Archaeological Evaluation Report

# HALLOWS DRIVE KELSALL

For Bloor Homes

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L-P:ARCHÆOLOGY

#### Archaeological Evaluation Report

### HALLOWS DRIVE KELSALL

Client:	Bloor Homes
Local Authority:	Cheshire West and Chester
NGR:	389345, 390180
Planning App:	12/03551/FUL
Author(s):	M. Williams
Doc Ref:	LPI5I6C-AER-vI,0
Site Code:	KEL/HAD13
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#### L-P:ARCHÆOLOGY

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### TABLE OF CONTENTS

Table of Figures

Table of Plates					
Table of Tables					
Table of Appendices					
Abstract					
I. Introduction					
2. Site Background					
3. Aims					
4. Geophysical Survey					
5. Topographic Survey and Walkover					
6. Metal Detecting					
7. Summary and Conclusions					
8. Archive					
Sources Consulted					
Figures					
Appendices					

#### TABLE OF FIGURES

- Figure I Site Location
- Figure 2 Greyscale image of results on aerial photograph and Ordnance Survey grid
- Figure 3 Greyscale image with interpretation of anomalies overlain
- Figure 4 3-D points collected during the survey and Contour map at 50cm intervals (numbered in metres AOD)
- Figure 5 Topographic survey
- Figure 6 Metal detecting results

#### TABLE OF PLATES

- Plate I Looking south across southern field. The raised area of modern dump is on the left.
- Plate 2 Looking west across the northern part of the northern field from the trackway access.

#### TABLE OF TABLES

Table 1- Artefacts recovered from metal detecting/walkover survey.

#### TABLE OF APPENDICES

Appendix I - Oasis Record

## Abstract

A site at Hallows Drive, Kelsall, was assessed for archaeological potential by geophysical, metal detecting and topographic survey. The surveys were carried out as part of a planning condition attached to the development of the site.

The geophysical survey identified several linear features that were almost certainly modern. The topographic survey did not identify any areas of potential archaeology. Thirty eight objects were retrieved during the metal detecting survey. These were mostly Post Medieval or modern, although there were two possible Medieval buckles, one Roman coin and a Medieval spindle whorl. Although these items are of individual interest, the assemblage is typical of casual loss and does not indicate any potential archaeological remains and suggests the site was probably open land from the Roman period onwards.

#### 1. Introduction

- 1.1. This assessment report has been prepared by Matthew Williams of L P: Archaeology on behalf of Bloor Homes. The geophysical survey was carried out by The Landscape Research Centre (LRC) and the metal detecting survey was carried out by members of the Mold Historical Search Society. Two topographical surveys were carried out, one by Bloor Homes and one by LRC. These were examined and a visual inspection/walkover of the site was carried out by L P: Archaeology.
- 1.2. The fieldwork was carried out between 19th and 24th July 2013.
- 1.3. The site is located in at Hallows Drive, Kelsall CW6 0QG (FIGURE 1). The site code allocated by Chester Museum Service is KEL/HAD13.
- 1.4. The work was carried out in accordance with the Written Scheme of Investigation (WSI) prepared by Matthew Williams of L P : Archaeology (WILLIAMS, 2013).

#### 2. Site Background

#### 2.1.PLANNING

- **2.1.1.** The work was carried out as part of condition 12/03551/FUL.
- **2.1.2.** Bloor Homes and Cheshire West and Chester Council (CWAC) agreed the methodology for these works in the WSI (WILLIAMS, 2013).

#### 2.2.GEOLOGY

**2.2.1.** The drift geology is Devensian glacial till, the solid geology is Helsby sandstone formation (COOPERS, 2012).

#### 2.3.TOPOGRAPHY

2.3.1. The site consists of two fields separated by a hedge. It is bounded to the north by housing fronting Chester Road, the east by housing fronting Church Street, the south by housing fronting Hallows Drive and the west by open fields (FIGURE 1 AND FIGURE 2). The site slopes gently down from 80mOD in the northeast to 70mOD in the southwest.

