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Bulford Army Camp 33kV Electricity Substation Bulford, Wiltshire

Archaeological Watching Brief Report

Ref: 100510.01
November 2013



Bulford Army Camp 33kV Electricity Substation Bulford, Wiltshire

Archaeological Watching Brief Report

Prepared for:

UK Power Networks Services Allenby
Project Office
Rear of Parsons House
Ordnance Road,
Aldershot
GU11 2AE

Prepared by:

Wessex Archaeology
Portway House
Old Sarum Park
Salisbury
Wiltshire
SP4 6EB

www.wessexarch.co.uk

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Buried topsoil visible in sondage

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Bulford Army Camp 33kV Electricity Substation Bulford, Wiltshire

Archaeological Watching Brief Report

Summary

Wessex Archaeology (WA) was commissioned by Utility Consulting (the Consultant), on behalf of UK Power Networks (the Client), to undertake an archaeological watching brief during development at Bulford Barracks, Bulford, Salisbury centred on National Grid Reference (NGR) 419315, 143775.

Planning consent (S/12/0378/FULL) has been granted for the removal of an existing substation and erection of a replacement electricity substation by Wiltshire Council on condition (Condition 3) that a programme of archaeological work was undertaken. The Assistant County Archaeologist confirmed the work should comprise an archaeological watching brief during the initial excavations to record anything of archaeological interest.

The watching brief was maintained during excavation of basements and an access road for the electricity substation during July 2013. Observations revealed c.1.65m of made ground deposits formed during the earlier construction of a deeply terraced sports field, the lower c. 0.15m of which remained undisturbed beneath the base of the construction. No significant archaeological remains or pre-modern formation were revealed and no artefacts were recovered during the excavations.



Bulford Army Camp 33kV Electricity Substation Bulford, Wiltshire

Archaeological Watching Brief Report

Acknowledgements

This project was commissioned by Utility Consulting (the Consultant), on behalf of UK Power Networks (the Client), and Wessex Archaeology would like to thank Patrick Portch in this regard. Wessex Archaeology would also like to thank Clare King of the Wiltshire County Archaeological Service for her advice during the project.

The fieldwork was carried out by Mike Heaton who also compiled this report. The project was managed by Sue Farr.



Bulford Army Camp 33kV Electricity Substation Bulford, Wiltshire

Archaeological Watching Brief Report

1 INTRODUCTION

1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by Utility Consulting (the Consultant), on behalf of UK Power Networks (the Client), to undertake an archaeological watching brief during development at Bulford Camp, Bulford, Salisbury centred on National Grid Reference (NGR) 419315, 143775 (hereafter 'the Site') (**Figure 1**).
- 1.1.2 Planning consent (S/12/0378/FULL) was granted by Wiltshire Council for the removal of an existing substation and erection of a replacement electricity substation on condition that a programme of archaeological work was undertaken.
- 1.1.3 A Written Scheme of Investigation (WA 2013) was submitted to and approved by the Assistant County Archaeologist at Wiltshire Council. The WSI described the Site, its situation and status, a summary of the Site's archaeological and historical context, and a specification of the archaeological works, details of which are not repeated here other than in brief summary.

1.2 The Site

- 1.2.1 The civil parish of Bulford straddles the eastern slopes of the valley of the River Avon within the chalk *massif* of Salisbury Plain, approximately 14km north of Salisbury in southern Wiltshire. It is a moderately dissected landscape of chalk downland plateau and dry valleys, cut by the meandering channel of the Avon and its short eastern tributary the Nine Mile River. The underlying geology comprises Cretaceous Upper Chalk, which occurs as solid bedrock and soliflucted 'coombe rock', supporting shallow acidic argillaceous soils typically less than 300mm thick, except at the base of the deeper valleys.
- 1.2.2 Bulford Camp is situated in the middle of the parish, occupying the greater part of it, approximately 1km east of the village. It is a broadly rectangular installation of mixed building types and open spaces, extending over an area of c. 2km² on a broad terrace overlooking the Nine Mile River. The substation was constructed in the north-eastern quadrant of the camp, at the north edge of a deeply terraced sports field overlooking a belt of scrub woodland known as Sling Plantation. The sports field occupied the base of a deep 'cut and fill' terrace, the northern edge of which stands c. 5m above the natural ground level in Sling Terrace and adjoining hardstandings.
- 1.2.3 Groundwork comprised the excavation of two 2m deep basements within a 36m x 25m formation terrace centred on NGR 419315, 143775, with a steeply inclined access road extending north-westwards for approximately 21m down to an existing paved hardstanding.



