

Belectric Solar Farm Middle Treworder Farm Wadebridge



Archaeological Evaluation Report



July 2013

Client: Belectric Solar Limited


Issue No: 1

OA Job No: 5534

NGR: SX 011 731



Client Name: Belectric Solar Limited
Client Ref No:
Document Title: Belectric Solar Farm, Lower Treworder, Wadebridge, Cornwall
Document Type: Evaluation Report
Issue/Version Number: v.1
Grid Reference: SX011 731
Planning Reference:
OA Job Number: 5534
Site Code: EGTW 13
Invoice Code: EGTWEV
Receiving Museum: TBC
Museum Accession No:
Event No:

Issue	Prepared by	Checked by	Approved by	Signature
1	J.Mumford	S.Foreman	D.Poore	

Document File Location: X:\Projects\Wadebridge Solar Farm
Graphics File Location: I:\E_invoice codes\EGTWEV
Illustrated by: J.Collins and C.Parsons

Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

© Oxford Archaeological Unit Ltd 2013

Janus House
Osney Mead

Oxford OX2 0ES

t: +44 (0) 1865 263800

e: oasouth@thehumanjourney.net

f: +44 (0) 1865 793496

w: oasouth.thehumanjourney.net

Oxford Archaeological Unit Limited is a Registered Charity No: 285627



Belectric Solar Farm, Lower Treworder, Wadebridge, Cornwall

Archaeological Evaluation Report

Written by J.Mumford

and illustrated by J.Collins and C.Parsons

Table of Contents

Summary.....	4
1 Introduction.....	5
1.1 Location and scope of work.....	5
1.2 Geology and topography.....	5
1.3 Archaeological and historical background.....	5
1.4 Acknowledgements.....	6
2 Evaluation Aims and Methodology.....	7
2.1 Aims.....	7
2.2 Methodology.....	7
3 Results.....	8
3.1 General soils and ground conditions.....	8
3.2 General distribution of archaeological deposits.....	8
3.3 Trench 1 (Fig.3).....	8
3.4 Trench 2 (Fig.4).....	9
3.5 Trench 3 (Fig.5).....	9
3.6 Trench 4 (not illustrated).....	9
3.7 Trench 5 (Fig.6).....	10
3.8 Trench 6 (Fig.7).....	10
3.9 Trench 7 (Fig.8).....	11
3.10 Trench 8 (Fig.9).....	11
3.11 Trench 9 (Fig.10).....	11
3.12 Finds summary.....	12
4 Discussion.....	13
4.1 Reliability of field investigation.....	13



4.2 Evaluation objectives and results.....	13
4.3 Interpretation.....	13
4.4 Significance.....	16
4.5 Impact assessment.....	16
Appendix A. Trench Descriptions and Context Inventory.....	18
Appendix B. Bibliography and References.....	26
Appendix C. Summary of Site Details.....	27



List of Figures

- Fig. 1 Site location map
- Fig. 2 Trench location plan
- Fig. 3 Trench 1 plan and sections
- Fig. 4 Trench 2 plan and sections
- Fig. 5 Trench 3 plan and sections
- Fig. 6 Trench 5 plan and sections
- Fig. 7 Trench 6 plan and sections
- Fig. 8 Trench 7 plan and sections
- Fig. 9 Trench 8 plan and sections
- Fig. 10 Trench 9 plan and sections
- Fig. 11 Trench plan overlaid on geophysical survey plot

List of Plates

- Plate 1: Possible posthole 106
- Plate 2: Trench 3; Removed 19th century boundary (ditches 302 and 304)
- Plate 3: Boundary/ trackway junction in trench 5 (gullies 507 and 509)
- Plate 4: Trench 9, Gully 903



Summary

A series of nine archaeological trial trenches was excavated on the site of a Belectric Solar Farm development at Higher Treworder, Treworder Lane, Wadebridge (SX 0110 7310), in response to a planning condition imposed by Cornwall Council.

The principal archaeological potential of the site lies in its immediate proximity to 'Higher Treworder Round' (MCO21631), a probable later prehistoric and/or Roman/post-Roman settlement, enclosed by two concentric ring-ditches with an entrance to the south-west. This important site was first identified as a cropmark on aerial photographs and subsequently confirmed by magnetometer survey. The latter suggests a settlement extending well beyond the confines of the round itself (MCO29843 and MCO21834).

As a result of the EIA process, the boundary of the solar farm development has been modified to exclude the round, and the most significant adjacent features. However the geophysical survey shows multi-period boundaries and trackways extending throughout the development area, some of which may also be associated with the round. The main aims of the investigation were to ground-truth the magnetometer survey results and recover dating evidence for the features identified, as well as any more ephemeral features that do not show up in the survey results.

All but one trench encountered linear archaeological features (boundary ditches and trackways). In the vast majority of cases they were found in the locations predicted by the geophysical survey and historic map evidence. A few undated discreet features of doubtful significance were also recorded, including two possible postholes in Trench 1 and a series of probable root holes in Trench 6, none of which were visible on the geophysical survey plot.

All of the surviving features were very shallow (c 0.05m to 0.20m) and covered by relatively thin topsoil (typically between 0.3 – 0.6m thick). Due to the softness of the Mudstone bedrock the features appear to be subject to active erosion caused by ploughing. Because the features were so shallow, few reliable stratigraphic relationships were observed that could shed light on the origins of the trackways or boundaries investigated. As no datable artefacts were recovered from any of the features or the topsoil, and there were no deposits suitable for scientific dating, little can be said about the date of individual features on archaeological grounds. Prehistoric and Roman/ post-Roman settlement sites in the south-west region are sometimes aceramic, or nearly so, such that the absence of pottery cannot be said to reflect absence of settlement in the vicinity.

The features on the geophysical survey can be divided into 3 broad phases based on their layout, appearance and the study of 19th century historic maps in comparison with the geophysical survey and trenching results. Given the scarcity of dating evidence these remain very uncertain:

Phase 1 – The series of small sub-rectilinear and penannular enclosures immediately south and west of Higher Treworder Round (Site 1). These features



were not investigated during the trench evaluation, as Site 1 and the surrounding field have been excluded from the solar farm development. On morphological grounds they seem likely to be of prehistoric, Roman and/or post-Roman date. The penannular features may be the roundhouses of a prehistoric settlement. There is no positive evidence for prehistoric, Roman or post-Roman features within the revised development boundary.

Phase 2 - Some of the major field boundaries within and surrounding the site may originally have been medieval cropping unit boundaries. They are characterised by sinuous boundaries typical of medieval 'open field' agriculture. Possible boundaries of this type include the northern, southern and north-eastern site boundaries and the slightly sinuous north-south boundary running through the middle of the site. None of these were investigated during the trenching as all have survived to the present as hedgerows and have been retained within the solar farm design.

Phase 2a consists of a series of linear geophysical anomalies which form curving, convergent patterns. Where investigated in the trenches these features proved to be broad, very shallow gullies, consistent with tracks worn into the bedrock surface, rather than deliberately cut ditches. The tracks are mostly concentrated in the eastern half of the site. 'Down' field names on the 1840 Tithe Map indicate that the eastern fields would probably have been unenclosed downland in the medieval/ early post-medieval period. The evaluation trenching did not recover any artefactual or stratigraphic evidence for the date of these features. However several appear to converge near the location of a pond shown on the 1840 Tithe Map next to Treworder Lane, which suggests that they are perhaps more likely to be associated with the medieval / early post-medieval landscape than the prehistoric (thus broadly contemporary with the Phase 2 boundaries).

Phase 3 – Probably in the late 18th or early 19th century the medieval/ post-medieval field system was extensively re-organised and infilled to create a series of smaller 'closes' (incorporating the Phase 2 boundaries). The geophysical survey shows that the boundaries of this phase overlay and superceded some of the Phase 2A tracks. This period is characterised by rectilinear enclosures bounded by straight 'cornish hedges' comprising thick earth or stone-faced banks. Most of these survive in the modern field system, although historic map evidence shows that four hedges of this phase within the solar farm site were removed between c 1840 and 1880. Where investigated in the trenches the boundaries of this phase were invariably marked by a pair of parallel ditches, presumably used as quarries for an intervening bank (as in the extant hedgerows) although no traces of the bank survived in the excavated examples. Some double-ditched features appear to be trackways rather than boundaries.

The complex sequence of extant and former boundaries and trackways within the site is of some significance for understanding the historic development of the local landscape. However their significance is low due to the difficulties in dating surviving components of the landscape.

The adverse effects on buried archaeological features of building the solar farm will be negligible, due to the low below ground impact of the solar panels and associated infrastructure. Given the extent of plough erosion evident in the trial trenches, it is possible that the development will have a beneficial effect, by removing the fields from cultivation.



1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 The site is located c. 1.5km to the east of Wadebridge, within the parish of Egloshayle, at grid reference SX 0110 7310. The site is bounded to the south by Treworder Lane and the A39 lies to the north.
- 1.1.2 The scope of work is informed by previous desk-based assessment and field investigation, including a geophysical survey, which were undertaken as part of an Environmental Impact Assessment (EIA, Wardell Armstrong 2011a and 2011b). The proposed scope is in accordance with consultations with P.Copleston, Historic Environment Planning Advice Officer for Cornwall Council.
- 1.1.3 Condition 5, attached to planning consent for the development, states that *'prior to the commencement of development a programme of archaeological recording work in accordance with a written scheme of investigation (WSI) shall be submitted and approved by the LPA. Once approved the agreed scheme shall be implemented in accordance with the details. Reason: To protect potentially important archaeological remains in accordance with the requirements of the National Planning Policy Framework' (NPPF).*

1.2 Geology and topography

- 1.2.1 The Site is situated on relatively elevated, level ground between two tributary streams of the River Allen, at c. 70m OD, the land dropping gently towards the river, which lies c. 500m to the south-east. The Allen is a tributary of the River Camel, which drains into a tidal estuary at Wadebridge.
- 1.2.2 The geology of the site comprises Mudstone of the Harbour Cove Slate Formation, a sedimentary bedrock formed between c. 354 and 370 million years ago, in the Devonian period. Ignaeous intrusions are present in the vicinity. Recent Quaternary period alluvial deposits infill the valley of the River Allen to the south-east of the site (but do not extend within the site boundaries) (British Geological Survey 2013, Geology of Britain Viewer (<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>)).

