

# Proposed Bicton Windfarm Kimbolton Huntingdonshire

Archaeological Evaluation Report



November 2010

## **Client: Broadview Energy Limited**

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## An Iron Age to Roman farmstead at the site of the proposed Bicton Windfarm, Kimbolton, Huntingdonshire

Archaeological Evaluation

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#### Summary

Between 14th December and 6th January 2009 OA East conducted an evaluation at the proposed Bicton Windfarm, Kimbolton (TL 100 704). The archaeological work comprised 15 evaluation trenches (600m) on land over a c.40ha area. Remains of a settlement possibly starting in the Middle or Late Iron Age was found and it continued into the Middle Roman period. This settlement comprised a probable farmstead and associated field system and its remains were recovered within four of the trenches (Trenches 1 and 5-7) over a c.300m distance. The remaining eleven trenches contained no evidence of archaeological remains pre-dating the furrows found across the site.

Domestic occupation was found within Trench 1 which had been targeted over a known crop mark system (CHER 10039). These aerial crop marks had possibly identified a single ditch within the trench but in reality, moderate to dense archaeological remains were recovered perhaps representing four or so phases of use. There were several ditches up to 2.72m wide, pits and a cobbled surface. Moderate quantities of artefacts were found from features within the trench comprising of mostly locally made pottery, three nails, a guern stone, secondary deposits of burnt material including a piece of hearth lining with slag attached. Small quantities of animal bone, mostly cattle, were found but too few to inform on farming practice but charred grain from soil samples have shown crop processing was occurring within the settlement in the Belgic and Roman periods. The farmstead's field system was seen for about 150m beyond to the north-east of the crop marked area (within Trenches 5-7). Here, three small ditches (less than 0.55m deep) were found as well as a pit and two post holes. Artefacts were very sparse from this area with only a single ditch containing two Roman pottery sherds, and a nail and animal bone from the pit.

On the whole the Iron Age and Roman features survived in reasonable condition. The main truncation was due to furrows which cut up to c.0.25m into the settlement remains. A few WWII features were uncovered within the trenches but mostly they sealed the earlier archaeological remains.





## 1 INTRODUCTION

## 1.1 Location and scope of work

- 1.1.1 An archaeological evaluation was conducted at the proposed Bicton windfarm, Kimbolton, Huntingdonshire (TL 100 704; Fig. 1).
- 1.1.2 This archaeological evaluation was undertaken in accordance with a Brief issued by Andy Thomas (Thomas 2009) of Cambridgeshire County Council (CCC) prior to submission of a planning application. This Brief was supplemented by a Written Scheme of Investigation prepared by OA East (Atkins and Connor 2009).
- 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 *Planning and Policy Guidance 16 Archaeology and Planning* (Department of the Environment 1990). The proposed planning application is for the construction of four wind turbines, access tracks, a sub station and a control building. The proposed trenching plan targets those areas to be directly affected by this proposed development with 15 evaluation trenches (collectively 600m long; Fig. 1). One 50m long evaluation trench was targeted over crop marks recorded within the site with the other trenches located where there was no evidence for pre-medieval remains.
- 1.1.4 The trench layout was agreed with Cambridgeshire County Council and consisted of two 50m trenches positioned in the shape of a cross at each of the four wind turbine sites (eight trenches in total; Fig. 1). A single 20m trench located at both the proposed sub-station and control building. Two 50m trenches and three 20m trenches was located along the proposed access tracks.
- 1.1.5 When the planning application is presented by the clients, the results of this archaeological evaluation will enable decisions to be made by CCC, on behalf of the Local Planning Authority, with regard to the treatment of the archaeological remains.
- 1.1.6 The site archive is currently held by OA East and will be deposited at the county store at Landbeach in due course.

## 1.2 Geology and topography

- 1.2.1 The site is located on land to the south-west of the village of Stow Longa and northwest of Kimbolton, Cambridgeshire, at approximate grid reference TL 100 704. The solid geology consists of mudstones and clays of the Middle Jurassic Oxford Clay series overlain by glacial tills deposited during the middle Pleistocene Anglian Glaciation (BGS 1974). The latter when exposed during evaluation and were seen to consist of stiff pale brown to light grey clays containing abundant rounded to irregular clasts of chalk, flint, limestone,sandstone as well as derived Jurassic fossils. Relict periglacial ground ice features were noted such as thermal contraction cracks and polygons now represented by orange brown fine grained aeolian sand infills. These relate to active periglacial conditions which existed during the late Pleistocene Devensian Glaciation (Ballantyne and Harris 1994).
- 1.2.2 The majority of the site lies on a plateau at between 70m and 75m OD within a gently undulating landscape. Along the south-western edge of the site the land slopes down into the broad valley of the River Kym.



## 1.3 Archaeological and historical background

- 1.3.1 No previous archaeological work has taken place within the immediate area of the proposed windfarm although an aerial photographic assessment of the majority of the proposed development area was undertaken during archaeological work on an Anglian Water pipeline to the north (Fig.3; Atkins and Palmer 2007). A series of complex cropmarks were identified that lie within the proposed development area (Fig.2). The southernmost cropmark complex is thought to be evidence for a prehistoric and/or Roman settlement (CHER 10039; Fig. 6). These cropmarks cover an area of *c*.300m north to south by *c*.150m east to west and comprise several enclosures and other ditches. The site is located on a high ridge overlooking a small brook which runs northwest to south-east less than 150m to the north. A possible earlier Bronze Age ring ditch is located immediately to the south of the enclosures.
- 1.3.2 Approximately 400m to the north-west of the development area is another cropmark complex (Fig. 2; CHER 10036), also comprising a series of sub-rectangular ditched enclosures. Previous archaeological evaluation confirmed that these two cropmark complexes represent discreet archaeological sites (Atkins 2009). A third possible enclosure is located to the south-east of the development area (CHER 10810; Fig. 2).
- 1.3.3 The 1591 Bigrams map shows a track, Filman Waye, passing c.0.5km to the north-east of the proposed development area (Fig. 2). Filman Waye followed a ridge of high ground in a north-west to south-east direction. This ridgeway seems to have been a main thoroughfare with other tracks leading off it (Fig. 2). One of these 'minor' tracks led from Filman Waye towards a recently identified settlement (Atkins 2009; Fig. 2) that was first established in the Roman period (CHER 18231) and re-occupied in the Early to Late Saxon period (CHER 18232).
- 1.3.4 The location of all four possible settlements in relation to Filman Waye and other routes suggests a close relationship between the tracks and settlements. The three settlements identified by cropmarks (CHER10036, 10039 and 10810) all lie south of Filman Waye within approximately 500m, whilst the settlement identified by evaluation (CHER18231/2) lies further away but in close proximity to one of the spur roads.
- 1.3.5 Study of the alignments of the settlements, both excavated and from cropmarks indicates that the ridgeway (Filman Waye) had a strong influence on the form that the settlements took and implies a Roman or earlier date for the establishment of the tracks. Better known ridgeway tracks in southern England are usually thought to be prehistoric in date and Filman Waye may be similarly ancient (Atkins forthcoming).
- 1.3.6 The influence of the ridgeway may extend to the "parish" boundaries of Upper Stow as well as the alignment of tracks and settlement features. It may be significant that all follow a very similar orientation to those noted as "ancient alignments" recorded by Sue Oosthuizen in her study of the Bourn Valley in south-west Cambridgeshire (Oosthuizen 2006, fig. 4.1).
- 1.3.7 Current evidence suggests that there was an Iron Age/Roman settlement (probably a farmstead) within the area every few hundred metres (Atkins forthcoming).
- 1.3.8 In Saxon times the development area was probably within Stow Longa parish which lies within the Leightonstone hundred of Huntingdonshire. There is pre-Domesday Survey evidence for Stow Longa. The village/parish name and relationship with other parishes and manors in the immediate area suggest that a large pre-conquest estate may have been centred on Stow Longa, before it was transferred in 991 to Spaldwick (Taylor 1989, 74). This estate had belonged to Brithnoth, Ealdorman of Essex who died at the Battle of Maldon in 991 and he left two estates to the Abbey of Ely Somersham and



Spaldwick (Hart 1966, no. 25). Stow Longa was the mother church of this estate which consisted of Stow Longa, Spaldwick, Easton, Little Catworth, Barham and Upthorpe, so forming a compact block of land on either side of the Ellington Brook (Taylor 1989, 72). In 1109 the Soke of Spaldwick estate including at least part of Stow Longa parish was transferred from Ely to the Bishopric of Lincoln as part of the compensation given to the Bishops when the new diocese of Ely was created.

