

Archaeology Wales

Burton Wold Wind Farm, Kettering, Northamptonshire

Archaeological Watching Brief



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Report No. 1251

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Archaeology Wales

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Archaeological Watching Brief

Prepared for:

Wind Prospect Ltd, Sutton House, Dovenby Hall Estate,
Cockermouth, Cumbria, CA13 0PN

On behalf of:

BL Wind Ltd, 1 Kingsway, London WC2B 6AN

Edited by: Mark Houlston

Signed: *Mark Houlston*

Position: Managing Director

Date: 11/8/14

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Non-Technical Summary

This report results from work undertaken by Archaeology Wales Ltd at the request of Wind Prospect Group Ltd (on behalf of BL Wind Ltd). It draws upon the results of an archaeological watching brief carried out during a soil strip for foundations, working areas and access roads for wind turbines at Burton Wold Farm.

The results of the archaeological work significantly identified three linear features [116] [120] [122] and a small pit [118] at the site of Turbine 2. Ditch [120], which cuts Ditch [122], potentially represents a later phase of activity. These features are probably post-Roman. There is a high potential that this site extends a further 10m or more to the north and north-west of the area exposed during the soil strip.

Three shallow ditches [110] [112] [114] were also identified along the access road near Turbine 8. These features appear to be contemporary and are possibly post-medieval or modern drainage channels.

1. Introduction

1.1 Location and Scope of Work

- 1.1.1 Between November 2013 and March 2014 Archaeology Wales Ltd (AW) carried out an archaeological watching brief during a soil strip for eight of the nine turbine locations and associated access roads (Appendix 1; Figs.1&2). The excavations for Turbine 1 were not monitored as the ground had previously been disturbed in this area (quarrying limestone and ironstone in the nineteenth century).
- 1.1.2 The proposed scheme is at Burton Wold Farm, Kettering. The development represents the extension to the existing Burton Wold Wind Farm. The proposal has been submitted by First Renewable Developments Ltd, Tournament Court, Edgehill Drive, Warwick, CV34 6LG, acting as agents for BL Wind Ltd, 1 Kingsway, London WC2B 6AN. The principal contractor for the scheme is Winvic Construction Ltd, Brampton House, 19 Tenter Road, Moulton Park, Northampton, NN3 6PZ.
- 1.1.3 Archaeological work has been recommended for this scheme by Lesley-Ann Mather, County Archaeological Advisor of Northamptonshire County Council (NCC). The recommendations are based on the results of the Evaluation Report (Houliston, 2013) and a monitoring visit on 29th January 2013.
- 1.1.4 The local planning authority is Kettering Borough Council (KBC) and the planning application number is KET/2012/0556. The archaeological investigation is required in order to discharge a planning condition specified by KBC in relation to the proposed development.
- 1.1.5 The archaeological investigation has been carried out at the request of Wind Prospect Group Ltd, Sutton House, Dovenby Hall Estate, Cockermouth, Cumbria, CA13 0PN. A Written Scheme of Investigation (Appendix 4) for the archaeological work was drawn up by Mark Houliston (AW) at the request of Wind Prospect. This was subsequently approved by Lesley-Ann Mather (NCC).
- 1.1.6 The AW project number is 1013 and the site code is BWK/13/WB.

1.2 Topography

- 1.2.1 The application area is located within the parishes of Cranford and Burton Latimer. Both parishes were constituted as urban districts in 1923. The historic settlements of Cranford St John and Burton Latimer are located to the north and west of the scheme area, respectively. The topography of the development area is predominantly characterised by flat ploughed fields.
- 1.2.2 The development site is located at NGR 492200, 275900 (SP 9220 7590) and is between 75m and 90m above Ordnance Datum.

1.3 Mapped Geology

- 1.3.1 The regional geology as mapped by the British Geological Survey (1:50,000 scale) indicates that the bedrock geology across most of the site (apart from Turbine 1) is composed of mudstones of the Rutland Formation; mapped at surface in the vicinity of Turbine 7. The bedrock geology in the north-west part of the site consists of limestone and mudstone of the Wellingborough Limestone Member as well as ironstone of the Northampton Sand Formation; these deposits are encountered at surface in the vicinity of Turbine 1. There are superficial deposits of glacial till or boulder clay (Oadby Member and Bozeat Till) across most of the site, but these deposits are not mapped to the north-west part of the site (Turbines 1 & 7 and associated access roads).
- 1.3.2 The mapped geology indicates that boulder clay will be encountered in the first metre below surface at Turbines 2-6 & Turbines 8&9. Sandstone, siltstone or mudstone may be encountered at surface in the vicinity of Turbines 1 & 7.

1.4 Archaeological and Historical Background

- 1.4.1 A desk-based assessment of the site (Cambrian Archaeological Projects, 2007) was submitted on behalf of Kettering East Energy Limited as part of an Environmental Statement. This identified the potential for prehistoric and Roman activity within the application area for the first wind farm development at Burton Wold Farm. During a site visit undertaken as part of the 2007 assessment, fragments of knapped flint were retrieved within the development area. They were widely dispersed and abraded, probably as the result of centuries of continued ploughing. Linear cropmarks were also identified; these were interpreted as being potentially prehistoric in date.
- 1.4.2 In 2006 an archaeological investigation was undertaken by Cambrian Archaeological Projects (Edgeworth, 2006). This work relates to the first wind farm development. Trial trenching revealed an enclosure and a series of pits. These features were dated to the later Iron Age and early Roman period. Medieval plough marks were found in the same area.
- 1.4.3 Two phases of archaeological evaluation have been undertaken within the present application area (Houliston, 2013). This comprised a geophysical survey, trial trenching, field-walking and 'strip, map and sample' excavation. Three sherds of post-medieval pottery were recovered during fieldwalking in the vicinity of Turbine 6. The geophysical survey identified a possible curved feature in the same area. At the proposed location of Turbine 2, a v-shaped feature was identified during trial trenching.

2. Aims and Objectives

The watching brief was undertaken to:

- Allow, within the resources available, the preservation by record of archaeological deposits, the presence or nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works to the archaeological resource.
- Provide the opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief are not sufficient to investigate and record the archaeological remains to a satisfactory or proper standard.
- To establish and make available information about the archaeological resource existing on the site.

3. Methodology

3.1 Watching Brief

- 3.1.1 The excavations were undertaken using a 32 tonne tracked mechanical excavator (Hyundai 320 LC-7) with a toothless ditching bucket (Appendix 2; Plates 1, 2, 5, 15 & 16).
- 3.1.2 All work was undertaken in accordance with the IfA's Standards and Guidance for an Archaeological Watching Brief (Institute for Archaeologists, 2008; revised 2011) and current Health and Safety legislation.
- 3.1.3 All identified deposits were examined and recorded during the watching brief. The identified features were photographed using a high resolution digital camera. The on-site illustrations were drawn on drafting film using recognised conventions and scales (1:10, 1:20, 1:50 and 1:100, as appropriate).
- 3.1.4 Context numbers 101-149 were allocated during the fieldwork. These were ascribed to the soil deposits and archaeological features identified during the watching brief.
- 3.1.5 The fieldwork was undertaken by Adrian Hadley and Spencer Cooper. The project was managed by Mark Houliston.

