

ORCV/01



# ORCHARD VILLAGE, PHASE 4, RAINHAM, LONDON BOROUGH OF HAVERING

## ARCHAEOLOGICAL EVALUATION

commissioned by Hill Partnership Ltd

P2058.08

P0047.14

October 2016



# ORCHARD VILLAGE, PHASE 4, RAINHAM, LONDON BOROUGH OF HAVERING

## ARCHAEOLOGICAL EVALUATION

commissioned by Hill Partnership Ltd

P2058.08

P0047.14

October 2016

project info

HA JOB NO. ORCV/01  
NGR TQ 50715 83358  
PARISH Rainham  
LOCAL AUTHORITY London Borough of Havering  
OASIS REF. headland4-263277

project team

PROJECT MANAGER Michael Tierney  
AUTHOR Joe Berry, Peter James  
FIELDWORK Joe Berry, Tom Hodgson  
GRAPHICS Beata Wiczorek-Oleksy, Caroline Norrman  
APPROVED BY Michael Tierney – Project Manager

*Michael Tierney*

 **HEADLAND  
ARCHAEOLOGY**

© 2016 by Headland Archaeology (UK) Ltd



**SOUTH & EAST**

Headland Archaeology  
Building 68C, Wrest Park, Silsoe, Bedfordshire MK45 4HS

01525 850 878

[southandeast@headlandarchaeology.com](mailto:southandeast@headlandarchaeology.com)

[www.headlandarchaeology.com](http://www.headlandarchaeology.com)



## PROJECT SUMMARY

Headland Archaeology (UK) Ltd undertook an archaeological evaluation of land south at Roman close, Rainham in the London Borough of Havering, between 26th and 27th of September 2016. The work was commissioned by Hill Partnership Ltd, in advance of the construction.. The evaluation exposed levels of artificial deposited materials related to previous development. No negative features or deposits of archaeological significance were encountered.

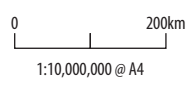
# CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	PLANNING BACKGROUND	1
1.2	SITE DESCRIPTION	1
1.3	ARCHAEOLOGICAL BACKGROUND	1
	Prehistory	1
	Roman	1
	Medieval	2
	Post-medieval to Modern	2
<b>2</b>	<b>OBJECTIVES</b>	<b>3</b>
2.1	GENERAL	3
<b>3</b>	<b>METHODOLOGY</b>	<b>3</b>
3.1	RECORDING	3
<b>4</b>	<b>RESULTS</b>	<b>3</b>
4.1	INTRODUCTION	3
4.2	TRENCH RESULTS	3
<b>5</b>	<b>DISCUSSION</b>	<b>4</b>
<b>6</b>	<b>CONCLUSION</b>	<b>4</b>
<b>7</b>	<b>BIBLIOGRAPHY</b>	<b>4</b>
<b>8</b>	<b>APPENDICES</b>	<b>6</b>
	APPENDIX 1 SITE REGISTERS	6
	APPENDIX 2 OASIS DATA COLLECTION FORM: ENGLAND	7

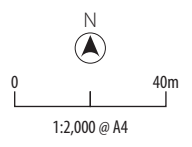
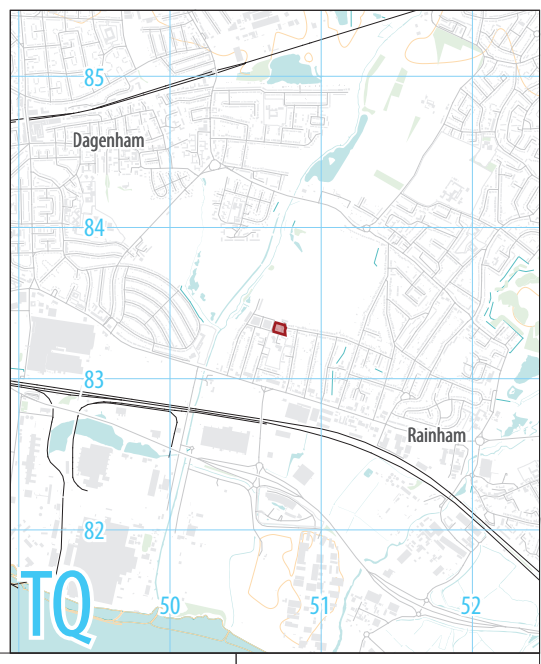
# LIST OF ILLUSTRATIONS

