



global environmental solutions

Land Adjacent to Watling Street, Castle View,
Craven Arms, Shropshire

Results of an Archaeological Evaluation

SLR Ref : 406.04757.00001

March 2014



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Revisions	Inclusion of slag and sample analysis 20 th March 2014

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Acknowledgements

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The investigation was designed and directed by Tim Malim (SLR). Fieldwork was undertaken by Marcus Headifen (SLR Consulting). Dr Dawn Mooney of Archaeology South-East undertook the processing and assessment of the palaeoenvironmental samples, and Dr Gill Juleff examined the potential slag.

SLR is a Registered Organisation with the IfA, an audited status which confirms that work is carried out to the highest standards of the profession. SLR operates a quality management system to help ensure all projects are managed in a professional and transparent manner, which enables it to qualify for ISO 9001. SLR is a member of the Federation of Archaeological Managers and Employers.

SUMMARY

In December 2013 six trenches were excavated at Land adjacent to Castle View, Watling Street, in Craven Arms (NGR SO 4239 8289) to evaluate the archaeological potential of the site for the South Shropshire Housing Association, which is currently seeking to secure a site allocation for housing through Shropshire Council's Allocations and Management of Development (SAMDev) Process. Although the eastern side of the area is adjacent to the Roman road Watling Street, only one trench was found to contain archaeological features, a ditch recut by a pit or later ditch, both of which contained charcoal within their fills.

1.0 INTRODUCTION

1.1 Purpose of document

This document contains a report on the results of an archaeological site investigation. It is to be submitted as a supplementary statement in support of a planning application for residential development.

1.2 Planning background

The Shropshire Council Historic Environment Team has highlighted the archaeological potential of the site during the SAMDev process, and indicated the need for an archaeological evaluation of the site prior to the submission of any planning application. In response South Shropshire Housing Association (the client) commissioned SLR Consulting to design a scheme of archaeological work that was agreed with the planning authority. This document contained a Written Scheme of Investigation (WSI) for a programme of archaeological work which is in accordance with NPPF 141, and would lead to discharge of the planning condition¹.

¹ SLR Consulting November 2013 *Land Adjacent to Watling Street, Craven Arms, Shropshire: Archaeological Written Scheme of Investigation*

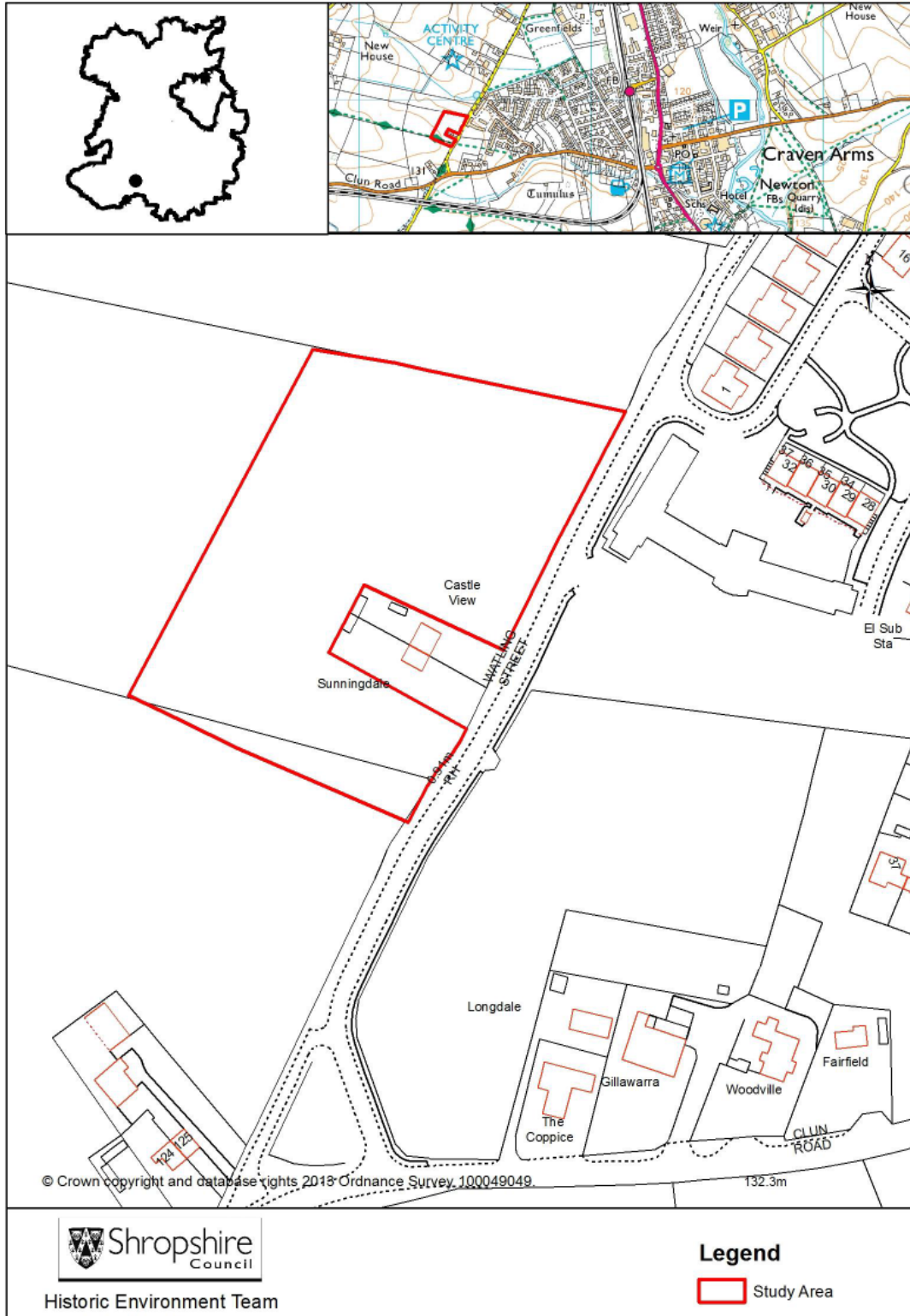


Figure 1
Location map showing proposed development area from Shropshire Council Brief

2.0 SITE LOCATION AND DESCRIPTION

2.1 Location and land use

The site is located adjacent to a section of Roman Watling Street that runs from Wroxeter to Leintwardine, on the north-western side of Craven Arms, Shropshire, NGR SO 4239 8289 (Figure 1). It comprises a roughly rectangular plot, 100m east - west, (with an indentation around the two properties Castle View and Sunningdale) of approximately 1.26ha in size. It is managed as improved pasture, with two fields separated by a field boundary comprising of a post and wire fence.



Figure 2:
south-west facing view across site towards Sibdon Carwood

2.2 Geology and topography

The site is between 135m and 140m AOD on a very gentle eastward slope towards Watling Street, and the River Onny. Towards the west, the land rises to Sibdon Carwood (Figure 2), with an unnamed drain, which flows into the Onny River, just north of the site. The site is situated on Devensian tills, over Silurian mudstones of the Coalbrookdale formation.

2.3 Archaeological and Historical background

The proposed development site is located immediately adjacent to a section of Roman Watling Street (Margary 06b) the runs south from Wroxeter to Leintwardine (HER PRN 00108). It is approximately 200m north of the Clun to Craven Arms road, which intersects with Watling Street.

A rectilinear cropmark enclosure c. 50m east of the site, on the opposite side of the road, which had previously been interpreted as a Romano-Celtic temple site, (HER PRN 02045) was re-interpreted in 1991, following geophysical prospecting and trial trenching by Birmingham Archaeology, as a

single ditched rectilinear Romano-British enclosure of a common regional type (Whimster 1989, 40-41). The National Mapping Programme has identified a number of outlying features beyond the enclosure, including two possible clusters of pits, and a linear feature which crosses the Roman Road just south of the proposed development site. Other Roman sites have been identified elsewhere in and around Craven Arms, including a double ditched rectilinear enclosure c.700m north-east of the development site, (HER 02046) and an important group of Roman military sites north of the town (HER 00620, HER 02041).