2 ARCHAEOLOGICAL BACKGROUND

2.1 Archaeological Context

- 2.1.1 Salisbury Plain is an area of outstanding archaeological survival in which the material remains of late prehistoric, Romano-British and medieval activity survive in concentrations almost unequalled in Britain, together with components of a pre-Enclosure agricultural landscape preserved by the Army's occupation and use of it. Within the immediate vicinity of Bulford Camp there are Neolithic and Bronze Age barrows at approximately 200m intervals along all the hilltops, together with linear earthworks that form part of a Bronze Age territorial system extending outwards from Sidbury Hill, c. 8km north-east of Bulford. Recent archaeological surveys (McOmish *et al* 2002) have demonstrated that most of the Avon valley parishes have Roman villas near to the river and native British settlements on the summit of the downs at the other end.
- 2.1.2 Within the camp itself there are barrows at Rawkinson Road and along Tidworth Road and Sheepbridge Road, and Bronze Age pottery and worked flint have been recovered within the camp itself. The Army's recurrent use of Salisbury Plain commenced in c. 1797 and installation of permanent infrastructure commenced shortly after 1897 when the then War Department commenced land acquisition. The camp itself was established c. 1898 (Crowley 1995) and acquired its first permanent structures c. 1910, growing continuously throughout the 20th century through a cyclic process of redevelopment and expansion in response to the needs of the Army and its families.
- 2.1.3 The archaeological character of the camp is therefore complex. It comprises the superimposed remains of prehistoric, Roman and medieval activity, overlain and in places disturbed by military activity of late 18th – 20th century date that is archaeologically significant in its own right. Such remains are manifest as pockets of culturally enhanced soils and disturbed ground within the otherwise solid bedrock chalk and 'coombe rock', with the later deposits often characterised by concentrations of coal cinders and machine-made building materials.

3 METHODOLOGY

3.1 Aims and objectives

- 3.1.1 The aims of the archaeological watching brief were to:
- determine the presence or absence of archaeological remains, and should remains be present, to ensure their preservation by record to the highest possible standard;
 - determine or confirm the approximate date or date range of the remains, by means of artefactual or other evidence;
 - determine or confirm the approximate extent of the remains;
 - determine the condition and state of preservation of the remains; and
 - prepare a report on the results of the watching brief

3.2 Fieldwork methodology

- 3.2.1 All works were undertaken in accordance with the methodology set out within the WSI (WA 2013). All fieldwork was conducted in accordance with the guidance and standards outlined in the Institute for Archaeologists' *Standard and Guidance for Archaeological Watching Briefs* (IfA 2008). Any archaeological deposits were recorded using Wessex Archaeology's *pro forma* record sheets with a unique numbering system for individual



contexts. Archaeological features and deposits were hand-drawn at either 1:10 or 1:20 as appropriate. Monitored works were referenced to OS mapping.

3.2.2 A full photographic record was compiled using digital images. The record illustrated both the detail and the general context of the principal features and the Site as a whole. Digital images have been subject to a managed quality control and curation process which has embedded appropriate metadata within the image and ensures the long term accessibility of the image set.

3.2.3 A unique site code **100510** was allocated to the Site, and was used on all records.

3.3 Health and Safety

3.3.1 Health and Safety considerations were of paramount importance in conducting all fieldwork. Safe working practices will override archaeological considerations at all times.

3.3.2 All work was carried out in accordance with the *Health and Safety at Work etc. Act 1974* and the *Management of Health and Safety Regulations 1992*, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time.

