



Archaeological trial trench evaluation at Bucknall Hospital, Stoke-on-Trent April 2015

Report No. 15/92

Author: James Fairclough

Illustrator: Amir Bassir



Archaeological trial trench evaluation at Bucknall Hospital, Stoke-on-Trent April 2015

Accession number: 2015.LH.15

Report No. 15/92

Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	22.05.15	Pat Chapman	Mo Muldowney	Andy Chapman	Draft for Senior Planning Officer review
2	10.06.15	Claire Finn	Mo Muldowney	Andy Chapman	Second draft for review
3	17.06.15	Claire Finn	Mo Muldowney	Andy Chapman	Third draft for review

Author: James Fairclough

Illustrator: Amir Bassir

© MOLA Northampton 2015

MOLA
Bolton House
Wootton Hall Park
Northampton
NN4 8BN
01604 700 493
www.mola.org.uk
sparry@mola.org.uk

STAFF

Project Manager: Mo Muldowney BA ACIfA

Text: James Fairclough MA PCIfA

Fieldwork: James Fairclough
Bartłomiej Grzywniak

Illustrations: Amir Bassir

Pottery: Paul Blinkhorn BTech
Jonathan Goodwin

OASIS REPORT FORM

PROJECT DETAILS		Oasis No. molanort1-211897	
Project title	Archaeological trial trench evaluation at Bucknall Hospital, Stoke-on-Trent, April 2015		
Short description	MOLA Northampton carried out a trial trench evaluation at Bucknall Hospital, Stoke-on-Trent. Both trenches contained made ground and in one trench there was a brick floor of the former farmhouse, demolished in the early 20th century. These deposits were dated to the 19th to early 20th centuries, although there is also a little pottery indicating that there was activity here in the later 17th to early 18th centuries. There were no earlier deposits or finds.		
Project type	Trial trench evaluation		
Previous work	Building Recording (Bassir, forthcoming)		
Current land use	Currently occupied by Bucknall Hospital		
Future work	Unknown		
Monument type and period	Remains of 1900s farm house		
Significant finds	Post-medieval ceramics		
PROJECT LOCATION			
County	Staffordshire		
Site address	Eaves Lane, Stoke-on-Trent		
Post code	ST2 8PQ		
OS co-ordinates	SJ 91003 47963		
Area (sq m/ha)	c0.075ha		
Height aOD	c158m aOD		
PROJECT CREATORS			
Organisation	MOLA Northampton		
Project brief originator	Jon Goodwin, Senior Planning Officer, Stoke-on-Trent City Council		
Project Design originator	Mo Muldowney		
Director/Supervisor	James Fairclough		
Project Managers	Mo Muldowney		
Sponsor or funding body	Keepmoat Homes		
PROJECT DATE			
Start date	22 April 2015		
End date	23 April 2015		
ARCHIVES	Location (Accession no.)	Contents	
Physical	Stoke-on-Trent Museum 2015.LH.15	Ceramics	
Paper		Site records	
Digital		Survey data, report, photographs	
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (MOLA report)		
Title	Archaeological evaluation at Bucknall Hospital, Stoke-on-Trent, April 2015		
Serial title & volume	15/92		
Author(s)	James Fairclough		
Page numbers	12		
Date	17 June 2015		

Contents

1	INTRODUCTION	
2	TOPOGRAPHY AND GEOLOGY	
3	AIMS AND OBJECTIVES	
4	HISTORICAL AND ARCHAEOLOGICAL BACKGROUND	
5	EVALUATION METHODOLOGY	
6	THE EXCAVATED EVIDENCE	
7	THE POTTERY	by Paul Blinkhorn and Jon Goodwin
8	DISCUSSION	
	BIBLIOGRAPHY	
	APPENDIX : CONTEXT INVENTORY	

Figures:

Cover: Trench 2, looking west-south-west
Fig 1: Site location
Fig 2: Trench locations
Fig 3: Trench 1, north-facing section
Fig 4: Trench 1, looking north-west
Fig 5: Plan of brick surface in Trench 2 (Scale 1:100)
Fig 6: Trench 2, north-facing section in extended area
Fig 7: Brick layer 203, looking west-south-west

Table:

Table 1: Pottery occurrence by number and weight (in g) of sherds per context
by fabric type

Table 2: Kiln furniture catalogue

Archaeological trial trench evaluation at Bucknall Hospital, Stoke-on-Trent April 2015

Abstract

MOLA Northampton carried out a trial trench evaluation at Bucknall Hospital, Stoke-on-Trent. Both trenches contained made ground and in one trench there was a brick floor of the former farmhouse, demolished in the early 20th century. These deposits were dated to the 19th to early 20th centuries, although there is also a little pottery indicating that there was activity here in the later 17th to early 18th centuries. There were no earlier deposits or finds.

1 INTRODUCTION

MOLA Northampton was commissioned by Keepmoat Homes to carry out archaeological trial trenching on the proposed development site at Bucknall Hospital, Stoke-on-Trent, Staffordshire (Fig 1). These works were undertaken following advice from Jon Goodwin (Stoke-on-Trent City Council Senior Planning Officer, Archaeology/HER), and in accordance with *The National Planning Policy Framework* (DCLG 2012) and a Written Scheme of Investigation (Crothers 2015).

2 TOPOGRAPHY AND GEOLOGY

The proposed development site lies on land currently occupied by Bucknall Hospital on the eastern side of Stoke-on-Trent. The site is bounded by Cliveden Road and Holdcroft Road to the north and by Eaves Lane to the east. The western side is bounded by open grassland, a small area of woodland and Granville Road and the south is bounded by open grassland (Fig 1).