1.3 Archaeological and historical background

- 1.3.1 The archaeological and historical background has previously been detailed in a report produced by the Projects Team of Cornwall Council, for the Environmental Impact Assessment (EIA, Wardell Armstrong 2011, Report 44-0222/REN/335, Chapter 7). This reviewed the County Heritage Environment Record (HER), historic maps, historic landscape characterisation data and secondary historical sources. The EIA also considers the potential archaeological and visual impacts of the solar farm development on the historic landscape. A magnetometer survey was subsequently carried out and included as an addendum to the EIA, to further investigate the archaeological potential of the site and its surroundings (Archaeophysics January 2011, Appendix 7.1 of the EIA).
- 1.3.2 The proposed development area does not include any Scheduled Monuments (SMs) or Listed Buildings (LBs). However several non-designated 'heritage assets' are considered to be archaeologically significant:



- 1.3.3 The principal archaeological potential of the site lies in its immediate proximity to 'Higher Treworder Round' (MCO21631), a probable later prehistoric and/or Roman/post-Roman settlement, enclosed by two concentric ring-ditches with an entrance to the south-west. This important site was identified first as a cropmark on aerial photographs and subsequently confirmed by magnetometer survey. Extensive magnetic anomalies in the surrounding area, particularly to the north, south and west of the round, suggest a series of small ditched enclosures and ring-ditches consistent with prehistoric or Roman/ post-Roman settlement extending well beyond the confines of the round itself (MCO29843 and MCO21834).
- 1.3.4 As a result of the EIA process, the boundary of the solar farm development has been modified to exclude the round, and the most potentially significant nearby features. However the geophysical survey shows multi-period boundary systems and tracks extending throughout the development area, some of which may relate to the round. The site appears to be part of an extensively settled later prehistoric and/or Roman/ post-Roman landscape, the most significant focus of which is probably the Scheduled Monument of Castle Killibury (SM15011), c.800m to the north-east of the site, a hillfort with evidence for complex settlement remains dating from the Iron Age and post-Roman periods.
- 1.3.5 The placename 'Higher Treworder' is first documented in 1289 (ICS place-names index). The place-name contains the Cornish element *tre*, 'estate, farmstead', which indicates an origin in the 5th to 11th centuries AD (Padel 1985, 223-224). The second part of the name Treworder is from Cornish *gor-dre*, 'over-farmstead' (ibid, 110). Medieval Scheduled Monuments in the vicinity of the site include 'Three Holes Cross' (SM24286), c.600m north of the site, while Listed Buildings in the vicinity include a 16th century manor at Tregarden, c.1km to the east.
- 1.3.6 Some of the later field boundaries apparent on the magnetometer survey plot may derive from the enclosure of medieval cropping units while others, in particular the straight double-ditched boundaries, are most likely to date from 16th - 19th century enclosures. A trackway which crosses the site from NNE-SSW, as shown on the 1840 Tithe Map, is partially preserved within the modern boundary system and may derive from an ancient ridgeway route (Wardell Armstrong 2011).

1.4 Acknowledgements

- 1.4.1 The Belectric project managers were Julian Wooderson and Paul Camp. Thanks are also due to landowner Andrew Hawkey for facilitating access to the site, arranging supply of the mechanical excavator and accommodation for the site team. The OA site team comprised Jim Mumford (supervisor), Conan Parsons (surveyor), Alex Latham, Suzanne Westall and Daniel Strachan. Stuart Foreman managed the project for OA.



2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

General

2.1.1 The aims of the evaluation are to determine the location, extent, date, character, and state of preservation of any archaeological remains surviving within the site boundaries, paying particular attention to 'ground-truthing' the previous magnetometer survey results.

Detailed Aims and Objectives

2.1.2 The aims and objectives of the evaluation are as follows:

- (i) To determine or confirm the general nature of any remains present
- (ii) To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence.
- (iii) To determine or confirm the approximate extent of any remains.
- (iv) To determine the condition and state of preservation of any remains.
- (v) To determine the degree of complexity of the horizontal and/or vertical stratigraphy present.
- (vi) To determine or confirm the likely range, quality and quantity of any artefactual evidence present.
- (vii) to determine the potential of the site to provide palaeo-environmental and/or economic evidence and the forms in which such evidence may be present.

2.2 Methodology

2.2.1 The investigation comprised nine trenches, each 50m x 2m in plan (900m² in total plan area). This is a low percentage sample of the total site area (under 1%) but was considered commensurate with the limited total area of below-ground construction impact arising from the solar farm development, which amounts to 2,535m² out of a total site area of 144,900m² (see section 4.5). The scope of the evaluation trenching is in accordance with consultation with the Cornwall Council Archaeological Officer.

2.2.2 The trenches were positioned to investigate magnetic anomalies apparent on the geophysical survey plots, and the potential for more ephemeral archaeological features that might not have been detected by the survey. The positions were modified slightly to avoid the locations of grouting holes for the solar panels, for engineering reasons. They were also intended to test the depth of soil cover – The magnetic anomalies appear to thin out in an easterly direction, which could be explained either by the presence of colluvium or plough erosion.

2.2.3 The trenches were excavated to the bedrock surface by a tracked excavator fitted with a toothless bucket, under close archaeological supervision.



3 RESULTS

3.1 General soils and ground conditions

- 3.1.1 The site consisted of four ploughed fields that had been left fallow for nearly a year. Vegetation had started to grow, but the soil was well drained and easy to work when dry, becoming sticky when wet.
- 3.1.2 All archaeological features were encountered immediately below a variable thickness of ploughsoil (c 0.3 – 0.60m) and were cut into the Mudstone bedrock. The bedrock was extensively scored by ploughmarks, particularly in the eastern fields where the ploughsoil was at its thinnest. In Trench 4 pockets of a light yellowish silty clay were visible in depressions in the bedrock surface, which were interpreted as of natural, possibly periglacial, origin.

3.2 General distribution of archaeological deposits

- 3.2.1 Trench locations are shown on Figure 2 in relation to the geophysical survey plot. The nine trenches were positioned over a selection of geophysical anomalies, and to achieve an even distribution within the evaluation area. Feature and deposit dimensions and descriptions are tabulated by trench in Appendix A. All trenches were 50 m long and 2 m wide.
- 3.2.2 All surviving features were very shallow and had been either cut or eroded into the bedrock surface.
- 3.2.3 All trenches except Trench 4 encountered linear archaeological features (boundary ditches and trackways). In the vast majority of cases they were found in the locations predicted by the geophysical survey. A few undated discreet features were encountered, including two possible postholes in Trench 1, and a series of possible root disturbance holes along the eastern site boundary in Trench 6.
- 3.2.4 Feature fills typically consisted of friable mid brown silty clay loam. The differences between fills were not sufficient to assist in phasing features. Fill descriptions are tabulated in Appendix A but not included in the following trench descriptions.
- 3.2.5 None of the features investigated produced any artefacts, or deposits suitable for radiocarbon dating or palaeoenvironmental sampling.
- 3.2.6 'Geophysical anomaly numbers' in the following text refer to catalogue numbers used in the geophysical survey report (Archaeophysica 2012).

3.3 Trench 1 (Fig.3)

- 3.3.1 Trench 1 was aligned along the northern edge of the site, 100 m north-east of Higher Treworder Round (Site 1).
- 3.3.2 A single linear gully was encountered (cut102; fill 103) which was aligned north-south and corresponds with geophysical anomaly number 22. This appears to be the same feature as 'Site 2' (as defined in the Environmental Statement) a linear gully plotted from aerial photographs, which is identified in the ES as a possible prehistoric field boundary associated with the round (Wardell Armstrong 2012, Fig.7.9). The profile was broad (0.9m) and very shallow (0.04m) and no dating evidence was found. The feature profile is similar to other single linear gullies within the site, which are interpreted below as worn field tracks/ driveways - see Section 4.4). The slight curve to the ditch suggests that it merges with the reverse S-shaped northern site boundary, which



suggests that this feature is most likely to be a track, broadly contemporary with the medieval/ post-medieval landscape.

- 3.3.3 Two shallow, undated possible post holes were found side by side, comprising cut 105 (fill 103) and cut 106 (fill 107). They lie within 100m of the round, but there is no positive evidence that they are prehistoric.

3.4 Trench 2 (Fig.4)

- 3.4.1 Trench 2 was located in the north-east corner of the site and was positioned to investigate a sub-rectangular geophysical anomaly (catalogue number 29). The alignment of this feature differs from the surrounding medieval / post-medieval fields and trackways. The curving sub-rectangular form in plan resembles the small, probably prehistoric enclosures to the south and west of Higher Treworder Round.
- 3.4.2 At the eastern end of the trench two parallel ditches were found, which match the location and alignment of geophysical anomaly 29, although the survey plot shows only one ditch on this alignment. Ditch 206 (fills 207 and 208) had a steep-sided flat-based profile distinctly different and deeper than any others recorded in the evaluation. Gully 209 (fill 210), in contrast, was wide and very shallow, possibly a worn trackway rather than a ditch cut. No artefactual evidence was recovered from either feature to support a prehistoric date.
- 3.4.3 Ditch 204 (fill 205) was located in the middle section of the trench. Its location and alignment matches geophysical anomaly 28, a single straight linear feature. The north-west to south-east alignment seems to relate to the 19th / 20th century field system. Its profile was fairly broad and very shallow and may represent a worn track rather than a ditch cut.
- 3.4.4 Ditch terminal 202 (fill 203) was very ephemeral, aligned north-east to south-west, and does not match any geophysical anomalies or cropmarks or the surrounding modern field boundaries. No dating evidence was recovered.

3.5 Trench 3 (Fig.5)

- 3.5.1 Trench 3 was located in the north-west corner of the site, c. 50m east of Higher Treworder Round (Site 1).
- 3.5.2 At the south end of the trench the traces of a plough-levelled double-ditched field boundary were revealed (comprising parallel ditches 302 and 304) as predicted by the geophysical survey and historic map evidence. The boundary is marked on the 1840 Tithe Map, but had been removed prior to the 1880 Ordnance Survey. Both ditches had broad, shallow, flat-based profiles. There was no surviving trace of an intervening bank, probably due to plough erosion. The total width of the boundary was 4.7m. No stratigraphic or artefactual dating evidence was recovered.
- 3.5.3 At the northern end of the trench was a discreet feature (306) with irregular base and sides, perhaps a tree throw.

3.6 Trench 4 (not illustrated)

- 3.6.1 Trench 4 was positioned to investigate a short length of curved gully which was thought might be of prehistoric date on morphological grounds (geophysical anomaly 24). However no archaeological features were visible in the trench. The feature may have been lost to plough truncation.



3.7 Trench 5 (Fig.6)

- 3.7.1 Trench 5 was positioned to investigate the junction of geophysical anomalies 30 and 31, neither of which are marked on the 19th century historic maps, and a track marked on the 19th century historic maps.
- 3.7.2 The former track was extant was aligned SW-NE. It comprised ditch 501 (fill 502) to the north and ditch 503 (fill 504) to the south, both of which had narrow, shallow profiles.
- 3.7.3 The trench also investigated a NW-SE aligned curved linear feature shown on the survey plot (geophysical anomaly 30). In the trench this coincided with a pair of adjacent parallel gullies (cut 507; fill 508 and cut 509; fill 510). These were too close together to have been separated by a bank or track. Both were of similarly shallow depth but gully 509 was substantially wider than 507.
- 3.7.4 Towards the middle of the trench a very small, shallow linear feature, which is interpreted as the traces of a trackway ditch (cut 505; fill 506) as it appears to coincide with the north-western of the two ditches forming geophysical anomaly 31.
- 3.7.5 At the southern end of the trench were two small narrow, parallel ditches, aligned north-east to south-west (cut 511; fill 512 and cut 513; fill 514). These were very close together, almost touching, so could not have been separated by a bank. They appear to coincide with the south-eastern ditch of geophysical anomaly 31.
- 3.7.6 The alignments and locations of all of these features match those on the geophysical survey plot and no other features were recorded.