<b>ILLUS 1</b> SITE LOCATION	VIII
<b>ILLUS 2</b> VIEW OF SITE FROM NW PRIOR TO EXCAVATION OF TRENCHES, BUILDINGS YET TO BE DEMOLISHED VISIBLE IN BACKGROUND	2
<b>ILLUS 3</b> VIEW OF TRENCH 1 FROM THE SOUTHEAST SHOWING LAYERS OF MADE GROUND OVER GEOLOGICAL GRAVELLY SAND	4
<b>ILLUS 4</b> VIEW OF TRENCH 2 FROM THE SOUTHEAST SHOWING MADE GROUND OVER GEOLOGICAL SUBSTRATE	4
<b>ILLUS 5</b> VIEW OF TRENCH 3 FROM THE NORTHEAST SHOWING LAYERS OF MADE GROUND OVER GEOLOGICAL SUBSTRATE	5

**ORCV/01**  
 Orchard Village, Phase 4  
 Rainham  
 London Borough of Havering



Contains OS data © Crown copyright and database right 2016



- KEY**
- development boundary
  - trench location
  - unexcavated trenches



**SOUTH & EAST**  
 Building 68C, Wrest Park, Silsoe  
 Bedfordshire MK45 4HS  
 01525 861 578  
[www.headlandarchaeology.com](http://www.headlandarchaeology.com)

**ILLUS 1** Site location



# ORCHARD VILLAGE, PHASE 4, RAINHAM, LONDON BOROUGH OF HAVERING

## ARCHAEOLOGICAL EVALUATION

### 1 INTRODUCTION

#### 1.1 PLANNING BACKGROUND

Headland Archaeology Ltd was commissioned by Hill Partnership Ltd to undertake a programme of archaeological works in connection with the redevelopment of Mardyke estate, Rainham.

Planning permission for the development was granted by Havering London Borough Council (Planning Refs P2058.08 and P0047.14). Condition 51 specifies:

'No development or any phase of development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme for investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority for the development or the relevant phase. The development or the relevant phase shall only take place in accordance with the detailed scheme pursuant to this condition. The archaeological works shall be carried out by a suitably qualified investigating body acceptable to the Local Planning Authority.'

The Written Scheme of Investigation (WSI) was prepared by Headland Archaeology and approved by John Gould, Greater London Archaeology Advisory Service, advisor to the Local Planning Authority.

#### 1.2 SITE DESCRIPTION

The development site is located within the previous Mardyke estate, to the north-west of Rainham in London Borough of Havering (Illus 1). It is bounded by Roman Close to the north and Lowen Road to the south (NGR TQ 50715 83358). The site had previously been occupied by residential properties some of which have been demolished.

The site lies around 3–4m AOD and is relatively level. The river Beam is located approximately 300m to the west of the site and the River Thames located c. 2km to the south.

The solid geology comprised of the London Clay Formation – Clay, silt and sand. Sedimentary Bedrock formed approximately 34 to 56 million years ago in the Palaeogene Period. Local environment previously dominated by deep seas. The superficial deposits comprised of Taplow Gravel Formation – Sand and Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by rivers. (Natural Environment Research Council (NERC) 2016 [bgs.ac.uk](http://bgs.ac.uk))

#### 1.3 ARCHAEOLOGICAL BACKGROUND

The archaeological background is covered in detail by Archaeological Desk-Based Assessment (PCA 2008). Following this, several phases of archaeological evaluation and excavation have been undertaken, targeting areas between buildings constructed in the 1960s (Fairman 2009, Fairman 2010a&b, Bright 2011, Beasley 2013). The following section has been synthesised from these documents.

##### Prehistory

The prehistory is in general represented by individual find spots. A single flint blade was discovered during the construction of the former Mardyke estate in 1960s and a bladelet recovered during excavations at New Road by Compass Archaeology in 2008 (PCA 2008).

The most significant discovery is two Mesolithic flint scatters recorded during excavation ahead of flood alleviation scheme at former Washland reservoir. These artefacts were recovered from fluvial deposits at the base of the bank that defined the eastern edge of the Wantz Stream Valley, a tributary of the river Beam (Oxford Archaeology 2006).

Previous phase of archaeological evaluation (Beasley 2013) had identified evidence for potential agricultural activity related to the late prehistory.

