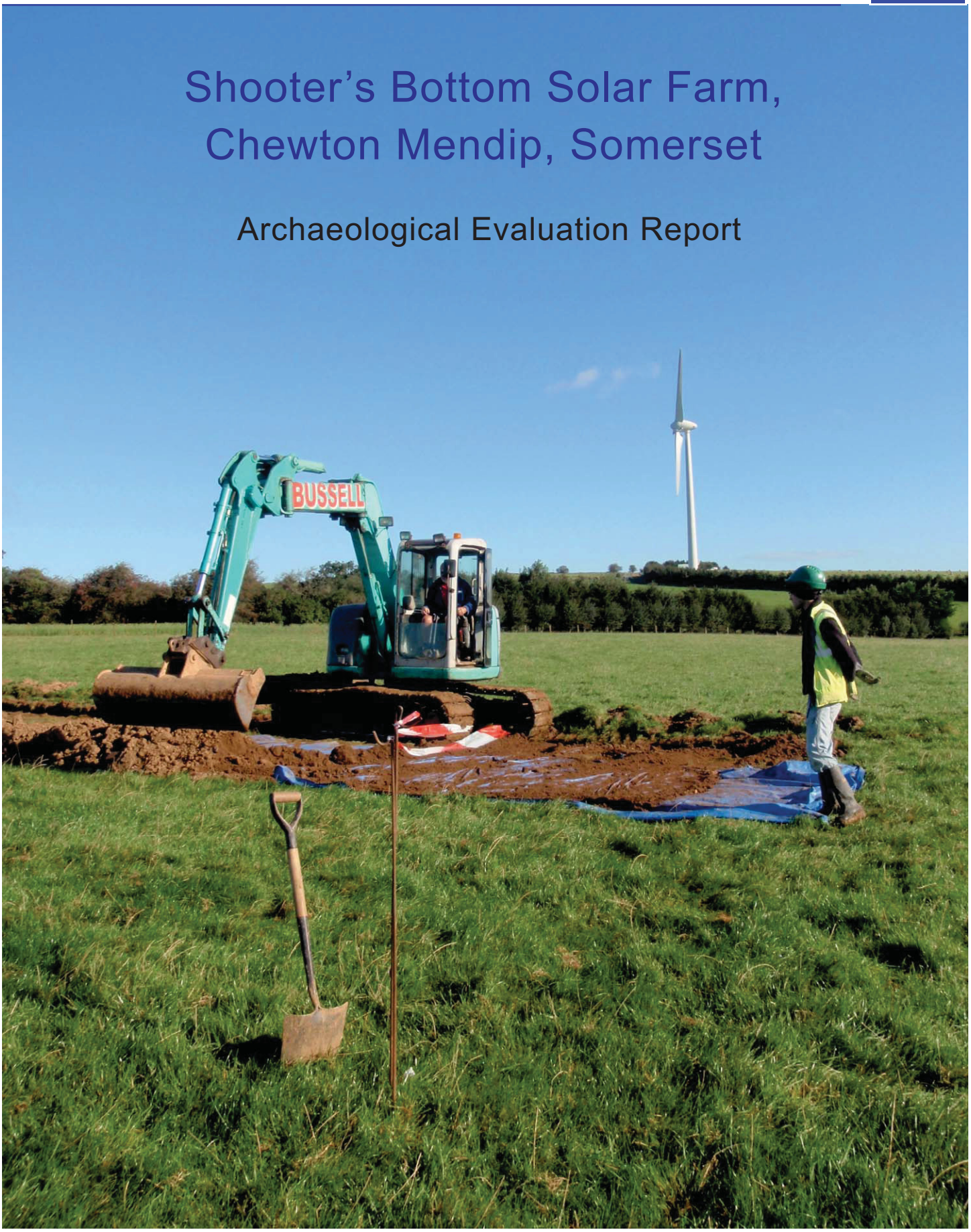
Wessex Archaeology

Shooter's Bottom Solar Farm, Chewton Mendip, Somerset

Archaeological Evaluation Report



Somerset County Museum Accession No. TTNCM 75/2012

Ref: 87060.01

September 2012

Shooters Bottom Solar Farm, Chewton Mendip, Somerset

Archaeological Evaluation Report

Prepared for:
Mendip Solar Ltd
The Long Barn
Manor Farm
Stratton on the Fosse
Radstock
Bath
Somerset
BA3 4QF

