

**Potash Farm,
Dallinghoo,
Suffolk
DLL 014**

Archaeological Record

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(TM 268 553)

Archaeological Record

This report provides a written and photographic record at English Heritage (2006) Level 2 of an historic building. It has been prepared to a brief written by the Archaeological Service of Suffolk County Council (William Fletcher, 01 Oct. 2008, Ref. /PotashFarm_Dallinghoo2008) and is intended to fulfil a condition of planning consent for conversion (Suffolk Coastal District Council application C/08/1478).

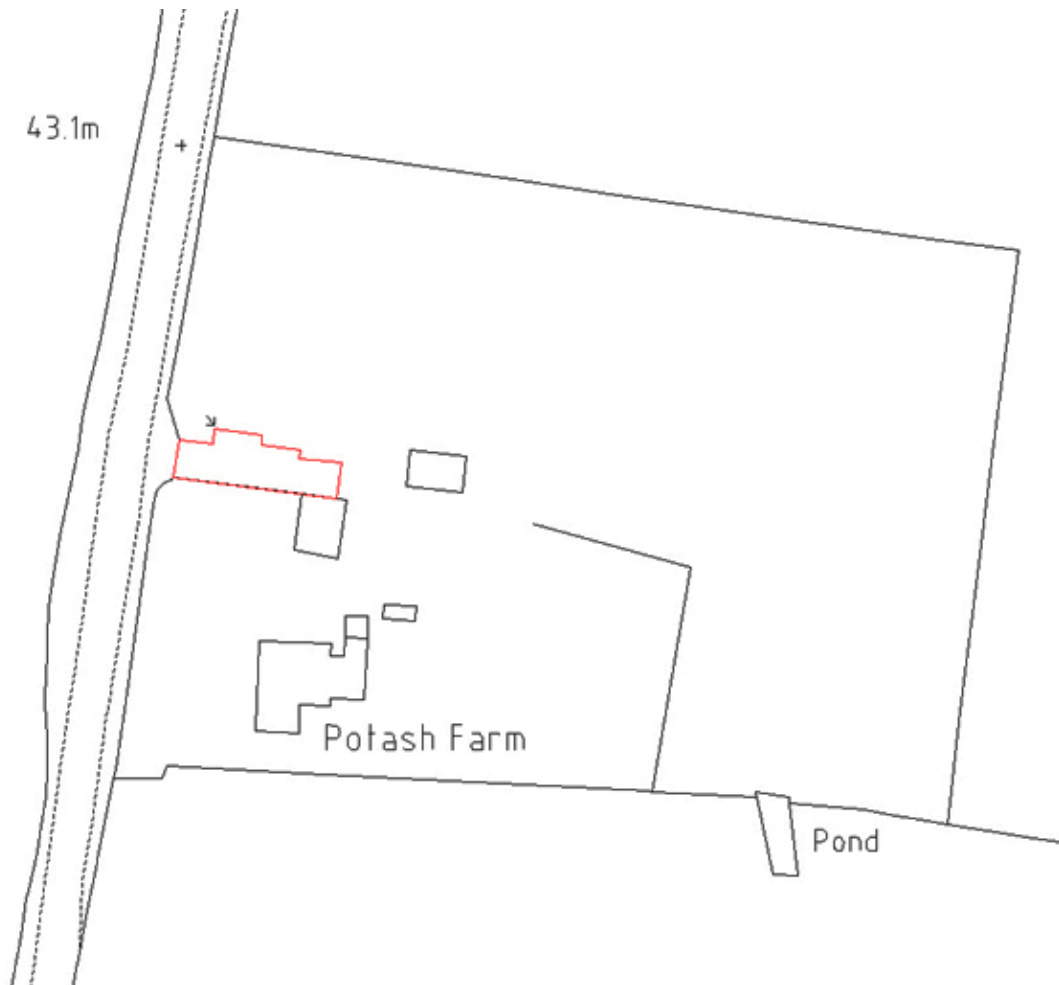
Introduction

The report is accompanied by a CD containing a full photographic record in the form of 60 digital images (Appendix 1) but also includes printed photographs of key features to illustrate the text (Appendix 2). Each image is separately described and includes a scale rod with half metre divisions wherever possible. The site was inspected on 5th March 2009.