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

4.1.1 The following summary details the results of the watching brief.

4.2 Stratigraphic data

4.2.1 All excavations revealed a consistent stratigraphic sequence consisting of a shallow (0.3m) greyish brown humic 'A' horizon topsoil containing large quantities of modern detritus. Approximately 1.2m of compacted chalk rubble lay in steeply inclined 'tip lines' below the topsoil and contained moderate quantities of hand-made brick, coal clinker and redeposited soil, that extended to the north-western end of the access road. A 0.15m thick buried, yellowish brown silty clay loam 'A' horizon topsoil was recorded at c. 1.5m below current ground level in hand-dug sondages beneath the base of the basements. Clean white bedrock chalk was noted at 1.65m below current ground level.

4.2.2 No archaeological remains of pre-modern formation were revealed.

5 ARTEFACTUAL AND ENVIRONMENTAL EVIDENCE

5.1 Finds

5.1.1 No pre-modern artefacts were observed.

5.2 Environmental

5.2.1 No visible forms of palaeoenvironmental material were revealed and no soil samples were retained.

6 DISCUSSION

6.1 Interpretation

6.1.1 The soil sequence revealed is of wholly man-made formation and indicates that the Site has been comprehensively disturbed by the 'cut and fill' construction of the sports fields in

which it is situated, at least 150mm of which lies undisturbed beneath the base of the substation construction.

- 6.1.2 The uppermost topsoil is too friable to be a naturally deposited soil, and lacks the reddish brown 'clay with flint' 'B' horizon subsoil that characterises all undisturbed natural soils on the chalk downlands; the chalk rubble is of wholly modern formation, in all likelihood created by bulldozer during the excavation of the 'cut and fill' terrace, and is too extensive to be the fill of – for instance – WWI practice trenches or shelters; and the lower 'buried' soil, though of the correct yellowish brown colour and compact texture for a chalkland rendzina, lacks the characteristic subsoil, indicating that it had been heavily modified prior to construction of the sports field.
- 6.1.3 Together, these indicate that the Site had been modified prior to construction of the sports field, probably by agriculture but possibly also by military earthworks, and was then buried beneath c. 1500mm of chalk rubble excavated by bulldozer from the southern end of the sports field. The natural ground level lies c. 1.65m below current ground level and remains essentially undisturbed by the construction.

6.2 Significance

- 6.2.1 The restricted spatial and vertical extent of the excavations undertaken limits the significance of the observations made. The deposits affected by construction are all of wholly modern formation, with 'natural' strata lying undisturbed c. 150mm – 200mm below the base of the excavations. Whilst the work has not deleteriously affected significant archaeological remains, the survival of such remains beneath the Site cannot be discounted on the basis of the evidence recovered here.

7 STORAGE AND CURATION

7.1 Museum

- 7.1.1 The archive is currently held at Wessex Archaeology's Salisbury office under the site code **100510**. In due course it will be deposited with Salisbury and South Wiltshire Museum.

7.2 Archive

- 7.2.1 On completion of the report a cross-referenced and internally consistent archive will be produced. The primary archive, including copies of all photographs, would normally be deposited with the local museum no later than six months after completion of the work.
- 7.2.2 The completed project archive will be prepared in accordance with the guidelines outlined in MoRPHE (English Heritage 2006) and in accordance with the *Guidelines for the preparation of excavation archives for long term storage* (UKIC 1990).

- 7.2.3 An OASIS online record <http://ads.ahds.ac.uk/projects/oasis/> has been initiated and key fields completed on Details, Location and Creators Forms. All appropriate parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included with the archive).

7.3 Copyright

- 7.3.1 This report may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of the company copyright licences, but for which copyright itself is non-transferrable by



Wessex Archaeology. The client is reminded that they remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of the report.

7.4 Security Copy

7.4.1 In line with current best practice (e.g. 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.

8 REFERENCES

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APPENDICES

Appendix 1: Table of Trench Descriptions

TRENCH 1		Type: Evaluation	Machine excavated
Dimensions:9.90m x 1.40m		Max. depth: 0.48m	Ground level:70.91 – 71.22m aOD
Co-ordinates: E413108.77 N133436.38 and E413099.75 N133431.33			
Context	Description		Depth (m)
101	Layer	Topsoil – Dark greyish brown silty clay (loose) containing occasional root disturbance and occasional to common sub-rounded to sub-angular flint inclusions (<0.06m).	0 – 0.25m
102	Layer	Subsoil – Mid brown silty clay (loose to firm) containing sparse sub-rounded to sub-angular flint inclusions and sparse chalk flecks.	0.25 – 0.38m
103	Layer	Natural – Upper Chalk bedrock with occasional flint nodules (<0.15m).	0.38m+