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

www.wessexarch.co.uk

3rd October 2012

Report no. 87060.02

Quality Assurance

Site Code	87060	**Accession Code**	TTNCM 75/2012	**Client Code**	Somerset PRN 32105
Planning Application Ref.	2011/0529	**NGR**	442264 112215		

Version	Status*	Prepared by	Approved By	Approver's Signature	Date
v01	F	J Powell	A D Crockett		05/09/2012

* I = Internal Draft; E = External Draft; F = Final

Contents

Figures

Front cover: *Working shot of machine backfilling Trench 2*
Rear cover: *General working shots and views of back-filled Trench 6*

Summary

Wessex Archaeology was commissioned by Mendip Solar Ltd to carry out an archaeological evaluation on land at Shooters Bottom Farm, Chewton Mendip, Somerset. The works are required to inform the proposed installation of a solar farm at the above site, including installation of solar panels, associated utility/ service trenches and construction of access routes.

Following recommendations by the Senior Historic Environment Officer, Somerset County Council, an archaeological evaluation was carried out to assess the potential for surviving below ground remains in order to inform the proposals and consequently any decision with regards to the future treatment of the archaeological resource.

The evaluation trenches were sited in strategic positions where the results of an archaeological desk-based assessment and geophysical survey suggest there is potential for the survival of archaeological remains (Cotswold Archaeology 2011).

No archaeological features were recorded during the course of the evaluation and the geophysical anomalies were proven to be the result of variations in the underlying natural geology. Two worked flints were recovered from the topsoil in Trench 4, to the south-east of the Site, possibly indicating a low-level background of prehistoric activity in the area.

The fieldwork was conducted between the 17th and the 19th of September 2012.

Acknowledgements

This project was commissioned by Mendip Solar Ltd and Wessex Archaeology would like to acknowledge the assistance of Nigel Davie in this regard. Wessex Archaeology would also like to thank Steve Membery of Somerset County Council for his collaborative advice throughout the project.

The project was managed for Wessex Archaeology by Caroline Budd, assisted by Andy Crockett. The fieldwork was undertaken by John Powell, Tom, Wells and Darryl Freer. This report was compiled by John Powell, with finds assessment by Lorraine Mepham and illustrations by Elizabeth James, and the final report QA'd by Andy Crockett.

1 INTRODUCTION

1.1 Project Background

1.1.1 Wessex Archaeology was commissioned by Mendip Solar Ltd to carry out a programme of archaeological evaluation at Shooters Bottom Farm, Chewton Mendip, Somerset, centred on National Grid Reference (NGR) 359312 150238 (hereafter the **Site**; **Figure 1**).

1.1.2 The archaeological works relate to a planning application submitted in March 2011 to Mendip District Council (ref. 2011/0529) for the construction of a solar farm, which was accompanied by an archaeological Desk-Based Assessment (DBA) and a Geophysical Survey (CA 2011) undertaken for the Site. The development works are to comprise the establishing of solar panels, a sub-station, service trenches, fencing, electrical inverter containers and access routes.

1.1.3 Informed by the DBA and geophysical survey, and in consultation with Steven Membery (hereafter the **Curator**), Senior Historic Environment Officer, Somerset County Council (SCC), it was confirmed by Mendip District Council that a programme of archaeological evaluation was required in order to confirm the results of the geophysical survey. Consequently, planning permission was granted for the proposed works by Mendip District Council (ref. 2011/0529) with the following archaeological condition attached:

- *No development hereby approved shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority.*

1.2 The Site

1.2.1 The Site is located approximately 5km north-east of the town of Wells, Somerset, on the south-eastern edge of the Mendip Hills. It extends across two parishes, Chewton Mendip and Emborough (**Figure 1**), and comprises a single arable field measuring approximately 10.7ha, bounded on all sides by minor roads and farmland.