Summary

Potash Farm lies in open countryside on the eastern side of Potash Farm Road, approximately 450 m north-east of Dallinghoo parish church. At the time of the tithe survey in 1841 it formed a modest owner-occupied holding of 32 acres. The barn is aligned at right-angles to the road and faces south towards a yard in front of an ostensibly early-20th century farmhouse. Neither building on the site is currently listed. The barn is a timber-framed, pantiled and weatherboarded structure of three bays with a central southern entrance and a brick threshing floor. An 18th century brick lean-to shed projects from the northern elevation of the entrance bay, and a 19th century brick stable and hay loft adjoin the eastern gable. The present three-bay arrangement is typical of the region's smaller barns, but dates only from an extension of the mid or late-18th century. The original structure dates from the late-16th or early-17th century and forms a complete barn of two bays that as such may represent a unique survival. The key elements of its frame are intact, including an arch-braced open truss and a clasped-purlin roof with curved wind-braces (the latter removed). A second arch-braced truss relates to the 18th century extension. At just 8 m in length (26 ft) it is among the shortest barns of its

period to survive in the country, and is of national significance. Given its largely complete condition, rarity and historic importance the building undoubtedly merits listing at grade II.



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Figure 1
Existing Ordnance Survey Site Plan
Outlining the barn in red (excluding the 20th century workshop adjoining its south-eastern corner) and showing the farmhouse to the south.

Historic Context: Documentary & Cartographic Record

Potash Farm lies in open arable countryside on a ridge of high ground which commands extensive views to the east. The Norman parish church of St Mary lies approximately 450 m to the south-west. The barn is aligned at right-angles to Potash Farm Road on the west, and faces south towards a yard in front of the ostensibly early-20th century rendered and slated farmhouse. Neither building is currently listed.

At the time of the Dallinghoo tithe survey in 1841 Potash Farm was a modest holding of 32 acres, of which all but four were arable, owned and occupied by one William Reeve. The contemporary map shows the barn with a cruciform profile (figure 2), suggesting that a demolished southern porch lay opposite the present lean-to shed to the north. The farmhouse is apparently aligned on an east-west axis and evidently represents the predecessor of the existing structure which is shown for the first time on the Ordnance Survey of 1927 (figure 5). A number of sheds were added to the barn's southern elevation during the mid-19th century, and altered thereafter, but none survived at the time of inspection. These structures probably

related to the introduction of cattle to the farm in the usual manner of the 1850s and 1860s, when falling grain prices forced local farmers to diversify from arable into mixed animal husbandry.



Figure 2

Potash Farm as shown on the Dallinghoo Tithing Map of 1841 (Suffolk Record Office). The barn appears to possess a southern porch which no longer survives, and the farmhouse is an earlier building on a different alignment to the present structure. The site (270) is named as 'farmyards' on the accompanying apportionment, and the adjoining fields as 'Home Field' (139), 'Home Meadow' (269), Woodstack Meadow (271) and Woodstack Field (272). All but Woodstack Meadow are identified as arable.

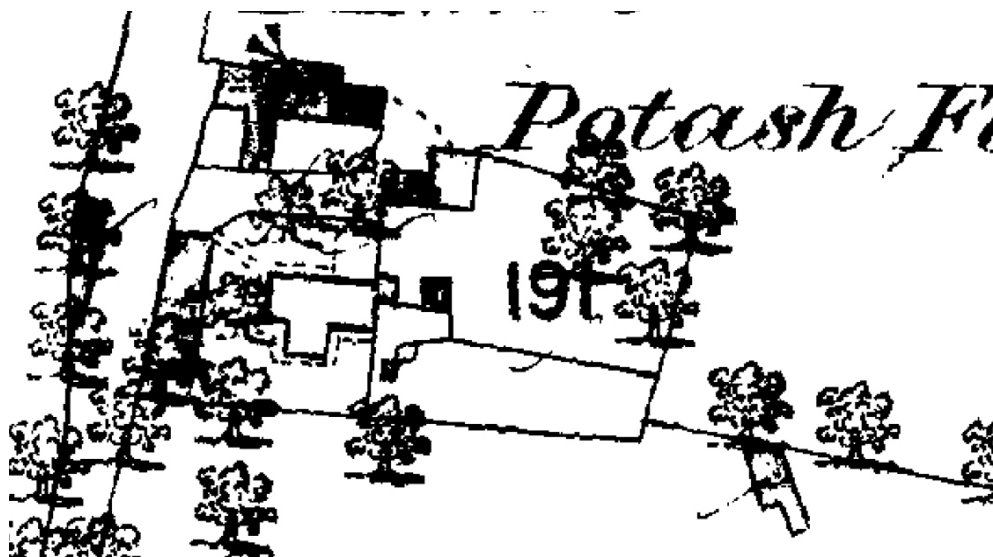


Figure 3

First Edition 25 inch Ordnance Survey of 1882, showing the farmhouse unaltered since 1841, but the apparent southern porch has been replaced with a long, narrow shed.

