

**Barn at
Potash Farm,
Benhall, Suffolk
BNL 029**

Heritage Asset Assessment

OASIS ID: Suffolkc1-119366



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Barn at Potash Farm, Deadman's Lane, Benhall, Suffolk

(TM 364 635)

Heritage Asset Assessment

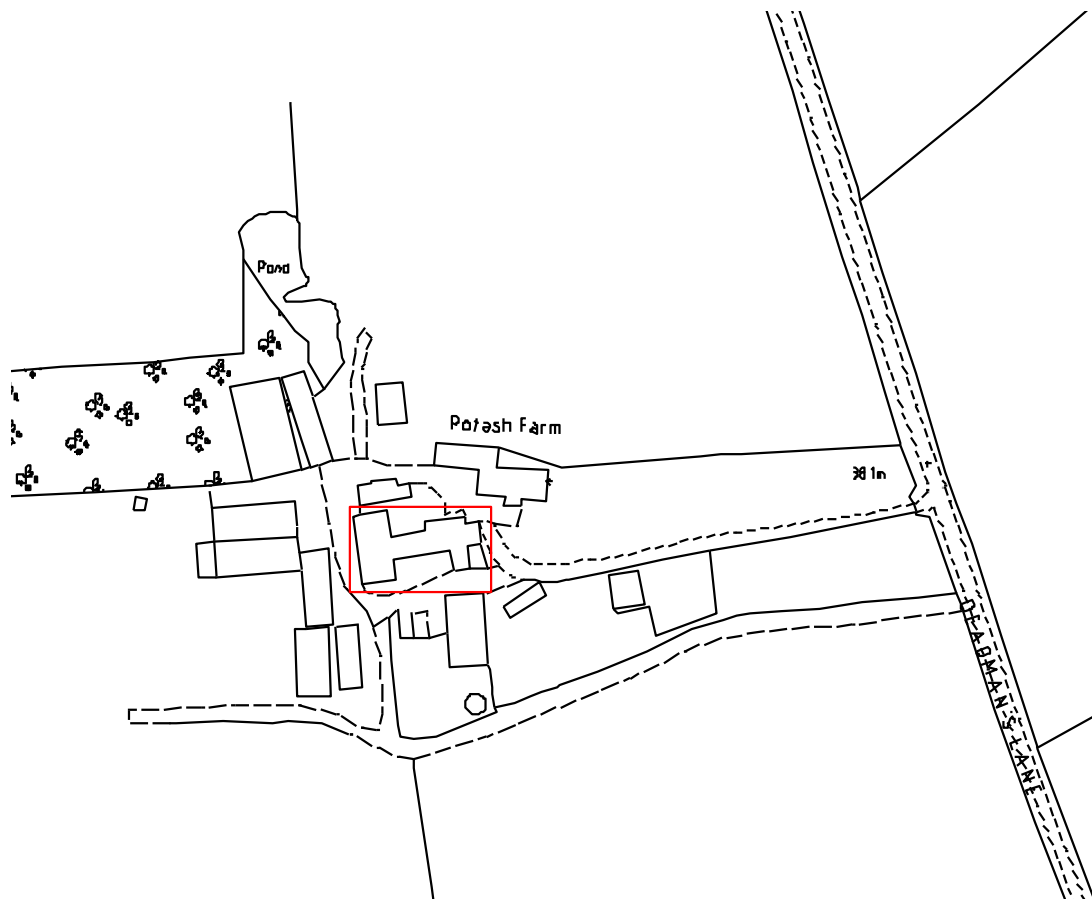
This report provides a record at English Heritage (2006) Level 2 of a redundant historic barn and associated agricultural sheds. It has been prepared to a specification written by Edward Martin of Suffolk County Council's Archaeological Service (ref. SpecHAA(EM)_pre_PotashFm_Benhall_2011, dated 18th November 2011) and is intended to inform and accompany a planning application for conversion to Suffolk Coastal District Council.

Introduction

The report is accompanied by a CD containing a full photographic record in the form of 42 digital images of 21 megapixels (Appendix 1), but also includes 12 printed photographs of key features to illustrate the text. 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 7th February 2012.

