YCCCART 2011/Y16

North Somerset HER 2012/080

YATTON, CONGRESBURY, CLAVERHAM AND CLEEVE ARCHAEOLOGICAL RESEARCH TEAM (YCCCART)

Resistivity survey Venus Street. Mrs Meaker's field 2

General Editor: Vince Russett

The RM 15 team on site studying something interesting

Abstract

YCCCART has been undertaking a project to establish the extent of the Congresbury Roman pottery kiln sites. A YCCCART gradiometer survey reported in YCCCART publication Y4/2011 revealed potential domestic features worthy of further investigation by means of a resistivity survey. A resistivity survey has revealed the existence of a possible rectangular structure as well as a square anomaly and several circular features.

Acknowledgements

A Heritage Lottery Grant enabled the purchase, by YCCCART, of a Geoscan RM15 Resistivity Meter without which this survey could not have been undertaken. YCCCART would like to thank Golden Software for providing a free licence for their excellent Surfer 10 programme.

This survey would also not have been carried out without the willing permission of the landowner, Mrs M Meaker.

The authors are grateful for the hard work by the members of YCCCART in performing the survey and Vince Russett for editing.

Introduction

Yatton, Congresbury, Claverham and Cleeve Archaeological Research Team (YCCCART) is one of a number of Community Archaeology teams across North Somerset, supported by the North Somerset Council Development Management Team.

The objective of the Community Archaeology in North Somerset (CANS) teams is to carry out archaeological fieldwork, for the purpose of recording, and better understanding and management of, the heritage of North Somerset.

Site location

Fig 1: Site location

The site lies in the south east of the village of Congresbury, in the North Somerset, some 12 miles from Bristol. The GPS references for the resistivity survey are included in the site record in the appendix to this report: the centre of the field is at ST44816282.

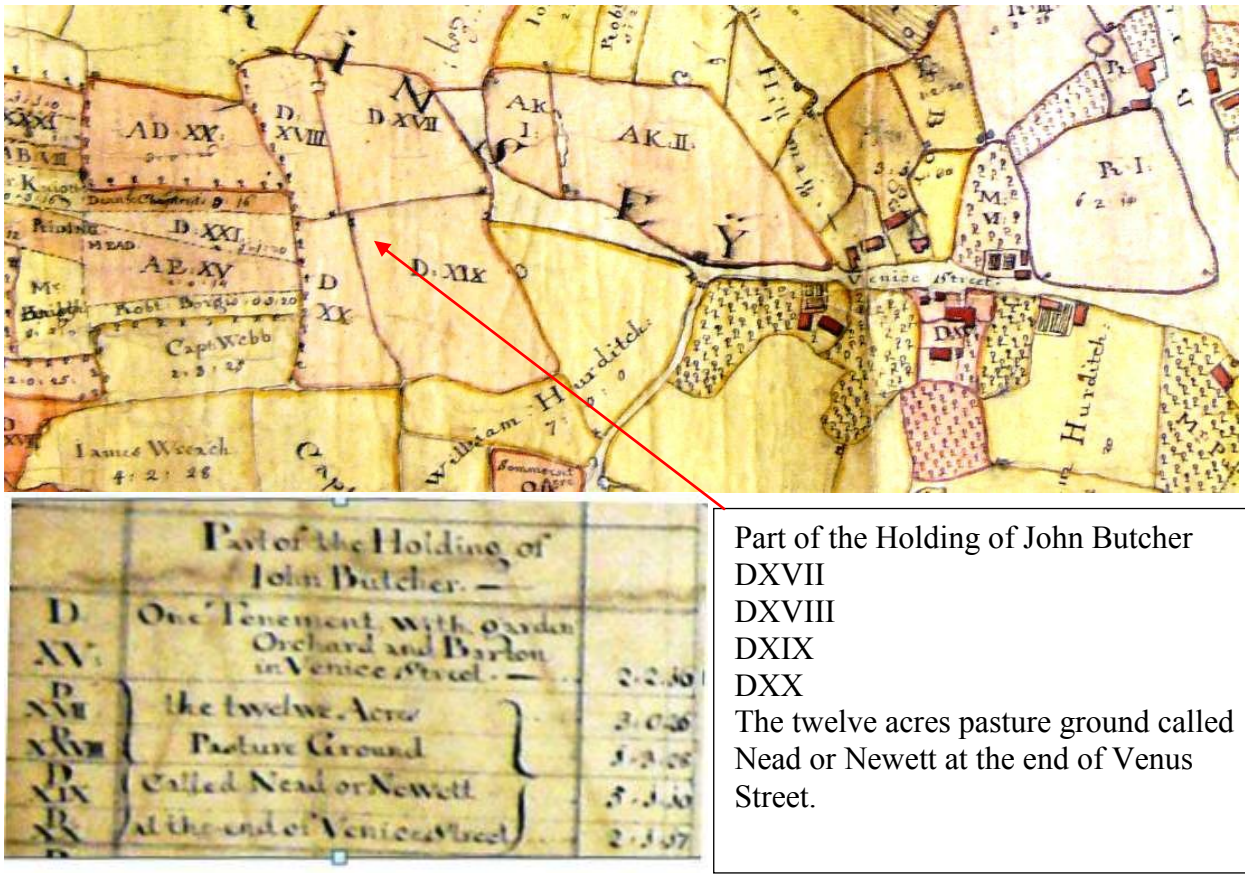
The field is privately owned and there are no rights of way in the field.

