Archaeological trial trench evaluation on land south of Three Pots Road Burbage, Leicestershire June 2014

13/00094/FUL

Report No. 14/142

Author: Chris Chinnock

Illustrators: James Ladocha and Amir Bassir

Project Manager:
Site Code: X.A75.2014
NGR: SP 4324 9160

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

Archaeological trial trench evaluation on land south of Three Pots Road Burbage, Leicestershire June 2014

13/00094/FUL

Report No. 14/142

Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	16.06.14	Pat Chapman	Andy Chapman	Liz Muldowney	Draft for client review

Author: Chris Chinnock

Illustrators: James Ladocha and Amir Bassir

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

STAFF

Project Manager:	Elizabeth Muldowney BA MA
Text:	Chris Chinnock BA, MSc, PIfA
Fieldwork:	Chris Chinnock
	Ben Kidd BA
	Adam Reid BSc
The field drain:	Pat Chapman BA AIfA
Illustrations:	James Ladocha BA
	Amir Bassir BSc

OASIS REPORT FORM

PROJECT DETAILS	**OASIS No: molarnort1 - 184457**	
Project name	Archaeological trial trench evaluation on south of Three Pots Road, Burbage, Leicestershire	
Short description (250 words maximum)	MOLA was commissioned by CgMs Consulting to carry out archaeological trial trenching on land south of Three Pots Road, Burbage, Leicestershire prior to proposed residential development on the site. Seven trenches were excavated. Furrows from ridge and furrow cultivation was present in the southern field though no dating material was found to suggest either a medieval or post-medieval date. An early example of a hand-made hollow-brick field drain, dated to the early 19th century, was present following the line of one of the furrows in the southern field. Other more recent field drainage was also present in the southern field. No other features of archaeological interest were present on-site.	
Project type (eg DBA, evaluation etc)	Evaluation	
Site status (none, NT, SAM etc)	None	
Previous work (SMR numbers etc)	Heritage Assessment (Dawson 2012)	
Current Land use	Overgrown grassland	
Future work (yes, no, unknown)	Unknown	
Monument type/ period	Ridge and furrow	
Significant finds (artefact type and period)	Post-medieval field drain	
PROJECT LOCATION		
County	Leicestershire	
Site address (including postcode)	Land south of Three Pots Road, Burbage	
Study area (sq.m or ha)	1.2ha	
OS Easting & Northing (use grid sq. letter code)	SP 4324 9160	
Height OD	Approx. 115m aOD	
PROJECT CREATORS		
Organisation	MOLA Northampton	
Project brief originator	Senior Planning Archaeologist, Leicestershire County Council	
Project Design originator	MOLA Northampton	
Director/Supervisor	Chris Chinnock	
Project Manager	Elizabeth Muldowney	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date/End date	02/06/14 – 06/06/14	
ARCHIVES	**Location (Accession no.)**	**Content (eg pottery, animal bone etc)**
Physical	Leicestershire Museums Archaeology Collections: X.A75.2014	-
Paper	Leicestershire Museums Archaeology Collections: X.A75.2014	Site file
Digital	Leicestershire Museums Archaeology Collections: X.A75.2014	Mapinfo plans, Word report
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (MOLA report)	
Title		
Serial title & volume	14/142	
Author(s)	Chris Chinnock	
Page numbers	16	
Date	15.07.14	

Contents

1 INTRODUCTION

2 AIMS AND OBJECTIVES

3 BACKGROUND
3.1 Topography and geology
3.2 Historical and archaeological background

4 EXCAVATION METHODOLOGY

5 THE EXCAVATED EVIDENCE
5.1 General stratigraphy
5.2 The archaeological features

6 FIELD DRAINAGE BRICKS by Pat Chapman

7 DISCUSSION

BIBLIOGRAPHY

Figures
Front cover: General site view, looking east
Back cover: The site entrance, looking south
Fig 1: Site location
Fig 2: The excavated trenches
Fig 3: Trench 5, sondage at western end, looking north
Fig 4: Gully [407], looking south-south-west
Fig 5: Drainage bricks; interior, left, stacked to create pipe, right
Fig 6: Trench 1, looking south-south-east
Fig 7: Trench 2, looking east
Fig 8: Trench 3, looking north-west
Fig 9: Trench 4, looking south-west
Fig 10: Trench 5, looking west
Fig 11: Trench 6, looking north
Fig 12: Trench 7, looking north-west

