Archaeological Evaluation

Chamberlains Barn, Leighton Buzzard, Bedfordshire

Planning Applications- CB/11/01863/MW & CB/11/01937/OUT

PHASE 2 Evaluation Report

Client: Arnold White Estates Ltd.

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Grid Reference: SP 931268
Address: Chamberlains Barn, Leighton Buzzard
Parish: Leighton-Linslade
Council: Bedfordshire
Project Manager: Antony Walsh
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Schedule
Fieldwork dates: 25/01/2016 to 31/08/2016
Report dates: December 2016, version 4 June 2017

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LAND AT CHAMBERLAINS BARN, LEIGHTON BUZZARD, BEDFORDSHIRE

EVALUATION

1.1 Summary

Headland Archaeology (UK) Ltd undertook an archaeological evaluation of the land at Chamberlains Barn, Leighton Buzzard in Bedfordshire between 25th January and 31st of August 2016. The work was commissioned by Arnold White Estates in response to archaeological conditions placed on planning permissions CB/11/01863/MW and CB/11/01937/OUT. In this phase of work, thirteen trenches were excavated, seven of which contained archaeological remains. These consisted of medieval and post-medieval plough furrows and two modern waste pits. One area of archaeological activity was identified.

2. INTRODUCTION

2.1 Planning Background

Headland Archaeology Ltd was commissioned by Arnold White Ltd to undertake a programme of archaeological evaluation in connection with the restoration of the quarry (CB/11/01863/MW) and the construction of residential dwellings (CB/11/01937/OUT) at Chamberlains Barn, Leighton Buzzard, Bedfordshire (Illus 1). Both planning applications were granted by Central Bedfordshire Council.

Planning application (CB/11/01863/MW) Condition 14 specifies:

> '*No preparatory works or extraction shall take place in Areas 4 and 5 indicated on plan no. BC/CM/97/034-1, until the operator has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been summited to and approved in writing by the local Planning Authority to enable the recording of any archaeological remains before destruction'*

Planning application (CB/11/01937/OUT) Condition 16 specifies;

> "*No development shall take place, in any area or sub-area as defined by the areas plan required by condition 3 of this permission, until a written scheme of archaeological resource management has been submitted to and approved in writing by the local Planning Authority. The said development shall only be implemented in full accordance with the approved scheme and its subsequent amendments, to record and advance understanding of the heritage assets with archaeological interest which will de unavoidably affected as a consequence of the development or to secure the protection and management of any archaeological remains which may be preserved in situ within the development site in accordance with Policy 45 of the Development Strategy for Central Bedfordshire (Revised Pre-submission Version June 2014)."*

The WSI was prepared by Headland Archaeology Ltd (January 2016, Version 4) and approved by the planning authority on the advice of Hannah Firth, Archaeologist at Central Bedfordshire Council.

Between 25th January and 31st August 2016 Headland Archaeology Ltd was commissioned to undertake field evaluation in accordance with the agreed WSI.

This report details the results of one of the phases of archaeological evaluation.

2.2 Site Description

The Chamberlains Barn Quarry l development area is located to the north-east of Leighton Buzzard (Illus 1), between Heath Road to the west, Vandyke Road to the east, and Shenley Hill Road to the north. The DA covers an area of c.95ha, centred on SP 931268 at an average of 95mAOD.

The site comprises of restored sand quarry, rough grasslands, agricultural land; arable and pasture, and small areas of scrub and woodland (Areas 1-5).

Two main geological groups are present within the development site. To the north and north-east, the bedrock geology consists of mudstone of the Gault Formation; a sedimentary Bedrock formed approximately 100 to 112 million years ago, in the Cretaceous Period.

To the south and south-east, the bedrock geology is predominantly sandstone of the Woburn Sands Formation; a sedimentary Bedrock formed approximately 100 to 125 million years ago, in the Cretaceous Period.

Local environment previously dominated by shallow seas. (www.bgs.ac.uk accessed 30.9.16)

2.3 Archaeological Background

The archaeological background is covered in detail in the 'Heritage assessment' as part of the environment impact assessment (Albion Archaeology 2011). This document was supported by the geophysical survey (Stratascan2008) and first phase of trial trenching (Albion Archaeology 2012). The following section has been synthesised from those documents. This has been updated by a visit to the Central Bedfordshire Historic Environment Record (December 2015).

2.3.2 There is limited evidence of earlier prehistoric activity within the DA and its immediate vicinity. A Palaeolithic handaxe is recorded to the south-west of the DA (HER10723), and a Neolithic arrowhead to the west (HER19616). Work at Chamberlains Barn Quarry recovered a Bronze Age urn and features with Iron Age pottery, indicating that there was some prehistoric activity in this area. The geophysical survey also identified two concentric ring ditches, 65m in diameter, in the north-eastern part of the DA which may represent a prehistoric 'hengiform' monument (HER 19594). This was investigated in the 2012 trial trenching and early Iron Age pottery was recovered from its fills. A series of undated square and circular cropmarks in the eastern part of the DA (HER14689) may also represent prehistoric enclosures.

2.3.3 Two findspots of Romano-British pottery are recorded on the HER just to the north of the DA (HER6; HER11295), and several Roman vessels recorded at Leighton Heath (HER2772). This may indicate the presence of a nearby farmstead. An archaeological field evaluation on the Leighton Buzzard Flood Alleviation Scheme, to the north of the Clipstone Brook east of the DA, also uncovered a late Iron Age – Romano-British enclosed rural settlement (HER11123). The positioning of the DA on the Greensand Ridge would also indicate that Romano-British remains could be positioned present here, as Romano-British remains are commonly found on similar higher land in north-western Bedfordshire (Simco 1984, 21).

2.3.4 Two Anglo-Saxon cemeteries were recorded in the 1930s during gravel extraction work at Chamberlains Barn Quarry, in the southern part of the PDA (HER3; Hyslop 1963). The first dated to the late 6th / early 7th century, and the second to the 7th century. Burials were accompanied by glass beads, pottery, and bronze and iron implements. Unfortunately, their precise location within the quarry was not recorded.. A 6th century cremation cemetery was also uncovered just to the west of the DA in the 1880s (HER1), and an Anglo-Saxon spearhead to the north-west (HER2820).