3.2 Finds

- 3.2.1 No finds were retrieved from the deposits encountered during the watching brief.

3.3 Palaeo-environmental Samples

- 3.3.1 No deposits suitable for environmental sampling were encountered during the archaeological fieldwork.

4. Watching Brief Results

4.1 Soil Types and Ground Conditions

- 4.1.1 The ploughsoil (101) was largely uniform across the scheme site. This deposit comprised a loose dark orange-brown humic clay. The ploughsoil was recorded up to 0.45m deep across the development area.
- 4.1.2 The underlying clay subsoil is derived from weathered glacial till; a stiff mottled mid brown-orange clay with occasional chalk, sandstone and flint gravel. This layer (102) extended about 1.5m below surface. The underlying till (103) was recorded during excavations within the site compound as a very stiff mottled dark grey – dark orange clay. The latter deposit extended over 3.5m below ground surface (Appendix 2; Photos 3&4).
- 4.1.3 The ground conditions were generally good during the watching brief. However, there was an extended period of heavy rainfall during and subsequent to the soil strip for Turbine 2. The archaeological features identified in this area were consequently waterlogged for a number of weeks before these could be excavated (Appendix 2; Photos 10&11).

4.2 Turbine 2 (Foundations & Crane Pad)

General Comments

- 4.2.1 Two discrete features, a ditch [116] and a small pit [118], and a further two inter-cutting ditches [120] [122] were encountered within the soil strip area for Turbine 2 (Appendix 1; Fig.4). These features were identified along the north-west boundary of the soil strip area.
- 4.2.2 The features were encountered directly below 35-45cm of ploughsoil (101) and were cut into the natural, a mid brown-orange clay (102).
- 4.2.3 No additional archaeological features were identified in the vicinity of the trial trenching undertaken in February 2013. This indicates that the feature recorded during the evaluation phase represents a pit rather than a boundary ditch, field drain or part of an enclosure.

Ditch [116]

- 4.2.4 Ditch [116] measured 1.2m across and over 2.15m long (extending into the baulk). This linear feature was aligned WNW-ESE. The terminus was half-sectioned, which confirmed this ditch was originally hand excavated (Appendix 2; Photo 12). The end profile was recorded as convex at approximately 40 degrees. The northern side of the ditch was concave at 60 to 70 degrees, leading to a flat base. This feature was 54cm deep. The homogenous fill (117) comprised a soft grey-brown silty clay with occasional medium flint gravel. No finds or inclusions were identified during the excavation of the sample slot.

Pit [118]

- 4.2.5 Pit [118] was positioned to the south of Ditch [116]. This subcircular feature measured 50-60cm in diameter. The pit was half-sectioned (Appendix 2; Photo 13).

The recorded profile consisted of slightly concave sides, at 60-70 degrees, leading to a flat base. This feature was 26cm deep. The fill (119) consisted of a soft grey-brown silty clay with occasional fine to medium chalk and flint gravel. No finds or inclusions were identified from this fill.

Ditches [120] & [122]

- 4.2.6 Two further linear features [120] [122] were identified some 15m to the north-east of Ditch [116]. These ditches extended approximately 5m out from the baulk and jointly measured 2.2m to 2.4m wide. Both features [120] [122] were aligned WNW-ESE, similar to Ditch [116].
- 4.2.7 A one metre wide slot was excavated across these linear features to determine the stratigraphic relationship (Appendix 2; Photo 14). This confirmed that Ditch [120] truncated Ditch [122]. No finds or inclusions were identified during the excavation of the sample slot.
- 4.2.8 Ditch [120] measured 0.8m to 1m across and was 22cm deep. This linear feature had concave sides at 40 to 50 degrees leading to a flat base. The fill (121) consisted of soft mid brown silty clay with occasional flint gravel.
- 4.2.9 Ditch [122] was recorded as 1.4m wide. It is estimated this feature was 1.6m wide prior to truncation by Ditch [120]. Ditch [122] was 46cm deep. The sides were straight to concave or convex, at approximately 30 degrees, leading to a narrow u-shaped base. The homogenous fill (123) comprised a soft dark grey silty clay with occasional flint gravel. This deposit was similar to the fills from Ditch [116] and Pit [118].

4.3 Turbine 6 (Foundations & Crane Pad)

- 4.3.1 A number of possible features in the natural subsoil soil were noted during the soil strip. These were sample excavated but were determined to be variations in the glacial till deposits; no archaeological features were identified in this area.

4.4 Turbine 8 (Access Road)

General Comments

- 4.4.1 Three linear features [110] [112] [114] were identified during the soil strip along the access road 150m north of Turbine 8 (Appendix 1; Fig.3). These features were encountered directly below 30-35cm of ploughsoil (101) and were cut into the natural, a mid brown-orange clay (102).
- 4.4.2 Ditches [110], [112] & [114] were comparatively shallow, less than 10cm deep. Ditch [110] was aligned N-S. Ditches [112] [114] ran parallel to each other, aligned NNW-SSE, and set about 1.05m apart. The features all contained a similar homogenous fill (111) (113) (115); this comprised a stiff dark grey clay with occasional sub-angular to sub-rounded fine to medium flint gravel. No finds were identified during the excavation of the sample slots.

Ditch [110]

- 4.4.3 This feature was approximately 1m wide and over 3m long; this feature was truncated to the south and extended northwards to linear [112]. Ditches [110] and

[112] may be contemporary or part of the same feature; there was no evidence to suggest one truncated the other.

- 4.4.4 Ditch [110] was recorded as 5cm deep, with irregular to slightly concave sides at 5 to 20 degrees leading to a flat base (Appendix 2; Photo 7). The linear feature was aligned N-S, parallel to the existing field boundary. The homogenous fill (111) comprised a dark grey clay.

Ditch [112]

- 4.4.5 This feature measured 0.85-0.90m wide and over 5m long; this was truncated to the north-west and extended into the baulk to the south-east. Ditch [112] was recorded as 9cm deep, with straight to slightly concave sides at 10 to 30 degrees leading to a very shallow u-shaped base (Appendix 2; Photo 8). This ditch was aligned NNW-SSE. The fill (113) was similar to deposit (111).

Ditch [114]

- 4.4.6 This feature was some 0.7m wide and over 2.5m long; being truncated to the north-west and extending into the baulk to the south-east. Ditch [114] was recorded as 8cm deep, with straight to slightly concave sides at 60 to 70 degrees leading to a flat base (Appendix 2; Photo 9). This ditch was aligned NNW-SSE, parallel with Ditch [112]. The fill (115) was similar to deposits (111) and (113).