The site is located within the Civil (and historical parish) of Sibdon Carwood, with Watling Street marking the parish boundary and the eastern boundary of the development site. The 1903 OS 6" scale map shows the northern boundary of the site to be a field boundary that still exists, while the southern boundary of the site truncates an existing footpath, which is now part of the Shropshire Way Long Distance Walkway. This could possibly have been a trackway leading from Sibdon Castle or the surrounding area, located approximately 1000m west of the site, to Stokesay Castle.

According to the Archaeological Data Service website (viewed 04/11/13) no tithe map exists for Sibdon Carwood parish.

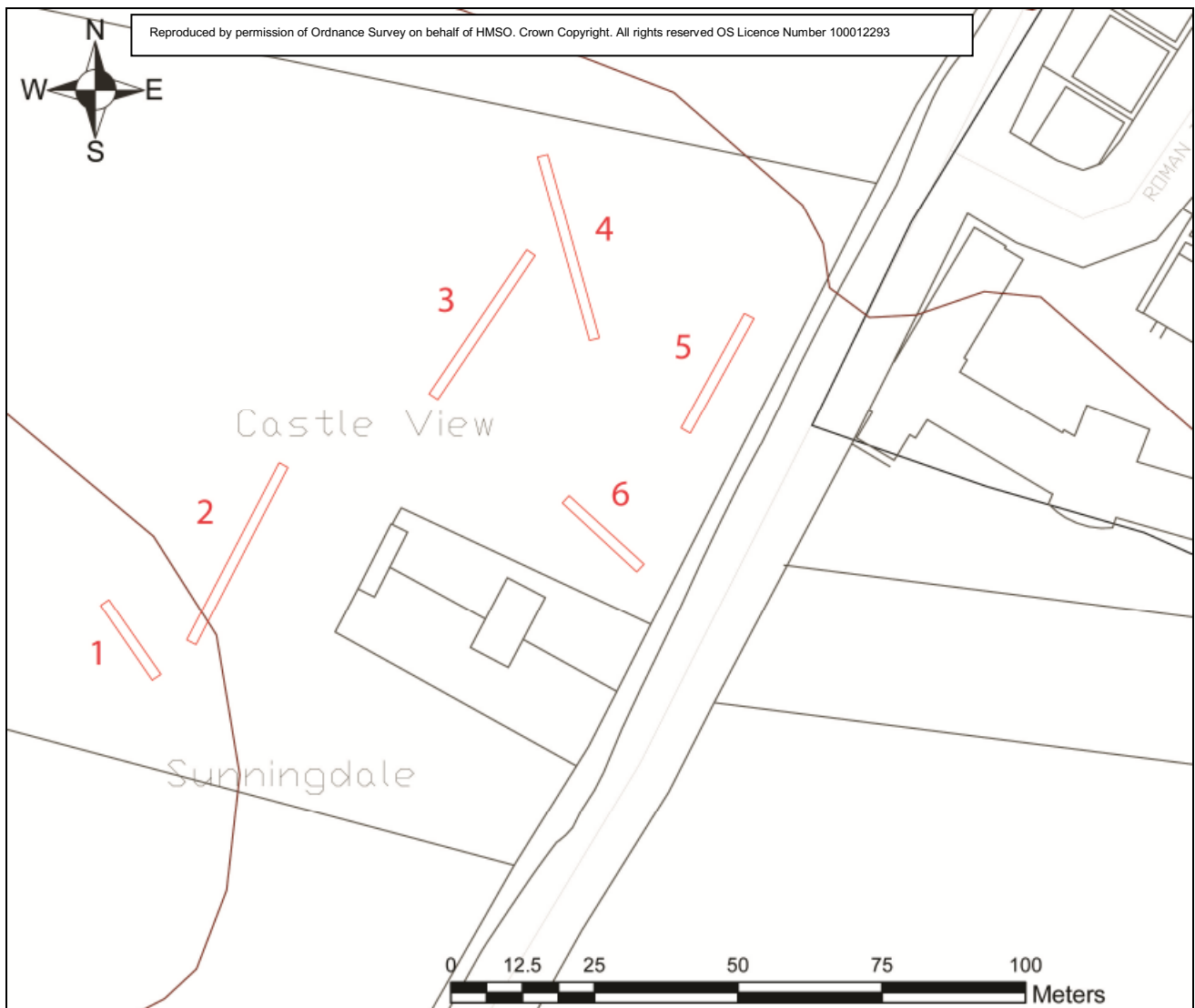


Figure 3
Site plan showing location of trenches

3.0 AIMS AND METHODOLOGY

3.1 Aim

The aim of the evaluation was to characterize the nature, date, extent and condition of preservation of any archaeological remains within the site.

3.2 Trial trenching

3.2.1 *Strategy and general approach*

Prior to the trial trenching, a geophysical survey was undertaken by Archaeological Landscape Investigation² (Appendix A). This survey located 11 magnetic anomalies, 7 of which could be interpreted as deriving from modern disturbances, including metal fence lines, service lines, metal power line pole bases, and a metal shed along the western boundary of Castle View.

Although 5 trenches were laid out broadly consistent with the WSI to investigate the remaining 4 anomalies, Trench 1, however, which had been originally located in the southeast corner of the site to investigate Point 11 from the Geophysical survey, had to be moved to the western side of the site, as excavating the trench would have blocked access to a public footpath which runs across the southern portion of the site. In doing so, Trench 1 was halved in length to 15m as in order to avoid the permitted footpath (Figure 3). Trench 6 was excavated along the northern boundary of Castle View to investigate the change of depth seen in Trench 5. Trench 2 was moved slightly to the south to avoid a buried electrical cable that was located using a Cable Avoidance Tool (CAT).

The trial trenches were excavated on 16th December 2013 using a mechanical excavator equipped with a toothless (“ditching”) bucket 1.8m wide, under the direction of an experienced archaeologist. The machine excavator removed the topsoil and overburden down to natural geological deposits, and thereafter manual cleaning, investigation and recording was undertaken from 17th – 20th December.

The investigation was guided by the Institute for Archaeologists’ *Standard and Guidance for Field Evaluation* 2008.

3.2.2 *Fieldwork Recording*

Trenches were recorded along one long face to illustrate the stratigraphic sequence, a Trench Recording Form was completed for each trench, and each was drawn and digitally photographed before backfilling. Deposits and modern intrusions were recorded using a pro-forma recording system, and fully cross-referenced.

The drawn record includes trench plans at 1:50 and 1:10 for sections of the trenches and from the features. The altitude was established from Google Earth™ at 137.70mOD.

² Archaeological Landscape Investigation December 2013 *Geophysical Survey Land Adjacent to Watling Street, Craven Arms, Shropshire*

4.0 RESULTS

4.1 Trenches 1, 2, 4

Trench 1 (Figure 4), relocated from its intended position, was located to investigate point 9 from the geophysical survey whilst Trench 2 was located to examine point 10, and Trench 4 was to examine point 8.

The trenches were opened up by machine, under the direction of an archaeologist. Trench 1 (15m x 1.6m) was on a roughly north-west – south-east orientation, with a 0.5m slope down to the north, excavated to a depth of 0.47m at the south-eastern end. Trenches 2 and 4 were both 30m x 1.6m, Trench 2 on a north-north-east – south-south-west alignment which had a 0.9m slope down to the north, and Trench 4 on a N-S alignment over flat ground.

