University of Leicester

Archaeological Services

An Archaeological Evaluation at the proposed Asfordby Wind Farm Site, Asfordby, Leicestershire

NGR: SK 721 210

James Harvey

ULAS Report No 2011-111

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For: RSK Environment Ltd.

P/A No. 10/00951/FUL

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CONTENTS

Summary 1
1. Introduction 1
2. Site Description, Topography and Geology 2
3. Historical and Archaeological Background (taken from RSK ES Chapter 12) 4
4. Aims and Objectives 5
5. Methodology 5
6. Results 7
7. Discussion 25
9. Archive and Publication 26
10. Bibliography 28
11. Acknowledgements 28

Appendix 1 The Iron Age and Roman Pottery and Miscellaneous Finds 29
Appendix 2 Post-Medieval Pottery 31
Appendix 3 The Animal Bones 32
Appendix 4 Environmental Evidence 34

FIGURES

Figure 1: Site Location Plan 2

Figure 2: Site location plan including the proposed turbine locations and sites discussed in the archaeological Archaeology and Cultural Heritage Statement 3

Figure 3: Proposed trench locations (Score 2011) 6

Figure 4: Trench Location Plan 9

Figure 5: Trenches 1-3 associated with Turbine 8 11

Figure 6: Plan of Trenches 4-6 associated with Turbine 4 13

Figure 7: Plan of Trenches 7-9 associated with Turbine 2 15

Figure 8: Plan of Trenches 10-12 targeted in Field 6 (including geophysical survey plot taken from Chisem 2010) 16

Figure 9: Plan of archaeological features recorded at the northern end of Trench 10 . 18

Figure 10: Plan of archaeological features recorded at the southern end of Trench 11 19

Figure 11: Plan of archaeological features recorded at the northern end of Trench 12 21

Figure 12: Plan of Trenches 13-15 associated with Turbine 6 23

Figure 13: Plan of Ditch [19] recorded at the centre of Trenches 14 and 15 24

An Archaeological Evaluation at the proposed Asfordby Wind Farm Site (NGR: SK 721 210, centre)

James Harvey

Summary

University of Leicester Archaeological Services carried out an archaeological evaluation by trial trenching at the proposed Asfordby Wind Farm Site (NGR: SK 721 210, centre) between the 23rd June and 1st July 2011. The work was undertaken as a pre-determination requirement in advance of a proposed new wind farm development on the site.

Previous geophysical survey had highlighted the potential for archaeological features to be present within part of the proposed application area. The evaluation forms part of an archaeological impact assessment of the proposed development. A total of fifteen trenches were excavated during the course of the evaluation. Twelve of the trenches focused on the proposed turbine locations and three were targeted on anomalies highlighted by the geophysical survey.

Positive results were recorded within five of the excavated trenches confirming the results of the geophysical survey as well as recording archaeological features not previously indentified. The results suggest a concentration of settlement activity dating to the Late Iron Age and Early Roman periods on top of a ridge overlooking the valley. This could represent the continuation of settlement activity previously identified to the east of the site near to the deserted village of Welby.

The site archive will be held by Leicestershire County Council Heritage Services Section, accession number XA.93.2011.

1. Introduction

Planning permission is currently being sought for the construction of a new wind farm at Asfordby, Leicestershire (NGR: SK 721 210 centre, Figs. 1 and 2; P/A No. 10/00951/FUL).

This report presents the results of a programme of archaeological trial trenching that was undertaken between the 23rd June and 1st July 2011. It follows an Environmental Statement (including a geophysical survey of the area) conducted by RSK Environment Ltd. that concluded that the site had archaeological potential.

A strategy for the work was set out in the Written Scheme for Investigation, (Score. 2011, hereinafter WSI). The trial trenching was undertaken in order to target geophysical anomalies identified along the connecting road between the turbines by as well as evaluating the apparently 'archaeologically blank' areas suggested by the geophysical survey within the proposed turbine locations where the impacts of the proposed development are likely to be most significant. The fieldwork was carried out

in accordance with Planning Policy Statement 5: Planning for the Historic Environment (PPS5).

2. Site Description, Topography and Geology

The proposed wind farm is located *c.*3km west of Melton Mowbray. The southern extent of the application area is located 0.6km north of Asfordby Valley and 1km north-east of Asfordby village (Figs. 1 and 2). The site is spread across a corridor of farmland measuring approximately 2km in long. The majority of the application area is located in fields to the west of Welby Lane although the proposed development also extends east of Welby Lane into Asfordby Business Park. The total area measures *c.*80ha. Previous work has identified that large areas of the site is likely to have been disturbed by previous development. The archaeological evaluation was therefore focussed on Turbines 2, 4, 6, 8 and an area to the north of Turbine 6, all located along the western edge of Welby Lane. Turbine 1 is also to be investigated at a later date.

The topography of the area under investigation varied considerably. The proposed location of Turbine 8 is located on lower ground at around *c.*89m OD whereas the other turbines run along higher ground to the north, generally situated on a west facing slope between 108-110m OD. Also included in the investigation was a relatively flat ridge of higher ground to the north of Turbine 6 that lay at a height of *c.*114m OD

The underlying geology is Charnmouth Mud Formation. The overlying drift geology is Oadby Member Diamicton that consists of brown to grey clay with chalk and flint inclusions (http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html, accessed July 2011).

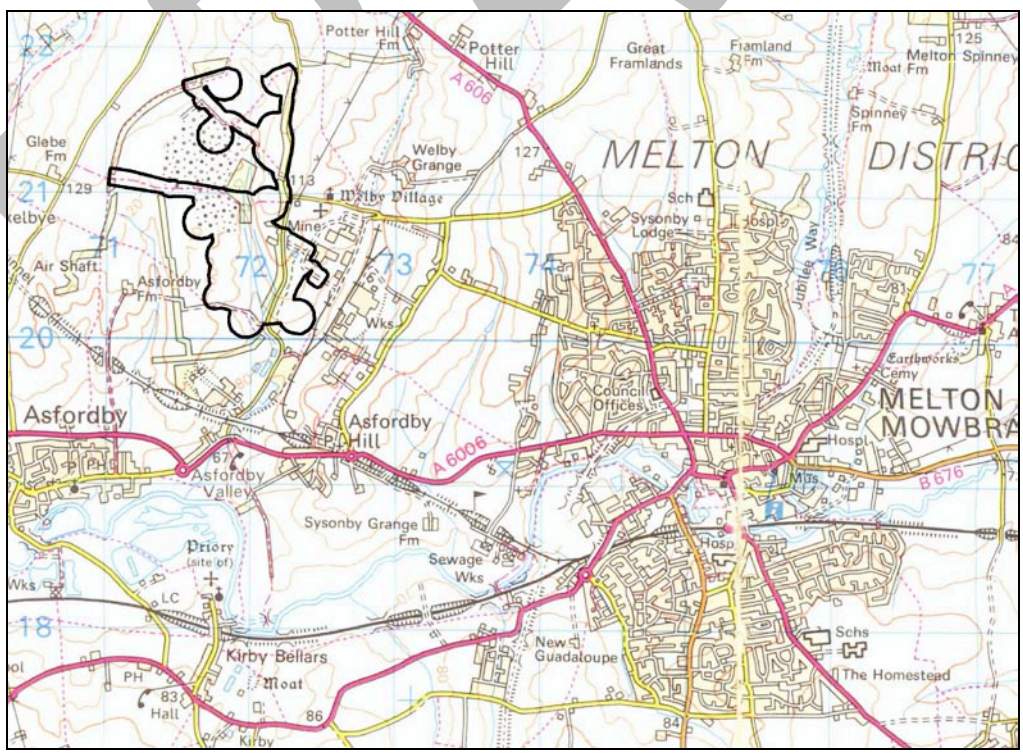

Figure 1: Site Location Plan

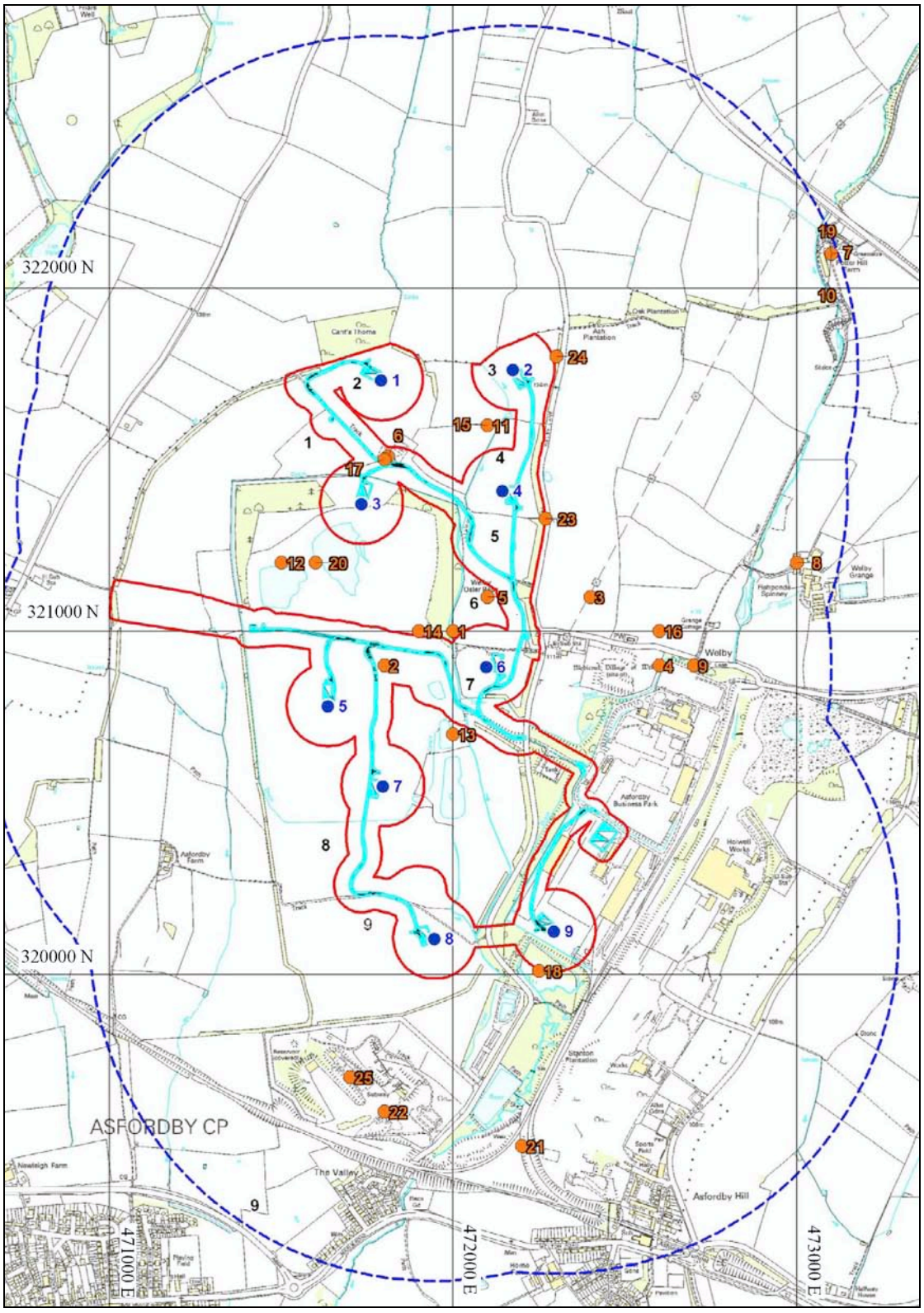

Figure 2: Site location plan including the proposed turbine locations (numbered in blue) and sites discussed in the archaeological Archaeology and Cultural Heritage Statement (numbered in orange). Field numbers used in the text are in black.