Land use and geology

The site lies immediately to the south of the flood plain of the natural course of the Congresbury Yeo. The geology is mixed, with Carboniferous limestone, Keuper Marl and estuarine alluvium

Currently the field is laid to grass and has been used for grazing.

Historical & archaeological context

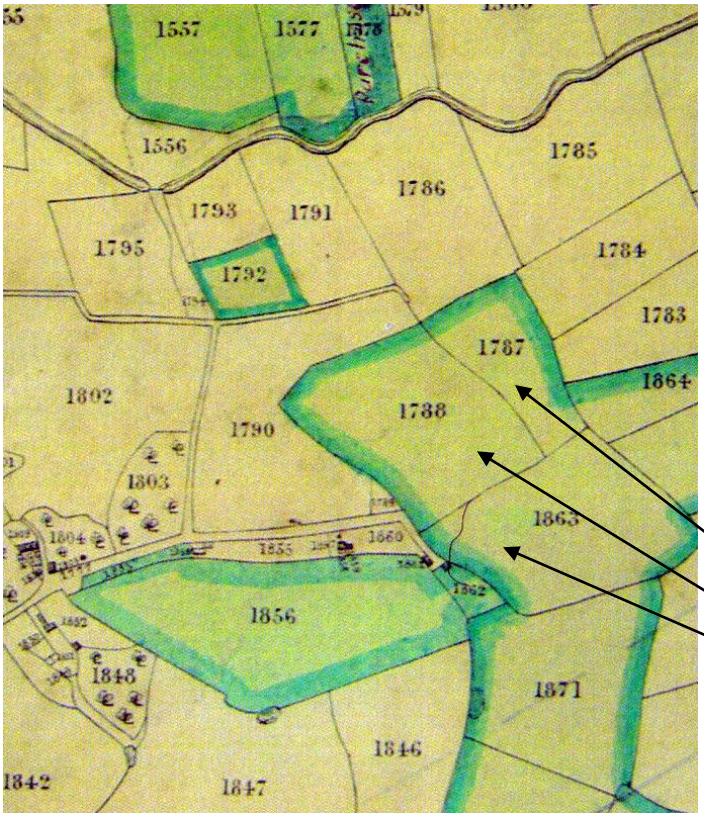


Part of the Holding of John Butcher
DXVII
DXVIII
DXIX
DXX
The twelve acres pasture ground called Nead or Newett at the end of Venus Street.

Fig 2: 1739 Map by J.J. de Wilstar. Courtesy of Bristol Record Office.
BRO/ 33041/BMC/4/PL1/2. Plans made for a survey of lands in the Manor of Congresbury, given for maintenance of Queen Elisabeth's Hospital, Bristol: A Survey Being Part of the Hospital Land in the Manor of Congresbury Bordering on the South-West side of the River 1739

In 1739, as can be seen from fig 2 above, the survey field was divided into four fields all called Nead or Newett and part of the holdings of John Butcher. This form is too late to be interpretable.

On the 1839 Congresbury Tithe map the current field is numbered 1787, 1788 and 1863.



In 1839 John Butcher's four fields have become three.

In the 1840 Tithe apportionment all three fields are described as pasture called Newett or Noad, owned by the Trustees of Queen Elizabeth Hospital and occupied by Anne Osmond.