APPENDIX: CONTEXT INVENTORY

Archaeological trial trench evaluation
on land south of Three Pots Road
Burbage
Leicestershire

Abstract

MOLA was commissioned by CgMs Consulting to carry out archaeological trial trenching on land south of Three Pots Road, Burbage, Leicestershire prior to proposed residential development on the site. Seven trenches were excavated. Furrows from ridge and furrow cultivation was present in the southern field though no dating material was found to suggest either a medieval or post-medieval date. An early example of a hand-made hollow-brick field drain was present following the line of one of the furrows in the southern field. Other more recent field drainage was also present in the southern field. No other features of archaeological interest were present on-site.

1 INTRODUCTION

In May 2014, MOLA was commissioned by CgMs Consulting to conduct an archaeological evaluation on land south of Three Pots Road, Burbage, Leicestershire (NGR SP 4324 9160) (Fig 1).

The Senior Planning Archaeologist for Leicestershire County Council (LCC) has advised that a programme of archaeological evaluation should be undertaken to determine the nature and extent of any archaeological remains within the Development Area. The requirements were outlined in a Written Scheme of Investigation prepared by MOLA (Muldowney 2014).

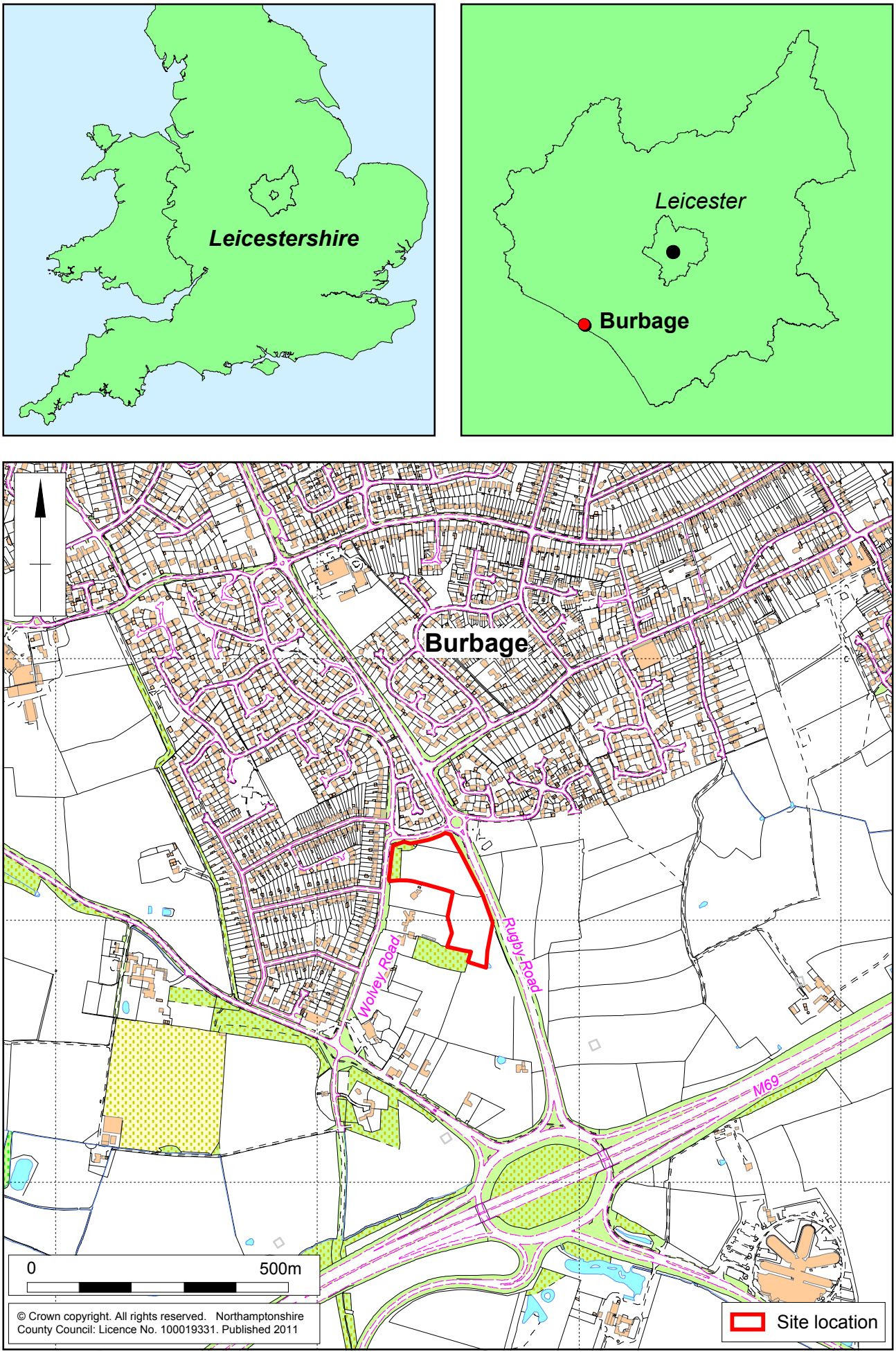
2 AIMS AND OBJECTIVES

The evaluation of the site was designed to provide information that will allow for the effective targeting of further investigation of the site, if required, prior to or during the early phases of its development.

The following information was required to allow the development of a strategy for further investigation of the site:

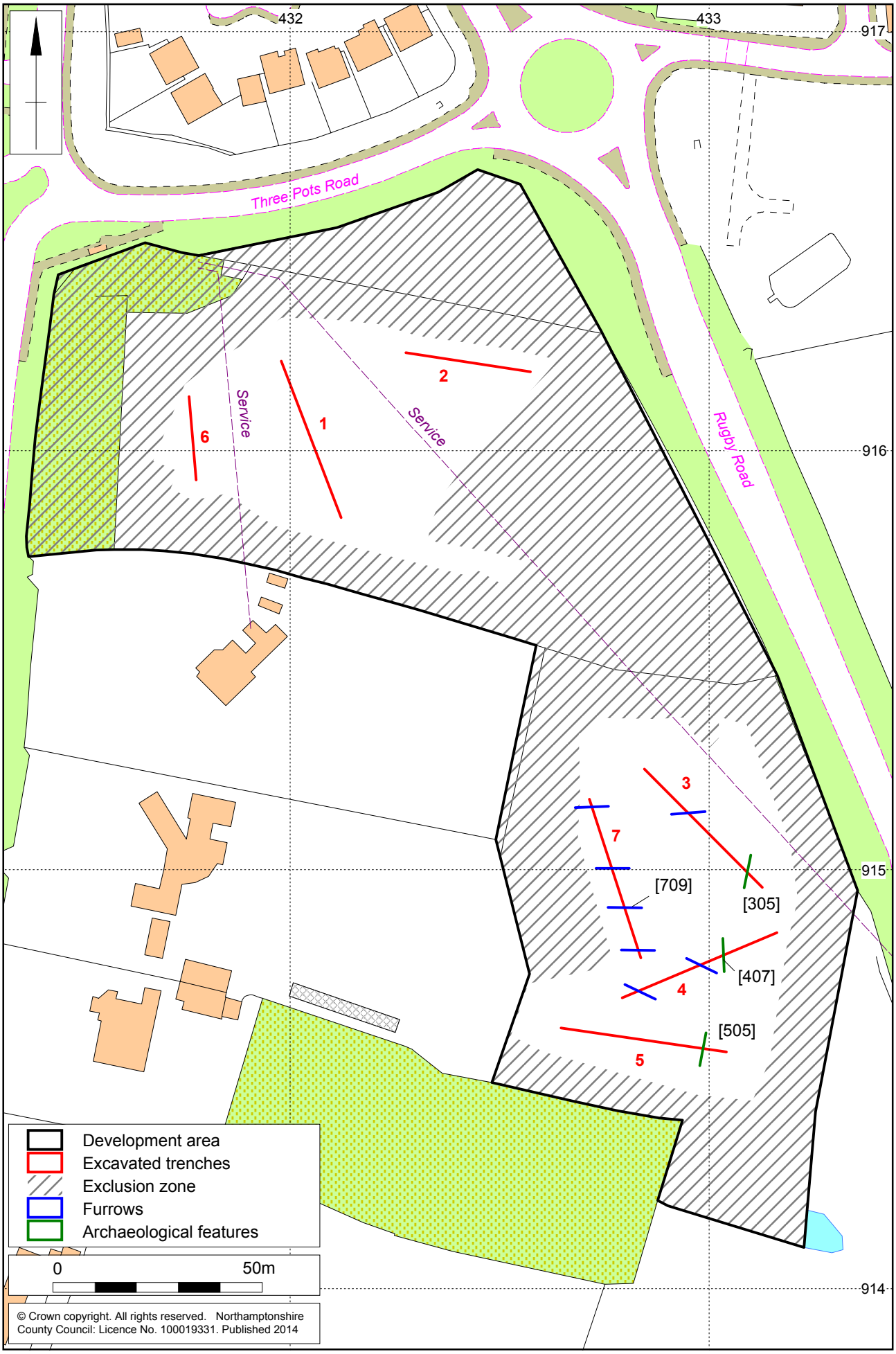
- *The location, extent, nature, and date of any archaeological features or deposits that may be present;*
- *The integrity and state of preservation of any archaeological features or deposits that may be present.*