3.8 Trench 6 (Fig.7)

- 3.8.1 Trench 6 was positioned alongside an extant field boundary and lane which forms the north-eastern site boundary. Geophysical survey and historic maps indicated the presence of a pair of parallel trackway ditches at the NE end of the trench, but no evidence for these was visible in the trench. Traces of the former field track may have been removed by plough erosion.
- 3.8.2 A single ditch (geophysical anomaly 33), which was predicted at the south-east end of the trench, was successfully identified, in the form of a 1.5m wide ditch terminal (cut 618; fill 619) with near vertical sides and a concave base.
- 3.8.3 A possible gully or plough score (604; fills 605 and 606) was recorded, on a similar alignment to the adjacent north-eastern site boundary. It was not visible on the geophysical survey plot. Cut 609 (fill 610) was another linear feature, similar in appearance and alignment to feature 604 and the two may be segments of the same truncated feature.
- 3.8.4 A series of four oval pit-like features may be tree throws or root holes associated with a former hedge line along the north-eastern site boundary. From north to south the feature numbers are as follows: Cut 602 (fill 603); cut 607 (fill 608); cut 614 (fill 615); cut 616 (fill 617). All four had approximately similar profiles, typically with moderately steep sides with a rounded or flat base, and were distributed throughout the length of the trench.
- 3.8.5 Pit 611 (fills 612 and 613) was a circular feature 0.55m in diameter with vertical (0.23m deep) sides and a flat base. This profile differs distinctly from the possible root holes described above. The primary fill (612) was a friable black silty clay with a concentration of charcoal in the base of the feature. A secondary fill comprising dark brown silty clay (613) infilled the top of the feature. The charcoal deposit and profile



suggests that this could be an archaeological feature, although charcoal can be found in root holes as a result of natural or man-made burning of vegetation. No artefacts were recovered so the date and interpretation of the feature are uncertain.

3.9 Trench 7 (Fig.8)

- 3.9.1 Trench 7 was aligned east to west next to Lower Treworder Lane and was positioned to investigate a conjunction of linear features (geophysical anomalies 38 and 41, and a double-ditched 19th century field boundary). All of these features were successfully identified and no others were present.
- 3.9.2 The parallel ditches of the NW-SE aligned 18th/ 19th century boundary, located at the west end of the trench, comprised cut 701 (fills 702 and 703) and cut 704 (fill 705). Both ditches were very shallow with a slightly concave base. There was no surviving trace of a bank separating the ditches. To the east of these was a third ditch of similar profile and dimensions, on the same alignment, separated from 702 and 704 by a gap of c. 4.5m. It is perhaps a flanking ditch for a field track alongside the 18th/19th century boundary. This particular boundary is not marked on the Tithe Map and is thus likely to have been removed before 1840.
- 3.9.3 At the eastern end of the trench the junction between two gullies was investigated (geophysical anomalies 38 and 41). The earliest of the features was a broad and very shallow gully (cut 708; fill 710), which was aligned NW-SE. This was cut by a north-south aligned narrow gully (cut 712; fill 713) with a shallow concave profile.

3.10 Trench 8 (Fig.9)

- 3.10.1 Trench 8 was positioned in the south-western corner of the development site, c 100m south of a complex of probable prehistoric cropmarks associated with Higher Treworder Round (Site 1). No prehistoric features were found in the trench.
- 3.10.2 The trench also investigated a double-ditched boundary apparent on the geophysical survey plot, which clearly formed part of the 19th century field system. A pair of parallel ditches was found in the middle section of the trench, in the location predicted by the survey and historic map evidence. The northern ditch (cut 802; fills 803 and 804) had a relatively broad, shallow concave profile. The southern ditch (805; fill 806) had a somewhat narrower shallow concave profile.
- 3.10.3 A modern linear feature, which was visible as a depression in the surface of the field, was recorded on a parallel alignment to ditches 802 and 805. It was marked by a ditch (cut 807; fill 808) which was cut through the topsoil but did not penetrate into the bedrock at all. It had steep sloping sides and a flat base.

3.11 Trench 9 (Fig.10)

- 3.11.1 Trench 9 was located in the south-east corner of the site to investigate two probable former tracks which appear to predate the 18th/19th century enclosures (geophysical anomalies 44 and 45). Three linear features were recorded cutting into the bedrock.
- 3.11.2 In the middle of the trench was an east-west aligned gully with a very broad, shallow profile (cut 901; fill 902) whose presence was not predicted by the geophysical survey or other evidence.
- 3.11.3 At the southern end of the trench, coinciding with geophysical anomaly 44, were two broad, very shallow parallel gullies, which were too close together to have been separated by a bank. The twin gullies perhaps represent wheel ruts of a former (pre-



19th century) track. The northern gully (cut 903; fill 904) had a single fill while the southern gully had two fills (907 and 908).

3.12 Finds summary

3.12.1 No finds were recovered from any of the archaeological features excavated, or from the overlying plough soil. Opportunistic inspection of the ploughed field surface during the evaluation did not see any archaeological finds, except for modern refuse in hedge lines.



4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The trench sample adopted is comparatively low at 1% of the development area, but is considered sufficient to ground-truth the geophysical survey results, and is appropriate given the low ground impact of the solar farm. The vast majority of linear features identified on the magnetometer survey plots were located successfully in the trenches. The geophysical survey plot thus appears to be a reliable guide to linear archaeological features (boundary ditches and trackways) within the site. Very few discreet features (such as pits and) were encountered in the trenches, but they are generally much more difficult to detect using both geophysical survey and low density trial trenches.

4.2 Evaluation objectives and results

4.2.1 All trenches except Trench 4 encountered linear archaeological features (boundary ditches and trackways). In the majority of cases they were found in the locations predicted by the geophysical survey. A few undated discreet features of doubtful significance were encountered, including two possible postholes in Trench 1 and possible root holes in Trench 6, none of which were visible on the survey plot.

4.2.2 All of the surviving features were very shallow (c 0.05m to 0.20m) and covered by relatively thin topsoil cover. Due to the softness of the Mudstone bedrock the features appear to be subject to active erosion caused by mechanised ploughing.

4.2.3 No datable artefacts were recovered from any of the features or the topsoil, and no deposits suitable for scientific dating were encountered. As no finds were recovered at all, little can be said about the date of individual features on archaeological grounds. Prehistoric and Roman/ post-Roman settlement sites in the south-west region are sometimes aceramic, or nearly so, such that the absence of pottery cannot be said to reflect absence of settlement in the vicinity. Because the features were so shallow, few reliable stratigraphic relationships were observed that could shed light on the origins of the trackways or boundaries investigated.

4.2.4 The archaeological deposits encountered were inorganic shallow feature fills, not suitable for environmental sampling or radiocarbon dating.

4.3 Interpretation

4.3.1 There was no significant evidence for settlement of any period within the trench evaluation area. The only discreet features encountered in the vicinity of Higher Treworder Round (Site 1) comprised two possible postholes in Trench 1, which lies 100m to the north-east. It is possible that they represent outlying prehistoric features of this settlement. However the latter appear to be concentrated to the south and west of the round. There is no indication on aerial photographs or the geophysical survey that prehistoric settlement features extend to the north-east.

4.3.2 A second group of four undated possible root holes were recorded in Trench 6 (along the north-eastern site boundary, but in absence of dating evidence their archaeological significance is doubtful.

4.3.3 All other features investigated in the evaluation trenches were linear trackways or field boundaries. Much analysis of the historic landscape of Cornwall has been undertaken on the basis of documentary evidence, historic map regression and aerial photographic



evidence (REF). The Cornwall Historic Landscape Characterisation categorises the Higher Treworder area as 'Anciently Enclosed Landscape' (AEL).

- 4.3.4 The linear features on the geophysical survey plot can be divided into four broad phases on stratigraphic and morphological grounds:
- 4.3.5 **Phase 1** - A series of small sub-rectilinear and penannular enclosures is apparent on the geophysical survey plot, immediately south and west of Higher Treworder Round (Site 1). These features were not investigated during the trench evaluation as Site 1 and the surrounding field have been excluded from the solar farm development. On morphological grounds they seem likely to be of prehistoric, Roman and/or post-Roman date. The penannular features may be the roundhouses of a prehistoric settlement. There is no positive evidence for prehistoric, Roman or post-Roman features within the revised development boundary.
- 4.3.6 **Phase 2** - Enclosure of much of the arable landscape of Cornwall is thought to have taken place in a gradual process between the 14th and the 17th centuries, replacing the 'open field' agriculture of the early medieval period in which groups of families cooperated in working dispersed strips within an open field system. Early enclosures often incorporated elements of the former open field, most commonly the existing stock-proof boundaries between 'cropping units', which characteristically form gently curving reversed 'S' shaped fields. These give the resulting field systems a sinuous pattern which contrasts with the straight alignments of more recent enclosures. The landscape at Lower Treworder seems to incorporate some sinuous major boundaries which conform to this pattern, such as the northern and site boundary, and possibly Treworder Lane, although the pattern is not as distinct as in many areas of AEL in Cornwall (Wardell-Armstrong 2012). The slightly sinuous north-south boundary running through the middle of the site is a likely candidate for a medieval boundary of this type. Field names on the 1840 Tithe apportionment schedule to the east of this boundary include 'Great Down', 'Homer Down' and 'Yonder Down' which suggests the enclosure of former downland pasture at some point in the medieval or post-medieval period. The fields on the western side of the boundary (in closest proximity to Higher Treworder medieval/ post-medieval farmstead) in contrast have names suggesting arable cultivation (Wardell Armstrong 2012). The distinction between arable and pasture in Cornwall is not as clear cut as in other parts of southern Britain. Carew described traditional mixed farming practice in Cornwall in the early 17th century in which farmers sowed crops of wheat and oats in a *close* (hedged field) for a year or two and were then obliged to 'give it at least seven or eight years ley' (ie put the land down to pasture to restore fertility between cropping) (Ref Carew). No Phase 2 boundaries were investigated by trenching as most have survived as hedgerows to the present day and will be retained within the solar farm.
- 4.3.7 **Phase 2A** consists of a series of shallow single gullies which form curving, convergent patterns. The geophysical survey report suggests that these could be prehistoric field systems associated with Higher Treworder Round. However their convergent alignments suggests that they are more likely to be livestock droveways than arable field boundaries. The evaluation trenching did not recover any artefactual or stratigraphic evidence for the date of these features. However several appear to converge near the location of a pond shown on the Tithe Map next to Treworder Lane (Site 6) which suggests that they are perhaps more likely to be associated with the medieval / early post-medieval landscape than the prehistoric. They may be broadly contemporary with the Phase 2 boundaries. The greatest concentration of tracks occurs in the eastern half of the site. This and the Tithe Map field names (see para 4.3.5)



suggests that the landscape at this location may have remained largely open downland in the late medieval and post-medieval periods, used as rough pasture. With the possible exception of geophysical anomaly 29 (investigated in Trench 2) the morphology and alignments of the Phase 3 features have little in common with the probable prehistoric enclosures to the south and west of Higher Treworder Round (Site 1). Where investigated in trial trenches the Phase 2 features proved to be broad, very shallow gullies, consistent with tracks worn into the bedrock surface, rather than deliberately cut ditches. Among this group is an old track line comprising geophysical anomalies 8, 34 and 44, which ran from the direction of the post-medieval Higher Treworder farmstead and merged with Treworder Lane near the south-east corner of the site. Although no reliable stratigraphic relationships were observed in the trenches, in plan several of the tracks are clearly overlain by the double-ditched 18th/19th century enclosure boundaries comprising Phase 3.