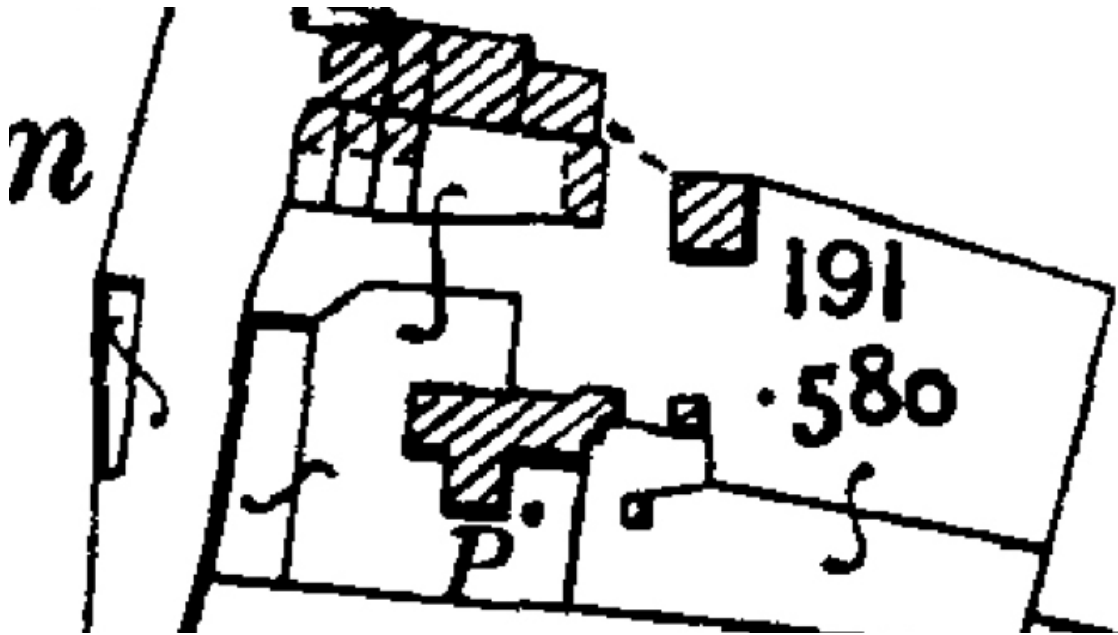


Figure 4

Second Edition 25 inch Ordnance Survey of 1904. A new open-sided shelter shed (as indicated by broken lines) has been added to the east of the southern yard, and three narrow enclosures, each with its own open-sided shed, have appeared to the west. These probably represent loose boxes for cattle, and a partitioned area at the western end of the barn may have formed a neathouse (cow shed).

