AN ARCHAEOLOGICAL WATCHING BRIEF OF GROUNDWORKS FOR THE REDEVELOPMENT OF THE BRICK STABLES AT BARWELL COURT FARM, CHESSINGTON, SURREY



## AN ARCHAEOLOGICAL WATCHING BRIEF OF **GROUNDWORKS FOR THE REDEVELOPMENT OF THE BRICK** STABLES AT BARWELL COURT FARM, CHESSINGTON, **SURREY**

#### Summary

Ground level reductions across the former stable yard and within the stable building were monitored for the presence of archaeological remains. Evidence of the former interior structural layout of the stable block was revealed as well as the foundations of a former cart shed. No features of archaeological interest were revealed and it is recommended that no further archaeological involvement is required in respect of the development.

> Surrey County Archaeological Unit Surrey History Centre, 130 Goldsworth Road, Woking, Surrey, GU21 6ND

Tel: 01483 518777 Fax: 01483 518780 email: archaeology.scau@surreycc.gov.uk

website: www.surreycc.gov.uk/SCAU

Unit Manager Author Date of report NGR Client

**Rob Poulton** Nigel Randall Date of Fieldwork 22 February – 9 March 2011 May 2011 Revised Sept 2011 TQ 1700 6306 (centred) Mr Philip Stone on behalf of the Trustees of the Sir Francis Barker Will Trust



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#### 1. Introduction

Between 31 March and 13 April 2011, the Surrey County Archaeological Unit (SCAU) conducted an archaeological Watching Brief during the ground level reductions within the building of the former stables and across its associated stable yard, at Barwell Court Farm, Chessington, Surrey (fig 1). The Watching Brief was recommended following a trial trench evaluation of the site conducted during October 2010 (see 1.3).

#### Planning Background

1.1 The work was undertaken on behalf of Mr Philip Stone who has been granted planning approval (ref: 07/10255/FUL and 10/10185/EXT) for the conversion of a brick stable block to two, three bedroom, semi-detached houses, with accommodation in the roof space. The approval included the demolition of existing wooden stables and store to facilitate the erection of two garages, and the re-landscaping of the existing stable yard with alterations to the existing northwest boundary wall. A condition attached to the planning approval required the implementation of a programme of archaeological work in accordance with a Written Scheme of Investigation (WSI) which had been submitted to and approved, in writing, by the Planning Authority.

1.2 SCAU was commissioned to produce a preliminary desk-based archaeological assessment and WSI (Robertson 2010a). The assessment concluded that the site lies within an Area of Archaeological Significance and that the building is identified as a Building of Townscape Merit under the terms of the Royal Borough of Kingston upon Thames' Unitary Development Plan First Alteration, and that the general archaeological potential of the site was high. It went on to recommend that a trial trench evaluation be undertaken to test that potential.

1.3 A single trial trench, excavated in the former stable yard, revealed one feature of possible archaeological interest, although its origin and nature was uncertain. The excavation demonstrated that the stable yard had been truncated down to the level of the natural clay but noted that the complete removal of levels of potential interest within the yard meant that it could not be used to assess the potential of the rest of the site. The evaluation report recommended that a watching brief be conducted on groundworks associated with the construction of the garage and driveway, the internal ground level reductions and the re-landscaping of areas to the northeast and southwest of the stable

block, should the groundworks required to create gardens in these areas prove to exceed the removal of the concrete or tarmac that covered them (Robertson 2010b).

#### 2. Methodology

2.1 Observations were conducted during the ground level reduction across the area of the planned garages and driveways, an area to the southwest of the stables, and within the interior of the stables themselves. The WSI for the evaluation (Robertson 2011) gives full details of the recording methods that were used during the Watching Brief.

2.2 The excavations were carefully monitored for the occurrence of features or artefacts of archaeological interest that might relate to ancient activity, in particular any evidence associated with the medieval development of Barwell Court.

2.3 The natural geology was exposed across all of the excavations and was carefully examined for evidence of features cutting it, with hand excavation and recording being carried out as necessary.

#### 3. Results

3.1 The Geological Survey of Great Britain, sheet 270, covering the Greater Londaon area, at scale 1:50,000, was consulted for the geological background to the site. The site is located on the boundary between the expanses of London Clay and a small area of overlying drift deposits of Claygate Beds, a generally sandier deposit.