##### Roman

There is extensive evidence of Roman activity in the area. Excavation carried out at former Washland reservoir recorded occupation and



**ILLUS 2** View of site from NW prior to excavation of trenches, buildings yet to be demolished visible in background

industry dating from the Middle Iron Age through to the 4th century AD. A cemetery dated to the 1st century AD was identified and the hiatus of activity between 2nd and 3rd century, represented by kilns and ovens before demise in the 4th century.

During the construction of the Mardyke Estate in 1960s, a Roman cemetery was excavated. A broad assemblage of material culture including quernstone and pottery fragments, indicative of settlement activity was also uncovered (PCA 2008).

Previous evaluation work (phase 1 and 2) had identified evidence of Roman activity to the north, west, and southwest of the site (Fairman 2009, Fairman 2010a, Beasley 2013). This activity comprised of negative cut features consisting of shallow pits and ditches. These features contained materials indicative of occupation within the vicinity of that development site and increased the potential of similar features being found on Phase 4 of the development.

## Medieval

There is limited evidence of post-Roman or early medieval activity, suggesting it is likely the area was utilised for common land or open fields.

The medieval Manor of Mardyke is documented to have resided on the edge of the marshes, approximately 22km south of the Dagenham Bridge but the location has never been confirmed. It is possible that two ponds identified on the John Cary map of c.1786 are associated with the original Manor of Mardyke rather than the

later Mardyke farm. No evidence of the Manor was recorded during the destruction of Mardyke Farm in the 1960s.

## Post-medieval to Modern

The borough of Havering appears on early maps as marsh and agricultural land inhabited by small scattered farms.

A dam was constructed across the nearby river Beam in 1705–21. This was constructed in two stages; initially 2 sluices were built in firm ground and across the breach wooded piles were driven into the silt. Foot wharves were constructed on both side of the piles and infilled with chalk and building material. A series of earth banks were later built to prevent further flooding.

John Cary's map of c.1786 indicates no significant development within the area.

The 1st Edition Ordnance Survey Map of c.1867 illustrates New Road with a bridge over the river Beam as well as Mardyke Farm, located to the south of the development site.

By 1898 the development site comprises of three open fields divided by trackways, leading from Mardyke Farm.

Throughout the 20th century the landscape had altered substantially from predominantly agricultural land use to the establishment of new roads and the development of residential estates.

By 1966 five tower blocks that formed part of the Mardyke Estate had been constructed on the site. To the immediate east was a large earthwork which is likely to be associated with flood defence.

By 1968 Mardyke Farm had been demolished and further residential properties had been constructed immediately to the north of the Mardyke Estate.

## 2 OBJECTIVES

### 2.1 GENERAL

The methodology followed was outlined in the Written Scheme of Investigation (WSI) (Headland Archaeology 2016).

Generally, the archaeological investigations were undertaken in order to:

- › to assess the extent, structure and date of any archaeological features and deposits of archaeological interest;
- › to place, where possible, the archaeological features within their local and regional context;
- › to establish any constraints to further fieldwork (e.g. services) and factors concerning the survival of archaeological remains (e.g. natural and human disturbance); and
- › to place the findings of the investigation within the context of previous work undertaken within the vicinity of the site.

The resulting archive will be organised and deposited in the LAARC (Accession Number: RCL16) to facilitate access for future research and interpretation for public benefit (CIfA 2014a). An online OASIS form has been completed and will ultimately be submitted with the approved version of the report (OASIS ID: headland4-263277).

## 3 METHODOLOGY

Due to the presence of a standing, still occupied building and associated infrastructure (programmed to be demolished), only three of the proposed six trenches were excavated. As a result the excavated trenches comprise a 2% sample of the development area. The three trenches also had to be moved from their original proposed location in the WSI to avoid impacting utility company assets.

All trenches measured 20m in length and 1.6m wide, and were excavated by a JCB-type excavator equipped with a ditching bucket.

Mechanical excavation was under archaeological supervision and ceased when either an archaeological horizon was exposed or the geological substrate was identified.

Prior to breaking ground, all trenches were located using a Trimble dGPS. Utility plans were consulted, and all trenches were scanned using a cable avoidance tool (CAT) to identify any potential buried services.

## 3.1 RECORDING

All recording followed the guidance laid down by the Chartered Institute for Archaeologists (CIfA 2014b), GLAAS (2015) Standards for Archaeological Work, and was in line with the approved WSI (Headland Archaeology 2016). All trenches and contexts were given a unique number. All recording was undertaken on pro forma recording sheets which conform to archaeological standards. All stratigraphic relationships were recorded.

