Land off Hardwick Road Toft Cambridgeshire

Archaeological Evaluation Report

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Archaeological Evaluation Report

Land off Hardwick Road, Toft, Cambridgeshire

Archaeological Evaluation

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Summary

Between the 13th and 14th of June 2016, Oxford Archaeology East conducted a trial trench evaluation on land off of Hardwick Road, Toft (TL 36215 56275). The archaeological works revealed a single pit of Middle Iron Age date, along with a number of post-medieval field boundaries, aligned north to south and east to west, which correspond with those shown on historic maps. Further to this, two tree throws and an undated gully were also identified. A very small finds assemblage consisting of a single Neolithic/Bronze Age struck flint and pottery sherds ranging in date from the Middle Iron Age through to the medieval period were recovered from two features.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 An archaeological evaluation was conducted by Oxford Archaeology East (OA East) on land off of Harwick Road, Toft, Cambridgeshire (TL 36215 56275) as part of a planning application (S/1220/16/OL) for a proposed 30 dwelling development (Fig. 1).

1.1.2 The archaeological evaluation was undertaken in accordance with a Brief issued by the Cambridgeshire County Council Historic Environmental Team (CCC HET, Thomas 2016), supplemented by a Written Scheme of Investigation (WSI) prepared in conjunction with Mott MacDonald (Wajdner 2016).

1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by CCC HET with regard to the treatment of any archaeological remains found.

1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

1.2.1 The site is located on the north side of the village, in a single pasture field surrounded on all sides by mature trees. The site lies on a very gentle south-east facing slope at a height of 41.35m OD (to the north-east) and falling to 37m OD (to the south-east). The bedrock geology consists of Gault Formation Mudstone with superficial deposits of Oadby Member Diamicton (British Geological Survey 2016).

1.3 Archaeological and historical background

1.3.1 An in-depth assessment of the archaeological resource has already been undertaken for the site (Marshall 2016), upon which the following summary is based:

Prehistoric

1.3.2 The only information for prehistoric activity within the immediate environs relates to cropmark evidence to the north of the site, identified by aerial photographs. These cropmarks consist of sub-circular and rectilinear enclosures (MCB 19601 and 20133) and are believed to be of prehistoric origin, however no investigations have been undertaken to confirm this.

1.3.3 A test pitting survey undertaken in 2013 across the village (Lewis & Pryor 2013) produced a flint assemblage dating from the Mesolithic and Neolithic periods, however, this was all concentrated around the bank of Brookside, the stream located on the southern side of the parish.

Romano-British

1.3.4 A Roman cemetery (MCB 4125) situated to the south of St Andrew's Church (approximately 650m south of the site) is the closest known evidence for Roman occupation in the area. The 2013 test pitting survey produced a pottery concentration in this area (Lewis & Pryor 2013).

Anglo-Saxon

1.3.5 The origin of the name 'Toft' is Viking, meaning 'curtilage' or 'homestead' and it is believed that the current village was established during the Late Anglo-Saxon period. No evidence for Anglo-Saxon activity is known of beyond a small assemblage of pottery recovered during the test pitting survey (Lewis & Pryor 2013). This pottery was concentrated on the south side of the village, indicating that the focus of the Anglo-Saxon settlement was in this southern location, around 600m south of the site.

Medieval

1.3.6 Toft was recorded in the Domesday Book (of 1086) with a total of 23 households; the first documented information for a church in the village dates from 1217. The survival of remnants of medieval ridge and furrow (MCB 4103, 4126 & 11389) to both the north and south of Toft suggests a thriving agricultural community. LiDAR imagery (Marshall 2016, fig. B.2) shows pronounced ridge and furrow approximately 100m south-east and south of the site. Slight remnants of ridge and furrow are also visible in the LiDAR within the site itself, particularly in the south-east corner.

Post-medieval

1.3.7 Many of the village's important buildings date from the 16th and 17th centuries, indicating expansion of the settlement in this period. Agricultural land surrounding Toft was enclosed around 1812-1815. Pottery found during the 2013 test pitting survey showed that post-medieval activity expanded northward towards the site and this is supported by historic maps which show structures along Comberton and Hardwick Roads. Historic mapping also shows that the site consisted of between two and tree field plots (see Fig. 2).

1.4 Geophysical survey

1.4.1 A geophysical survey was undertaken across the site in April 2016 (Bartlett 2016). The findings (shown on Fig. 3) include a strong linear disturbance which corresponds to former field boundaries, illustrated on historic Ordnance Survey maps. Brick debris relating to recently demolished stables was also identified to the immediate west of these linear boundaries. Possible cultivation remains were mapped across the central and eastern portion of the site, although these do not align with field boundaries, thus their interpretation is uncertain. Two modern pipes and a number of land drains were also identified.

1.5 Acknowledgements

1.5.1 OA East would like to thank Mott MacDonald for commissioning the archaeological works. Thanks must also go to the landowner Mike Tebbit for his kind help and cooperation, including organisation of the machine plant. The fieldwork was undertaken by the author with the assistance of Nick Cox and Ted Levermore. The site survey was carried out by Gareth Rees and Charlotte Walton. The project was managed by Matt Brudenell, while Andy Thomas for monitored the evaluation on behalf of CCC HET.

2 Aims and Methodology

Aims

2.1.1 The objective of this trial trench evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

Methodology

2.1.2 A total of five 30m and five 20m long trenches were positioned within the proposed development area, targeted upon anomalies identified during the geophysical survey (Bartlett 2016; Fig. 3).

2.1.3 Machine excavation was carried out under constant archaeological supervision with a 13 tonne 360º excavator using a 1.8m wide toothless ditching bucket.

2.1.4 The site survey was carried out using a Leica GS08 GPS.

2.1.5 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.

2.1.6 Bucket sampling (of up to 90 litres) was undertaken on the top- and subsoils across all trenches. No environmental samples were taken from features during the evaluation works due to the lack of potential for ecofact remains.

2.1.7 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

3 RESULTS

Introduction

3.1.1 Relatively few archaeological features were identified by the evaluation, and these were dominated by ditches of post-medieval date. Therefore the findings are described numerically by trench (Fig. 3).

3.1.2 Natural geology of orange grey clay with chalk and flint inclusions was overlain by a mid orange brown silty clay subsoil (02) measuring between 0.15m and 0.4m in thickness, which was encountered across all the evaluated area. This was overlain by a 0.2m to 0.4m thick dark brown grey silty clay topsoil (01). In the south-western corner of the site, where Trench 1 was located, a 0.2m thick layer of hardcore was seen to overlay the topsoil.

3.1.3 Full details of context and trench descriptions, including orientations, can be found in Appendix A.

Trench 1

3.1.4 Trench 1 was originally designed to measure 30m in length, but the southern end of the trench was targeting a modern pipe (which ran to a water trough) and thus it was reduced in length in order to avoid this.

3.1.5 A single feature was identified towards the centre of the trench. Tree throw **15** measured 2.5m long and was 0.15m deep with gently sloping sides and a flat base. It was filled with a mid grey brown clay (16) that produced no finds.