TRENCH 2		Type: Evaluation	Machine excavated
Dimensions:9.40m x 1.40m		Max. depth: 0.45m	Ground level:68.57 – 69.37m aOD
Co-ordinates: E413171.10 N133462.82 and E413176.50 N133454.73			
Context	Description		Depth (m)
201	Layer	Topsoil – Dark greyish brown silty clay (loose) containing sparse ploughed in crop, occasional root disturbance, and occasional to common sub-rounded to sub-angular flint inclusions (<0.04m).	0 – 0.20m
202	Layer	Subsoil – Mid brown silty clay (loose to firm) containing sparse sub-rounded to sub-angular flint inclusions (<0.03m) and sparse chalk flecks.	0.20 – 0.33m
203	Layer	Natural – Upper Chalk bedrock which is slightly degraded by faint peri-glacial scarring.	0.33m+

Appendix 2: OASIS form

Bulford Army Camp, 33kV Electricity Substation, Bulford, Wiltshire - Wessex Archaeology
OASIS ID - wessexar1-164528

Versions				
View	Version	Completed by	Email	Date
View 1	1	S Farr	s.farr@wessexarch.co.uk	19 November 2013
Completed sections in current version				
Details	Location	Creators	Archive	Publications
Yes	Yes	Yes	Yes	1/1
Validated sections in current version				
Details	Location	Creators	Archive	Publications



No No No No 0/1

File submission and form progress

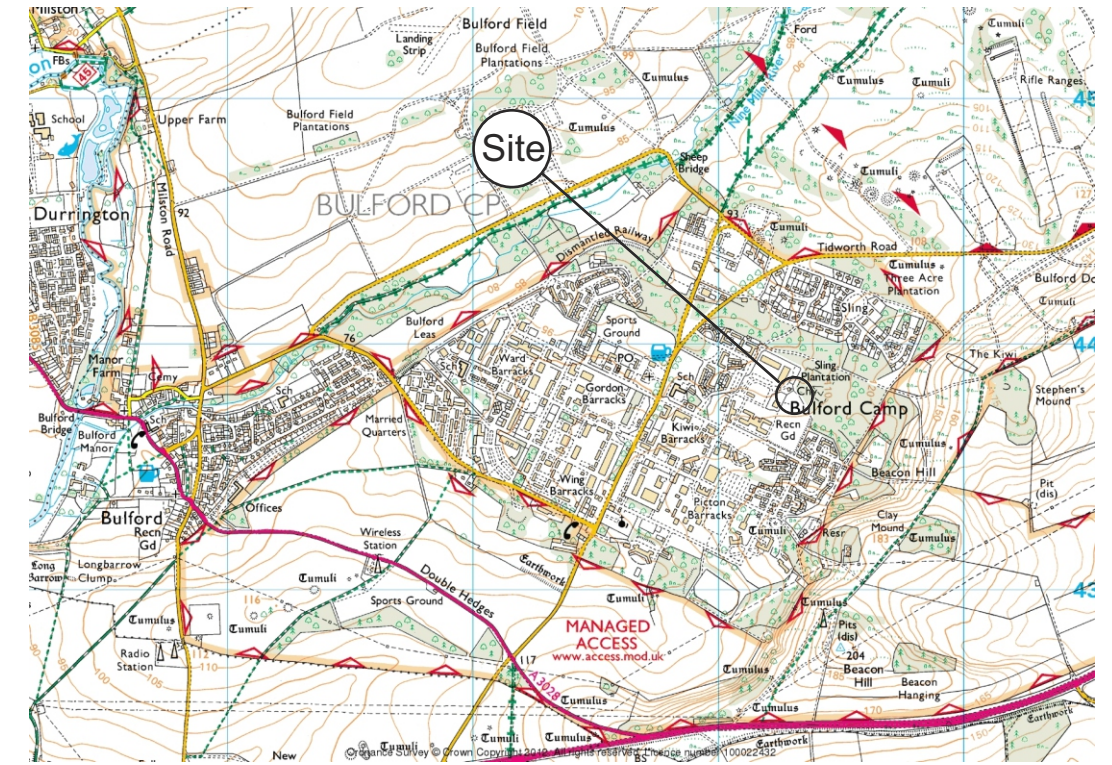
Grey literature report submitted?	No	Grey literature report filename/s	
Report release delay specified?	Yes	Release delay	Release into ADS library once signed off
Images submitted?	No	Image filename/s	
Boundary file submitted?	No	Boundary filename	
HER signed off?		NMR signed off?	