3.2 No topsoil or subsoil was present across any of the excavations, presumably having been removed during previous ground level reductions associated with the construction of the stable and its yard, some time between 1880 and 1896 (Robertson 2010a).

3.3 The natural orange and grey mottled London Clay was revealed across all of the observed excavations.

#### 3.4 Ground level reductions – proposed garages and driveways

Ground level reductions were carried out across the east side of the site, below a demolished wooden stables and small brick outbuilding. Observations were also carried out during the grubbing out of the eastern boundary retaining wall (fig 2). The total area measured 30m long by 5m wide at its south end, widening to 6m at its north end.

#### 3.4.1 The north end – Area A

Across the north end, an area measuring 12.5m long by a maximum of 6m wide had a shallow concrete raft, 0.10m deep above 0.20 -0.30m of modern building debris. This debris was directly above the natural clay indicating that previous ground level reductions had truncated the area.

The excavation revealed two short sections of brick foundations that formed the northeast corner of a building (figs 2 and 3), most probably the L shaped building first shown on the second edition Ordnance Survey (OS) map of 1896, as the foundation's north wall was in line with the north end of the main stable building (note, previous reports erroneously cited this map's date as 1886). The foundations comprised of two courses of red bricks set on a shallow base of lime mortar. A single course of bricks set with lime mortar and stamped with the maker's name 'SOUTHWATER', formed the extant remains of the demolished wall. The remains of a compacted chalk floor was evident within the structure.



Fig 3 The foundations of the demolished building in the former stable yard, looking northwest, and detail of the bricks used in its construction

#### 3.4.2 The central area – Area B

Across the centre of the observed area (fig 2), measuring 12.5m long by approximately 5.5m, was an upper surface of crushed and puddle chalk to a depth of 0.30m. The surface formed the floor of the former wooden stables. Below the crushed chalk was a layer of crushed brick and tile. This layer extended below the depth of the required ground level reductions but a trial excavation showed it to be 0.30m deep and directly above the natural clay. No features of archaeological interest were observed in this area.

#### 3.4.3 The south end – Area C

The south end, measuring 5m by 5m, was occupied by a brick built outbuilding, formerly used as a stable. The building was demolished and the ground below was reduced. It had a shallow concrete floor over a 0.40m deep deposit of mid brown sandy clay with frequent inclusions of small brick and tile fragments. Cut through this deposit was 0.9m by 0.9m square rubbish pit containing several bottles of early to mid 20th century date. The pit cut through into the underlying clay. No features of archaeological interest were observed across the footprint of the building and it is likely that the area was truncated during earlier ground level reductions.

#### 3.4.3 The eastern boundary retaining wall – Area D

The boundary wall, to the east of the former stable yard was removed and observations were carried out during the process. The north half of the wall was constructed of frogged, red bricks with a lime mortar on a lime mortar base. The south half was constructed of similar bricks but with a cement based mortar, suggesting that it had been rebuilt. Four buttresses, equally spaced along the wall, had been added at a later date.

The land behind the wall, visible after its demolition, showed considerable signs of disturbance with layers of brick, soil and mortar present. It could not be determined whether any undisturbed deposits of topsoil or subsoil remained but it is unlikely given the presence of Barwell Lane immediately to its east.

#### 3.4.4 The southwest area – Area E

A small trial excavation was conducted in the southwest of the site, outside of the stable's south entrance, to determine whether it had been subjected to the same degree of truncation noted across the site during the evaluation and earlier stages of the

Watching Brief. The removal of the concrete revealed a 0.20m deep layer of crushed chalk rubble overlying a 0.10m deep layer of grey/brown clay with inclusions of brick and tile fragments. The natural clay was exposed at a depth of 0.40m. The stratigraphy and degree of truncation was very similar to that observed in the stable yard during the evaluation phase. The proposed extent of the landscaping required for the southwest area (to be hard landscaped) would entail the removal of the concrete slab and the crushed chalk to a depth of approximately 0.25m below the present ground level. As a consequence no further observations were made in this area.

#### 3.5 Ground level reductions – Stable interior

The interior of the stable was divided into three areas; the north and south ends were each divided into for stables whilst the middle area was used as a tack room. This area had a fireplace and chimney stack, and its walls were finished with lath and plaster, suggesting that it was designed for occupation. The lofts above the stable areas also showed signs of removed laths and may also have been used as living quarters for stable hands or other farm workers.