#### 2.4.SITE CONDITIONS

**2.4.1.** There are two uninhabited dwellings with gardens in the south east corner. The garage of one house has been demolished. There is a track with a wooden gate leading to the site in the north east corner.

#### 2.5.ARCHAEOLOGY AND HISTORY

- 2.5.1. There are no heritage assets recorded within the site area. A Bronze Age cremation was discovered 300m east of the site (HER1872). The historic environment assessment report (OWEN, 2012) concludes there is a low to moderate potential for remains dating to the later prehistoric periods (Bronze Age and Iron Age) and Roman period.
- 2.5.2. Examination of historic Ordnance Survey maps shows the site as open fields from 1874 (1<sup>st</sup> ed.) to 1970, when the two dwellings in the south of the site were constructed. No other changes are recorded in the historic mapping (COOPERS, 2012; OWEN, 2012).

#### 3. Aims

- **3.1.**The aims of the geophysical survey were to determine the presence or absence of anomalies that may represent archaeological features.
- **3.2.** The aim of the topographical survey and site inspection was to identify elevated areas that may indicate lithic scatters or later finds scatters.
- **3.3.**The aims of the metal detector survey were:
  - to identify artefact concentrations that may indicate buried archaeology and;
  - to collect an assemblage that would assist the interpretation of the site.
- **3.4.**The aim of this stage of work was to collect enough information to allow a suitable mitigation strategy to be devised.

#### 4. Geophysical Survey

#### 4.1.INTRODUCTION

4.1.1. The Landscape Research Centre Ltd (LRC) was engaged to undertake a fluxgate gradiometer survey to investigate an area to the north of 16 Hallows Drive in the civil parish of Kelsall, Cheshire. The survey was undertaken on behalf of L-P:Archaeology, specifically to test for the presence of any underlying archaeological features. Only a few possible features were detected, as much of the site was dominated by magnetic interference caused by relatively recent activity.

#### 4.2.METHODOLOGY

- **4.2.1.** The survey was conducted using a Foerster Ferex 4.032 DLG fluxgate gradiometer 4-probe array. This machine is capable of high resolution data collection, and takes readings every 10cm along the traverse axis and every 50cm along the grid axis (thus achieving 18000 readings per 30m square). The machine collects data within a 0.2 nT sensitivity range. Because the cart uses a real time kinematic GPS to position itself, each data point of the survey has an inbuilt sub 2cm accuracy.
- **4.2.2.** The data from the magnetometer has been processed and presented using G-Sys (an in-house developed Geographic Database Management program which can also display, process and present digitised plans and images). This report was produced using Microsoft Word 2010 and Adobe Photoshop 7 for further image manipulation. All maps have north pointing to the top of the page, and Google Earth images are used for background map location.
- **4.2.3.** The survey consisted of two areas, the southernmost being very rough pasture, recently topped. A number of small tree stumps were present in the area. A small raised area was present in the north-eastern corner of the southern site, and it appears likely that this is a relatively recent event, given the extreme magnetic content of the mound.
- **4.2.4.** The northern area was pasture, with no major obstacles were encountered. However, members of a construction company were raising a metal barrier

around the site at the time of the survey, and this affected the results around the edges of the area.