- 1.3.9 At some point, Stow Longa village was divided into two parishes. The eastern part in which the church and village now stands was called Estou, but was also known as Long Stow or Never Stow. It was within the soke of Spaldwick for a period but is now within the parish of Stow Longa. The western part is recorded as being in the parish of Kimbolton in all surviving documents, being a parcel of the manor of Kimbolton (Page *et al* 1974, 101). This part of the village (now gone) was called Overstow or Upper Stow. Upper Stow is recorded on two 16th century maps. The earlier map shows "Upper Stow" and the immediate closes around it, whereas the 1591 map (HRO SM19/126 and HRO PM3/6B) shows a larger area that includes the open fields. The development area is located just within the southern boundaries of the 1591 map. The extent of the open fields, the routeways shown on the 1591 map and the development area are shown overlaying the modern map (Fig. 2).
- 1.3.10 The present anomaly of Stow Longa village being within two parishes (Kimbolton and Stow Longa itself) was probably the result of post-conquest re-organisation, either as William de Warrene expanded the honour of Kimbolton, or in 1109 when the Spaldwick estate was transferred from Ely to Lincoln. It is unlikely to have occurred as early as 991 when Stow Longa and adjacent centres including Spaldwick were given *en bloc* to Ely since Stow was at that time almost certainly the primary centre of these estates. The hiving off of Upper Stow should be seen as part of Stow Longa's decline in importance, in contrast to the rise of Kimbolton on one side and Spaldwick on the other. It should perhaps be noted that the surviving pre-1591 and the 1591 Bigrams maps record land at Upper Stow at a point when it had probably been part of Kimbolton parish for over 400 years. This seems to imply that even in the post-medieval period, this area was still being treated as a "separate" entity and important in its own right.
- 1.3.11 In 1591 the development area lay within two fields, *Liamore* to the east and possibly *Nether Bi...ls* (indistinct) elsewhere. Ridge and furrow cultivation on air photographs of the development and surrounding area (Fig. 6; Atkins and Palmer 2007, appendix 2, fig. 1) shows the different alignments followed in the two fields.
- 1.3.12 The 1835 one-inch Ordnance Survey map (surveyed in 1808-1817 and published 1835; not reproduced here) shows the high hill ridge within which the development site lies as Kimbolton Hill, but no field boundaries, stream or structures are illustrated within this area.
- 1.3.13 The 1887 1st Edition Ordnance Survey map (Fig. 3) shows the development site was within an area of several fields but no structures were within it. The map is reasonably accurate although there is a *c*.10m discrepancy as Trench 14 found a modern field boundary ditch which was recorded on the map as being just to the west.
- 1.3.14 The development area was taken over in 1941 to become part of Kimbolton Airfield (Fig. 6). Parts of the proposed access track and one of the proposed wind turbines are located on former runways.
- 1.3.15 In recent times the area has reverted back to arable farming with most of the Airfield features removed.



## 1.4 Acknowledgements

- 1.4.1 The author would like to thank Broadview Energy Limited who commissioned and funded the work. Thanks go to CgMs who managed the project on behalf of the client and ensured its smooth running especially Rob Bourn. Andy Thomas of Cambridgeshire County Council monitored the work.
- 1.4.2 I am grateful for specialist analysis from Pete Boardman, Steve Critchley, Chris Faine, Carole Fletcher, Rachel Fosberry and Steve Wadeson. Steve Critchley also kindly metal detected the site. Louise Bush and Rachel Clarke surveyed in the evaluation trenches. The project was managed by Aileen Connor who also edited this report. Rob Atkins directed the evaluation with Jon House supervising and Zoe Uí Choileáin, Peter Lovet and Fiona Keith-Lucas assisting.



2 AIMS AND METHODOLOGY

## 2.1 Aims

- 2.1.1 The objective of this 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.
- 2.1.2 The Brief and WSI (Thomas 2009; Atkins and Connor 2009) required that the evaluation should seek :
  - \* To determine or confirm the general nature of any remains present.
  - \* To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence.
  - \* To determine or confirm the approximate extent of any remains.
  - \* To determine the condition and state of preservation of any remains.
  - \* To determine the degree of complexity of the horizontal and/or vertical stratigraphy present.
  - \* To determine or confirm the likely range, quality and quantity of any artefactual evidence present.
  - \* To determine the potential of the site to provide palaeoenvironmental and/or economic evidence and the forms in which such evidence may be present.

## 2.2 Methodology

- 2.2.1 The methodology for the evaluation followed the brief and WSI for the site (Thomas 2009 and Atkins and Connor 2009). There were minor location changes to five of the archaeological trenches (Trenches 2, 3, 4, 13 and 14) to accommodate the current agricultural regime and this in four of the cases resulted in the trenches being moved by a few metres (Fig. 1), and in one case a slight reduction in length (Trench 13).
- 2.2.2 The mechanical excavation was carried out under constant archaeological supervision using a wheeled 360°-type excavator fitted with a 2m wide toothless ditching bucket. The western end of Trench 1 had to be stepped due to a deep feature (Airfield related) surviving as an earthwork. Two deep features in trench 1, too deep to hand excavated were revealed by machine during backfilling.
- 2.2.3 The site survey was carried out using a Leica GPS 1200 and Leica Smartnet location software.
- 2.2.4 Spoil, exposed surfaces and features were scanned with a metal detector. All metaldetected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.2.5 During the evaluation, adverse weather conditions (snow and frozen ground) delayed work on the evaluation and work was suspended on Friday 18th December for more than a week. 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, digital and monochrome photographs were taken of all relevant features and deposits.



- 2.2.6 Five environmental samples, all 20 litres in size, were taken from the fills of ditches and pits. These samples were taken to investigate the quality of preservation of charred remains, small animal bones, land molluscs and macro-fossils.
- 2.2.7 The site condition was affected by the heavy snow falls which did not melt for over a week. The site did not have water-logged deposits although heavy clay natural sub-soil did cause water to collect within excavated sections and along the base of some of the trenches.



## 3 RESULTS

## 3.1 Introduction

3.1.1 From 14th December 2009 Oxford Archaeology East excavated 15 evaluation trenches (collectively 600m long) within the proposed Bicton Windfarm site (Fig. 1; Table 1 and Appendix 1). Four trenches contained archaeological remains, these are described in full below whereas the remainder of the trenches are briefly described in Table 1.

Tr	Description of Archaeology	Topsoil/ Subsoil
1	?IA and Roman - settlement features: cobbled surface, five to six ditches, two pits, and other features. Modern (WW11)- Sealing the IA/Roman features in the western half of the trench was a raised earth bank up to 0.8m high. Large fragments of limestone blocks and some concrete relating to WW11 period also present.	T 0.30-0.40m S-West side only 0.10m
2	Medieval/post-medieval - furrows (north-west to south-east)	T 0.25, S 0.10
3	Medieval/post-medieval furrows found (north-west to south-east)	T 0.30, S 0.10
4	Medieval/post-medieval furrows found (north-west to south-east)	T 0.30, S 0.10
5	Roman - one ditch and medieval/post-medieval furrows (ran north-west to south-east)	T 0.35, S -
6	Three possible Roman features (no dating evidence) comprising two ditches and a pit. Both ditches ran into Trench 7. Medieval/post-medieval furrows found (north-east to south-west) and a WWII brick manhole and a related WWII drain.	T 0.35, S -
7	Four possible ?Roman features (no dating evidence) comprising two ditches and two possible post-holes. Medieval/post-medieval furrows found (north-west to south-east in western part of trench and north-east to south-west in eastern side). WWII drain ran to manhole in Trench 6.	T 0.35, S -
8	Medieval/post-medieval furrows (north-east to south-west) Probable treethrow	T 0.30, S -
9	Medieval/post-medieval furrows (north-east to south-west)	T 0.30, S -
10	Medieval/post-medieval furrows (north-east to south-west)	T 0.30, S -
11	Medieval/post-medieval furrows (north-west to south-east)	T 0.35, S-
12	Medieval/post-medieval furrows (north-west to south-east) Natural -? treethrow	T 0.35, S-
13	Medieval/post-medieval furrows found (north-west to south-east)	T 0.30, S-
14	Medieval/post-medieval furrows (north-west to south-east) and post- medieval/modern field boundary	T 0.35, S-
15	Medieval/post-medieval furrows (north-west to south-east)	T 0.35, S-

Table 1: Trenches within the development area

## 3.2 Trench 1

- 3.2.1 Trench 1 was 52.8m long, it ran north-east to south-west (Fig. 4) and was targeted to test features identified as cropmarks (CHER 10039; Figs. 2 and 6). One east to west aligned ditch identified by cropmarks was recorded in the trench.
- 3.2.2 A mound of earth was found in the south-western half of the trench which had been used as a firing target for 50 cal (0.5") bullets when the site was given over as a World



War II airfield. This exactly correlates with the deeper soil layer recorded in the cropmark survey (Fig. 6). The farmer had attempted to level this area but had found large limestone worked blocks and some concrete preventing total levelling. The archaeology sealed below this mound was assessed by two test pits in which Roman features/layers were present.

