YCCCART 2015 / Y 5 North Somerset HER 2015/19 Gradiometry Survey south of Silverstone Way, Congresbury (Mrs J Edwards Field 1)

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General Editor: Vince Russett



Stonewell Farm surrounded by apple orchards (shown in green) Based on the 1881 ordnance survey map.

Page	Contents
3	Abstract Acknowledgements Introduction
4	Site location Land use and geology
5	Historical & archaeological context
7	Survey objectives Methodology
8	Results
11	Recommendations References
12	Appendix – Site Records

Abstract

YCCCART has a project to establish the extent of the Congresbury Roman kiln sites. A gradiometry survey south of Silverstone Way, Congresbury, has revealed 3 parallel enigmatic lines.

Acknowledgements

A Heritage Lottery Grant enabled the purchase, by YCCCART, of a Bartington 601 gradiometer without which this survey could not have been undertaken.

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

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

Introduction

YCCCART is one of a number of Community Archaeology teams across North Somerset, supported by the North Somerset Development Management Team.

The objective of the Community Archaeology in North Somerset (CANS) project is to undertake archaeological fieldwork to enable a better understanding and management of the heritage of the area while recording the activities and locations of the research carried out.

Site Location



Fig 1: Site location indicated by the red arrow.

The field is privately owned.

Land use and geology

The field is used for grazing. Geology is the Mercia Mudstone group – Mudstone and Halite stone.

Historical & archaeological context

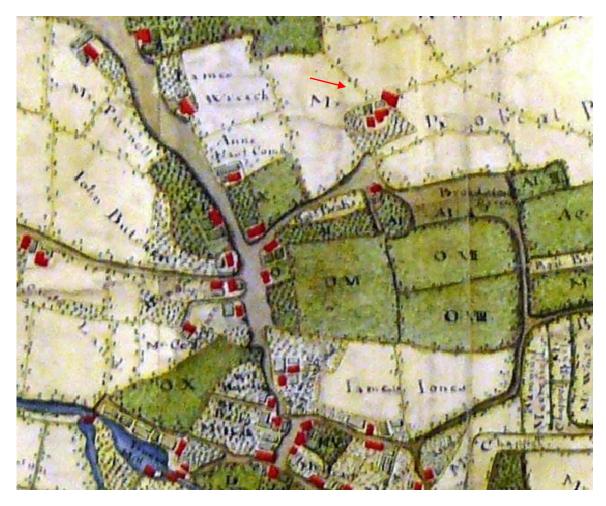


Fig 2: De Wilstar map of 1739. Courtesy of Bristol Record Office. Reference 33041/BMC/4/PL1/2

The area of the current field is indicated on the 1739 map in Fig 2 above by the red arrow.

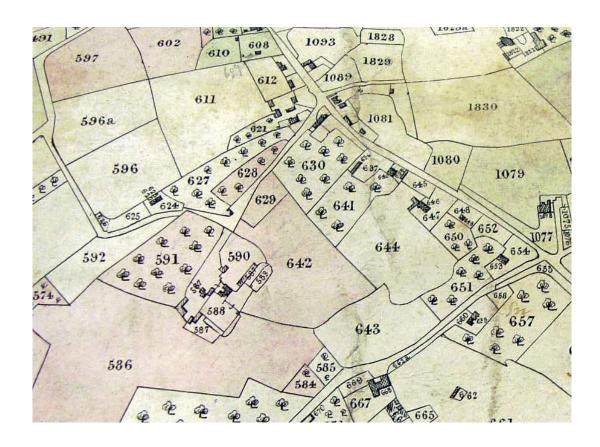


Fig 3:1839 Map. Courtesy of Bristol Record Office BRO 37959/9. The surveyed field is incorporated in number 642 & 586 on the map.

The Tithe apportionment record, relating to the 1839 map above, shows the field numbers as follows:

Number	Number Owner		Name	Туре		
586	Robert Beakes Simmons Esq	s		Pasture		
587	Robert Beakes Simmons Esq	John Ford	Farm house, outbuildings and barton			
588	Robert Beakes Simmons Esq	John Ford	Garden			
589	Robert Beakes Simmons Esq	John Ford	Plantation			
590	Robert Beakes Simmons Esq	John Ford	The Barbery	Pasture		
591	Robert Beakes Simmons Esq	John Ford	Orchard	Orchard		
642	642 Robert Beakes Simmons Esq		The Five Acres Home Ground	Pasture		

Survey objectives

The survey was undertaken in order to continue to investigate the extent of the Congresbury Romano British pottery kiln field.

Methodology

The survey of field was undertaken during March and April 2015 by teams from YCCCART, using a Bartington 601 gradiometer, with settings as per the site record in the Appendix.

The completed survey was downloaded to a TerraSurveyor program.