5. Conclusions

5.1 Discussion: Features Located at Turbine 2 (Foundations & Crane Pad)

- 5.1.1 The three linear features [116] [120] [122] identified at Turbine 2 were all aligned WNW-ESE. A small pit [118] was also identified to the south of Ditch [116]. The fill of Ditch [122] comprised a soft dark grey silty clay, similar to the fills from Ditch [116] and Pit [118]. This may suggest these features are contemporary.
- 5.1.2 The stratigraphic relationship of Ditches [120] and [122] was determined by excavation. This confirmed that Ditch [120] was a re-cut of Ditch [122]. The fill of the former ditch [120] (121), a brown silty clay, differs from the fills of Ditches [116] (117) and [122] (123) as well as Pit [118] (119). This indicates that the latter features potentially belong to an earlier phase of activity.
- 5.1.3 The features identified at Turbine 2 should be considered in relation to the late Iron Age or early Roman site previously identified at Burton Wold Farm (located at Turbine 7 of the first phase of the wind farm). The evaluation trenching at the latter site (Edgeworth, 2006) identified an outer enclosure, internal ditches and a series of pits. The boundary ditch was recorded as 1.5m deep, below 0.4m of plough-soil. This is clearly a much more substantial ditch than the linear features [116] [120] [122] discovered during the watching brief in February 2014 (these being 22-54cm deep). However, the most significant disparity is the lack of finds from the features at Turbine 2. The artefacts from the 2006 investigation comprised 151 sherds from 8 contexts; these included Roman grey ware and black-burnished ware, with some Samian ware present. The absence (or low density) of finds from the Turbine 2 site suggest these features are prehistoric or, more likely, post-date the Roman period.

5.1.4 No archaeological features were identified in the vicinity of the trial trenching previously undertaken in the soil strip area for Turbine 2. A feature was recorded in this area during the evaluation in January 2013; the v-shaped cut (context 6) was recorded as 0.35m deep. This feature contained two layers of grey-brown silty clay, with a moderate amount of carbon flecks noted in the upper fill. No finds were recovered. The results of the watching brief indicate this feature represents a pit rather than a boundary ditch or part of an enclosure.

5.2 Discussion: Features Located at Turbine 8 (Access Road)

5.2.1 The three linear features [110] [112] [114] identified near Turbine 8 were all of similar width and depth and the features all contained a fill of dark grey clay (111) (113) (115). These shallow features appear to be contemporary. They are possibly post-medieval or modern drainage channels as Ditch [110] was aligned N-S, and ran parallel with the existing field boundary. However, it should be noted that Ditches [112] and [114] were both aligned NNW-SSE, which does not respect the present field pattern.

5.2.2 It is possible that the straight edge on the west-south-west side of Ditch [114] could have been cut by machine rather than by hand. Whilst these features may be modern, no artefacts or inclusions were retrieved from the fills to support this hypothesis. If these are post-medieval or modern drains it is perhaps surprising that no comparable features were identified in other part of this field during the watching brief.

5.3 Assessment of Archaeological Potential

5.3.1 The methodology employed during the soil strip allowed the monitoring archaeologist to inspect all excavated areas prior to the formation of the access roads and the working areas required to assemble the turbines. There is high degree of certainty that all archaeological features were identified and recorded during the watching brief.

5.3.2 The results of the archaeological work are noteworthy in terms of the identification of a site at Turbine 2. Four archaeological features were exposed during the soil strip, including three ditches [116] [120] [122] that extended beyond the limit of excavation. The extent of these linear features is uncertain, although these were not encountered within the access road a further 20m to the north-west of Turbine 2. There is nonetheless a high potential that this site extends 10m or more to the north and north-west of the exposed features.

5.3.3 Overall the investigation has also provided negative evidence for significant prehistoric, Roman and medieval activity to the north-east of Burton Wold Farm. No remains of an earlier field pattern, in the form of ditches or boundaries, were found during the soil strip. In particular, the lack of stray finds from the plough-soil is strongly indicative of a low-level of medieval and earlier activity within the scheme area.

6. Acknowledgements

We are grateful for the assistance of provided by Mike Davis, Julie Wynne and Susan Beveridge of Wind Prospect Group Ltd and Fergie Taylor of First Renewable

Developments Ltd. We are also grateful for the logistical support provided by the principal contractor (Dan Barker and Matt Harrington of Winvic Construction Ltd) and the groundwork contractor (Pat and Seamus King of James King Ltd).

7. Bibliography and References

British Geological Survey (Geology of Britain Viewer):
<http://mapapps.bgs.ac.uk/geologyofbritain/> (Accessed 09/07/14)

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Edgeworth, M. 2006. *Excavation of a Romano-British Enclosure Complex at Burton Wold, Burton Latimer, Northamptonshire*. Cambrian Archaeological Projects, Report 460

Houliston 2013, *Burton Wold Farm, Kettering: Archaeological Evaluation*, Archaeology Wales, Report 110

Institute for Archaeologists. 2008, Revised 2011. *Standards and Guidance for an Archaeological Watching Brief*

Samian ware present. The absence (or low density) of finds from the Turbine 2 site suggest these features are prehistoric or, more likely, post-date the Roman period.

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5.2 Discussion: Features Located at Turbine 8 (Access Road)

- 5.2.1 The three linear features [110] [112] [114] identified near Turbine 8 were all of similar width and depth and the features all contained a fill of dark grey clay (111) (113) (115). These shallow features appear to be contemporary. They are possibly post-medieval or modern drainage channels as Ditch [110] was aligned N-S, and ran parallel with the existing field boundary. However, it should be noted that Ditches [112] and [114] were both aligned NNW-SSE, which does not respect the present field pattern.
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- 5.3.2 The results of the archaeological work are noteworthy in terms of the identification of a site at Turbine 2. Four archaeological features were exposed during the soil strip, including three ditches [116] [120] [122] that extended beyond the limit of excavation. The extent of these linear features is uncertain, although these were not encountered within the access road a further 20m to the north-west of Turbine 2. There is nonetheless a high potential that this site extends 10m or more to the north and north-west of the exposed features.
- 5.3.3 Overall the investigation has also provided negative evidence for significant prehistoric, Roman and medieval activity to the north-east of Burton Wold Farm. No remains of an earlier field pattern, in the form of ditches or boundaries, were found during the soil strip. In particular, the lack of stray finds from the plough-soil is strongly indicative of a low-level of medieval and earlier activity within the scheme area.

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Edgeworth, M. 2006. *Excavation of a Romano-British Enclosure Complex at Burton Wold, Burton Latimer, Northamptonshire*. Cambrian Archaeological Projects, Report 460