In all three trenches there was a firm dark grey brown silty clay ploughsoil, of between 0.2-0.35m thickness, with occasional rounded pebbles and small cobbles and occasional Victorian ceramics (probably from manuring), which overlay a 0.1 - 0.2m thick firm mid yellow grey brown silty clay subsoil. This in turn overlay yellowish brown undifferentiated clays and gravels. All three trenches were very shallow throughout and contained no buried archaeology, the geophysical anomalies being either modern (point 11: a grubbed-out field boundary) or of geological origin.



Figure 4:
Trench 1, facing SW

4.2 Trench 3

(30m x 1.6, orientated northeast by southwest, with a 0.95m slope down to the south-west).

Trench 3 had a dark grey brown silty clay ploughsoil (301), of between 0.2 - 0.27m thick, overlying a 0.1m thick mid yellowish grey brown silty clay subsoil, (302), which overlay yellowish brown undifferentiated clays, gravels and silts (303, 304, and 307).

At the southwest end of Trench 3 (Figure 5), three features were located, hand excavated, and recorded. The underlying natural soil at this end of the trench had a higher silt content than at other parts of the site, and thus the features excavated may have been over dug due to the diffuse edges.

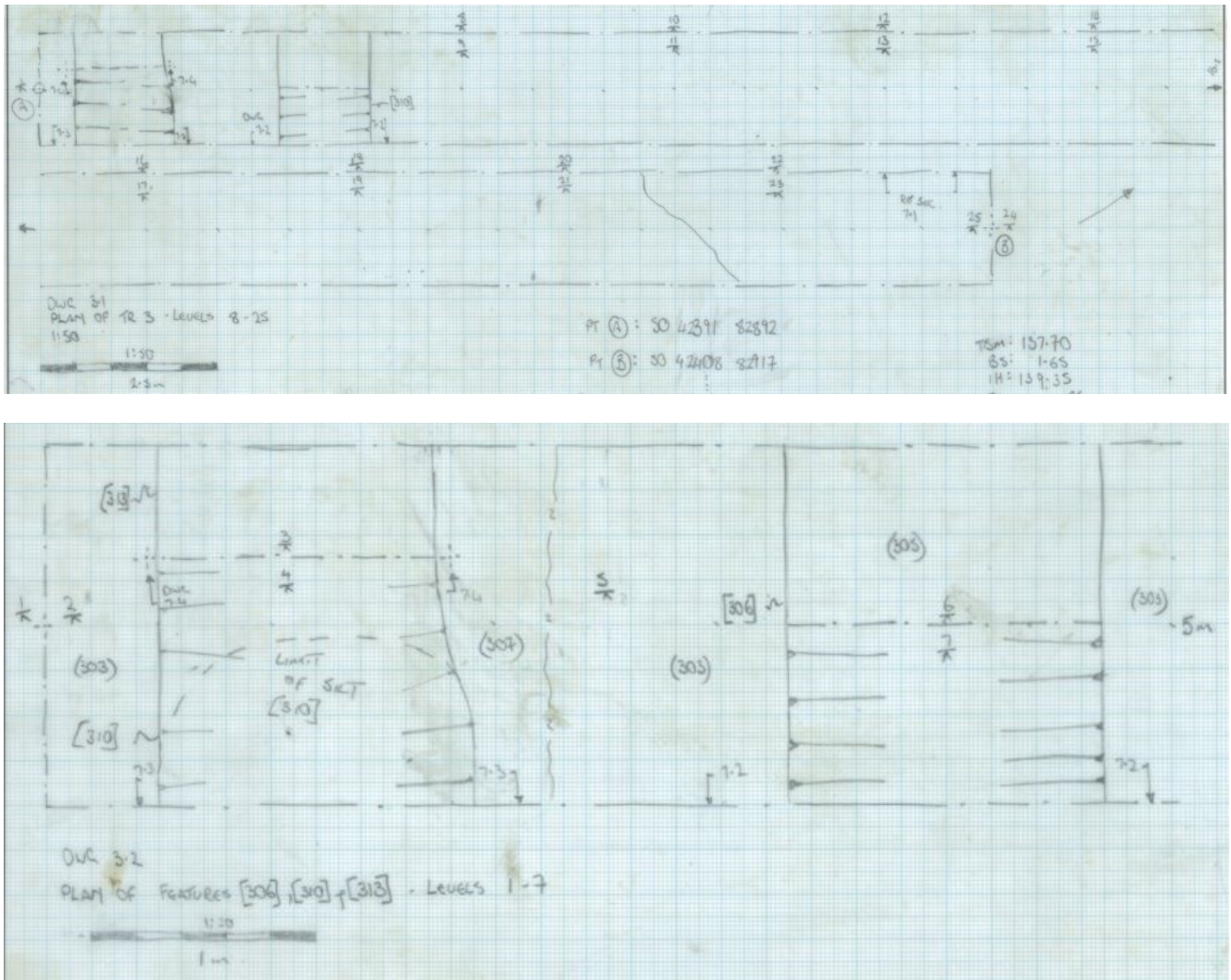


Figure 5
Trench 3 site plan showing location of linear features at south-western end

[306] was a 1.55m wide linear feature on a north-east - south-west alignment, located 3.3m from the SW end of the trench (Figure 5). This feature was 0.45m in depth, filled by a sterile homogenous mid yellow grey sandy silt (305). The edges of this feature were very uncertain, and the fill was very similar to (307), the light yellow grey silty sand natural, leading to the interpretation of [306] being a geological anomaly.

[310] and [313] were found to be on the same alignment as [306], separated by 1.5m, with [310] (Figure 5 detail plan) cutting through [313]. [310], which was possibly a pit, was 1.96m wide by 0.5m deep, and extended 0.74m into Trench 3, was filled by (315) a 0.25m deep mid brown firm silty clay with occasional charcoal flecking, overlying (308) a 0.3m deep charcoal rich grey silty clay from which a small post-medieval/ Victorian terracotta pottery sherd was obtained, which overlay (309) a 0.1m deep, densely compacted, slightly friable grey brown clay silt (Figures 6 and 7).