TerraSurveyor composites were adjusted using the following filters:

Standard settings

- 1) Colour Red Blue Green 2
- 2) Band weight equaliser
- 3) Grad shade
- 4) Despiked
- 5) Destriped
- 6) Clip SD2
- 7) Periphery

The report was written in Microsoft Word 2013.

Photographs were taken by members of YCCCART, and remain the copyright of YCCCART.

Results

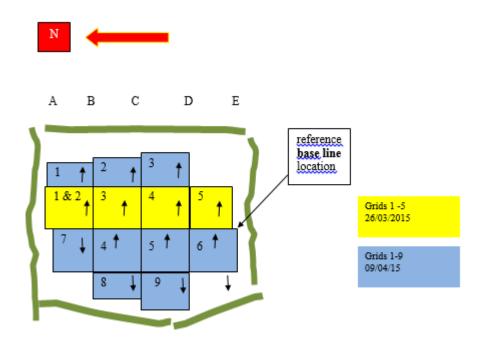


Fig 4: Grid lay out

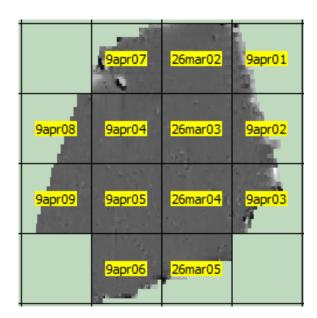


Fig 5: TerraSurveyor grids.

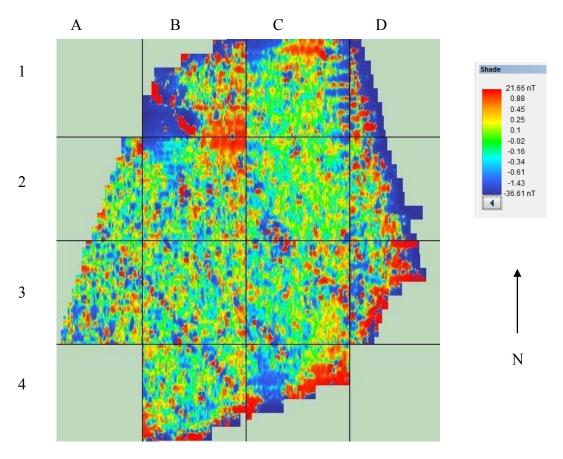


Fig 6: TerraSurveyor shade view colour image. High readings are red.

The most interesting anomalies in Fig 6 above are the three lines of blue/red dots from:

- 1) bottom of grid 2A to the right hand side of grid 4.
- 2) top left of grid 3B to top of grid 4C.
- 3) left of grid 2 to left of grid 3Cf

They could result from grubbed out hedges but they do not relate to the hedge line on the 1739 map at Fig 2 (see page 5). It is possible that they represent three parallel drainage pipes.

The high / low anomaly in grid 1B is probably the result of agricultural waste.

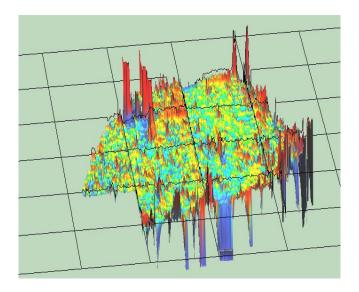


Fig 7: TerraSurveyor axonometric colour image. High readings are red.

The 3d image (Fig 7above) clearly shows the three lines on the left hand side.

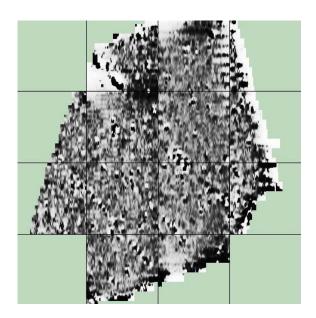


Fig 8: TerraSurveyor shade view black and white image. High readings are black.

The black and white images, at Fig 8 above, again show the lines.

Recommendations

No further action

References

Congresbury Tithe Map BRO 37959/9 (Bristol Record Office)

De Wilstar map of 1739. *BRO 33041/BMC/4/PL1/2*

(Bristol Records Office)