2.3.5 Leighton Buzzard is recorded in the Domesday Book as "Lestone" and settlement is thought to have originated in the Saxon period. The medieval core of the town was concentrated along the roads leading to the High Street. Another medieval settlement was focused around Heath, to the north-west of the DA. Earthworks in the vicinity of the DA represent former field boundaries, thought to be medieval in date (HER11180), along with ridge and furrow cultivation both within the DA and in its vicinity (HER5079, 5462, and 2589). Ridge and furrow was also identified in the geophysical survey, the LiDAR data, and in the 2012 trial trenching, and appears to cover the majority of the un-quarried parts of the

DA. This suggests that the DA lay within the agricultural hinterland of the medieval settlements.

2.3.6 Several former sand and stone quarry pits and brickworks exist within the DA and surrounding area, including HER11146 and HER11085 within the northern part of the DA. These are 19th century in date. Historic mapping can provide a further indication of land use within the DA during the post-medieval period. The 1840 Leighton Buzzard Tithe Map shows a dense concentration of small strip fields within the DA, indicative of the medieval agricultural system. This was changed considerably by the process of Enclosure in the mid-19th century, as is shown on the 1848 Leighton Buzzard Enclosure Map which depicts larger rectangular fields, similar to the current field layout. The 1880 and 1901 OS Maps show the DA in a similar way to the Enclosure Map, with a sand pit in the northern part. The 1926 OS Map shows the construction of Chamberlains Quarry.

3. OBJECTIVES

3.1 General

The methodology followed was outlined in the WSI (Headland Archaeology (UK) Ltd. January 2016-Version 4) and designed to meet the requirements of the planning application (refs: CB/11/01937/OUT and CB/11/01863/MW).

Generally, the archaeological investigations were undertaken in order to:

- Assess the extent, layout, structure and date of features and deposits of archaeological interest;
- Place, where possible, the identified features within their local and regional context;
- Establish the relationship of any remains found to the surrounding contemporary landscapes;
- Recover palae-environmental remains to determine local environmental conditions

3.2 Specific

The local and regional research contexts are provided by Bedfordshire Archaeology: Research and Archaeology: Resource Assessment, Research Agenda and Strategy (Oake et al, 2007). These are supported by Research and Archaeology Revisited: a Revised Framework for the East of England, East Anglian Archaeology Occasional Paper 24 (Medlycott, M. 2011, ed.); Research and Archaeology; A Framework for the Eastern Counties (Glazebrook 1997; Brown & Glazebrook 2000), Exploring Our Past (English Heritage 1991), and English Heritage Archaeology Division Research Agenda (English Heritage 1997). The evidence retrieved during the works was analysed in light of the objectives contained in these frameworks.

- **Iron Age / Romano-British:** "Little detailed work has been carried out on the characterization of rural settlements in either the Iron Age or Roman period. And for both periods patterns of settlement nucleation or dispersal are areas of considerable significance but little understood…. Priority should be given to those projects which offer the chance to determine the relationship between settlement and enclosure in both the Roman and Iron Age" (Oake 2007, 11)

- **Anglo-Saxon:** "The investigation of early cemeteries under modern conditions would also be very valuable" (Oake 2007, 13)

- **Medieval:** "The origins and development of field systems require research as does the position of the county between the midland system and the different systems in the rest of the eastern region" (Oake 2007, 14)

The resulting archive (finds and records) will be organised and deposited in a registered museum (Luton Culture, Entry Number 1171) to facilitate access for future research and interpretation for public benefit). An online OASIS form has been completed and will be ultimately submitted with the approved version of the report (OASIS ID: headland4-235440).

4. METHODOLOGY

Trial trenching was carried out between the 25th January and 31st August 2016. In this phase of works a total 13 trenches were excavated (Illus1. and 2.). The trenches were generally c30m in length on

average with a minimum of 24.3m and measured between 1.9m - 2.2m wide. However, trenches 20, 21 and 23 were split in two to accommodate agricultural plant access. Trench 20 segments were 16,14m and 9.40m long, trench 21 segments were 19.29m and 8m long and trench 23 was 18.62m and 5.88m long. The trenches were set out in accordance with the agreed trench layout plan in the WSI using a Trimble GNSS device.

A mechanical excavator equipped with a toothless ditching bucket was used to remove the overburden under direct archaeological supervision. Potential archaeological features were excavated by hand.

Investigation of archaeological remains was undertaken through hand excavation. A representative sample, sufficient to meet the objectives of the evaluation, of identified archaeological or potentially archaeological remains were investigated and recorded. The stratigraphy of each trench was recorded in full.

4.1 Recording

All recording followed the guidance laid down by the Chartered Institute for Archaeologists (CIfA 2014b) and was in line with the approved WSI (Headland Archaeology (UK) Ltd- Archaeological Evaluation, Chamberlains Barn, near Leighton Buzzard, Bedfordshire, January 2016-Version 4). 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 across the entire site was recorded digitally using a Trimble survey grade GNSS device. Sections through features with multiple fills were drawn by hand at a 1 to 10 scale while sections through single fill features were recoded digitally using a Trimble survey grade GNSS device.

A full photographic record was taken using digital photography and incorporating black and white print photographs where appropriate. A metric scale was clearly visible in record photographs.

5. RESULTS

5.1 Introduction

Full context descriptions and trench descriptions, including dimensions, depths and orientations, are presented in the appendix I. Contexts are identified numerically by trench (i.e. Trench 1: (101), Trench 2: (201)) 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 we have completed and presented in this report. This structure reflects our adherence to the CIfA guidance on report production, which states that "*descriptive material should be clearly separated from interpretative statements*" (CIfA 2014b, 14, Section 5). Drawing upon the same document, we feel it is imperative to create a narrative which uses the evidence we gather to assign significance to heritage assets (remains) we encounter:

"If archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their significance in a local, regional, national or international context as appropriate" (CIfA 2014b, 14, Section 5).

We always utilise multiple data-sources when phasing and interpreting remains. This includes feature morphology (recognisable and datable feature types), datable artefactual material, stratigraphic position of feature (in heavily ploughed areas the presence of an intact subsoil sealing remains is given particular emphasis), the relative stratigraphic position of features (cutting or cut by). A range of other considerations also come into play. The limitation of datable artefactual material is recognised and we reflect on the possibility of intrusive material and the presence of residual material. We also recognise that most archaeological features are 'filled' by disuse fills and disused artefacts.