The evaluation was carried out following the guidelines suggested by the IfA's standards and guidance for archaeological field evaluation (IfA 2008), the MOLA Fieldwork Manual (2014) and the East Midlands regional framework (Knight *et al* 2012).



Scale 1:10,000

Site Location Fig 1



Scale 1:1250

The excavated trenches Fig 2

3 BACKGROUND

3.1 Topography and geology

The development area comprised 2.2ha of overgrown fields. However, an area of marshly grassland and a belt of mature trees are to be retained, which reduced the area for evaluation to approximately 1.2ha. The site is bounded to the south by residential property and farmland, to the west by Wolvey Road, to the north by Three Pots Road and to the east by Rugby Road (Fig 2).

Topographically the site is reasonably level and lies on a low hill at approximately 115m above Ordnance Datum (aOD). The underlying geology has been mapped by the British Geological Survey as Mercia Mudstone Group, superficial deposits are recorded as Oadby Member Diamicton Till (www.bgs.ac.uk/geoindex, accessed 20/05/2014).

3.2 Historical and archaeological background

A desk based assessment for the site has been compiled by CgMs Consulting (Dawson 2012). The results are summarised below.

There is limited evidence for prehistoric activity in the vicinity of the development area comprising postholes dating between the early Neolithic and later Bronze Age to the north-east and a lithic scatter to the north-west.

A pottery scatter, dating from the Iron Age, recorded just to the west of the present site, is the only evidence for activity in this period within 1km. In the Romano-British period the site lay close to the junction of two major routeways, Fosse Way and Watling Street. A potential Roman settlement site has been identified to the north-east at White House Farm.

A possible Saxon cemetery has been recorded at the same location as the potential Roman settlement. In the medieval period the development area would have been to the south of the villages at Sketchley to the north-west and Burbage to the north-east, within the parish of Burbage. It is likely to have been part of the fields associated with the settlement during this period.

The earliest mapping showing detail for the area is the 1st edition Ordnance Survey map, the sequence of maps shows gradual encroachment of development towards this area from the late 19th century. A number of small buildings are shown on the earliest map within plots at the north-west corner of the development area, these are identified on the 1964 map as Firs Cottages, although their number had reduced. They were no longer depicted by 1990. These properties would have been within what is now the road easement flanking Wolvey Road.

4 EXCAVATION METHODOLOGY

Seven trenches were excavated using a 13T mechanical excavator fitted with a 1.8m-wide toothless ditching bucket. The topsoil and subsoil were removed under archaeological direction to reveal natural substrate. The topsoil and subsoil were stacked separately at the side of the excavated area. All procedures complied with MOLA Health and Safety provisions and MOLA Health and Safety at Work Guidelines.

The excavated area was cleaned sufficiently to define any features. The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval.