- 4.3.8 **Phase 3** - This period is characterised by rectilinear enclosures bounded by straight 'cornish hedges' comprising earth or stone-faced banks, typically c 5m wide. Most of these survive in the modern field system, although historic map evidence shows that four hedges of this phase within the solar farm site were removed between c 1840 and 1880. Where investigated in the trenches the boundaries of this phase were invariably marked by a pair of parallel ditches, presumably used as quarries for an intervening bank (as in the extant hedgerows) although no traces of the bank survived in the excavated examples. Some double-ditched features of this phase appear to be trackways rather than boundaries. Four former boundaries of this type were investigated (in Trenches 3, 5, 7 and 8) in locations predicted on the basis of the geophysical survey and historic map evidence. One of these, in Trench 7, seems to have been removed before 1840 as it does not appear on the Tithe Map, but it clearly relates spatially to the 19th century field system and overlies an old track line (geophysical anomaly 38). Three other double-ditched boundaries, in Trenches 5, 7 and 8, were marked on the 1840 Tithe Map but appear to have been removed prior to the 1880 First Edition Ordnance Survey. There is no evidence for any boundaries within the evaluation area being removed during the 20th century.
- 4.3.9 This phase of enclosure seems to have subdivided two large pre-existing 'cropping units' into several smaller 'closes' and re-arranged the field tracks so as to follow the new boundaries. The straight double-ditched boundaries appear characteristic of late enclosures of former commons and waste in the 16th-19th centuries, the most intense period of activity being between c. 1760 and 1840 (Menner 2007). The evaluation trenches did not shed much additional light on this process.
- 4.3.10 Trenches 5 and 6 were placed to investigate a linear feature which is suggested in the Environmental Statement to be on the line of a putative ancient ridgeway connected with Castle Killibury to the NE. It appears on the geophysical survey plot as a double-ditched feature and is marked on the 1840 Tithe Map as a track (as distinct from a field boundary). In Trench 5 a pair of parallel ditches was found at the north-west end of the trench in the location predicted, but these were indistinguishable from the pairs of ditches elsewhere on the site which mark removed 18th/19th century hedges. No evidence for a track on this alignment was found in Trench 6. This does not necessarily disprove the existence of a ridgeway; In an unenclosed prehistoric landscape the precise route followed may have varied considerably. Any shallow traces are likely to have been removed by modern plough erosion. A second double-ditched trackway (geophysical survey feature 31) appears to be a contemporary 18th or 19th century branch of the track described above, but is not shown on the 1840 Tithe Map and may have been removed by that date.



4.4 Significance

- 4.4.1 The evaluation has shown that archaeological features of generally low or negligible significance survive as very shallow, plough-eroded features cut into the bedrock surface. They appear to be under active erosion caused by mechanized ploughing.
- 4.4.2 Two groups of discreet features in Trenches 1 and 6 are of negligible significance in isolation given their poor preservation and the absence of dating evidence.
- 4.4.3 The extensive series of tracks and boundaries underlying the 19th century field system is of some interest in elucidating the development of the local agricultural landscape but, due to a lack of archaeological dating evidence and poor preservation, the features themselves are of low significance. There was no evidence that any of the features investigated form part of a prehistoric field system associated with Higher Treworder Round (Site 1).

4.5 Impact assessment

- 4.5.1 The solar farm development is designed to be low impact in terms of groundworks to allow management of the site as a meadow when the installation is complete. General topsoil stripping is not required. The total area of below-ground impact amounts to 2,535 m² out of a total site area of 144,900 m², just under a 2% impact overall. This comprises 2,816 grouting holes for the solar panel supports (each 0.2 m²). The impact of the associated cable trenching is 1,752 m² and other impacts (including substation footings) are estimated at a worst case of 220 m².
- 4.5.2 The groundworks described above would be undertaken by small tracked machines. The grouting holes would initially be dug by machine to a 0.5m x 0.5m plan and then the remainder of the required depth is drilled using a small tracked drilling machine. The developers method for constructing temporary compound and access tracks involves laying geotextile and stone on the existing ground surface without taking off the topsoil and removing them on completion of the development.
- 4.5.3 As the main known archaeological constraint on the development, Higher Treworder Round (Site 1) and associated features have been excluded from the development there will be no impact on this important archaeological site. In terms of conserving the archaeology within the revised site boundary it can be argued that the minor impacts caused by the development would be offset by the benefits of taking the site out of arable cultivation. On balance the overall impact on buried archaeological features would be negligible.



APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description				Orientation		SE-NW
Trench 1 was aligned along the northern edge of the site, 100 m north-east of Higher Treworder Round (Site 1). Two possible postholes were identified and a gully were investigated. No evidence was found for a prehistoric origin.				Avg. depth (m)		0.3
				Width (m)		2
				Length (m)		50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
100	Layer	-	0.3	Plough soil; friable reddish brown silty clay loam with slate and Mudstone fragments	-	-
101	Layer	-	-	Natural; light grey brown Mudstone	-	-
102	Cut	1	0.04	Gully with shallow sloping sides and a flat base	-	-
103	Fill			Fill of feature 102; loose mid brown silty clay loam	-	-
104	Cut	0.36	0.1	Post hole; steep sloping sides and a concave base.	-	-
105	Fill			Fill of post hole 104; friable mid brown silty clay loam	-	-
106	Cut	0.34	0.14	Post hole; steep sloping sides and concave base.	-	-
107	Fill	-	-	Fill of post hole 106; friable mid brown silty clay loam	-	-



Trench 2						
General description					Orientation	E-W
Trench 2 was located in the north-east corner of the site and was positioned to investigate a sub-rectangular geophysical anomaly (catalogue number 29) thought potentially to be of prehistoric date. Various ditches and gullies were investigated but no evidence was found for a prehistoric origin.					Avg. depth (m)	0.3
					Width (m)	2
					Length (m)	50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
200	Layer	-	0.3	Plough soil; friable reddish brown silty clay loam with slate and mudstone fragment.	-	-
201	Layer	-	-	Natural; light grey brown Mudstone	-	-
202	Cut	0.9	0.15	Ditch; rounded north-east end and a flat concave profile	-	-
203	Fill	-	-	Fill of feature 202; friable reddish brown silty clay loam	-	-
204	Cut	0.9	0.15	Ditch; shallow concave profile;	-	-
205	Fill	-	-	Fill of feature 204; friable mid brown silty clay loam	-	-
206	Cut	1.12	0.44	Ditch; steep sloping sides and flat base	-	-
207	Fill	-	-	The secondary fill of feature 208; friable mid brown silty clay loam.	-	-
208	Fill	-	-	The primary fill of feature 206; light brown silty clay loam with yellow clay patches;	-	-
209	Cut	1.16	0.16	Gully; shallow concave profile.	-	-
210	Fill	-	-	Fill of feature 209; friable mid brown silty clay loam (210).	-	-



Trench 3						
General description				Orientation		E-W
Trench 3 was located in the north-west corner of the site, c. 50m east of Higher Treworder Round (Site 1). It contained a natural feature and double-ditched 18th/ 19 th century field boundary.				Avg. depth (m)		0.44
				Width (m)		2.10
				Length (m)		37.70
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
300	Layer	-	-	Natural; light grey brown Mudstone	-	-
301	Layer	-	0.3	Plough soil; friable reddish brown silty clay loam with slate and mudstone fragments	-	-
302	Cut	1.45	0.12	Ditched field boundary; shallow concave profile	-	18 th /19 th century
303	Fill	-	-	Fill of feature 302; dark reddish brown silty clay loam	-	-
304	Cut	1.25	0.15	Ditched field boundary; steep sloping north side rounding to a narrow concave base with a shallower south side	-	18 th /19 th century
305	Fill	-	-	Fill of feature 304; dark reddish brown silty clay loam	-	-
306	Cut	0.8	0.24	Natural feature; irregular sides and base	-	-
307	Fill	-	-	Fill of feature 306, reddish brown silty clay loam	-	-



Trench 4						
General description				Orientation		N-S
Trench 4 was positioned to investigate a short length of curved gully which was thought might be of prehistoric date on morphological grounds (geophysical anomaly 24). However no archaeological features were visible in the trench. The ditch may have been lost to plough truncation.				Avg. depth (m)		0.4
				Width (m)		2
				Length (m)		50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
400	Layer	-	-	Natural; light grey brown Mudstone	-	-
401	Layer	-	0.4	Plough soil; friable reddish brown silty clay loam with slate and Mudstone fragments.	-	-
402	Layer	-	0.12	Sub soil; a band of orange-brown silty clay infilling a shallow hollow in the Mudstone surface. The band coincides with a linear magnetic anomaly on the geophysical survey plot.	-	-



Trench 5							
General description				Orientation		N-S	
Trench 5 was positioned to investigate the junction of geophysical anomalies 30 and 31, neither of which are marked on the 19 th century historic maps. The alignments and locations of all of these features match those on the geophysical survey plot and no other features were recorded.				Avg. depth (m)		0.37	
				Width (m)		2	
				Length (m)		50	
Contexts							
context no	type	Width (m)	Depth (m)	comment	finds	date	
500	Layer	-	0.37	Plough soil; friable reddish brown silty clay loam with slate and Mudstone fragment	-	-	
501	Cut	0.52	0.1	Ditch; shallow concave based profile	-	18 th /19 th Century	
502	Fill	-	-	Fill of feature 501; friable dark brown silty clay loam	-	-	
503	Cut	0.52	0.1	Ditch; shallow concave profile	-	18 th /19 th Century	
504	Fill	-	-	Fill of feature 503; dark brown silty clay loam.	-	-	
505	Cut	0.2	0.03	Shallow ploughmark; cuts north-south across two earlier ditches on a N-S alignment	-	-	
506	Fill	-	-	Fill of feature 505; mid brown silty clay loam	-	-	
507	Cut	0.79	0.06	Narrow ditch with sloping sides and concave base.	-	-	
508	Fill	-	-	Fill of feature 507; firm grey brown silty clay loam	-	-	
509	Cut	1.54	0.12	Ditch; wide shallow concave profile	-	-	
510	Fill	-	-	Fill of feature 509; grey brown silty clay loam.	-	-	
511	Cut	0.52	0.05	Ditch; shallow concave profile	-	-	
512	Fill	-	-	Fill of feature 511; dark brown silty clay loam	-	-	
513	Cut	0.38	0.03	Ditch; shallow concave profile	-	-	
514	Fill	-	-	Fill of feature 513; mid dark grey brown silty clay loam	-	-	
515	Layer	-	-	Natural; light grey brown Mudstone	-	-	