Archaeological remains were found in six of the thirteen trenches and they were generally focused in the western part of the site. The majority of the features were dated to the post-medieval or modern period, and were represented by furrows suggesting an agricultural use of the landscape. Later features comprised the remains of 20th century refuse pits. The following results should be in conjunction with relating to the first phase of evaluation (report *RLAI/15).*

5.2 Trench Results

Archaeological remains were found in six of the thirteen trenches (Illus. 2). The earliest features on site appear to be the probable medieval furrows [1006], [1008], [1010], [1012] and [1015] exposed in trench 10. The majority of the features in the other trenches were dated to the post-medieval or modern period, and represented the remains of later agricultural ploughing activities. Other features comprised remains representing refuse disposal activities in relation to the quarry exploitation.

Remains of furrows of various widths were exposed in trench 10. Furrow [1015] appears to confirm an east-west linear feature which was noted by the geophysical survey of the field (Illus 3B and 3C) and was 2.40m wide with a maximum depth of 0.35m and a total length of 2.6m exposed in the trench. Furrow [1015] was filled by (1014) a light grey and mid yellow brown sand clay with occasional small sub angular stones 0.17m thick sealed by a mid-grey yellow silt clay with small sub angular stones (1013). Furrow [1015] was truncated by [1012] at the north-west.

Furrow [1012] ran north north-east to south south-west and was 2.4m wide for a depth of 0.24m. The furrow was filled by a mid-grey brown silt clay which contained fragments of possible medieval CBM.

Furrows [1006], 1008], [1010] (Illus 3A and 4) were all part of a network of features that truncated furrow [1015], ran perpendicular to and had a width ranging from 0.48 to 2.40m and were c0.25m average depth. The maximum length exposed was that of furrows [1006] and [1012]. Two possible medieval roof tile fragments and nails were retrieved from feature [1006] and brick and roof tile fragments were also found in features [1008] and [1012] thus suggesting a possible medieval or post medieval truncation of furrow [1015] (Illus 4 & 5).

Modern waste pits and disturbance were exposed trenches 14 and 15, at the far south-west of the development area. Waste pits [1405] and [1407] were investigated as representative samples of the modern truncations found in this part of the site. Both pits were filled with a dark yellow brown sand and 20th century waste such as rubble, glass and plastic clearly associated with the more recent quarrying activities of the area (Illus 5 & 6).

Remnants of plough furrows were also identified in trenches 19, 20, 23 and trench 21 which targeted a linear feature highlighted by the geophysical survey (Stratacan 2008) (Illus 3). They were on a parallel alignment, orientated north-west to south-east, following the landscape gradient. They measured approximately 2.10-2.80m wide and were 5-6m apart.

The natural substrate at the north-east consisted of a mid-orange brown clay with patches of gravel changing into a much lighter grey brown Boulder Clay towards trench 10. The geology was consistent across the field containing trenches 19, 20, 21, 22 and 23 and comprised light to medium grey brown Boulder Clay which was exposed at a depth ranging between 0.28 and 0.38m.

Subsoil was present in trench 23, located at the base of the slope and consisted of medium grey brown silty clay with frequent sub-rounded gravel flint and chalk and of an average depth of 0.11m. This was sealed by a dark grey brown clayed loam plough soil.

No archaeological features were exposed in trench 22.

5.3 Finds

by Julie Franklin, Jackie Wells, Julie Lochrie

The finds assemblage did not include any sherds of pottery but 20 sherds (302g) of ceramic building material, two pieces of iron and a small fraction (1g) of industrial waste. Finds were only found in trench 10 and are dated from the medieval to modern periods. A summary of the assemblage is given below (Table 1), and a catalogue is given at the end.

Trench	Feature	Pottery (Medi)	Pottery (Medi)	Pottery (PM-Mod)	Pottery (PM-Mod)	Iron	Glass	Lithics	Stone	CBM	CBM	Ind Waste	Dating
		Count	Wgt	Count	Wgt	Count	Count	Count	Count	Count	Wgt	Wgt	
10	Feature 1006					2				7	53g	1g	Medi?
10	Feature 1008									1	14g		Medi?

10	Feature 1012									12	235g		Medi?
Total						**2**				**20**	**302g**	**1g**	

Table 1 Assemblage summary by feature

5.3.1 Iron

Four iron finds included two nails found in feature [1006] (1005). Being associated with medieval roof tile, these may be of medieval date.

5.3.2 Ceramic building material

The ceramic building materials are typically sand tempered brick and tile sherds. Pieces are generally abraded and well fragmented.

Ten fragments derive from flat roof tiles, probably of peg type, although only one retains an identifying nail hole. Such tiles are broadly datable from the 13th to 16th centuries.
There were also 1 brick sherds, too fragmentary to be of diagnostic value.

Type	Sherds	Wgt	Dating
Roof Tile	10	251g	13^{th}-16^{th}
Brick	1	17g	
Fragments	9	34g	?
Total	20	302g	

Table 2 Ceramic Building Material summary

5.3.3 Industrial Waste

The industrial waste comprises 1g of slag with a very small amount (<0.5g) of magnetic residues. None of the slag appears to be related to ironworking and may be the result of other pyrotechnic processes. Similarly, the magnetic residues are not necessarily the result of smithing and may be magnetised natural from the same pyrotechnic processes. Associated finds are mixed in terms of dating so these pieces cannot be dated.

5.3.4 Discussion

The earliest archaeology on the site may be of medieval date, though it is unclear if any features actually date from that period. The flat roof tile is more numerous but has a broad date range and may also have been of some age when deposited. It is possible that many of the features were actually backfilled during the post-medieval or modern periods.

5.4 Environmental Report

By Laura Bailey

Introduction

Some animal bone material was collected during archaeological works. The site comprised furrows of possible medieval or later date. The aims of the assessment were to assess the use of the land at a specific location and to characterize the remains as far as possible.

Methodology

Animal bone was hand collected in the field and identifications were made with reference to Schmid (1972).

Results

Results of the assessment are presented in Table 3 Animal bone.

Animal Bone

A small amount of animal bone material was recovered from feature [1006], (1005). The bone was generally heavily fragmented and abraded. The surface condition was poor. The bone material was identified as a large mammal cranium fragment.