Fig 3: 1839 Tithe Map extract. Courtesy of Bristol Record Office BRO 37959/9

Tithe Apportionment

Tithe Ref	Landowner	Occupier	Description
1787	Trustees of Queen Elizabeth Hospital	Anne Osmond	Pasture called Newett or Noad
1788	Trustees of Queen Elizabeth Hospital	Anne Osmond	Pasture called Newett or Noad
1863	Trustees of Queen Elizabeth Hospital	Anne Osmond	Pasture called Newett or Noad

Results of 2011 gradiometer survey

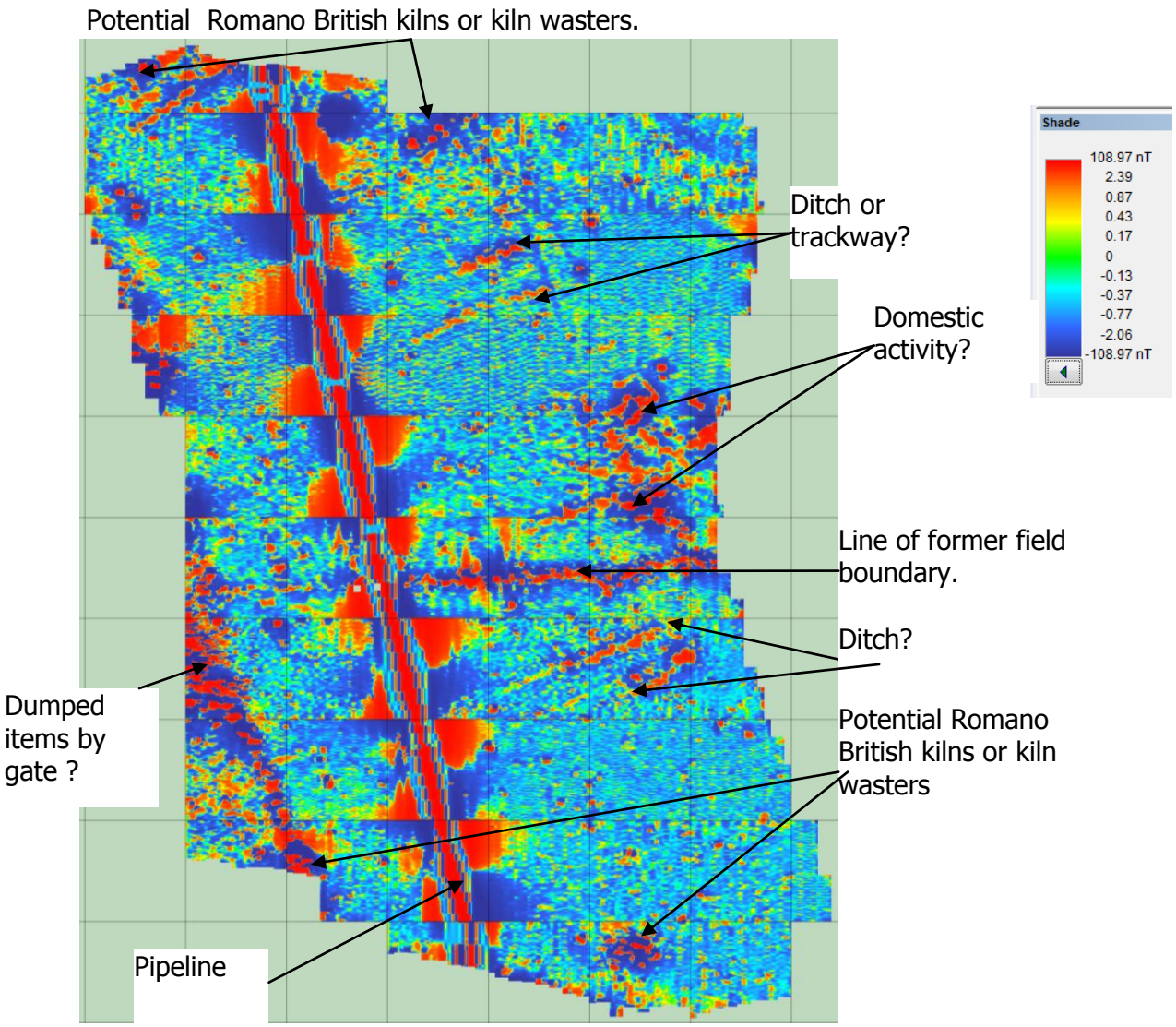


Fig 4: Shade view. ArcheoSurveyor colour view.

A gradiometry survey, undertaken during February and March 2011, revealed a variety of features, as illustrated in fig 4 above, including an area of possible domestic activity which is shown towards the top right.

Survey objectives

The survey had the following objectives.

1) To investigate the possible area of domestic activity revealed by a gradiometer survey.
2) Use the survey to train YCCCART members and members of Community Archaeology in North Somerset (CANS) in the use of the Geoscan RM15 resistivity meter.