#### 4.3.RESULTS AND INTERPRETATION

- **4.3.1.** The results of the surveys are displayed as a number of greyscale images (FIGURE 2) and with the interpretations superimposed onto the images in FIGURE 3. Features discovered by magnetic survey techniques are referred to as "anomalies", defined as such because they are different from the background magnetic norm.
- 4.3.2. The large and small black and white areas in the greyscale images are dipoles (iron spikes), which indicate the presence of iron or steel objects. These are generally found in the topsoil, and although they could signify the presence of archaeological objects, it is much more likely that they relate to more modern detritus, such as broken ploughshares, iron horseshoes, shotgun cartridges etc. The south-eastern part of the surveyed area was particularly affected by this anomaly type, with so much interference that this form of anomaly completely dominates the southern surveyed area. The northern area also has a scattering of dipoles, but these are more in keeping with normal arable agriculture.
- **4.3.3.** A total of five distinct anomalies were detected, although it is difficult to attribute any archaeological significance to these.
- **4.3.4.** Anomaly 1 (coloured magenta in FIGURE 3) is typical of the signal returned by an iron or steel pipe, and almost invariable marks the presence of a buried water pipe, although it could relate to one of the other services.
- **4.3.5.** Anomaly 2 (coloured light orange in FIGURE 3) is a weakly positive linear anomaly entering the site from the north-east, apparently taking a slight turn before fading away. While it is possible this could relate to the presence of a ditch, it is also possible that it is of a more modern origin (for instance, a tractor wheel rut).
- **4.3.6.** Anomalies 3, 4 and 5 (coloured red in FIGURE 3) are all similar in character, being weakly positive linear anomalies. Numbers 3 and 4 can immediately be attributed to a modern origin, as they mark the presence of tractor wheel ruts.

- It is likely that anomaly 5 has a similar derivation, although this was not noted on the ground at the time of the survey.
- **4.3.7.** A topographic survey was conducted at the same time as the magnetic data collection. A total of 4524 points were collected, ranging in value from 70.43m AOD in the south-western part of the survey area to 79.55m AOD in the northeast (FIGURE 4). This gives a rise in elevation of 9.12m across the site. The contours are generally quite even (FIGURE 4), apart from the mound in the central eastern area, which appears to be of a relatively recent origin.

#### 4.4.CONCLUSIONS

**4.4.1.** In conclusion, it can be stated that the underlying geology provided medium magnetic contrast for the detection of infilled features. A total of five magnetic anomalies were detected, none of which could be attributed to a definite archaeological origin.

#### 5. Topographic Survey and Walkover

- 5.1.1. Two topographic surveys were carried out, one by LRC (FIGURE 4) and one by Bloor Homes (FIGURE 5). The results of these were examined for raised areas of ground. The site was also visually inspected for raised areas of ground. These have been linked to prehistoric lithic scatters on other sites (EDWARDS, 2013).
- **5.1.2.** The site was covered in scrub grass during the walkover and discreet raised areas of less than c.1m would have been difficult to recognise. In addition, a local resident stated that the fields had been under crop in living memory. Therefore any small lumps are likely to have bee ploughed out.
- **5.1.3.** There are three general areas of raised ground within the site which are visible on the contour plans (FIGURE 4 AND FIGURE 5). No other anomalies were noted.
- **5.1.4.** The two areas in the northern field consist of ridges approximately 9m wide that run in a south westerly direction from the north east corner of the site. These appear to follow the natural topography downhill.
- **5.1.5.** The raised area in the east of the southern field is clearly modern as large pieces of concrete and corrugated iron were visible. The magnetometry survey also indicated that it was modern and contained modern debris.
- **5.1.6.** No topographical features that may represent archaeological activity were noted.



Plate 1 - Looking south across southern field. The raised area of modern dump is on the left.



Plate 2 - Looking west across the northern part of the northern field from the trackway access.

#### 6. Metal Detecting

#### 6.1.INTRODUCTION

6.1.1. The field was surveyed along a 15m grid and all finds were measured in from the grid. All metals were detected and exposed and artefacts of all materials were recorded. Clearly modern finds were noted but not collected. Surface finds were to be collected as part of the site walkover but no artefacts were seen, mainly due to the surface conditions of rough, tufted and fairly long grass (PLATE 1 AND PLATE 2).

#### 6.2.RESULTS

- **6.2.1.** Thirty-eight artefacts were recovered. Materials included iron, copper-alloy, pottery and lead. The artefacts are listed below in Table 1 and the location shown in FIGURE 6.
- **6.2.2.** Uncollected artefacts included iron nuts and bolts, aluminum objects and cartridge cases. There was a concentration of these objects in the north east corner of the northern field and across the entire southern field.