Summary

Potash Farm lies in open countryside at the northern edge of Benhall parish, close to its boundaries with Saxmundham and Rendham. At the time of the tithe survey in 1847 it formed a medium-sized tenanted holding on the Benhall Lodge estate, with 85 acres of chiefly arable land in Benhall parish and probably more in Saxmundham. No buildings on the site are listed but the rendered farmhouse is said to contain a substantial timber frame and may date from the 17th century or before. The agricultural buildings all date from the middle decades of the 19th century and are of local historic significance as they illustrate the nature of the contemporary agricultural revolution known today as Victorian High Farming. The main barn is a traditional timber-framed and weatherboarded threshing barn of three bays with a central entrance to the south and a lean-to porch to the rear. It contains bolted knee-braces with nailed primary wall-braces and roof collars in contrast to the arch-braces and pegged joints associated with the first half of the 19th century, and while it may represent the barn of similar outline shown on the 1847 map it was probably built in the following decade. Its wall and roof framing survives largely intact, but it is now covered with corrugated iron and asbestos rather than its original tile. The milking parlour adjoining its eastern gable was almost certainly built as a contemporary stable and retains a good ceiling of chamfered joists, but in other respects has been much altered. The most unusual structure on the site is a detached single-storied granary to the north of the barn. This diminutive building of *circa* 1860 rests on its original cast-iron 'mushrooms' (in lieu of the staddle stones found elsewhere in the country) and is a rare survival of a type that was never common in Suffolk (where granaries more typically lay above cart lodges). Despite their local historic significance, however, the various buildings on the site are not of sufficient age, rarity or completeness to meet the strict English Heritage criteria for listing.



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Figure 1
Modern Ordnance Survey
Enclosing the barn and attached sheds in red with the farmhouse to the north-east and
Deadman's Lane on the east. See figure 6 for more detail.

Documentary and Cartographic Evidence

Potash Farm lies in open arable countryside at the northern edge of Benhall parish, approximately 2 km from St Mary's church and 200 m south of its boundary with both Rendham and Saxmundham parishes. The site is reached by a dedicated track from Deadman's Lane to the east, and contains a number of 20th century farm buildings in addition to the 19th century complex which forms the subject of this report. No buildings on the site are listed but the farmhouse is said to possess a substantial timber frame and despite its 20th century render and fenestration may well date from the 17th century or before.

At the time of the Benhall tithe survey in 1847 the farm was a medium-sized tenanted holding on the estate of the Reverend Henry Holland of Benhall Lodge, and contained 85 acres of chiefly arable land in the parish (and probably more in Saxmundham). Its tenant was named as John Stanford, and the field adjoining the farmstead on the north, which included a large pit, was known as Potash Field. The tithe map shows the farmhouse in red with an L-shaped profile, much as today, with three outbuildings to the south-west including a large structure on the site of the present barn. This structure may represent the existing barn and milking parlour, which date from a similar period, but its profile differs significantly (lacking the lean-to northern porch and with a smaller milking parlour), and the map probably depicts an earlier barn on the same plot.