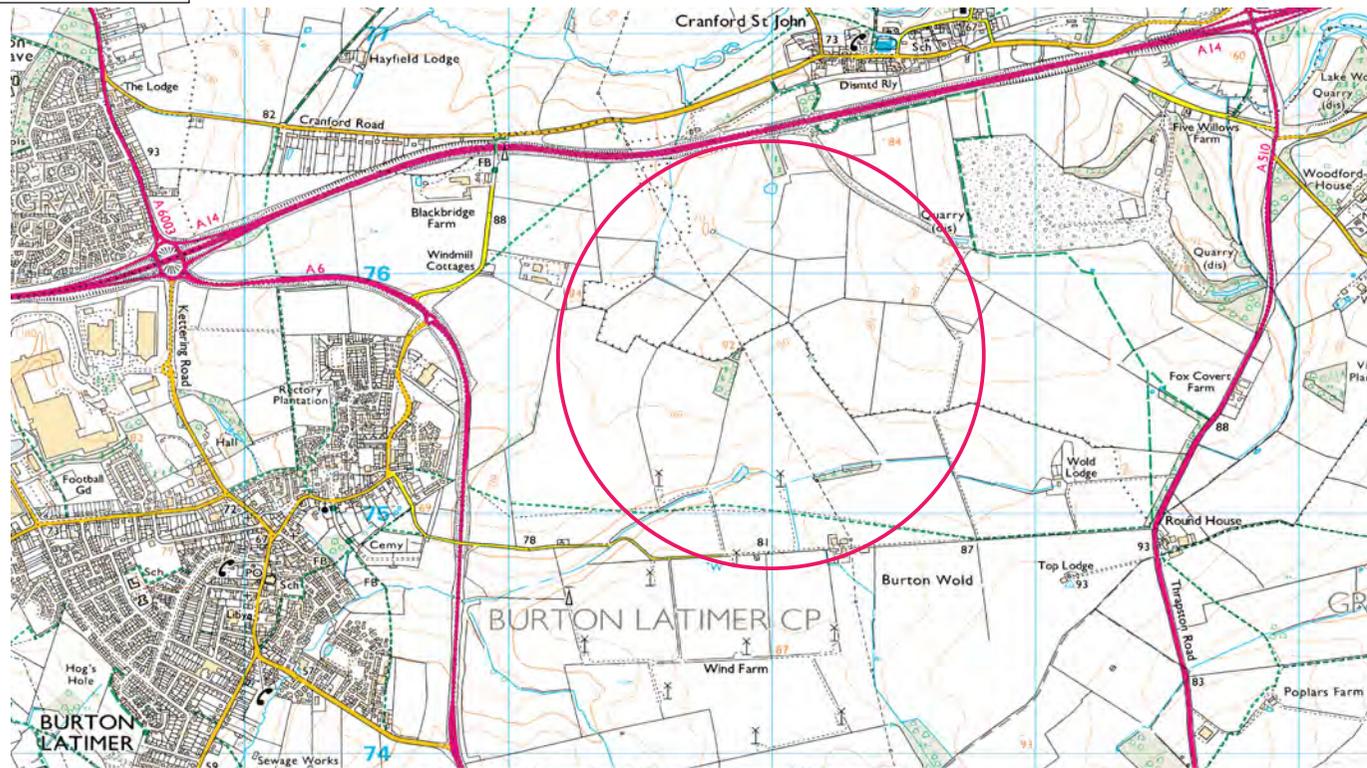
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Institute for Archaeologists. 2008, Revised 2011. *Standards and Guidance for an Archaeological Watching Brief*

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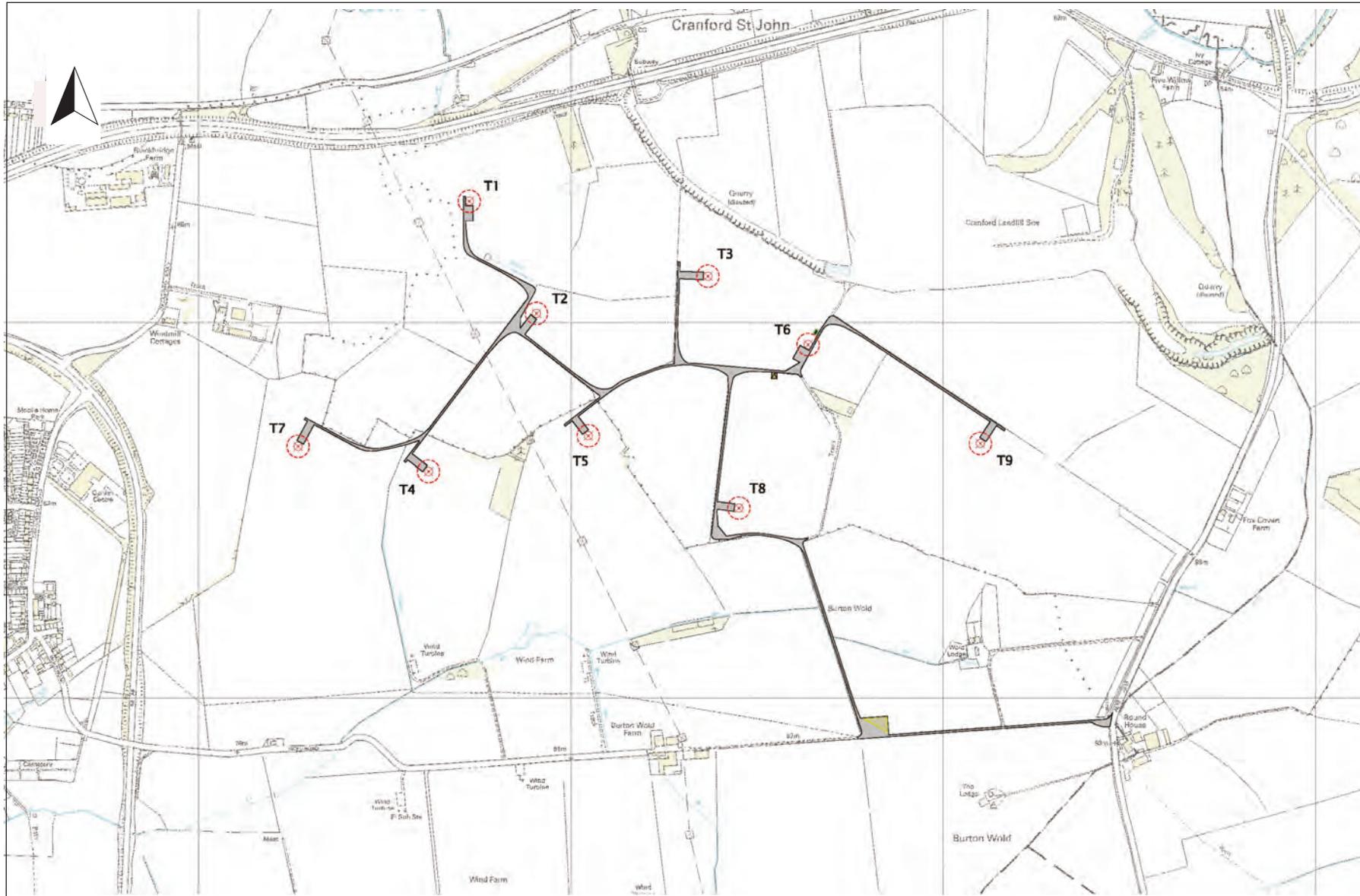
APPENDIX I:

Figures



OS Map data reproduced by Archaeology Wales Ltd under Ordnance Survey Copyright Licence No. 100055111

Fig. 1
Location of
site



OS Map data reproduced by Archaeology Wales Ltd under Ordnance Survey Copyright Licence No. 100055111