All archaeological deposits encountered during the course of the excavation were fully recorded, following standard MOLA procedures (MOLA 2014). All deposits were given a separate context number and were described on *pro-forma* context sheets to include details of the context, its relationships and interpretation. Unstratified animal bones and modern material were not retained.

The location of the trenches were surveyed and related to the Ordnance Survey National Grid using Leica Viva GPS survey equipment using SMARTNET real-time corrections, operating to a 3D tolerance of ± 0.05m. A full photographic record comprising both 35mm black and white negatives and digital images was maintained. The field data from the evaluation has been compiled into a site archive with appropriate cross-referencing.

The evaluation conformed to the Institute for Archaeologists *Standard and guidance for archaeological field evaluation* (revised Oct 2008). All stages of the project were undertaken in accordance with English Heritage, *Management of Research Projects in the Historic Environment* (MoRPHE) (EH 2006). The evaluation was carried out in accordance with Written Scheme of Investigation (WSI) prepared by MOLA (Muldowney 2014).

All trenches were backfilled with their up-cast, lightly compacted by the mechanical excavator.

5 THE EXCAVATED EVIDENCE

5.1 General stratigraphy

A full account of the stratigraphy by trench can be found in the Context Inventory (Appendix 1).

The stratigraphy remained generally consistent across the development area apart from a slight deviation, observed in the southernmost and western parts (Trenches 5 and 6).

The natural substrate comprised mid orange-brown sandy clay with bands of mid brown sandy clay and frequent patches of gravel. At the southern edge of the site this substrate changed to mid yellow-brown-orange sand, observed in a sondage at the western end of Trench 5 (Fig 3). At the western edge of the site the natural was similar to that observed in other trenches but with a higher sand content and the banding of clay and gravel was more pronounced. The natural substrate was present between 0.40m and 0.55m below the present grounds surface.

Trench 5, sondage at western end, looking north Fig 3

A subsoil was present across the site and comprised mid brown to mid brown-grey sandy clay with occasional stone inclusions and root disturbance throughout. The subsoil was typically between 0.20m and 0.40m thick.

The topsoil was consistent across site and comprised a mid-dark brown-grey sandy clay with significant root intrusion and occasional small stone inclusions throughout. Occasional fragments of pottery and other material dating from the 18th century to present were observed during machine excavation. The topsoil was between 0.20m and 0.40m thick.

5.2 The archaeological features

No features of archaeological interest were observed in the northern field. Additionally very little pottery or other material was observed in the topsoil or subsoil compared to the southern field.

In the southern field several linear features, interpreted as remnant furrows from medieval agricultural practices, were present (Trenches 3, 4 and 7) (Fig 2). In most cases only the bottom few centimetres of the furrows had survived and the width varied depending on how much had survived. Typically they were between 1.4m to 2.2m wide and approximately 0.10m deep. Many of the furrows, especially in Trench 7, had very indistinct edges and were indentified by the presence of linear trends of root disturbance. The fills generally comprised mid grey-brown silty sand with occasional rounded pebbles and root intrusion throughout. Furthermore, the furrows present in Trench 4 were on a different alignment, north-west to south-east as opposed to the east to west alignment recorded in Trenches 3 and 7.

In Trench 7 a land drain was present overlying furrow [709]. The land drain seems to be an early example of field drainage and comprised hand-made hollow bricks mirroring one another to create a circular channel. The land drain was placed at the edge of the furrow and its alignment mirrored that of the furrow exactly.

A narrow linear gully, aligned north to south, was present in Trench 4, [407] (Fig 4). This shallow U-shaped feature was approximately 0.60m wide and 0.30m deep with a

concave base. A similar gully was noted in Trenches 3 and 5, the excavated section in Trench 5 had a land drain in its base whereas the section in Trench 3 did not. The fills, (304), (406) and (504), comprised mid grey-brown sandy silt with occasional small stones and charcoal flecks throughout. It is probable that all three of these gullies relate to field drainage in the 19th and 20th centuries. No finds were recovered.