- 3.2.3 In the north-eastern corner of the trench there were four features (**105**, **108**, **110** and **113**). The earliest was a ?sub-circular feature (**110**), more than 3.5m in length by more than 1.15m and 0.16m deep. It was filled with a dark brownish grey clay silt (109). Four pottery sherds including one dating from the 2nd century AD were found. Cutting this feature on its southern side were parallel ditches **105** and **108** which ran north to south (Fig. 4, S.100). Ditch **108** was only partly within the trench so its full profile was unknown. It was more than 0.97m wide and 0.65m deep with a moderate to steep, stepped north-eastern side and a flattish base. The lower backfill deposit (107) was a 0.4m thick light greyish brown sandy clay. It contained part of an Early Roman flat topped quern which had been well used. It was sealed by a dark blue grey sandy clay in which five sherds of Early Roman pottery were found.
- 3.2.4 Ditches **105** and **113** were aligned at right-angles to each other and may be part of the same field system. Ditch **113** terminated adjacent to **105** and probably respected it. Ditches **105** and **113** were of a similar size, 0.71m and 0.68m wide and 0.31m and 0.30m deep respectively. Both ditches had moderately steep sides and a concave base. They each contained two fills that were slightly different from one another which may suggest they were not infilled with the same material after disuse, or were perhaps backfilled at different times. The two fills of **105** were paler being mid yellow brown sandy clay with some charcoal flecks in the upper deposit (103) whereas the lower deposit of **113** was a pale orangey/greyish brown which was sealed by a mid brownish grey clayey silt. Finds were only present in the upper fill of both ditches and comprised very small quantities of Late Iron Age and Early Roman pottery.
- 3.2.5 Four metres to the south-west, there was a moderate sized ditch (138) which ran east to west, c.3m wide and 0.70m deep with a gentle to moderately sloping southern side and a gently concave base. The lower fill (137) was a mid brown silty clay which contained moderate quantities of pottery and bone. The pottery dated to the late pre-Roman Iron Age (LPRIA) and Early Roman periods. This lower layer was overlaid by a dark brown silty clay with a few small stones (136). Moderate quantities of artefacts were also found within it. The soil seems to have originated from several different sources or a single disturbed source as the twelve pottery sherds ranged from hand made Iron Age into Early Roman. The animal bone recovered included a horse molar (Faine, Appendix C.1). A soil sample (3) taken from this deposit was barren of charred grains. Sealing ditch 138 on its south-eastern side was a cobbled surface (118) which was at least 1.5m wide and 0.1m thick and may have run roughly north to south. The layer comprised cobbles c.50% and c.50% a dark brown silty clay. The single course of fairly large, sub-rounded cobbles would presumably have been stream/river derived. Three small pottery sherds included a middle 1st century to 2nd century AD fragment.
- 3.2.6 Cutting ditch **138** on its north-western side were two intercutting pits **128** and **125**. Pit **128** was undated but was the earliest. It was probably sub-circular in shape (1.2m long and more than 0.6m wide and 0.64m deep) with steep sides. Its lower fill (127) was a mid brown sandy clay sealed by a dark grey brown silty clay. Pit **125** was far larger, (2.96m in length, more than 2m wide and 0.82m deep) and also probably sub-circular. (Fig. 4, S.103). Pit **125** had moderate to steep sides and a flattish base. Both fills (123 and 124) may have been deposited quickly from relatively undisturbed source(s) as the



pottery recovered (57 sherds) had a large average sherd weight of *c*.20g (Wadeson, Appendix B.4). The primary fill (124) appears to have been thrown back into the pit as a single event from all sides. It was a mid to dark grey brown silty clay containing cobbles, possibly derived from the cobbled surface (118). The large quantity of pottery recovered (47 sherds weighing 1.481kg) dates the middle of the 1st century AD. It may have been a primary domestic rubbish deposit as many of the sherds were large and unabraded although there was only a small quantity of bone, mainly cattle present. The upper fill (123) was 0.36m thick very dark grey brown silty clay with a few small stones. The ten pottery sherds recovered are middle 1st century AD in date except for a 2nd century mortaria sherd found during machining across the top of the feature and this may have come from the subsoil. A soil sample (1) from this deposit produced some cereals, chaff and weed seeds which indicate nearby crop processing (Fosberry Appendix C.2).

- Four metres to the south-west, there was a large ditch (135) which may date to the 3.2.7 Middle or Late Iron Age. It ran north-west to south-east, was 2.72m wide and 1.2m deep, with a steep north-eastern side and moderately steep south-western side (Fig. 4, S.107). It contained five fills (130-134), the earliest (134) may have been a redeposited natural layer 0.52m thick. It comprised a sterile light orange brown silty clay with very few stones. Above this large deposit on the south-western side there was a small burnt secondary deposit (133), possibly from a hearth or oven which measured 0.6m by 0.5m and 0.2m thick. It comprised a very dark brown to black clay silt with very frequent charcoal flecks. A sample (5) from this deposit contained small animal bones but no charred grain (Fosberry, Appendix C.2). Fills 133 and 134 were sealed by layer 132, more than 0.44m thick. The layer was tipped in from both the north-east and southwest. It was a mid brown to mid grey brown clay silt with frequent small stones comprising c.10% of the total deposit but only contained one very small (2g) pottery sherd which was possibly Roman. This layer in turn was sealed by a mid grey brown clay silt (131) with few inclusions other than ten Middle to Later Iron Age pottery sherds (152g) including part of a globular jar (Wadeson, Appendix B.4). The upper fill (130) was a sterile mid brown silty clay. The whole ditch was sealed by a (0.6m thick) mound of earth, concrete and stone (129) which was constructed when it was being used as an airfield during World War 2.
- 3.2.8 Twelve metres to the south-west of ditch **135**, a sondage was hand excavated through the archaeological deposits. The earliest layer (142) was a fairly sterile, 0.58m thick, mid to dark greyish brown silty clay containing a single dog radius (Faine, Appendix C.1) but no dating evidence. Sealing it was a very dark grey brown clayey silt (141). from which two mid 1st century AD pottery sherds were recovered. A sample (4) produced a moderate quantity of cereal grains, chaff and weed seeds suggesting crop processing was taking place nearby (Fosberry, Appendix C.2). This deposit was sealed by a buried topsoil (140) sealing which was a mound of earth concrete and stone (129) deposited during World War 2.
- 3.2.9 Ten metres to the south-west, and at the highest point of the earth concrete and stone mound (120), the trench was widened by machine to allow it to be stepped. Within this stepped area, a *c*.1m<sup>2</sup> sondage was hand dug to reveal a very shallow undated ditch (**117**) which ran north-west to south east, 0.4m wide and 0.12m deep. It was filled with a dark grey brown clay silt (116). This feature was sealed by a 0.42m thick layer (115) of dark greyish brown clayey silt, possibly a buried topsoil or the base of mound 129. A shotgun cartridge and brick was found in this deposit. This layer was sealed by a light yellowish brown clayey sandy silt (114), 0.54m thick, with frequent large sandstone blocks. There were several 50mm gun cartridges in this deposit.



## 3.3 Trench 5

- 3.3.1 Trench 5 was 20m long and ran north-east to south west (Fig. 5). A single Roman ditch (**120**) and two ?medieval furrows were found within the trench. The Roman ditch (**120**) ran north-west to south-east and had a "V" shaped profile. It was 0.90m wide and 0.45m deep with moderately steep sides and a concave base (Fig. 5, S.102). It was filled by a single deposit (119) which was a mid grey brown silty clay. Two pottery sherds dating from the 1st to 2nd century AD were recovered. A sample (2) produced only a few weed seeds (Fosberry, Appendix C.2).
- 3.3.2 The two ?Medieval furrows ran north-west to south-east. One of the furrows was sampled (**122**) and was 2.25m wide and 0.25m deep with gently sloping sides and a slightly concave base. It was filled with middle orange brown silty clay.

## 3.4 Trench 6

3.4.1 Trench 6 ran north to south for 51.2m (Fig. 5). It contained two probable Roman ditches and a pit as well as north-east to south-west orientated furrows and a modern brick manhole and drain. The two possible Roman ditches continued into Trench 7 where they were excavated (**151** and **155**). Pit **149** was circular, 1.6m in diameter and 0.55m deep with moderately steep sides and a flattish base (Fig. 5, S.108). It was filled with a fairly sterile light to medium brown clay silt with a few animal bone fragments and an iron object (probably a nail).

#### 3.5 Trench 7

- 3.5.1 Trench 7 was 52.6m long and ran east to west (Fig. 6). It contained two undated ditches (**151** and **155**) and two undated post holes (**147** and **153**) as well as medieval/post-medieval furrows and a drain (**145**) leading to the brick culvert observed in Trench 6.
- 3.5.2 Ditch **151** was aligned north-east to south-west, it was 0.95m wide and 0.24m deep with moderately steep sides and a concave base. The ditch was filled with a sterile medium grey brown clay silt with very few inclusions. Ditch **155** ran north-west to south-east, was 0.90m wide and 0.55m deep with steep sides and a flattish base (Fig. 6, S.109). It was filled with a single sterile deposit comprising a medium grey brown clay silt. The ditches may be Roman based on their alignment.

#### 3.6 Finds Summary

3.6.1 The majority of artefacts were found in Trench 1. A total of 122 sherds (2.425kg) of pottery ranging from the Mid to Late Iron Age to the Mid Roman periods was recovered. The pottery comprised mainly locally produced utilitarian wares. The majority of the finds were probably redeposited from middens, although the finds within pit **125** may be a primary deposit. Metalwork was extremely limited (despite extensive use of a metal detector) and comprised only three iron objects, all probably nails. Other finds include two pieces of slag, one possibly from the lining of a forge, a quern fragment and a small quantity of fired clay and/or daub.