3. Historical and Archaeological Background (taken from RSK ES Chapter 12)

The application site lies within an area of known archaeological potential recorded on the Leicestershire and Rutland Historic Environment Record and has previously been discussed in detail as a part of the Environmental Statement for the proposed wind farm (RSK, 2011). Prehistoric activity is attested to in the area including Bronze Age finds as well as finds of Iron Age and Roman date. Earlier finds have been made in Asfordby itself, including some possible Mesolithic stone tools and Neolithic or Bronze Age lithics.

Within the application area two reported Bronze Age hoards are recorded (Sites 1 and 2; Fig 2); these appear to be two different hoards both containing large quantities of Bronze Age material (**MLE6366**; **321498**).

The Roman period is also represented through finds of brooches and coins reported from Asfordby. A Roman road ran between Loughborough and Grantham, passing a little to the north of Saxelbye. A Roman site suggested to be the site of a villa has been recorded north-west of Welby church (Fig. 2, Site 3; 200m east of Field 5). Pottery, tile and tesserae found on the site in 1980 support a report that a mosaic had been found in the field to the north-west of Welby Church. Aerial photographs of the site suggest a rectangular feature that could relate to a Roman building (**MLE3345**; **MLE6502**; **MLE3349**).

The villages surrounding the site are all established by the Medieval period and recorded in the Domesday Book. The entry for Asfordby records that it is held by and from the King, and totals 15 ½ carucates of land, with two mills and 20 acres of meadow. Welby was held from Countess Judith and included 6½ carucates and 12 acres of meadow. Welby (Fig. 2, Site 4) appears from both the documentary and earthwork evidence to have been a large village throughout the medieval period. A number of finds from that date have been made in and around the development site, including a pilgrim flask (Site 5), coin (Site 6) and medieval masonry finds from Potters Hill Farm and Welby Grange (Sites 7 and 8). There are also a number of sites in the area that attest to medieval or early medieval activity, including fishponds (Sites 9, 11, 12), a possible kiln site at Potter Hill Farm (Site 10) and a watermill at Millfield (Site 13) - both evidenced from place names and Welby Osier Bed (Site 14), an area of willow grown for basket making.

Asfordby expanded during the later post-medieval period, while Welby contracted and was eventually abandoned. The National Monuments Record (NMR) entry for Welby deserted medieval village (Site 4) describes half of the site as being ploughed and levelled in 1966. It was visited in 1968 when it was found that Holwell Works waste tips were encroaching on the other half. However, a number of buildings of post-medieval or earlier origin, no longer extant, show how large the village of Welby had once been.

Geophysical Survey (From Chisem 2010)

A detailed magnetic survey (gradiometry) was undertaken across the application area by RSK STATS Geoconsult Limited within areas where no known previous disturbance had occurred.

The results of the survey were largely negative but anomalies of probable archaeological origin were located in Field 6 (Fig. 2) and form a circular enclosure and a linear feature. Two further sub-circular anomalies are observed within this field thus potentially indicating a possible settlement (Fig. 8). The presence of the anomalies at this location is significant given the proximity of the Iron Age and Roman finds located to the east as well as the deserted medieval village of Welby. The forms of the features were indicative of prehistoric archaeological features, and could indicate a continuity of the settlement of Welby spanning prehistoric and historic periods.

Closely spaced parallel anomalies identified in Fields 4, 8 and 9 were thought to represent recent plough scars. However, some of the larger sub-parallel features, potentially indicate medieval farming systems, as more modern agricultural use usually produces straighter, narrower parallel scars.

4. Aims and Objectives

The main aims of the evaluation were:

- To identify the presence/absence of any archaeological deposits. In particular the evaluation would focus on areas of the application area considered to be affected most by the potential development and also to target the anomalies highlighted by the geophysical survey.

- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed development

- To produce an archive and report of any results.

Within the stated project objectives, the principal aim of the evaluation was to establish the nature, extent, date, depth, significance and state of preservation of archaeological deposits within the application area in order to determine the potential impact upon them from the proposed development.

5. Methodology

The WSI stated that the proposed sites of Turbines 2, 4, 6 and 8, the road line to the north of Turbine 6 (where the geophysical anomalies were located) and the proposed compound to the north of Turbine 8 were to be investigated (Figs 3 and 4). Each of the proposed turbine locations were evaluated by two 40m x 1.6m trenches located in a cruciform arrangement centred on the turbine. Additionally a 20m x 1.6m trench was to be excavated on each turbine site at the proposed location of the associated crane base. Three 30m x 1.6m trenches were to be excavated along the proposed road line to the north of Turbine 6 in order to target the geophysical anomalies (Fig.3). It

was originally stated that a further three 30m x 1.6m trenches were also to be excavated to the north of Turbine 8 at the proposed location of the compound area (Fig. 3). However it was subsequently decided to move the location of the compound to an area within Asfordby Business Park. The location of Turbine 1 (within Field 2) has also been highlighted for investigation but this will be undertaken at a later stage.

Figure 3: Proposed trench locations (Score 2011). Note the three trenches in the proposed compound of Field 8 were not excavated.

The excavation of the trial trenches involved the removal of topsoil and overlying layers under full archaeological supervision until either the top of archaeology or natural undisturbed ground was reached, or to a maximum safe depth given the specific site conditions.

The bases of the trenches were cleaned in areas where potential archaeology was observed. Archaeological remains were recorded and sample excavation was undertaken in order to determine the character and date of any remains. Bulk soil samples were taken as appropriate in order to evaluate the environmental potential of the site. Archaeological contexts as a cut are indicated by square brackets e.g. [09], those that are fills are indicated by round brackets e.g. (07).

The trenches were accurately located using a Topcon Hiper Pro GPS+ RTK System attached to a Topcon FC-100 controller. The data was processed using Topcon Tools GPS+ Post Processing Software and the final plans completed with the aid of TurboCad v.15 design software.

All the work followed the Institute for Archaeologists (IfA) *Code of Conduct (2010) Standard and Guidance for Archaeological Field Evaluations (2008).*

6. Results

A total of fifteen trenches were excavated during the course of the evaluation totalling an area of *c.*784 sq. metres (Fig. 4). These trenches closely matched their proposed locations set out in the WSI.

The composition of the underlying deposits showed little variation across the paddocks. The topsoil consisted of a dark greyish-brown clayey loam containing frequent chalk and flint inclusions. This underlying subsoil (where present) consisted of a mid greyish-brown silty clay deposit that contained occasional chalk and flint inclusions. The natural substratum was also relatively similar across the sites comprising yellowish/grey-brown clay with chalk and flint inclusions of varying quantities. The trench descriptions are summarised in the table below.

Table 1: Trench Descriptions

Trench	Length (m)	Height at base of Trench (m OD)	Natural Substratum	Notes	Min. depth to archaeology (m)
1	40.5	87.70-91.00	Grey brown clay with chalk and limestone	Single drain	N/A
2	39.5	87.61-89.54	Grey brown clay with chalk and limestone/ orangey brown clay/ reddish brown sand and gravel	Furrows	N/A
3	40	87.42-89.60	Grey brown clay with chalk and limestone/ orangey brown clay/ reddish brown sand and gravel	Furrows	N/A
4	21.47	114.34-114.85	Yellow brown clay with chalk and flint	Furrows	N/A
5	39.5	108.89-114.19	Yellow brown clay with chalk and flint		N/A
6	39.5	110.57-112.14	Grey brown clay with chalk and limestone/ orangey brown gravelly clay	Furrows	N/A
7	20	108.79-110.24	Grey brown clay with chalk and limestone/ orangey brown gravelly clay	Furrows	N/A
8	39	107.17-111.56	Grey brown clay with chalk and limestone also some ironstone	Furrows and drain	N/A
9	35	108.31-109.93	Grey brown clay with chalk and limestone	Post-Medieval Gully [02] and furrows	0.35
10	28	113.40-113.82	Orangey brown clay with limestone and flint/ yellowish brown clay with chalk and limestone	Ditch and possible limestone spread	0.3
11	27	114.10-114.44	Grey brown clay with chalk and limestone	Gully [04] and Ditch [06]	0.32
12	27	113.93-114.20	Grey brown clay with chalk and limestone	Gully [14] and Ditch [17]	0.45
13	21	110.60-111.40	Grey brown clay with chalk and limestone	Possible Furrow	N/A
14	39	107.40-110.43	Grey brown clay with chalk and limestone/ brown clay	Linear feature [19] Possible furrow and drains	0.25
15	38.5	108.41-109.81	Grey brown clay/ Grey brown clay with chalk and limestone	Linear feature [19] Possible furrow and drains	0.25

