interior of 17 th century barn (2a).
25. Northern interior of 17 th century barn (2a) showing tension braces and truncated studs.
26. Detail of face-halved scarf joist in northern roof-plate of 17 th century barn (2a).
27. Interior of lean-to shed (11a) from west showing door to barn (7) to left.
28. Interior of lean-to shed (11a) from east showing doors to barn (7) right and western gable.
29. Interior of main barn from east showing four 19th century bays with threshing floor (3) in foreground and 17 th cent bays ( $1 \& 2 \mathrm{~b}$ ) in rear.
30. Interior of main barn from 17 th century bays ( $2 \mathrm{~b} \& 1$ ) to west showing archbraces to threshing floor of 19th century barn (3).
31. Southern interior of single 17 th century bay (1) showing 19th century bay to left (3) and rebuilt entrance bay of 3-bay barn (2b) right.
32. Detail of externally trenched tension brace in southern interior of single 17th century bay (1).
33. Northern interior of single 17th century bay (1) showing stud mortises in tiebeam to left with entrance bay of 3-bay barn (2b) beyond.
34. Northern interior of entrance bay of 3-bay barn (2b) showing 19th century partition to left and open frame to single bay (1) to right.
35. Detail of roof-plate of 17 th century entrance bay (2b) showing central gap in stud mortises for narrow rear door.
36. Southern interior of 17 th century entrance bay ( 2 b ) showing replaced roof-plate and 19th century lean-to porch.
37. Interior of lean-to shed (11b) from west showing door to lean-to porch of entrance bay (2b).
38. Interior of lean-to shed (11b) showing door to 17 th century barn (2a) to right.
39. Interior of lean-to shed (10) from west showing barn to left and door to yard in eastern gable.
40. Interior of lean-to shed (10) from east showing door to lean-to porch in entrance bay (2b).
41. Western tie-beam of single 17 th cent bay (1) from east showing empty stud mortises with later tie of open truss of 3-bay barn (2b) beyond.
42. Roof structure of main barn from west showing empty mortises of western tiebeam of single bay (1) in foreground.
43. Internal south-eastern corner of 19th century barn (3) showing original arch-brace to right and original knee-brace to left.
44. Internal north-eastern corner of 19th century barn (3) showing replaced archbrace to left and original knee-brace to right.
45. Southern interior of penultimate western bay of 19th century barn (3) showing nailed studs partly blocking original entrance.
46. Detail from north of original brick threshing floor in penultimate western bay of 19th century barn (3).
47. Detail of southern entrance doors in 19th century barn (3) showing nailed studs above present door and lack of jowl to arch-braced post.
48. Southern interior of western bay of 19th century barn (3) showing single 17th century bay (1) to right.
49. Exterior of 19th century barn (3) showing remains of late-19th century half-hung double doors beneath secondary roof-plate.
50. Interior of stable (4) from east showing door to 19th century barn (3) in rear and notches of missing hay loft.
51. Interior of stable (4) from west showing central window adjoining granary (5).
52. Roof structure of stable (4) from west showing pegged collars of clasped-purlins.
53. Eastern internal gable of stable (4) showing arch-braced open frame against boarding of granary (5).
54. South-eastern internal corner of stable (4) showing door and windows to southern yard to right.
55. South-western internal corner of stable (4) showing door and windows to southern yard to left.
56. Northern interior of stable (4) showing door to northern lean-to.
57. North-western internal corner of stable (4) showing notches of removed hay loft in tie-beams.
58. Detail of brick floor to stable (4) from north-west showing door to southern yard.
59. Exterior of northern open-sided lean-to shed (6) from north-east.
60. Interior from west of open-sided lean-to (6) showing northern exterior of stable (4) to right.
61. Northern exterior of stable (4) from open shed (6) showing boarded infill above original rafters.
62. Internal south-western corner of open-sided lean-to (6) showing door to stable (4).
63. Southern exterior of single-storied stable (4) from enclosed yard showing rear (eastern) exterior of the central shelter-shed (9).
64. Southern exterior of collapsed granary (5) showing stable (4) to left and sheltershed (8) to right.
65. Internal stair to granary (5) at western end of southern exterior, seen from southern yard.
66. Eastern external gable of granary (5) showing loading door in gable (the vertical gable has collapsed backwards).
67. Interior of first floor granary from east showing lattice door at head of southern stair.
68. Interior of granary from north-west showing Sampson posts supporting loft ceiling.
69. Western end of southern interior of granary (5) showing stair rising from exterior to right.
70. Western end of northern interior of stable (5) showing window to open shed (6).
71. Interior of granary (6) from west showing Sampson post and rebuilt cement-block walls.
72. Interior of granary (6) from east showing Sampson post with stair in rear and rebuilt cement-block wall to left.
73. Detail of binding joist in granary from west showing possible hay drop against northern interior (indicated by lack of common joist).
74. Western exterior of eastern shelter shed (8) showing brick replacing timber posts and enclosed shed ( 8 b ) to right.
75. Exterior of eastern shelter shed (8) from south-east showing rebuilt door aperture in southern gable.
76. Exterior of eastern shelter shed (8) from east showing collapsed granary (6) to right.
77. Interior of eastern shelter shed (8a) from north showing removed brick partition to southern shed (8b).
78. Interior of enclosed shed to south of shelter shed (8b) showing removed secondary partition (not keyed) to northern section (8a).
79. Exterior of detached cart lodge (14) from south-west showing shelter shed (8) to left.
80. Interior of cart lodge (14) from south.
81. Interior of cart lodge (14) from north showing softwood roof structure.
82. Eastern exterior of central shelter shed (9) showing door to right.
83. Detail of brick rubble construction of eastern exterior of central shelter shed (9).
84. Interior of central shelter shed (9) from north.
85. Interior of central shelter shed (9) from south showing boarding to 19 th century barn (3) and door to eastern yard.
86. Western exterior of central shelter shed (9) from western yard.
87. Western yard seen from central shelter shed to east and showing lean-to shed (10) to right.
88. Exterior of lean-to shed (10) from south-west showing central shelter shed (9) in rear to right.
89. Exterior of lean-to shed (10) from east showing doors to 19th century four-bay barn to right.
90. Southern exterior of lean-to shed (11) showing doors in entrance bay of barn (2b) to right.
91. Exterior of Fletton brick milking parlour (13) from south-west.
92. Exterior from north of milking parlour showing yard entrance to right.
93. Interior of milking parlour (13) from east showing concrete cattle troughs to right.
94. Interior of milking parlour (13) from west showing door to shed in angle of parlour and central lean-to (9).
95. Northern interior of shed in angle of central shelter shed (9) and milking parlour (13).
96. Southern interior of shed in angle of central shelter shed (9) and milking parlour (13).
97. Exterior of western yard from south-east showing western shelter shed (12) to right.
98. Exterior of western shelter shed (12) from south-west showing barn to right.
99. Interior of western shelter shed (12) from south showing roundwood rafters.
100. Interior of western shelter shed (12) from north showing roundwood rafters.