Identifiable	Notes

Context	Trench	Description	Condition	Weight (g)	Cattle	sheep/goat	Horse	
1005	10	Fill of [1006]	Poor	4				Large mammal skull fragment

Table 3 Animal Bone

Discussion

The environmental assemblage offers little insight into site economy. The animal bone assemblage comprised elements of the main domesticates. The combination of bone suggests that the material probably had a domestic origin. Due to the small size of the assemblage it is unlikely that analysis would provide significant further information.

6. DISCUSSION

6.1 Quality of preservation

Quarrying and agricultural truncation was apparent at this site, which is typical for the area. The topsoil at the site varied from 0.15m to 0.32m in depth over a subsoil between 0.2m and 0.5m thick. In the north-east parts of the site the topsoil was however extensively mixed with natural substrate as a result of extensive ploughing. The overburden in the south-west area was disturbed by modern quarrying activities.

6.2 Summary of remains

6.3 Prehistoric Activity

No evidence of prehistoric activities was found in the trenches. However, a residual lithics were retrieved from the trenches in the first phase of evaluation.

6.4 Medieval

There is evidence for a medieval occupation represented by agricultural furrows which contained potentially fragments of building material.

6.5 Post-medieval and modern activity

Many trenches of the DA showed evidence of agricultural activity. These related to ploughing which have continued to this day. The modern activity was represented by large truncations and waste pits which are most likely connected to the quarrying activities clearly present in the landscape of the DA.

7. CONCLUSION

The evaluation successfully characterised the archaeological potential of the development area.

Archaeological features were investigated and recorded in six of the thirteen trial trenches. These consisted of a potentially medieval furrow, parallel intercutting probable furrows and modern waste pits, and ground disturbances related to local quarrying activities.

The amount of material recovered is consistent with a relatively low density of archaeology; however, there are one or two features; the banked enclosure and its associated ditches, discovered during phase one of this evaluation that may be of interest. It is likely that the archaeology recorded is all that survived as it lay outside the areas of quarrying activities and may be on the periphery of any significant activity. The evaluation confirmed the presence of agricultural marks as suggested by the geophysical results. The presence of such material in the evaluation adds to the regional record.

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Appendix I – Trench and Context Summary

TR06			
L (m)	**W (m)**	**Min. D (m)**	**Max. D (m)**
30	2.2	0.8	0.90
Context	**Description**		***D BGL (m)**
0601	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).		0.30
0602	Subsoil- Medium grey brown silty clay		0.60
0603	Natural- Medium grey blue silty clay. 'Boulder' clay.		N/A
Summary			
No archaeological features encountered.			

TR07			
L (m)	**W (m)**	**Min. D (m)**	**Max. D (m)**
24.30	1.70	0.28	0.31
Context	**Description**		***D BGL (m)**
0701	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).		0.28
0702	Void		N/A
0703	Subsoil-Medium grey brown silty clay		0.60
0704	Natural- Medium grey blue silty clay. 'Boulder' clay.		N/A
Summary			
No archaeological features encountered.			

TR10			
L (m)	**W (m)**	**Min. D (m)**	**Max. D (m)**
30	2.2	0.40	0.50
Context	**Description**		***D BGL (m)**
1001	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).		0.15
1002	Subsoil-Medium grey brown silty clay		0.25
1003	Natural- Medium grey blue silty clay. 'Boulder' clay.		N/A
1004	Redeposited natural- Mid blue grey clay		0.15-0.3m

1005	Fill of [1006] Light grey brown silty clay	0.25
1006	Cut of agricultural scar- Aligned north-east to south west, shallow concave edges with undulating base.	0.25
1007	Fill of [1008] Light brown grey clay	0.26
1008	Cut of feature. Gently sloped to steep sides, concave base.	0.26
1009	Fill of [1010] Light brown grey silty clay	0.29
1010	Cut of feature, steep sides, and uneven base.	0.29
1011	Fill of [1012] Mid grey brown silty clay	0.24
1012	Cut of feature. Gently sloped uneven base.	0.24
1013	Upper fill of furrow [1015]	0.18
1014	Lower fill of furrow [1015]	0.07
1015	Cut of furrow. Gently sloped, uneven base	0.25
Summary		
1 x furrow and other series of agricultural scarring		

TR14

L (m)	W (m)	Min. D (m)	Max. D (m)
30	1.70	0.10	0.45

Context	Description	*D BGL (m)
1401	Topsoil- Dark grey brown sandy silt.	0.15
1402	Subsoil-Medium red brown sand	0.30
1403	Natural- Medium red brown sand.	N/A
1404	Fill of pit [1405]; deliberate backfill- Dark grey brown silty sand.	N/A
1405	Cut of modern pit- Sub-circular in plan. Unexcavated	N/A
1406	Fill of pit [1407]; deliberate backfill- Dark grey brown silty sand.	N/A
1407	Cut of modern pit- sub-circular in plan. Unexcavated.	N/A
Summary		
2x pits exposed. Modern in origin. Cut through the topsoil (1401). Unexcavated and recorded in plan.		

TR15

L (m)	W (m)	Min. D (m)	Max. D (m)

30	2.2	0.55	0.85
Context	**Description**		***D BGL (m)**
1501	Made Ground- Mixed dark grey brown sandy loam and red brown 'redeposited' sand.		0.15
1502	Natural- Medium red brown 'orange' sand.		N/A
Summary			
Disturbed ground potential as a result of modern quarry activity. Land surface reinstated with mixed plough soil and 'redeposited' natural sand and ironstone. No archaeological features encountered.			

TR16			
L (m)	**W (m)**	**Min. D (m)**	**Max. D (m)**
30	2.2	0.4	0.90
Context	**Description**		***D BGL (m)**
1601	Topsoil- Dark grey brown silty loam		0.30
1602	Subsoil- medium yellow brown silty sand		0.60
1603	Natural- Medium yellow brown 'orange' silty sand.		N/A
Summary			
No archaeological features encountered.			

TR17			
L (m)	**W (m)**	**Min. D (m)**	**Max. D (m)**
30	2.2	0.40	0.80
Context	**Description**		***D BGL (m)**
1701	Topsoil- Dark grey brown sandy loam.		0.21
1702	Subsoil- light to medium grey brown silty clay		0.41
1703	Natural-medium yellow brown silty clay		N/A
Summary			
No archaeological features encountered.			