Job Title: Burton Wold

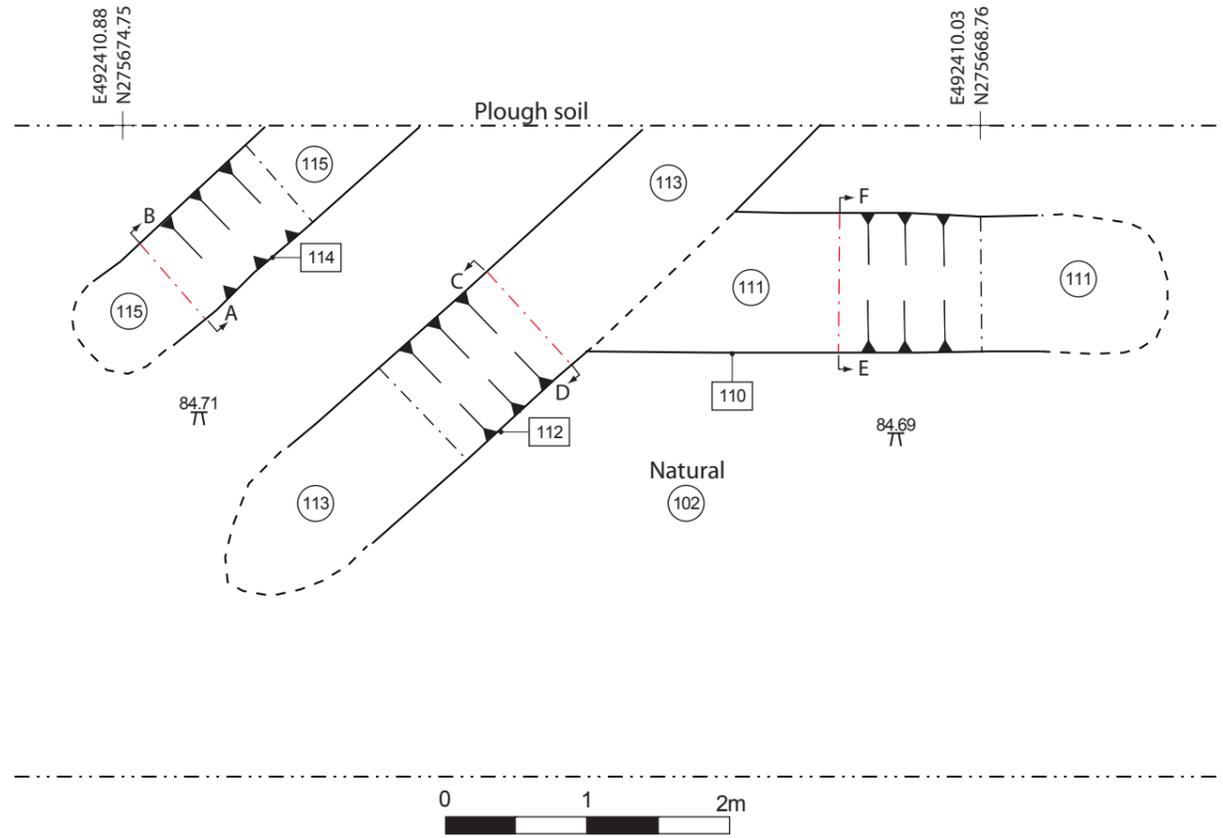
Drawing Title: Scheme layout

Date: August 2014

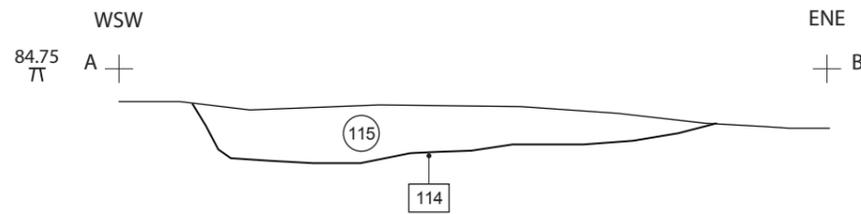
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Figure 2

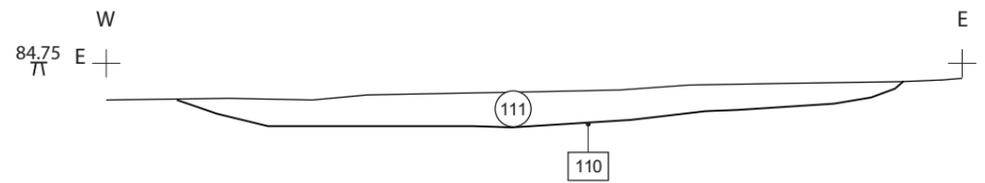
Post-ex plan of linears
[110], [112] and [114]



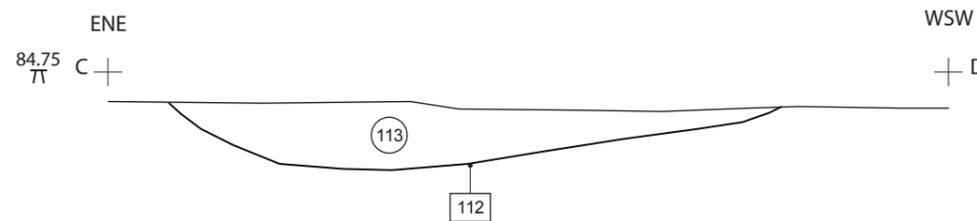
South-south-east facing section
of linear [114]



South facing section
of linear [110]



North-north-west facing section
of linear [112]



Job Title: Burton Wold Wind Farm,
Kettering

Drawing Title: Plan & sections of
linears [110], [112] and [114]

Date: July 2014

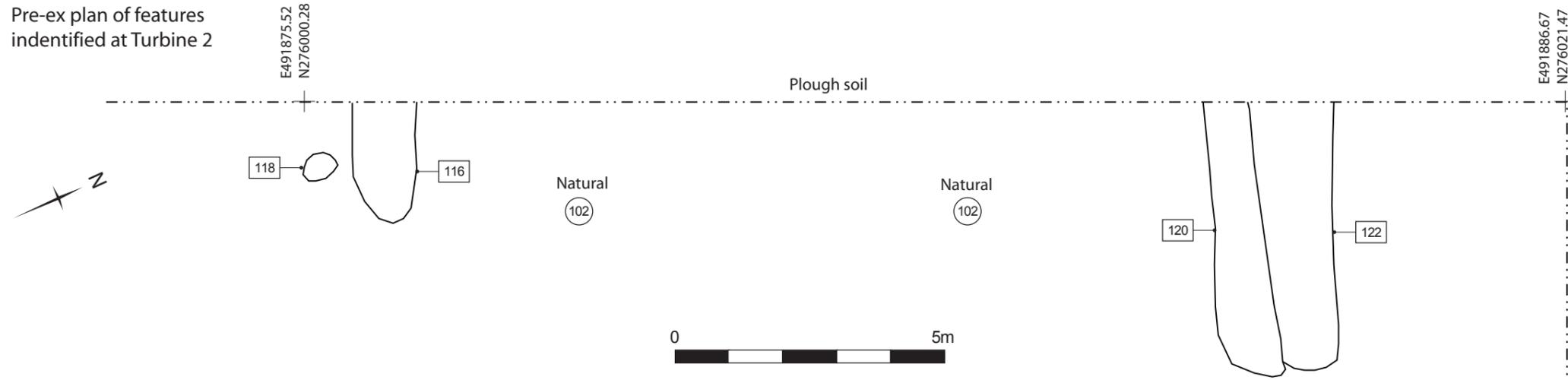
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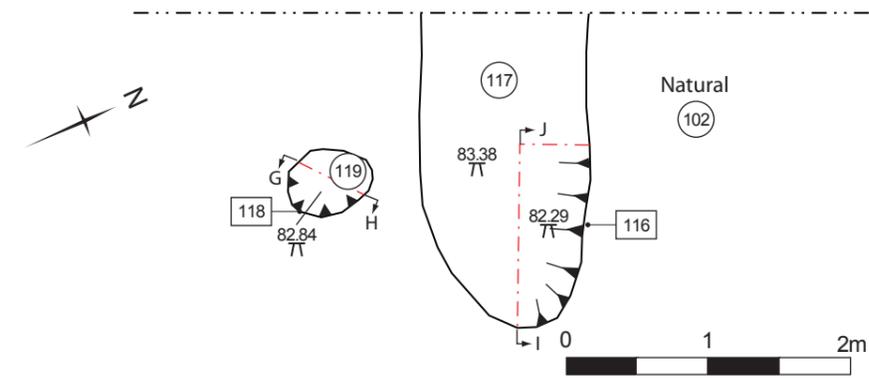
Figure 3