#### 6.3.DISCUSSION AND CONCLUSION

- **6.3.1.** No corroded artefacts requiring X-ray for identification were recovered.
- **6.3.2.** The assemblage suggests casual loss or discard of artefacts from the Roman period onwards with the emphasis on the modern period.
- **6.3.3.** The Roman coin (22), unidentified coin (30), buckles (26, 27) and spindle whorls (34, 37) are of interest and should be retained as part of the site archive. The remaining artefacts should be discarded.
- **6.3.4.** The assemblage does not indicate any specific potential archaeological remains. The occurrence of pre-Victorian finds is very low and does not indicate any activity on the site.

NUMBER	MATERIAL	FORM	DECORATION/NOTES	PERIOD
1	Lead	?Pipe end		
2	Pb		Sheet fragment	
3	Cu Alloy	Coin	Edward VII penny	1907
4	Pb		Melted lump	
5	Cu Alloy	Rectangular plate or plaque	No writing or decoration	PM
6	Cu Alloy	Tag	Corner fragment	PM
7	FE	Circular ail/bolt shaft		PM
8	Cu Alloy	Coin	Victoria Penny	1897
9	Fe	Bolt	Circular shaft	Modern
10	Cu Alloy	Coin	Half Penny	1964
11		Button	Silver coloured	PM
12	Pb		Sheet fragment	
13	PB		Sheet fragment	
14	Pb	Button	30mm across.	PM
15	Fe	Hinge fragment		PM
16	Fe	Horseshoe fragment		PM
17	Fe	Hinge fragment	Same as 15	PM
18	Fe	Hook fragment	Part of agricultural machinery	PM
19	Fe	Bolt		Modern
20	Fe	Plate	Part of agricultural machinery	PM
21	Pb		Fragment	
22	Cu Alloy	Coin	Very corroded	Roman
23	Cu Alloy	Badge	Concentric circles. Very corroded	PM
24	Cu Alloy	Ring fragment	70mm long. Sub-rect X-sec.	PM
25	Cu Alloy	Two coins	1907 Penny and Decimal two pence	Modern
26	Cu Alloy	?Shoe buckle	No pin	Med or PM
27	Pb	Buckle	No pin	Med
28	Alloy	Coin	George VI Sixpence	George VI
29	Cu Alloy	Coin	Edward VII Penny	1907
30	Cu Alloy	Coin	Very corroded	?PM
31	Pb		Melted	
32	Pb	Weight	78mm diameter. Two holes. Clipped edge.	
33	Cu Alloy	Ring	Plumbing item	PM
34	Pb	Spindle whorl	Rough dot decoration	Medieval
35	Pb	Musket ball		PM
36	Cu Alloy	Coin	Penny	Elizabeth II
37	Pb	Spindle whorl	No decoration	
38	Pb		Melted lump	
39	Course red ceramic	Body sherd	Dark brown glaze interior and exterior	

Table 1- Artefacts recovered from metal detecting/walkover survey.

#### 7. Summary and Conclusions

- **7.1.**A site at Hallows Drive, Kelsall was assessed for archaeological potential using geophysics, topographical survey and metal detecting.
- **7.2.**The geophysics detected several linear anomalies. These related to a buried service and probable wheelruts. No anomalies that could be associated with archaeological features were recorded.
- **7.3.**No topographical anomalies that may represent archaeological features were noted.
- **7.4.**The metal detecting survey produced an assemblage of 39 artefacts. These consisted mainly of Post Medieval and modern items that had been lost or discarded. One Roman coin, two Medieval buckles and one Medieval spindle whorl were found. The assemblage does not indicate any specific potential archaeological remains.