Switch Room excavation complete, viewed from the south-east



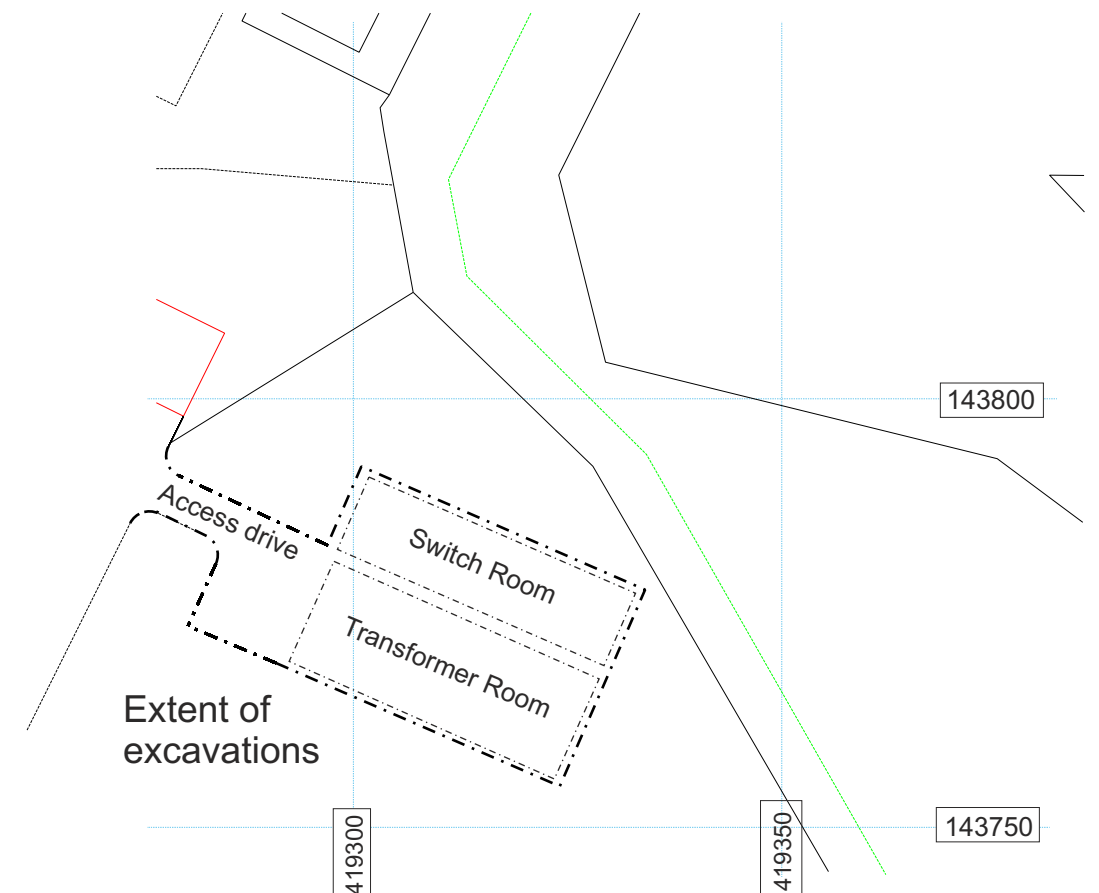
Brick exposed in base of Switch Room excavations



Transformer Room excavations (east end) complete, viewed from the south-west. Buried topsoil visible in sondage



Access Road trial trench, viewed from the north-west,



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Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk



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