Due to access restrictions, excavations could only be conducted within the north and south ends of the stable building. Excavations were limited within these areas as access was restricted by large timbers that supported the first floor. This was compounded by additional temporary supports, installed to ensure the integrity of the structure should any supports be damaged or undermined during the excavations.

#### 3.5.1 The south end – Area 1

Access within the south end of the stable was severely restricted by the position of the first floor supports, and excavations were confined to a central area of approximately  $8m^2$  (fig 4). The floor was constructed from crenellated, blue stable bricks set onto a 0.10m deep layer of concrete. This overlay a 0.20m deep layer of disturbed, grey/brown clay with inclusions of flint pebbles and brick fragments. The natural clay was revealed at a depth of 0.47m.

The bases of two brick piers were revealed (fig 4) cutting the natural clay. One occupied a central position with the second to its northwest. A brick foundation, one brick's width and three courses deep, ran between them. It was noted that the positions of the piers corresponded with two redundant, straight mortises in the main roof tie beam. A third redundant mortise indicated the position of a third pier but due to access restrictions, its existence could not be confirmed. It is probable that the piers were part of the original construction and that they, and their associated timbers, were removed at a later date to be replaced by the extant timbers, or their predecessors. The area was further disturbed by two drains constructed of large diameter, ceramic pipes. No features of archaeological interest were revealed.

#### 3.5.2 The north end – Area 2

An area of approximately 4m<sup>2</sup> was observed (fig 4). It had a floor surface of concrete, 0.10 - 0.18m thick overlaying a 0.20m deep layer of grey/brown clay with inclusions of flint pebbles and small brick fragments. The natural clay was revealed at a depth of 0.30m. The area was disturbed by a modern ceramic drain and hopper and an earlier, brick built drain and hopper. No features of archaeological interest were revealed.

#### 3.5.3 The north end – Area 3

An area of approximately 7m<sup>2</sup> was observed (fig 4). It had a floor surface of concrete, 0.07m thick overlaying an earlier floor surface of shallow-frogged, red bricks laid stretcher side up on a layer of 0.08m deep orange/grey very sandy clay (fig 5). The bricks were heavily worn on their upper surface but completely unworn on their lower surface, suggesting they were unused when installed. The sandy clay on which they were set had occasional inclusions of struck flints and slate, and frequent brick and tile fragments. Two or three of the flints display flake removals on their distal surface indicating careful core preparation that is typical of a late Mesolithic or Neolithic date. Other flints may be the result of building activity. The inclusion of the prehistoric flints within this layer is curious but of little importance as they are clearly not in their original context and may even have been imported from outside of the site.



Fig 5 The brick floor and bedding substrate in Area 3

The area was heavily disturbed by three brick built drain hoppers, two with large diameter ceramic pipes that had been cut through the brick laid floor and a third with a brick built channel set below the brick floor and constructed from the same type of brick. The natural clay was revealed at a depth of 0.25m. No features of archaeological interest were observed.

#### 3.5.2 The north end – Area 4

An area of approximately 6m<sup>2</sup> was observed (fig 4). It had a floor surface of concrete, 0.11m thick overlaying a 0.15m deep layer of grey/brown clay with inclusions of small brick and tile fragments. The natural clay was revealed at a depth of 0.25m. The area was disturbed by a modern ceramic drain and an earlier brick built drain and hopper. An area of deeper disturbance was observed in the north half of the area.

The base of a brick pier was revealed. It measured 0.45m<sup>2</sup> and extending to a depth of greater than 0.70m. It was constructed of similar bricks to those used in the brick built drains and the brick floor in Area 3. It was positioned below a redundant, shallow-tapering, long mortise hole in the main roof tie beam. A similar redundant mortise was noted in a corresponding position at the other end of the tie beam indicated the presence of a second pier, although it was not revealed during the excavations in Area 3. It is probable that the piers were part of the original construction and that they, and their associated timbers, were removed at a later date to be replaced by the extant timbers, or their predecessors. No features of archaeological interest were revealed.

#### 4. Conclusions and recommendations

#### 4.1 External ground level reductions

All of the observed areas to the exterior of the stables proved to have been truncated, with no evidence of any top or subsoil present. It is probable that the majority of this truncation occurred during the original construction of the stables and its outbuildings, or during subsequent building and rebuilding phases of the outbuildings.