1.2.2 The Site lies at approximately 220m above Ordnance Datum (aOD). The underlying geology for the Site comprises limestone of the Clifton Down Formation (British Geological Survey online viewer[1]). The overlying soils are known as Nordrach which are typical palaeo-argillic brown earths. These consist of well drained fine silty over clayey soils, stone-less or with chert stones often deep. Shallow silty soils overlie limestone in places (Soil Survey of England and Wales, Sheet 05 South West England).

1.3 Archaeological and Historical Background

1.3.1 A detailed archaeological and historical background of the Site has been presented in the DBA (*op cit*), and this information will not be repeated in detail here. In summary, the DBA identified:

- *A single possible round barrow was recorded during the 18th century and is located approximately 400m to the east of the Site;*
- *A further group of five Bronze Age round barrows are located 700m to the south-east of the Site;*

[1] http://mapapps.bgs.ac.uk/geologyofbritain/home.html (accessed 20/9/12)

- *A Roman military settlement was established at Shepton Mallet in the AD 80s and expanded into a civilian centre, which lasted until the 4th century AD;*
- *A roman road runs east to west approximately 600m to the south of the Site; and*
- *Tithe maps from the 19th century record the presence of a dewpond and a limekiln immediately to the north and east of the Site.*

1.3.2 The DBA concluded that there are no known heritage assets, and no evidence of currently unrecorded buried heritage assets, within the proposed development site.

1.3.3 The geophysical survey revealed anomalies of indeterminate origin, but did not identify anomalies of clear archaeological potential. As such the report concluded that it was considered highly unlikely that archaeological remains of significance survived that warrant preservation *in situ*.

2 SCOPE OF WORKS

2.1 WSI

2.1.1 The investigations were carried out under the auspices of a Written Scheme of Investigation (WSI) prepared by WA (WA 2012), which set out a detailed methodology for the archaeological works at the Site, and which was approved by the Curator prior to commencement of fieldwork. This document will not be repeated here.

2.2 Fieldwork

2.2.1 Fieldwork comprised the mechanical excavation of six 20m x 1.6m trenches targeted on anomalies identified by the geophysical survey, primarily in order to establish the presence/absence of any archaeological features/deposits, ground-truth the results of the geophysical survey, and assess the potential for the survival of archaeological remains throughout the proposed development area.

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 With due regard to the IfA *Standards and Guidance for archaeological evaluation* (IfA 2008), the generic aims of the archaeological evaluation were defined as;

- *To identify the presence of archaeological remains;*
- *To aid in the early identification of significant archaeological constraints, thereby educing the risk of unforeseen discoveries during construction; and*
- *To identify areas for additional archaeological mitigation as necessary.*

3.2 Objectives

3.2.1 In order to achieve the project Aims, the following objectives were defined:

- *Clarify the presence/absence and extent of any buried archaeological remains within the Site that may be disturbed by development;*
- *Confirm the results of the geophysical survey (CA 2011)*
- *Identify, within the constraints of the investigation, the date, character, condition and depth of any surviving remains within the Site;*

- *Assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits; and*
- *Produce a report which will present the results of the evaluation in sufficient detail to allow an informed decision to be made concerning the Site's archaeological potential.*

4 RESULTS

4.1 Introduction

4.1.1 The location of the evaluation areas is shown in **Figure 1** and descriptions of all deposits and feature are provided in **Appendix 1**.

4.2 Stratigraphic sequence

4.2.1 The natural soil sequence observed across the Site was fairly uniform (**Plate 1**). Topsoil comprised a 0.3m thick mid-reddish brown silty loam with a well-developed turf and no evidence of recent ploughing. Below the topsoil was a relatively thin light reddish brown to pale yellow brown silty-clay subsoil that was up to 0.19m deep. The underlying geology comprised a mixture of mid to dark reddish brown silty clay with common outcrops of limestone.