Trench 2

3.1.6 Trench 2 was devoid of archaeology.

Trench 3

3.1.7 A single pit (**03**) was revealed at the southernmost end of Trench 3 (Fig. 3, S.1). Extending from the eastern baulk, it measured 1.4m long and was 0.4m deep with steeply sloping sides and a flat base. The single mid brown grey silty clay fill (04) contained a struck flint flake (of Neolithic or Bronze Age date) and 12 sherds (47g) of Middle Iron Age (*c.*350-50BC) pottery along with a number of large sub-rounded stones.

Trench 4

3.1.8 Tree throw **10** was situated at the eastern end of the trench. It measured 0.7m long, 0.65m wide, 0.04m deep and was filled by a mid yellow grey silty clay (09).

Trench 5

3.1.9 A north-south aligned ditch was uncovered at the eastern end of Trench 5. Ditch **14** measured 0.62m wide and 0.22m deep with steeply sloping sides and a flat base (Fig. 4, S.3). It was filled with a mid grey silty clay (13) which contained a very small assemblage of pottery, comprising of a sherd of Roman reduced sandy ware (3g), a sherd of red sandy ware dated to *c.*13th-14th century (2g) and a sherd of fine glazed Essex sandy ware (3g) of *c.*14th century date.

Trench 6

3.1.10 Trench 6 was devoid of archaeology.

Trench 7

3.1.11 Two parallel east to west aligned ditches, 6.7m apart, were revealed in Trench 7. The more northerly of the two (**11**) was 0.5m wide and 0.18m deep with gently sloping sides and a concave base (Fig. 4, S.4). It was filled with a mid brown grey silty clay (12). Ditch **17** (Fig. 4, S.5) was also 0.5m wide and measured 0.17m deep with steeply sloping sides and a concave base. It was filled by a mid brown grey silty clay (18). Neither feature produced finds.

Trench 8

3.1.12 Located within the southern half of the trench was gully **06**. Aligned north-west to south-east, it measured 0.27m wide and was 0.1m deep with a U-shaped profile. It was filled with a mid grey brown silty clay, from which no finds were recovered.

Trench 9

3.1.13 Trench 9 was devoid of archaeology.

Trench 10

3.1.14 A single east to west aligned ditch (**07**), was identified within Trench 10, cutting through the subsoil. It measured 1.15m wide and was 0.28m deep with gently sloping sides and a concave base (Fig. 3, S.12). It was filled by a mid brown grey silty clay (08) which did not produce any finds.

Finds Summary (Appendix B)

3.1.15 A very small collection of finds was recovered from the site, consisting predominantly of pottery, collected from two features.

3.1.16 Pit **03** in Trench 3 produced 47g of Middle Iron Age pottery in a range of sandy tempered fabrics along with an undiagnostic struck flint flake of Neolithic or Bronze Age date.

3.1.17 Ditch **14** in Trench 5 produced 8g of pottery which consisted of a single sherd of Roman reduced sandy ware (2g) and two sherds of medieval pottery in two fabrics which date from around the 13th to 14th century.

4 Discussion and Conclusions

Iron Age

4.1.1 The single Iron Age pit on the site cannot provide much information about prehistoric activity in the vicinity of Toft, however, cropmark evidence for ditched enclosures of probable Iron Age or Roman date has previously been identified from aerial photographs in the field to the north of the site (MCB 19601 and 20133). Therefore, the presence of this single pit could add weight to the interpretation of these cropmarks being of an Iron Age date.

Post-medieval

4.1.2 A total of four ditches were identified across three trenches on the site. The two east to west aligned ditches in Trench 7, on the northern side of the site and the north to south aligned ditch in Trench 5, towards the southern side of the site were not identified by the geophysical survey. The 1886 six inch Ordnance Survey Map (see Marshall 2016, fig. 4.4) shows the site to contain a large number of trees, thought to relate to an orchard. These are predominantly confined to the northern side of the site, forming a fairly linear pattern, and line up with the east to west field boundary on the eastern side of the site. The two ditches within Trench 7 correspond with this area of trees, thus indicating that a field boundary could have originally been located here.

4.1.3 Further to this, two north to south lines of trees are also illustrated on the 1886 OS map. The tree line down the centre of the site roughly corresponds with the location of ditch **14** in Trench 5. This would therefore also indicate a former field boundary in this location, dividing the site into three roughly equal plots. The pottery recovered from ditch **14** consisted of a residual Roman sherd and two medieval sherds, which (due to their small size) are also likely to be residual.

4.1.4 The east to west aligned ditch in Trench 10 was identified during the geophysical survey and relates to a former boundary ditch, which is shown on a number of historic maps dating from 1846 through to 1901 (see Marshall 2016, figs 4.3 to 4.5) and also see Figure 2. The geophysical survey also identified the north to south return to this boundary, however this was not revealed in the trench. The reason for this is most probably because as it was cut through the subsoil, it did not have sufficient depth to survive in the natural geology. A large number of degraded substantial tree roots were also evident across the trench in the vicinity of these two ditches, further illustrating that they were likely to have been superseded by trees.

Conclusions

4.1.5 Overall, the archaeological trenching has shown that the site is characterised by post-medieval field boundaries, a number of which are marked on historic maps. The general lack of archaeological remains across the site highlights that this location has remained as agricultural farmland throughout history. The Heritage Statement (Marshall 2016, 9-11) has demonstrates how Roman, Anglo-Saxon and medieval occupation was concentrated on the southern side of the village, away from this location. The presence of a single Iron Age pit on the site does however show that low level prehistoric activity was occurring in the vicinity, and may relate to cropmarks identified in the field to the north.

Appendix A. Trench Descriptions and Context Inventory

Trench 1				
General description			**Orientation**	N-S
Trench contained a single tree throw. Modern hardcore overlay topsoil across souther 7.8m of the trench and related to a hardstanding in this area. Modern plastic field drain also uncovered.			**Depth (m)**	0.6-0.8
			Width (m)	1.8
			Length (m)	21
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-
15	cut	tree throw	-	-
16	fill	tree throw	-	-

Trench 2				
General description			**Orientation**	E-W
Trench devoid of archaeology.			**Depth (m)**	0.5-0.6
			Width (m)	1.8
			Length (m)	30
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-

Trench 3				
General description			**Orientation**	N-S
Trench contained an Iron Age pit at its southernmost end. Modern plastic field drain also uncovered.			**Depth (m)**	0.5-0.65
			Width (m)	1.8
			Length (m)	30
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-
3	cut	pit	-	-
4	fill	pit	pottery	Middle Iron Age

Trench 4				
General description			**Orientation**	E-W
Trench contained a single tree throw. Modern plastic field drain also uncovered.			**Depth (m)**	0.45-0.6
			Width (m)	1.8
			Length (m)	20
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-
10	fill	tree throw	-	-
11	cut	tree throw	-	-