#### 3.7 Environmental Summary

- 3.7.1 A total of 2.4kg of animal bone was recovered including the butchered bones of cattle and sheep/goat as well as evidence for horse and dog. The assemblage is not large enough to merit analysis.
- 3.7.2 Five samples were taken from ditches and a pit. Small to moderate quantities of seeds were found in three of the samples. The combination of cereal grains along with chaff elements and weed seeds indicate that crop processing took place nearby, and it is likely that a subsistence economy was being practised. The assemblage is too small, however, to provide more detailed information. The weed seeds indicate a range of habitats including rough pasture and arable which might tentatively suggest a mixed farming economy. The potential for recovery of environmental remains from this site is variable, samples from ditches were generally poor, however a sample from a pit produced a moderate assemblage and suggests there may be potential for this type of feature.



4 DISCUSSION AND CONCLUSIONS

## 4.1 Iron Age to Roman settlement

- 4.1.1 Features relating to a ?Middle or Late Iron Age into Roman farmstead (Trench 1) and its outlying fields to the north-east were found (Trenches 5-7). The evaluation uncovered moderate to dense remains comprising a large Middle or Late Iron Age ditch (2.7m wide and up to 1.2m deep) as well as several smaller Belgic and Roman ditches, several pits and a cobbled surface which collectively represented probably four phases of use ending in the 2nd century AD. The area of outlying fields to the north-east of the main settlement stretched over at least 150m and they comprised sparse ?Roman features within Trenches 5-7 (although only one of the ditches was dated by artefacts).
- 4.1.2 Moderate quantities of artefacts (pottery and animal bone) were recovered including some unabraded pottery from one pit (**125**) in particular. Secondary deposits of burnt material, and a piece of hearth lining with slag attached imply some small scale industrial activity. Locally produced utilitarian vessels with little evidence for imports were found in features. There was also no copper alloy metal work recovered from either hand digging or metal detecting on site. Environmental remains show that crop processing was taking place.
- 4.1.3 Middle to Late Iron Age Ditch **135**, may have been a continuation of a large north to south ditch observed continuing as a cropmark to the south for *c*.75m. This cropmark complex (10039) may be evidence for a farmstead. Its proximity to Filman Waye (an historic trackway), which may date to this period (see 1.3.2 to 1.3.5 above; Fig. 2) may be significant, particularly when considered in conjunction with other nearby cropmark sites (Fig. 2; 10036 and 10810). Filman Waye may have served to connect these small farms to larger settlements.
- 4.1.4 It is increasingly likely that routeways and possibly even the placing of settlements along this ridge (and indeed elsewhere in Cambridgeshire) were part, at least in outline, of an organised and loosely planned system (Oosthuizen 2006 and Atkins forthcoming). Cropmarks and archaeological work of the area around the windfarm (Fig. 2) show four separate farmsteads, all a few hundred metres apart, and appear to be of a similar size. It is tempting to assume that the rest of the ridgeway comprised similar farmsteads. The projected concentration is comparable to the eastern half of Ely where Iron Age and Roman settlements are now known to occur at intervals of between 500m and 1.5km (Evans *et al* 2007, 74).
- 4.1.5 Although there was limited excavation, the artefacts found in the evaluation were very similar to the Roman farmstead previously evaluated *c*.400-600m to the west (CHER18231, Atkins 2009). Tentatively, the evidence may imply that the farms along this ridge were operating mixed farming subsistence economy.
- 4.1.6 The evaluation found that Iron Age/Roman features survived in good condition, generally sealed below 0.3m of topsoil, but at a greater depth (0.6m) where a mound had been constructed during the second world war. The survival of a cobbled surface (Trench 1) and two post holes (Trench 7) suggests that Iron Age/Roman buildings, trackways and other relatively shallow features have survived. The evaluation has shown that there has been some truncation of the former IA/Roman farmstead by medieval/post-medieval ploughing but while the furrows will have caused a significant impact to shallow features, the WWII airfield has apparently had little impact on earlier remains. The medieval/post-medieval furrows are present across the development area, around seven to eight metres apart, cutting into the natural subsoil up to c.0.25m



deep. Sparse WWII remains from the former airfield have been found cutting natural subsoil and earlier features but these consisted of a single brick manhole and related drain in Trenches 6 and 7. Some of the trenches were excavated through areas where former WWII concrete runways had been located (e.g. Trenches 10, and 11), but these had been built up above the natural subsoil and furrows have survived within these trenches. Within Trench 1, a WWII 50mm practice range was constructed over Roman features, indeed the former pre WWII topsoil seems to have survived, in places, below WWII features.

## 4.2 Significance

4.2.1 The Iron Age/Roman farmstead and related field system survives in reasonable condition and should be viewed as of local to regional importance.

#### 4.3 **Recommendations**

4.3.1 Recommendations for any future work based upon this report will be made by the County Archaeology Office of Cambridgeshire County Council.



# APPENDIX A. CONTEXT LIST

Context	Cut	Trench	Cate gory	Feature Type	Function	Length (m)	Width (m)	Depth (m)
100	-	All	natural					
101	-	All	topsoil					
102	-	All	subsoil					
103	105	1	fill	ditch	?boundary		0.7	0.31
104	105	1	fill	ditch	?boundary		0.65	0.09
105		1	cut	ditch	?boundary		0.7	0.31
106	108	1	fill	ditch			0.97 plus	0.3
107	108	1	fill	ditch			0.74	0.4
108		1	cut	ditch			0.97 plus	0.65
109	110	1	fill	?pit				0.16
110		1	cut	?pit		1.15 plus	3.5 plus	0.16
111	113	1	fill	ditch			0.68	0.22
112	113	1	fill	ditch			0.56	0.12
113		1	cut	ditch			0.68	0.3
114		1		layer	WWII mound			0.54
115		1		layer	WWII mound?			0.42
116	117	1	fill	ditch			0.42	0.12
117		1	cut	ditch			0.42	0.12
118		1		layer	cobbled surface		<i>c</i> .1.5	0.1
119	120	5	fill	ditch			0.9	0.45
120		5	cut	ditch			0.9	0.45
121	122	5	fill	furrow			2.25	0.25
122		5	cut	furrow			2.25	0.25
123	125	1	fill	pit		2.5	0.5	0.36
124	125	1	fill	pit		2.96	0.5	0.82
125		1	cut	pit		2.96	2m plus	0.82
126	128	1	fill	pit		1.2	0.6 plus	0.3
127	128	1	fill	pit		1.2	0.6 plus	0.32
128		1	cut	pit		1.2	0.6 plus	0.62
129		1		layer	WWII mound?			0.6



130	135	1	fill	ditch	boundary			0.36
131	135	1	fill	ditch	boundary		c.2	0.6
132	135	1	fill	ditch	boundary			more than 0.44
133	135	1	fill	ditch	boundary	?0.6	0.5	0.2
134	135	1	fill	ditch	boundary		0.66 plus	0.6
135		1	cut	ditch	boundary		2.72	1.2
136	138	1	fill	ditch				0.4
137	138	1	fill	ditch			c.3	0.3
138		1	cut	ditch			c.3	0.7
139		1		layer	WWII mound			0.2-0.4
140		1		layer	post med topsoil			0.4-0.5
141	143	1	fill	?				0.17-0.2
142	143	1	fill	?				0.58
143		1	cut	?				0.72
144	145	7	fill	drain	WWII			0.25 plus
145		7	cut	drain	WWII			0.25 plus
146	147	7	fill	post hole		0.5	0.5	0.12
147		7	cut	post hole		0.5	0.5	0.12
148	149	6	fill	pit			1.6	0.55
149		6	cut	pit			1.6	0.55
150	151	7	fill	ditch			0.95	0.24
151		7	cut	ditch			0.95	0.24
152	153	7	fill	post hole		0.75	0.5	0.25
153		7	cut	post hole		0.75	0.5	0.25
154	155	7	fill	ditch			0.9	0.55
155		7	cut	ditch			0.9	0.55
156	157	8	fill	tree throw				
157		8	cut	tree throw				



APPENDIX B. FINDS REPORTS

## **B.1 Metalwork**

By Carole Fletcher and Rob Atkins

#### Results

B.1.1 Three iron objects, all ?nails, were recovered from two features. In Trench 1, Roman pit 125 contained two ?nails (123; SFs 2 and 3). Only the shaft of SF2 survived (31mm long; 4mm diameter). SF 3 was a possible nail bent over at right angles, only the shaft survived (*c*.85mm long and 5mm diameter). Within Trench 6 undated pit 149 contained a single possible large nail. Its head is sub-rectangular 25mm by 12mm, the shaft is 90mm long; 5mm diameter.

## Recommendations

B.1.2 No further work is recommended on this very small collection of iron ?nails.