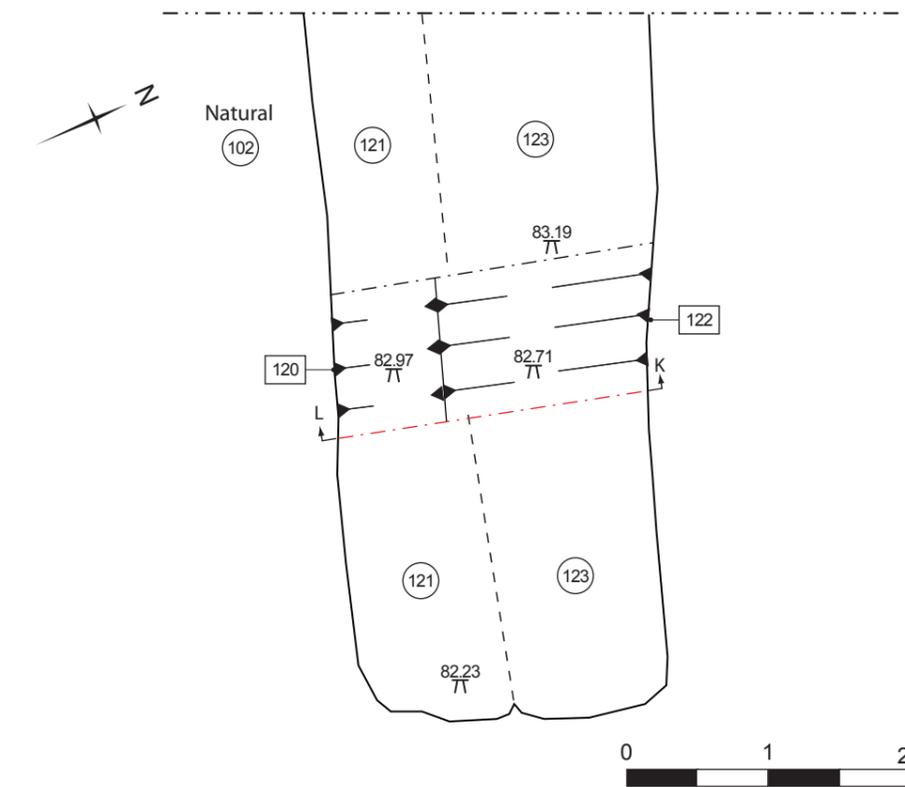
Pre-ex plan of features identified at Turbine 2



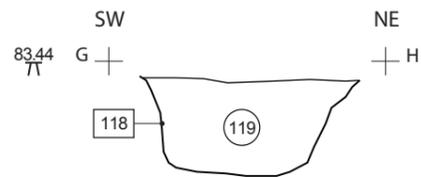
Post-ex plan of [116] and [118]



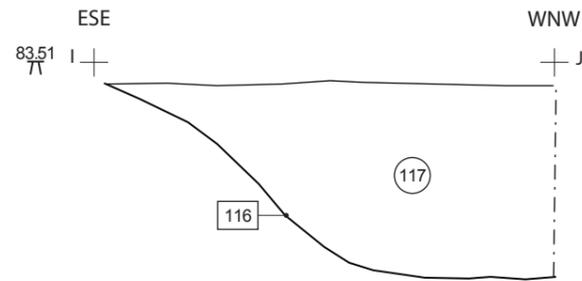
Post-ex plan of [120] and [122]



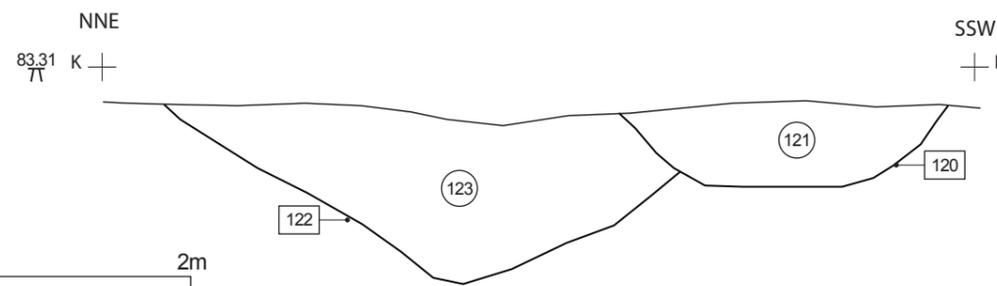
South-east facing section of [118]



North-north-east facing section of [116]



West-north-west facing section of [120] and [122]



Job Title: Burton Wold Wind Farm, Kettering

Drawing Title: Plan & sections of features [116], [118], [120] and [122]

Date: July 2014

Drawn By: ILB

Scale: Plans 1 : 100 & 1 : 50 @ A3
Sections 1 : 20 @ A3

Figure 4



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APPENDIX II:

Plates



1. Working shot of the soil strip along the access road near Turbine 8. Looking North.



2. General shot of the methodology for the watching brief and road construction.

Plates 1 and 2



3. General view of excavations for a septic tank within the site compound. Looking north-west.



4. The upper deposits of glacial till evident within excavations within the site compound; comprising a mid brown-orange layer (102) extending 1.5m below surface, above 2m of very stiff dark grey clay (103).

Plates 3 and 4



5. General view of the soil strip down to underlying deposits of glacial till (102).



6. Working shot of sample slots excavated across linear features [110], [112] & [114]. Looking south-east.

Plates 5 and 6



7. South-facing section of linear [110]. Scale 1 x 1m.



8. North-north-west facing section of linear [112]. Scale 1 x 1m.



9. South-south-east facing section of linear [114]. Scale 1 x 0.5m.



10. Pre-excavation shot of linear [116] and pit [118] within flooded soil strip area for Turbine 2. Looking north-west.

Plates 9 and 10



11. Pre-excitation shot of linear features [120] and [122] within flooded soil strip area for Turbine 2. Looking north.



12. North-north-east facing section across terminus of linear [116]. Scale 1 x 1m.



13. .South-east facing section of pit [118]. Scale 1 x 0.5m.