Trench 5				
General description			**Orientation**	E-W
Trench contained a single north-south post-medieval ditch.			**Depth (m)**	0.45-0.6
			Width (m)	1.8
			Length (m)	20
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-
14	fill	ditch	pottery	13th-14th century
15	cut	ditch	-	-

Trench 6				
General description			**Orientation**	E-W
Trench was devoid of archaeological features.			**Depth (m)**	0.5-0.6
			Width (m)	1.8
			Length (m)	20
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-

Trench 7				
General description			**Orientation**	N-S
Trench contained two east-west aligned post-medieval ditches.			**Depth (m)**	0.5-0.65
			Width (m)	1.8
			Length (m)	20
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-
11	cut	ditch	-	-
12	fill	ditch	-	-
13	cut	ditch	-	-
14	fill	ditch	-	-

Trench 8				
General description			**Orientation**	N-S
Trench contained an undated north-west to south-east aligned gully. Modern plastic field drain uncovered.			**Depth (m)**	0.5-0.6
			Width (m)	1.8
			Length (m)	30
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-
5	fill	gully	-	-
6	cut	gully	-	-

Trench 9				
General description			**Orientation**	E-W
Trench was devoid of archaeology.			**Depth (m)**	0.5-0.55
			Width (m)	1.8
			Length (m)	20
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-

Trench 10				
General description			**Orientation**	NE-SW
Trench contained a single post-medieval ditch, cut through the subsoil.			**Depth (m)**	0.3-0.55
			Width (m)	1.8
			Length (m)	30
Contexts				
context no	**type**	**comment**	**finds**	**date**
1	layer	topsoil	-	-
2	layer	subsoil	-	-
7	cut	ditch	-	-
8	fill	ditch	-	-

Appendix B. Finds Report

By Matt Brudenell

Introduction

B.1.1 Fifteen sherds of pottery (55g) and a single worked flint (2g) were recovered from the evaluation. The material derived from two contexts relating to features in Trenches 3 and 5. The material is described by type and date below.

Iron Age pottery

B.1.2 Twelve sherds (47g) of handmade Iron Age pottery were recovered from fill 04, pit **03** in Trench 3. The assemblage comprises a maximum of three vessels in sand tempered fabrics typical for the Middle/Later Iron Age in southern Cambridgeshire. Diagnostic sherds includ two refitting rim fragments from a burnished vessel, most likely a slack-shoulder jar. The vessel had a flat-topped rim with an estimated diameter of 15cm. The pottery dates to 350-50 BC.

Roman pottery *(identification by Katie Anderson)*

B.1.3 A single residual sherd (3g) of Roman pottery was recovered from fill 13, ditch **14** in Trench 5. The sherd is in a reduced sandy ware, and was found alongside two medieval sherds (see below).

Medieval pottery *(identification by Richard Mortimer)*

B.1.4 Two sherds of medieval pottery (5g) were recovered from context 13, ditch **14** in Trench 5. The sherds comprise a red sandy ware (*c*. 13th-14th century; 2g) and a fine glazed Essex sandy ware (*c*. 14th century; 3g)

Worked flint *(identification by Anthony Haskins)*

B.1.5 A single, small patinated secondary flake was also recovered from context 04, pit **03** in Trench 3. The flake was struck from glacial derived flint, and has flake scars on the dorsal surface. The flake is likely to be Neolithic or Bronze Age in date.

Appendix C. Geophysical Survey

By Alister Bartlett

Introduction

C.1.1 This report describes a geophysical survey which has been undertaken as part of an archaeological field evaluation of a proposed development site at Toft, Cambridgeshire. The purpose of the survey was to test for evidence of archaeological features or remains at the site, and supply information relevant to the planning process.

C.1.2 The survey was commissioned from Bartlett Clark Consultancy, Specialists in Archaeogeophysics of Oxford, by Oxford Archaeology East. The fieldwork was done on the 14th April 2016.

The site

C.1.1 Notes on the condition and location of the site were included in the Written Scheme of Investigation for the project which was submitted to Oxford Archaeology East by Bartlett Clark Consultancy in advance of the survey (Bartlett 2016b). Information on the archaeological potential of the site is included in the Heritage Statement which has previously been prepared by Mott MacDonald (Marshall 2016). The following summary is reproduced in part from these documents.

Topography and geology

C.1.1 The survey area occupies a paddock currently used as sheep pasture located to the west of Hardwick Road in Toft village, which is located about 9km east of Cambridge. The site is about 1.4ha in area, and is centred at NGR TL 362562.

C.1.2 The site lies (according to the BGS on-line geology viewer) on a bedrock of sandstone, mudstone and limestone of the Gault with Upper Greensand Formation. There is also a drift deposit of glacial Diamicton Till across the entire area. Soils on Greensand are not necessarily highly responsive to magnetometer surveying, but the response will be modified by the presence of the Till. Satisfactory results have often been obtained from surveys in comparable locations, but the strength of the magnetic response may depend in part on the relative proportions of clay and gravel in the till.

C.1.3 A further indication of the responsiveness of the soil to magnetic investigation is provided by magnetic susceptibility measurements, which were made on soil samples from the site. These gave readings with a mean value of 13.5 (x 10-8 SI/kg), which is sufficiently high to permit the detection of archaeological features, if any are present.

Archaeological background

C.1.1 There are no specific records of archaeological findings or remains in the immediate vicinity of the evaluation area, although the location of the site near the centre of a village could mean that traces of earlier settlement activity may be present nearby.

C.1.2 It is noted in the Heritage Statement that there is a low to moderate potential for the presence of archaeological deposits within the site. Specifically these are likely to be of medieval or post medieval origin and related to agricultural practices within the site. Traces of potential ridge and furrow were seen in an earlier walkover survey, particularly in the south-eastern corner. Traces of Roman and Saxon activity have been seen in

previous archaeological evaluations in the village, but both were recorded at some distance (c. 650m) to the south of the present survey area.

Objectives of the Survey

C.1.1 The purpose of the survey was to provide information which may inform further stages of the evaluation and planning process.

C.1.2 A geophysical survey is usually able to identify the extent and character of archaeological remains capable of producing a magnetic response. The magnetometer will detect cut features such as ditches and pits when they are silted with an increased depth of topsoil, which usually responds more strongly than the underlying natural subsoil. Fired materials, including baked clay structures such as kilns or hearths are also likely to produce a localised enhancement of the magnetic field strength, and the survey therefore responds preferentially to the presence of ancient settlement or industrial remains. The survey is also strongly affected by ferrous and other debris of recent origin.

Survey Procedure

C.1.1 The procedure used for the investigation was a fluxgate gradiometer survey. A survey grid was set out at the required locations, and tied to the OS grid using a GPS system with VRS correction to provide 0.1m or greater accuracy. The plans are therefore geo-referenced, and OS co-ordinates of map locations can be read from the AutoCAD version of the plans.