A plan of the trenches and features was recorded digitally. A full photographic record was taken using digital photography and black and white print photographs were taken where appropriate. A metric scale was clearly visible in all record photographs.

## 4 RESULTS

### 4.1 INTRODUCTION

Full context and trench descriptions, including dimensions, depths and orientations, are presented in Appendix 1.1. Contexts are identified numerically by trench (ie Trench 1: (0100), Trench 2: (0200)) with cuts indicated by square brackets and deposits by rounded brackets. Selected technical detail is utilised below in order to describe the remains found and to inform the interpretation and dating presented in this report.

No negative features or deposits of archaeological interest were encountered during the evaluation.

The excavated trenches exposed levels of artificially deposited materials, 'made ground', related to the construction and later demolition of buildings that had previously occupied the site. No evidence of buried soil horizons were recorded, indicating that the original land surface had been removed during the earlier construction phases.

Trenches 4, 5 and 6 were not excavated due to the following constraints:

**Trench 4** building still extant

**Trench 5** building still extant and public road

**Trench 6** on public road

These three trenches on the east of the development could not be re-located elsewhere in the footprint of the site.

### 4.2 TRENCH RESULTS

The geological substrate was exposed between 0.70m and 1.05m below the current ground level. In general, it was medium yellow brown sandy silt with pockets of gravel flint and grey blue alluvial clays. This was sealed by layers of made ground comprising of mixed light yellow brown loose silty sand and grey brown reclaimed soil infill with frequent red brick and concrete inclusions. In each trench the made up ground was covered by the present a layer of rubblely hardcore that makes up the present ground surface.





Trench 1 contained a layer of consolidation/ levelling, approximately 0.30m in depth, consisting of medium yellow brown sandy silt with abundant gravel flint, sand and concrete. (Illus 3).Beneath this was another layer of made ground with a mixture of silty sand and brick rubble and a depth of 0.5m. There were no archaeological features or artefacts present.

Trench 2 (Illus 4) had a similar layer of made ground material measuring 0.45m in depth overlying the geological substrate. There were no archaeological features or artefacts present.

The made ground in Trench 3 (Illus 5) was 0.48m deep coming down onto light yellowish brown sandy silt. There were no archaeological features or artefacts present.

## 5 DISCUSSION

The levels of made ground (between 0.70m and 1.05m) and the absence of agricultural soils suggest the site had been significantly truncated by previous construction work. No archaeological features or artefacts were present in the trenches. There was no trace of the kind of archaeological remains found during previous phases of archaeological evaluation and mitigation to the west of north of this site.

The eastern part of the site could not be evaluated as planned in the WSI. Considering the results from the western half of the site, if any archaeological features or deposits were present it is likely they would have been subjected to similar levels of truncation.

## 6 CONCLUSION

The evaluation exposed levels of made ground relating to the original development of the site in the 1960s. With the absence of agricultural soils, suggests the original land surface had been removed and if any archaeological features or deposits were present that there is low potential for survival. Nevertheless, in the absence of a full evaluation this conclusion cannot be proven. It is therefore recommended that future construction work to the east of Trench 1 and 2 be the subject of archaeological observation and recording during the site clearance phase of the project.

## 7 BIBLIOGRAPHY

- Beasley, M 2013 *A Phase III Archaeological Evaluation on Blocks E, F, G, K, M and N, Mardyke Estate, Rainham, London Borough of Havering, RM13 8PS* Pre-Construct Archaeology Ltd (London)
- Natural Environment Research Council (NERC) 2016 *British Geological Survey* [online] Accessed 20 September 2016 from [www.bgs.ac.uk/](http://www.bgs.ac.uk/)
- Bright, I 2011 *An Archaeological Watching Brief at the Mardyke Estate, Rainham, London Borough of Havering, RM13 8PS (Phase 2)* Pre-Construct Archaeology Ltd (London)
- Chartered Institute for Archaeologists (CIFA) 2014a *Standard and guidance for the archaeological investigation and recording of standing buildings or structures [online document]* Accessed from [www.archaeologists.net/sites/default/files/CifAS&GBuildings\\_1.pdf](http://www.archaeologists.net/sites/default/files/CifAS&GBuildings_1.pdf)