14. West-north-west facing section of sample slot across linear features [120] & [122]. Scale 1 x 1m.

Plates 13 and 14



15. Working shot of the soil strip at the junction (turning area) between Turbines 6 & 8. Looking north-west.



16. Working shot of the soil strip for Turbine 8. Looking east-north-east.

Plates 15 and 16

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APPENDIX III:

WSI

Archaeology Wales

Written Scheme of Investigation

for an

Archaeological Watching Brief

at

Burton Wold Wind Farm, Kettering Northamptonshire

Prepared for:

Wind Prospect Ltd,
Sutton House, Dovenby Hall Estate, Cockermouth,
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Project No: 1013e

22nd February 2012

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Non Technical Summary

This Written Scheme of Investigations details the proposal for an archaeological Watching Brief on land at Burton Wold, Kettering. It has been prepared by Archaeology Wales Ltd for Wind Prospect Ltd on behalf of Kettering East Energy Ltd. The proposal is for a Continuous Watching Brief during groundworks in the area of Turbine 2 and for an Intermittent Watching Brief in all other areas.

1. Introduction

The proposed scheme is at Burton Wold Farm, Kettering (henceforth – the site), centred at NGR SP 9250 7580. The development represents an extension to the already existing Burton Wold Wind Farm. The proposal has been submitted by Wind Prospect Ltd, Sutton House, Dovenby Hall Estate, Cockermouth, Cumbria, CA13 0PN (henceforth – Wind Prospect) acting as agents for Kettering East Energy Limited, Wold Lodge, Thrapston Road, Finedon, Wellingborough, NN9 5HW. The local planning authority is Kettering Borough Council (henceforth - KBC) and the planning application number is KET/2012/0556. Archaeological services are provided by Northamptonshire County Council, Planning (henceforth - NCC).

This Written Scheme of Investigations has been prepared by Mark Houlston (MIfA), Managing Director, Archaeology Wales Ltd (henceforth - AW) at the request of Wind Prospect. It provides information on the methodology that will be employed by AW during a Watching Brief at the site.

The proposed Watching Brief follows a Desk-based Assessment of the site (CAP 2007) which was submitted on behalf of Kettering East Energy Limited as part of an Environmental Statement, and two phases of Archaeological Evaluation (Houlston 2013).

The latter, which consisted of a geophysical survey, trial trenching, field-walking and 'strip, map and sample' excavation, was carried out in two phases: the first in August 2008 when Trench 8 and some adjacent watching brief work was undertaken as part of exploratory construction activities, and the remainder in January 2013.

The archaeological investigation is required in order to discharge Planning Condition 14 of the conditions specified by KBC in relation to the proposed development.

The relevant part of the condition states that:

14. No development shall take place until the Local Planning Authority has given its written approval to the {evaluation} report and to any protective measures that it identifies. Protective measures shall be implemented in accordance with the approved details.

REASON: In the interest of the historic environment in accordance with Policy 12 of the NPPF and Policy 13 of the North Northamptonshire Core Spatial Strategy.

The details set out in this WSI follow recommendations made by Lesley-Ann Mather, County Archaeological Advisor, NCC. They are based on the results of the Evaluation Report (Houlston 2013) and a monitoring visit on 29/1/13.

AW is a Registered Organisation with the Institute for Archaeologists (IfA). All work will

conform to the *Standard and Guidance for an Archaeological Watching Brief* (IfA 2011) and will be undertaken by suitably qualified staff to the highest professional standards.

All work will be undertaken in accordance with the regional research agenda for the East Midlands (Knight *et al*, 2012).

2. Site Description

The Site includes nine turbine locations, electrical substation and associated access tracks. It is located within the parish of Cranford St.John, south of the village centre, and borders the parish of Burton Latimer to the south. The historic settlement of Burton Latimer is located further to the west. Both parishes were constituted as urban districts in 1923.

As part of the Desk-based Assessment (CAP 2007), fragments of knapped flint and roofing tile were identified in the field around Turbine 6. These appeared to cover most of the field, but may have been dispersed and fragmented as the result of plowing carried out over many centuries.

The only features of potential archaeological importance identified by the Evaluation were a curved feature in Trench 6, identified by the geophysical survey, and part of feature located against the side of the evaluation trench in Trench 2. The only finds recovered were three sherds collected during field-walking in Trench 6. These have yet to be analysed.

3. Objectives

The aims of a watching brief, as defined by the IfA (2008, revised 2011) are:

- To allow a rapid investigation and recording of any archaeological features that are uncovered during the proposed groundworks within the application area.
- To provide the opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief are not sufficient to support the treatment to a satisfactory or proper standard

4. Watching Brief Methodology

General

The archaeological watching brief will be undertaken by AW staff using current best practice.

All work will be carried out by a suitable qualified archaeologist with relevant level membership of the Institute for Archaeologists (IfA) and will follow the IfA's *Standard and Guidance for an Archaeological Watching Brief* (2008; revised 2011).

The archaeological observation, investigation and recording will be carried out during all ground reductions associated with the development.

Continuous Watching Brief

The Watching Brief will be Continuous during all groundworks undertaken in the area of Turbine 2, particularly, but not exclusively, during construction activities associated with the turbine and crane base. In these areas an archaeologist will be present during all ground disturbances.

All groundworks will take place under the supervision of the Watching Brief archaeologist. The mechanical excavator used will be equipped with a flat-bladed or 'ditching' bucket.

During machining, all surfaces will be inspected and all archaeological features will be recorded. Sample excavation of features will be undertaken.

Should significant archaeological remains be found that require full excavation, work will be stopped, the area concerned fenced off, and the client and NCC informed so that a methodology, staffing levels and timescale can be agreed for further work should this be required.

Intermittent Watching Brief

The Watching Brief will be Intermittent during all ground disturbances undertaken in relation to the development, with the exception of those in the area of Turbine 2. This will include turbine bases, crane bases, the sub-station, the anemometer, access tracks and service trenches.

In these areas, the Watching Brief will be Continuous to start with, but if the potential for archaeological survival is low, a regime of intermittent visits may be adopted. In each distinct area of the development, the scope of such a regime will be agreed with NCC beforehand, i.e. the Watching Brief will remain continuous unless NCC have agreed otherwise.

All groundworks will take place under the supervision of the Watching Brief archaeologist. At these times the mechanical excavator used will be equipped with a flat-bladed or 'ditching' bucket.

During machining, all surfaces will be inspected and all archaeological features will be recorded. Excavation of features will be undertaken, where appropriate.

Should significant archaeological remains be found that require full excavation, work will be stopped, the area concerned fenced off, and the client and NCC informed so that a methodology, staffing levels and timescale can be agreed for further work should this be required.