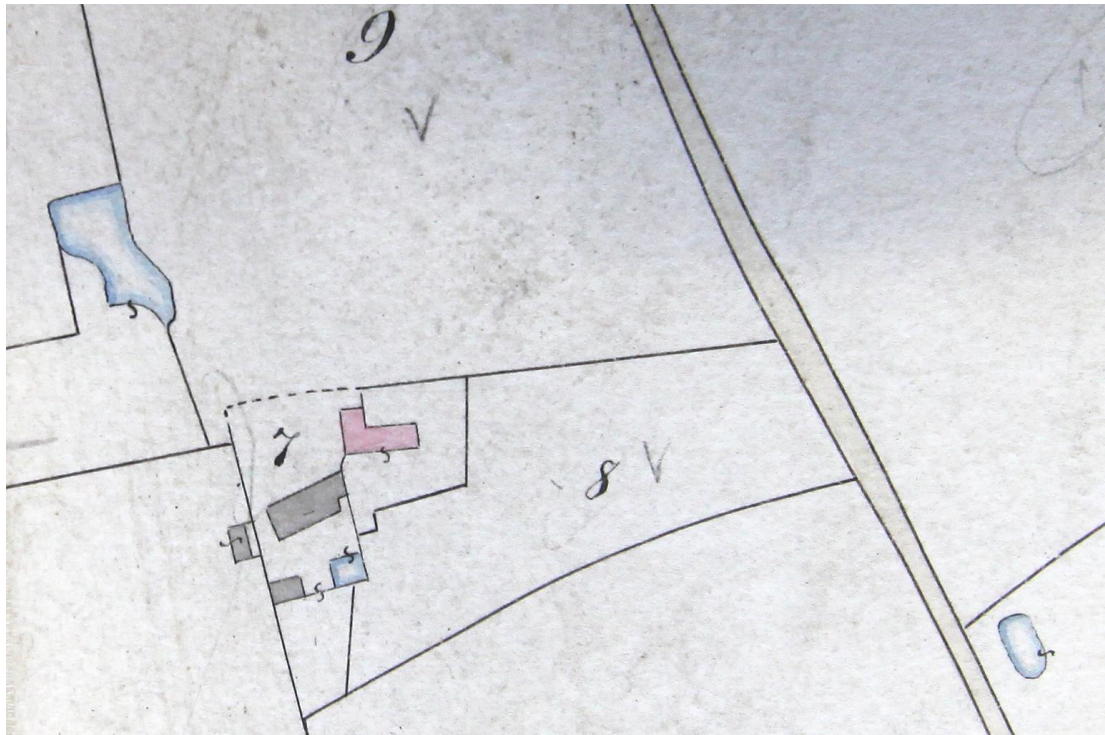


Figure 2. The 1847 tithe map of Benhall, showing the L-shaped farmhouse in red with Potash Field (9) adjoining a large pit to the north. The large rectangular building to the south-west of the house occupies the site of the present barn but lacks the northern lean-to porch and probably presents its predecessor. The narrow projection of the milking parlour to the east is also shorter than at present.

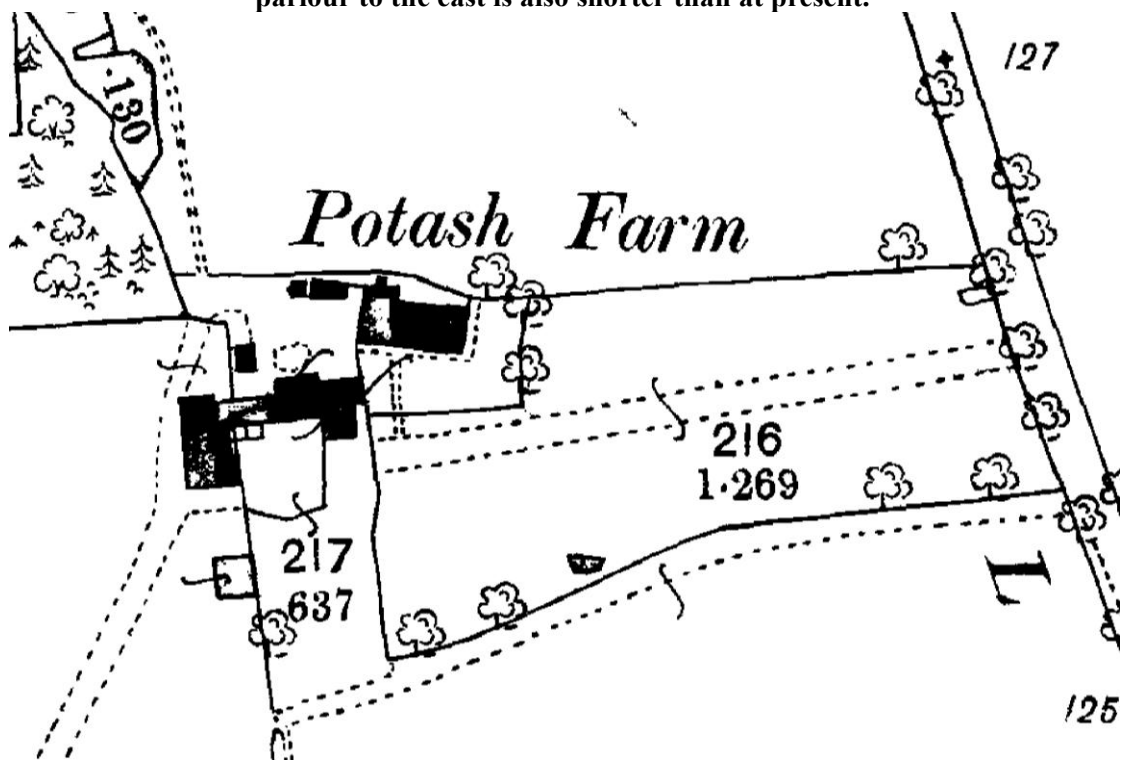


Figure 3. First Edition 25 inch Ordnance Survey of 1883. The present barn is shown with its current outline together with a large new shed to the west (since rebuilt in cement block-work) and a detached granary to the north. The circular feature outside the northern porch may be a horse mill.

The Ordnance Survey of 1883 undoubtedly shows the present buildings, including the detached granary to the north of the barn which was absent in 1847. A series of small enclosures adjoin the southern wall of the brick loose box (building 2 in figure 6) and a large structure that no longer survives occupies the site of the 20th century cement-block shed to the west. The circular feature indicated by a broken line to the north of the barn's northern entrance may represent a horse mill (i.e. an open-sided shelter) used to power machinery in the porch.