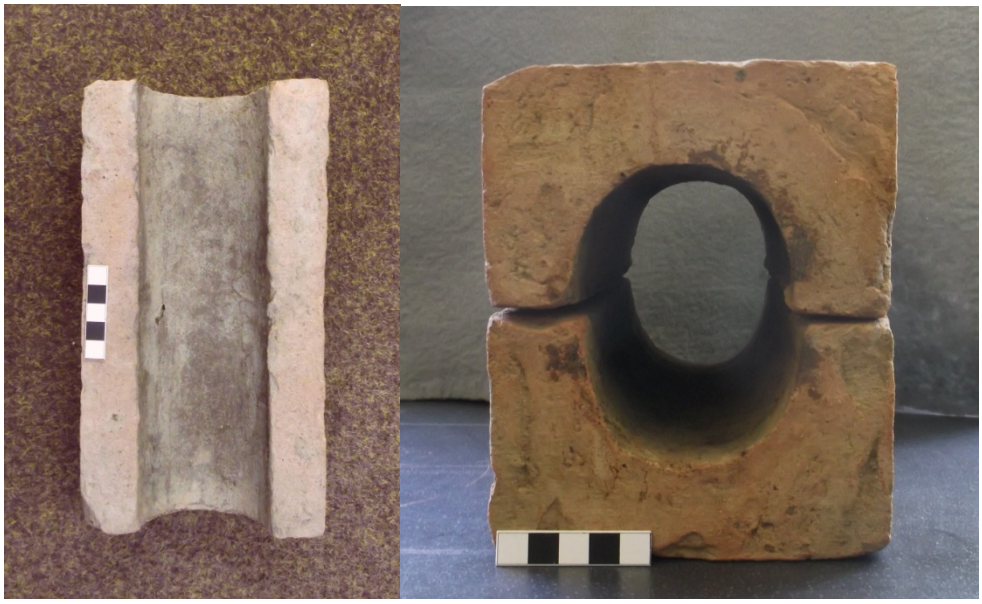
Gully [407], looking south-south-west Fig 4

6 THE FINDS

6.1 **Field drainage bricks** by Pat Chapman

These unusual bricks were part of a field land drain observed in furrow [709] (Fig 2). The bricks are handmade in a fabric of fine pale red and buff clays. The horizontal marks along the stretchers indicate that the bricks were stacked in parallel lines for drying.

They are 245mm long by 133mm wide and 78mm thick (9¾ x 5⅛ x 3 inches), wider and thicker than the average building brick, with a semi-oval channel in one surface 73m wide and 45mm deep (2⅞ x 1¾ inches). One brick could stand in the trench on its own so the water could drain through underneath, or two bricks would be laid together to create a pipe (Fig 5). Material was not retained.



Drainage bricks; interior, left, stacked to create pipe, right, scale 50mm Fig 5

Similar examples were found in Essex and formed part of the collection of field drainage tiles and pipes donated by the Ministry of Agriculture, Fisheries and Food Land Drainage and Water Supplies Division to the Museum of English Rural Life (www.collectionsgateway.org.uk).

Originally 'hollow drainage' using stone, straw or brushwood was used to drain agricultural land until, at the end of the 18th century, ceramic material such as curved tiles, similar to roof ridge tiles, on flat plates began to be used. The brick type was one of the earliest types of designed drain, probably used at the same time as the horseshoe drain. The cylindrical pipe started to be made from the 1840s onward with the invention of extruding brick-making machines. After 1860 machines were designed to run continuously so cylindrical field drainage pipes could be produced cheaply in their millions (Harvey 1987).

These drainage bricks, a short-lived solution to drainage, are rarely found. They would date to the early 19th century.

7 DISCUSSION

Whilst little of archaeological significance was encountered on site, it was possible to suggest that agricultural activity was certainly present in the southern field during the medieval and/or post-medieval periods. Conversely, the absence of any remnant furrows in the northern field suggests it may have had a different land use, probably pasture. The wet ground conditions and marsh dwelling plants observed in this area support the interpretation that it was likely to have been poor draining pasture.

The presence of an early type of land drain respecting the alignment of a furrow in Trench 7 may suggest that ridge and furrow earthworks were visible in the early 19th century when the land drain was installed.