Trench 6						
General description					Orientation	NW-SE
<p>Trench 6 was positioned beside an extant field boundary and lane which forms the north-eastern site boundary. Geophysical survey and historic maps indicated the presence of a pair of parallel trackway ditches at the NE end of the trench, but no evidence for these was visible in the trench. Plough erosion is severe. A single ditch (geophysical anomaly 33), which was predicted at the south-east end of the trench, was successfully identified. Otherwise the trench contained possible root holes and a plough furrow. No dating evidence was recovered.</p>					Avg. depth (m)	0.34
					Width (m)	2
					Length (m)	50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
600	Layer	-	-	Natural; friable reddish brown silty clay loam with slate and mudstone fragments	-	-
601	Layer	-	0.3	Plough soil	-	-
602	Cut	0.54	0.1	Root hole? Moderate sides with flat base.	-	-
603	Fill	-	-	Fill of feature 602; reddish brown silty clay loam	-	-
604	Cut	0.4	0.1	Ditch or plough mark(?) with steep sloping west side and narrow concave base and a shallower sloping east side.	-	-
605	Fill	-	-	Fill of feature 604	-	-
606	Fill	-	-	Fill of feature 604; light grey brown silty clay with a fine lens of very dark grey brown weathered mudstone	-	-
607	Cut	0.4	0.08	Root hole? Moderate sides with flat base.	-	-
608	Fill	-	-	Fill of feature 607; light reddish brown silty clay loam	-	-
609	Cut	0.28	0.06	Ditch or plough mark? Very shallow, truncated profile.	-	-
610	Fill	-	-	Fill of feature 609; dark brown silty clay loam	-	-
611	Cut	0.55	0.23	Pit; vertical sides and flat base.	-	-



612	Fill	-	-	Primary fill of feature 611; friable black silty clay with concentration of charcoal filling the base	-	-
613	Fill	-	-	Secondary fill of feature 611; dark brown silty clay	-	-
614	Cut	0.46	0.22	Root hole? Moderate west side, steep east side, with concave base.	-	-
615	Fill	-	-	Fill of feature 614	-	-
616	Cut	0.3	0.11	Root hole? Moderate sides, with concave base	-	-
617	Fill	-	-	Fill of feature 616; dark brown silty clay	-	-
618	Cut	0.4	0.2	Ditch; vertical west side, moderate east side, concave base	-	-
619	Fill	-	-	Fill of feature 618; reddish brown silty clay loam.	-	-

Trench 7						
General description					Orientation	E-W
Trench 7 was aligned east to west next to Lower Treworder Lane and was positioned to investigate a conjunction of linear features (geophysical anomalies 38 and 41, and a double-ditched 19 th century field boundary). All of these features were successfully identified and no others were present. No dating evidence was recovered.					Avg. depth (m)	0.32
					Width (m)	2
					Length (m)	50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
700	Layer	-	0.32	Plough soil	-	-
701	Cut	0.81	0.12	Ditch	-	18 th /19 th Century
702	Fill	-	-	Fill of feature 702; friable dark grey brown silty clay loam	-	-
703	Fill	-	-	Fill of feature 702; friable dark brown silty clay loam	-	-
704	Cut	0.78	0.09	Ditch	-	18 th /19 th Century
705	Fill	-	-	Fill of feature 704; friable dark brown silty clay loam	-	-
706	Cut	0.54	0.06	Ditch	-	-
707	Fill	-	-	Fill of feature 706; friable dark brown silty clay loam	-	-
708	Cut	1.78	0.06	Ditch	-	-



709	Fill	-	-	Fill of feature 708; dark brown silty clay loam	-	-
710	Cut	0.7	0.08	Ditch	-	-
711	Fill	-	-	Fill of feature 710; dark brown silty clay loam	-	-
712	Cut	0.32	0.13	Ditch	-	-
713	Fill	-	-	Fill of feature 712; dark brown silty clay loam	-	-
714	Layer	-	-	Natural; light grey brown mudstone	-	-

Trench 8						
General description				Orientation	N-S	
Trench 8 was positioned in the south-western corner of the development site, c 100m south of a complex of probable prehistoric cropmarks associated with Higher Treworder Round (Site 1). No prehistoric features were apparent. The Trench contained a 18 th /19 th field boundary and a modern boundary in the plough soil. No dating evidence was recovered.				Avg. depth (m)	0.62	
				Width (m)	2	
				Length (m)	50	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
800	Layer	-	0.62	Plough soil; friable reddish brown silty clay loam with slate and mudstone fragment	-	-
801	Layer	-	-	Natural; light grey brown Mudstone	-	-
802	Cut	1.84	0.22	Ditch; shallow concave profile	-	18 th /19 th Century
803	Fill	-	-	Secondary fill of feature 802	-	-
804	Fill	-	-	Primary fill of feature 802; dark reddish brown silty clay loam	-	-
805	Cut	0.77	0.22	Ditch; shallow concave profile	-	18 th /19 th Century
806	Fill	-	-	Fill of feature 805; dark brown silty clay loam	-	-
807	Cut	1.98	0.62	Ditch; Steep sides and flat base	-	Modern (cut through topsoil only)
808	Fill	-	-	Fill of feature 807; dark reddish brown silty clay loam	-	-



Trench 9						
General description				Orientation		N-S
Trench 9 was located in the south-east corner of the site to investigate two probable former tracks which appear to pre-date the 18th/19 th century enclosures (geophysical anomalies 44 and 45) . Three ditches were recorded cutting into the bedrock, two of which (cuts 903 and 905) correspond to geophysical anomaly 44. Ditch 901 is on a similar alignment to geophysical anomaly 45 but is located c. 15m too far south to be a direct match. No dating evidence was recovered.				Avg. depth (m)		0.4
				Width (m)		2
				Length (m)		50
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
900	Layer	-	0.4	Plough soil; friable reddish brown silty clay loam with slate and mudstone fragment	-	-
901	Cut	2.3 m	0.16 m	Ditch; broad shallow profile	-	-
902	Fill	-	-	Fill of feature 901; light grey brown silty clay loam	-	-
903	Cut	1.8	0.1	Ditch; broad shallow profile	-	-
904	Fill	-	-	Fill of feature 903; mid brown silty clay loam	-	-
905	Cut	2.4	0.1	Ditch; broad shallow profile	-	-
906	Fill	-	-	Secondary fill of feature 905; lens of light grey with yellowish clay mudstone – possibly compacted material within wheel rut	-	-
907	Fill	-	-	Primary fill of feature 905; light grey brown silty clay loam	-	-
908	Layer	-	-	Natural; light grey brown Mudstone	-	-



APPENDIX B. BIBLIOGRAPHY AND REFERENCES

Carew, R, 1602, *The Survey of Cornwall*

Cornwall Archaeological Unit & LDA 1994: *Cornwall Landscape, Assessment 1994*, Cornwall County Council, Truro

Menner, R, 2007, Post-Medieval Hedges in Cornwall (1540-1840)

Oxford Archaeology, 1992, Fieldwork Manual, (Ed. D Wilkinson, first edition, August 1992)

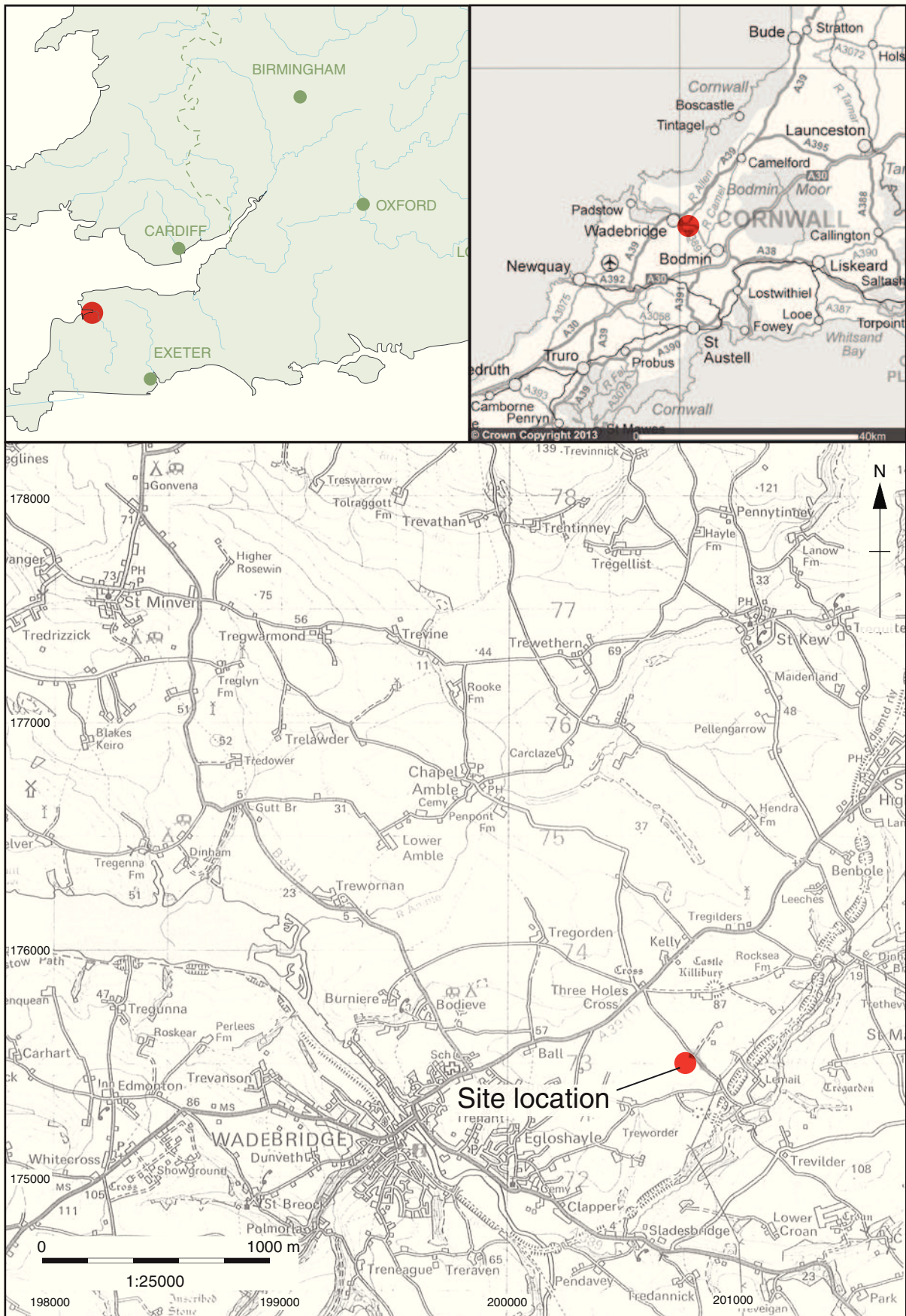
Oxford Archaeology, 2000, OA Environmental Sampling Guidelines and Instruction, Manual

