NORTHAMPTONSHIRE ARCHAEOLOGY NORTHAMPTONSHIRE COUNTY COUNCIL

JANUARY 2005

A GEOPHYSICAL SURVEY ON

LAND AT HUNGERFORD PARK,

HUNGERFORD, WEST BERKSHIRE

JANUARY 2005

Report 05/17

Project Manager	Adrian Butler BSc, MA, AIFA
Fieldwork	Ian Fisher BSc, James Aaronson BA
Text and illustrations	Ian Fisher and Adrian Butler

STAFF

QUALITY CONTROL

	Print name	Date
Checked by	Adrian Butler	21 January 2005
Approved by	Steve Parry	21 January 2005

Contents

1	INTRODUCTION	1
2	TOPOGRAPHY AND GEOLOGY	1
3	METHODOLOGY	1
4	SURVEY RESULTS	2
5	CONCLUSION	3
	BIBLIOGRAPHY	4

FIGURES

- Fig 1 Site Location 1:2500
- Fig 2 Gradiometer Survey Results 1:1250
- Fig 3 Gradiometer Survey Results with interpretation 1:1250

A GEOPHYSICAL SURVEY ON LAND AT HUNGERFORD PARK, HUNGERFORD, WEST BERKSHIRE, JANUARY 2005

ABSTRACT

Geophysical gradiometer survey was undertaken by Northamptonshire Archaeology in two areas at Hungerford Park, Hungerford, Berkshire. The survey revealed a single pit in the southern area and possible demolition rubble in the northern area.

1 INTRODUCTION

Detailed gradiometer survey with a total area of approximately 0.5ha was undertaken by Northamptonshire Archaeology (NA) at Hungerford Park, Hungerford, West Berkshire (NGR SU 354 673, Fig 1). The work was carried out on behalf of Gifford and Partners Ltd as part of an archaeological evaluation to identify prehistoric activity in Area 1 (located on a knoll) and the remains of a former Tudor mansion in Area 2 (Christina Evans pers comm, 11/01/05). The project was at pre-planning stage and therefore no Brief for Archaeological Work was yet available.

All fieldwork was conducted in accordance with English Heritage and Institute of Field Archaeologists Guidelines (EH 1995 & Gaffney et al 2002).

2 TOPOGRAPHY AND GEOLOGY

The site is situated south-east of Hungerford, to the south of the River Kennet. Area 1 was located on the south-east slope of a knoll. The south west corner of the area $(20 \times 30m)$ was unsurveyable due to dense tree coverage and vegetation. In contrast, area 2 was located on flat ground bounded to the north by a wall. Remenants of other walls were visible extending to the south on the east and west sides of the survey area. The area was dissected by a road to the north running east to west. The southern part of the survey area $(50 \times 20m)$ was unsurveyable due to trees and dense brambles. Low-lying brambles (in Areas 1 and 2) hindered and slowed the survey down.

The solid geology of Hungerford comprises Red Chalk, the drift geology consists of Clay with Flints (<u>http://www.bgs.ac.uk/geoindex/index.htm</u>; accessed 11/01/05).

3 METHODOLOGY

The detailed gradiometer survey was undertaken using Geoscan Research FM36 fluxgate gradiometers. A total of 6 separate 30m x 30m grid-squares were surveyed in detail. Each grid-

square was traversed at rapid walking pace via zigzag traverses (alternate north-south) spaced at 1m intervals. A ST1 sample trigger recorded readings every 0.25m along the traverse.

The data were analysed using Geoplot 3.00p software. Low (negative) magnetism is shown as white and high (positive) magnetism as black in the resultant greyscale plots. The 'Zero Mean Traverse' algorithm processing function was used in order to normalise the background variation between individual traverse and grid-squares in Area 1. The processed data is presented here in the form of greyscale plots (Figs 2 & 3).

4 SURVEY RESULTS

Area 1

Despite being located on a distinct knoll and there being potential for prehistoric activity the survey did not identify significant archaeological remains. The south-west corner of the survey area could not be surveyed due to trees and fallen trees. Central to the northern edge of the area surveyed, a discrete positive magnetic anomaly was detected representing a pit and the sole archaeological feature detected in the area.

Area 2

The northern survey area was designed to detect evidence of a former Tudor mansion. Unfortunately bramble and plantation cover prevented total survey of Area 2. Where the asphalted roadway crossed the survey area east-west, the magnetic response was diminished. To the south of the road the gradiometer survey revealed an approximately 40m x 20m area of complex, mainly negative magnetic anomalies. These anomalies, at too intense values for local geological extrusions, may reflect buried building rubble. This putative rubble spread would appear to be contained within the curtilage of the extant walls on the site and may represent demolition of the suspected mansion. A chain of intense paired positive and negative anomalies orientated north-east between service covers identified in the field, almost certainly represent an underground ferrous pipeline.

5 CONCLUSION

Two areas of c.0.25ha each were surveyed by fluxgate gradiometry. A single pit-like feature of less than 2m diameter, was located in survey Area 1. In Area 2 negative anomalies interpreted as possible building rubble was identified, providing uncertain evidence of a Tudor mansion on the site.

BIBLIOGRAPHY

English Heritage 1995 *Geophysical Survey in Archaeological Field Evaluation*, Research and Professional Services Guideline, 1

Gaffney, C, Gater, J, and Ovendon, S, 2002 *The Use of Geophysical Techniques in Archaeological Evaluations*, Institute of Field Archaeologists Technical Paper, **6**

Northamptonshire Archaeology a service of Northamptonshire County Council

21 January 2005











Fig 2 Detailed Gradiometer Survey Results