TR18

L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.65	0.70

Context	Description	*D BGL (m)
1801	Topsoil- Dark grey brown sandy loam.	0.30
1802	Subsoil- Light to medium grey brown silty clay	0.40
1803	Natural- Medium yellow brown silty clay	N/A

Summary

No archaeological features encountered.

TR19

L (m)	W (m)	Min. D (m)	Max. D (m)
24.30	1.70	0.28	0.31

Context	Description	*D BGL (m)
1900	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.28
1901	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A

Summary

4x furrows exposed, aligned north-west to south-east. 1x furrow excavated and recorded depth of preservation at 0.05m.

TR20

L (m)	W (m)	Min. D (m)	Max. D (m)
25.50	1.70	0.31	0.38

Context	Description	*D BGL (m)
2000	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.03m).	0.31
2001	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A

Summary

3x furrows exposed, aligned north-west to south-east. Trench split into two due to tram lines.

TR21

L (m)	W (m)	Min. D (m)	Max. D (m)
28	1.70	0.38	0.39

Context	Description	*D BGL (m)
2100	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.03m).	0.32
2101	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A

Summary

3x furrows exposed, aligned north-west to south-east. Trench split into two due to tram lines.

TR22			
L (m)	**W (m)**	**Min. D (m)**	**Max. D (m)**
29.40	1.70	0.29	0.32
Context	**Description**		***D BGL (m)**
2200	Topsoil- Dark grey brown silty loam with frequent sub-angular and sub-rounded gravel flint and chalk (0-0.03m).		0.29
2201	Natural- Medium grey blue silty clay. 'Boulder' clay.		N/A
Summary			
No archaeological features encountered.			

TR23			
L (m)	**W (m)**	**Min. D (m)**	**Max. D (m)**
26.30	1.70	0.38	0.45
Context	**Description**		***D BGL (m)**
2300	Topsoil- Dark grey brown silty loam with frequent sub-angular and sub-rounded gravel flint and chalk (0-0.03m).		0.29
2301	Subsoil- Medium grey brown silty clay with frequent sub-rounded gravel flint and chalk (0-0.04m).		0.10-0.12
2302	Natural- Light grey blue silty clay. 'Boulder' clay.		N/A
Summary			
4x furrows exposed, aligned north-west to south-east. 1x furrow excavated and recorded depth of preservation at 0.10m. Trench split into two due to tram lines.			

Appendix II – Photographic Register

Photo number	Digital	Black and White print	Direction facing	Description
1001	23001		E	Trench 15
1002	23002		N	Section of trench 15
1003	23003		NNE	Trench 14
1004	23004		WNW	Section of trench 14
1005	23005		N	Trench 17
1006	23006		N	Trench 17
1007	23007		SW	Trench 16
1008	23008		SW	Trench 16
1009	23009		NE	Trench 16
1010	23010		NE	Trench 16
1011	23011		W	Trench 18
1012	23012		W	Trench 18
1026	23026		NNW	Trench 6
1027	23027		NNW	Trench 6
1028	23028		S	Section of trench 7
1029	23029		S	Section of trench 7
1030	23030		W	Trench 7

1036	23036		SW	Section of trench 10
1037	23037		SE	Trench 10
1049	23050		E	Working shot of slot in ditches [1006], [1008], and [1010]
1050	23051		E	Working shot of slot in ditches [1006], [1008], and [1010]
1057	22107		SW	NE facing section through ditches [1006], [1008], and [1010]
1058	22108		SW	NE facing section through ditches [1006], [1008], and [1010]
1059	22109	34	SW	NE facing section through ditches [1006], [1008], and [1010]
1060	22110		SW	NE facing section through ditches [1006], [1008], and [1010]
1061	22111		NNE	SSW facing section through ditches [1006], [1008], and [1010]
1062	22112	33	NNE	SSW facing section through ditches [1006], [1008], and [1010]
1063	22113		NNE	SSW facing section through ditches [1006], [1008], and [1010]
1064	22114		SE	Shot of ditches [1012] and [1015]
1065	22115		SW	NE facing section through ditches [1012] and [1015]
1066	22116		NNE	SSW facing section through ditches [1012] and [1015]
1067	22117			VOID
1068	22118		S	N facing section through pit modern waste pit trench 15
1069	22119		S	N facing section through modern waste pit trench 15
1070	22120		SW	Shot of modern waste pits trench 15
1071	22121		S	N facing section through pits trench 15
1134	0023		SE	Northwest facing shot of trench 20
1135	108-0024		NW	Southeast facing shot of trench 20
1136	0025		NNE	South southwest facing representative section of trench 20
1137	0026		E	West facing shot of trench 19
1138	0027		W	East facing shot of trench 19
1139	0028		N	South facing representative section of trench 19
1140	0029		SE	Northwest facing shot of trench 22
1141	0030		NW	Southeast facing shot of trench 22
1142	0031		NE	Southwest facing representative section of trench 22
1143	0032		NE	Southwest facing shot of trench 21
1144	0033		SW	Northeast facing shot of trench 21
1145	0034		NW	Southeast facing representative section of trench 21
1146	0035		NE	Southwest facing representative section of trench 23
1147	0036		SW	Northeast facing shot of trench 23
1148	0037		NE	Southwest facing shot of trench 23
1149	0038		NW	Southeast facing representative section of trench 21
1150	0039		NW	Southeast facing representative section of trench 21
1153	0042		N	South facing representative section of furrow in trench 23

Appendix III—Drawing Register

Drawing Number	Type	Scale	Description
3	1:10	Section	NE facing section through ditches [1006], [1008], and [1010]
4	1:10	Section	NE facing section of ditches [1012] and [1015]