Author: Chris Short

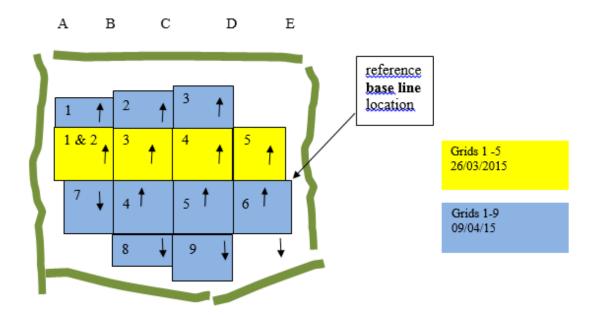
Date June 2015

Appendix

YCCCART Site S	Survey						
Project – J Edwards – Congresbury Kilns projects							
Survey date		26 March 2015 to 9April 2015					
Report date		9April 2015					
Type /Instrument		Grad 601					
		Pace :1.5m/s Lines/m : 1 Range:100nT Volume: High Sensors:2	Grid size: 30m x30m Pattern: Zig Zag Samples/m:2 (grid 1 only on 26/3/15 as reference) Samples/m:4 (other grids) Audio: On Threshold:10nT				
			Reject:50 Hz				
Location		Off the end of Silver St/behind Silverstone Way					
Ref		none					
Site name		J Edwards 1					
Landowner		Mrs J Edwards					
Tenant							
HER ref							
Site type		Open land					
Description		Grass land					
Period							
Geology							
Land use		Grazing					
Survey team and	conditions						
26/3/2015	Team	Ian Morton, Peter Wright, Arthur Langley and Ferdi					
	Weather						
	Team						
	Weather Sunny, warm, ground damp/dry						

Survey area		notes	3	readings						
	-	size	walk direction	max	min	mean				
Date	Grid number									
26/3/2015			Setting out base line and grids for whole field 30 x 30m E +18.9 -21.7 -2.1							
	1	30 x 30m			-21.7	-2.1				
		Samples/m:2								
	2	30 x 30m	Е	+19.9	-27.0	-2.3				
		repeat of grid 1								
		Samples/m:4								
	3	30 x 30m	Е	+20.7	-19.5	-1.0				
	4	30 x 30m	Е	+21.0	-11.0	-0.6				
	5	30 x 30m M & R	E +21.8		-100.0	-2.5				
9/4/2015	1	Partial grid M &	Е	+71.9	-100.0	-11.4				
	2	Partial grid M &	Е	+15.8	-100.0	-5.6				
	3	Power line	Е	+98.8	-100.0	-0.6				
		overhead								
	4	Power line	Е	+81.4	-93.9	-0.6				
		overhead								
	5		Е	+9.9	-9.1	-0.0				
	6	Partial grid .Mirror	Е	+98.6	-100.00	-0.0				
		& return last 2								
		traverses								
	7	Partial grid M & R	W	+99.8	-99.1	-3.7				
	8	Partial grid M &R	W	+5.7	-7.3	-1.1				
	9	Partial grid M& R	W	+14.6	-7.7	-1.1				
		Power line								
		overhead								

Setting Out



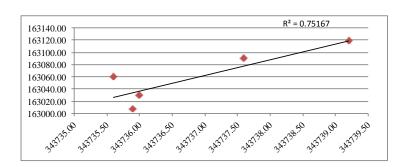
Position A on base line – 4.3 m from spot on step 3.4 m from FP (2^{nd})

Position B on base line – 7.75m from 2nd post from gate 5.45m from sixth post from gate – 2 yellow spots

Position of quiet spot – E 343701.9 N 163039.6

Grid Ref. All ST

	eastings	northings
A	343739.20	163119.50
В	343737.60	163090.30
C	343735.60	163060.30
D	343736.00	163029.80
E	343735.90	163007.80
F		
G		
H		



quiet spot 343701.9 163039.6

HAZARD AND RISK ASSESSMENTS

Severity of hazard:

1= Minor injury

2= Serious injury 3= Major injury or fatality Likelihood: 1= Unlikely

2= Likely 3= Very likely or inevitable Population (no. of persons who could be affected):
1= 1-5 persons

2= 6-20 persons 3= 21+ persons Risk Factor: Severity x Likelihood x Population (min 1, max 27)

Location:Edwards 4

Activity/Equipment:

Date of assessment:26 March 2015

Assessor: Arthur Langley

Nature of hazard	Slips, trips, falls	Dust	Noise	Fire/Explosion	Exposure to harmful substances	Entrapment	Impact	Contact	Entanglement	Ejection	Electric shock	RSI/Eyestrain	Manual handling	Other Dog facces	MAX. RISK FACTOR
Severity	1	0	0	0	0	0	0	1	0	0	0	1	1	2	
Likelihood	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1
Population	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Control methods and timescale

Ground is fairly flat, uneven and soft in places. Care will be taken when walking 601.

The area is popular with dog walkers and may have occurrences of dog faeces. Need to wear gloves and/or wash hands after surveying. Two pet sheep in field – care will be taken not to frighten.

Members will wear substantial footwear and long trousers which will deal with the uneven ground, wet grass and some muddy areas to protect skin from any stumbles. The shoes/Wellington boots will reduce risk of contamination by the dog faeces. Need to wear gloves and/or wash hands after surveying.