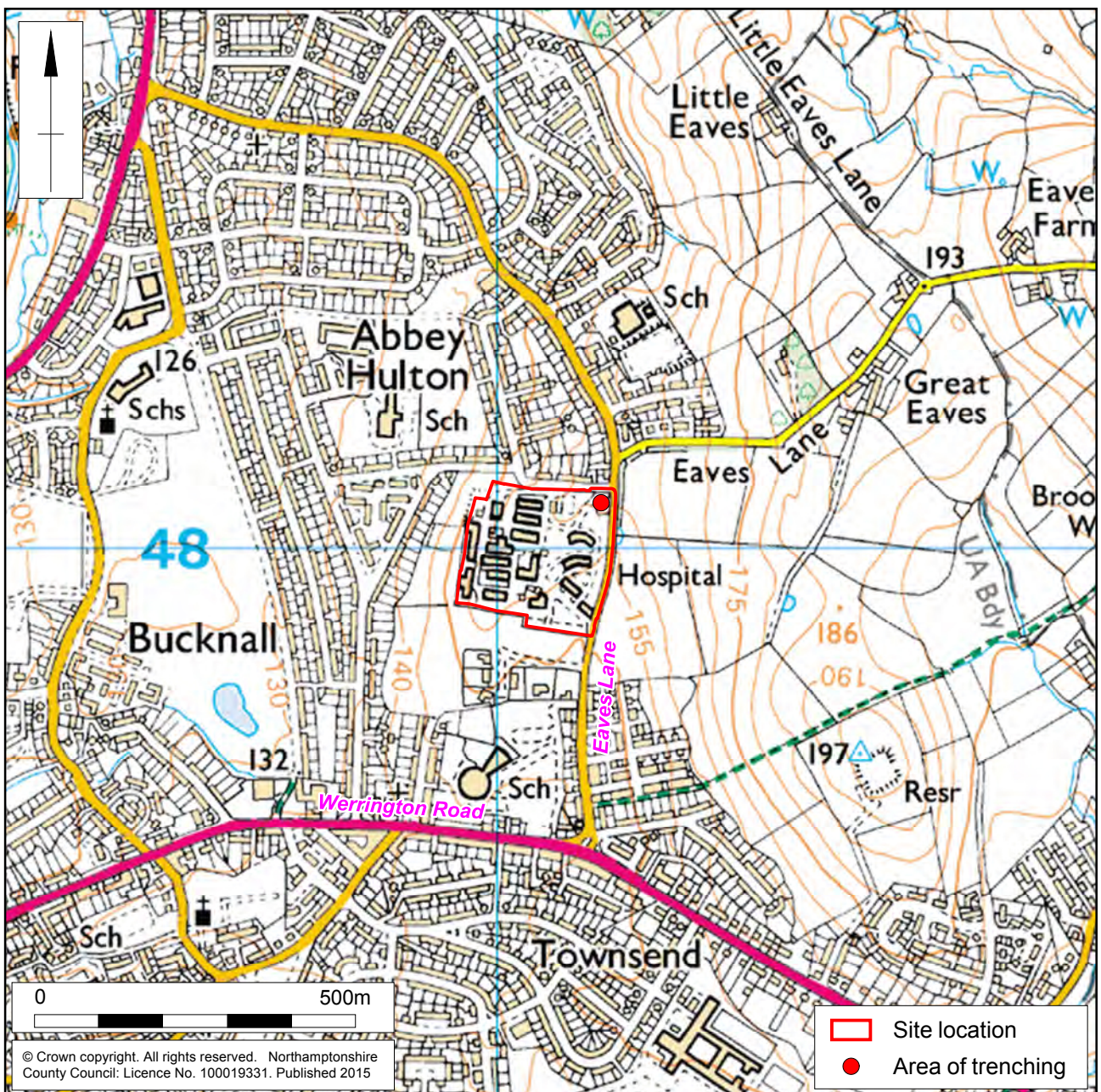
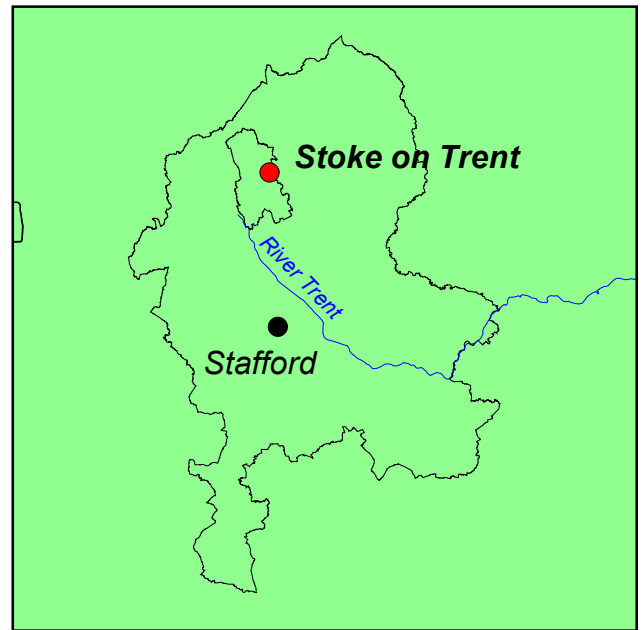
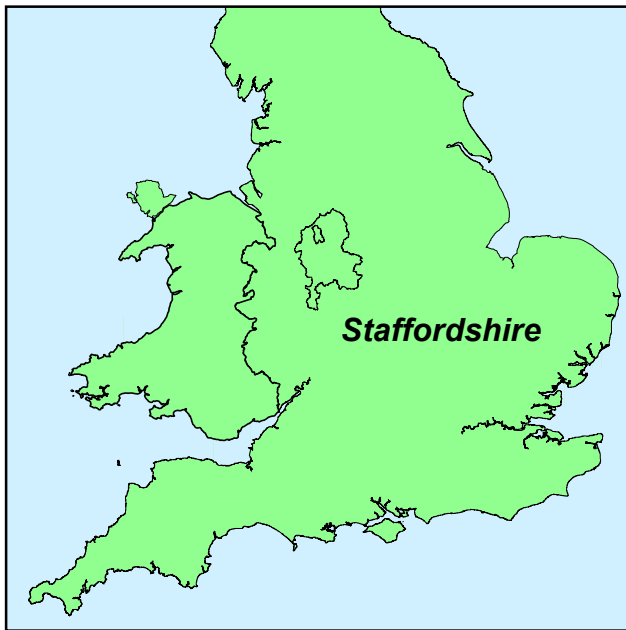
The superficial geology is diamiction formed of Devensian Till overlying the bedrock geology of mudstone, siltstone and sandstone formed from Pennine lower coal measures (BGS Geindex – www.bgs.ac.uk). The site lies at c158m aOD.