Methodology

The survey was undertaken by teams from YCCCART during the period September to October 2011.

The completed survey was downloaded to an ArcheoSurveyor programme and the resultant composite adjusted using the following filters
1) Colour - Red Blue Green 2 & Black Green White
2) Band weight equaliser
3) Grad shade
4) Destriped

The data was also exported to Snuffler, a programme with which YCCCART are currently experimenting.

The report was written in Microsoft Word 2007.

Results

17Oct grid 2	17 Oct grid 1	
22 Sep grid 4	15 Sep grid 1	8 Sep grid1
22 Sep grid 3	15 Sep grid 2	8Sep grid 2
22 Sep grid 2	22Sep grid 1	15 Sep grid 3

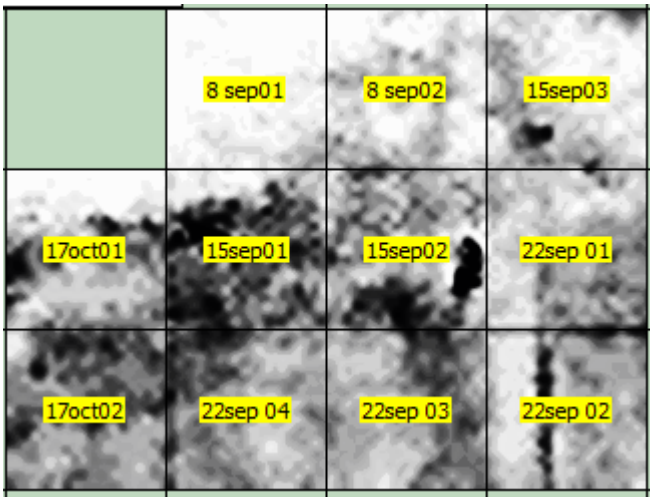


Fig 5: Grid plan and ArcheoSurveyor grid names.

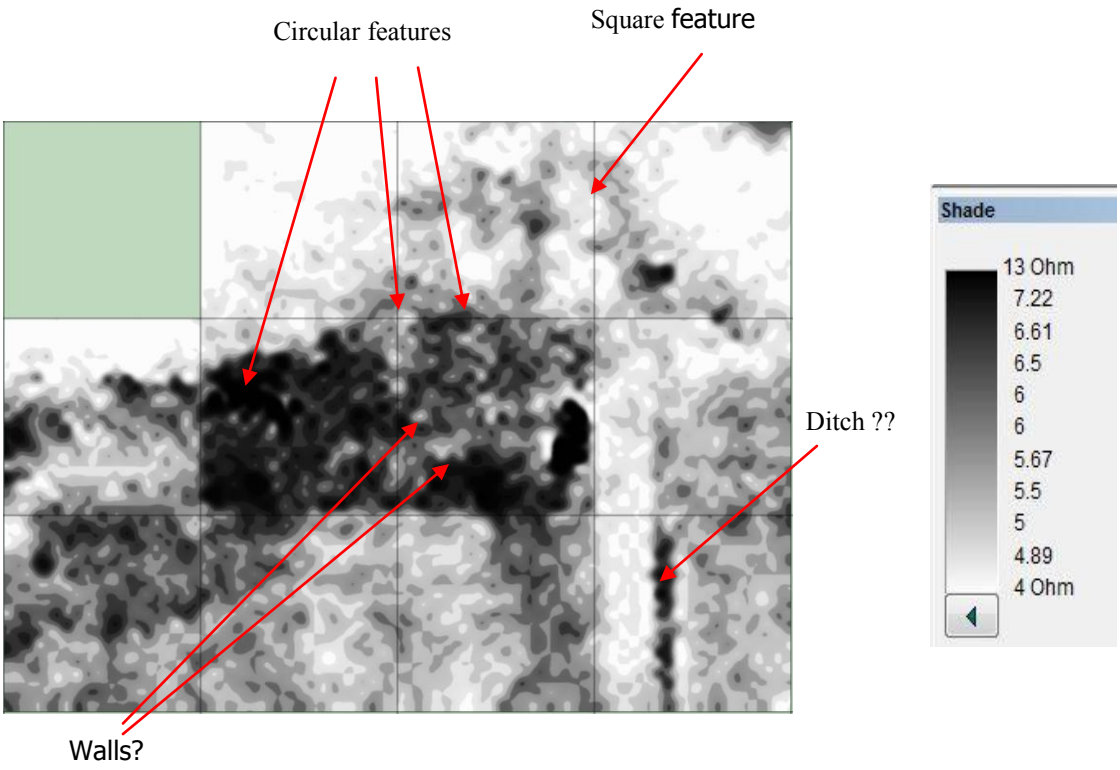


Fig 6: Shade view ArcheoSurveyor image. High readings are black.