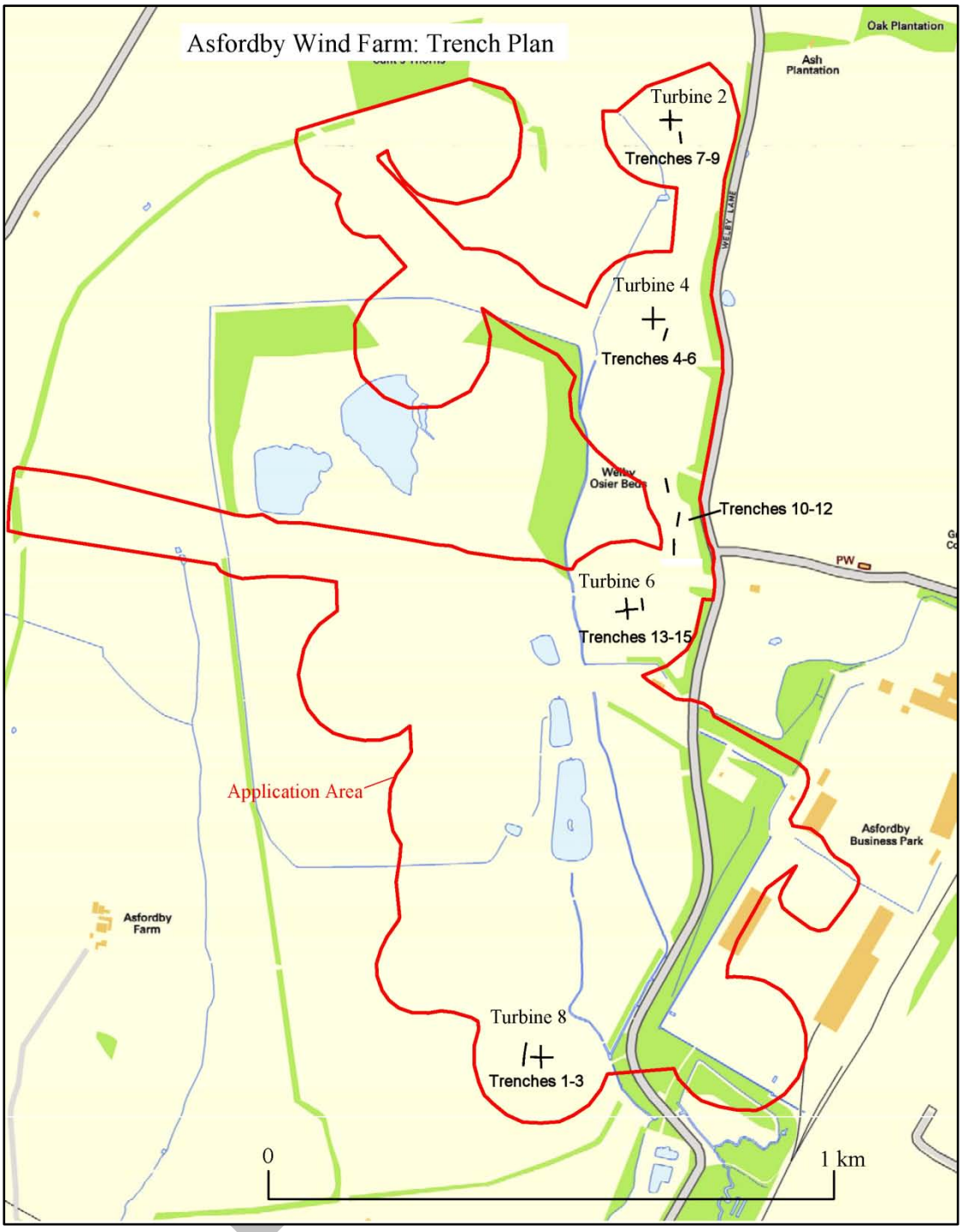

Figure 4: Detailed plan showing actual location of trenches.

Field 9 (Turbine 8, Trenches 1-3) Figs 4 and 5

Trench 1

Trench 1 was positioned across the proposed location of the turbine crane base and was orientated approximately north to south. The ground surface sloped down to the north-west and this was reflected in the levels of overburden within the trench. At the southern end of the trench the natural sub-stratum was reached at a depth of 0.29m directly below the ploughsoil. However the trench deepened towards the northern end where 0.3m of colluvial subsoil was overlain by 0.3m of plough soil. No archaeological finds or features were recorded in this trench although a drain was noted on a north-west to south-east orientation.

Trenches 2 and 3

Trenches 2 and 3 were positioned across the centre of the proposed turbine in a cruciform arrangement. Trench 3 was orientated east to west and Trench 4 north to south. The natural sub-stratum was reached at a depth of 0.20m – 0.37m and three parallel linear features were recorded towards the eastern side of the trench arrangement. These features were all *c.*1.5m wide, relatively evenly spaced at 5.5-6m intervals from their centres and were orientated north-east to south-west. Sample excavation of the features showed them to be very shallow and containing coal fragments. These are likely to represent the in-filled remains of medieval or post-medieval agricultural furrows. No archaeological finds or features were recorded in this trench.

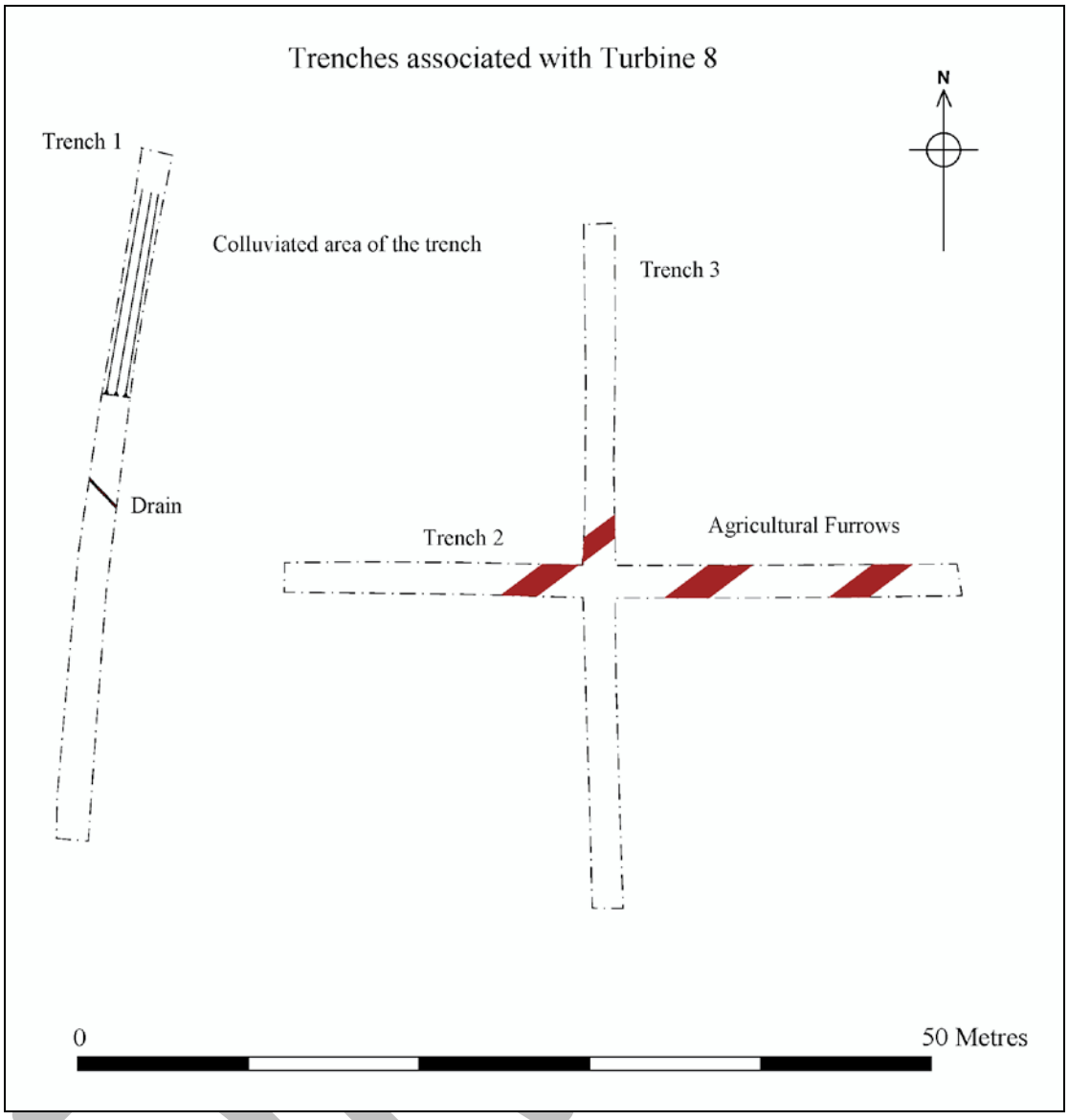

Figure 5: Trenches 1-3 associated with Turbine 8

Field 4 (Turbine 4, Trenches 4-6) Figs 4 and 6

Trench 4

Trench 4 was positioned across the proposed location of the turbine crane base and was orientated approximately north north-east to south south-west. The natural sub-stratum was reached at a depth of 0.24m – 0.40m. Three parallel linear features were recorded. These between 2-2.5m wide, spaced at *c.*7m intervals and orientated east to west. These features also represent in-filled furrows that were recorded on the geophysical survey. No archaeological finds or features were recorded in this trench.

Trench 5 and 6

Trenches 5 and 6 were positioned across the centre of the proposed turbine in a cruciform arrangement. Trench 5 was orientated east to west and Trench 6 north to south. The natural sub-stratum was reached at a depth of 0.26m – 0.35m and three parallel linear features were recorded towards the northern side of the arrangement that represent the continuation of the system of furrows recorded in Trench 4. No archaeological finds or features were recorded in this trench.