## B.2 Slag

By Pete Boardman

#### Results

B.2.1 Two pieces of slag (86g) were recovered from the evaluation. These comprise:

Context 123, pit **125**: weight 51g, dimensions 72mm x 51mm x 29mm

This small piece of material appears to be from the lining of a forge. It is made up of cinder, burnt clay and light slag. The layering of these materials is indicative of forge lining rather than smelting.

Context 132, ditch **135**: weight 35g and dimensions 49mm x 56mm x 30mm

This material appears to be tap slag, it is very light in weight with large voids formed during the cooling process. The make-up of the slag suggests Roman in date as it has a small iron (Fe) content, which is common where a refined smelting technique has been used.

#### Recommendations

B.2.2 No further work is recommended on these two slag pieces.



## B.3 Quern

By Carole Fletcher

#### Results

B.3.1 There was a single quern fragment found from context 107 (fill of ditch **108**). Width 9.5cm weight 1133g. It is made from a fine grained sandstone. It is a fragment of the upper stone of an Early Roman flat topped quern, a development of a LIA type. It is very worn showing it had been well used.

#### Recommendations

B.3.2 No further work is recommended on the quern.

## B.4 Pottery

By Stephen Wadeson

#### Introduction

- B.4.1 A total of 122 sherds, weighing 2.425kg of Iron Age, Late pre Roman Iron Age/Transitional (LPRIA/TRANS), Early Roman and Romano-British pottery were recovered during excavations at the site of the proposed Bicton Windfarm, Kimbolton, Huntingdonshire (KIM BWF 09). Pottery was recovered from four trenches, (1, 5, 6 & 7) with the majority of the assemblage recovered from pit **125**, Trench 1 (*c*.71% by weight). The remainder of the pottery was retrieved from various deposits across trenches 1.5, 6 and 7.
- B.4.2 The majority of the pottery is moderately abraded and has an average sherd weight of c.20g. The relatively high average sherd weight is due to the presence of largely unabraded sherds from pit **125**. Without the inclusion of the pottery from this feature the average sherd weight for the remaining assemblage is reduced to *c*.11g.
- B.4.3 With the exception of the material from pit **125**, the condition of the pottery indicates substantial levels of post-depositional disturbance possibly the result of middening and/or manuring as part of waste management during the Roman period (Percival and Lyons 2004).

Ceramic Period	Quantity	% Quantity	Weight (kg)	% Weight	MSW
Iron Age	15	12.3	0.204	8.4	13.6
LPRIA/Transitional	52	42.6	1.301	53.6	25.0
Roman	55	45.1	0.920	38.0	16.7
Total	122	100.0	2.425	100.0	

Table 3: Quantity and weight of pottery by ceramic period (MSW = Mean sherd weight)

#### Methodology

B.4.4 The assemblage was examined in accordance with the guidelines set down by the Study Group for Roman Pottery (Webster 1976; Darling 2004; Willis 2004). The total assemblage was studied and a preliminary catalogue was prepared. The sherds were examined using a magnifying lens (x10 magnification) and were divided into fabric



groups defined on the basis of inclusion types present. The fabric codes are descriptive and abbreviated by the main letters of the title (Sandy grey ware = SGW) vessel form was also recorded.

#### Quantification

B.4.5 All sherds have been counted, classified and weighed to the nearest whole gram. Decoration and abrasion were also noted and a spot date has been provided for each individual sherd and context.

#### The assemblage

#### Iron Age

- B.4.6 A total of fifteen sherds, weighing 0.204kg, of Iron Age pottery was recovered during excavations, predominantly mid to late Iron Age. The majority of the assemblage consists of unsourced, locally produced shell tempered wares. This includes eight sherds from a single plain rimmed globular jar recovered from ditch **135**.
- B.4.7 All fifteen sherds recovered are residual, deposited in later features due to post depositional processes in the Early Roman period and represent an earlier phase of settlement activity on or near the current site of excavation.

#### Late pre Roman Iron Age/Transitional

- B.4.8 Excavations recovered fifty-two sherds of Late Pre Roman Iron Age/Transitional pottery, weighing 1.301kg. *The* majority of the assemblage, *c*.91% (by weight) was recovered from pit **125**.
- B.4.9 Initially produced using Iron Age fabrics and technologies (hand made/bonfired pottery) the LPRIA/TRANS pottery was supplemented by wheel made/kiln fired Gaulish imports and locally made copies which can be distinguished from earlier Iron Age vessels by the adoption of more Romanised forms (such as the wide mouthed carinated jar). This material, produced using new technologies in the form of the fast potters wheel and the semi-permanent kiln became more widespread. Alongside shell tempered wares, these vessels were increasingly produced in grog tempered fabrics.
- B.4.10 Within the assemblage the majority of vessels, *c*.92% are grog tempered with a further *c*.5% of pottery produced in a finer sand tempered, handmade reduced ware. This distinctly transitional fabric is a darker, coarser (often thicker) predecessor of the more Romanised Sandy reduced ware, typical of the Early Roman period onwards. In addition only a single, abraded sherd of shell tempered pottery, used for a restricted number of vessel types such as storage jars was identified.

#### Early Roman/Romano British

- B.4.11 Fifty-five sherds weighing 0.920kg of Early Roman/Romano British pottery was identified within the assemblage. Most of the pottery (*c*.82%) consists of unsourced, locally produced utilitarian coarse wares manufactured between the mid 1st and 4th centuries AD.
- B.4.12 The majority of the pottery fabrics recovered are sandy grey wares (c.48%). The earliest of the grey wares can be referred to as 'proto' sandy grey wares (c.5%) due to the



variable consistency and colour of the fabrics produced at the time. This was the result of poor clay preparation and firing technology during the 1st and early 2nd century before the use of both the fast wheel and the semi-permanent kiln became widespread (Swan 1984).

- B.4.13 The Early Roman period was the first era in which fully Romanised Sandy grey wares (c.26%) were manufactured and these account for the majority of the grey wares recovered and include eight sherds (c.17%) from a wide mouthed jar.
- B.4.14 A further (*c*.30%) of the assemblage is made up of shell tempered wares. Due to the fragmentary condition of the pottery and the nature of shell tempered wares it can be difficult to differentiate between the various possible manufacturing centres producing shelly fabrics in the Roman period.
- B.4.15 The Lower Nene Valley was known to have been a production centre for shell-tempered storage jars (Perrin 1996, 119–20) between the late Iron Age and 3rd century AD. Early Roman shell tempered wares were known to have been manufactured at Bourne in Lincolnshire (Tomber and Dore 1998, 156) the Harrold kilns in Bedfordshire (Tomber and Dore 1998, 115) and other numerous unsourced local production sites which would have exploited the Jurassic shelly clay beds throughout the Roman period (Perrin 1996, 119).
- B.4.16 Forms and fabrics traditionally associated with specialist and fine wares are rare within the assemblage and include a single oxidised sherd (c.18%) from a Nene Valley mortaria (Tomber and Dore 1998, 119). In addition a small heavily abraded sherd of unsourced red fine ware was recovered, possibly a local copy of Samian or Oxfordshire wares such as those produced at the Obelisk kilns at Harston in South Cambridgeshire (2nd and 4th centuries).

#### Discussion

- B.4.17 This is a relatively small assemblage which contains pottery from several sequential periods including a small quantity of residual Iron Age pottery representing the earliest phase on the site. Although typical of prehistoric activity the assemblage is too small to suggest the nature of the occupation or of any activities undertaken.
- B.4.18 The Late pre Roman Iron Age/Transitional pottery present in the assemblage would suggest a continuation of settlement activity in the vicinity. Lyons and Percival have commented that LPRIA pottery is rarely found by itself and is frequently found with Later Iron Age and Roman material, confirming it is contemporary with both pottery types (Percival and Lyons 2004).
- B.4.19 The Romano-British assemblage is primarily early Roman (Mid 1st to mid 2nd century AD) and is typical of low status utilitarian domestic assemblages within this region (Evans 2003, 105).

#### Sampling Bias

B.4.20 Excavation was carried out by hand and selection made through standard sampling strategies on a feature by feature basis. There are not expected to be any inherent biases. Where bulk samples have been processed for environmental and artefactual remains, there has also been some recovery of pottery. These are a small quantity of abraded sherds which have been quantified, and added to the catalogue.

#### Acknowledgements

B.4.21 Special thanks to Carole Fletcher, OA East for her support and patience.



## B.5 Fired clay and/or daub

By Rob Atkins

#### Introduction and methodology

- B.5.1 There were six tiny undiagnostic fragments of fired clay and/or daub (54g) from five separate features. Due to the total lack of any form or markings it is uncertain what these fragments relate to.
- B.5.2 Context 123: two fragments (29g), one with sandy and the other shelly inclusions. Context 129: one sandy fragment (14g), context 133: one fragment (3g), context 136: one fragment (5g) and context 142: one fragment (3g).

#### Recommendations

B.5.3 No further work is recommended on this assemblage.



## APPENDIX C. ENVIRONMENTAL REPORTS

## C.1 Mammal Bone

By Chris Faine

#### Introduction

C.1.1 A total of 2.4 Kilogrammes of animal bone was recovered from the excavation at Bicton Wind Farm, consisting of 72 fragments, 20 of which were identifiable to species (27% of the total sample).