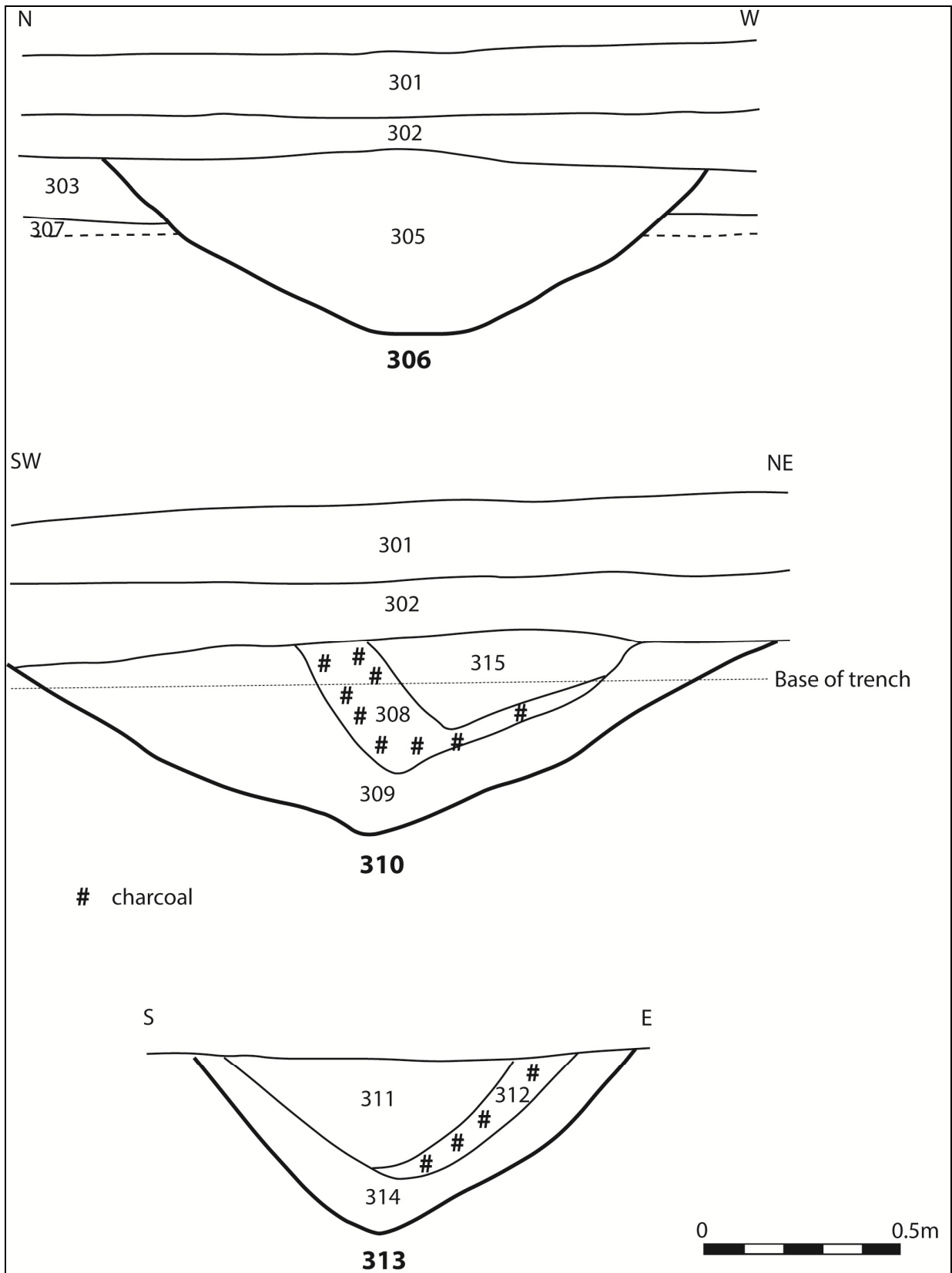


Figure 6
Section drawings of the ditches (or pit) within Trench 3



Figure 7:
Pit [310], facing SE

[313] was a 0.45m deep by 1.2m wide linear feature on a north-west – south-east alignment with u-shaped base (Figures 6 and 8). This feature was filled by (311), a 0.28m deep light grey brown firm silty clay, with very occasional charcoal flecks, which overlay (312), a 0.07m deep dark grey brown firm silt clay, with frequent charcoal flecks and a piece of potential iron slag (Figure 9). This in turn overlay a 0.12m deep mid brown grey clay silt primary ditch fill (314).



Figure 8: Ditch [313], facing NW



Figure 9
Fragment of potential slag from context 312

4.3 Trenches 5 and 6

Trench 5 (30m long x 1.6m wide) was located along the eastern boundary of the site, parallel to Watling Street, while Trench 6 (15m x 1.6m) was perpendicular to it, and ran along the boundary of Castleview. Both trenches were much deeper than the other 4, with both having a maximum depth of 0.65m. Trenches 5 and 6 had a ploughsoil of between 0.25 – 0.30m thick (Figure 10), overlying a subsoil of 0.25 – 0.35m thick, with the thickest depth being along the south eastern corner of the northern part of the site. No buried archaeology was found in either trench.



Figure 10: Trench 5, E facing representative section

5.0 ASSESSMENT OF ENVIRONMENTAL SAMPLES

5.1 Introduction and Methodology³

During archaeological evaluation work at the site, two bulk samples were taken to recover environmental remains such as charred plant macrofossils, wood charcoal, fauna and mollusca, and to assist finds recovery. Sample <1> was taken from the secondary fill [308] of ditch feature [310], and sample <2> originated from the secondary fill [312] of ditch [313].

The bulk soil samples were processed in their entirety in a flotation tank, and the flots and residues were retained on 500µm and 250µm meshes respectively and air dried prior to sorting. The residues were passed through graded sieves (8, 4 and 2mm) and each fraction sorted for environmental and artefact remains (Table 1). The flots were scanned under a stereozoom microscope at x7-45 magnifications and an overview of their contents recorded (Table 2). Preliminary identifications of macrobotanical remains have been made using modern comparative material and reference texts (Cappers *et al.* 2006, Jacomet 2006, NIAB 2004). Nomenclature used follows Stace (1997).

Charcoal fragments recovered from the heavy residue of each sample were fractured along three planes (transverse, radial and tangential) according to standardised procedures (Gale & Cutler 2000). Specimens were viewed under a stereozoom microscope for initial grouping, and an incident light microscope at magnifications up to 400x to facilitate identification of the woody taxa present. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Hather 2000, Schoch *et al.* 2004), and by comparison with modern reference material held at the Institute of Archaeology, University College London. Identifications have been given to species where possible, however genera, family or group names have been given where anatomical differences between taxa are not significant enough to permit satisfactory identification. Nomenclature used follows Stace (1997), and taxonomic identifications of charcoal are recorded in Table 1.

5.2 Results

Both samples produced small flots which were dominated by intrusive modern botanical material such as small rootlets and grass leaves. Uncharred seeds of goosefoot (*Chenopodium* sp.) and chickweed (*Stellaria* sp.) were also noted. Small assemblages of wood charcoal, identified as oak (*Quercus* sp.) and hazel (*Corylus avellana*) were recorded in both samples, along with a single fragment of hazelnut shell in sample <1>. The residues of both samples contained small quantities of magnetised material, and a moderate quantity of burnt stone was recorded in sample <1>.

5.3 Discussion

Environmental remains were generally scarce in both samples, and the presence of modern plant material such as grass, rootlets and wild seeds indicates that the contexts may be disturbed. Charcoal present in the samples is likely to originate from anthropogenic burning events, however the provenance of the samples from the fills of ditches suggests that this assemblage results from the secondary deposition of burnt material rather than *in situ* burning. Sample <1> contained a majority of hazel charcoal, and the charred hazelnut shell fragment from this sample is likely to be related to the use of hazel wood as fuel rather than the consumption of hazelnuts. Both oak and hazel are known to be efficient fuel woods (Taylor 1981), and may have been specifically selected as fuel. Both taxa could have been procured from mixed deciduous woodland in the local vicinity of the site, which from the Medieval period onwards are likely to have been managed for firewood and timber production by local private and religious estates (Rackham 1990).

³ Dr Dawn Mooney, Archaeology South-East, University of London

Overall, the botanical assemblage from the site is small and of low significance, and cannot further contribute to a discussion of the function of the features in question or of the site as a whole. If desired, the charred hazelnut shell fragment and charcoal from either sample could be submitted for radiocarbon dating. However, it should be noted that oak has a long lifespan and timber from oak trees is often reused before deposition, so there is a high probability of these remains returning an inaccurate date for the formation of the context.

Table 1 Residue quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams

Sample Number	Context	Parent context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charcoal Identifications	Charred botanicals (other than charcoal)	Weight (g)	Other (eg ind, pot, cbm)
1	308	310	D	10	10	***	4	****	8	<i>Corylus avellana</i> (40), <i>Quercus</i> sp. (10)	*	<2	Magnetised material ***/4g - Burnt stone **/1284g
2	312	313	D	5	5	**	<2	**	<2	<i>Quercus</i> sp. (11), <i>Corylus avellana</i> (4)			Magnetised material **/<2g

Table 2 Flot quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and preservation (+ = poor, ++ = moderate, +++ = good)

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Other botanical charred	Identifications	Preservation
1	308	<2	5	5	60	-	* <i>Chenopodium</i> sp.	*	**	****	*	<i>Corylus</i> sp. nut shell fragment	++
2	312	<2	5	5	60	-	* <i>Stellaria</i> sp.	*	**	***			

5.4 References

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6.0 ANALYSIS AND HERITAGE SIGNIFICANCE

The underlying natural geology consisted of undifferentiated clays, silts and gravels of glacio-fluvial origin.