#### 8. Archive

- **8.1.**The paper archive consists of:
  - ◆ 1 x Finds Register
- **8.2.**The finds archive consists of:
  - ◆ 1 box (all materials) as described in Table 1. It is recommended that the Roman coin (22), unidentified coin (30), buckles (26, 27) and spindle whorls (34, 37) are retained as part of the archive and the remaining artefacts discarded.
- **8.3.**The archive is to be deposited with the Cheshire West and Chester Museum Service.

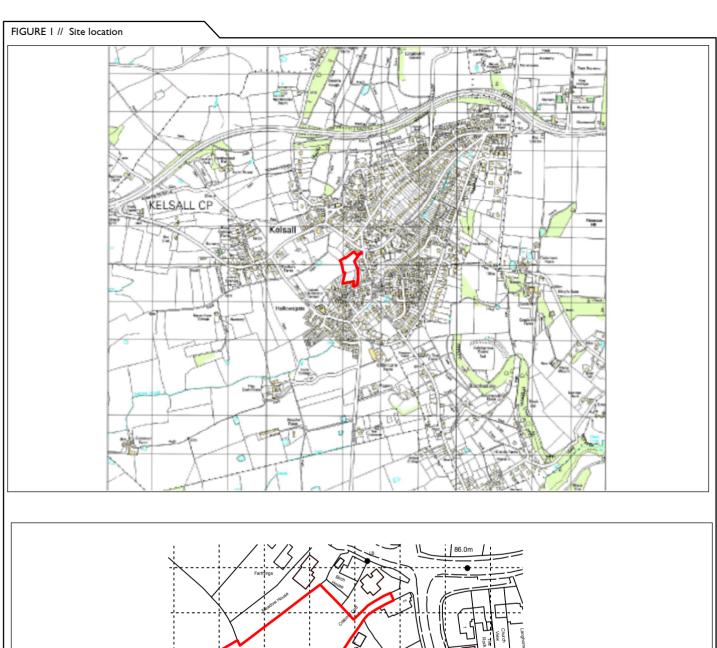
## SOURCES CONSULTED

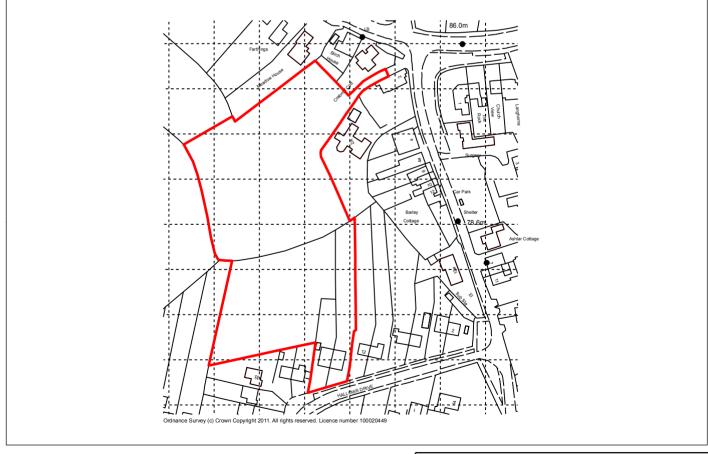
L-P:ARCHÆOLOGY

- COOPERS, 2012. Site Investigation Report for land at Hallows Drive, Kelsall (Client report No. 5585si). Coopers chartered consultant engineers.
- EDWARDS, J., 2013. 12/03551/FUL Hallows Drive, Kelsall.
- OWEN, P., 2012. Hallows Drive, Kelsall. Historic Environment Assessment. (Client report No. MT054-HEA-001). MetroMOLA.
- WILLIAMS, M., 2013. Specification for Archaeological Survey, Hallows Drive, Kelsall. (Unpublished Archive Report). L P: Archaeology.