3 AIMS AND OBJECTIVES

The main aim of the investigation was to determine if archaeological remains were present within the application area and if possible locate remains of the farmhouse seen in the 1900 Ordnance Survey.

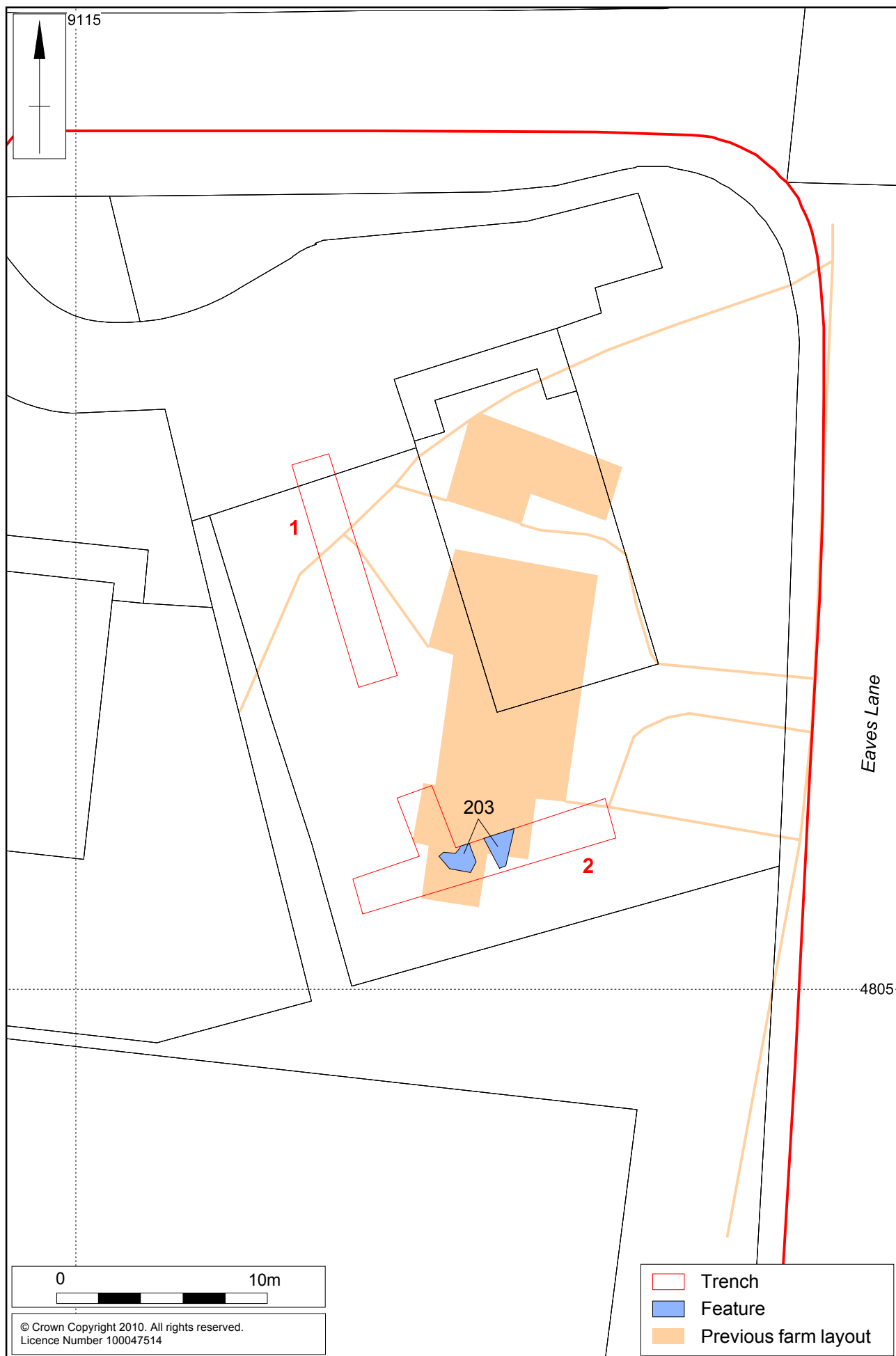
The specific objectives of the project were to provide further information on the following:

- The location, extent, nature, and date of any archaeological features or deposits that may be present at the proposed development site;
- The integrity and state of preservation of any archaeological features or deposits that may be present at the proposed development site.



Scale 1:10,000

Site location Fig 1



Scale 1: 250

Excavated trenches Fig 2

4 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Bucknall Hospital was built in 1885-86 to the designs of Hanley architect Elijah Jones and was officially opened on 30th June 1886. Originally functioning as a smallpox hospital, it became a Joint Infectious Diseases Hospital for Stanley, Stoke and Fenton. The hospital grew in size and saw notable phases of construction in the late 19th and early 20th centuries. The surviving buildings date from between 1885 and 1930 with later alterations and additions and they have remained in continuous use as a hospital since 1886 but few of the buildings survive in their original form (AMEC 2013)

There are no known monuments or designated heritage assets within the study area. The wider hospital site is included in Stoke City Council's local list of buildings of historic interest and is included within the SCC Historic Environment Record (HER); as such the buildings represent 'heritage assets' under the terms of government guidance as set out in the National Planning Policy Framework (NPPF 2012)

The 1900 Ordnance Survey map depicts a farmhouse to the north-east of the hospital site, aligned north-east to south-west, with an outbuilding on the north-eastern end. By the time the Ordnance Survey map of 1924 had been published, the outbuilding had been demolished. The 1937 Ordnance Survey map shows the farm house had been demolished and a new building had been constructed in its place and was aligned north-west to south-east.

Verity House is located at the far north-eastern corner of the hospital site and was built as a doctor's residence in the later 1920s or 1930s and was illustrated on the Ordnance Survey map edition of 1937 as *Wayside*. After 2006 when living-in doctors were no longer common practice, the building was adapted for office and clinical space and was renamed Verity House (AMEC 2013). The house was built on the footprint of the demolished farmhouse.

5 EVALUATION METHODOLOGY

The evaluation comprised the excavation of two 10m-long trial trenches, each measuring c1.6m wide (Fig 2). The total length of trenching being c20m with the trenches positioned so as to provide an even coverage across the target area. The positions of these trenches were changed from the original proposal in an attempt to better target the footprint of the demolished farmhouse. These variations were agreed in advance of excavation with the Senior Planning Officer and the client, Keepmoat Homes (Peter Shambrook).

Trenches were positioned using Leica Viva Global Positioning System (GPS) survey equipment using SMARTNET real-time corrections, operating to a 3D tolerance of $\pm 0.05\text{m}$. The made-ground layers were removed using mechanical excavator. Excavation was carried out until the first archaeological horizon was encountered, or, where these were absent, the natural substrate. This work was carried out under archaeological supervision, by a suitably qualified archaeologist. Once the evaluation was completed, the trenches were backfilled upon approval of the Senior Planning Officer for Stoke-on-Trent City Council.

The machined surface was cleaned by hand sufficiently to identify and establish the extent of archaeological features, if present. Trenches containing archaeological features were planned at a scale of 1:50. Trenches not containing archaeological deposits were also recorded but in section only.