Trenches 1, 2 and 4 were all very shallow, and contained no buried archaeology, the anomalies the trenches were to investigate being of geological origin, as indicated in the conclusions of the geophysical report.

Trenches 5 and 6 were substantially deeper than the three aforementioned trenches. This may be accounted for by the possibility that the foundations to Watling Street, close to which these trenches were placed, have acted as a bank, behind which the subsoil and ploughsoil has accumulated over time either through natural colluviation (water action) or through direct colluvial action (tillage erosion). However the results from either Trench 5 or Trench 6 did not show this. Another interpretation is that the area immediately to the west of Watling Street had been scoured out by erosion or human action over a period of time, and was in turn infilled by sediment moving downslope. As such the soils further upslope were eroded, hence the first four trenches being considerably shallower.

Trench 3 was the only Trench in which archaeology was found, however [306] was probably a geological anomaly. [310] was probably a pit, possibly of post-medieval or later origin, which had been cut through [313]. This feature appears to have been a field boundary, of unknown date, though it was at right-angles to Watling Street, suggesting that this field system was built after the road was constructed. A piece of potential slag was found in the fill of [313] but analysis of this by an archaeometallurgist from Exeter University⁴ concluded that:

This sample does not appear to be slag (it is not quite dense enough whilst the surface is quite soft and abraded, also it is not quite the right colour), although its weight and appearance could have derived from lead slag. It looks instead like some sort of mudstone with iron staining and embedded small pebbles which, where they have been lost, have left sub-spherical voids that could be mistaken for gas bubbles. It is therefore identified as a piece of stone that possibly has been in contact with rusting iron in a fairly wet environment, resulting in large, rapidly formed broken pustules of iron concretion.

Assessment of residues obtained from flotation of soil samples from the fills of features [310] and [313] consisted of charcoal from oak and hazel. These were interpreted as of secondary origin and incorporated into the features as backfill, rather than evidence for burning in situ. The anomaly located in Trench 3 (point 8) from the geophysical survey may be the ditch [313], however it could also similarly be [306] due to its relative closeness.

Based on the results outlined above it would appear that the site was not heavily utilized during Roman times or any subsequent period. A single small ditch could reflect a change in field boundary, later reused or cut by a pit which contained artefactual evidence for a post-medieval date. If industrial evidence had been confirmed for the earlier ditch, this could have been of significance for understanding Roman zoning of the landscape bordering Watling Street and the marching camps or enclosures to the east and north. Without such supporting material evidence, however, the heritage significance of a single re-cut ditch can be assessed as low.

⁴ Dr Gillian Juleff

7.0 CLOSURE

This report has been prepared by SLR Consulting Limited with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of South Shropshire Housing Association; no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

APPENDIX A

Geophysical Survey

Land Adjacent to Watling Street, Craven Arms, Shropshire

NGR: SO 4239 8289



Front Cover: View of northeastern end of survey location and electricity pylons to north

This report has been prepared by Archaeological Landscape Investigation for SLR Consulting Ltd.

Archaeological Landscape Investigation

Report Date: 20/03/2014

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Non-technical Summary

Archaeological Landscape Investigation carried out a magnetometer survey at Land Adjacent to Watling Street, Craven Arms, for SLR Consulting Ltd. The survey produced limited evidence for archaeological activity mainly due to limited magnetic response from possible features and magnetic interference from overhead power cables and underground services. Several very weak magnetic responses, which may represent natural features or possible archaeological features, were located. These mainly seem to represent linear features, running across the site in approximately NW – SE orientations, which is similar to the alignment of the 19th century field system. The results of the survey may provide a very limited aid to locating a targeted archaeological trial trench investigation, although given the weakness of the results, any such programme would probably be better served by using a more methodical system such as a standard grid array layout.

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1. Introduction

Archaeological Landscape Investigation was instructed by SLR Consulting Ltd to undertake a gradiometer survey at Land Adjacent to Watling Street, Craven Arms, Shropshire, centred on NGR SO 4239 8289.

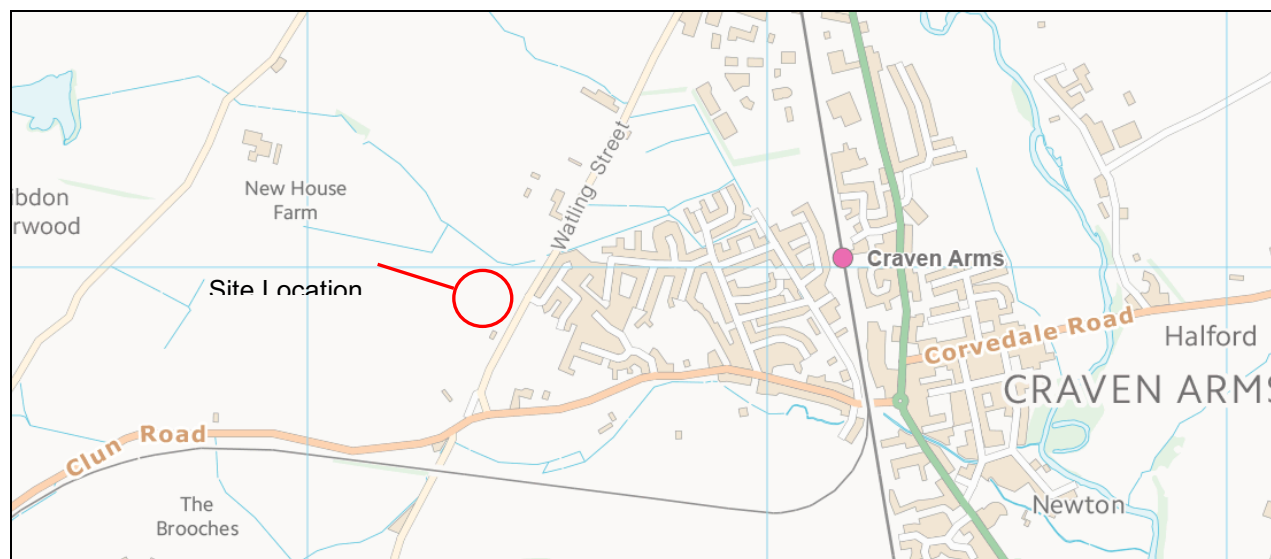


Figure 11. Site Location (OS Opendata Mapping)

This report on the geophysical survey has been prepared by Thomas Wellicome BSc MA AlfA on behalf of Archaeological Landscape Investigation.

Site Location and Ground Conditions

The survey area comprises an approximately 'U' shaped plot of ground partially surrounding a pair of buildings known as Sunningdale and Castle View (Figs. 1 and 2). The site lies on the western fringe of Craven Arms, adjacent to the route of Watling Street.

The site slopes slightly from west to east, although is relatively flat over most of its surface area. The site's current use comprises improved pasture for sheep grazing.

Weather conditions were mainly dry and cold, although there was some fluctuation in temperature, which is typical for the time of year in which the survey was carried out. This may have had a slight effect on the function of the gradiometer(s), which are susceptible to changes in temperature.

Crossing the site were two overhead power lines, these were located along the northwestern boundary of the site and at the southwestern corner. Power lines cause problems for magnetic surveys as the alternating current flow (under differing loads) causes fluctuations in the magnetic field around them. The full effects of these power lines on the survey are not entirely clear, although they do appear to have affected the clarity of the results, potentially masking subtle features, and overpowering the response from those features which were located. A possible third, underground, power line, feeding the northernmost house, was supposedly present, running along the northern side of the property, although its effects are not obviously visible from the survey results.