The only feature of any note observed during the exterior ground level reductions was the short section of wall foundation towards the north end of the site in a position that corresponded to the L shaped building on the later edition OS maps (fig 6). The main stable building does not appear on the OS map first edition of 1880 but it, and an L shaped building to its southeast, have both been constructed by the time of the second edition map of 1896. The maps show the L shaped building to be open fronted to the stable yard. The 1913 edition shows that an OS bench mark was added to this building, indicating that by that date it was a permanent structure; bench marks were only added to permanent structures. Its plan form was the same at the time of the 1934 edition.

The available dates for the production of the Southwater bricks used in the foundations suggests that they were not produced until the early 20th century when the Southwater Brick, Tile, Terracotta Pipe and Clay Company was acquired by the Sussex Brick and Estates Company in 1907 who then developed Southwater Engineering Bricks (www.horshamdistrictcountryside. org). The Southwater bricks used are different from those used in the construction of the stable building, which indicates a different and probably later date for the L shaped building. If the 1907 date is correct, it suggests that the L shaped building was either a later phase of construction than the stable, and therefore what appears on the 1896 OS map is a timber building from 1896 was rebuilt, or partially rebuilt, on the same footprint, some time after that date. Given that the observed foundations and the first course were of the same type of Southwater brick and that no evidence of older foundations were discovered, it seems most likely that the L shaped structure shown on the 1896 OS map was a timber building, later replaced by a brick structure.

It is known that in the mid 20th century, when the farm was still operational, that the structure was used as an open fronted, brick built cart shed, probably its original purpose, but was blown down during a storm in the late 1960s to be replaced by the timber structure recently demolished as part of this development (Mrs J Barker *pers comm*).

#### 4.2 Internal ground level reductions

The four areas observed within the structure of the stables all showed that the area had been truncated, with no evidence of any top or subsoil present below the removed floor surfaces. All four areas were heavily disturbed by at least two phases of drains cutting the natural clay. What may have been an original brick laid floor was present in Area 3.

The brick piers in Area 1 and Area 4 and their corresponding, redundant mortises in the main roof tie beams are evidence of an earlier, possible original, arrangment of the internal structure and show that both areas had different divisions to those present at the time of the watching brief. There was no further evidence to suggest how the internal divisions may have been arranged.

4.3 No features of archaeological interest were revealed in any of the observed areas and no further work is recommended in relation to this development.

4.4 The statements and recommendations in 4.1 to 4.3 are the considered views of the Surrey County Archaeological Unit, based on the evidence presented in the earlier part of this report. It must be emphasised, however, that whether further archaeological work is required, what form it should take and when it might be scheduled are decisions to be made by the Local Planning Authority (generally acting under the advice of English Heritage), and any further action in response to this report should await their opinion.

#### References

Robertson, J. 2010a, A preliminary archaeological assessment of the proposed development at Barwell Court Farm, Chessington, SCAU report.

Robertson, J. 2010b, An archaeological evaluation of the site of the proposed development at Barwell Court Farm, Chessington, SCAU report.

Robertson, J. 2011, *Barwell Court Farm, Chessington: Written Scheme of Investigation* for the conduct of an enhanced archaeological Watching Brief, SCAU report.

Websites consulted:

http://www.horsham.co.uk/villages/southwaterimages/southwatehistory.pdfT

APPENDIX 1 – OASIS Project entry

# **OASIS DATA COLLECTION FORM: England**

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### OASIS ID: surreyco1-100617

Project details				
Project name	The stables at Barwell Court Farm, Chessington			
Short description of the project				
Project dates	Start: 22-02-2011 End: 09-03-2011			
Previous/future work	Yes / No			
Any associated project reference codes	BCFC11 - Sitecode			
Any associated project reference codes	CA087J - Sitecode			
Any associated project reference codes	07/10255 - Planning Application No.			
Any associated project reference codes	BCF11 - Museum accession ID			
Type of project	Recording project			
Site status	Local Authority Designated Archaeological Area			
Site status (other)	Building of Townscape Merit			
Current Land use	Other 2 - In use as a building			
Monument type	LIVERY STABLE Post Medieval			
Monument type	CART SHED Modern			
Significant Finds	PILLAR Post Medieval			
Significant Finds	FLOOR Post Medieval			
Investigation type	'Watching Brief'			
Prompt	Direction from Local Planning Authority - PPS			