The character, composition and general depositional sequence of the site stratification was recorded on *pro-forma* sheets, with a unique context number being allocated to each distinct deposit and feature. All recording followed the guidelines detailed in MOLA's *Archaeological Fieldwork Manual* (MOLA 2014).

Artefacts and ecofacts were collected by hand and retained, receiving appropriate care prior to removal from site, in line with procedures outlined in *First Aid for Finds* (Watkinson & Neal 2001).

A full photographic record comprising both 35mm black and white negatives and digital images was maintained. With north arrows and appropriate scales being used in all photographs

All fieldwork records will be compiled into a comprehensive and fully cross-referenced site archive in accordance with the requirements of the Potteries Museum and Art Gallery (PMAG). All records and materials will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the English Heritage procedural document, *Management of Archaeological Projects 2* (EH 1991). Work was carried out in accordance with the Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014a) and *Management of Research Projects in the Historic Environment* (MoRPHE) (Historic England 2015).

6 THE EXCAVATED EVIDENCE

One archaeological feature was identified in Trench 2. This comprised the remains of a brick surface (Fig 3 and 4). No other archaeological features were identified in either trench.

The natural horizon across the site was a light yellow-orange clay, overlain by a dark black-brown post-medieval made-ground layer containing fragments of pottery, brick and charcoal. This was sealed by a layer of gravel and pick-yellow sand which formed the modern ground surface. No subsoil or topsoil was present.

Trench 1

This trench was located to the west of the current building on site, aligned north-north-west to south-south-east, and was positioned to target the former yard to the north of the farmhouse. No structural evidence of the yard or farmhouse remained, with only fragmentary post-medieval pottery and brick being found in the made-ground layers (Fig 3 and Fig 4).

The lower made-ground layer was 0.30m thick and comprised firm dark black-brown silty clay with fragments of post-medieval pottery, brick and charcoal (102). This was overlain by a thin layer of compact light pink-yellow sand and gravel mix, 0.05m thick, over matting (101). Layer (103, located towards the northern end of the trench, comprised modern disturbance, up to 0.60m thick.



Trench 1, north-facing section Fig 3



Trench 1, looking north-west Fig 4

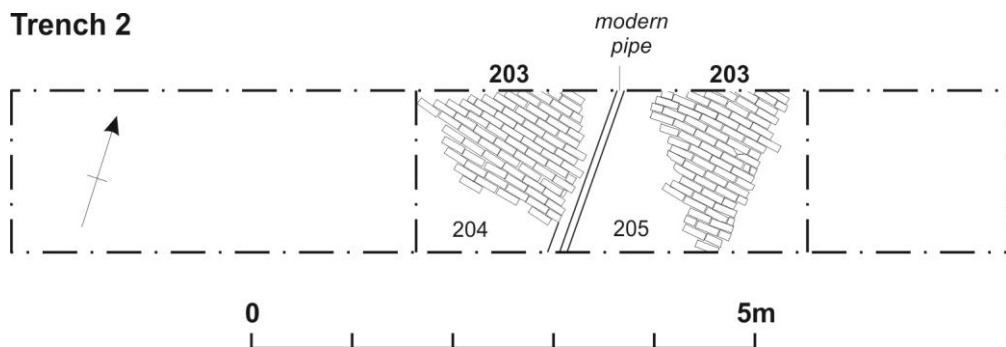
Trench 2

This trench was located to the south of the current building, aligned east-north-east to west-south-west. The trench was positioned to target the location of a former farmhouse depicted on historical Ordnance Survey (OS) maps.

Made-ground deposit (204), extended across the trench, was 0.34m thick and comprised compact dark black-brown clayey-silt contained small fragments of brick. It was overlain by the remains of a brick surface (203), which was 3.5m wide and comprised hand-made, yellow/brown-red bricks measuring 0.23x0.1x0.07m laid on edge and end-to-end (Fig 5-7). The brick surface was truncated by a modern plastic pipe. No wall foundations were present.