C.1.2 The magnetometer readings were collected along transects 1m apart using Bartington 1m fluxgate gradiometers, and are plotted at 25cm intervals along each transect. The results of the survey are presented as grey a scale plot (at 1:1250 scale) in figure 1, and as a graphical (x-y trace) plot in figure 2 (at 1:1000 at A4). Inclusion of both types of presentation allows the detected magnetic anomalies to be examined in plan and profile respectively.

C.1.3 The graphical (x-y) plots represent minimally pre-processed magnetometer readings, as mentioned in the 2008 English Heritage geophysical guidelines document. Adjustments are made for irregularities in line spacing caused by variations in the instrument zero setting (as is required for legibility in gradiometer data), but no further filtering or other process which could affect the anomaly profiles or influence the interpretation of the data has been applied. A weak additional 2D low pass filter has been applied to the grey scale plot to adjust background noise levels.

C.1.4 An interpretation of the findings is shown in figure 2, and is reproduced separately to provide a summary of the findings in figure 3. Colour coding has been used in the interpretation to distinguish different effects. The interpretation is intended to categorize most of the identifiable magnetic anomalies, but cannot reproduce the detail of the grey scale plots.

C.1.5 Features as marked include magnetic anomalies which may represent former field boundaries (in brown), and recent disturbances in grey. Small (and mainly natural) background magnetic anomalies are outlined in light brown. Pipes are shown in blue, and some of the more conspicuous ferrous objects (identifiable as narrow spikes in the graphical plots) are outlined in light blue. Possible cultivation effects and land drains are indicated. [Magnetic anomalies of potential archaeological relevance are usually outlined in red, but none (other than possible cultivation effects) could be identified in this survey.]

Results

C.1.6 The survey has detected various subsurface features and disturbances, but they appear mainly to be of recent origin.

C.1.7 The findings include strong linear disturbances which are outlined in brown towards the east of the field, and are labelled A in figure 3. These correspond to former boundaries which are visible in the OS map extract which is inset as a location plan in figure 1 (and on earlier maps reproduced in the Heritage Statement; Marshall 2016). The magnetic disturbances presumably therefore represent modern debris in the fill of former boundary ditches. The strength of the magnetic activity could suggest that the ditches also contain iron pipes, but this is not entirely clear. Strong nearby disturbances at B correspond to brick debris visible on the ground surface, and this is stated in the Heritage Statement (Marshall 2016) to be the site of a recently demolished stable.

C.1.8 The more evenly spaced sequences of strong magnetic anomalies at C and along the southern field boundary at D are also likely to represent pipes. Clusters of more randomly distributed magnetic anomalies (which are outlined in grey, as at E) probably represent scatters of hardcore or similar modern debris which has been spread on the ground to improve drainage or fill hollows. Disturbances at F may indicate the location of a lane which is mentioned in the Heritage Statement (Marshall 2016), and is shown on an 1815 tithe map to run along the northern field boundary.

C.1.9 The linear sequences of small magnetic anomalies marked at G and H may be chance alignments of minor disturbances, but their convergent plan suggests they could perhaps indicate land drains. Other weak parallel linear markings are shown in green in the interpretation, and are most visible in a relatively undisturbed part of the site around I. Linear patterns of this kind are usually caused by cultivation, but the field is currently pasture, and the cultivation markings do not align either with the present boundaries, or with linear features visible in a Lidar plot reproduced in the Heritage Statement (Marshall 2016). It is possible perhaps that the markings at I represent faint traces of pre-enclosure ridge and furrow, and the Lidar has responded mainly to more recent boundaries, but the evidence is inconclusive. An alternative possibility is that the markings at I represent additional drains. A slightly stronger ditch-like feature in the south-east corner of the site at J is aligned at a right angle to the other cultivation effects, but could perhaps indicate a related boundary or headland. Possible visible traces of ridge and furrow are noted here in the Heritage Statement.

C.1.10 Other magnetic anomalies detected by the survey are limited to small strong disturbances which are outlined in blue in the interpretation, and represent scattered pieces of iron. Other weaker anomalies (outlined in light brown) are likely to be of natural or non-archaeological origin.

Conclusions

C.1.11 Soil conditions at the site appear to be reasonably favourable for the magnetic detection of archaeological features, but the survey findings are very limited. There is a possible sequence of weak cultivation markings which may pre-date the present field boundaries. These are only weakly defined, and so the evidence is not entirely conclusive. There may be slightly more clearly defined features of this kind in the south-eastern corner of the field, where visible traces of ridge and furrow have been recorded.

C.1.12 Other findings include magnetic anomalies representing recently removed field boundaries, pipes, and other disturbances of recent origin.

Appendix D. Bibliography

Bartlett	2016a	*Land at Hardwick Road, Toft, Cambridgeshire: archaeological geophysical survey.* Bartlett-Clark Consultancy. Unpublished
Bartlett	2016b	*Land at Hardwick Road, Toft, Cambridgeshire: Written Scheme of Investigation for archaeological geophysical survey.* Bartlett-Clark Consultancy. Unpublished
British Geological Survey	2016	*Geology Viewer of Britain.* Accessed 15 June 2016: *http://mapapps.bgs.ac.uk/geologyofbritain/home.html*
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English Heritage	2008	*Geophysical Survey in Archaeological Field Evaluation*. English Heritage Research
Lewis, C. & Pryor, A.	2013	*Archaeological Test Pit Excavations in Toft, Cambridgeshire.* Access Cambridge Archaeology. Unpublished
Marshall, A.	2016	*Hardwick Road, Toft: Heritage Statement.* Mott MacDonald. Unpublished
Thomas, A.	2016	*Brief for archaeological evaluation: Hardwick Road, Toft.* CCC HET. Unpublished
Wajdner, B.	2016	*Hardwick Road, Toft: Written Scheme of Investigation.* Mott MacDonald. Unpublished

APPENDIX E. OASIS REPORT FORM

Project Details

OASIS Number	oxfordar3-254786		
Project Name	Land off Harwick Road, Toft		
Project Dates (fieldwork) Start	13-06-2016	Finish	14-06-2016
Previous Work (by OA East)	No	Future Work	No

Project Reference Codes

Site Code	ECB4760	Planning App. No.	S/1220/16/OL
HER No.	ECB4760	Related HER/OASIS No.	-

Type of Project/Techniques Used

Prompt	Direction from Local Planning Authority - PPG16
Development Type	Rural Residential

Please select all techniques used:

☐ Aerial Photography - interpretation	☐ Grab-Sampling	☐ Remote Operated Vehicle Survey
☐ Aerial Photography - new	☐ Gravity-Core	☐ Sample Trenches
☐ Annotated Sketch	☐ Laser Scanning	☐ Survey/Recording Of Fabric/Structure
☐ Augering	☐ Measured Survey	☒ Targeted Trenches
☐ Dendrochronological Survey	☐ Metal Detectors	☐ Test Pits
☐ Documentary Search	☐ Phosphate Survey	☐ Topographic Survey
☐ Environmental Sampling	☐ Photogrammetric Survey	☐ Vibro-core
☐ Fieldwalking	☐ Photographic Survey	☐ Visual Inspection (Initial Site Visit)
☒ Geophysical Survey	☐ Rectified Photography	

Monument Types/Significant Finds & Their Periods

List feature types using the NMR Monument Type Thesaurus and significant finds using the MDA Object type Thesaurus together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Pit	Iron Age -800 to 43	Pottery	Iron Age -800 to 43
Ditch	Post Medieval 1540 to 1901	Pottery	Post Medieval 1540 to 1901
	Select period...		Select period...

