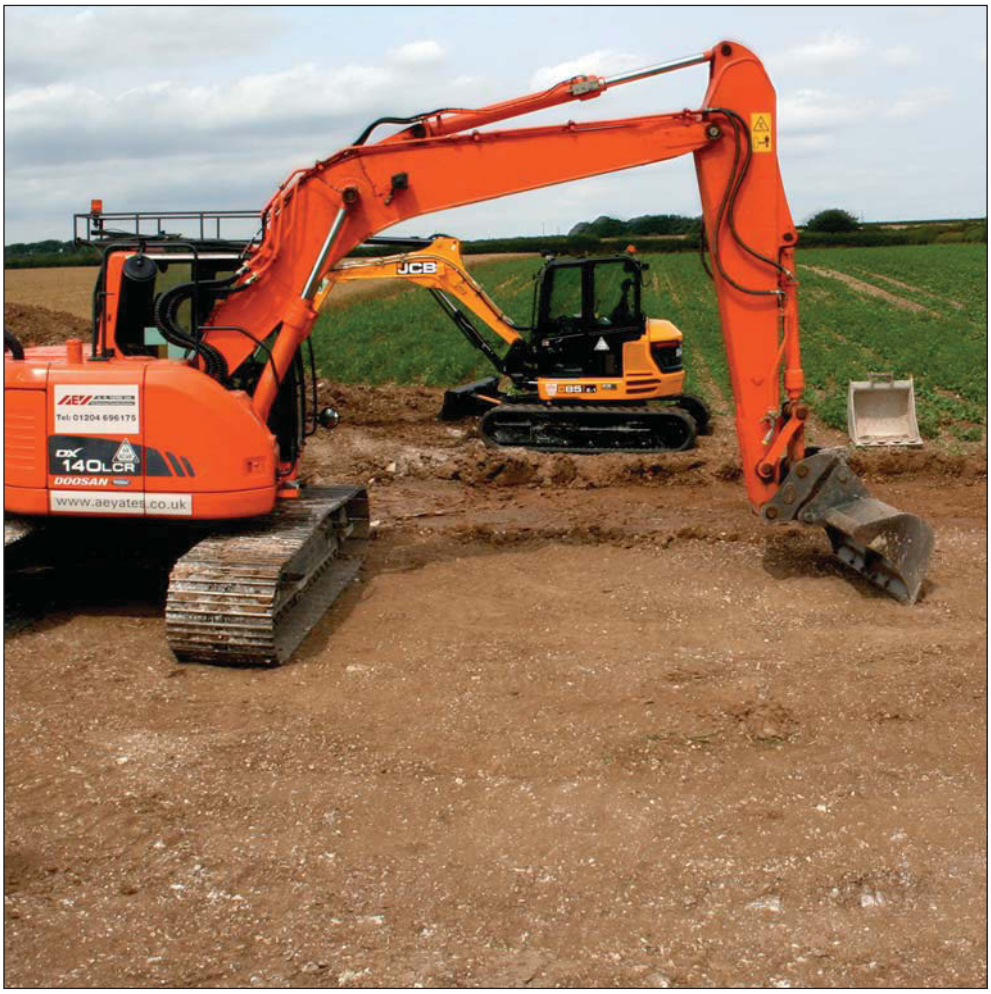
making sense of heritage

Samples Farm, Walkington
East Riding of Yorkshire

Archaeological Watching Brief Report



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October 2014

archaeology

Samples Farm, Walkington, East Riding of Yorkshire

Archaeological Watching Brief and Strip, Map & Sample

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Quality Assurance

Project Code	103521	**Accession Code**		**Client Ref.**	
Planning Application Ref.	DC/12/04892/STPLF/STRAT	**Ordnance Survey (OS) national grid reference (NGR)**	497913 E 435490 N		

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v01	I	*AB*	JKM		14/10/2014
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* I = Internal Draft; E = External Draft; F = Final

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Archaeological Watching Brief and Strip, Map & Sample

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Summary

Wessex Archaeology was commissioned by AGR Renewables Limited, to undertake a Programme of Archaeological Works prior to and during construction of the proposed single wind turbine at Samples Farm, Walkington, East Riding of Yorkshire (hereafter the 'Site', centred at 497913, 435490). This report supports planning condition number 8 attached to the planning permission for a single wind turbine and associated infrastructure.

The works comprised pre-construction geophysical survey (results of which have been outlined in a separate report 103520.06) and analysis with the subsequent monitoring of any ground-disturbing activities related to the construction of the turbine, access track and export cable route; achieved by a combination of Watching Brief or Strip, Map and Sample methodology.