4.3 Archaeological evidence

4.3.1 No archaeological features were identified during the course of the evaluation. Targeted geophysical anomalies that could be correlated with subsurface 'features' were shown to be related to changes in the underlying geology rather than archaeological remains. The large magnetic response targeted in Trench 2 corresponded with an area of iron panning recorded above the natural geology towards the north-western end of the trench.

4.3.2 Within Trench 2 (**Plate 2**) a small irregular feature was identified, excavated and recorded. On excavation the feature proved to be the result of bioturbation. The feature was oval in plan and measured 0.62m by 0.50m and up to 0.15m deep, and contained a single light grey-brown silty-loam fill.

4.3.3 Two worked flints of indeterminate prehistoric origin were recovered from the topsoil of Trench 4.

4.4 Artefacts

4.4.1 The worked flints are of indeterminate prehistoric origin; whilst they cannot be closely dated, they are most likely Neolithic and/or Bronze Age in origin.

4.5 Environmental remains

4.5.1 In the absence of deposits that were stratigraphical secure, and/or of pre-modern date, and/or of clear palaeoenvironmental potential, and in accordance with best practice (e.g. EH 2011), no environmental samples were taken during the archaeological evaluation.

5 DISCUSSION

5.1.1 The archaeological evaluation has achieved the aims as set out above.

5.1.2 No archaeological features were recorded during the course of the evaluation and the geophysical anomalies have been confirmed to be the result of variations in the underlying geology.

5.1.3 The two worked flints recovered from topsoil do possibly indicate a background of prehistoric activity in the area, potentially associated with a putative barrow noted in 18th century documentary sources, reported as approximately 400m to the east of the Site (CA 2011).

6 BIBLIOGRAPHY

Cotswold Archaeology [CA], 2011, *Shooters Bottom Solar Park, Chewton Mendip, Somerset: Heritage Desk-Based Assessment and Geophysical Survey*, unpublished client report no. 11148

English Heritage, 2006, *Management of Research Projects in the Historic Environment*, English Heritage

Institute for Archaeologists, 2008, *Standard and Guidance for an archaeological field evaluation*

Institute for Archaeologists, Code of Practice and the Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology

Walker, K, 1990, *Guidelines for the preparation of excavation archives for Long-term Storage*, UKIC Archaeology Section

Wessex Archaeology, 2012, *Shooters Bottom Solar Farm, Chewton Mendip, Somerset: Written Scheme of Investigation for a Programme of Archaeological Evaluation*, unpublished client report no. T16271.01

7 APPENDICES

7.1 Appendix 1: Trench summaries

Context descriptions are presented in numerical order
bgl = below ground level
aOD = above Ordnance Datum (Newlyn)

Trench 1	**Dimensions:**	20.05m x 1.6m x 0.51m	**Ground surface level:**	226.62m aOD
	Coordinates (NGR):	359165.18, 150312.13		

Context	Category	Description	Depth (bgl)
100	Layer	**Topsoil**: Mid reddish-brown, silty-loam. No inclusions. Well developed turf.	0 – 0.28m
101	Layer	**Subsoil**: Light reddish-brown, silty-clay with rare limestone fragments. Slightly dirty appearance and a diffuse horizon to underlying natural.	0.28 – 0.39m
102	Layer	**Natural**: Light reddish-brown, silty-clay with occasional broken grey limestone outcrops.	0.39m+

Trench 2	**Dimensions:**	19.06m x 1.6m x .54m	**Ground surface level:**	224.04m aOD
	Coordinates (NGR):	359279.04, 150327.07		

Context	Category	Description	Depth (bgl)
200	Layer	**Topsoil**: Mid reddish-brown, silty-loam, no inclusions, covered with thick turf.	0 – 0.3m
201	Layer	**Subsoil**: Light reddish-brown to pale yellowish-brown, silty clay with rare to occasional limestone. Slightly dirty appearance with a diffuse horizon to the underlying natural.	0.3 – 0.42m
202	Layer	**Natural**: Light Reddish-brown to pale yellow-brown silty clay with occasional outcrops of limestone.	0.42m+
203	Cut	**Bioturbation/Natural Feature**: Small irregular oval cut with very diffuse edges. Not archaeological.	0.30m+
204	Fill	**Secondary Fill/Bioturbation**: Light grey-brown, clay-silt fill of natural feature with rare charcoal flecks. Clearly relatively modern.	