Project Location

County	Cambridgeshire	Site Address (including postcode if possible)	
District	South Cambridgeshire	Land off Hardwick Road Toft CB23 2RQ	
Parish	Toft		
HER	Cambs CC		
Study Area	1.6ha	National Grid Reference	TL 36215 56275

Project Originators

Organisation	OA EAST
Project Brief Originator	Andy Thomas
Project Design Originator	Mott MacDonald
Project Manager	Matt Brudenell
Supervisor	Louise Bush

Project Archives

Physical Archive	Digital Archive	Paper Archive
CCC Store	OA East	CCC Store
ECB4760	TOFHDR16	ECB4760

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	☐	☐	☐
Ceramics	☒	☐	☐
Environmental	☐	☐	☐
Glass	☐	☐	☐
Human Bones	☐	☐	☐
Industrial	☐	☐	☐
Leather	☐	☐	☐
Metal	☐	☐	☐
Stratigraphic		☐	☐
Survey		☒	☐
Textiles	☐	☐	☐
Wood	☐	☐	☐
Worked Bone	☐	☐	☐
Worked Stone/Lithic	☒	☐	☐
None	☐	☐	☒
Other	☐	☐	☐

Digital Media	Paper Media
☒ Database	☐ Aerial Photos
☐ GIS	☒ Context Sheet
☒ Geophysics	☐ Correspondence
☒ Images	☐ Diary
☒ Illustrations	☐ Drawing
☐ Moving Image	☐ Manuscript
☐ Spreadsheets	☐ Map
☒ Survey	☐ Matrices
☒ Text	☐ Microfilm
☐ Virtual Reality	☐ Misc.
	☐ Research/Notes
	☐ Photos
	☒ Plans
	☒ Report
	☒ Sections
	☐ Survey

Notes:

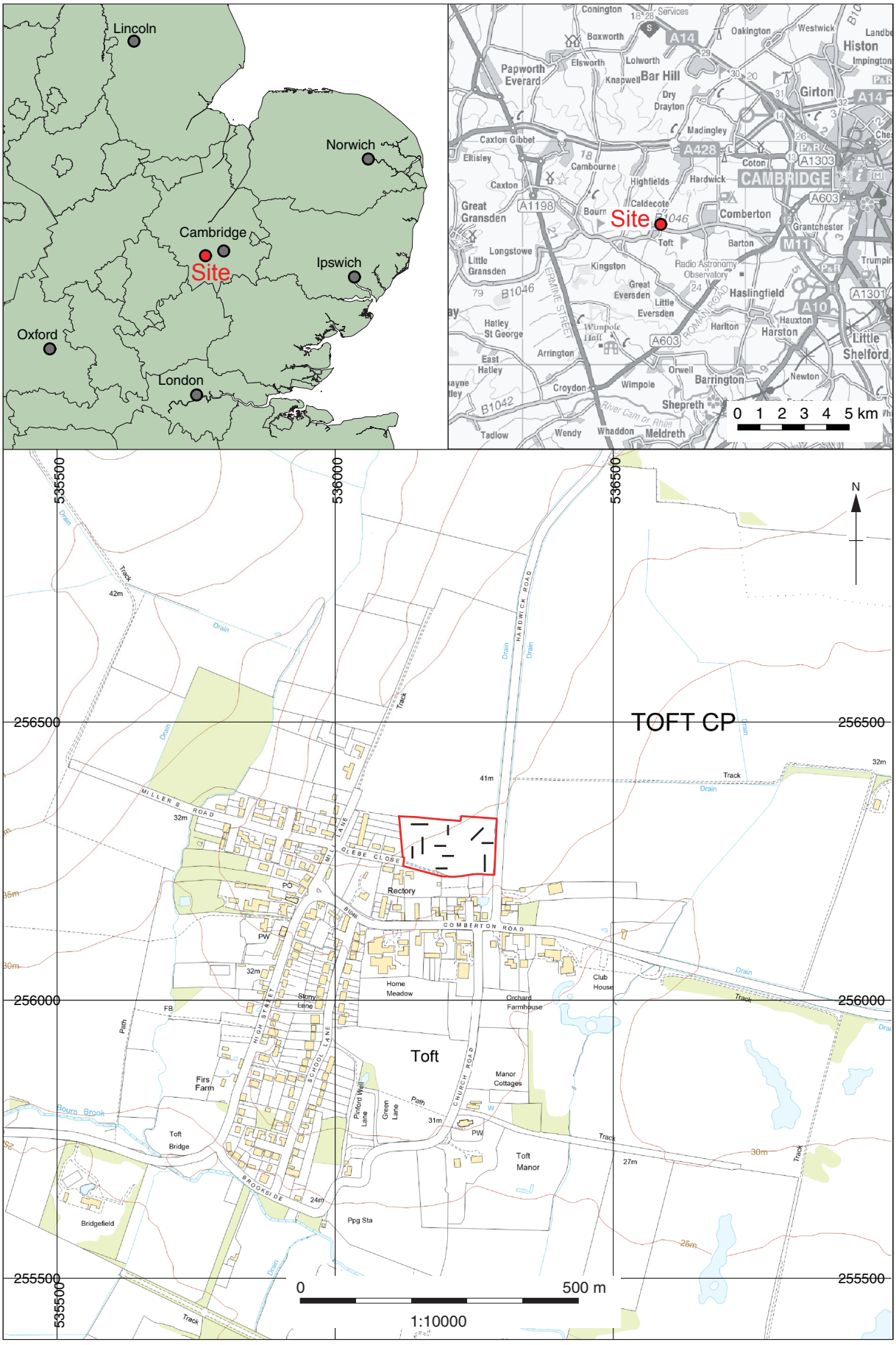
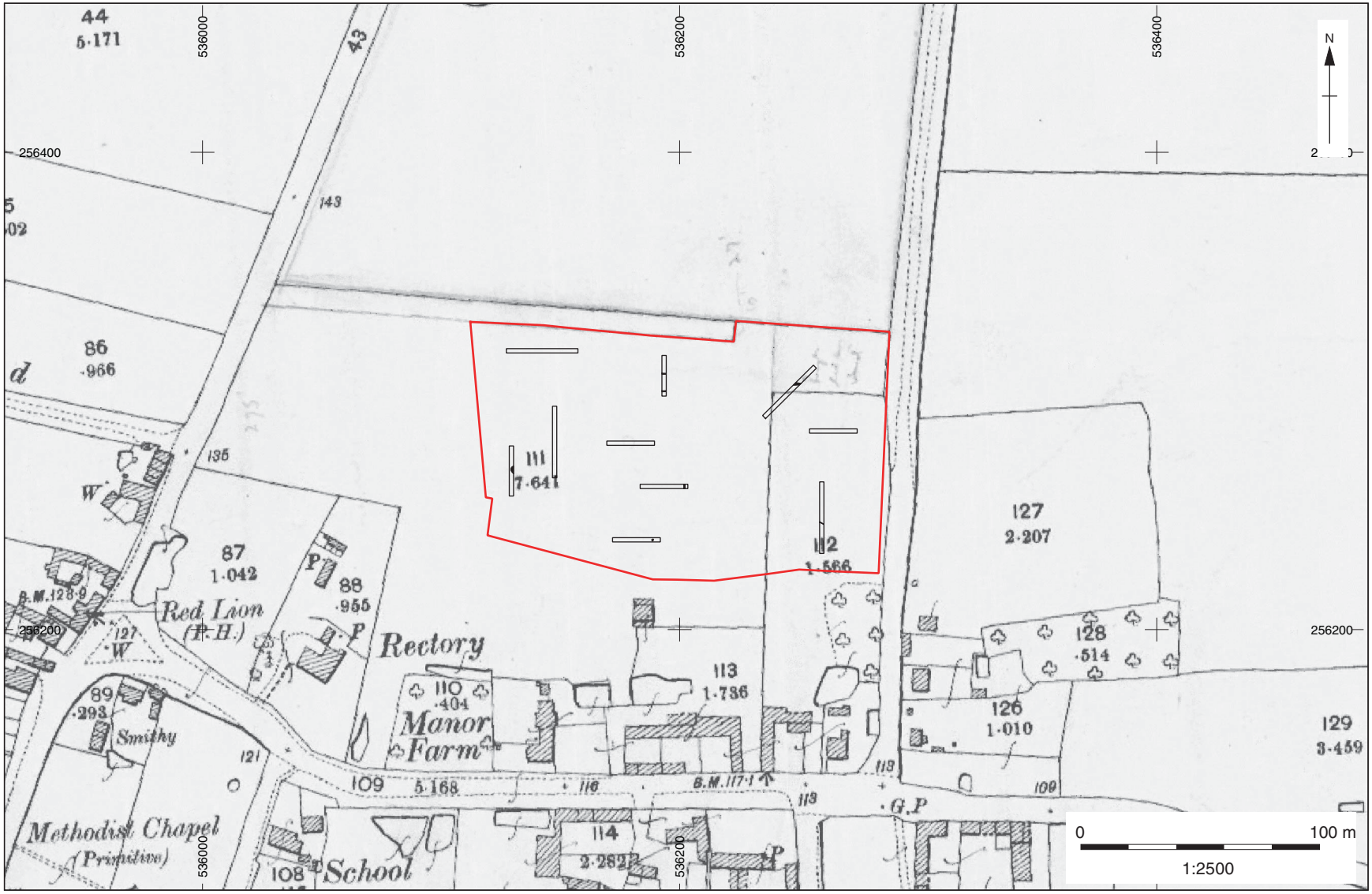