No features of definite archaeological interest were encountered during the programme of works. Two, small charcoal rich deposits were recorded partly in section within the footprint of the turbine circle adjacent to the turbine base. These were sampled for potential future palaeoenvironmental or radiocarbon dating assessment. However, they may be natural features, as opposed to the remains of hearths or campfires.

Samples Farm, Walkington, East Riding of Yorkshire

Archaeological Watching Brief and Strip, Map & Sample

Acknowledgements

Wessex Archaeology was commissioned by AGR Renewables Limited; they are thanked in this regard. Environmental Consultant, David Smith is thanked for liaising on the project.

Onsite works were undertaken by Dr Andrew Bicket, Olly Good and Garreth Davey. The project was managed by John McCarthy.

Samples Farm, Walkington, East Riding of Yorkshire

Archaeological Watching Brief and Strip, Map & Sample

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by AGR Renewables Limited, to undertake a Programme of Archaeological Works prior to and during construction of the proposed single wind turbine at Samples Farm, Walkington, East Riding of Yorkshire (hereafter the 'Site', centred at 497913 E, 435490 N). This report supports planning condition number 8 attached to the planning permission for a single wind turbine and associated infrastructure..

1.1.2 The works comprised pre-construction geophysical survey and analysis with the subsequent monitoring of any ground-disturbing activities related to the construction of the turbine, access track and export cable route; achieved by a combination of Watching Brief or Strip, Map and Sample methodology.

1.1.3 The fieldwork elements took place as follows:

- *geophysical survey = 26th June 2014*
- *turbine base / crane hardstanding = 23rd – 24th July 2014*
- *turning circle = 31st July 2014*
- *access track = 1st/2nd September 2014*

1.2 The Site

1.2.1 The Site is located in the Yorkshire Wolds, on the outskirts of Walkington; to the west of the village (**Figure 1**). The geology of the site is chalk bedrock which has been overridden and modified by glacial processes and is variously cut and overlain by glacial till.

1.2.2 The Site is contained with an arable field, which was under crop at the time of the works. The northern part of the field is level, sloping substantially towards the south.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Recent Investigations in the area

2.1.1 An archaeological desk based assessment was undertaken by Heritage Collective (Garland 2013) as part of the planning application for the wind turbine site. The desk based assessment identified a high potential for archaeological material from the Bronze and Iron Age within the proposed project location as well as a low to moderate potential for prehistoric, Romano-British, medieval and post-medieval remains. A site visit was conducted for the desk-based assessment (Garland 2013). No currently known undesignated cultural heritage assets have been identified.

2.1.2 A Written Scheme of Investigation (WSI) (Wessex Archaeology 2014a) was prepared by Wessex Archaeology in advance of the archaeological works and agreed with the Humber Archaeological Partnership (HAP) and the English Heritage Science Advisor (correspondence dated 19th June 2014 to 22nd July 2014). There is no evidence for any previous archaeological excavations at the Site.

2.1.3 Magnetometer survey was undertaken within the main construction footprint to identify detectable subsurface features of archaeological interest (IfA 2011), full reporting of this work is made in Wessex Archaeology (2014b). During the works, the configuration of the scheme was changed to accommodate access from the South; the geophysical survey is based on the original layout and focuses upon access from the North, the turbine base and turning circle, the latter two of which represent the most substantial areas of excavation during construction. Subsequent monitoring (watching brief and strip, map and sample was undertaken for the revised layout, the focus of this report (ref: 103521.02). Geophysical anomalies of possible archaeology are discussed where the site investigations overlap, particularly in the excavated footprint of the turning circle.

3 METHODOLOGY

3.1 Aims and objectives

3.1.1 The main aims of the Watching Brief and Strip, Map and Sample were:

- To record in detail all archaeological remains present within the proposed groundwork;
- To record and retrieve artefactual and environmental evidence;
- To consider the archaeology of the development within its local, regional or national context, as appropriate; and
- To make available the results of the work.

3.1.2 In order to mitigate possible impacts upon potential archaeological remains a programme of geophysical survey and assessment was undertaken to inform the design of the development allowing micro-siting around potentially significant archaeological remains. Archaeological monitoring was implemented during groundworks to allow the preservation of further remains through archaeological recording. In consultation with HAP, the phases of site investigations were staged to allow the results of one phase to inform subsequent stages from Geophysical Survey (results of which have been outlined in a separate report 103520.06) to Watching Brief and Strip Map and Sample phases discussed below.