Results from the resistivity survey are difficult to interpret as features seem to merge. A rectangular feature (building?) is indicated in fig 6 above and more clearly in the fig 7 axonometric view below. In addition several circular anomalies are evident together with a square feature towards the top right and a ditch (right) which is evident on the ground.

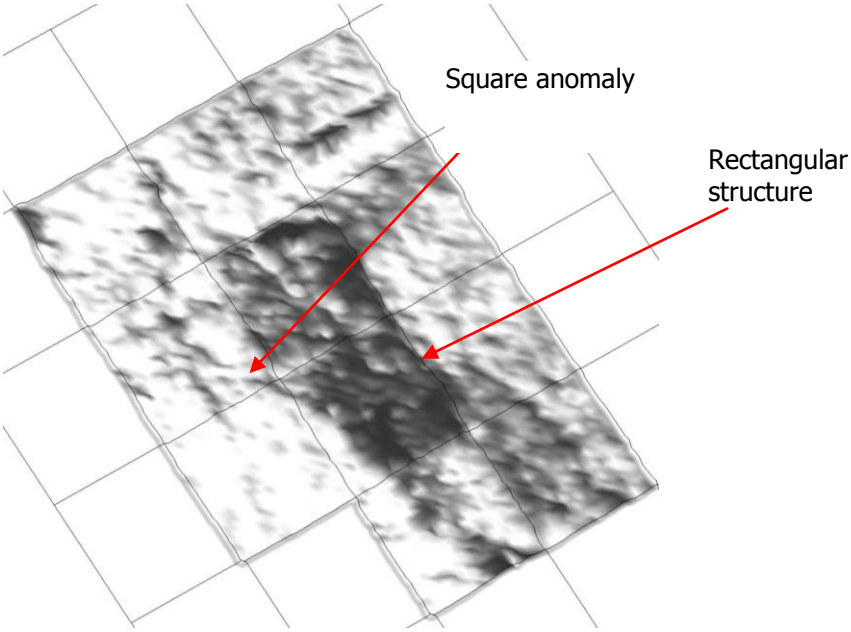


Fig 7: Axonometric view. ArcheoSurveyor colour view.

Such a higher resistance rectangular feature could be explained in several ways, one of which could be a building with stone foundations, although it seems far too big (at about 40m x 20m) for this. This would not stand out as much in this field which was wet during the survey (we encountered several frogs!). There could be other (modern) explanations, such as tipped rubble for a cattle yard or other similar: further work is needed to elucidate this.