**ILLUS 3** View of Trench 1 from the southeast showing layers of made ground over geological gravelly sand **ILLUS 4** View of Trench 2 from the southeast showing made ground over geological substrate **ILLUS 5** View of Trench 3 from the northeast showing layers of made ground over geological substrate

Chartered Institute for Archaeologists (CIfA) 2014b *Standard and guidance for archaeological field evaluation* [online document] Accessed from [www.archaeologists.net/sites/default/files/CifAS&GFieldevaluation\\_1.pdf](http://www.archaeologists.net/sites/default/files/CifAS&GFieldevaluation_1.pdf)

Fairman, A 2009 *An Archaeological Evaluation on Blocks B, L and P, Mardyke Estate, Rainham, London Borough of Havering, RM13 8PS* Pre-Construct Archaeology Ltd (London)

Fairman, A 2010a *An Assessment of an Archaeological Excavation of Phase 1, Block B, Mardyke Estate, Rainham, London Borough of Havering, RM13 8PS* Pre-Construct Archaeology Ltd (London)

Fairman, A 2010b *An Archaeological Evaluation at Mardyke Estate, Phase 2, Rainham, London Borough of Havering, RM13 8PS* Pre-Construct Archaeology Ltd (London)

Greater London Archaeological Advisory Service (GLAAS) 2015 *Guidelines for Archaeological Projects in Greater London* [online document] Accessed from <https://historicengland.org.uk/images-books/publications/glaas-standards-for-archaeological-work/>

Headland Archaeology 2016 *Archaeological Evaluation Orchard Village, Phase 4, Rainham, London Borough of Havering; Written Scheme of Investigation*

Museum of London Archaeology (MOLA) 2000a *The archaeology of Greater London: An assessment of archaeological evidence for human presence in the area now covered by Greater London*

Museum of London Archaeology (MOLA) 2000b *The archaeology of Greater London: An assessment of archaeological evidence for human presence in the area now covered by Greater London*

Oxford Archaeology 2006 *Washlands Reservoir, River Beam, Dagenham, Greater London. Phase 1 Area – Strip, Map and Sample and The Embankment – Geoarchaeological Boreholes; Post-excavation Assessment and Updated Research Design*

Pre-Construct Archaeology 2008 *An Archaeological Desk Based Assessment of Mardyke Estate, London Borough of Havering, RM13*

## 8 APPENDICES

### APPENDIX 1 SITE REGISTERS

#### Appendix 1.1 Trench and context register

\* D BGL = Depth below ground level

TR1	L (M)	W (M)	MIN. D (M)	MAX. D (M)
	20	1.6	1.7	1.9
CONTEXT	DESCRIPTION			*D BGL (M)
0101	Present ground surface layer – light grey brown gravel and brick rubble hardcore surface.			0.25
0102	Made ground/consolidation – medium yellow brown sandy silt with abundant gravel flint, sand and concrete.			0.30
0103	Made ground/consolidation – light yellow brown loose silty sand with grey brown silty clay infill and brick rubble.			0.50
0104	Geological substrate– medium yellow brown sandy silt with pockets of flint gravel and blue grey alluvial clays.			N/A

#### SUMMARY

No archaeological features present.

TR2	L (M)	W (M)	MIN. D (M)	MAX. D (M)
	20	1.6	1.2	1.55
CONTEXT	DESCRIPTION			*D BGL (M)
0201	Present ground surface layer – Light grey brown gravel and brick rubble hardcore surface.			0.25
0202	Made ground/consolidation – light yellow brown loose silty sand with grey brown silty clay infill and brick rubble.			0.45
0204	Geological substrate– medium yellow brown sand silt with pockets of flint gravel and blue grey alluvial clays.			N/A

#### SUMMARY

No archaeological features present.

TR3	L (M)	W (M)	MIN. D (M)	MAX. D (M)
	20	1.6	1.2	1.6
CONTEXT	DESCRIPTION			*D BGL (M)
0301	Present ground surface layer – light grey brown gravel and brick rubble hardcore surface.			0.25
0302	Made ground/consolidation – light yellow brown loose silty sand with grey brown silty clay infill and brick rubble.			0.48
0304	Geological substrate– medium yellow brown sand silt with pockets of flint gravel and blue grey alluvial clays.			N/A

#### SUMMARY

No archaeological features present.