#### Results

C.1.2 Faunal material was recovered from a variety of contexts dating from the Iron Age to Romano-British periods. Table 4 shows the species distribution for the assemblage. Cattle remains are the most prevalent, consisting mainly of butchered lower limbs elements and portions of the axial skeleton from adult animals. Sheep/Goat remains are limited, consisting of butchered adult long bones and loose teeth. A dog radius and horse 1<sup>st</sup> molar were recovered from contexts 142 and 136 respectively. Unfortunately this is an extremely small assemblage that can tell us little about animal husbandry on the site. The domestic mammal remains most likely represent general settlements debris rather than for example primary butchery waste.

	NISP	NISP%	MNI	MNI%
Cattle (Bos)	14	70	7	53.8
Sheep/Goat				
(Ovis/Capra)	4	20	4	30.8
Horse (Equus caballus)	1	5	1	7.7
Dog (Canis familiaris)	1	5	1	7.7

 Table 4: Species distribution for the bone assemblage

#### Recommendations

C.1.3 The assemblage is very small and does not merit further study.

## C.2 Environmental samples

By Rachel Fosberry

#### Introduction and Methods

C.2.1 Five bulk samples were taken from features within the evaluated areas of the site in order to assess the quality of preservation of plant remains, bones and artefacts and their potential to provide useful data as part of further archaeological investigations.



- C.2.2 Ten litres of each sample were processed by tank flotation for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.3mm nylon mesh and the residue was washed through a 0.5mm sieve. Both flot and residue were allowed to air dry. The dried residue was passed through 5mm and 2mm sieves and a magnet was dragged through each resulting fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The flot was examined under a binocular microscope at x16 magnification and the presence of any plant remains or other artefacts are noted on Table 5.
- C.2.3 After an initial appraisal of the flots, a decision was made to process a further ten litres of Samples 1 and 4.

#### Quantification

C.2.4 For the purpose of this assessment, items such as seeds, cereal grains and small animal bones have been scanned and recorded qualitatively according to the following categories

# = 1-10, ## = 11-50, ### = 51+ specimens

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Sample No.		Context No.	Cut No.	Feature Type	Sample Size (L)		Flot Volume (ml)	Cereals	Chaff	Weed Seeds	Small Bones	Charcoal <2mm	Charcoal > 2mm	Small animal bones	Large animal bones	Pottery
	1	123	125	pit	20	LIA/ER dark fill	5	#	#	##	#	++	+	#	##	#
	2	119	120	ditch		fill of possible Roman pit	1	0	0	#	0	+	+	0	0	0
	3	136	138	ditch		Fill of ditch containing pot and bone		0	0	0	0	++	+	0	#	#
	4	141	143	unkno wn	10	Unknown feature, not well dated	15	##	##	#	0	+++	+	0	#	#
	5	133	135	ditch	20	very dark burnt material	1	0	0	0	##	++	+	0	#	0

#### Results

 Table 5: Results from environmental samples

#### Preservation

C.2.5 All of the samples contain plant remains preserved by carbonisation. Preservation is variable ranging from poor to good.

#### **Plant Remains**

#### Cereals

C.2.6 Charred cereal grains are present in two of the samples; Both Samples 1 and 4 (from pit fill 123 and fill 141) contain wheat (*Triticum* sp.) grains and chaff elements of glume



bases, spikelet bases and rachis fragments. Spelt (*T.spelta*) glume bases have been identified in both samples and emmer (*T.dicoccum*) glume bases are tentatively identified in Sample 4 as they are lacking the pronounced veins that are diagnostic of spelt glumes.

#### Weed seeds

- C.2.7 Samples 1 and 4 both contain moderate quantities of charred seeds including grass seeds (Poaceae), figleaved goosefoot (*Chenopodium ficifolium*), self-heal (*Prunella vulgaris*), cleavers (*Gallium* sp.), mallow (*Malva* sp.), dock (*Rumex* sp), figwort (*Scrophularia* sp.) and a cornflower-type (cf *Centaura* sp.)
- C.2.8 Sample 1, 4 and also Sample 2 (ditch fill 119) contain vetch (*Vicia* sp.) cotyledons and seeds.

#### Ecofacts and Artefacts

- C.2.9 Three of the samples contain occasional sherds of pottery.
- C.2.10 All of the samples except for Sample 2 contain animal bones and Samples 1 and 4 contain small bones of rodents and possibly a reptile.

#### Contamination

C.2.11 Modern roots were present in small quantities in all of the samples.

#### Discussion

- C.2.12 Cereal grains are present in two of the samples. Spelt wheat predominates and emmer what is possibly also present. The combination of the two types of wheat is not uncommon although Spelt wheat generally replaces emmer wheat during the Late Iron Age to early Roman period in this region.
- C.2.13 The presence of chaff elements indicates that crop processing took place on site. The combination of chaff, grain and weed seeds suggest a subsistence economy in which crops were grown locally for consumption rather than export although this interpretation should be treated with caution when based on such a small assemblage.
- C.2.14 The weed seeds in this assemblage represent plants that characteristically grow in a range of habitats including drier, calcareous soils (mallow), rough pasture (self-heal) and arable (cornflower, vetch, cleavers). Cleavers are associated with an autumn sown crop.

#### Further Work and Methods Statement

- C.2.15 The low densities of plant remains from the site are not considered to merit full analysis.
- C.2.16 If further excavation is planned, sampling should be undertaken as investigation on the nature of cereal waste and possible weed assemblages is likely to provide evidence fort utilisation of local plant resources, agricultural activity and economic evidence from this period.



## APPENDIX D. BIBLIOGRAPHY

Atkins, R., 2009 Roman and medieval settlement remains along the Stow Longa to Anglian Water pipeline OA East report No.990 (unpublished)

Atkins, R., Forthcoming Roman, Saxon and medieval settlement remains along the Stow Longa to Tilbrook (Huntingdonshire) Anglian Water Pipeline ?PCAS

Atkins, R., and Palmer, R., 2007 Stow Longa to Tilbrook (Huntingdonshire), Anglian Waterpipeline (Phase 2), CAMARC report No 964 (unpublished)

Atkins, R., and Connor, A., 2009 Written Scheme of Investigation Bicton Windfarm, Kimbolton Oxford Archaeology East report (unpublished)

Ballantyne, C.K., and Harris, C., 1994 *The Periglaciation of Great Britain* (Cambridge University Press)

British Geological Survey (BGS) 1974 Wellingborough England and Wales Sheet 186 Solid and Drift Geology 1:50000

Darling, M. J., 2004 'Guidelines for the archiving of Roman Pottery' *Journal of Roman Pottery Studies* Vol 11

Evans, C., Knight, M., and Webley, L., 2007 'Iron Age settlement and Romanisation on the Isle of Ely: the Hurst Lane Reservoir site', *Proc. Cambridge Antiq. Soc. 96*, 41-78

Evans, J., 2003 'The Pottery' in Hinman, M., *A Late Iron Age Farmstead and Romano-British Site at Haddon, Peterborough.* British Archaeological Report 358, 105-107

Hart, C.R., 1966 The Early Charters of Eastern England (Leicester University Press)

Oosthuizen, S., 2006 Landscapes Decoded The origins and development of Cambridgeshire's *medieval fields* (University of Hertfordshire press)

Page, W., Proby, G., and Inskip Ladds, S. (eds.)., 1974 *The Victoria History of the County of Huntingdonshire*, volume III (Folkestone and London: University of London)

Percival, S., and Lyons, A., 2004 An Archaeological Assessment of the Prehistoric and Roman Pottery from Bob's Wood, Hinchingbrooke, Cambridgeshire, Norfolk Archaeological Unit Specialist Report 3 (unpublished)

Perrin, J.R., 1996 'The Roman Pottery', in Mackreth, D., *Orton Hall Farm: A Roman and Early Saxon Farmstead*, E. Anglian Archaeol. 76, 114–204

Stace, C., 1997 New Flora of the British Isles second edition (Cambridge University Press)

Swan, V., 1984 The Pottery Kilns of Roman Britain (RCHM)1984Swan, V.,

Taylor, C.C., 1989 'Spaldwick' in Cambridgeshire Proc. Cambridge Antiq. Soc. LXXVIII, 71-5

Thomas, A., 2009 Brief for Archaeological Evaluation Bicton Windfarm, Kimbolton CAPCA report dated November 11th 2009 (unpublished)

Tomber, R. and Dore, J., 1998 *The National Roman Fabric reference collection, A Handbook* MoLAS Monograph 2

Webster, G.(ed.), 1976 *Romano-British coarse pottery: a student's guide* CBA Research Report No. 6

Willis, S., 2004 The Study Group For Roman Pottery Research Framework Document for the Study of Roman Pottery in Britain, 2003 Journal of Roman Pottery Studies Vol 11