BIBLIOGRAPHY

Dawson, M, 2012 *Heritage Assessment: Land at Three Pots, Burbage, Leicestershire*, CgMs Consulting

DCLG 2012 *National Planning Policy Framework*, Department of Communities and Local Government

EH 2006 *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide,* English Heritage

Harvey, N, 1987 *Field, Hedges and Ditches,* Shire Publications, **21**, 2nd edition

IfA 2008 *Standard and guidance for archaeological field evaluation*, Institute for Archaeologists

Knight, D, Vyner, B, and Allen, C, 2012 *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands*, Nottingham Archaeological Monographs, **6**

MOLA 2014 *Archaeological Fieldwork Manual,* MOLA Northampton

Muldowney, E, 2014 *Written scheme of investigation for archaeological evaluation on land south of Three Pots Road, Burbage, Leicestershire*, MOLA Northampton

WEBSITES

www.bgs.ac.uk/geoindex/home.html (accessed 20/05/2014)

http://www.collectionsgateway.org.uk/collections/8/field_drainage_tiles.pdf (accessed 09/06/14)

MOLA
15 July 2014

APPENDIX: CONTEXT INVENTORY

Trench No.	**Length, width & alignment**		**Surface height, NNW end (aOD)**	**Depth & height of natural (aOD)**
1	**40m x 1.8m NNW-SSE**		**122.22m**	**0.45-0.70m 121.77-121.52m**
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/ Samples***
101	Topsoil	Friable dark brown-grey sandy silt, rare small stone inclusions and root disturbance throughout.	0.25-0.30m thick	-
102	Subsoil	Firm mid brown sandy clay, infrequent small stone inclusions.	0.15-0.40m thick	-
103	Natural	Mid orange-brown sandy clay with bands of mid brown-grey sandy clay, frequent small-medium stone inclusions.	0.00-0.10m visible	-

Trench 1, looking south-south-east Fig 6

Trench No.	**Length, width & alignment**		**Surface height, E end (aOD)**	**Depth & height of natural (aOD)**
2	**30m x 1.8m E-W**		**121.81m**	**0.40-0.50m 121.41-121.31m**
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/ Samples***
201	Topsoil	Friable mid brown sandy clay, infrequent small stone inclusions and root disturbance throughout.	0.20-0.30m thick	-
202	Subsoil	Firm mid orange-brown sandy clay, occasional small-medium stones inclusions throughout.	0.20m thick	-
203	Natural	Mid orange-brown sandy clay with frequent small-medium stone inclusions.	0.05-0.10m visible	-

Trench 2, looking east Fig 7

Trench No.	**Length, width & alignment**		**Surface height, NW end (aOD)**	**Depth & height of natural (aOD)**
3	**40m x 1.8m NW-SE**		**117.58m**	
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/ Samples***
301	Topsoil	Mid grey-brown sandy clay, rare small stone inclusions and root disturbance throughout.	0.30-0.40m thick	-
302	Subsoil	Mid orange-brown sandy clay	0.20m thick	-
303	Natural	Mid orange-brown sandy clay with grey sandy clay patches and infrequent small-medium stone inclusions. Sondage excavated at SE end.	0.00-0.30m visible	-
304	Fill of [305]	Friable mid grey-brown sandy silt, small stone inclusions.	0.35m wide, 0.23m thick	-
305	Gully	Small U-shaped linear gully terminal.	0.35m wide, 0.23m deep	-
306	Fill of [307]	Mid grey-brown silty sand, small stone inclusions.	0.10m thick	-
307	Root disturbance	Irregular shape in pland plan with irregular sides and base.	1.30m x 0.40m	-
308	Fill of [309]	Friable mid grey-brown silty sand, large rounded pebbles, frequent charcoal flecks.	2.19m wide, 0.09m thick	-
309	Furrow	Wide shallow linear, flat base.	2.19m wide, 0.09m deep	-