Miles, H, 1977, Excavations at Killibury Hillfort, Egloshayle 1975-6 *Cornish Archaeology* 16, 89-121



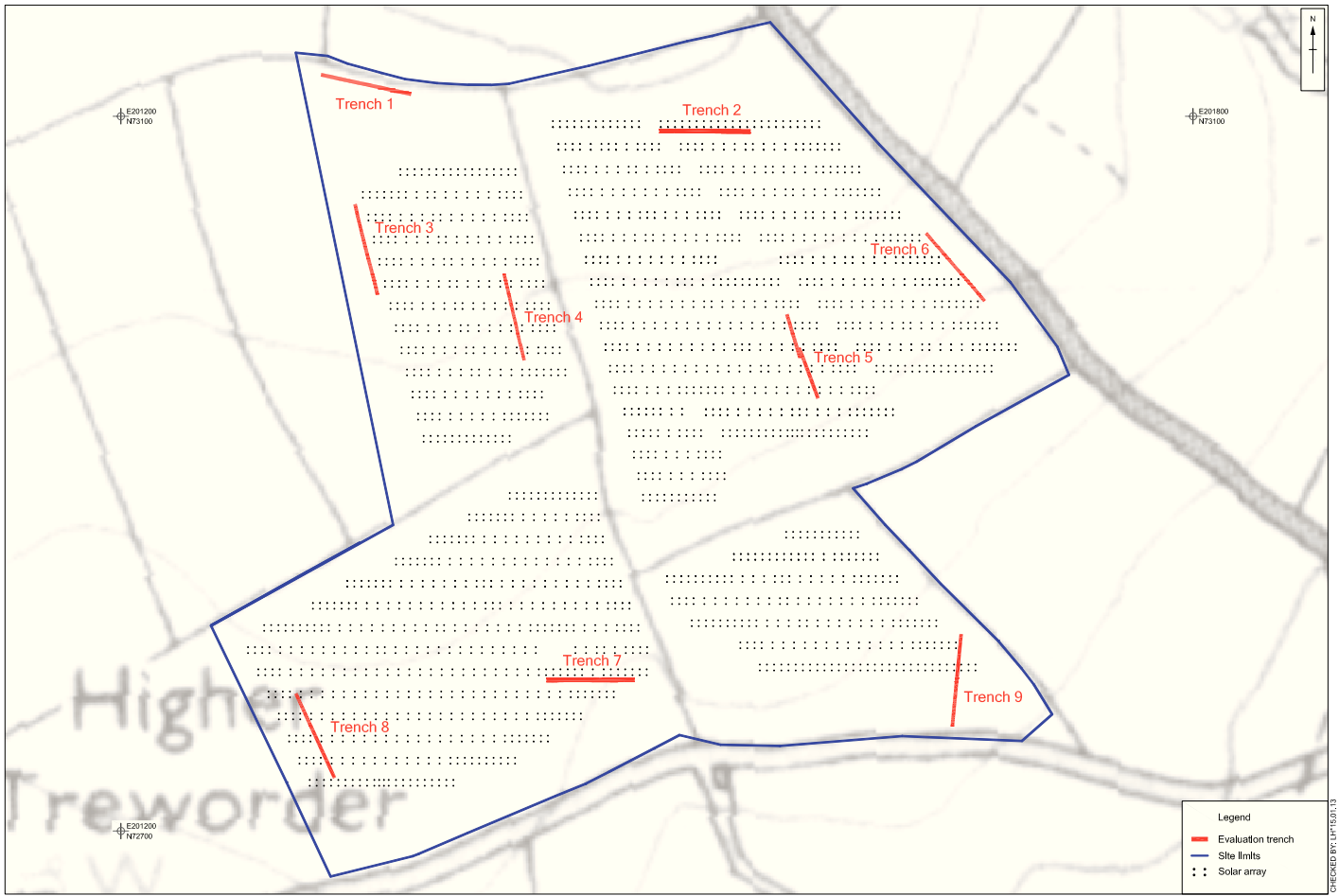
APPENDIX C. SUMMARY OF SITE DETAILS

Site name:	Belectric Solar Farm, Lower Treworder, Wadebridge, Cornwall
Site code:	EGTW 13
Grid reference:	SX011 731
Type:	Evaluation
Date and duration:	
Area of site:	Nine evaluation trenches 50 x 2m
Summary of results:	insert concise summary of works
Location of archive:	The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Royal Cornwall Museum, Truro (or a suitable alternative repository).



Reproduced from the Landranger 1:50,000 scale by permission of the Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office
© Crown Copyright 1974. All rights reserved. Licence No. AL 100005569

Figure 1: Site location



All GIS data reproduced by permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © 2013 Crown copyright. All rights reserved. Licence No. 10002006

Survey Data supplied by:
Conan Parsons

0 100 m
Scale at A3 1:2000

Figure 2 - Trench location plan

CHECKED BY: LUT/03/13

Trench 1

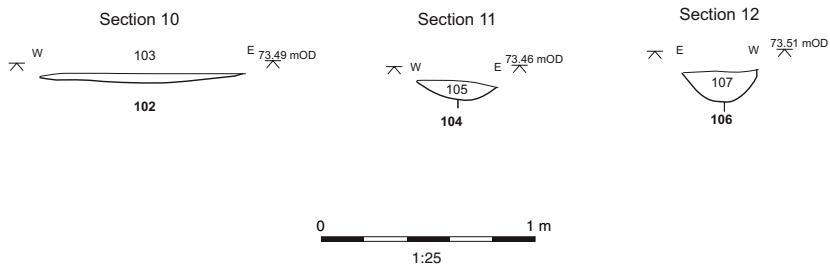
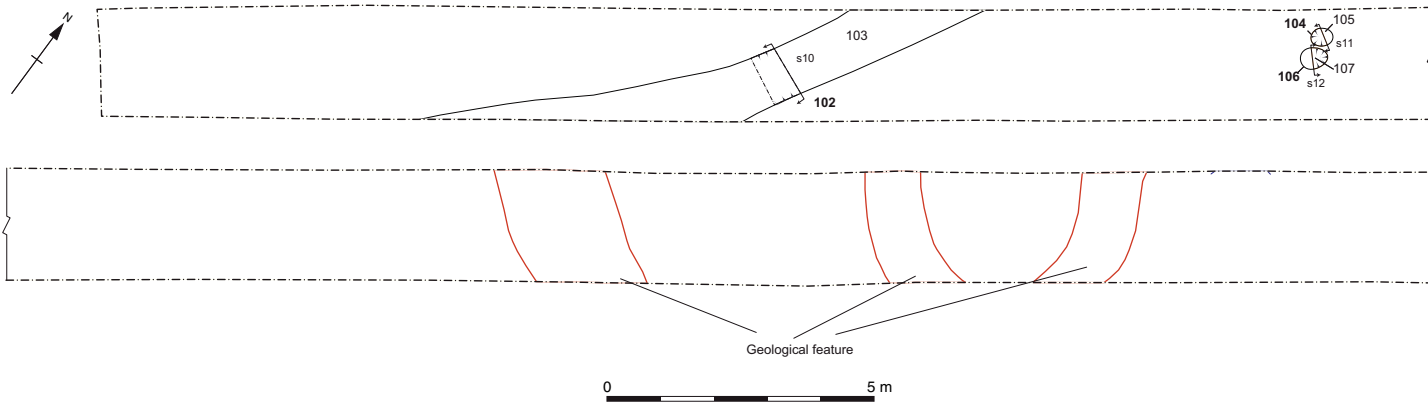
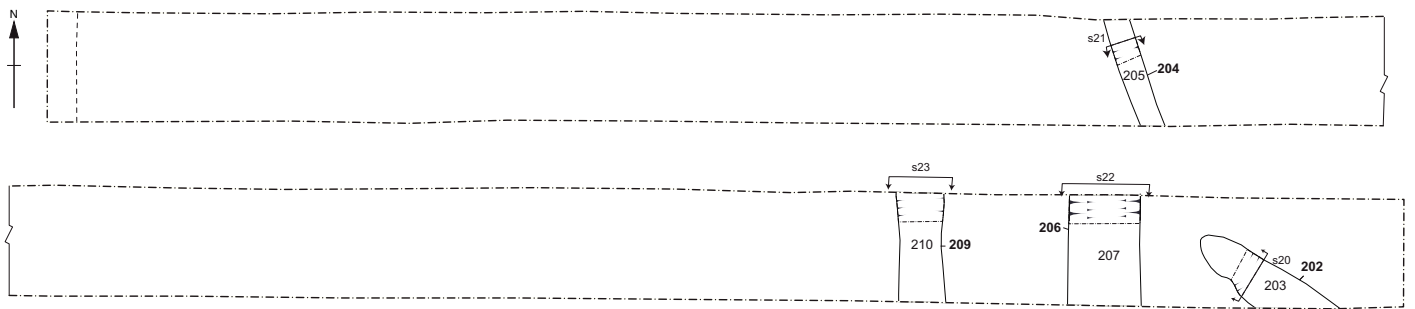
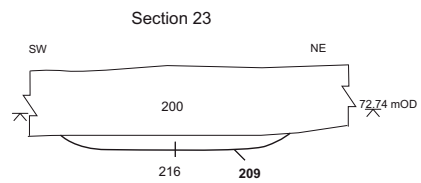
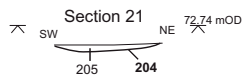
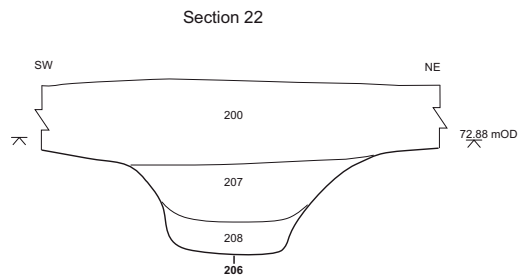
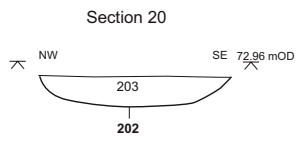