As in Trench 1, the upper levels in this trench were formed of a made ground of firm dark black-brown silty clay with fragments of post-medieval pottery, brick and charcoal (202) 0.48m thick. This was covered by a compact light pink-yellow made ground of mixed sand and gravel, 0.14m thick, overlying matting which formed the driveway surface (201).

At the request of the Senior Planning Officer, the trench was extended to the north in order to assess the extent of the brick work and to determine the presence/absence of wall foundations. The brick surface did not extend beyond the original limit of the trench and no walls were identified (Fig 5-7).



Plan of brick surface in Trench 2, extension not shown (Scale 1:75) Fig 5



Trench 2, north-facing section in extended area Fig 6



Brick layer 203, looking west-south-west Fig 7

7 THE POTTERY by Paul Blinkhorn and Jon Goodwin

The pottery assemblage comprised 13 sherds with a total weight of 146g, and an additional 6 sherds of kiln furniture (196g). It was all post-medieval or modern. The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. This assemblage features locally produced ceramics, characterised by a small number of slipwares and mottled wares of the late 17th and early 18th centuries, supplemented by refined earthenwares, both plain and decorated, dating to the 19th century. The fragmentary nature of the assemblage meant that some forms were difficult to distinguish.

Evidence of pottery manufacturing was also noted. Made ground (102) produced a machine-made three-armed stilt, in a very hard, dense white fabric and an even coating of a thin glaze. Two more of these were noted in made ground (202), along with a broken thimble, and a refractory 'bob' with thimble tip held inside. A biscuit-fired whiteware waster was also found in disturbed ground (103). A pearlware plate with a blue tone on the reverse has a slightly yellowish cast to the interior, which could indicate its function as a 'setter' used to stabilise a stack of plates during glost firing. The fabric suggests that the kiln furniture is all of late 19th- to 20th-century date. The context also produced two fragments (108g) of very highly fired modern roof-tile.

Table 1: Pottery catalogue

Layer	Fabric	Form	Decoration/ Glaze	Date	No.	Weight (g)
102	Mottled ware	Hollow ware	Mottled glaze	Late 17th to mid-18th century	2	16
102	Refined blackware	Hollow ware	Iron rich glaze	19th century	1	8
102	Transfer-printed Whiteware	Cup/bowl	Under-glaze blue print	2nd half of 19th century	1	1
103	Biscuit-fired whiteware	Bowl	Unglazed	Mid to late 19th century	1	90
202	Transfer-printed Whiteware	Cup	Under-glaze blue print; moulded body	Mid to late 19th century	1	2
202	Overfired slipware	Possible mug	White slip trailed over a dark slip ground	18th century	3	7
202	Transfer-printed Whiteware	Plate	Under-glaze Willow print in blue	Mid-19th century	1	8
202	Coarse earthenware	Hollow ware	Iron rich glaze	18th to 19th century	1	3
202	Slipware	Bowl/Porringer	Brown trailed and combed slip	Late 17th to mid-18th century	1	9
202	Slipware	Hollow ware	White slip trailed and dotted over a dark slip ground	Late 17th century	1	1

Table 2: Kiln furniture catalogue

Layer	Form	Date	Sherds	Weight (g)
102	Machine-made three-armed stilt, distal end	Late 19th to early 20th century	1	24
102	Machine-made three-armed stilt, distal end	Late 19 th to early 20 th century	1	24
202	Machine-made three-armed stilts, x2	Late 19th to early 20th century	2	39
202	Thimble	Late 19th to early 20th century	1	19
202	Refractory 'bob' with thimble tip inside	Late 19th to early 20th century	1	45
202	Pearlware plate used as a 'setter' to stabilise plates during gloss firing	Mid-19th century	1	69

8 DISCUSSION

The evaluation identified a brick surface and made-ground deposits all of post-medieval date.

The absence of subsoil and topsoil deposits and presence of made-ground layers, indicates that the area had been stripped of overburden. It appears likely that the land on the hillside was prepared by sculpting and levelling, for the construction of the farmhouse that is shown at this location on the Ordnance Survey historical maps until the Hospital expanded in the 1930s.