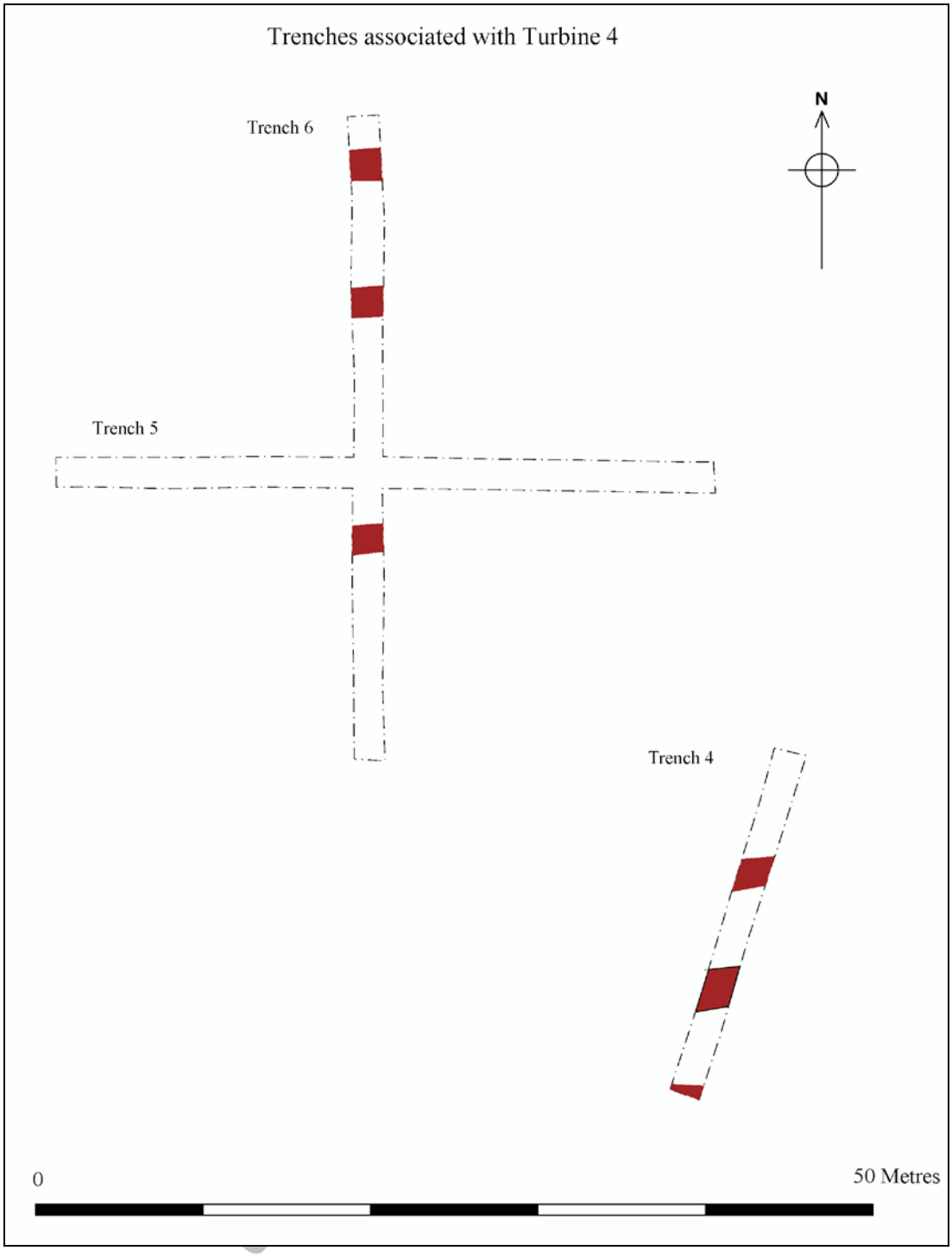

Figure 6: Plan of Trenches 4-6 associated with Turbine 4

Field 3 (Turbine 2, Trenches 7-9), Figs 4 and 7

Trench 7

Trench 7 was positioned across the proposed location of the turbine crane base and was orientated approximately north north-west to south south-east. The natural sub-stratum was reached at a depth of 0.24m – 0.29m. Three parallel linear features were recorded, spaced *c*.7m apart from their centres and orientated east north-east to west south-west. These features probably represent the continuation of the system of furrows recorded in Field 4.

Trench 8 and 9

Trenches 8 and 9 were positioned across the centre of the proposed turbine in a cruciform arrangement. Trench 8 was orientated east to west and Trench 9 north to south. The natural sub-stratum was reached at a depth of 0.30m – 0.60m. A narrow linear feature [02] was recorded *c*.12m from the southern end of Trench 9. It measured 0.3m wide, 0.3m deep and spanned the width of the trench on a west north-west to east south-east orientation. Its sides and base were V-shaped and it was filled with a mid greyish-brown clay deposit (02) containing occasional limestone fragments. A single sherd of Staffordshire Slipware was recovered from this deposit dating to the later 17th or 18th centuries (Appendix 2). Two parallel linear features were also recorded that probably represent the continuation of the system of furrows seen elsewhere on the site.

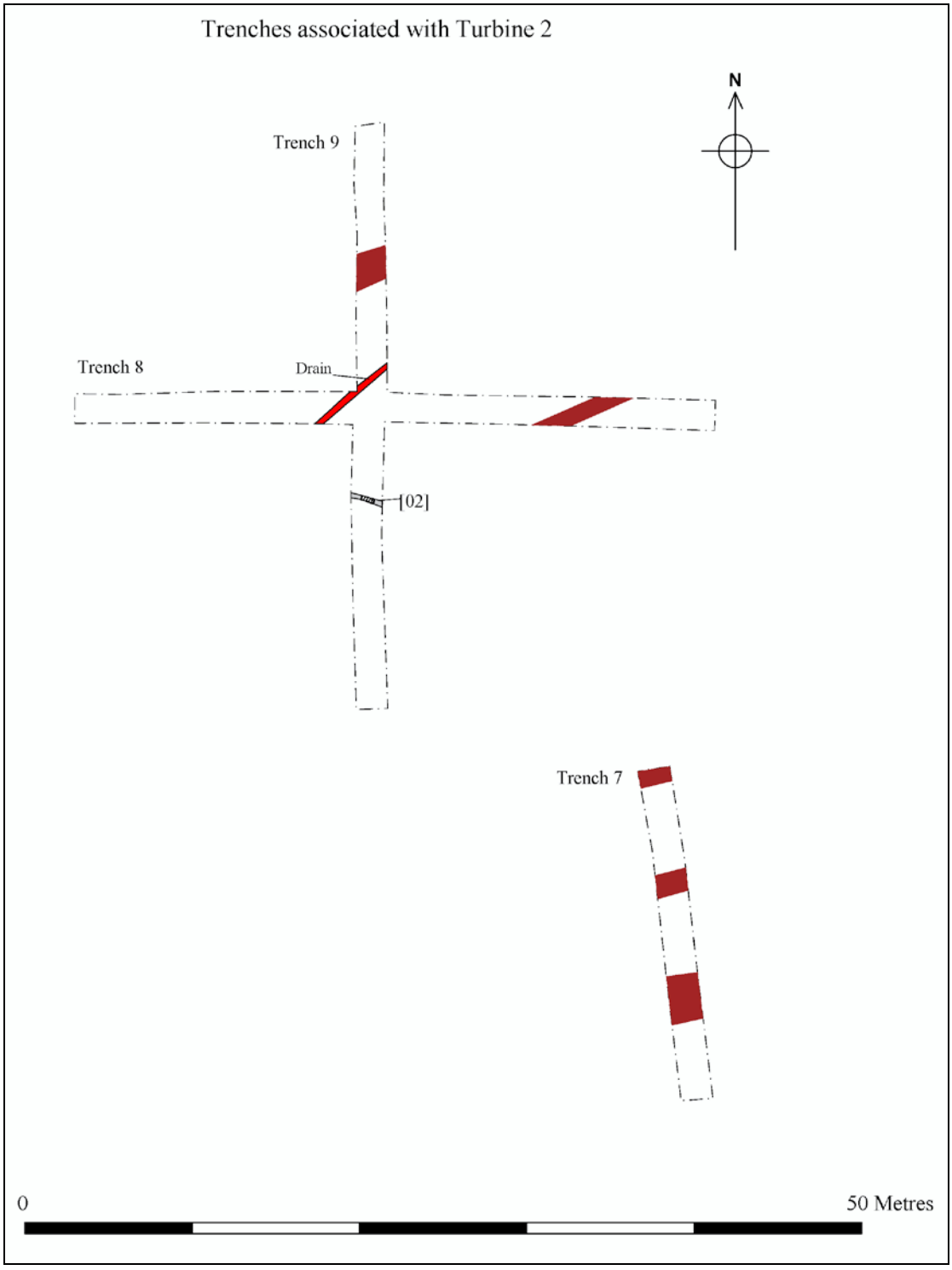

Figure 7: Plan of Trenches 7-9 associated with Turbine 2

Field 6 (Targeted Geophysics, Trenches 10-12), Figs 4 and 8-11

Trenches 10-12 were located in the proposed road line corridor in order to target anomalies highlighted by the geophysical survey.

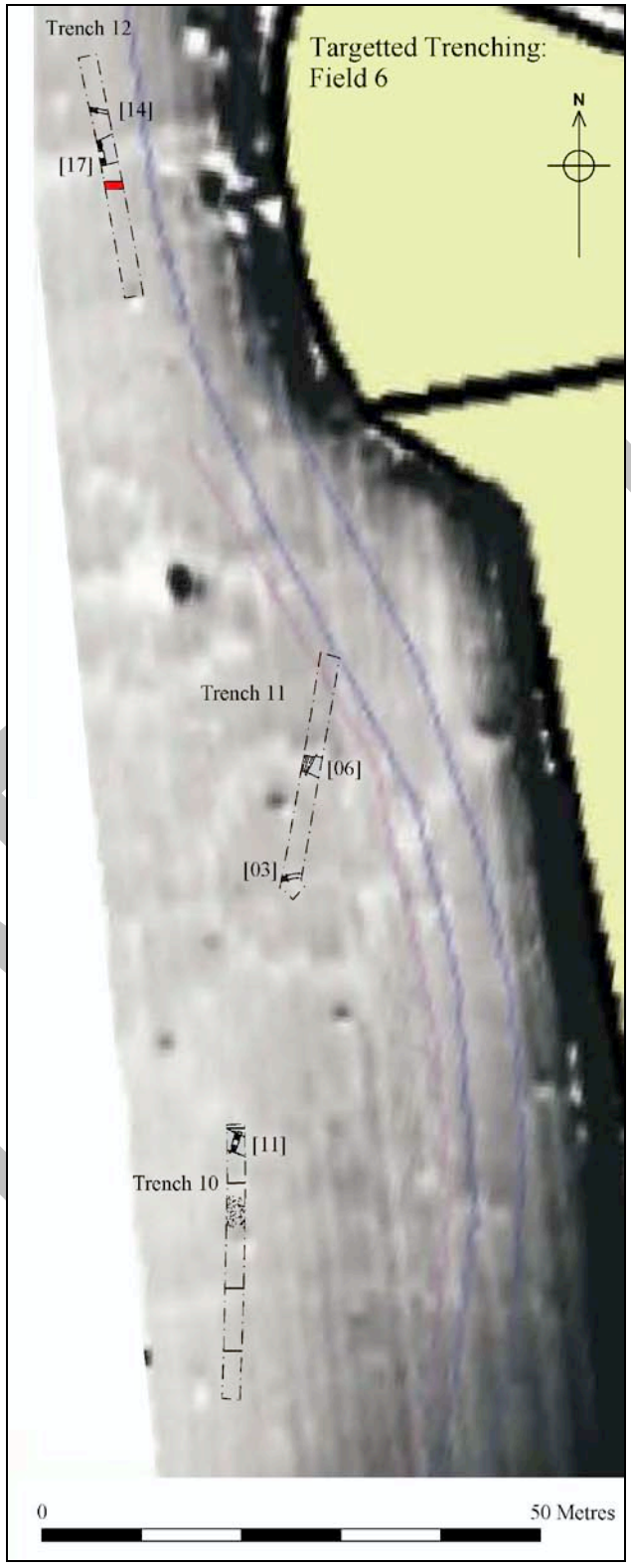

Figure 8: Plan of Trenches 10-12 targeted in Field 6 (overlain on the geophysical survey plot taken from Chisem 2010)