### Appendix 1.2 Photographic register

PHOTO	DIGITAL	DIRECTION FACING	DESCRIPTION
1001	7215	S	General site shot prior to excavation of trenches
1002	7216	SW	General site shot prior to excavation of trenches
1003	7217	W	General site shot prior to excavation of trenches
1004	7218	N	General site shot prior to excavation of trenches
1005	7219	NE	General site shot prior to excavation of trenches
1006	7220	SE	NW facing section of Trench 3 at sondage
1007	7221	SE	NW facing section of Trench 3 at sondage
1008	7222	SE	NW facing section of Trench 3 at sondage
1009	7223	NE	Working shot of Trench 3 excavation
1010	7224	NE	Working shot of Trench 3 excavation
1011	7225	NE	Working shot of Trench 3 excavation
1012	7226	NE	Working shot of Trench 3 excavation
1013	7227	NE	Trench 3
1014	7228	SW	Trench 3
1015	7229	SE	Working shot of Trench 1 excavation
1016	7230	SW	NE facing section of Trench 1
1017	7231	SE	Working shot of Trench 1 excavation
1018	7232	SE	Working shot of Trench 1 excavation
1019	7233	SE	Working shot of Trench 1 excavation
1020	7234	E	Working shot of Trench 1 excavation
1021	7235	SE	Working shot of Trench 1 excavation
1022	7236	NE	Working shot of Trench 1 excavation
1023	7237	SE	Working shot of Trench 1 excavation
1024	7238	SE	Working shot of Trench 1 excavation
1025	7239	NW	Trench 1
1026	7240	SE	Trench 1
1027	7241	SE	Trench 1
1028	7242	S	NE facing section of Trench 2
1029	7243	W	Working shot of Trench 2 excavation
1030	7244	N	Working shot of Trench 2 excavation
1031	7245	SW	Working shot of Trench 2 excavation
1032	7246	W	Trench 2
1033	7247	E	Trench 2
1034	7248	SW	General site shot after backfilling of trenches
1035	7249	SW	General site shot after backfilling of trenches
1036	7250	SE	General site shot after backfilling of trenches

## APPENDIX 2 OASIS DATA COLLECTION FORM: ENGLAND

OASIS ID: headland4-263277

## PROJECT DETAILS

Project name	Orchard Village, Phase 4, Rainham
Project dates	Start: 26-09-2016 End: 27-09-2016
Previous/future work	Yes / Not known
Any associated project reference codes	ORCV16 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	NONE None

## PROJECT LOCATION

Country	England
Site location	GREATER LONDON HAVERING RAINHAM Orchard Village, Phase 4, Rainham
Postcode	RM13 8QD
Study area	0.5 Hectares
Site coordinates	TQ 50715 83358 51.528483659955 0.172969831485 51 31 42 N 000 10 22 E Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 3m Max: 4m

## PROJECT CREATORS

Name of Organisation	Headland Archaeology Ltd
Project design originator	Michael Tierney
Project director/manager	Michael Tierney
Project supervisor	Joe Berry
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Hill Holdings Ltd

## PROJECT ARCHIVES

Physical Archive Exists?	No
Digital Media available	"Database","Images raster / digital photography","Survey","Text"
Paper Media available	"Context sheet","Diary","Report","Unpublished Text"
Entered by	Joe Berry ( <a href="mailto:joe.berry@headlandarchaeology.com">joe.berry@headlandarchaeology.com</a> )
Entered on	29 September 2016









© 2016 by Headland Archaeology (UK) Ltd

**SOUTH & EAST**

Headland Archaeology  
Building 68C, Wrest Park, Silsoe  
Bedfordshire MK45 4HS

01525 861 578

[southandeast@headlandarchaeology.com](mailto:southandeast@headlandarchaeology.com)

**MIDLANDS & WEST**

Headland Archaeology  
Unit 1, Clearview Court, Twyford Road  
Hereford HR2 6JR

01432 364 901

[midlandsandwest@headlandarchaeology.com](mailto:midlandsandwest@headlandarchaeology.com)

**NORTH**

Headland Archaeology  
Unit 16, Hillside, Beeston Road  
Leeds LS11 8ND

0113 387 6430

[north@headlandarchaeology.com](mailto:north@headlandarchaeology.com)

**SCOTLAND**

Headland Archaeology  
13 Jane Street  
Edinburgh EH6 5HE

0131 467 7705

[scotland@headlandarchaeology.com](mailto:scotland@headlandarchaeology.com)

[www.headlandarchaeology.com](http://www.headlandarchaeology.com)