#### Maps consulted

Stow Longa Upper Stow pre 1590 mapHRO SM19/126Stow Longa and Kimbolton Bigrams plan 1591HRO PM3/6B and HRO 2408Reprint of the first edition one-inch Ordnance<br/>Survey of England and Wales (1835)Sheet 53 Bedford and Northampton<br/>(old map sheet 52)Tilbrook and Stow Longa 1st Edition 1887<br/>Ordnance Survey mapSheet 53 Bedford and Northampton<br/>(old map sheet 52)



# APPENDIX E. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project De	tails										
OASIS Num	ber Ox	forda	r3-70197								
Project Nam	e An	Iron	Age to Ror	nan farmstead	at the site	e of the p	roposed Bio	cton Windf	arm, Kimbolton, Huntingdonshire		
Project Date	s (fieldwo	ork)	Start	14-12-2009			Finish	04-01-20	10		
Previous Wo	ork (by O	A Ea	st)	No			Future	Work U	nknown		
Project Refe	rence Co	odes	5								
Site Code	KIMBWF09	9			Plannir	ng App.	No.	N/A			
HER No.	ECB3304				Relate	d HER/	OASIS N	O. CHE	R 10039		
Type of Proje	ect/Tech	niqu	ies Usec	ł							
Prompt	Er	nviror	mental (ur	nspecified sche	edule)						
Development	Type Wi	ind Fa	arm								
Please sele	ect all te	echr	niques i	used:							
Aerial Photog	graphy - int	terpre	tation	Grab-Sar	mpling			Rem	note Operated Vehicle Survey		
Aerial Photog	graphy - ne	w		Gravity-C	Core			🗙 Sam	Sample Trenches		
Annotated S	ketch			Laser Scanning     Survey/Recording Of Fabri					vey/Recording Of Fabric/Structure		
Augering				Measure	d Survey	y X Targeted Trenches					
Dendrochron	nological Su	urvey		X Metal De	tectors	Test Pits					
Documentar	y Search			Phospha	te Survey	y Dopographic Survey					
Environment	al Sampling	g		Photogra	mmetric S	Survey Vibro-core					
Fieldwalking				Photogra	phic Surve	еу		Visu	al Inspection (Initial Site Visit)		
Geophysical	Survey			Rectified	Photogra	phy					
Monument 7	Types/Sig	gnif	icant Fir	nds & Their	Period	s					
List feature type together with the	•					•		•	A Object type Thesaurus		
Monument			Period			Object			Period		
Farmstead			Iron Age -	800 to 43		pottery	and bone		Early Prehistoric -500k to -4k		
Farmstead			Roman 43	3 to 410		pottery, stone, bone			Roman 43 to 410		
Furrows			Post Medi	eval 1540 to 1	901				Select period		
Project Lo	cation										
County	Cambridgeshire					Site Address (including postcode if possible)					
District	Huntingdonshire					Fields opposite Bicton Industrial estate Kimbolton Rd Kimbolton					
Parish	Kimbolton						gdonshire				
HER	Cambridge	eshire	)								
Study Area	c.40ha					National Grid Reference TL 100 704					



# **Project Originators**

Organisation	OA EAST	
Project Brief Originator	Andy Thomas, Cambridgeshire County Council	
Project Design Originator	Rob Atkins and Aileen Connor, OA East	
Project Manager	Aileen Connor	
Supervisor Rob Atkins		

## Project Archives

Physical Archive	Digital Archive	Paper Archive
Landbeach, CCC stores	OA East	Landbeach, CCC stores
KIMBWF09	KIMBWF09	KIMBWF09

### Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	X	$\mathbf{X}$	$\mathbf{X}$
Ceramics	X	$\mathbf{X}$	$\times$
Environmental	$\mathbf{X}$	$\mathbf{X}$	$\mathbf{X}$
Glass			
Human Bones			
Industrial	$\mathbf{X}$	$\mathbf{X}$	$\mathbf{X}$
Leather			
Metal	$\mathbf{X}$	$\times$	$\mathbf{X}$
Stratigraphic			
Survey			
Textiles			
Wood			
Worked Bone			
Worked Stone/Lithic	$\mathbf{X}$	$\mathbf{X}$	$\mathbf{X}$
None			
Other			

#### Notes:



Drawing Conventions							
Plans							
Limit of Excavation							
Deposit - Conjectured							
Natural Features							
Sondages/Machine Strip							
Intrusion/Truncation							
Illustrated Section	S.14						
Archaeological Deposit							
Excavated Slot							
Furrow							
Modern Deposit							
Cut Number	118						
Sections							
Limit of Excavation							
Cut							
Cut-Conjectured							
Deposit Horizon							
Deposit Horizon - Conjectured							
Intrusion/Truncation							
Top Surface/Top of Natural							
Break in Section/ Limit of Section Drawing							
Cut Number	118						
Deposit Number	117						
Ordnance Datum	18.45m OD						
Inclusions	G						

Convention Key



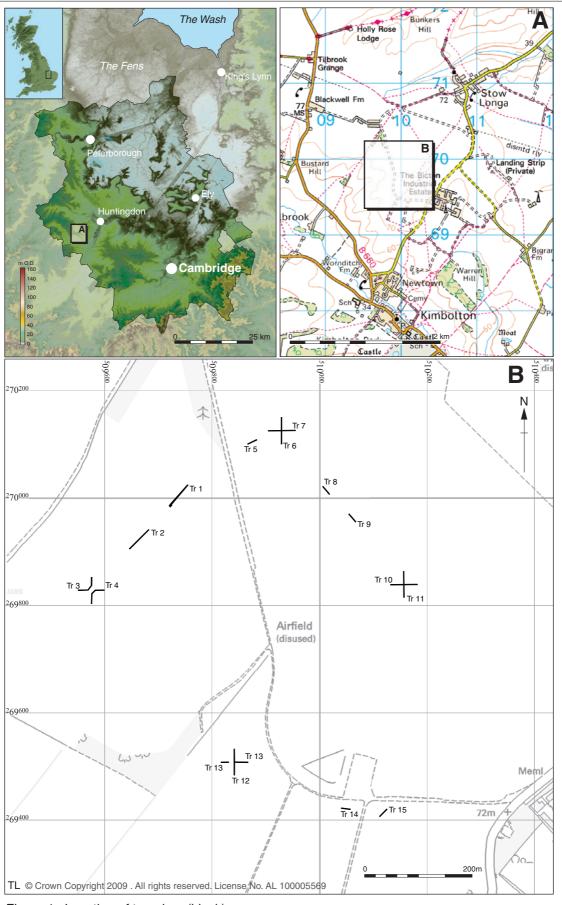
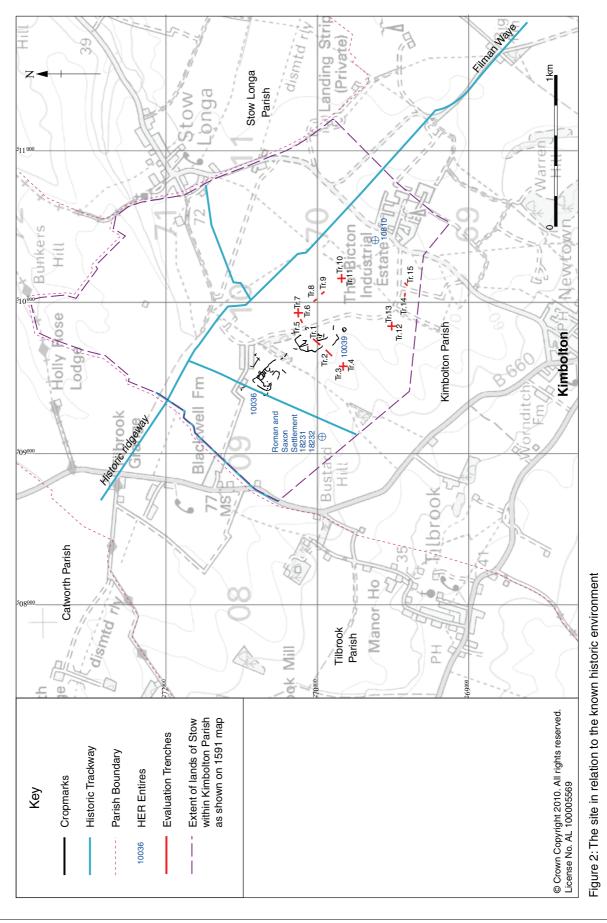
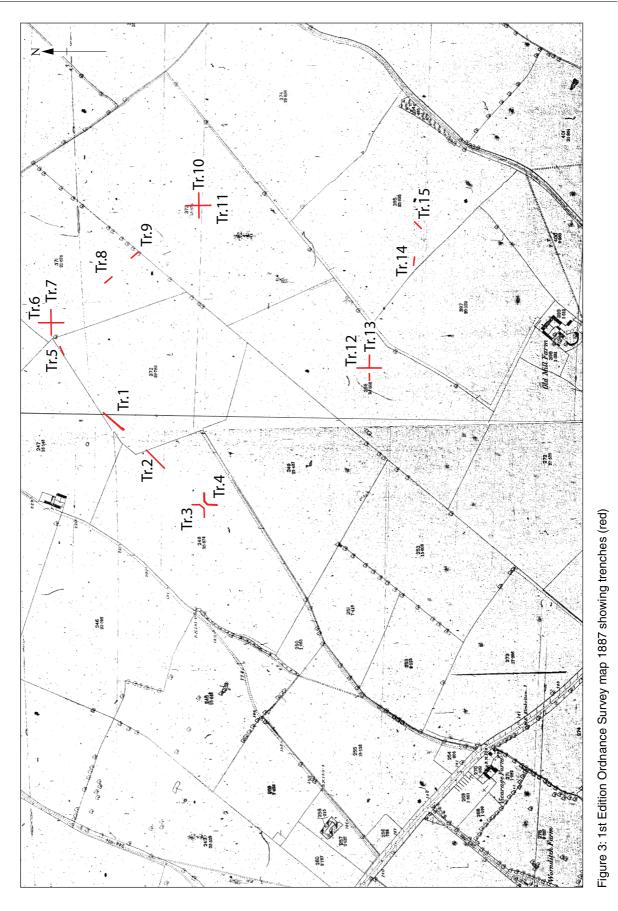