Figure 3: Trench 1, plan and sections

Trench 2



0 5 m
1:100



0 1 m
1:25

Figure 4: Trench 2, plans and sections

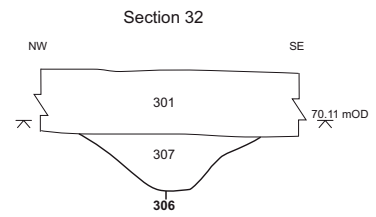
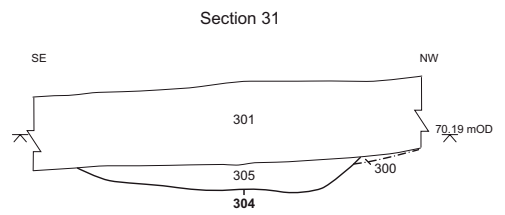
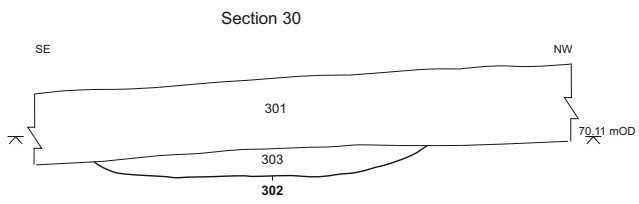
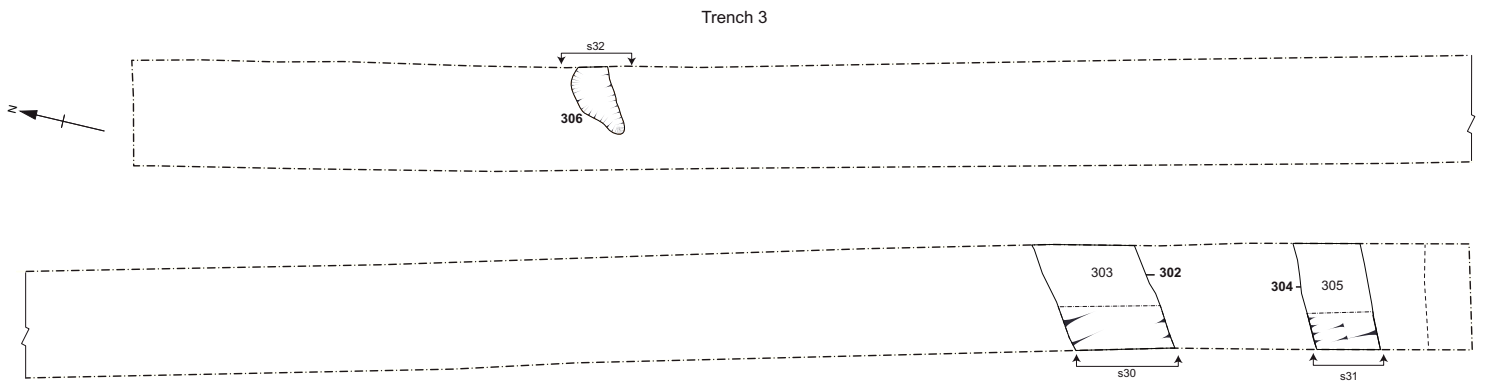


Figure 5: Trench 3, plan and sections

Trench 5

Server 10:/oaupubsl_1toQ*EGTW12*EGTWEV*Electric Solar Farm, Lower Treworder, Wadebridge*jk*22.01.12

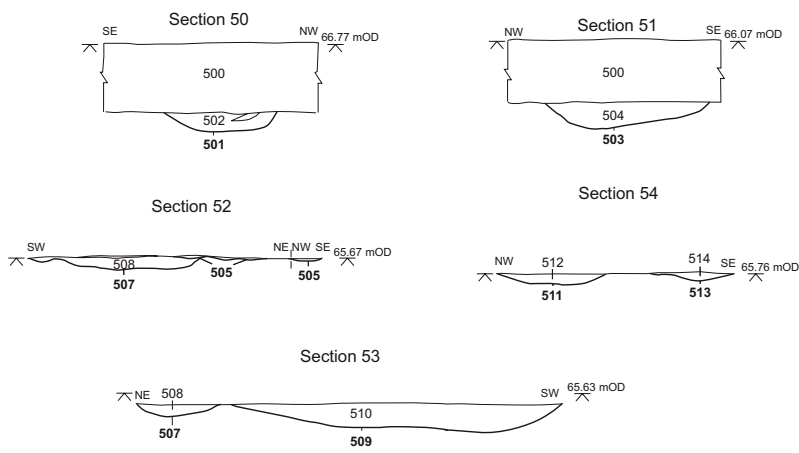
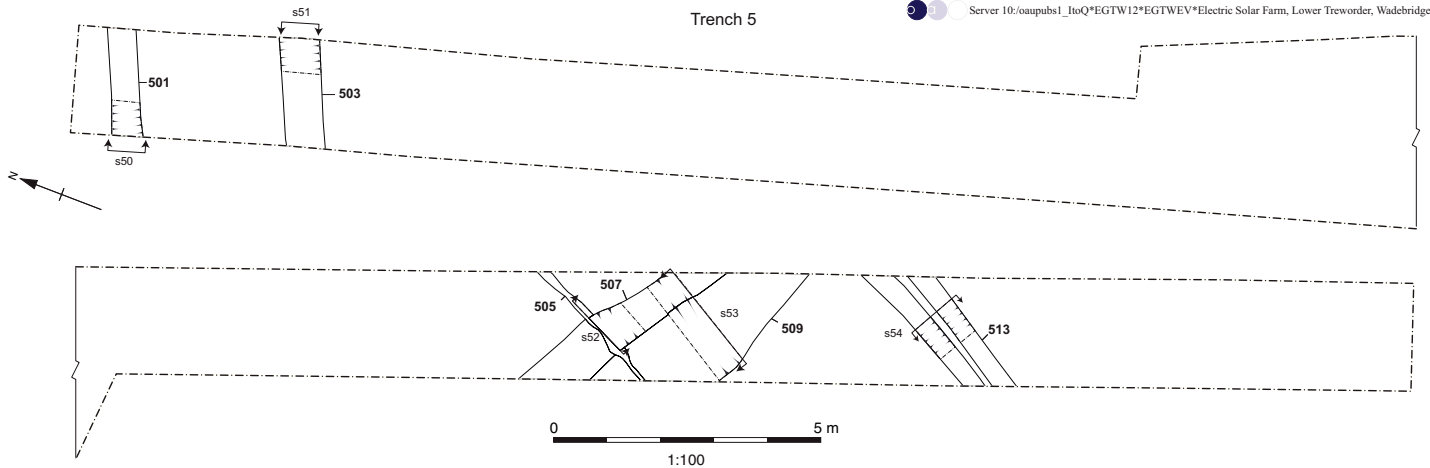


Figure 6: Trench 5, plan and sections

Trench 6

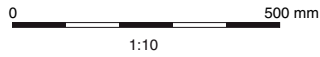
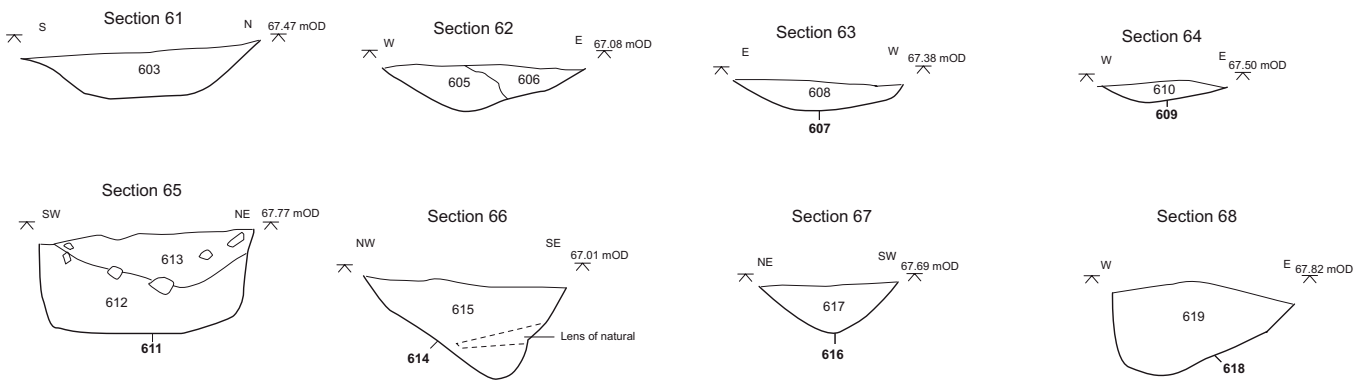
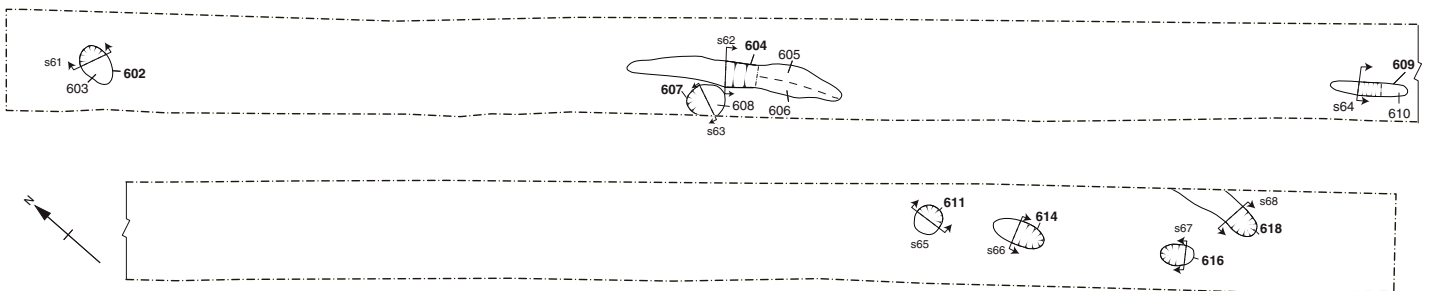