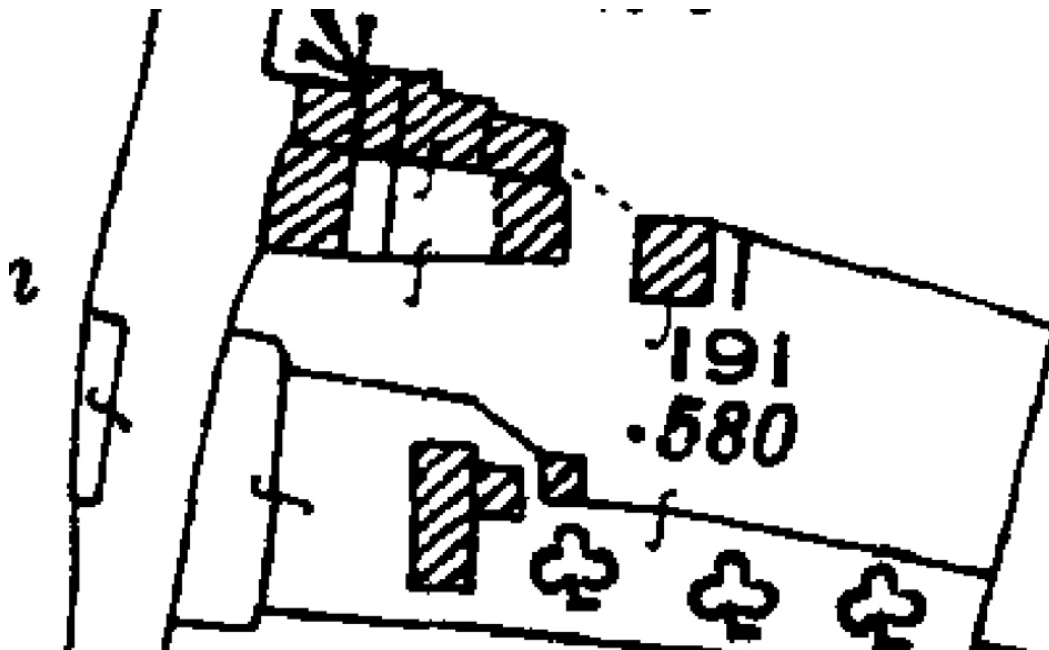


Figure 5

Third Edition 25 inch Ordnance Survey of 1927. The probable loose boxes of 1904 have now been provided with roofs to form a covered cattle yard, and the shelter shed to the east has been enlarged. These structures no longer survive. The northern elevation of the barn is shown with its present stepped outline for the first time, presumably due to the removal of an earlier lean-to shed against its eastern bay. The house appears to have been rebuilt on its present north-south axis, possibly retaining part of the previous structure in its rear (eastern) service wing.

Building Analysis

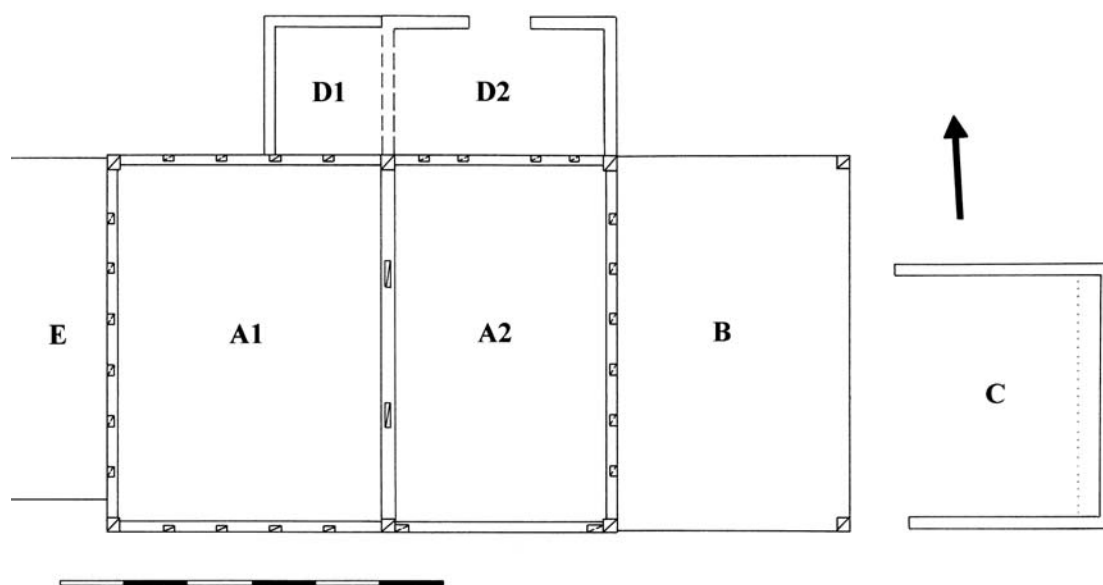


Figure 6

Block plan of the barn, including a detailed plan of the original structure (A) showing the positions of its studs, roof-plates and arch-braced tie-beam. Each historic area is identified by a letter for ease of reference in the text and photographs. Scale in metres

Key

- A. Early-17th century timber-framed, pantiled & weatherboarded barn of two bays with internally trenched wall braces and a clasped-purlin roof with wind braces. The eastern bay (A2) originally with a wide entrance to south and a smaller door to north. All principal timbers and some common studs intact.
- B. Mid- or late 18th century eastern extension of one bay. Primary braces to walls. Clasped-purlin roof structure without wind braces. The studs of the original barn's eastern gable were removed and replaced by the present arch-braces when this bay was added.
- C. Early- or mid-19th century brick stable with hay loft. Formerly with a hay rack and manger against the eastern gable, as shown by a dotted line.
- D. 18th century brick lean-to shed (D2) with 19th century extension to west (D1)
- E. Late-20th or early-21st century timber shed on the site of an earlier structure shown on 19th century maps.