Trench 3	**Dimensions:**	19.8m x 1.6m x 0.48m	**Ground surface level:**	225.05m aOD
	Coordinates (NGR):	359300.11, 150238.59		

Context	**Category**	**Description**	**Depth (bgl)**
300	Layer	**Topsoil**: Mid reddish-brown, silty-loam. No inclusions, covered with a well defined turf.	0 – 0.29m
301	Layer	**Subsoil**: Light to mid reddish-brown, silty-clay with occasional limestone fragments. Diffuse interface with natural.	0.29 – 0.48m
302	Layer	**Natural**: Light to mid reddish-brown, silty-clay with frequent limestone outcrops.	0.48m+

Trench 4	**Dimensions :**	19.5m x 1.6m x 0.45m	**Ground surface level:**	223.96m aOD
	Coordinates (NGR):	359389.53, 150167.82		

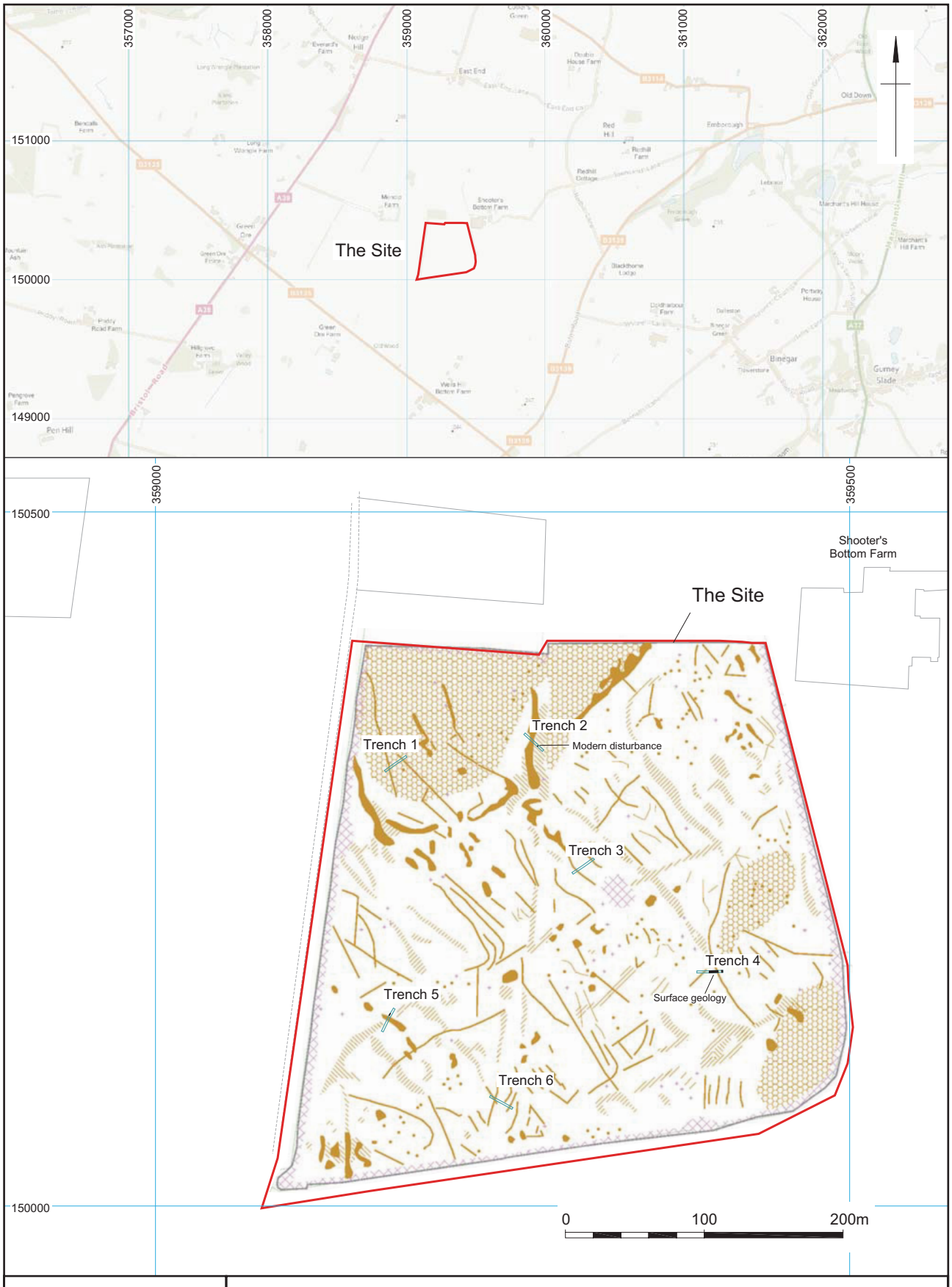
Context	**Category**	**Description**	**Depth (bgl)**
400	Layer	**Topsoil**: Mid reddish-brown, silty-clay-loam with rare limestone inclusions and a well developed turf.	0 – 0.28m
401	Layer	**Subsoil**: Pale yellow-brown, silty-clay with rare limestone fragments.	0.28 – 0.40m
402	Layer	**Natural**: Mottled dark red to pale yellow-brown, silty clay with lenses of clay. Occasional outcrops of limestone.	0.40m+
2 x worked flint recovered from topsoil (400)			