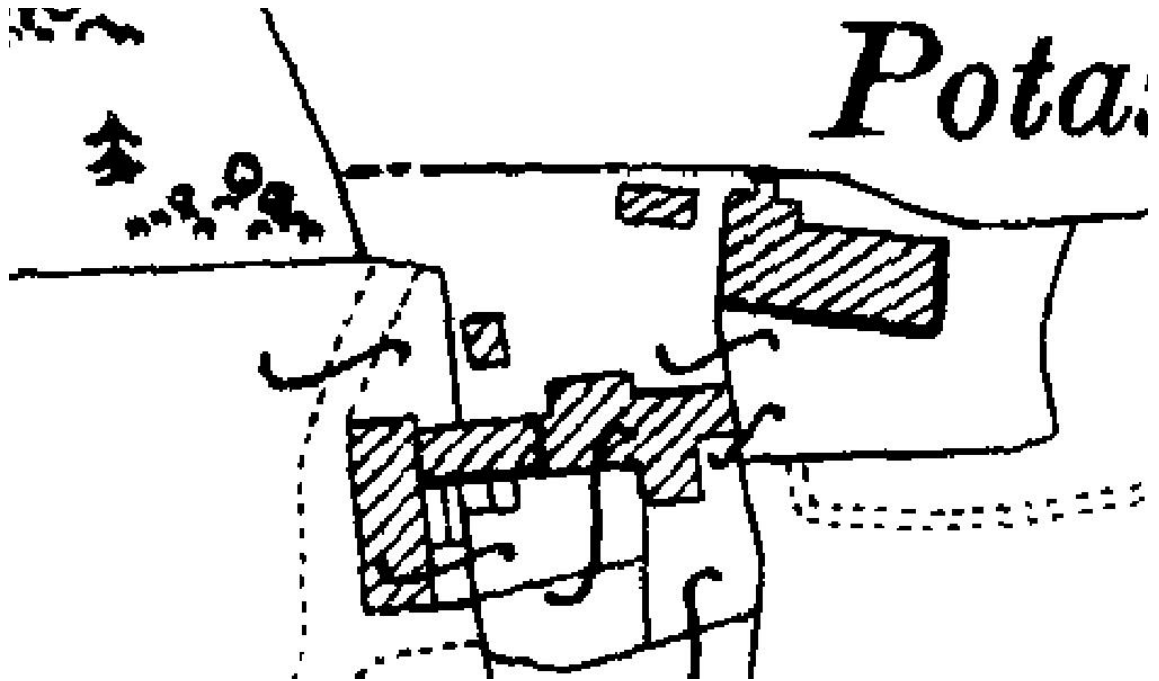


Figure 4. The Second Edition 25 inch Ordnance Survey of 1904, showing little change since 1883.