Figure 1: Site location showing archaeological trenches (black) in development area (red)



Contains Ordnance Survey data © Crown copyright and database right. Reproduced from the 1st edition OS map 1885

Figure 2: Evaluation trenches overlain on First Edition Ordnance Survey map, 25 inch, 1885

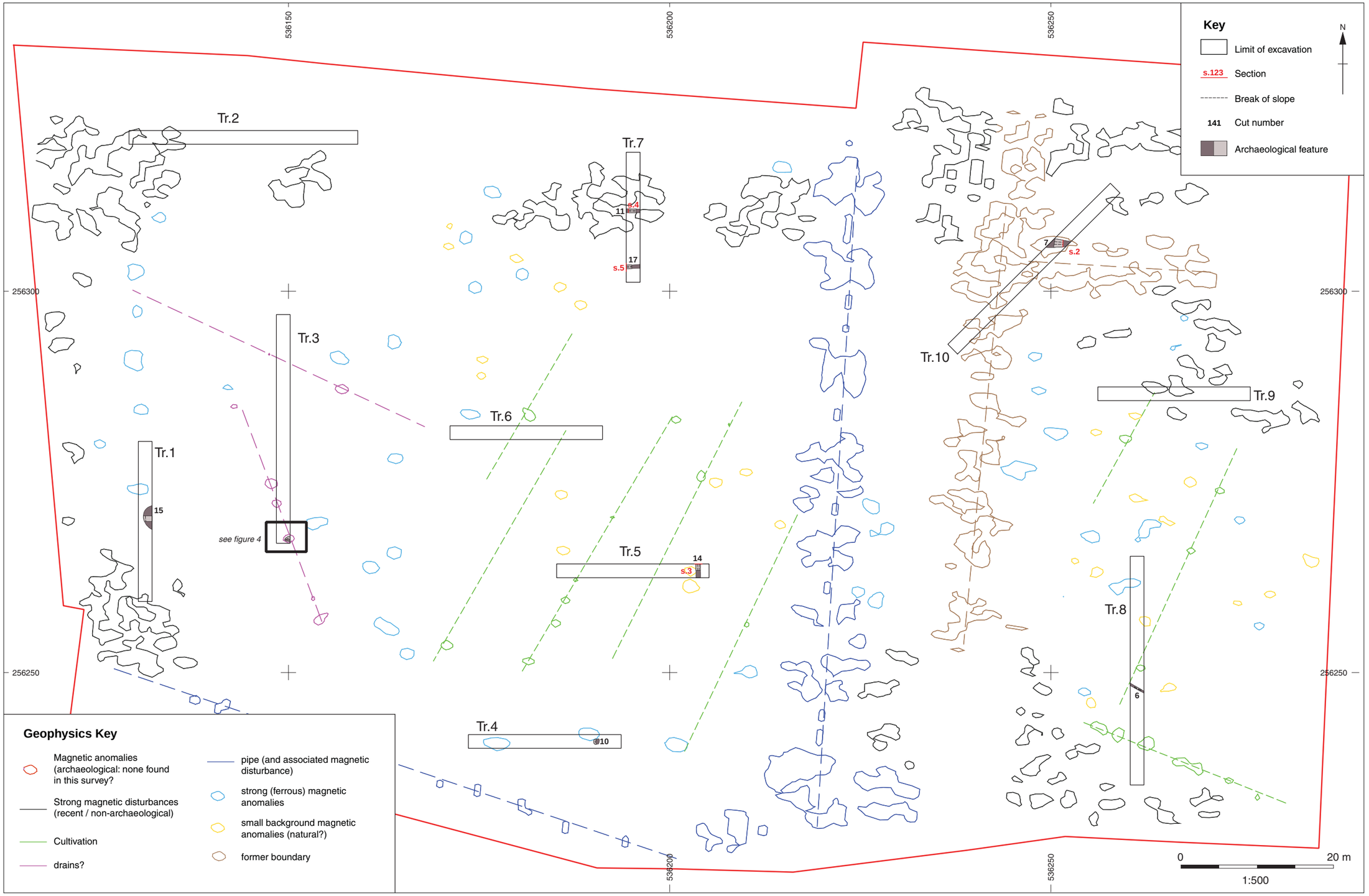


Figure 3: Trench plan with geophysical survey results (as supplied by Bartlett-Clark Consultancy)