#### **Project location**

Country	England
Site location	GREATER LONDON KINGSTON UPON THAMES CHESSINGTON Barwell Court Farm
Postcode	KT9 2LZ
Study area	600.00 Square metres
Site coordinates	TQ 1700 6306 51.3540428993 -0.319577151521 51 21 14 N 000 19 10 W Point

#### **Project creators**

Name of	9
Organisation	

Surrey County Archaeological Unit

Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Jane Robertson
Project director/manager	R Poulton
Project supervisor	Nigel Randall
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Philip Stone - OBO Trustees of Sir Francis Barker Will Trust & Mrs J Barker

#### **Project archives**

Physical Archive Exists?	No
Digital Archive recipient	Museum of London LAARC
Digital Contents	'Stratigraphic'
Digital Media available	'Images raster / digital photography','Text'
Digital Archive notes	Archive will be passed to MoL LAARC but initially held at SCAU
Paper Archive recipient	Museum of London LAARC
Paper Contents	'Stratigraphic'
Paper Media available	'Report'
Paper Archive notes	Archive will be passed to MoL LAARC but initially held at SCAU

Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	An archaeological watching brief of groundworksfor the redevelopment of the brick stables at Barwell Court Farm, Chessington, Surrey
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Description	A ring bound A\$ document with beige covers. A digital copy is also noted as being avaialbe on the Surrey County Arhaeological Unit LAN as a MicroSoft Word document at: - H:\HeEnt\Nigel\Sites\Barwell Court WB 11
Entered by Entered on	Nigel Randall (nigel.randall@surreycc.gov.uk) 27 September 2011

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# The stables at Barwell Court Farm, Chessington - Surrey County Archaeological Unit

### OASIS ID - surreyco1-100617

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View 2	2		Nigel Randall	nigel.randall@surreycc.gov.uk		22 June 2011
View 3	3		Nigel Randall	nigel.randall@surreycc.gov.uk		22 June 2011
View 4	4		Nigel Randall	nigel.randall@hotmail.com		23 June 2011
View 5	5		Nigel Randall	nigel.randall@surreycc.gov.uk		27 September 2011
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Details	Locati	on	Creators	Archive		Publications
No	No		No	No		0/1
File submission and form progress						
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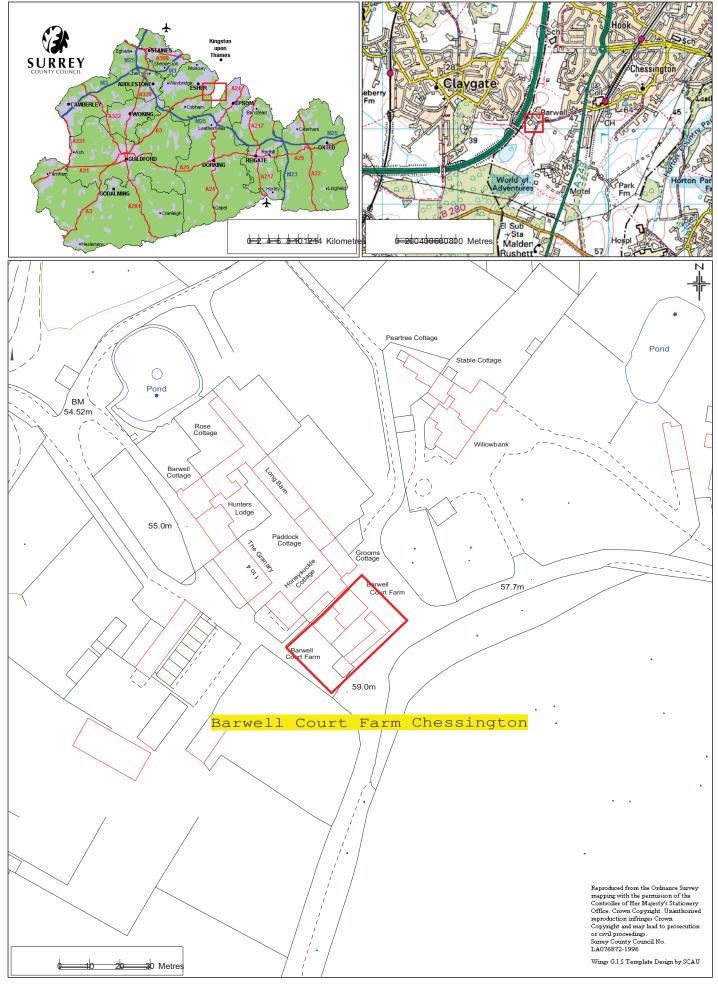