3.2 Fieldwork methodology

Introduction

3.2.1 All works were undertaken in accordance with the methodology set out in the within the WSI (WA 2014), which will not be fully repeated here. All fieldwork was conducted in accordance with the guidance and standards out lined in the *Institute for Archaeologists Standard and Guidance for Archaeological Watching Brief* (IfA 2008 revised).

Watching Brief

3.2.2 An archaeological watching brief was organised for the construction footprint of the cable export cable trenches, turning area and temporary construction compound. A tracked excavator fitted with a toothless ditching bucket was used for all excavation.

Strip, Map & Sample

3.2.3 A pre-construction "strip, map and sample" of the footprint of the turbine, crane hardstanding and substation was undertaken under archaeological supervision. A tracked excavator fitted with a toothless ditching bucket was used for all excavation.

3.3 Monitoring

3.3.1 The various areas of the Site were prepared in differing ways dependent upon their purpose (**Figures 1** and **2**).

3.3.2 The crane hardstanding, turbine foundation (**Plates 1-2**) and turning circle (**Plates 3-4**), were excavated using a toothless ditching bucket to a depth of the chalk bedrock, around 40cm. The turbine base was then excavated with battered sides to a depth of 2m into the underlying chalk geology.

3.3.3 The access track was excavated on the north edge using a V-shaped trenching bucket to provide drainage / export cable installation (**Plate 5-7**). This was excavated to the level of the chalk bedrock (at c.40cm depth). The remaining bed of the track was partially excavated but not through the topsoil (to a depth of around 20cm).

3.3.4 Subsequently onsite organisation of the development did not use a temporary construction compound; this was located offsite and did not require groundworks. The export cable route is subject to change and is being considered within a different planning application and was not excavated as part of this programme of works.

3.3.5 Notification of the turning circle was not given prior to excavation and this was undertaken without archaeological supervision (30th July 2014). On the following day (31st July 2014) the excavated turning circle was inspected and two possible deposits of archaeological interest were excavated and recorded (**Figure 3**, **Plates 3-4**). The turning circle area was excavated cleanly to the topsoil-subsurface interface with the underlying glacial till and chalky gravels.

3.4 Recording

3.4.1 A photographic record was made of the works using digital photography. The photographic record illustrates the general context of the principal features excavated and the Site as a whole (**Appendix 2**).

3.5 Specialist strategies

Environmental

3.5.1 As per the sampling policy set out in the WSI (WA 2014; ref 103520.04), encountered deposits were sampled with respects deposits **001** and **003** (**Figure 3**), :

- *A 50% sample will be taken of all post-holes, and of pits with a diameter of up to 1.5m.*

Dating

3.5.2 If required, suitable organic material will be recovered from the environmental samples from context **001** and **003** during sample processing.

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

4.1.1 The combined results of the various archaeological works is discussed here comprising the geophysical survey, watching brief and strip, map and sample components covering the construction area of the Site (**Figure 1**). Site records are summarised in **Appendices 1-4**.

4.2 Summary

4.2.1 The geophysical survey did identified one feature of possible archaeology within the turning circle area (**Figures 2** and **3**) **WA 4001**. Subsequent site investigation did not observe any features of clear archaeological or historical interest, and that feature may be geological in origin as an area more rocky substrate outcrops in the vicinity of this anomaly (i.e. chalky patches in **Plates 5 and 6**).

4.2.2 The possible archaeological material encountered during the works comprises two small charcoal-rich layers directly overlying glacial deposits within the western section of the turning circle (**Figure 3**), outwith the area of the geophysical survey. It is possible these are natural deposits. The deposits have been bulk sampled in accordance with the sampling strategy set out for the site in the WSI (WA 2014).

Natural deposits

4.2.3 The main sub-surface geology is characterised by patches of yellowish brown slightly silty clay glacial clay containing frequent chalk inclusions from bedrock parent material which is clearly outcropping across site. Clayey areas may be infilled periglacial ice-wedge casts. Cleaned areas were archaeologically sterile.

Features of uncertain date

4.2.4 Partly in section on the western edge of the excavated turning circle area (**Figure 1**), two small charcoal-rich layers were cleaned, excavated and bulk sampled for possible environmental assessment and dating (**Figure 3**, **Plate 3**). The burnt patches directly overly glacial clay, possibly the upper surface of a periglacial ice wedge cast; glacial till deposits are extensive across the area overlying and cutting the local chalk bedrock. There is no clear cut to the features and artefactual evidence was not observed during cleaning and sampling. The features may be evidence of a small campfire or hearth however their location directly on the glacial sub-surface may indicate they are natural features.