Trench 10, Fig. 9

Trench 10 was orientated north to south and positioned in order to target weak linear and curvilinear features identified by the geophysical survey (Fig. 8). The natural sub-stratum was reached at a depth of 0.30m – 0.50m. A ditch feature [07] with a re-cut [11] was recorded at the northern extreme of the trench that matched the curvilinear anomaly suggested by the geophysical survey (Fig. 9). Ditch [07] measured >0.7m wide, 0.4m deep and spanned the width of the trench. Its surviving sides and base were concave and it was orientated east south-east to west south-west. The ditch was filled by three separately identifiable deposits. The primary fill comprised a dark greyish-brown silty clay deposit (08) measuring 0.5m wide and 0.15m thick containing occasional charcoal flecks. This was overlain by a mid yellowish-brown silty clay deposit (09), measuring >0.5m wide and 0.17m thick containing chalk fragments. This upper fill consisted of greyish brown silty clay (10) with flint and chalk flecks, measuring >0.55m wide and 0.25m deep. The ditch was truncated on its southern side by a re-cut linear feature [11], measuring 1.3m wide and 0.45m deep. Its northern side was steep and straight with an incline of *c.*60º; its southern side was shallower and sloping with an incline of 30-40º with a slightly concave base. It was filled by a dark greyish-brown silty clay deposit (12) containing chalk flecks and occasional large limestone fragments (average size *c.*100 x 80 x 30mm). The excavated fills appeared very sterile in nature and no finds were recovered from any of the deposits.

A spread of crushed chalk/limestone was recorded towards the centre of the trench. This measured *c.*3m wide with a maximum depth of 50mm and corresponded with an area of subsoil build-up and a deepening of the natural substratum. No finds were recovered in association with the spread and it is uncertain whether this represents a glacial hollow or whether the feature was archaeological in origin.

Elsewhere in the trench a number of field drains were recorded that had mostly been ploughed away. These were orientated east to west and probably map the location of the previously ploughed out furrows. No evidence of the geophysical anomaly located towards the southern end of the trench was recorded.

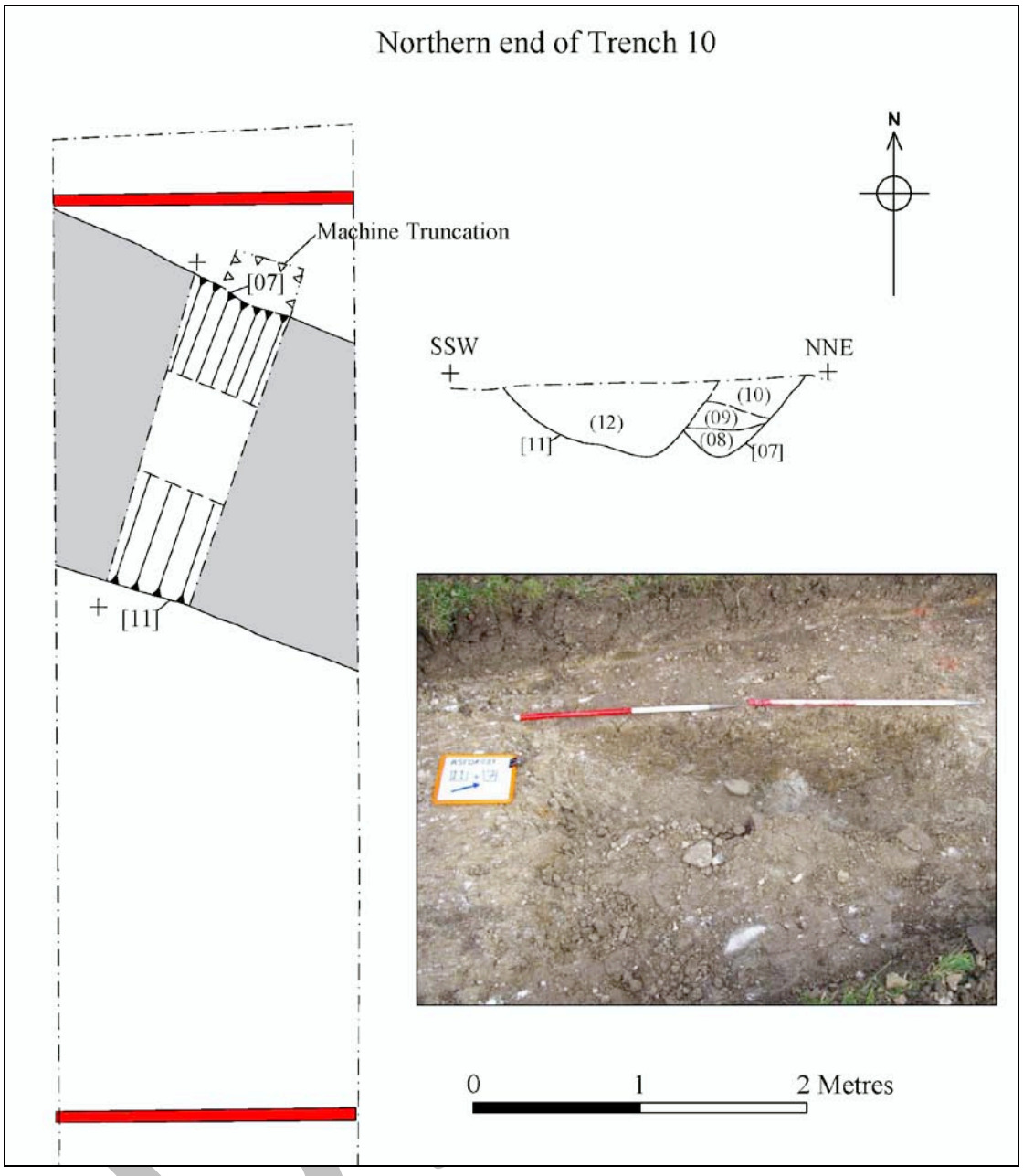

Figure 9: Plan of archaeological features recorded at the northern end of Trench 10

Trench 11, Fig. 10

Trench 11 was orientated north north-east to south south-west and positioned in order to target a strong curvilinear feature interpreted from the geophysical survey (Fig. 8). The natural sub-stratum was reached at a depth of 0.25m – 0.41m. Ditch [06] was recorded towards the centre of the trench; this correlated with the curvilinear anomaly recorded on the geophysical survey. A small curvilinear gully [04] not previously been highlighted by the geophysical survey was also recorded at the southern end of the trench. Ditch [06] measured between 1.6-18m wide, 0.5m deep and spanned the width of the trench on a west north-west to east south-east orientation. The sides and base of the ditch were concave and it was filled by a mid greyish-brown silty clay deposit (05) that contained occasional limestone fragments, large rounded pebbles and charcoal flecks. This deposit contained Scored ware pottery dating to the Mid-Late

Iron Age as well as Roman grey ware pottery dating between the late first and second century AD (Appendix 1). A small collection of animal bone was also recovered from this deposit (Appendix 2).

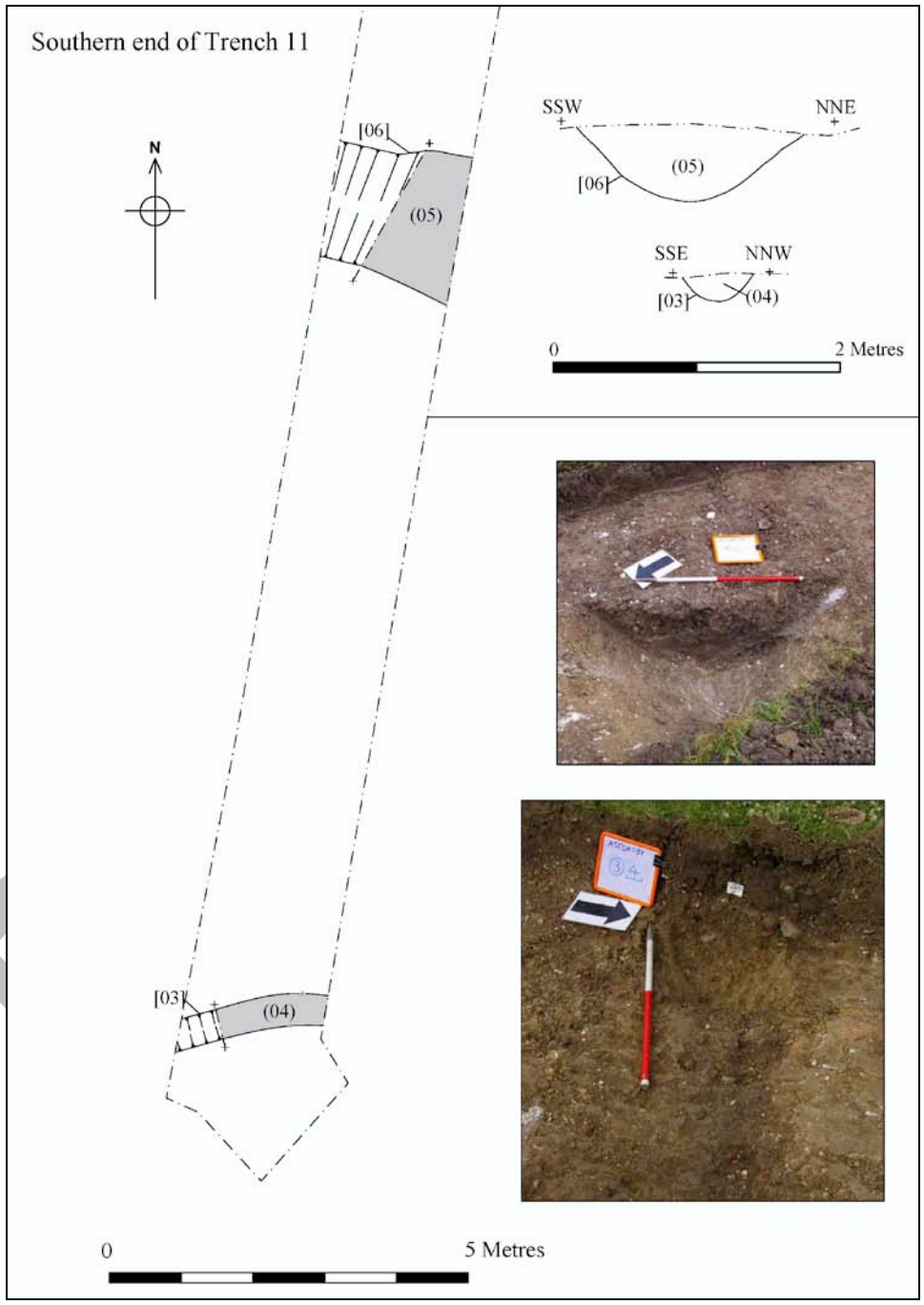

Figure 10: Plan of archaeological features recorded at the southern end of Trench 11