Fig 1 Barwell Court Farm, Chessington: site location

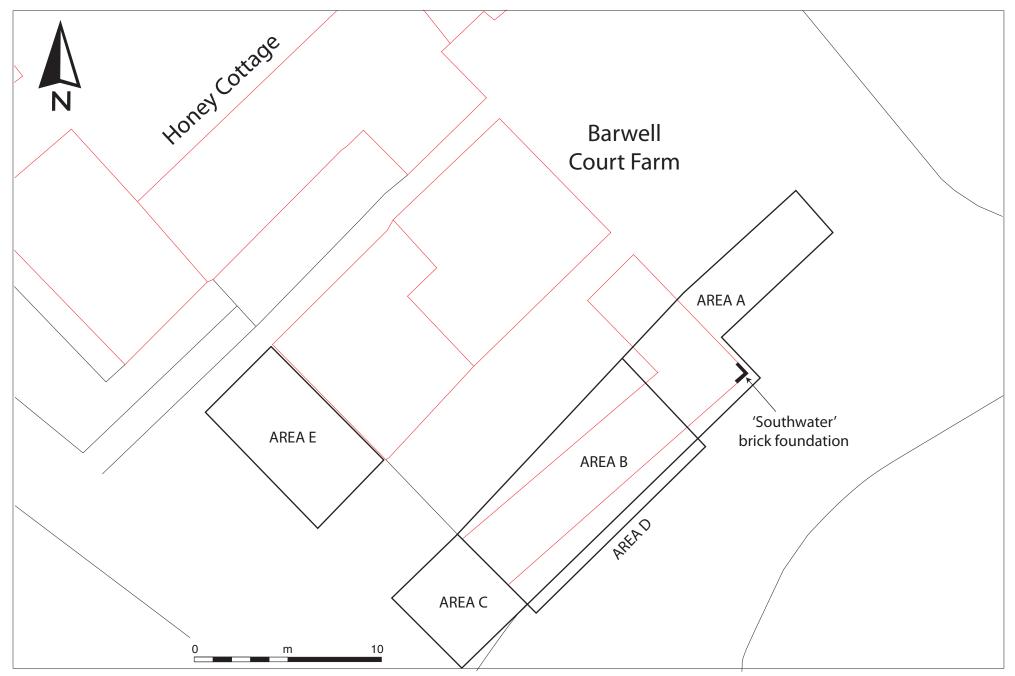


Fig 2 Barwell Court Farm, Chessington, Surrey: locations of exterior ground level reductions



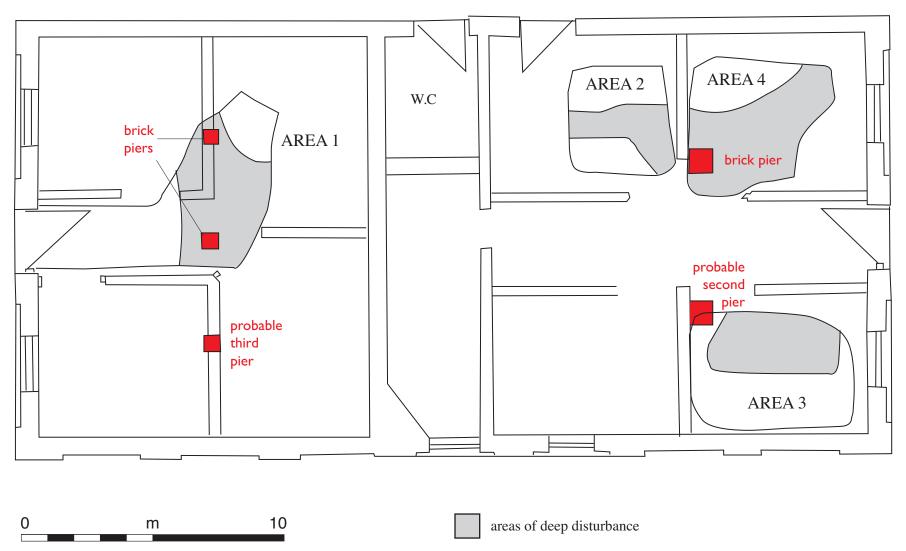


Fig 4 Barwell Court Farm, Chessington, Surrey: locations of interior ground level reductions