## Appendix 2 (pp. 18-24): Selected Printed Photographs



Illus. 1. General view of site from south-west showing the impressive length of the main barn in rear to left, with mid $-19^{\text {th }}$ and $20^{\text {th }}$ century yard buildings in the foreground and the detached cart lodge (14) to the right.


Illus. 2. The well-preserved moat seen from the north and showing its proximity to the barn (left) and grade II-listed early- $17^{\text {th }}$ century farmhouse (right).


Illus. 3. Exterior of farm complex from north-east showing the partly collapsed early $-19^{\text {th }}$ century granary and stable range $(4 \& 5)$ to the left of the barn. Its steeply-pitched roof structure was probably designed for thatch and is the earliest to survive on the site.


Illus. 4. Northern exterior of multi-phase barn with two entrance bays showing early-19th century bays to left (3) with early-17th century structures to right (1 \& 2). The western bays have been converted into an open-sided vehicle shelter. The shallow-pitched pantiled roof is a later $19^{\text {th }}$ century addition.


Illus. 5. Interior of the $\mathbf{1 7}$ th century 3-bay barn (2a) from the west showing the later curved tie-beam braces and the empty mortises of the original western gable in the foreground. The $17^{\text {th }}$ century studs and wall brace to the left were truncated in the $20^{\text {th }}$ century to form a vehicle shed.


Illus. 6. Internal southern elevation of 17 th century barn (2a) showing its externally trenched tension braces with the position of the original western gable to right.


Illus. 7. Interior of main barn from 17 th century bays ( $2 \mathrm{~b} \boldsymbol{\&} 1$ ) to west showing original arch-braces to threshing floor of 19th century barn (3) to right and later replacements to left. An original brick threshing floor survives between the two doors.


Illus. 8. Southern interior of single 17 th century bay (1) showing 19th century bay to left (3) and rebuilt entrance bay with lean-to porch of 3-bay barn (2b) right. Note the externally trenched $17^{\text {th }}$ century brace to the right and the primary brace interrupting the studs to the left.


Illus. 9. Northern interior of single 17th century bay (1) showing stud mortises in tiebeam to left with entrance bay of 3-bay barn (2b) beyond.


Illus. 10. Southern interior of western bay of 19 th century barn (3) showing lowered entrance to left and single 17th century bay (1) to right with rebuilt southern entrance (2b) beyond. Each of the three bays is of a different period.


Illus. 11. Interior of stable (4) from east showing door to 19 th century barn (3) in rear and notches of missing hay loft in original tie-beams. The roof is original to the early$19^{\text {th }}$ century structure but the tie-beam in the foreground is an insertion.


Illus. 12. Southern exterior of single-storied stable (4) from enclosed yard showing rear (eastern) exterior of the central shelter-shed (9) to left and collapsed granary (5) to right.


Illus. 13. Interior of collapsed granary (5) from north-west showing the Sampson posts supporting the loft ceiling and the rebuilt cement-block walls.


Illus. 14. Exterior of lean-to shed (10) from south-west showing the central shelter shed $(9)$ in rear to right and the mid $-19^{\text {th }}$ century lean-to porch of the $17^{\text {th }}$ century entrance (2b) to left.