The brick surface in Trench 2 was the only evidence for the farmhouse and is likely to have been the remains of a floor at the south end of the building. No walls or wall footings were located. The truncated nature of the floor and absence of walls/footings indicates that the farmhouse was almost completely demolished when the hospital grounds were expanded to allow for the construction of Verity House.

The pottery assemblage contained an assortment of local Staffordshire wares and mass-produced nationally distributed fabrics, as well as fragments of kiln spacers and thimbles, both used in pottery manufacture. These objects were recovered from the overburden and predominantly post-dated the farmhouse. These pieces are likely to have derived from waste material accumulated from the pottery manufacturing industry, which was famously located in nearby Stoke-on-Trent. A few sherds of material are somewhat earlier, and although some appears to have been redeposited, it is possible to suggest that there was activity on the site in the late 17th and early 18th-centuries.

BIBLIOGRAPHY

AMEC 2013 *North Staffordshire combined healthcare trust, Bucknall Hospital historic building record*, AMEC Environment and Infrastructure UK

ClfA 2014a *Standard and Guidance for Archaeological Field Evaluation*, Chartered Institute for Archaeologists

ClfA 2014b *Standards and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*, Chartered Institute for Archaeologists

ClfA 2014c *Code of Conduct*, Chartered Institute for Archaeologists

Crothers, M E, 2015 *Written Scheme of Investigation for trial trench evaluation at Bucknall Hospital, Stoke-on-Trent, Staffordshire*, MOLA Northampton

EH 1991 *Management of Archaeological Projects 2*, English Heritage

Ford, D A, 1995 *Medieval Pottery in Staffordshire, AD800-1600: A Review* Staffordshire Archaeological Studies, 7

HE 2015 *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide*, Historic England

MOLA 2014 *Archaeological Fieldwork Manual*, MOLA Northampton

Watkinson, D, and Neal, V, 2001 *First Aid for Finds* (3rd edition), United Kingdom Institute for Conservation

Watt, S, (ed) 2012 *The archaeology of the West Midlands; a framework for research*, Oxbow

Websites

BGS www.bgs.ac.uk/geoindex, British Geological Survey, GeoIndex

APPENDIX: CONTEXT INVENTORY

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
1	10m x 1.6m NNW-SSE	391162.01, 348075.42	161.72m aOD	0.95m deep 160.77m aOD
Context	Context type	Description	Dimensions	Artefacts/ Samples
101	Made ground	Compact light pink-yellow sand and gravel mix over matting. Forms driveway surface.	0.05m thick	-
102	Made ground	Firm dark black-brown silty clay with fragments of post-medieval pottery, brick and charcoal.	0.30m thick	Ceramics
103	Disturbance	Firm brown-grey sandy clay with occasional charcoal and stones.	0.60m thick	Ceramics
104	Natural	Firm light yellow-orange clay.	-	-

Trench No	Length, width & alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
2	10m x 1.6m ENE-WSE	391175.15, 348059.74	161.09m aOD	0.62m deep 160.47m aOD
Context	Context type	Description	Dimensions	Artefacts/ Samples
201	Made ground	Compact light pink-yellow sand and gravel mix over matting. Forms driveway surface.	0.14m thick	-
202	Made ground	Firm dark black-brown silty clay with fragments of post-medieval pottery, brick and charcoal.	0.48m thick	Ceramics
203	Brick layer	Yellow/brown-red bricks aligned north-west to south-east. (Bricks measured 0.23x0.1x0.07m)	3.5m wide 0.10m thick	-
204	Made ground	Compact dark black-brown clayey-silt with occasional brick fragments.	0.34m thick	-
205	Pipe/Backfill	Modern pipe, firm mid grey-brown silty clay backfill	-	-
206	Natural	Firm light yellow-orange clay.	-	-



MOLA
Bolton House
Wootton Hall Park
Northampton
NN4 8BN
01604 700 493
www.mola.org.uk
sparry@mola.org.uk