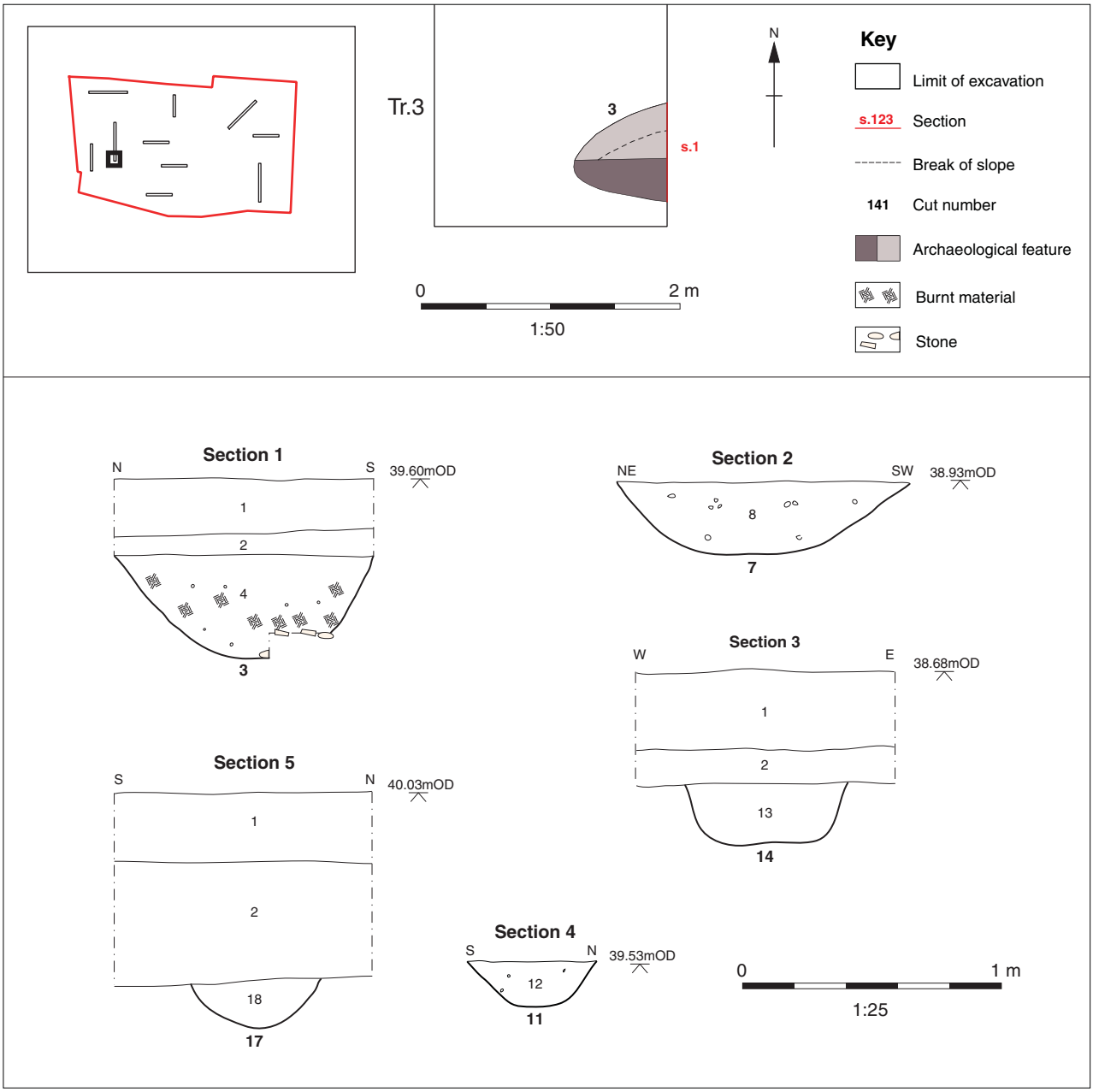


Figure 4: Feature sections and inset of Pit **03**

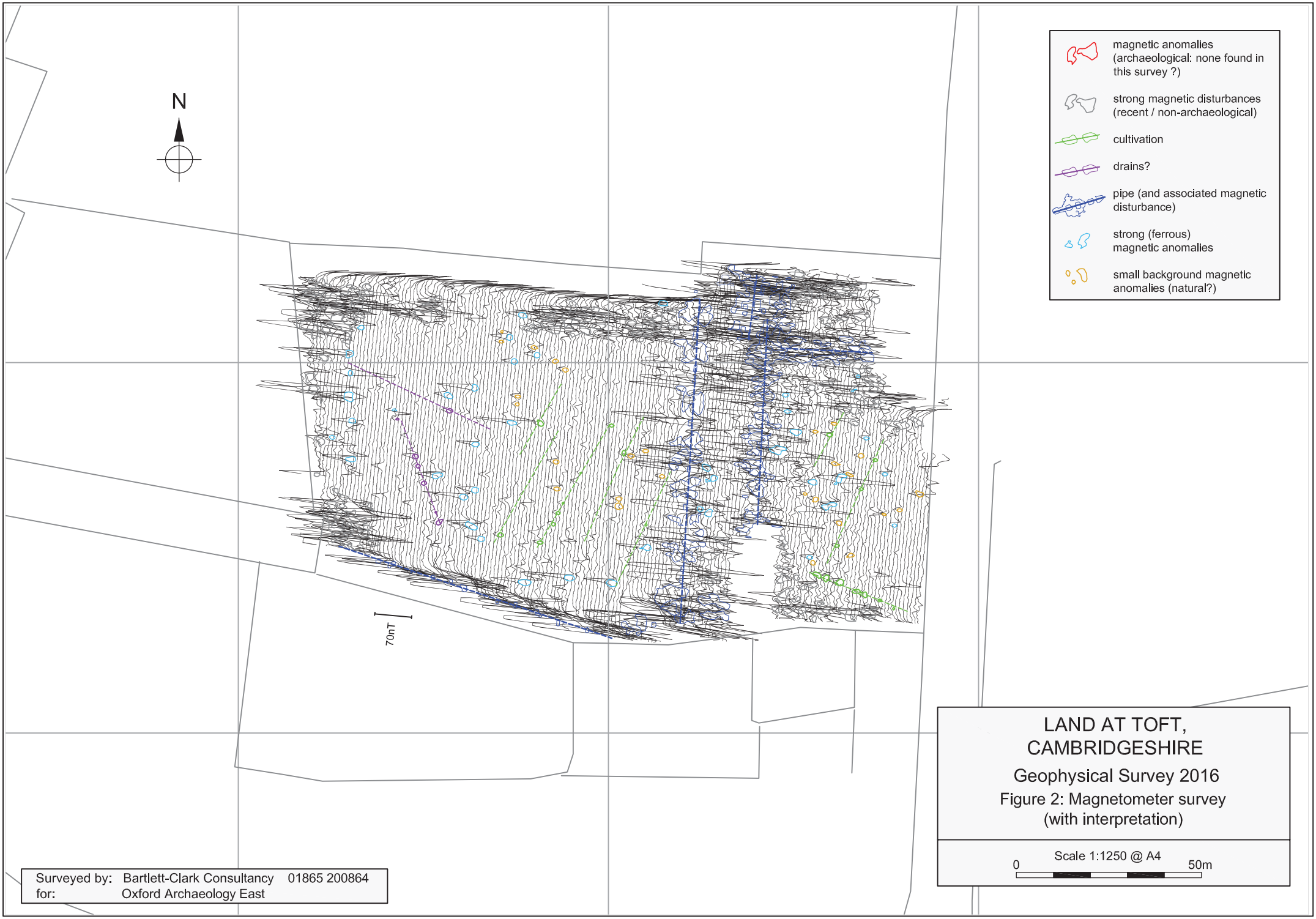
Plate 1: Trench 2, looking west

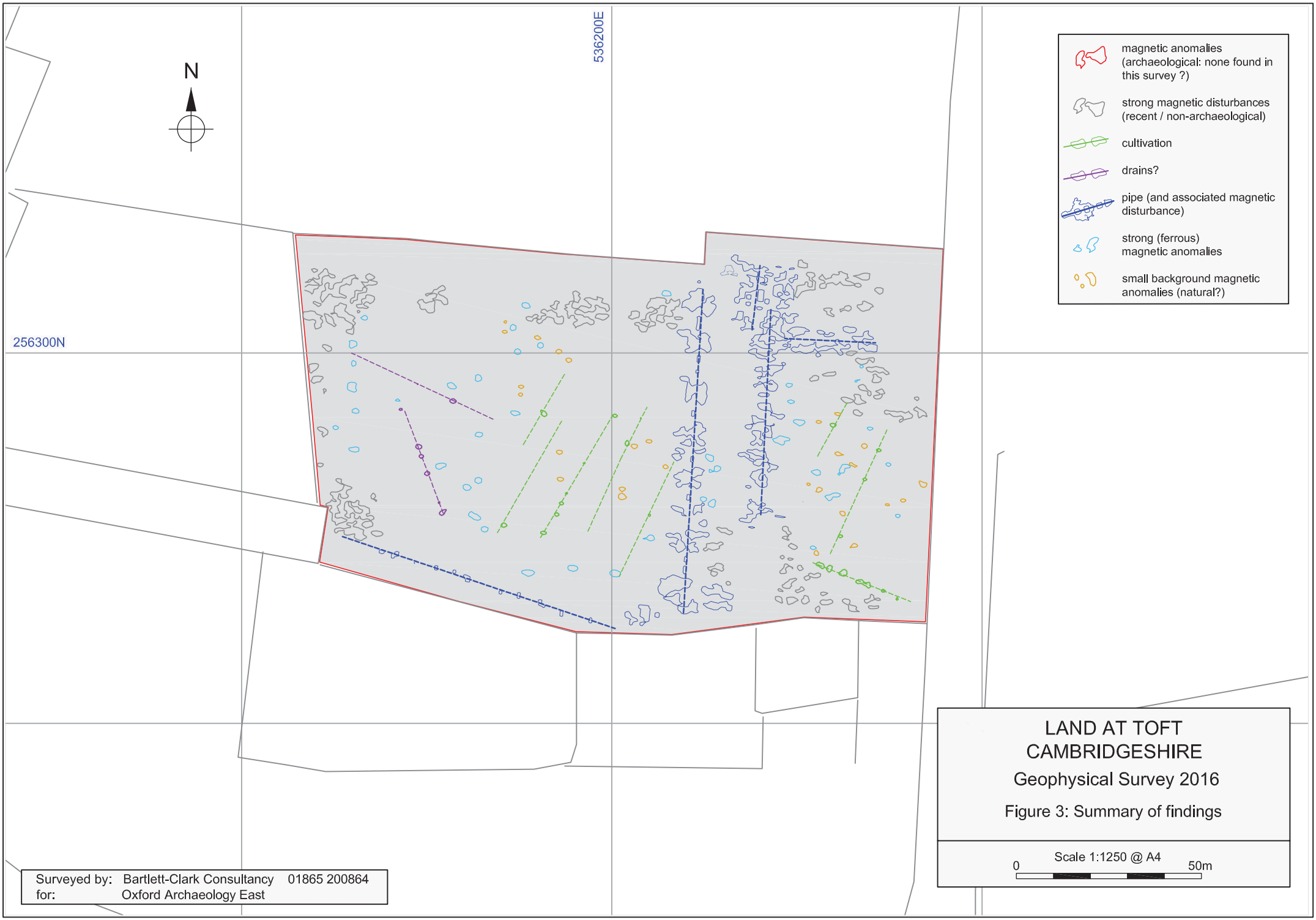
Plate 2: Trench 3, looking north

Plate 3: Ditch **11**, Trench 7, looking west

Plate 4: Ditch **07**, Trench 10, looking east


N
536200E
256300N
Background mapping includes OS data.
© Crown copyright.
TOFT
PO
Orchard
Farm
Wks
34
CH
Toft
FB
Farm
Site location
1:12500
3.4 nT
-3.2
LAND AT TOFT,
CAMBRIDGESHIRE
Geophysical Survey 2016
Figure 1: Magnetometer survey
(grey scale plot)
Scale 1:1250 @ A4
0
50m
Surveyed by: Bartlett-Clark Consultancy 01865 200864
for: Oxford Archaeology East


N
magnetic anomalies (archaeological: none found in this survey ?)
strong magnetic disturbances (recent / non-archaeological)
cultivation
drains?
pipe (and associated magnetic disturbance)
strong (ferrous) magnetic anomalies
small background magnetic anomalies (natural?)
70nT
LAND AT TOFT, CAMBRIDGESHIRE
Geophysical Survey 2016
Figure 2: Magnetometer survey (with interpretation)
Scale 1:1250 @ A4
0
50m
Surveyed by: Bartlett-Clark Consultancy 01865 200864
for: Oxford Archaeology East


N
536200E
256300N
magnetic anomalies (archaeological: none found in this survey ?)
strong magnetic disturbances (recent / non-archaeological)
cultivation
drains?
pipe (and associated magnetic disturbance)
strong (ferrous) magnetic anomalies
small background magnetic anomalies (natural?)
LAND AT TOFT
CAMBRIDGESHIRE
Geophysical Survey 2016
Figure 3: Summary of findings
Scale 1:1250 @ A4
0
50m
Surveyed by: Bartlett-Clark Consultancy 01865 200864
for: Oxford Archaeology East

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