Curvilinear gully [04] measured 0.43m in width, 0.25m deep and spanned the width of the trench on an approximate east to west orientation. Its sides and base were concave and it was filled with a mid greyish-brown silty clay deposit (03) containing common limestone fragments and fire affected pebbles. Large fragments of Mid-Late Iron Age Scored ware pottery and a reasonable quantity of animal bone were

recovered from this deposit (Appendices 1 and 3). The deposit also contained a large collection of fired clay/daub and a piece of chalk had been partially drilled on two sides, presumably in an attempt to create a suspension hole that was unsuccessful. The deposit was also bulk sampled for environmental evidence but the results of this were largely negative apart from the presence of snail shells.

Trench 12, Fig. 11

Trench 12 was orientated north north-west to south south-east and positioned in order to target a strong linear feature interpreted from the geophysical survey (Fig. 8). The natural sub-stratum was reached at a depth of 0.30m – 0.50m. Ditch [17] was recorded *c*.8m from the northern end of the trench correlating with the geophysical anomaly. A smaller gully [14], not previously highlighted by the geophysical survey was also recorded *c*.5m from the northern end of the trench.

Ditch [17] was large, measuring 2.6 - 2.8m wide, 0.78 - 0.93m deep and spanned the width of the trench on an east north-east to west south-west orientation. The northern side of the ditch was steep and straight with an incline of *c*.50º, breaking to *c*.80º towards the base. The southern side was more sloping with an increasing incline from 40-80º. The base of the feature had an uneven profile, suggesting more than one cut was present but no clear differences could be observed within the fill of the feature to suggest a recut. The primary fill comprised a dark greyish-brown silty clay deposit (16), measuring 2.6m wide and up to 0.93m deep with chalk flecks. This was overlain by a dark brownish-grey silty clay deposit (15) containing chalk and limestone fragments and occasional charcoal flecks. A small collection of Roman pottery dating from the late first to second century AD was recovered from this deposit as well as an abraded sherd of grey ware pottery dating between the mid and late first century AD (Appendix 1). The deposit contained a small quantity of animal bone (Appendix 3). This deposit was also bulk sampled for environmental remains but this was negative apart from containing small quantities of charcoal flecks

Gully [14] was linear, measuring 0.4m wide, 0.1m deep and spanned the width of the trench on a west north-west to east south-east orientation. Its sides and base were concave and it was filled by a mid greyish brown clay deposit (13) that contained occasional flint and limestone fragments. No finds were recovered from this deposit.

A large linear cut was also recorded to the south of Ditch [17]. However sample excavation of the feature revealed a large ceramic drain in the base of the cut.

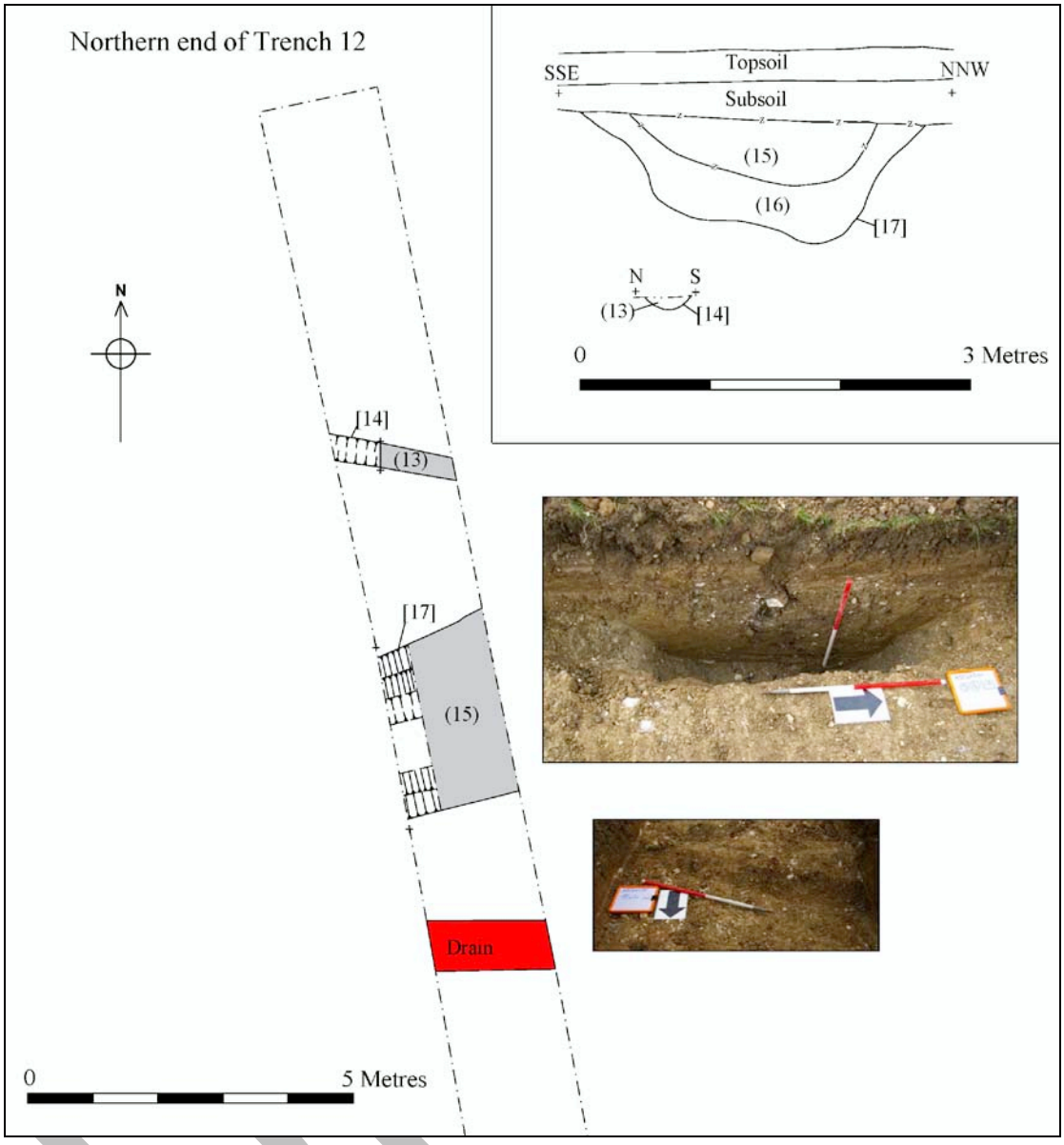

Figure 11: Plan of archaeological features recorded at the northern end of Trench 12

Field 7 (Turbine 6, Trenches 13-15) Figs 4 and 12-13

Trench 13

Trench 13 was positioned across the proposed location of the turbine crane base and was orientated approximately north north-east to south south-west. The natural sub-stratum was reached at a depth of 0.24m – 0.40m. No archaeological finds or features were recorded in this trench.

Trench 14 and 15

Trenches 8 and 9 were positioned across the centre of the proposed turbine in a cruciform arrangement. Trench 14 was orientated east north-east to west south-west but a 'dog leg' was created in the trench to avoid following the line of a field drain towards the western end. Trench 15 was orientated north north-west to south south-east. The natural sub-stratum was reached at a depth of 0.25m – 0.30m. A single linear feature [19] was recorded towards the centre of both trenches although it became poorly defined at both it extents due to later truncation by field drains and poorly defined natural sub-stratum. However the feature did seem to end within Trench 15. It measured >10m in length, a maximum of 1m wide and 0.5m deep and was orientated north to south. A section was excavated across its widest part towards the centre of the trenches (Fig. 13). Here the eastern side was steep and straight with an incline of *c*.50º, the western side was shallower with a *c*.40º incline, breaking to *c*.50º towards the base which was concave. It was filled by a mid greyish brown silty clay deposit (18) that contained common limestone fragments. The southern extent of the feature was also investigated. Here the sides were shallow, with a reasonably flat base that sloped down slightly to the north. The evidence suggested that the feature had been truncated away at this point rather than representing its true terminus. No finds were recovered from this feature. The deposit was also bulk sampled for environmental remains but this also proved largely negative with only small quantities of charcoal flecks recorded.