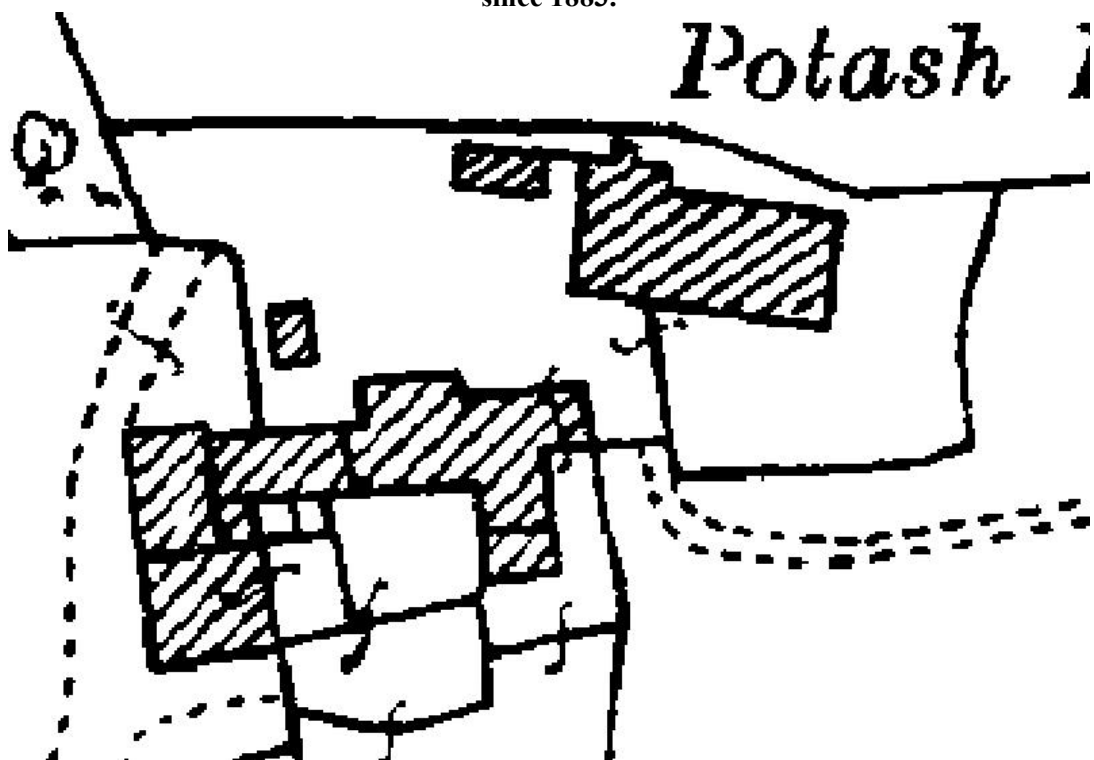


Figure 5. Third Edition 25 inch Ordnance Survey of 1927. The lean-to shed to the south of the barn (building 5 in figure 6) had been extended since 1904.

Building Analysis

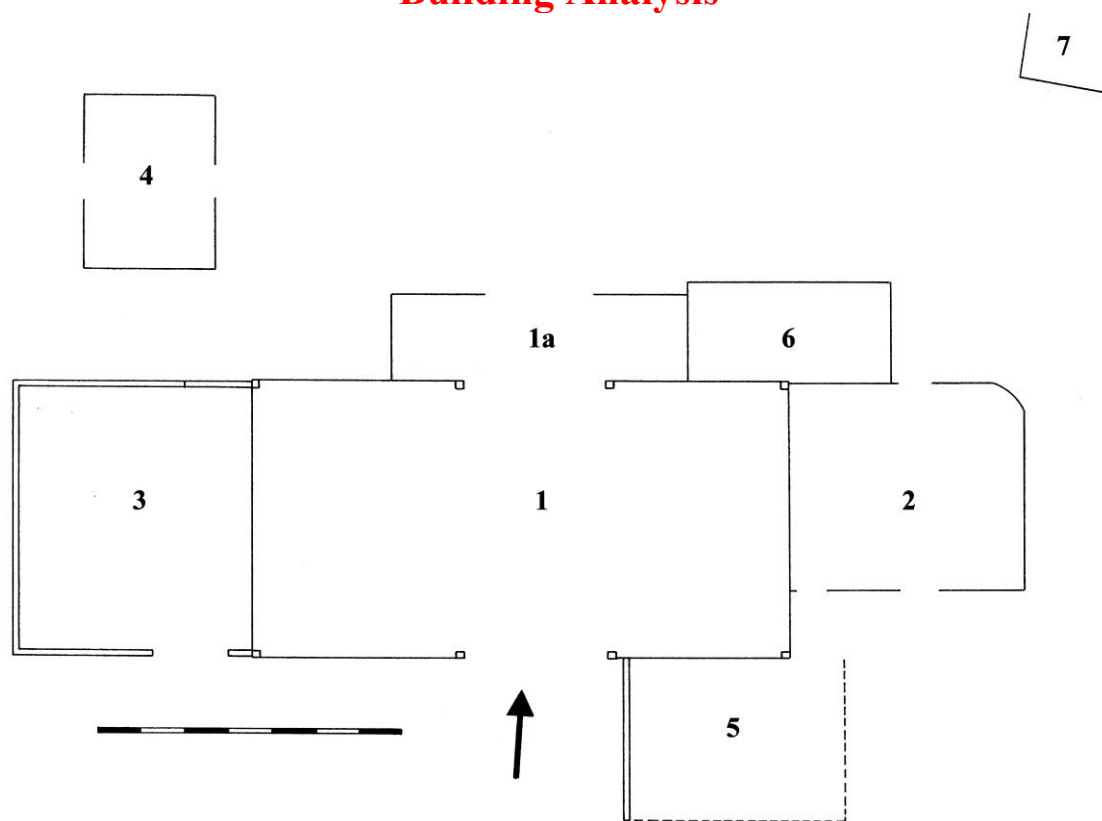


Figure 6

Block plan of the barn complex identifying each unit with a number for ease of reference in the text and photographic record. Scale in metres. The large mid-20th century cement-block shed to the west is not shown but occupies the site of an earlier structure shown on the historic Ordnance Surveys.

1 & 1a. Mid-19th century timber-framed and weatherboarded barn

The main barn is a timber-framed and weatherboarded structure of three bays on an approximately east-west axis which extends to 12.4 m in length by 6.4 m in overall width (40.5 ft by 21 ft). Its walls rise to 4 m at their roof-plates (12 ft) including a shallow red-brick plinth of 0.5 m, and consist of narrow studs (chiefly of oak) which are tenoned but not pegged to the principals and interrupted by nailed primary braces. The internal floors are of modern concrete. The two tie-beams flanking the entrance in the central bay are secured to the storey posts by original bolted knee-braces (with no evidence of earlier arch-braces) and the posts are not jowled. The gable tie-beams are flush with the roof-plates and secured by iron straps rather than dovetails, while the roof structure consists of clasped-purlins with nailed collars and a ridge board. Like the wall studs, the rafters are interrupted by diagonal braces.