All sides of the field were surrounded by metal wire fencing, as were the boundaries of the houses at Castle View. The proximity of the fences to the survey grid caused the area that could be effectively surveyed to be reduced to just slightly less than one hectare. A metal fenced enclosed underground septic tank was also present in the northwest corner of the survey area, which further reduced the potential survey area.

In addition, a recently replaced⁵ sewerage pipe was located running from the Castle View cottages to a septic tank located in the northeast corner of the field.

A public footpath crosses the southern end of the site on a northwest-southeast orientation.

Soils and Geology

The site geology comprises Devensian tills, overlying Silurian mudstones of the Coalbrookdale Formation. Excavations by SLR Consulting in 2013, to the northeast of the site, suggest there may be an element of alluvial deposition of material from seasonal flooding over these geological deposits in that area, although it was unclear whether these extend this far to the west.

2. Methodology

Geophysical Survey

The survey was carried out in accordance with English Heritage's guidance *Geophysical Survey in Archaeological Field Evaluation*, which establishes best practice for archaeological geophysical surveys in England.

A survey grid was established (Fig. 2) over the site location, orientated to provide a best possible fit to the area to be surveyed. The orientation of the grids was approximately NNE to SSW, which while not ideal for surveying accuracy⁶ was perceived to be the best layout of grids to fit the site footprint. The survey area was limited by wire fences surrounding the site.

To minimise the effects of the slight slope of the ground level on the site and allow as great an area to be as easily surveyed as possible, grids were walked in an SSW – NNE orientation. Grids were walked using a zig-zag method, for maximum speed.

Given the proximity of the power cables and fencing to most parts of the site, locating a suitable point to zero and calibrate the magnetometer was problematic. A zero point was eventually chosen within the survey grid in the southeastern side of grid square 3, which appeared to be the part of the site least disturbed by modern service activity.

⁵ Resident of Castle View – Pers. Comm.

⁶ Surveying is best carried out with the magnetometer grid orientated to allow walking in a N – S orientation, to reduce gradiometer alignment issues to a minimum.



Figure 12. Survey grid arrangement, with approximate boundary of site highlighted in red.

The survey was undertaken using a Bartington Instruments Grad601 fluxgate gradiometer, with dual gradiometer setup. This comprises of two Grad-01-1000L cylindrical gradiometer sensors mounted on a rigid carrying bar, with a 1m separation.

The survey settings for the gradiometer were as follows:

Sensitivity: 0.1nT

Sample Interval: 0.25m

Traverse Width: 1m

Traverse Method: Zig-Zag

Grid Square Size: 20 x 20m

Archaeosurveyor was used to download and manipulate the geophysical data. Only minimal processing was applied to all images to ensure no false results were created by excessive image manipulation. Data was downloaded to a portable computer during each rest period for the course of the day, to ensure data integrity and check ongoing results.

3. Brief Archaeological Background

The survey area lies to the immediate east of a Romano-British enclosure (HER PRN 02045), which was evaluated in 1991. The evaluation appeared to reveal the enclosure to be defined by a single ditch and was roughly rectilinear in plan, a form relatively common in this part of the Welsh Marches. A geophysical survey of the enclosure was undertaken immediately prior to the evaluation, although the survey grid was subject to vandalism prior to the evaluation and subsequently the exact location of features located were not correctly targeted. The evaluation appears to have located the enclosure boundary and small numbers of other features were identified, along with a limited assemblage of finds.

The site itself lies directly adjacent to Roman Watling Street, and a further Romano-British site has been identified to the east on the opposite side of the road. In this location two clusters of possible pits and a linear feature were recorded during evaluation of the site in 1991.

Approximately 700m to the northeast of the site is a large ditched Romano-British enclosure, partially evaluated as part of the 1991 evaluation programme and further investigated by SLR Consulting in 2013. The enclosure seems to be multi-phased, and was associated with external gullies and features including two 'ovens'.

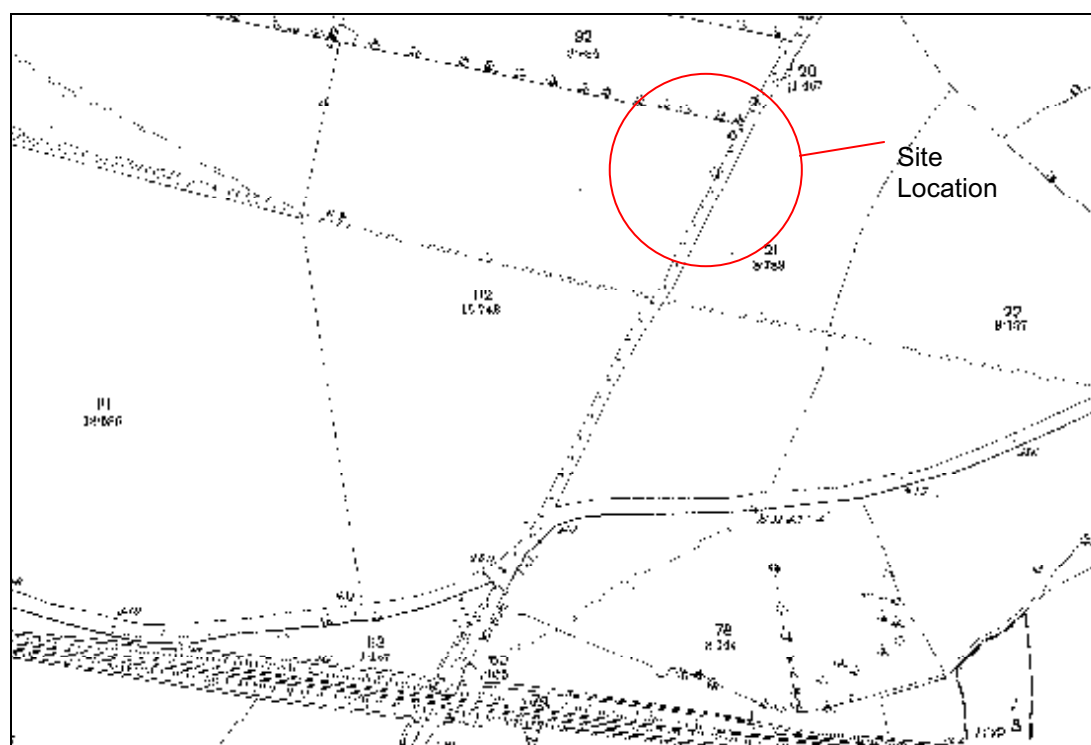


Figure 13. Extract from 1st Edition 1:2500 OS map

The 1st Edition OS map shows no structures or boundaries as being present within the survey area, with the site itself forming part of a larger field, bisected by a public footpath orientated approximately E – W.

4. Results

The survey plot(s) located on the site plan can be found in Appendix A. For image clarity only the survey itself is portrayed in the following text.

The proximity of the power lines to most of the survey area seems to have had a strong effect on results of the survey. The overall levels of magnetic response from possible features are weak, with only a +/-2 or 3 nT difference between difference between features and the background soils.