Figure 7: Trench 6, plan and sections

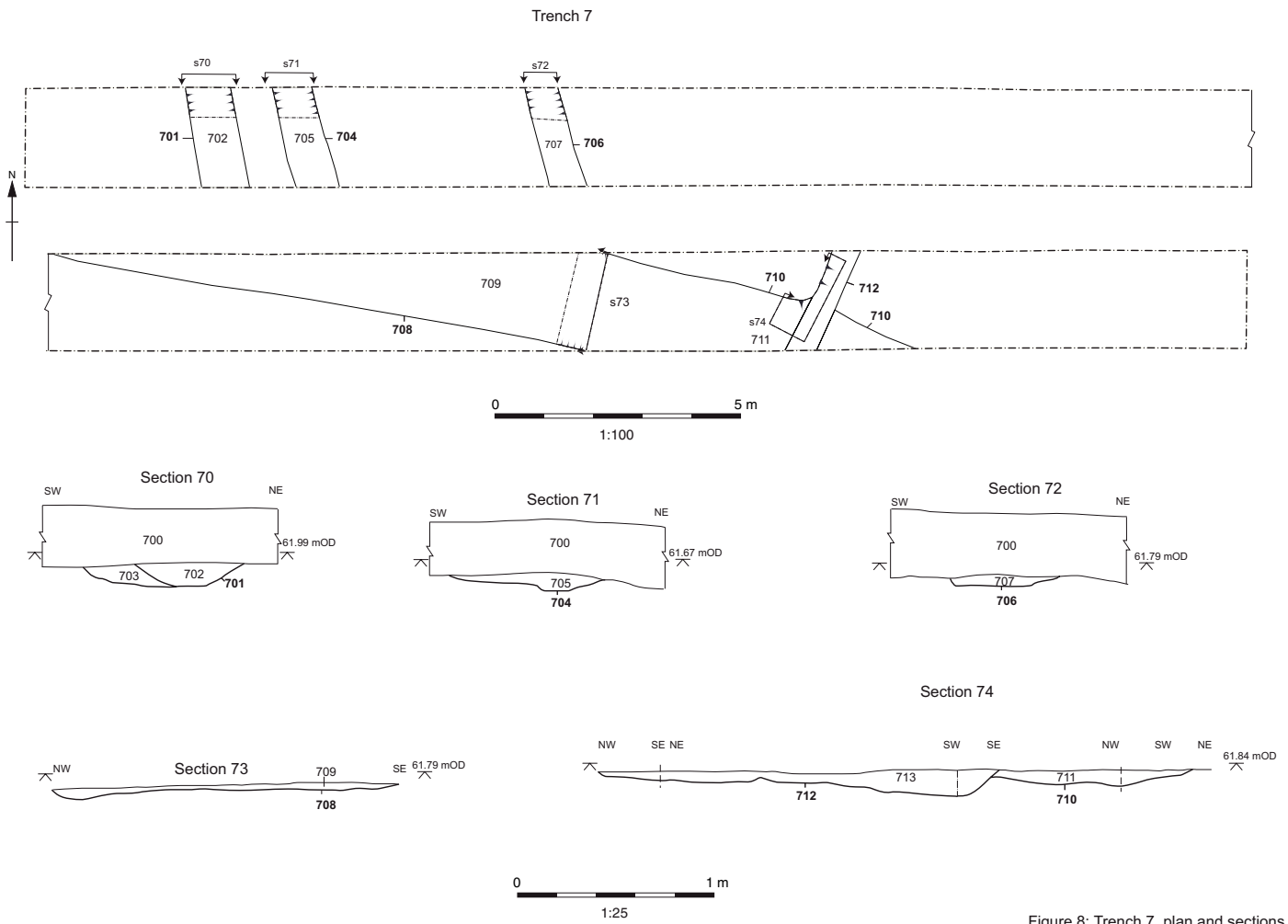


Figure 8: Trench 7, plan and sections

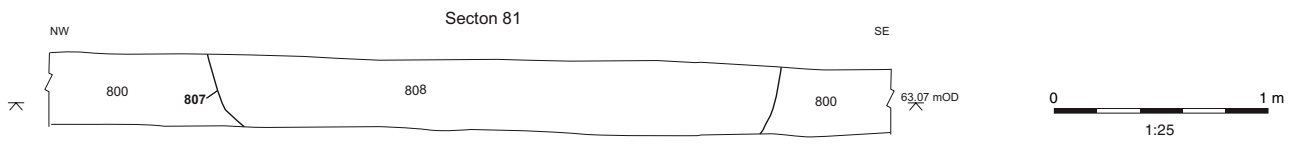
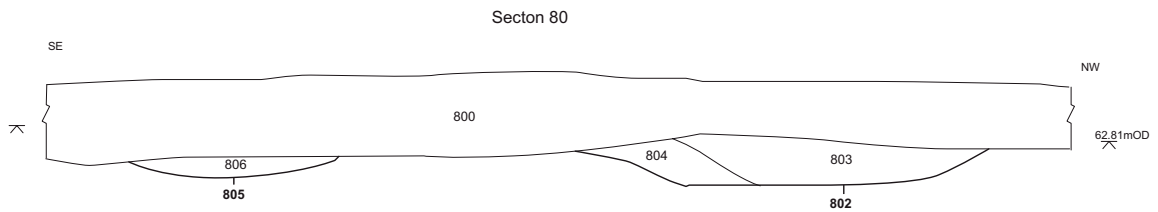
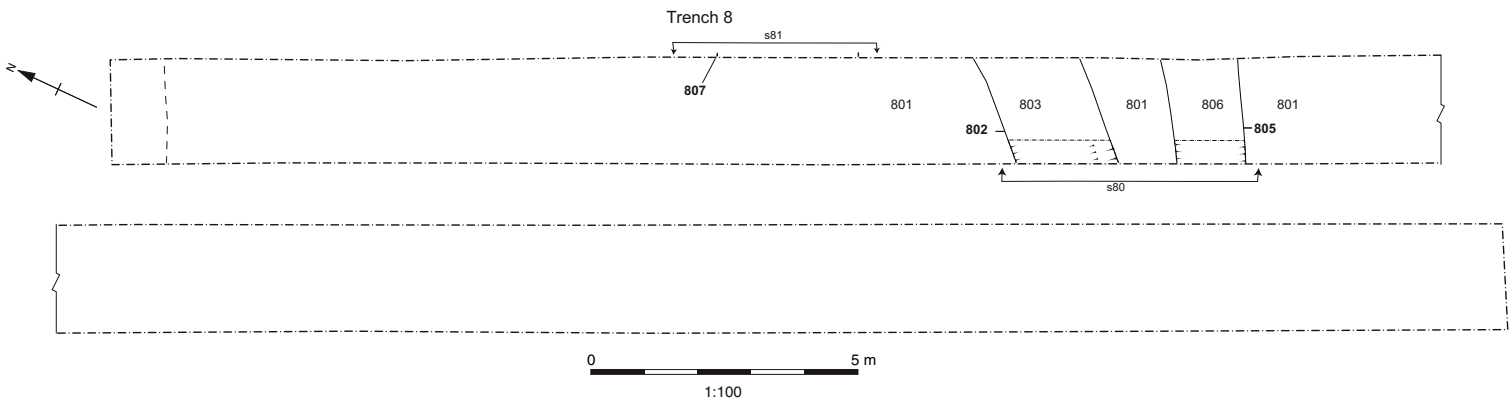


Figure 9: Trench 8, plan and sections

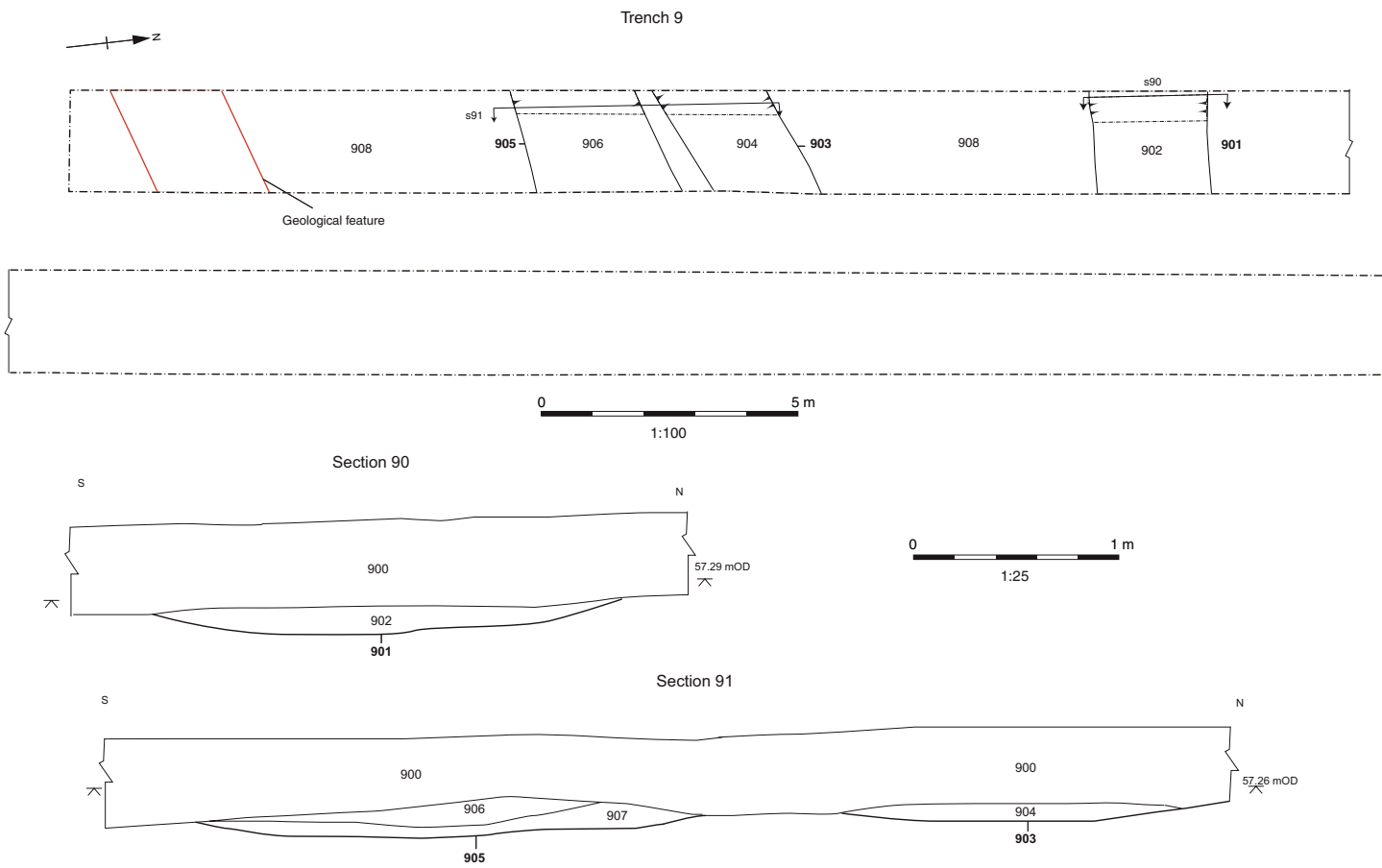


Figure 10: Trench 9, plan and sections



Figure 11: Trench plan overlaid on geophysical survey plot



Plate 1: Possible posthole 106



Plate 2: Trench 3; Removed 19th century boundary (ditches 302 and 304)



Plate 3: Boundary/ trackway junction in trench 5 (gullies 507 and 509)



Plate 4: Trench 9, Gully 903



**Head Office/Registered Office/
OA South**

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarchaeology.com
w: <http://oxfordarchaeology.com>

OA North

Mill 3
Moor Lane
Lancaster LA1 1QD

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: [oanorth@oxfordarchaeology.com](mailto: oanorth@oxfordarchaeology.com)
w: <http://oxfordarchaeology.com>

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
e: [oaeast@oxfordarchaeology.com](mailto: oaeast@oxfordarchaeology.com)
w: <http://oxfordarchaeology.com>



Director: Gill Hey, BA PhD FSA MIFA
*Oxford Archaeology Ltd is a
Private Limited Company, N^o: 1618597
and a Registered Charity, N^o: 285627*