Surfer Images

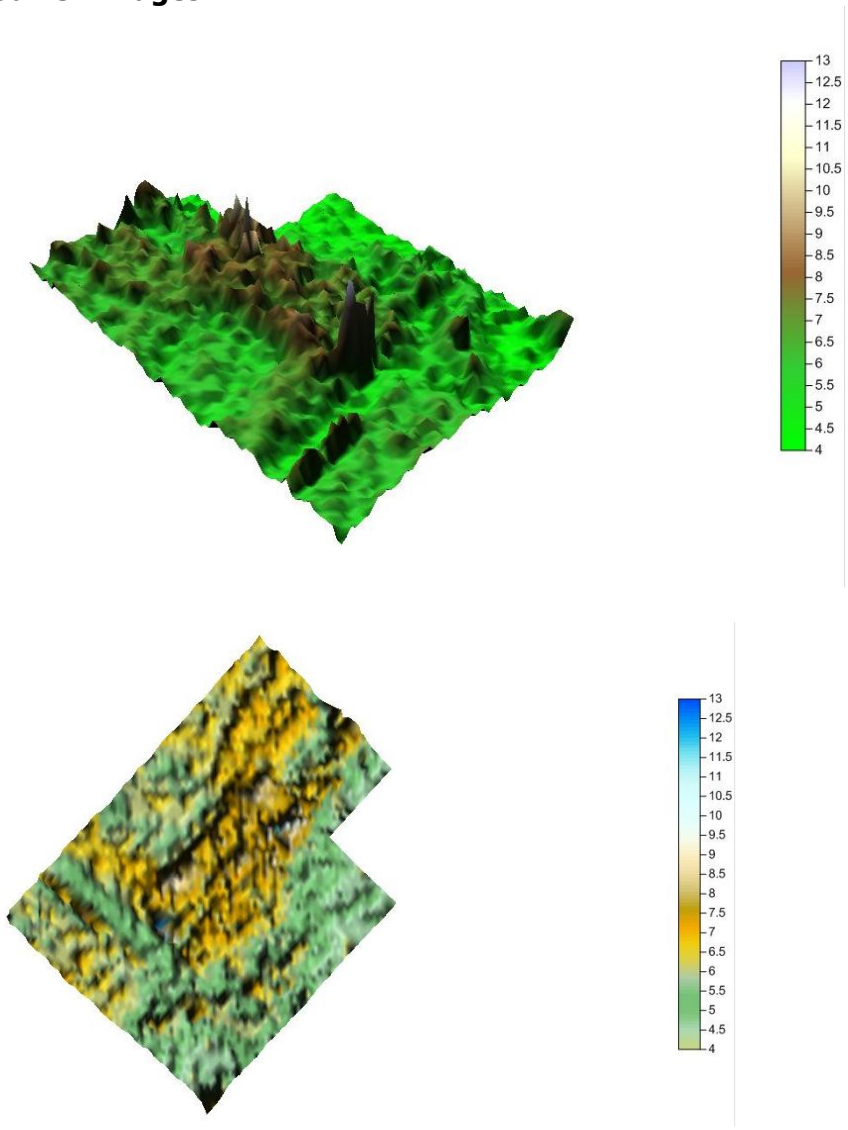


Fig 8. Images produced by Surfer 10 Software supplied by Golden Software.

The images produced using Surfer 10 software also show what appears to be a rectangular structure.

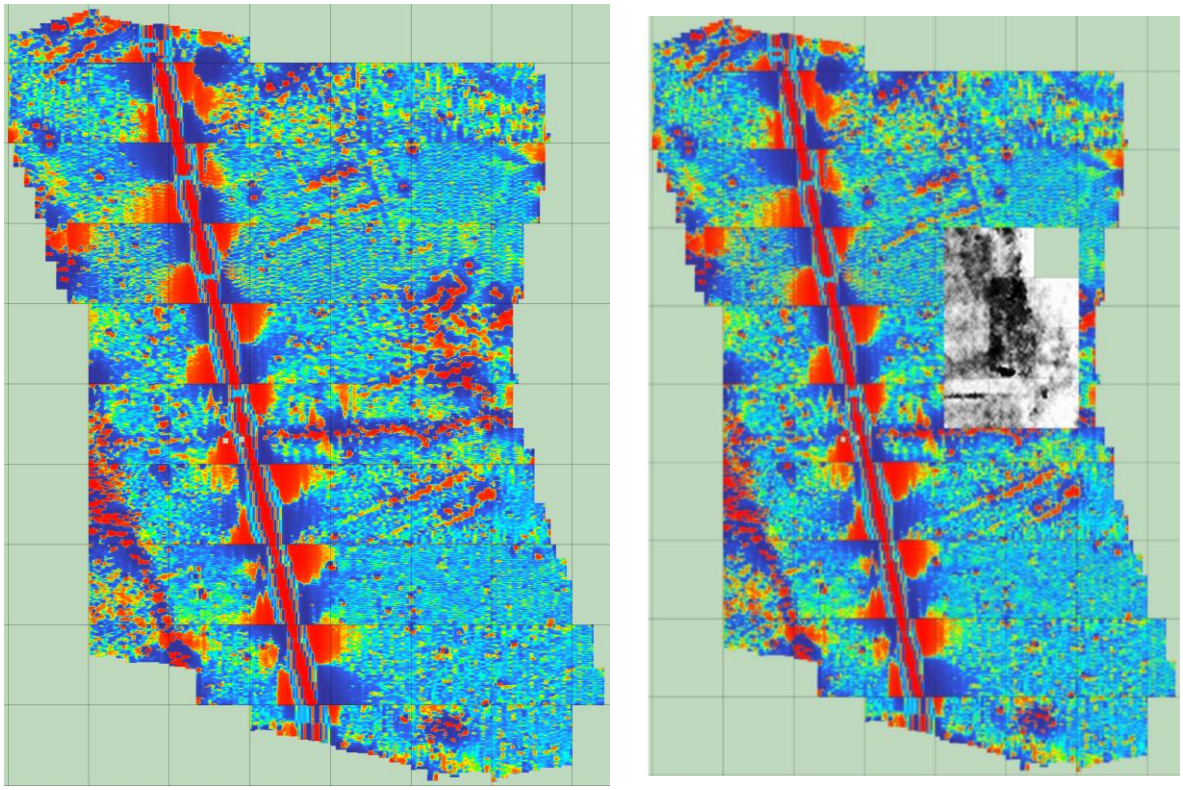


Fig 9. Left is the results of the gradiometry survey and right the resistivity survey overlaid on the gradiometry survey.