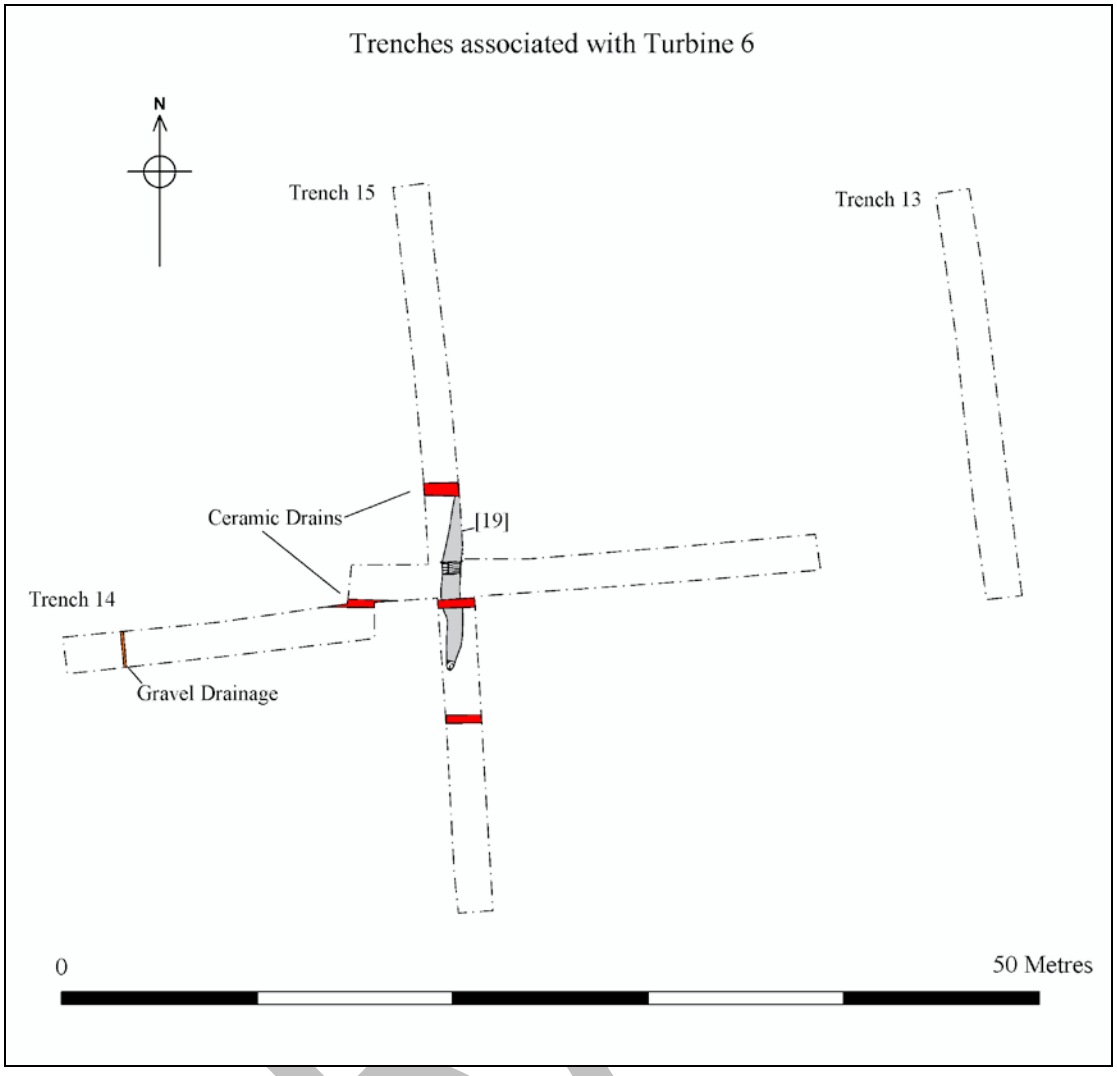

Figure 12: Plan of Trenches 13-15 associated with Turbine 6

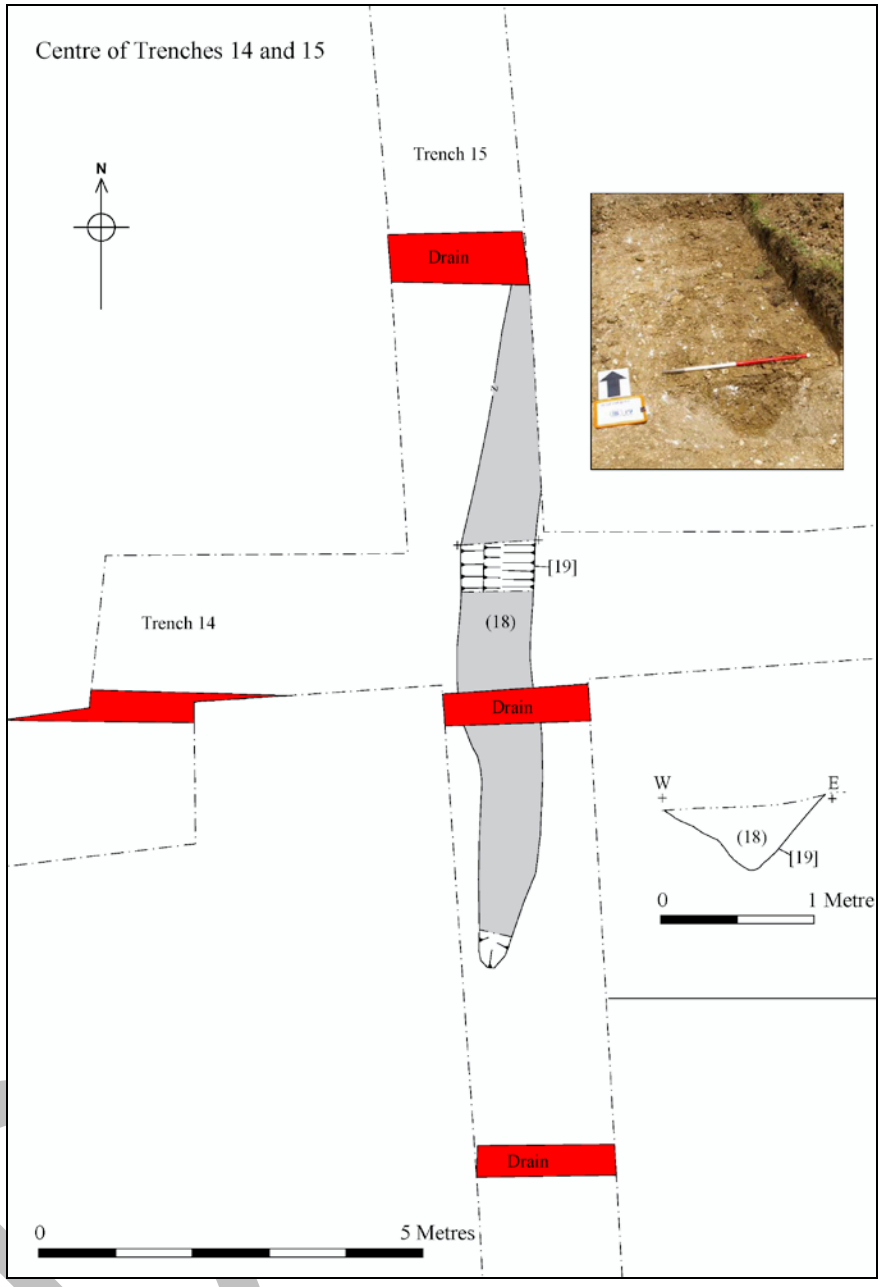

Figure 13: Plan of Ditch [19] recorded at the centre of Trenches 14 and 15

7. Discussion

The results of the geophysical survey were mostly confirmed by the results of the trial trenching with positive results established within five of the excavated trenches (Trenches 10-12, 14-15). However a number of other features were also recorded during the evaluation that had not been previously identified suggesting that the geophysical survey does not provide a full representation of the features buried below the ploughsoil. The recorded archaeology appears to be clustered within Fields 6 and 7 (although mainly Field 6) and dates between the Mid-Late Iron Age and Early Roman periods. There appears to be a total absence of archaeological evidence across the remainder of the evaluated areas apart from in Field 3 where a small drainage gully of post-medieval date was recorded (Trench 9).

The trenches within Field 6 were located to look at a number of geophysical anomalies. Trench 10 targeted a weak curvilinear anomaly suggested to be an enclosure as well as a weak linear anomaly. A ditch was recorded close to the suggested location of the curvilinear anomaly. This feature had been re-cut and appeared to be linear rather than curvilinear in nature. Unfortunately no finds were recovered from the in-filled deposits to provide a date for the features. The weak linear anomaly recorded by the geophysical survey was not located but a chalk spread that may be archaeological in origin was recorded towards the centre of the trench.

Trench 11 was targeted to locate a strong curvilinear anomaly suggested to be a sub-oval enclosure measuring *c*.23m x 17m. This feature was located and produced Mid-Late Iron Age Scored ware pottery as well as Early Roman pottery dated between the late first and second century AD. Within the enclosed area a narrow gully was also recorded that produced large sherds of Scored ware pottery, high quantities of fired daub and fire-cracked pebbles. This suggested that the feature may either be associated with a building or certainly located in close proximity to occupation activity.

Trench 12 was targeted to locate a strong linear anomaly. This corresponded with a large boundary or enclosure ditch recoded within the trench that produced exclusively Roman material dated to the late first or second century AD as well as an abraded sherd dating slightly earlier to the mid to late first century AD.

The trenches associated with Turbine 6 in Field 7 recorded a ditch that had not been seen within the geophysical survey but no finds were recovered from the feature to help date the activity.

Some interpretations can be made about the presence of archaeological features within Fields 6 and 7 compared to the absence elsewhere based on the topography of the site. The trenches associated with archaeological activity were located on a relatively flat ridge of higher ground overlooking the valley to the west. The other trenches were all located on the steep west-facing slope immediately below the ridge apart from the trenches associated with Turbine 8 that were located on much lower ground to the south of the ridge. It is likely that the ridge would have provided an ideal settlement location with relatively level ground, good drainage, a low risk of flooding and a clear viewpoint across the surrounding landscape. Not enough evidence has been recorded to suggest whether the Roman activity on the site represents a continuation of activity from the Iron Age or whether the activity represents two chronologically separate phases. However it is clear that the ridge

remained a suitable settlement location into the medieval period with the establishment of Welby village, 300m to the east.

The limited nature of the investigation makes the extent of the activity difficult to determine. However, given the lack of archaeological activity on the slope below the ridge it is likely that the start of the slope marks the western extent of settlement activity. Also it is possible that the large ditch recorded in Trench 12 may mark the northern extent of the activity given that the geophysical survey suggests no further anomalies further north into Field 5. The eastern extent of the activity is uncertain given that the geophysical anomalies continue eastwards beyond the limits of the application area. However it is highly likely that the remains are part of the same settlement activity that has previously been recorded in the field on the opposite side of the road, to the north of Welby Lane. Here fieldwalking has located a large quantity of Roman pottery mainly comprising of greyware, as well as sherds of a mortarium and colour coated wares. A single sherd of possible Iron Age pottery was also recovered possibly suggesting that the Iron Age activity may spread into this area as well. Fragments of Roman tile and tesserae were also found during the fieldwalking and in 1988 it was recorded that a mosaic had been uncovered in the field 'some years ago' and quickly covered up. Although this claim is unsubstantiated the combined evidence suggests that a substantial Roman building may be present within this field, perhaps even a villa. The presence of a large masonry building may have provided a focus for later settlement with the development of Welby village in the medieval period that was situated immediately south of the suggested villa site.