Some individual timbers have been re-used from 17th century or older buildings, including the eastern tie-beam (which contains mortises for pegged arch-braces) but these carpentry features are characteristic of the third quarter of the 19th century and are not normally found in barns depicted on the tithe surveys of the 1830s and 1840s. The 1847 tithe map of Benhall is an unusually late example, however, and it is possible that it shows the present barn and adjoining milking parlour (2) when newly built. It is more likely, however, that it shows a previous barn on the same site and that the present structure represents a replacement of the 1850s or 1860s; the narrow eastern projection of 1847 is considerably shorter than the milking parlour and the lean-to porch (1a) is not shown. This porch projects by 2 m (6.5 ft)

from the rear (northern) elevation and includes open sheds of 1.7 m (5.5 ft) in length which flank the central bay and would have been used to store grain alongside the threshing floor. Its side-walls overlap the weatherboarding of the main barn in a manner that might suggest it was added afterwards, but there is no evidence of either studs or doors in the roof-plate of the central bay and the barn must have possessed a porch from the outset. The equivalent roof-plate of the southern elevation contains a mortise for a central door bar (i.e. a moveable vertical post to which the doors were secured), and clearly formed the principal entrance, but the present aperture has been reduced in height and now lacks doors of any kind.

The structure survives largely intact and in good condition, although the external weatherboarding has been renewed except where protected by the northern porch and the buildings adjoining both gables. The roof was probably designed for plain tiles or pantiles, given its pitch of approximately 50 degrees (where thatch usually requires at least 55), but is now covered by corrugated iron to the south and corrugated asbestos to the north. The central threshing floor is either lost or hidden by modern concrete and there is evidence of a 20th century milling floor in the eastern bay (as indicated by deal rails attached to the walls).

2. Milking Parlour

The milking parlour adjoins the eastern gable of the barn with which it appears to be contemporary. The building extends to 5.3 m in length by 4.9 m in width and its walls rise to 3 m at their roof-plates (17.5 ft by 16 ft by 10 ft). Like those of the barn, its diagonal wall braces are nailed to the principal posts and interrupt the studs in the typical mid-19th century fashion, and its rafters are similarly interrupted by diagonal braces. The roof consists of butt-purlins rather than clasped-purlins but this reflects its smaller proportions. The framing remains exposed in the loft but the walls of the lower storey have been rendered and whitewashed, obscuring any evidence of its original layout. The building contains mid-20th century cattle stalls of galvanised tubing and was used until recently as a milking parlour with a dairy in the adjoining lean-to (6); it was almost certainly designed as a stable although any diagnostic fixtures and fitting have been removed and there is no obvious evidence of a hay drop in the ceiling. The replacement of the loft floorboards with wire-mesh may have destroyed any such evidence, and the windows of the eastern gable are insertions of the mid-20th century. The original ceiling joists are well-framed, with neatly stopped chamfers to every tall-sectioned common joist, and the structure remains largely intact with the exception of its north-eastern corner which has been removed to widen the thoroughfare towards the farmhouse. The roof is now covered by corrugated asbestos and the floors are of concrete.

3. Brick Loose Box

The building adjoining the barn's western gable is a single-storied red brick structure of the same width which rises to only 1.8 m at its roof-plates and extends to 5.5 m in length (6 ft and 18 ft respectively). The interior is now rendered and used as a loose box for cattle and calves (it contained a calf with its mother at the time of inspection) and it probably served this purpose from the outset as it is shown on the Ordnance Survey of 1883 with two small pens to the south. The eastern end of the rear, northern elevation differs from the rest of the fabric and appears to have formed an original doorway of 1.5 m in width that was blocked in the 20th century. The roof is now covered with corrugated asbestos.

4. Detached Granary

The small detached weatherboarded building to the north of the barn is a mid-19th century single-storied granary resting on a series of cast-iron 'mushrooms' with domed tops and cross-sectioned bases. These mushrooms were the local equivalent of the staddle stones used for the same purpose in other parts of the country where stone was more plentiful. The

building extends to 4.25 m in length by 3 m in width on a north-south axis (14 ft by 10 ft) and its walls rise to 2.75 m at their roof plates (including the mushrooms, which offer clearance of approximately 25 cm (although it is uncertain to what extent they may have sunk into the ground)). The original hipped pantiled roof is intact, complete with internal plaster between the rafters, as are the studwork walls with diagonal primary braces and brick infill to a height of 2 m (reflecting the internal bins, which have been removed). Both the eastern and western elevations contain central doorways but the latter may be a secondary insertion, and large sections of heavily tarred original cladding still remain *in situ*. This building is shown on the Ordnance Survey of 1883 but not the 1847 tithe map and dates from *circa* 1860.