## **FIGURES**

L-P:ARCHÆOLOGY





TOP: Site location general 1:20,000 @ A4 BOTTOM: Site location detail 1:2000 @ A4

PROJECT //  $\,$  1516C - Hallows Drive Kelsall

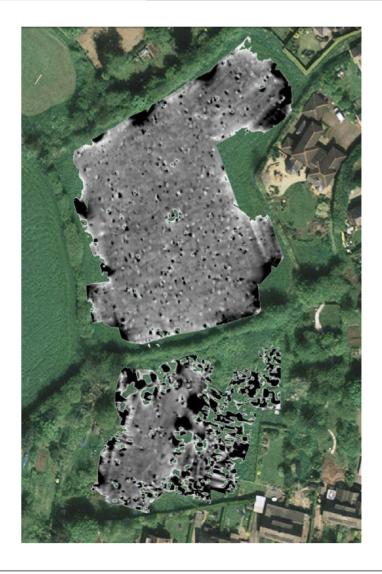
DESCRIPTION // Site location

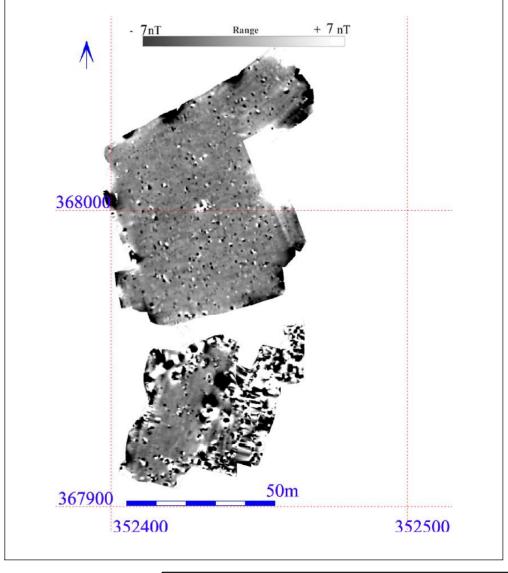
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FIGURE 2 // Geophysics results