Recording

Recording will be carried out using AW recording systems (pro-forma context sheets etc), using a continuous number sequence for all contexts.

Written, drawn and photographic records (High Resolution Digital TIFFs) of an appropriate level of detail will be maintained throughout the course of the project. Digital photographs will be taken using cameras with resolutions of 14 mega pixels or above.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required, and these will be related to Ordnance Survey datum and published boundaries where appropriate.

5. Monitoring, Artefacts and Sampling

Monitoring

NCC will be contacted prior to the commencement of ground works, and subsequently once the work is underway.

NCC will be provided with notice of the start date, a projected timetable and a copy of the Health and Safety Risk Assessment no less than 5 working days prior to the commencement of the work.

Any changes to the specification that the contractor may wish to make after approval will be communicated to NCC for approval on behalf of Planning Authority.

Representatives of NCC will be given access to the site so that they may monitor the progress of the field evaluation. No area will be back-filled, until NCC has had the opportunity to inspect it, unless permission has been given in advance. NCC will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

Artefacts

Archaeological artefacts recovered during the course of the excavation will be cleaned and labelled using an accession number which will be obtained from the local museum. A single number sequence will be allocated to all finds. The artifacts will be stored appropriately until they are deposited with the museum.

All artefacts recovered during the project will be retained and be related to the contexts from which they were derived. All typologically distinct and closely datable finds will be recorded three-dimensionally.

The evaluation will carefully consider any artefactual or economic information and provide an assessment of the viability, for further study, of such information. It will be particularly important to provide an indication of the relative significance of such material for any subsequent decision-making process regarding mitigation strategies.

Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (Phil Parkes of Cardiff Conservation Services).

A catalogue by context of all artefactual material found, quantified by number, weight, or both, and containing sketches of significant artefacts will be compiled.

Pottery will be analysed to the standards outlined in *Guidelines for the Preparation of Pottery Archives* as prepared by the Study Group for Roman Pottery in consultation with the IFA. All other material will be analysed following the advice given in the Institute of Field Archaeologists *Guidelines for Finds Work*.

The requirements for the conservation of artefacts will be unpredictable until after the completion of the fieldwork. The archaeological contractor will ensure, however,

that at least minimum acceptable standards are achieved (the UK Institute of Conservation's *Guidelines for the Treatment of Finds from Archaeological Sites* will be used as guidance).

All medieval and earlier artifacts will be subject to specialist analysis by Dr Hilary Cool. All lithics will be subject to specialist analysis by Dr Amelia Pannet whilst all Saxon and later ceramics will be subject to specialist analysis by Paul Courtney and classified in accordance with the Northamptonshire Ceramic Type Series. The MPRG's *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics* will be adhered to (Slowikowski *et al*, 2001).

Environmental and Technological Samples

Environmental Soil samples will be taken from appropriate dated or undated deposits or from specific industrial features such as kilns and hearths (English Heritage, 2011). This will be subject to variation as necessary during the investigation, following consultation with the County Archaeological Advisor and the English Heritage Regional Science Advisor or the project's palaeo-environmentalist. The minimum sample size will be 40 litres.

Any features containing deposits of environmental or technological significance will be sampled. If required, the project manager should arrange, through a suitably qualified expert the assessment of the environmental potential of the site through examination of suitable deposits. The assessment of potential should consider the guidelines set out in the English Heritage publication *Environmental Archaeology* (2011).

The requirements for the conservation of samples will be unpredictable until after the completion of the fieldwork. The archaeological contractor will ensure, however, that at least minimum acceptable standards are achieved (the UK Institute of Conservation's *Guidelines for the Treatment of Finds from Archaeological Sites* will be used as guidance).

Human Remains

Human remains will be left *in situ*, covered and protected when discovered. No further investigation will normally be undertaken until NCC and the local Coroner have been informed. After discussion, it may be appropriate to take bone samples for C14 dating. If removal is essential it can only take place under the appropriate Ministry of Justice and Environmental Health regulations.

6. Method Statement for Reporting and Deposition of the Site Archive

Information in the report will be laid out in such a way that data and supporting text are readily cross-referenced.

Copies of the report will be sent to: Wind Prospect (Ms Julie Wynne), NCC (Ms Lesley-Ann Mather) and for inclusion in the HER.

A summary report of the work will be submitted for publication to a national journal no later than one year after the completion of the work. Grey Literature and relevant archive material generated by the project will also be uploaded onto the OASIS online database. The OASIS reference ID will be clearly indicated on the reports.

The Site Archive

A project archive will be prepared in accordance with the National Monuments Record agreed structure and be deposited within the local museum (Kettering) on completion of site analysis and report production. It will also conform to the guidelines set out in English Heritage (2009) *Management of Research Projects in the Historic Environment* and MoRPHE Project Planning Note 3: Excavation (2008).

Arrangements will be made with the local museum before work starts. Wherever the archive is deposited, this information will be relayed to the HER.

Although there may be a period during which client confidentiality will need to be maintained, the report and the archive will be deposited not later than six months after completion of the work.

Other significant digital data generated by the survey (ie AP plots, EDM surveys, CAD drawings, GIS maps, etc) will be presented as part of the report on a CD/DVD. The format of this presented data will be agreed with the curator in advance of its preparation.

7. Resources and Timetable

Standards

The work will be undertaken by AW staff using current best practice.

Archaeology Wales Ltd is an IfA Registered Organisation. All work will be undertaken to the standards and guidelines of the IfA.

Staff

The project will be undertaken by suitably qualified AW staff. Overall management of the project will be undertaken by Mark Houlston.

Equipment

The project will use existing AW equipment.

Timetable of Archaeological Works

The work will be undertaken at the convenience of the client. No start date has yet been agreed.

Insurance

AW is an affiliated member of the CBA, and holds Insurance through the CBA insurance service.

Health and Safety

All members of staff will adhere to the requirements of the *Health & Safety at Work Act, 1974*, and the Health and Safety Policy Statement of AW.

If AW has sole possession of the site, then AW will produce a detailed Risk Assessment for approval by the client before any work is undertaken. If another organisation has responsibility for site safety, then AW employees will be briefed on the contents of all existing Risk Assessments, and all other health and safety requirements that may be in place.

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Knight D., Vyner B. & Allen C. 2012. *East Midlands Heritage; An updated Research Agenda and Strategy for the Historic Environment of the East Midlands*

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APPENDIX IV:

Archive Cover Sheet

ARCHIVE COVER SHEET

Burton Wold, Kettering, Northamptonshire

Site Name:	Burton Wold
Site Code:	BWK/13/WB
PRN:	-
NPRN:	-
SAM:	-
Other Ref No:	Planning App KET/2012/0556
NGR:	NGR SP 9520 7580
Site Type:	Green Field
Project Type:	Watching Brief
Project Manager:	Adrian Hadley
Project Dates:	November 2013- March 2014
Categories Present:	Medieval?
Location of Original Archive:	AW
Location of duplicate Archives:	Kettering Museum
Number of Finds Boxes:	NA
Location of Finds:	NA
Museum Reference:	NA
Copyright:	AW
Restrictions to access:	None

Archaeology Wales



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