N.B. The barn at Potash Farm was built in two phases, as shown in figure 6. Each phase is described separately below, and the original internal elevations of the earlier structure (A) are reconstructed in figure 7, along with the principal rafters of the southern elevation (omitting the common rafters).

A. Original Timber-Framed Barn

Proportions and Structure

The barn is now a three-bay structure on an east-west axis which extends to 11.6 m in length by 5.95 m in overall width (38 ft by 19.5) and contains a central, southern entrance. Its walls rise to 3.35 m (11 ft) at their roof-plates. Three-bay arrangements of this kind are typical of the region's smaller barns, but the present layout represents the 18th century extension of a

smaller building of just two bays. This earlier barn extended to 8 m in length by 5.95 m in width (26 ft by 19.5) and rose to 3.35 m (11 ft) at its roof plates. The original framing of its northern and southern elevations is reconstructed in figure 7. Each wall stud rose 2.9 m (116 ins) between the roof-plates and ground sills, but the latter appear to be replacements of the 18th century or later and the studs may have been slightly taller initially. The jowled corner-posts contain empty mortises for wall-braces which rose to both the gable tie-beams and roof-plates. No wall braces survive, but their internal trenches are visible in the southern studs of the western bay (A1) which survive intact. The arch-braces of the tie-beam between the two bays are also intact, as are the principal rafters of the clasped-purlin roof structure. These rafters contain mortises for wind braces as shown in figure 7, but all have been removed, and the purlins slightly raised; a series of peg-holes in the common rafters reveal their original positions. The present roof pitch of approximately 50 degrees appears to be original, and the barn is therefore likely to have been peg-tiled rather than thatched. The present pantiles date from the 19th century.

Date

The structure is fully framed in the medieval tradition, with tenoned and pegged joints, jowled storey posts and trenched wall braces. The presence of a clasped-purlin roof with wind braces suggests it was built between the mid-16th and mid-17th centuries, while the edge-halved-and-bridled scarf joint indicates the first half of this range. A date in the late-16th or early-17th century can be ascribed with confidence.

Layout

The eastern bay, A2, which at 3.3 m (11 ft) is shorter than its western neighbour (of 4.1 m or 13.5 ft), now contains the principal barn entrance with double-hung doors in its southern elevation. The lack of stud mortises in its roof-plate confirms that it was designed as such, along with the presence of double-pegged jamb mortises adjoining the flanking storey posts. These mortises are now hidden by later corner-brackets which have been nailed to the posts. The tithe map of 1841 appears to show a porch projecting from this entrance. The rear, northern elevation of the same bay would have contained a small doorway in the usual manner of the period, but its studs have been removed and are indicated only by empty mortises; these mortises are more closely spaced than elsewhere in order to accommodate the door. The present brick threshing floor in this bay is probably an addition of the 18th or early-19th century extending into the lean-to shed (D2), the doorway of which is of similar proportions to the original (designed to create sufficient through-draught for threshing and winnowing but not to admit vehicles). The well-worn brickwork contains a groove for the retaining board which divided the shed from the body of the barn.

B. 18th Century Extension

The eastern bay of the present three-bay barn is a 3.6 m (12 ft) addition of the mid- or late-18th century. Its framing incorporates primary braces which interrupt the common studs, and the latter are not pegged to the plates. The roof is ostensibly similar to the original but contains no mortises for wind braces. The extension can be dated chiefly on the basis of the arch-braces which replaced the studs of the original barn's eastern gable when it was added; these braces are somewhat misshapen in comparison with those of the 17th century open truss, but bolted knee-braces would have been employed instead from *circa* 1800 onwards. The extant tie-beam and corner posts of this gable are heavily weathered, suggesting they were exposed externally despite the lack of wattle-and-daub notches from the remaining common studs. The majority of the frame may have been rendered with only the principal timbers left visible. Two unpegged mortises in the corner posts may have secured the plates of an earlier, lower building on the site of the extension (perhaps a stable). The gable of the western bay appears to have been rebuilt with primary bracing when the extension was added (re-using several original studs), and the western end of its northern elevation is modern – possibly

relating to the presence of a cattle partition at this end of the barn as indicated on the Ordnance Surveys.