5. Lean-to Shed

A largely collapsed lean-to shed of uncertain configuration with a western side-wall of Fletton brick extending to 3.6 m (12 ft) from the southern elevation of the barn's eastern bay. This structure is first shown on the Ordnance Survey of 1883 but its brickwork may have been rebuilt in the early-20th century. A later extension of which only fragments remain was added between 1904 and 1927 as shown by figures 4 and 5.

6. Dairy Shed

A lean-to shed of cement blocks added to the northern elevation of the barn and milking parlour in the mid-20th century to accommodate the tanks of a dairy (as reported by the owner). The interior is open on the east and now serves as a wood shed.

7. Farmhouse

The rendered and cement-tiled farmhouse is not listed and was not inspected for the purpose of this report, but is said to contain a substantial timber frame and may date from the 17th century or before.

Historic Significance

The main barn at Potash Farm has lost its original doors, roof tiles and most of its cladding, but in other respects is a relatively well preserved mid-19th threshing barn of typical East Anglian form. It may represent the building of similar scale and outline shown on the tithe map of 1847 but probably dates from the following decade and is of historic value insofar as it reflects the great rebuilding of local farm complexes during the agricultural revolution known today as Victorian High Farming. The adjoining milking parlour is a contemporary structure that was almost certainly designed as a stable and retains an intact original ceiling of chamfered joists but in other respects has been much altered. The detached granary on iron 'mushrooms' is a good example of an increasingly rare type of agricultural building that was never common in Suffolk where granaries were more usually placed above cart lodges. The light nature of its timber frame has made it vulnerable to rot in places but it appears to remain structurally viable and is arguably the most historically interesting element of the farm complex. Despite their historic significance the various buildings of the site are not of sufficient age, rarity or completeness to meet the strict English Heritage criteria for listing.

Appendix 1 (on accompanying CD): Full Photographic Record

Descriptions of Photographs in Appendix 1

Photograph no.

1. General view of site from entrance track to east showing farmhouse to right and the 19th century barn complex in centre.
2. General view from south showing corrugated iron roof of main barn (1) with loose box (3) left and milking parlour (2) right.
3. General view from south-west showing 20th century cement-block shed to left and entrance track in rear to right.
4. General view from north-east showing detached granary (4) to right with barn (1) and milking parlour (2) to left.
5. Southern exterior of barn (1) showing remains of brick lean-to shed (5) to right of original central entrance.
6. Northern exterior of barn showing lean-to rear porch (1a) with milking parlour (2) and dairy shed (6) to left.
7. Western external gable of barn (1) showing lean-to northern porch (1a) to left and brick loose box (3) to right.
8. Interior of lean-to northern porch (1a) from west showing grain storage area with main barn (1) to right.
9. Interior of lean-to northern porch (1a) from east showing grain storage area with main barn (1) to left.
10. Northern interior of barn (1) showing entrance to lean-to porch (1a) with double-doors in rear.
11. Southern interior of barn (1) showing central entrance with original bolted knee-braces to tie-beams and primary wall braces.
12. Original clasped-purlin roof structure of barn (1) from north showing nailed collars, primary rafter braces and ridge board.
13. Western interior of barn (1) showing outline of loose box (3) in gable and nailed primary wall braces.
14. Southern interior of western bay of barn (1) showing lower boarding and rail suggesting sometime presence of a grain loft.
15. Eastern interior of barn (1) showing original entrance in central bay to right (lacking doors) and lean-to porch (1a) to left.
16. Southern interior of barn showing later studs above present entrance in central bay. Original doors rose to roof-plate as indicated by central door bar mortise.