Appendix IV – Finds Catalogue

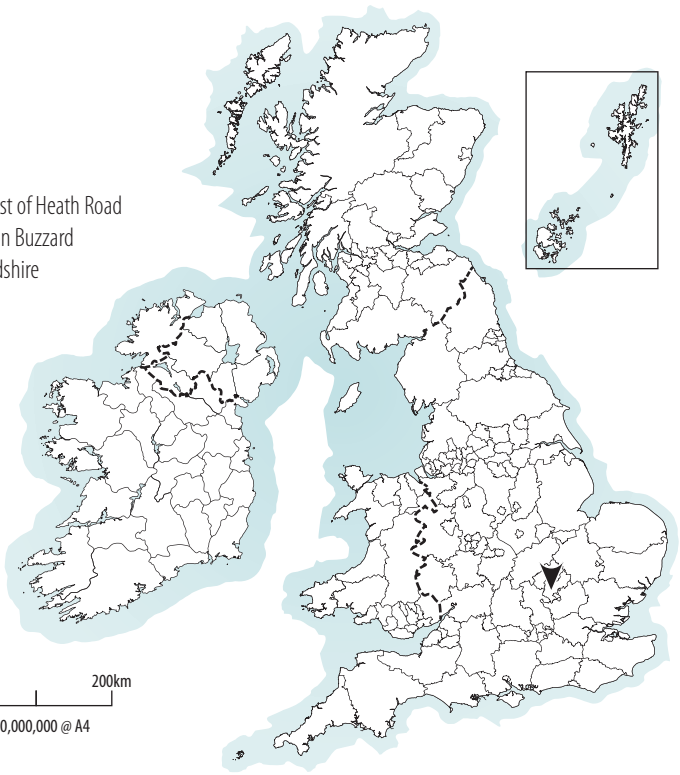
Trench	Context	Context Notes	Sample	Quantity	Weight (g)	Material	Object	Description	Spot Date
10	1005	Ditch 1006		4	9	CBM	Fragments	abr frags	
10	1005	Ditch 1006	1	3	44	CBM	Roof Tile	peg tile	13th-16th
10	1005	Ditch 1006		1	1	Industrial Waste	slag	small, light, black, vitrified fragment	
10	1005	Ditch 1006		2	9	Iron	Nails		
10	1007	Ditch 1008	1	1	14	CBM	Roof Tile	flat roof tile	13th-16th
10	1011	Ditch 1012		1	17	CBM	Brick	abr brick frag	
10	1011	Ditch 1012		5	25	CBM	Fragments	abr frags	
10	1011	Ditch 1012	1	6	193	CBM	Roof Tile	flat roof tile	13th-16th

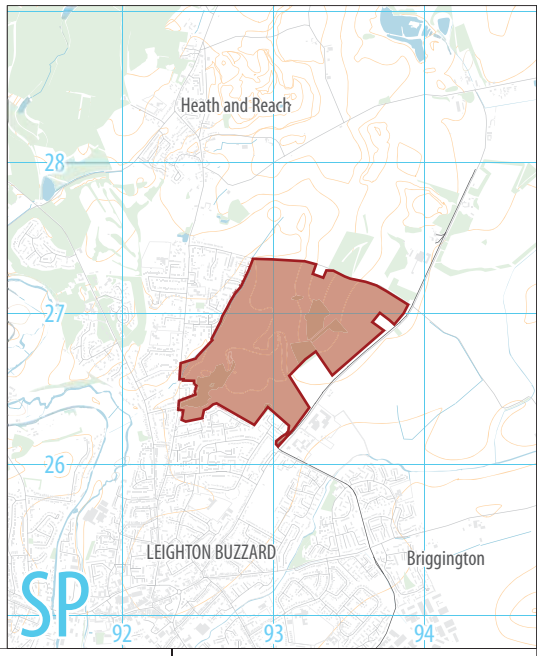
Appendix V– OASIS Form

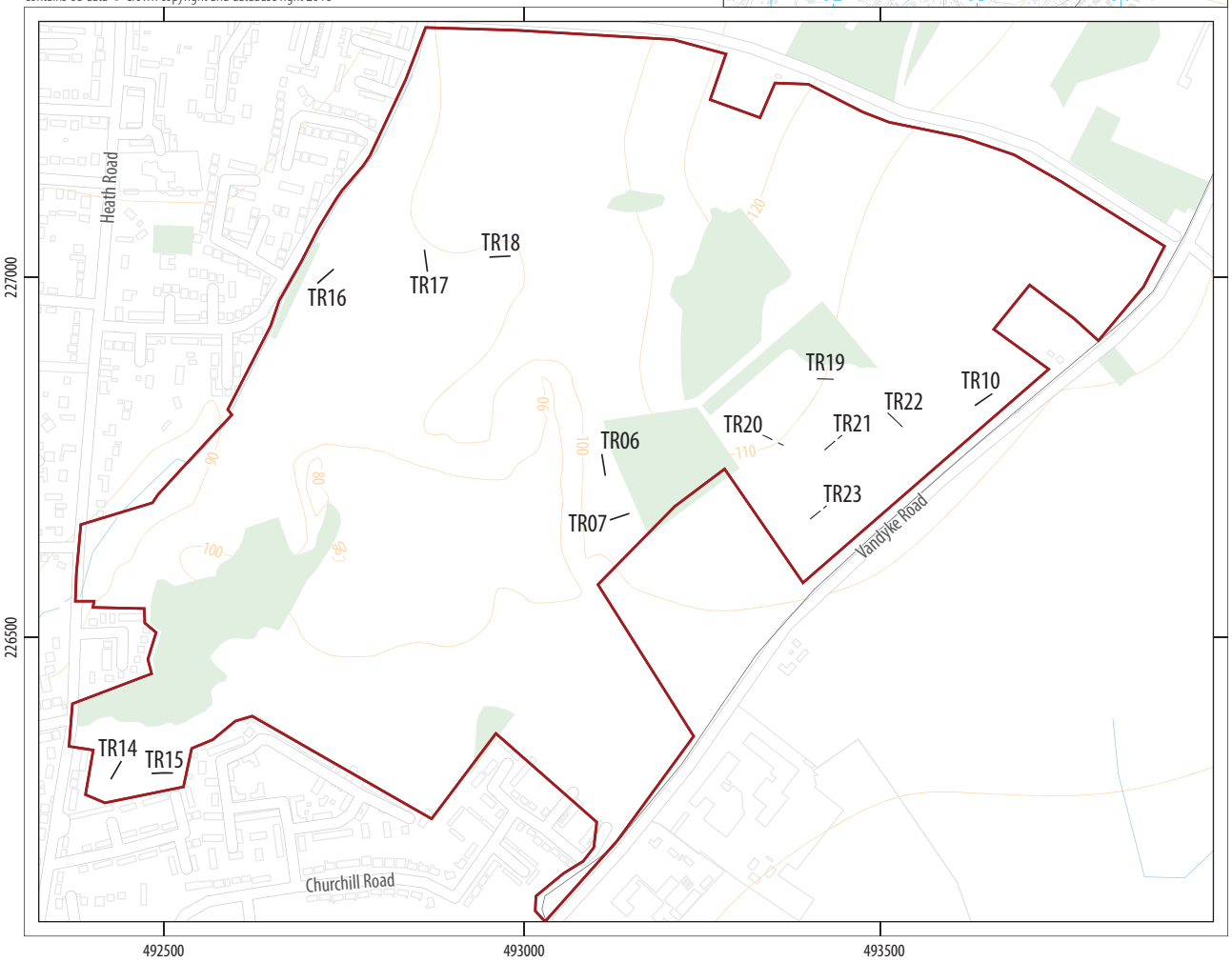
OASIS ID: headland 4-235440	
Project details	
Project name	Chamberlains Barn, Leighton Buzzard
Short description of the project	Trial trenching evaluation-Headland Archaeology (UK) Ltd undertook an archaeological evaluation for Arnold White Estate Ltd on land on Chamberlains Barn, Leighton Buzzard, Bedfordshire. Between 25th January and 31st of August 2016; 28 trenches were excavated in the proposed Development Areas- 13 trenches and 15 trenches- A total 13 contained archaeological remains. 3 Areas of interest were identified. These consisted of medieval ditch and pit, post medieval furrows. The project was subjected to two planning applications CB/11/01863/MW and CB/11/01937/OUT and thus was subjected to two archaeological reports.
Project dates	25-01-2016 End: 31-08-2016
Previous/future work	No / No
Type of project	Field evaluation
Site status	None
Current Land use	Other 7 - Mineral extraction
Monument type	DITCHES Medieval
Monument type	PIT Medieval
Monument type	FORROWS Post Medieval
Significant Finds	POTTERY Medieval
Significant Finds	CBM Medieval
Significant Finds	CBM Post Medieval
Significant Finds	PEG NAIL Medieval
Significant Finds	LITHIC Prehistoric
Project location	
Country	England
Site location	BEDFORDSHIRE SOUTH BEDFORDSHIRE LEIGHTON LINSLADE Chamberlains Barn
Postcode	LU7 3DS
Study area	95 Hectares
Site coordinates	NGR - SP 493149 226927 LL - 51.900156362398 -1.28317333676 (decimal) LL - 51 54 00 N 001 16 59 W (degrees) point
Lat/Long Datum (other)	
Project creators	
Name of Organisation	Headland Archaeology Ltd