C, D & E. Stable and Sheds

An axial stable of 4.1 m in length by 4.1 m in overall width was added to the barn's eastern gable in the early- or mid-19th century. The chequer-pattern of its Flemish-bond brickwork suggests the former, but it is not obviously present on the tithe map of 1841. The stable was entered from the south by a double-hung door immediately beneath the loading door of its hay loft, and lit by windows in both northern and southern elevations. The southern window retains a nailed louver that may well be original, but the northern window has been blocked. A narrow northern door of just 68 cm (27 ins) in width lies opposite the southern entrance, with evidence of a hay rack and manger against the eastern gable (shown by a dotted line in figure 6). This evidence takes the form of a loading vent in the ceiling, now blocked by secondary floorboards. A boarded, central stall partition still survived at the time of inspection (probably a late-19th century insertion) but no other relevant fixtures or fittings remained and a window had been inserted into the eastern gable. There is no evidence of a tack room, but part of the barn may have served this purpose as the two spaces are linked internally.

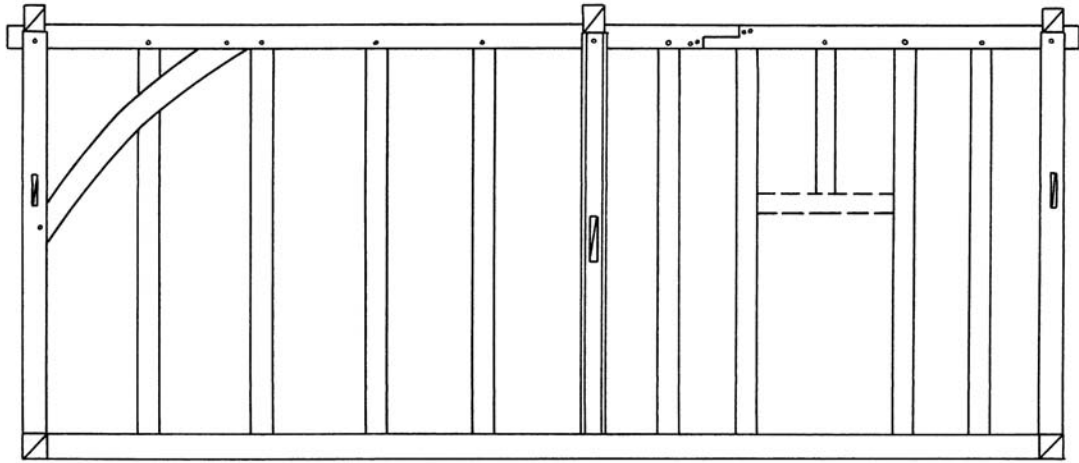
The brick lean-to shed against the northern elevation was built in two phases. The section adjoining the entrance bay (A2) represents an extension to the threshing bay of the 18th century, with brickwork laid in English bond, and is probably contemporary with the barn's eastern extension. Its narrow door reflects the arrangement of the 17th century original. The space was extended westwards (D1) in the 19th century. Side areas of this kind often contained grain bins.

The timber shed against the barn's western gable (E) is a very recent reconstruction of a building shown on 19th century maps, and the 20th century workshop adjoining the stable replaces an open-sided animal shelter.