17. Southern exterior of milking parlour (2) from corner of barn (1) to west showing timber-framed fabric with entrance door to left.
18. Southern exterior of milking parlour (2) from south-east showing partly collapsed lean-to shed (5) to left.
19. Eastern external gable of milking parlour (2) from north-east showing truncated corner with lean-to dairy shed (6) to right.
20. Interior of lean-to dairy shed (6) from east showing rendered northern external wall of milking parlour to left.
21. Rendered northern interior of milking parlour (2) showing entrance door, galvanised cattle stalls and original ceiling joists.
22. Detail from east of original ceiling in milking parlour (2) showing neatly chamfered and stopped tall-sectioned oak common joists.
23. Roman carpenter's numeral to northern end of binding joist in milking parlour (2) viewed from east.
24. Southern interior of milking parlour (2) showing two external doors with 20th century windows in eastern gable to left.
25. Interior of milking parlour (2) from east showing rendered walls and original ceiling with no clear evidence of hay drop.
26. Internal eastern gable of milking parlour (2) showing 20th century windows and truncated north-eastern corner to left.
27. Internal eastern gable of loft above milking parlour (2) showing timber-framed wall fabric with diagonal primary braces.
28. Northern interior of loft above milking parlour (2) showing timber-framed walls with nailed primary braces and original tie-beam.
29. Southern interior of loft above milking parlour (2) showing timber-framed walls with nailed primary braces and original tie-beam.
30. South-western corner of loft above milking parlour (2) showing boarded gable of barn (1) and connecting hatch.
31. Southern butt-purlin roof structure of milking parlour (2) showing nailed collars and primary rafter braces identical to those of barn.
32. Northern exterior of brick loose box (3) showing 20th century infill to doorway to left and modern shed to right.
33. Southern exterior of brick loose box (3) showing cattle pen in foreground and barn (1) to right.
34. Rendered interior of brick loose box (3) seen from entrance door in southern exterior.

35. Eastern exterior of detached granary (4) with hipped pantiled roof in centre with northern exterior of barn (1) to left.
36. Southern exterior of detached granary (4) showing brick infill to studwork of walls.
37. Detached granary (4) from south-west showing remains of heavily tarred weatherboarding and original pantiled roof.
38. Detail of cast-iron 'mushroom' beneath threshold of central entrance in eastern exterior of detached granary (4).
39. Detail of cast-iron 'mushroom' with cross-section base supporting ground sill of detached granary (4).
40. Interior of detached granary (3) from central eastern entrance showing narrow secondary door in western wall.
41. Northern interior of detached granary (4) seen from central entrance of eastern elevation.
42. Southern interior of detached granary (4) seen from central entrance of eastern elevation showing lower tier of brick infill.

Photographic Appendix 2 follows on pp. 11-16

Appendix 2 (pp. 11-16): Selected Printed Photographs



Illus. 1. General view of the site from the entrance track to the east showing the unlisted (but possibly 17th century) farmhouse (7) to the right and the 19th century barn complex in the centre.



Illus. 2. General view from the south showing the tall corrugated-iron roof of the main barn (1) in the centre with the brick loose box (3) to the left and the milking parlour (2) to right. The farmhouse (7) is visible in the rear to the right.



Illus. 3. General view from the north-east showing the detached granary with hipped pantiled roof (4) to the right (surrounded by 20th century sheds), with the barn (1) and milking parlour (2) to left. The barn's lean-to porch (1a) is an original feature shown on the 1883 Ordnance Survey.



Illus. 4. The southern interior of the barn (1) showing the original entrance in its central bay (now reduced in height and lacking doors). The bolted knee-braces to the tie-beams are original features, and the diagonal primary wall and rafter braces are typical of the mid-19th century.



Illus. 5. The eastern interior of the barn (1) showing the original entrance in the central bay to the right and the contemporary lean-to porch (1a) to the left. The collars of the clasped-purlin roof are nailed rather than pegged to the principal rafters.



Illus. 6. The rendered and whitewashed southern internal wall of the milking parlour (2) showing its two external doors with the 20th century windows of the eastern gable to the left. Although used most recently as a milking parlour this shed may have been designed as a stable.



Illus. 7. A detail from the east of the original ceiling in the milking parlour (2) showing its neatly chamfered and stopped tall-sectioned oak common joists. There is no evidence of a hay drop but the original loft boards have been replaced with wire mesh.



Illus. 8. The northern interior of the loft above the milking parlour (2) showing its timber-framed walls with nailed primary braces and an original tie-beam. The rafters of the butt-purlin roof structure are also interrupted by diagonal braces as in the roof of the barn (1) and both buildings appear to be contemporary.



Illus. 9. The southern exterior of the brick loose box (3) showing the modern cattle pen in the foreground and the corner of the barn (1) to the right.



Illus. 10. The detached granary (4) from the south-west showing its hipped pantiled roof and the remains of heavily tarred original weatherboarding. The farmhouse (7) and barn (1) are visible to the right.



Illus. 11. A detail of the cast-iron mushroom with cross-sectioned base supporting the eastern ground sill immediately beneath the entrance to the detached granary (4).



Illus. 12. The interior of the detached granary (3) from its central eastern entrance showing the narrow ostensibly secondary door in its western wall and the plaster beneath the pantiles. The brick infill probably indicates the height of the missing grain bins.