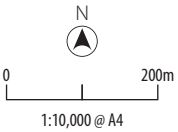
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Headland Archaeology Ltd
Project director/manager	Antony Walsh
Project supervisor	Joe Berry, Peter |James
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Arnold White Estates Ltd.
Project archives	
Physical Archive recipient	Luton Culture
Physical Contents	''Animal Bones'',''Ceramics'',''Industrial'',''Metal'',''Survey'
Digital Archive recipient	Luton Culture
Digital Contents	“Animal Bones'',''Ceramics'',''Industrial'',''Metal'',''Survey”
Digital Media available	''Survey''
Paper Archive recipient	Luton Culture
Paper Contents	''Animal Bones'',''Ceramics'',''Industrial'',''Metal'',''Survey”
Paper Media available	''Context sheet'',''Drawing'',''Map'',''Miscellaneous Material'',''Photograph'',''Plan'',''Report'',''Section'',''Survey 2
Entered by	Astrid Lesley Nathan (astrid.nathan@headlandarchaeology.com)
Entered on	14 November 2016

RLAI
land east of Heath Road
Leighton Buzzard
Bedfordshire





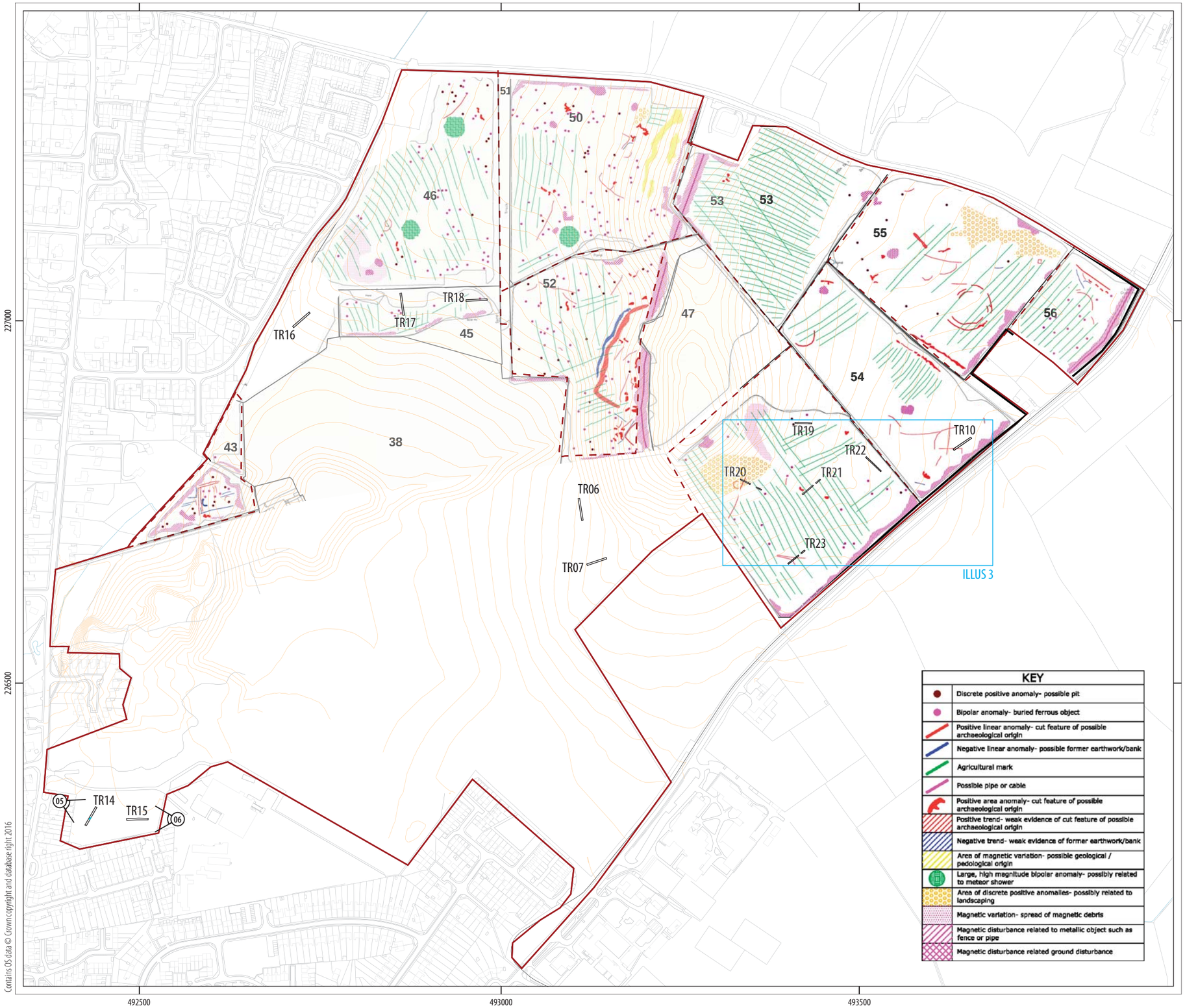




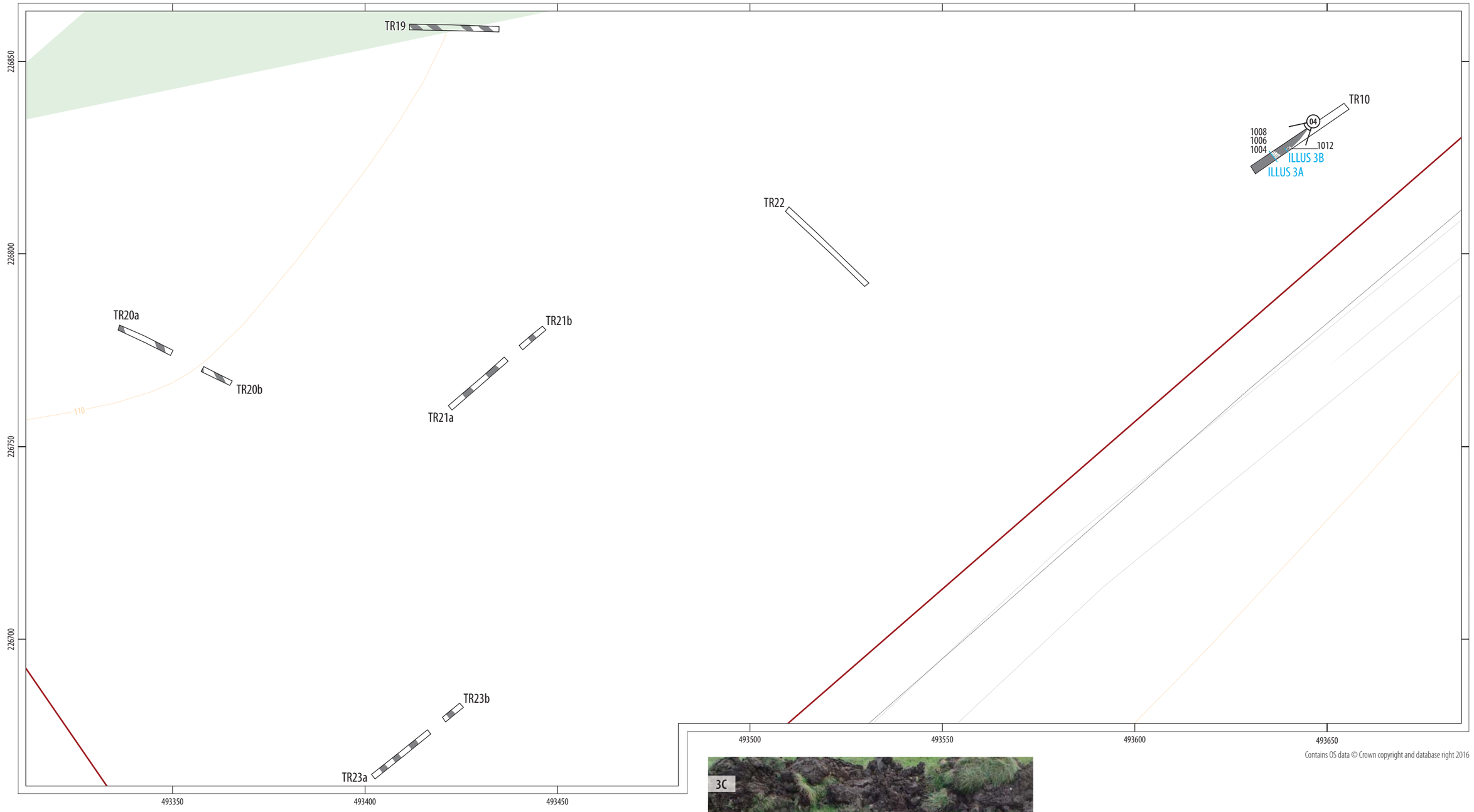
KEY
development boundary
trench location

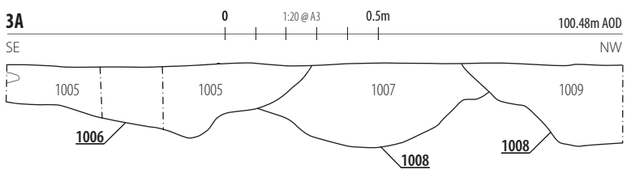
HEADLAND ARCHAEOLOGY
SOUTH & EAST
Building 68C, Wrest Park, Silsoe
Bedfordshire MK45 4HS
01525 861 578
www.headlandarchaeology.com

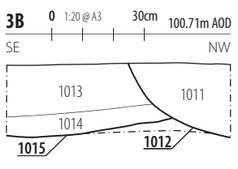
ILLUS 1 Site location

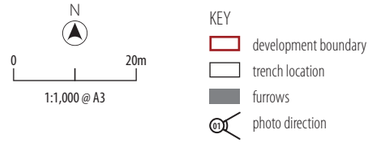


ILLUS 2 Trench location plan









ILLUS 3 Plan showing HA1 furrows at east end of site A) NE facing section through [1006, 1008, 1010]; B) NE facing section through [1012 and 1015]; C) NW facing section of furrows [1012 and 1015]

ILLUS 4 NE facing section of furrow [1004] **ILLUS 5** N facing section of modern waste pit [1405] **ILLUS 6** E facing shot of Trench 15

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