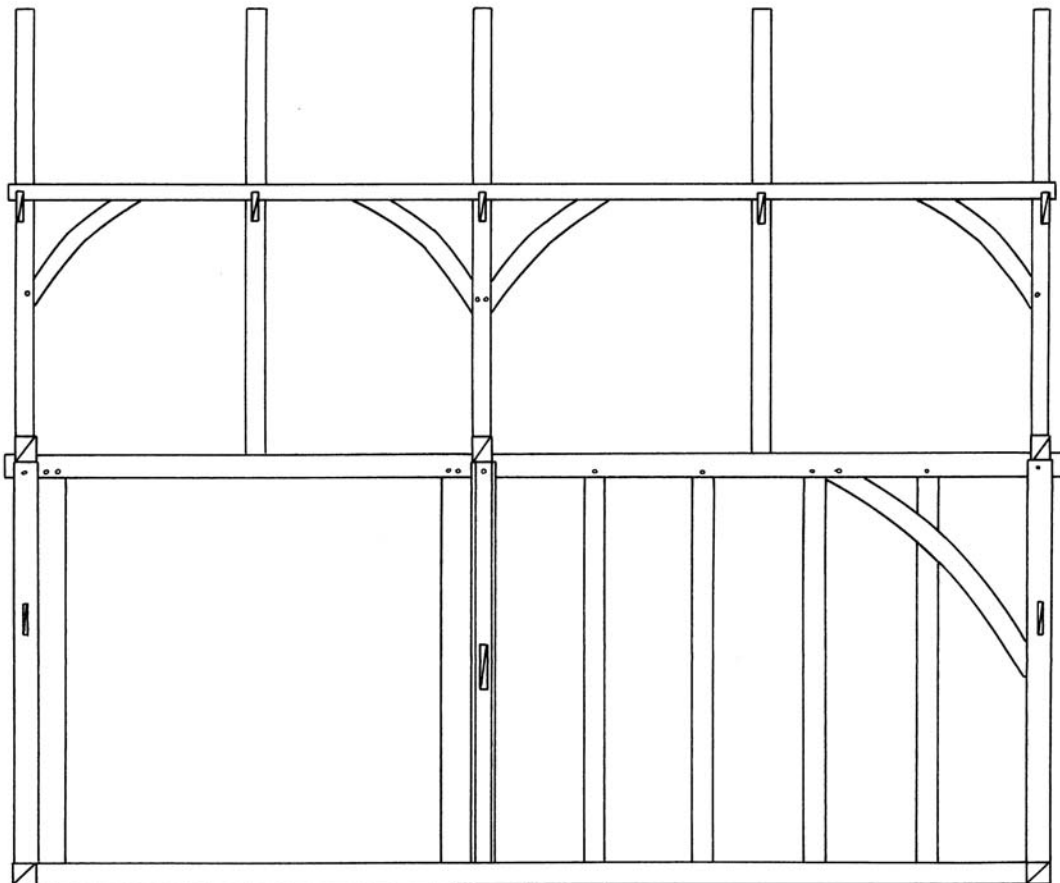
Historic Significance

The barn at Potash Farm is a complete two-bay structure of the late-16th or early-17th century and as such it may be unique in the region. At just 8 m in length (26 ft) it is among the shortest barns of its period to survive in the country, but at 5.95 m (19.5 ft) is considerably wider than many. Small barns typically contained three bays, and the existence of a well-framed two-bay example is of national significance. Its eastern gable was replaced by arch-braces when a new, third bay was added in the 18th century, and many wall studs were renewed at the same time, but most of its framing remains intact, including its original arch-braced open truss and the key elements of its wind-braced roof. Given its rarity and substantially complete condition the barn undoubtedly merits listing at grade II.

Figure 7



Original Rear (Northern) Internal Elevation



Original Front (Southern) Internal Elevation

Appendix 1 (on accompanying CD): Full Photographic Record

Description of Photographs in Appendix 1

Photograph no.

1. General view of site from Potash Farm Road to north, showing barn on left.
2. General view of site from Potash Farm Road to south, showing barn on right.
3. General view of site from Home Field to west showing barn to left and house to right.
4. General view from site to east, showing conspicuous location on edge of high ground.
5. General view of site from south-west showing yard entrance to right.
6. General view of site from north-east showing house in rear to left.
7. General view of yard from west showing farmhouse to right.
8. Northern external elevation showing stable C left, barn in centre and modern shed E to right.
9. Northern external elevation of shed D showing original brickwork D2 left and extension D1 right.
10. Northern external elevation of brick stable C showing blocked window left & narrow door right.
11. Eastern external elevation of stable showing secondary window with modern shed to left.
12. Exterior from south-west showing modern sheds to right and left.
13. Southern external elevation showing modern shed E to left.
14. Southern external elevation of barn showing original entrance to right.
15. Boarded external western elevation of barn seen from modern shed E.
16. Exterior from west showing modern shed E in foreground.
17. Exterior from north-west showing lean-to shed D to left and modern shed E to right.
18. Northern internal elevation of stable C showing narrow door to left and stall to right.
19. Southern internal elevation of stable C showing original window to left and door to right.