5 ARTEFACTUAL EVIDENCE

5.1.1 No artefactual material was observed and recovered during the monitoring.

6 ENVIRONMENTAL EVIDENCE

6.1 Introduction

6.1.1 Samples were collected of the burnt, charcoal-rich deposits encountered within the footprint of the turning circle (**Figure 2**, **Figure 3**, **Plate 3**), with the features in extending into the section. As the material is not from a well-sealed context and is of uncertain anthropogenic origin, the samples have been stored on WA premises in the event that subsequent environmental assessment is required.

7 DISCUSSION

7.1 Summary

7.1.1 Two layers of charcoal-rich of possible anthropogenic origin were recorded within the excavated areas of the Site; equally the deposits could be natural. Samples have been retained for future assessment if required.

7.1.2 In some areas stripping of topsoil did not reach the depth of the subsoil and therefore it is considered that there remains a potential for undisturbed archaeological features to survive in these areas. Topsoil was fully removed in all areas where construction works could potentially damage archaeological features.

7.2 Conclusions

7.2.1 During the course of the site monitoring no features of clear archaeological interest were encountered, recorded features comprise two small deposits of burnt charcoal-rich material within the area of the turning circle (**001**, **003**).

7.3 Recommendations

7.3.1 Further environmental assessment of the sampled charcoal-rich deposits may elucidate an anthropogenic or natural origin to the material.

8 STORAGE AND CURATION

8.1 Archive

8.1.1 It is recommended that the project archive resulting from the excavation be deposited with the East Riding Archives and Local Studies Service at the East Riding Treasure House. The Office has agreed in principle to accept the project archive on completion of the project **103521.02**.

8.1.2 Copies of the report will be submitted to the Local Planning Authority. A copy of the Evaluation Report will also be sent to the English Heritage Regional Advisor for Archaeological Sciences: Dr Andy Hammon, English Heritage, 37 Tanner Row, York YO1 6WP.

8.1.3 The complete site archive comprising printed report, photographic records, graphics, and digital data, will be prepared following nationally recommended guidelines (IfA 2009; Brown 2011; ADS 2013).

8.1.4 All archive elements will be marked with the site/accession code and a full index will be prepared. The physical archive comprises the following:

- *Printed technical report with figures and plates;*
- *Digital copies of the report, site photographs and GIS datasets.*

8.1.5 An OASIS entry (see **Appendix 5**) has been completed for the project, and grey literature reported uploaded.

8.2 Storage

8.2.1 Environmental samples are in storage on WA premises in the event that subsequent environmental assessment is required.

8.3 Discard policy

8.3.1 Wessex Archaeology follows the guidelines set out in Selection, Retention and Dispersal (Society of Museum Archaeologists 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive.

8.4 Copyright

8.4.1 This report, and the archive generally, may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which we are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferrable by Wessex Archaeology. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

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8.5 Security Copy

8.5.1 In line with current best practice (Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

9 REFERENCES

9.1 Bibliography

ADS, 2013, *Caring for Digital Data in Archaeology: a guide to good practice*, Archaeology Data Service & Digital Antiquity Guides to Good Practice

Brown, D.H., 2011, *Archaeological archives; a guide to best practice in creation, compilation, transfer and curation,* Archaeological Archives Forum (revised edition)

English Heritage, 2008, *Geophysical Survey in Archaeological Field Evaluation. Professional guidelines*, 2nd edition.

Garland, N., 2013, *Archaeological Desk-Based Assessment: Samples Farm, Walkington, East Riding of Yorkshire*, Unpublished client report 13/0906.

Institute for Archaeologists (IfA), 2008, *Standard and Guidance for an Archaeological Watching Brief*. Available at: www.archaeologists.net

Institute for Archaeologists (IfA), 2009, *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives*. Available at: www.archaeologists.net

Institute for Archaeologists (IfA), 2011, *Standard and Guidance for Archaeological Geophysical Survey*. Professional guidelines.

Wessex Archaeology, 2014a, *Samples Farm, Walkington, East Riding of Yorkshire: Archaeological Works, Written Scheme of Investigation*, Unpublished report ref 103520.04.

Wessex Archaeology, 2014b, *Samples Farm, Walkington, East Riding of Yorkshire: Archaeological Works Detailed Gradiometer Survey Report*, Unpublished Report Ref: 103250.06.