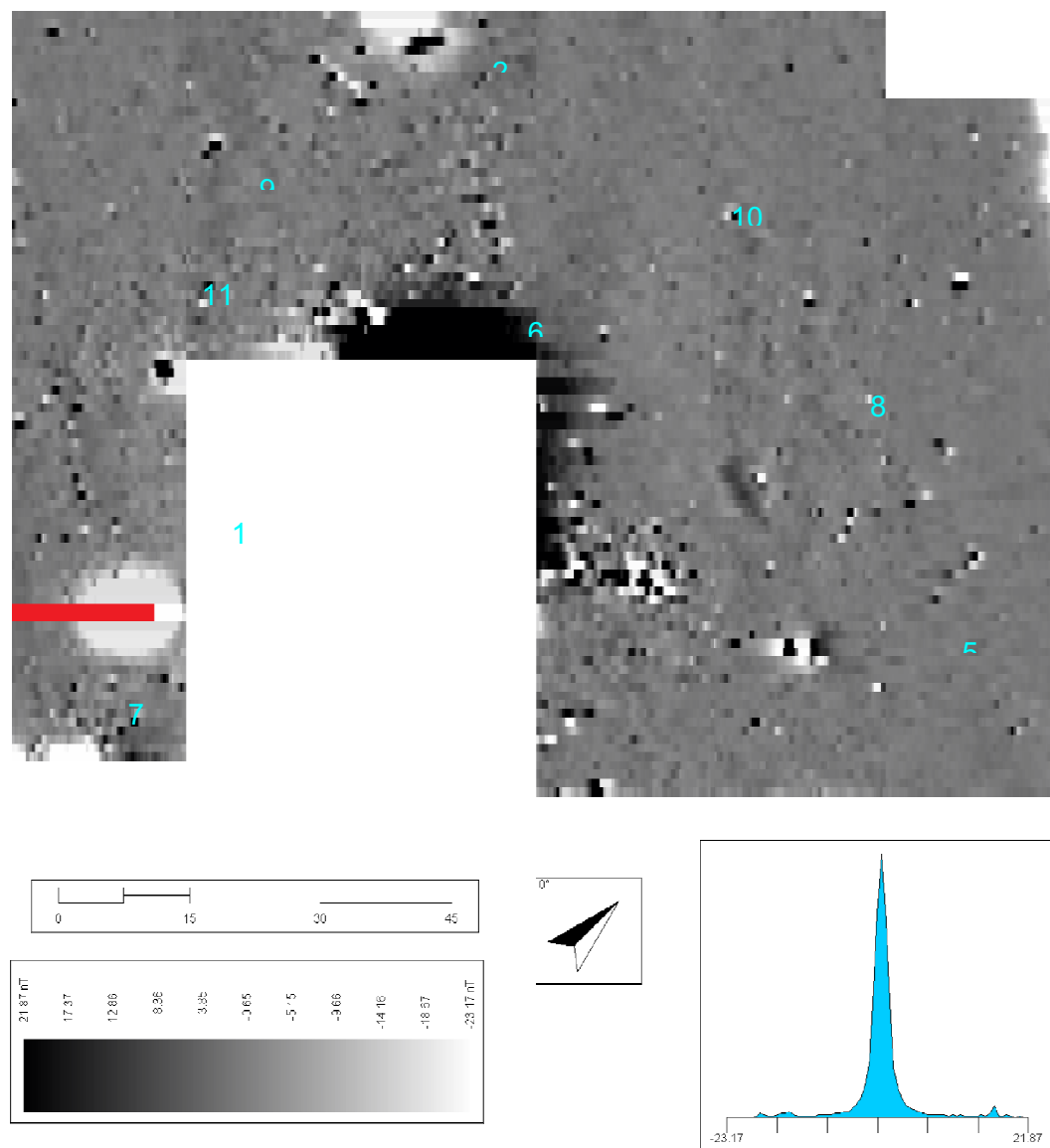


Figure 14. Clipped and Destriped Survey Results. Red indicates dummy values.

Two strong magnetic responses (Figs. 4 and 5, points 1 and 2) are observed as the magnetometer passed close to the metal bases of the pylon cables. A further strong magnetic response is observable on the northern side of the field where the gradiometer passed in close proximity to the wire fencing in the site boundary. The wire fencing has been picked up by the gradiometer at point 3 (Figs. 4 and 5).

A strong bipolar magnetic response, probably indicating buried metallic objects, is visible along the route of the sewage pipe (Figs. 4 and 5, point 4) between a manhole located in grid 2 (Figs. 4 and 5, point 5) and the buildings at Castle View. The reason for this response is unclear; although given the relatively recent nature of its replacement it may be that service marker tape (often made of aluminium) is present over this section, the strength of response makes this unlikely. Given the readings it is likely that these anomalies are caused by the disturbance of the ground created during the excavation of the sewage pipe. The lack of response between the manhole and the septic tank itself at the northeastern corner of the site is more surprising, although the possible route of the pipe can be seen heading in a northerly direction from the manhole location in Figure 5.

A large area of positive magnetic disturbance is visible to the north and northeast of Castle View; this is the result of a response from the corrugated iron shed that lies at the rear of the properties (Figs. 4 and 5, point 6).

The line of a recently grubbed out field boundary is just visible on the southern corner of the plot (Figs. 4 and 5, point 7), although this is partially obscured by a strong magnetic response from power cables to the north and south.

As perhaps should be expected from a field which has been used for agricultural purposes there is a wide and fairly consistent scatter of small metallic responses across the surveyed area, characterised by tell-tale dipolar 'positive - negative' readings. Given the nature of the field and its proximity to Castle View, these are likely to be, in the majority of cases, pieces of scrap metal left over from various agricultural uses, or general detritus. However, given the proximity of the Romano-British enclosure, there is a chance some may represent discarded metalwork relating to its use.

To the northeast of Castle View are two very weak curving linear magnetic responses which differ only by 2 to 4nT from the background readings (Figs. 4 and 5, point 8). A further north - south orientated linear anomaly is located immediately to the northeast of these features. The former of these may well be background geology, given their irregular form, although the latter seems too straight to be natural in origin.

To the northwest of the Castle View buildings are two very weak northwest to southeast orientated responses (Figs. 4 and 5, points 9 and 10). These appear to be c. 5m in width and extend for at least 40m, beyond the survey area. The size of these responses suggests they may well be background noise from geology, although their apparent 'enclosure' of the electric pylons may suggest that they are an effect created by their proximity, or possibly relate to its construction. Although the feature next to point 9 appears to be close to the edge of a row of survey grids, which may imply a calibration or walking error, its width and start point do not coincide exactly with the edge. Its extent over several grid squares also seems to rule this out as a possible interpretation.

At point 11, two curving magnetic anomalies are observable; these appear to overlie a weak linear response orientated on an approximately east - west alignment. This feature appears to mirror the alignment of the grubbed out field boundary visible at point 7. This may suggest that the line of the current footpath originally ran between two boundaries, possibly demarcated by a ditch or bank.