Fig 9 above shows that the resistivity survey has established archaeology in the area suggested by the gradiometry survey as worthy for investigation.

Recommendations for further work

The resistivity survey has indicated an apparent rectangular building which it is recommended is investigated further by means of psuedosection survey.

References

1793 Congresbury map	*Plans made for a survey of lands in the Manor of Congresbury, given for maintenance of Queen Elisabeth's Hospital, Bristol: A Survey Being Part of the Hospital Land in the Manor of Congresbury Bordering on the South-West side of the River 1739* Bristol Record Office BRO/ 33041/BMC/4/PL1/2
Extract from Congresbury Tithe Map	Bristol record Office BRO 37959/9

Author: Chris Short.

Date: 2012.

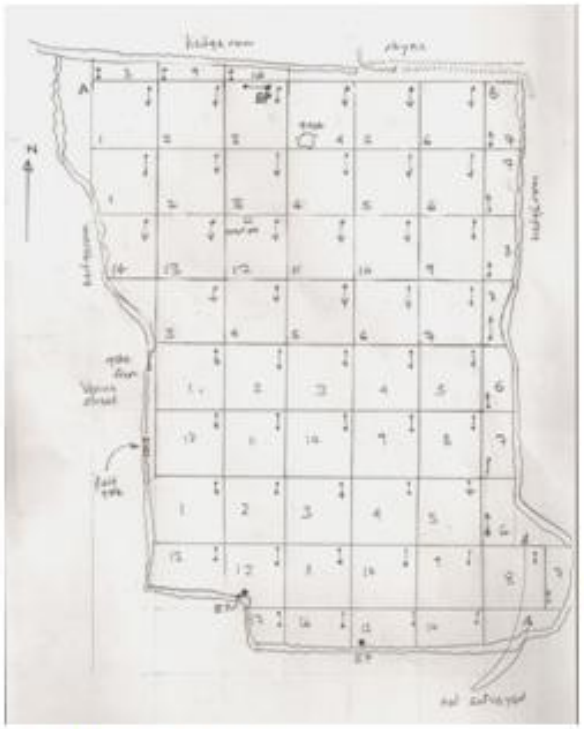
Appendix 1

Summary of daily site records

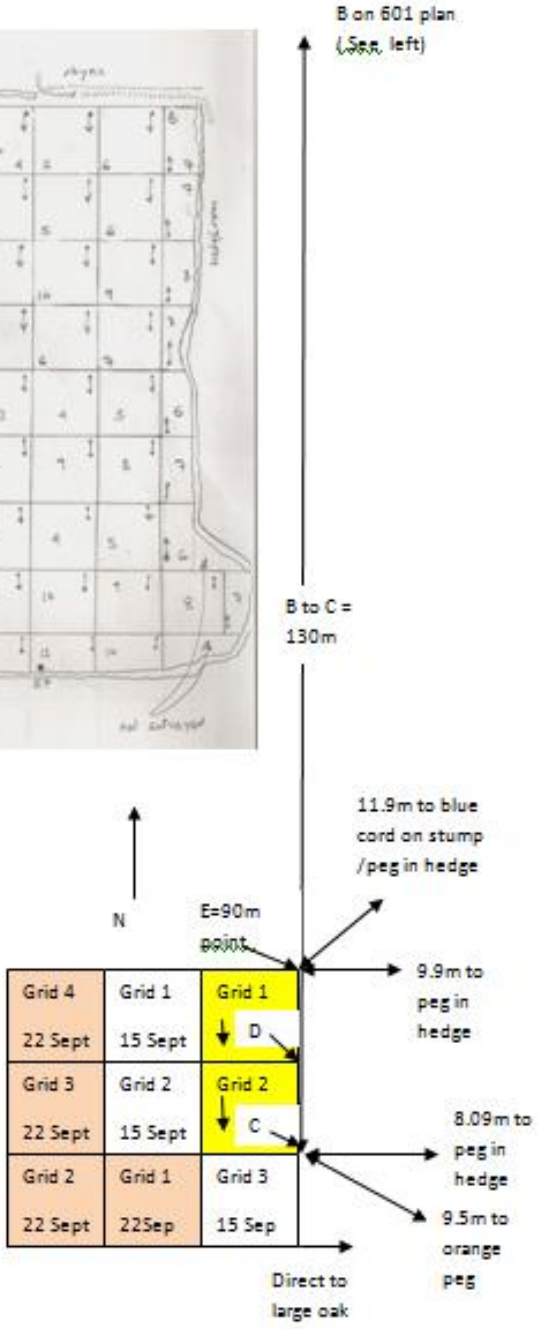
YCCCART Site Survey Project **– Mrs Meaker 2**						
Survey date	8 September 2011 to 17 October 2011					
Report date	17 October 2011					
Type /Instrument	**RM15**					
	Gain x1, Current 1mA Frequency 137Hz Probes 'Config 1' (2 probes)	Grid size: 20m x20m Pattern : Zig Zag Sample interval 1m Traverse Interval 1m. Mode Zig-Zag				
Weather	8 Sept: Cloudy, grass very wet, humid. 15 Sept: Sunny & warm. Grass wet. 22 Sept: Cloudy with sunshine. Some light rain. Grass very wet. 17 October: Sunny, grass very wet.					
OS Ref or Lat-Longitude	See below					
Site name	Meaker 2					
Landowner	Mrs Meaker					
Tenant	Mr Thomas					
HER ref						
Site type	?					
Description						
Period						
Geology	See report					
Land use	Grass					
Survey team	*8 Sept: Colin Campbell, David Long, Ian Morton, Janet Dickenson, Ferdi , Susan Dugas & Chris Short.* *15 Sept : Colin Campbell, David Long, John Haynes, Vince Russett & Chris Short.* *22 Sept: Colin Campbell, David Long, John Haynes , Vince Russett, Richard Baker & Chris Short.* *17 October: John Haynes, Pete Wright, Pete English & Chris Short.*					
Survey area		Notes		Readings		
		Size	Walk direction			
8 Sept	Grid 1 Grid 2	1 x 20m 1 x 20m	S S			