Figure 1: Location of trenches (black)

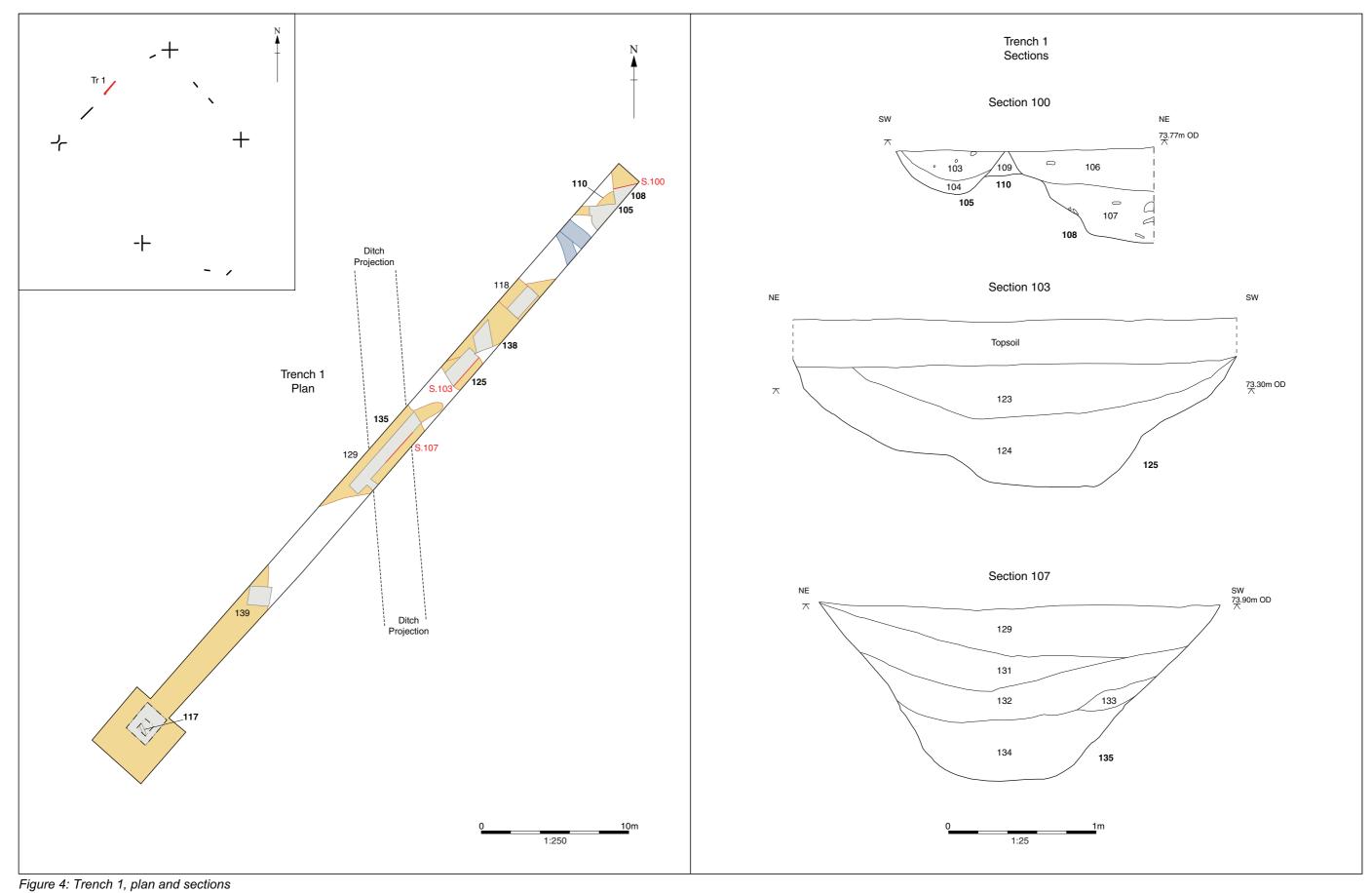








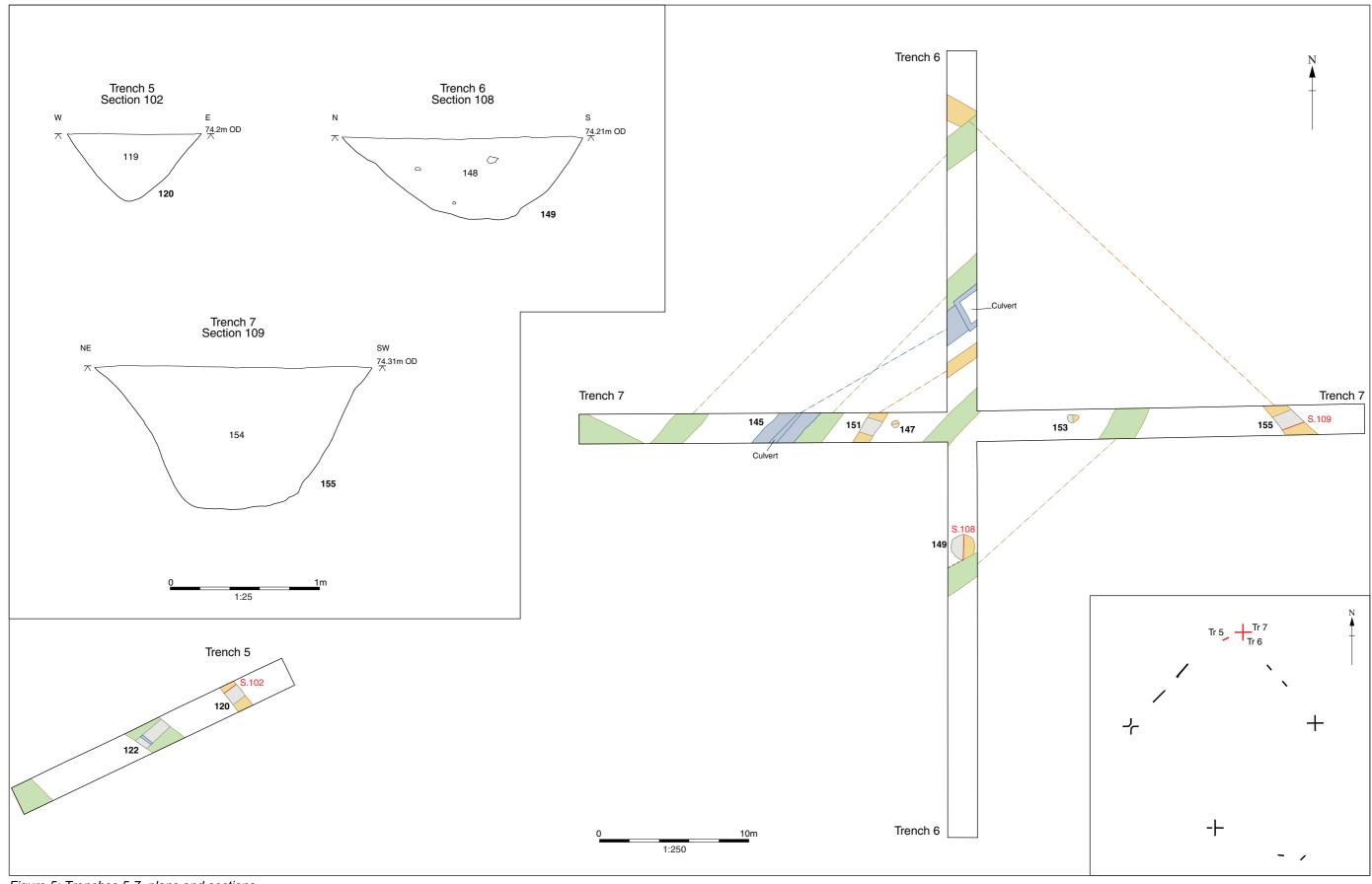


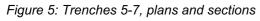


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Figure 6: Trenches 1-9 showing archaeological features and deposits (black) and cropmarks identified from aerial photography

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