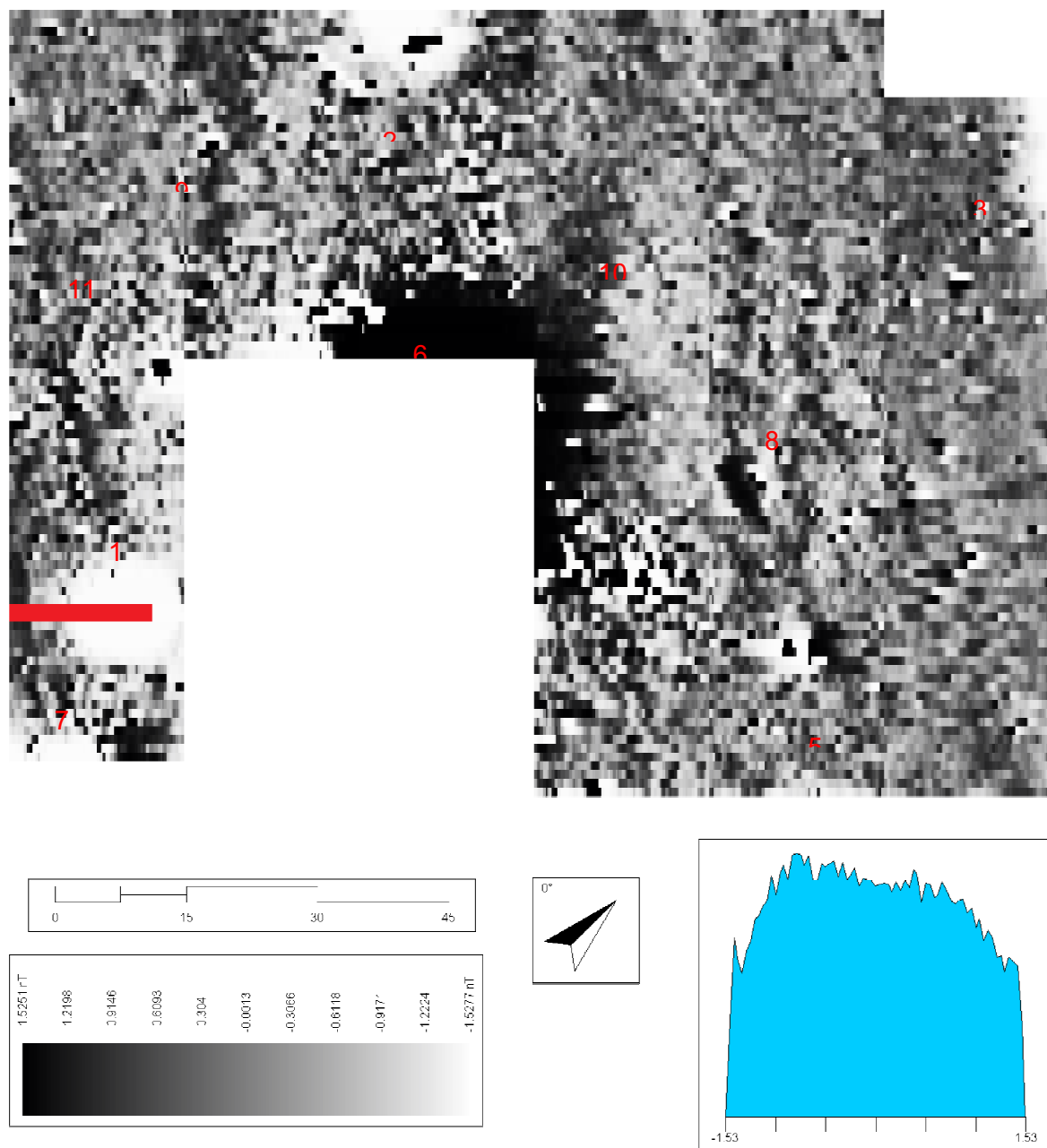


Figure 15. Survey results with compression filter applied

Applying a compression filter to enhance the contrast (and noise) of the results does seem to draw out these features (Fig. 5), although given the inherent problems with all image/data processing the results from these should be taken with some degree of caution.

An interpretational plot detailing the possible outlines of the potential archaeological features is depicted in Fig. 6.



Figure 16. Interpretational plot of possible weak magnetic anomaly responses from the survey

5. Conclusions

It seems apparent from the results of the survey that the combination of power lines, services, and features with similar magnetic responses to the surrounding soils has limited the clarity of the survey results over the site. Features are all of low magnetic response, and may all in fact represent natural geological effects.

The results of this survey are therefore of limited use in establishing the location of potential trial trenches in follow on archaeological work. Given the limited results there are two main areas that seem to show at least some promise of containing archaeological features, these being located in grid squares 2, 3, 4, 21 and 22 on the northeastern side of Castle View, and grid squares 11 and 12 to the southwest. However, due to the uncertain nature of these features, any location of trial trenching should not be wholly reliant on targeting the possible features identified during this survey, and a more methodical approach, such as using a standard grid array, might be equally successful in locating buried features.

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7. Acknowledgements

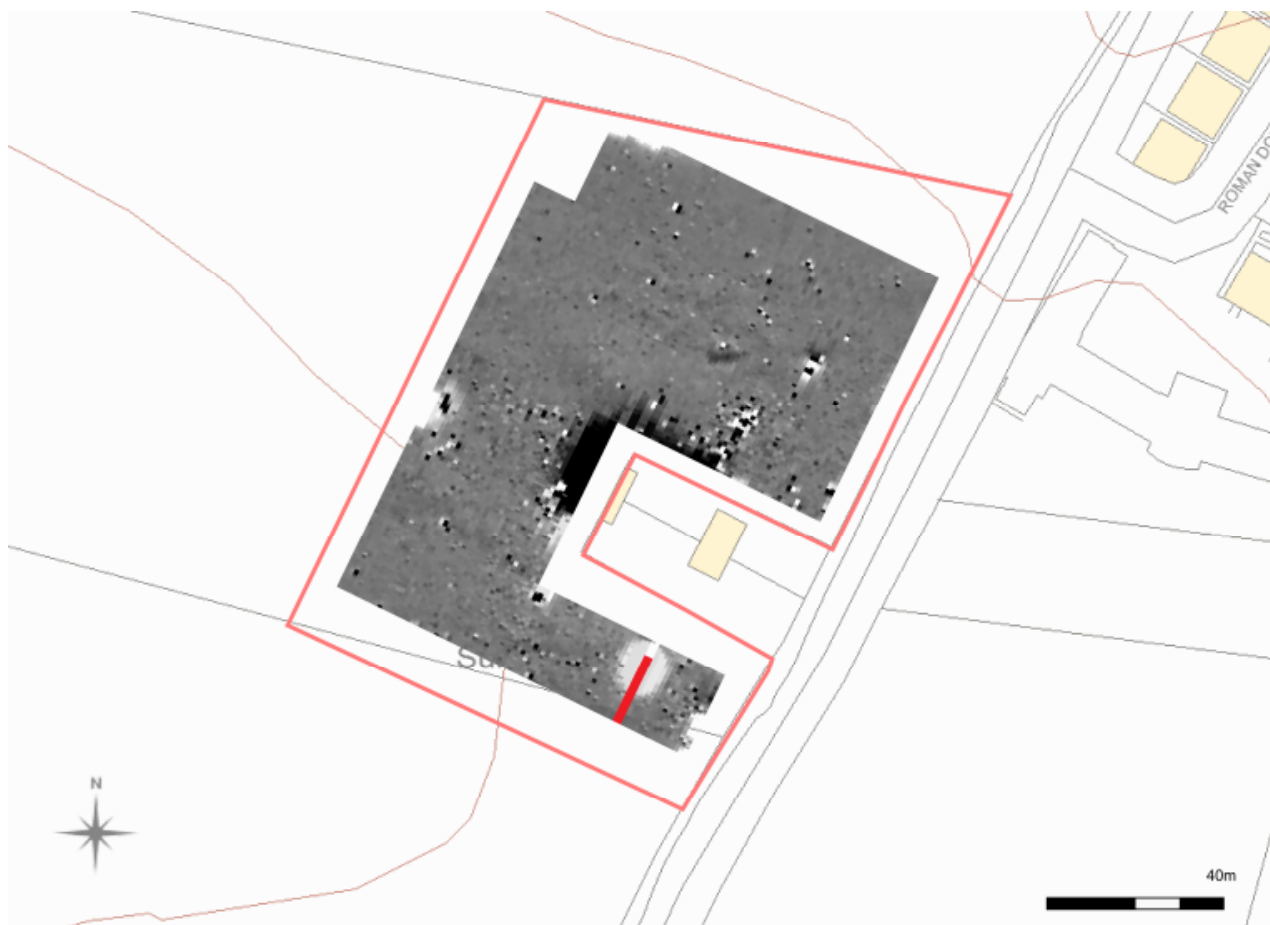
The author gratefully acknowledges the assistance provided by Timothy Malim, SLR Consulting Ltd for commissioning the project and providing the background information, and Matt Jones (CR Archaeology) for assisting with the survey fieldwork.

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9. Appendix 1 – Survey Results on OS map





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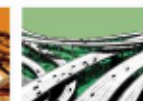
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