15 Sept	Grid 1 Grid 2 Grid 3	1 x 20m 1 x 20m 1 x 20m	S S S			
22 Sept	Grid 1 Grid 2 Grid 3 Grid 4	1 x 20m 1 x 20m 1 x 20m 1x 20m	S S S S			
17 Oct	Grid 1 Grid 2	1 x 20m 1 x 20m	S S			
Summary		Downloaded as: ArcheoSurveyor: *Mrs Meaker 2/ 8 Sep grids 1 & 2, 15 Sept 1to 3, Sep 22 grids 1 to 4, 17 Oct grids 1 & 2.* Snuffler *: Mk1 to Mk11*				

RM 15. Grid layout. Mrs Meaker 2



RM 15 –Walking south per arrow (All grids.)

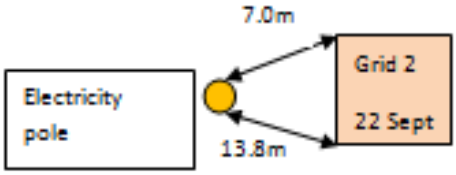


Pegs at E & C

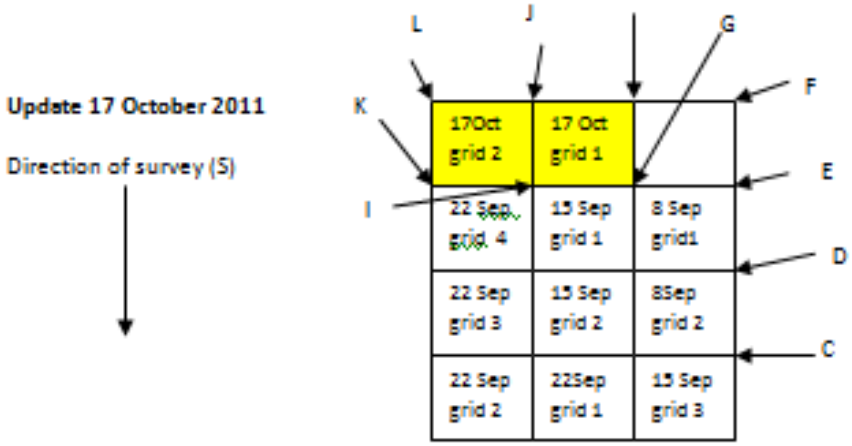
Yellow = 8
September grids

GPS

C	344872.34	162819.28
D	344871.96	162839.11
E	344871.29	162859.66



H



Update 17 October 2011

Direction of survey (S)

GPS

C	344872.34	162819.28
D	344871.96	162839.11
E	344871.29	162859.66
F	344871.50	162881.54
G	344850.07	162859.50
H	344851.84	162881.54
I	344830.75	162859.40
J	344832.45	162880.15
K	344811.20	162859.26
L	344811.52	162879.67