Trench 3, looking north-west Fig 8

Trench No.	**Length, width & alignment**		**Surface height, NW end (aOD)**	**Depth & height of natural (aOD)**
4	**40m x 1.8m NW-SE**		**115.79**	**0.55m 115.24m**
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/ Samples***
401	Topsoil	Mid brown sandy silt, rare small stone inclusions, root disturbance throughout.	0.30-0.40m thick	-
402	Subsoil	Mid brown-grey sandy clay.	0.15-0.25m thick	-
403	Natural	Mid orange-brown sandy clay with grey sandy clay patches, infrequent small-medium stone inclusions.	0.00-0.10m visible	-
404	Fill of [405]	Firm mid brown-grey sandy silt with moderate amount of small-medium stone inclusions.	0.60m wide, 0.10m thick	-
405	Furrow	Broad, shallow linear with flat base. Base of truncated furrow.	0.60m wide, 0.10m deep	-
406	Fill of [407]	Firm mid grey-brown sandy silt with occasional small stones and charcoal flecks.	0.60m wide, 0.20m thick	-
407	Gully	U-shaped linear gully with concave base. More eroded on the south-west edge.	0.60m wide, 0.30m deep	-

Trench 4, looking south-west Fig 9

Trench No.	**Length, width & alignment**		**Surface height, E end (aOD)**	**Depth & height of natural (aOD)**
5	**40m x 1.8m E-W**		**115.30m**	**0.48-0.75m 114.82-114.55m**
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/ Samples***
501	Topsoil	Mid brown sandy clay.	0.30-0.40m thick	-
502	Subsoil	Mid grey-brown sandy silt.	0.10-0.40m thick	-
503	Natural	Mid orange-brown with grey patches of snady clay, infrequent stone inclusions. Change in natural to mid yellow-orange sand at eastern end.	1.25m visible in sondage at eastern end	-
504	Fill of [505]	Mid brown grey sandy silt, infrequent small-medium stone inclusions. Land drain in base.	0.73m wide, 0.13m thick	-
505	Gully	Shallow U-shaped linear gully.	0.73m wide, 0.13m deep	-
506	Fill of [507]	Mid brown-grey sandy silt with high concentration of gravel.	0.50m wide, 0.20m thick	-
507	Geological banding	Silt and gravel banding in the natural substrate.	0.50m wide, 0.20m deep	-

Trench 5, looking west Fig 10

Trench No.	**Length, width & alignment**		**Surface height, N end (aOD)**	**Depth & height of natural (aOD)**
6	**20m x1.8m N-S**		**122.16m**	**0.45-0.50m 121.71-121.66m**
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/ Samples***
601	Topsoil	Friable dark brown-grey sandy silt, small infrequent stone inclusions.	0.20-0.30m	-
602	Subsoil	Mid brown sandy clay, infrequent small stone inclusions.	0.20-0.25m thick	-
603	Natural	Mid orange-brown sandy clay, bands of yellow and grey sandy clay, rare small-medium stone inclusions.	0.00-0.05m visible	-
604	Fill of [605]	Mid grey brown silty sand with small-medium stones throughout.	-	-
605	Animal burrow/root disturbance	Very irregular in plan and section, variable width and depth probable animal burrow.	-	-

Trench 6, looking north Fig 11

Trench No.	**Length, width & alignment**		**Surface height, SSE end (aOD)**	**Depth & height of natural (aOD)**
7	**40m x 1.8m NNW-SSE**		**116.27m**	**0.40-0.50m 115.87-115.77m**
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/ Samples***
701	Topsoil	Mid grey brown sandy clay, small stone inclusions.	0.30-0.40m thick	-
702	Subsoil	Mid orange-brown sandy clay	0.15m thick	-
703	Natural	Mid orange-brown sandy clay with patches of grey sandy clay, small stone inclusions	0.00-0.20m visible	-
704	Fill of [705]	Mid brown-grey silty sand with root disturbance throughout.	1.20m wide	-
705	Furrow	Ephemeral linear feature.	1.20m wide	-
706	Fill of [707]	Mid brown-grey silty sand with root disturbance throughout.	1.40m wide	-
707	Furrow	Ephemeral linear feature.	1.40m wide	-
708	Fill of [709]	Mid brown-grey silty sand with root disturbance throughout.	1.40m wide	-
709	Furrow	Ephemeral linear feature.	1.40m wide	Land drain example
710	Fill of [711]	Mid brown-grey silty sand with root disturbance throughout.	1.90m wide	-
711	Furrow	Ephemeral linear feature.	1.90m wide	-

Trench 7, looking north-west Fig 12

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