Trench 5	**Dimensions :**	19.81m x 1.6m x 0.53m	**Ground surface level:**	227.08m aOD
	Coordinates (NGR):	359163.85, 150124.82		

Context	**Category**	**Description**	**Depth (bgl)**
500	Layer	**Topsoil**: Mid reddish-brown, silty-clay, no inclusions visible. Well defined turf.	0 – 0.31m
501	Layer	**Subsoil**: Pale reddish-brown to mid yellow-brown, silty-clay with rare limestone fragments.	0.31 – 0.43m
502	Layer	**Natural**: Mid reddish-brown, clay-silt with rare outcrops of limestone. Area of pale yellow-brown clay towards north-eastern end of the trench.	0.43 – 0.53m+

Trench 6	**Dimensions :**	19.51m x 1.6m x 0.5m	**Ground surface level:**	225.87m aOD
	Coordinates (NGR):	359257.24, 150069.30		

Context	Category	Description	Depth (bgl)
600	Layer	**Topsoil**: Mid reddish-brown silty-clay with rare limestone inclusions and a well developed turf line.	0 – 0.28m
601	Layer	**Subsoil**: Pale yellowish-brown, silty-clay with occasional limestone fragments less than 120mm in length.	0.28 – 0.40m
602	Layer	**Natural**: Pale brown to mid reddish-brown, silty-clay with very rare outcrops of limestone.	0.40 – 0.50m+



Evaluation trench

Geophysics by Stratascan

Date:	24/09/12	Revision Number:	0
Scale:	1:40 000 & 1:4000 @ A4	Illustrator:	LJC/SEJ
Path:	Y:\PROJECTS\87060\Drawing Office\Report figs\wsi\12_09_11\87060_eval.dwg		

Wessex Archaeology

Site and trench location plan showing geophysical survey results

Figure 1

Plate 1: South-west facing section of Trench 6 (scale 1x1m)

Plate 2: General view of Trench 2 (scales 1x2m & 1m)

Plate 3: General view of Trench 3 (scales 1x2m & 1m)

Plate 4: General view of Trench 5 (scales 1x2m & 1m)

Wessex Archaeology

Date:	24/09/12	Revision Number:	0
Scale:	n/a	Illustrator:	SEJ
Path:	Y:\PROJECTS\87060\Drawing Office\Report figs\Eval\12_09_24\Fig02_PLATES.cdr		

Selected plates

Figure 2

WESSEX ARCHAEOLOGY LIMITED.
Registered Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk
Regional offices in **Edinburgh**, **Rochester** and **Sheffield**
For more information visit **www.wessexarch.co.uk**