20. Eastern internal elevation of stable from south-west showing central stall division to right.
21. Detail of stall division in stable from north-west with later window in eastern gable.
22. Detail of stable ceiling showing blocked loading vent above position of former eastern hay rack from north.
23. Southern facade of stable from modern shed showing double-hung door left & window right.
24. Detail of hay loft loading door above southern external door to stable.
25. Detail of louvered window in southern external elevation of stable.
26. Interior of hay loft above stable from west showing clasped-purlin roof structure.
27. General view of barn interior from east, showing mortises of original eastern gable in tie-beam.
28. General view of barn from west showing original arch-braces in foreground & secondary in rear.
29. Barn roof structure from west showing clasped purlins with empty wind-brace mortises.
30. Brick threshing floor in bay A2 from north-east.
31. Brick threshing floor in bay A2 from south-east, extending into shed D2.
32. Detail of brick threshing floor extending into lean-to shed D from south-east.
33. Interior of rebuilt western gable showing original tie-beam & corner posts.
34. Interior of western roof gable showing wind-brace mortises in principal rafters.
35. Internal northern elevation of western bay A1 showing modern framing to left.
36. Detail of north-western corner showing internal brace mortise & turned stud.
37. Detail of north-western corner post showing empty mortises for internal rising wall braces.
38. Internal northern elevation of central bay A2 showing roof-plate scarf to left.
39. Detail of edge-halved-and-bridled scarf joint in northern roof-plate of central bay, with secondary plate beneath.
40. Interior of northern lean-to shed D2 showing extension D1 to left.
41. Interior of lean-to shed D1 from east showing original wall studs to left.
42. Northern internal elevation of extension bay B showing original primary bracing.

43. Eastern internal elevation showing outline of stable roof beyond.
44. Internal southern elevation of eastern extension bay B.
45. Detail of junction between roof-plates of bay B left and bay A2 right.
46. Internal eastern roof gable of bay B showing lack of wind-brace mortises.
47. Northern internal elevation of secondary roof in bay B showing junction with original to right.
48. Secondary arch-braces to tie-beam of original eastern gable of barn A, seen from east.
49. Southern internal elevation of central bay showing original entrance with vertical door bar in situ.
50. Detail of secondary nailed corner bracket to southern entrance with original jamb mortise above.
51. Detail of carpenter's numeral to south-western arch brace of central bay A2.
52. Detail of eastern double-hung doors to southern entrance.
53. Southern entrance bay showing western double-hung doors and door bar.
54. Detail of roof-plate of southern entrance showing door bar mortise.
55. Southern internal elevation of western bay A1 showing original wall studs.
56. Detail of internal brace trench and mortises in southern elevation of bay A1.
57. Detail of weathering to tie-beam & corner post of external eastern elevation of barn A.
58. Detail of mortise for former ceiling rail or earlier roof-plate in bay B.
59. Detail of weathering to eastern face of south-eastern corner post of structure A.
60. Detail of roof structure from west showing empty wind-brace mortises in principal rafters.

Appendix 2 (pp. 13-16): Selected Printed Photographs



A2.1 General view of site from Potash Farm Road to north, showing barn (A/B) in centre with brick stable (C) to left and recently rebuilt shed (E) to right.



A2.2 General view of site from west showing proximity of farmhouse to right



A2.3 Southern external elevation of barn from south-west showing double-hung doors original 17th century entrance bay (A2) to right & 18th century extension bay (b) to right. The sheds to right and left are modern.



A2.4 General view of barn interior from structure B to east, showing 18th century arch-braces and stud mortises of original eastern gable in tie-beam, & 17th century arch-braces of structure A in rear



A2.5 Barn roof structure from west showing clapsed purlins with wind brace mortises in principal rafters, and profile of stable roof in rear



A2.6 Brick threshing floor in bay A2 seen from north-east, showing southern entrance to left



A2.7 Southern internal elevation of western bay (A1) showing original wall studs with mortises and trench for missing internal brace to right.



A2.8 Detail of weathering to eastern elevations of tie-beam & north-eastern corner post of original barn (A).