9. Archive and Publication

The site archive will be held by Leicestershire County Council Heritage Services Section, accession number XA.93.2011.

The archive contains:

- 15 trench recording sheets
- 1 context summary record
- 19 context sheets
- 1 photographic recording sheet
- 1 Sample records sheet
- 1 Drawing Index sheet
- 1 Drawing Index sheet (detail)
- CD containing digital photographs and report
- Survey data
- Unbound copy of this report
- Thumbnail print of digital photographs
- 33mm black and white contact sheet and negatives
- A box of finds

The report is listed on the Online Access to the Index of Archaeological Investigations (OASIS) held by the Archaeological Data Service at the University of York, under ID: universi1- 105230. Available at: http://oasis.ac.uk/

ID	OASIS entry summary
Project Name	Asfordby Wind Farm
Summary	University of Leicester Archaeological Services carried out an archaeological evaluation by trial trenching at the proposed site of Asfordby Wind Farm (SK 721 210) between the 23th June and 1st July2011.
Project Type	Evaluation
Project Manager	Vicki Score
Project Supervisor	Jon Coward
Previous/Future work	Previous: geophysics / Future: likely
Current Land Use	Paddock/Arable
Development Type	Wind farm
Reason for Investigation	PPS5
Position in the Planning Process	Between application deposition and determination
Site Co ordinates	SK 721 210
Start/end dates of field work	30/06/201116/06/2011
Archive Recipient	Leicestershire County Council Heritage Services
Study Area	80ha
Associated project reference codes	Museum accession ID: XA.93.2011 OASIS form ID: universi1- 105230

A summary of the work will be submitted for publication in the local archaeological journal *Transactions of the Leicestershire Archaeological and Historical Society* and in due course.

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11. Acknowledgements

The fieldwork was commissioned by RSK Environment Ltd. and was carried out by Jon Coward and James Harvey. We would like to thank the farmer Roger Hobill for his co-operation during project. The finds were analysed by Nicholas Cooper, the plant remains by Anita Radini, and the bone identification was by Jen Browning, all of ULAS. The project was managed by Vicki Score, also of ULAS. Richard Clark of LCC HNET monitored the work on behalf of the planning authority.

Appendix 1 The Iron Age and Roman Pottery and Miscellaneous Finds

Nicholas J. Cooper

Introduction

A total of 12 sherds of mid-late Iron Age pottery and 13 sherds of early Roman pottery were recovered from three stratified contexts. The material is in good condition and the high average sherd weight of 22g indicates a low level of breakage related to deposition close to the centre of activity.

Methodology

The material has been analysed by form and fabric using low power microscopy and classified according to the Leicestershire form and fabric series for Prehistoric (Marsden 2011) and Roman pottery (Pollard 1994) and quantified by sherd count and weight and the results are presented below (Table 1).

Results

Table 1: Quantified summary of the Iron Age and Roman Pottery

Asfordby XA93 Iron Age and Roman Pot									
Context	**Cut**	**Fabric**	**Form**	**part**	**Décor**	**Sherds**	**Weight**	**Dating**	
3		S1	Jar	body	scored	3	105	M-L Iron Age	
3		R1	jar	body	scored	2	47	M-L Iron Age	
5		S1	Jar	body	scored	3	27	M-L Iron Age	
5		R1	jar	base	scored	4	90	M-L Iron Age	
5		GW5	jar	body		8	110	L1st2nd	
15	17	CG1A	store jar	rim		1	114	L1st2nd	
15	17	CG1A	Store jar	body		2	30	L1st2nd	
15	17	GW5	jar	body		1	13	L1st2nd	
15	17	GW3	beaker	body	roulette	1	5	M-L1st	
Total						**25**	**541**	**AvShWt**	**22g**

Mid to Late Iron Age Pottery

Well-preserved sherds of East Midlands scored ware occurred, both on their own in context (3), and alongside Roman sherds in (5). It is recognised that the production of scored ware continues until at least the period of the Roman Conquest if not into the later 1st century in northern parts of the distribution towards the Trent Valley (Elsdon 1992). As the Roman grey ware from (5) is probably of early Roman date, the scored ware is probably, but not necessarily, residual. The fact that both of the dominant fabrics used for scored ware in the county are represented; the granitic (R1) from Charnwood, and the shell-tempered (S1) from Rutland is indicative of Asfordby's geographic location in the Wreake Valley at the junction of the two distributions.

Roman Pottery

The Roman material from (5) comprises joining sherds from a grey ware jar (GW5), probably of later 1st or 2nd century date, whilst (15) contained sherds from a large shell-tempered storage jar, a grey ware sherd, and an abraded sherd from a roulette-decorated vessel, possibly a butt beaker, indicating a mid-late 1st century date.

Fired Clay

A total of 21 fragments of fired clay (143g) were recovered from context (3) alongside sherds of mid-late Iron Age scored ware. The material contains a mix of calcareous, fossil shell inclusions and what appears to be sandstone or mudstone, probably naturally occurring in the clay. The material is very fragmentary with no external surfaces or wattle impressions preserved, but is probably best interpreted as burnt daub from nearby buildings

Chalk Object

Context (3) also contained a roughly pear-shaped fragment of chalk, presumably sourced from Lincolnshire or Norfolk, unless occurring in the boulder clay. Attempts to drill a suspension hole from both sides proved unsuccessful and the intended function of the intended object remains uncertain. Length 50mm.

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Appendix 2 Post-Medieval Pottery

Deborah Sawday

The pottery, one sherd, weighing 5 grams, was catalogued with reference to the ULAS fabric series (Sawday 1989), (Davies and Sawday 1999). The results are shown below, Table 1.

The interior of the sherd, a fragment of a press moulded dish with a notched piecrust rim, was covered with white slip decorated with iron rich trailed slip, which has fired brown and yellow under the transparent lead glaze. The pale buff fabric suggests a Staffordshire origin for the sherd which dates to the later 17th or early 18th century and was probably deposited here when the fields were manured with night soil.

Table 1: The medieval and later pottery by fabric, sherd numbers and weight (grams) by context.

Context	Fabric/Ware	Nos	Grams	Comments
1 [2]	EA7 - Slipware	1	6	Press moulded dish with slip trailed decoration and notched piecrust rim.

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Appendix 3 The Animal Bones

Jennifer Browning

Introduction

An assemblage comprising 70 animal bone fragments was recovered during trial trenching at Asfordby. The pottery spot dates suggest that the site dates from the mid-late Iron Age and Roman periods (Appendix 1).

Methodology

The animal bone recovered by hand during the evaluation was rapidly scanned to assess preservation and variety and therefore provide an indication of the faunal potential should the site progress to excavation.

Results

The assemblage was fragmented, with frequent fresh and old breaks. Bone surfaces were quite eroded, which could inhibit the identification of modifications such as butchery marks and pathologies. A small number of fused epiphyses and measureable bones were observed. The species observed, cattle, sheep/goat and dog, were domestic, which is consistent with settlement activity.

Table 1: Summary of faunal remains from the evaluation

Period	Context	No.	Description
Iron Age	3	58	Minimum of 3 cattle tibiae represented, cattle mandible fragment, cattle maxillary teeth, sheep/goat femur, 1 x sheep/goat, 49 large mammal shaft fragments (several belong to same bone)
Roman	5	9	sheep/goat humerus, metacarpal, metatarsal fragments, 5 large mammal rib fragments (mostly joining), 1 x large mammal shaft fragment, 1 x dog scapula
Roman	15	3	2 x large mammal shaft fragments, 1 x medium mammal shaft fragment,
Total		70	

Archaeological Potential

Although the assemblage is fairly poorly preserved, the recovery of faunal material from Iron Age and Roman sites is a research priority for environmental archaeology in the East Midlands (Monckton 2006, 272). Despite the growing number of Iron Age sites in the region, many have produced relatively small and poorly preserved animal bone assemblages. In the wider landscape, previous work at Humberstone, Leicester (Charles 2000 and Browning 2011) and Enderby (Gouldwell 1992) have produced large and informative faunal assemblages, which have helped shed light on animal husbandry, butchery, cultural practices and diet within the region. Assemblages from Tixover (Baxter 1994) and Crick (Hammon 1998) as well as material from numerous smaller interventions, will also prove helpful to place the site in its regional context. Faunal assemblages from rural Roman sites in the region are particularly rare, especially in contrast to urban centres and it is therefore hoped that recovery of a larger sample at the current site could provide valuable insights into the use of animal resources in this under-represented period (Monckton 2006, 272).

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Appendix 4 Environmental Evidence

By Anita Radini

Introduction

A site evaluation was carried out by the University of Leicester Archaeological Services at Asfordby Wind Farm Site. Soil samples were taken for the recovery of archaeobiological evidence from a possible round house gully and two ditches. All the samples were assessed for potential of environmental analysis. Volume of soil samples and results are presented in table 1.

Materials and Methods

Three samples were assessed for potential of environmental analysis, 1 (3), 2 (15) and sample 3 (18). The samples appeared to be greyish and pale brown in colour and consisted of fine clay and lumps of chalk. A sub sample of 500 ml of soil of each sample was wet sieved by bucket-flot and the flots retrieved were scanned for visible presence of charred plant remains (such as charcoal fragments and flecks), animal bone fragments, and any other biological remains such as insects or snails.

Results and Discussion

All samples had a variable amount of chalk lumps, small gravels and few modern root fragments suggesting a degree of soil disturbance.

Table 1

Sample	Context	Feature	Charcoal	Snails	Md Roots	Comments	Potential
1	3	round house gully?	flecks x	x	x	chalk xx	low
2	15	ditch	flecks x		x	chalk xx	low
3	18	ditch	flecks x		x	chalk xx	low

Md=modern
x=present

Overall the archaeobotanical assemblage was very poor, and only a very low amount of charcoal flecks was recovered. Sample 1 (3) had few snails, those were recorded but not removed from the sample.

Conclusion

It was possible to state that the samples consisted of almost sterile clay, with some intrusive flecks of charcoal due to snails and modern root activity, therefore no further work is required. Despite the assemblage being very poor, soil conditions can vary largely across site and it is important that in any future excavation an appropriate sampling strategy is adopted.

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