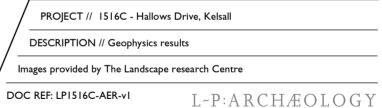


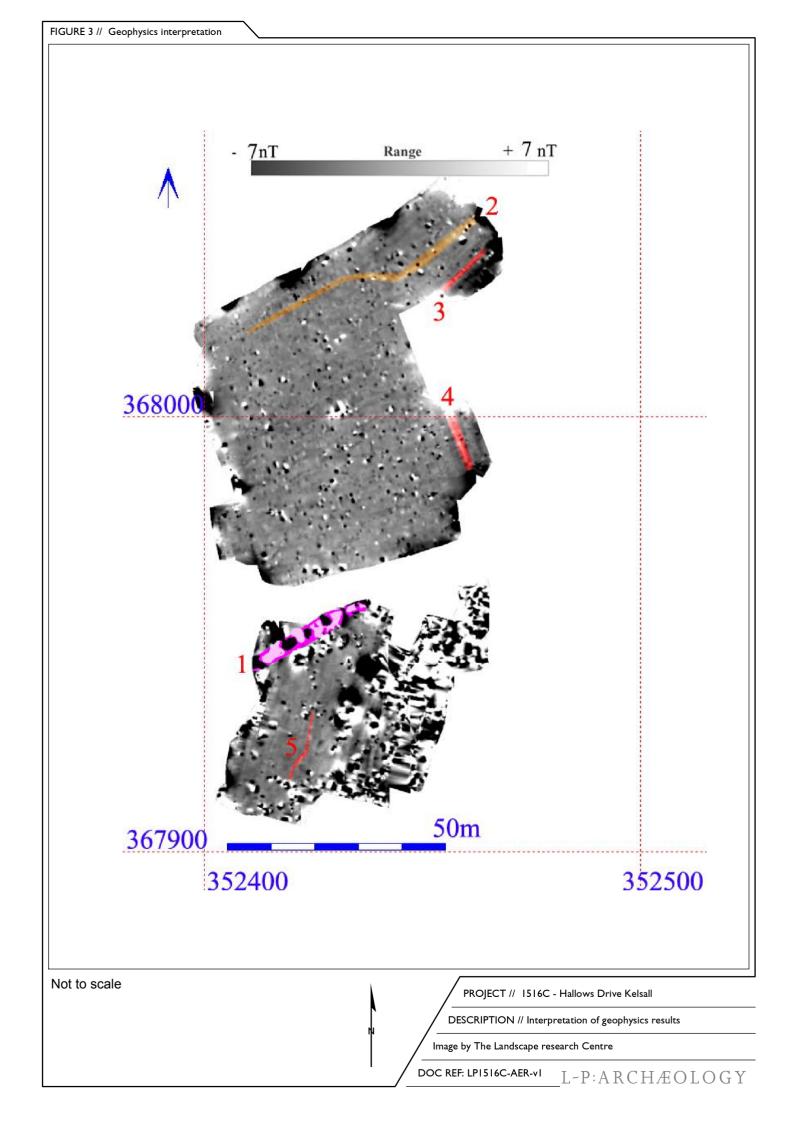


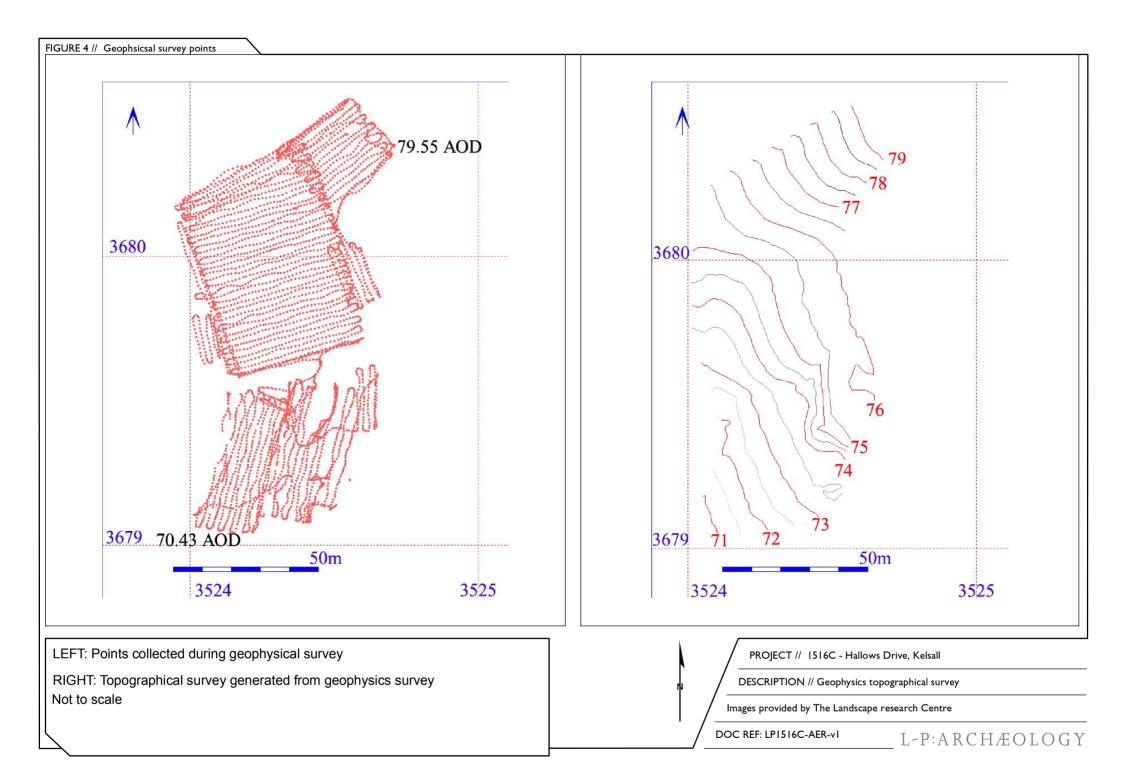
LEFT: Results over aeriel photograph (Google maps)

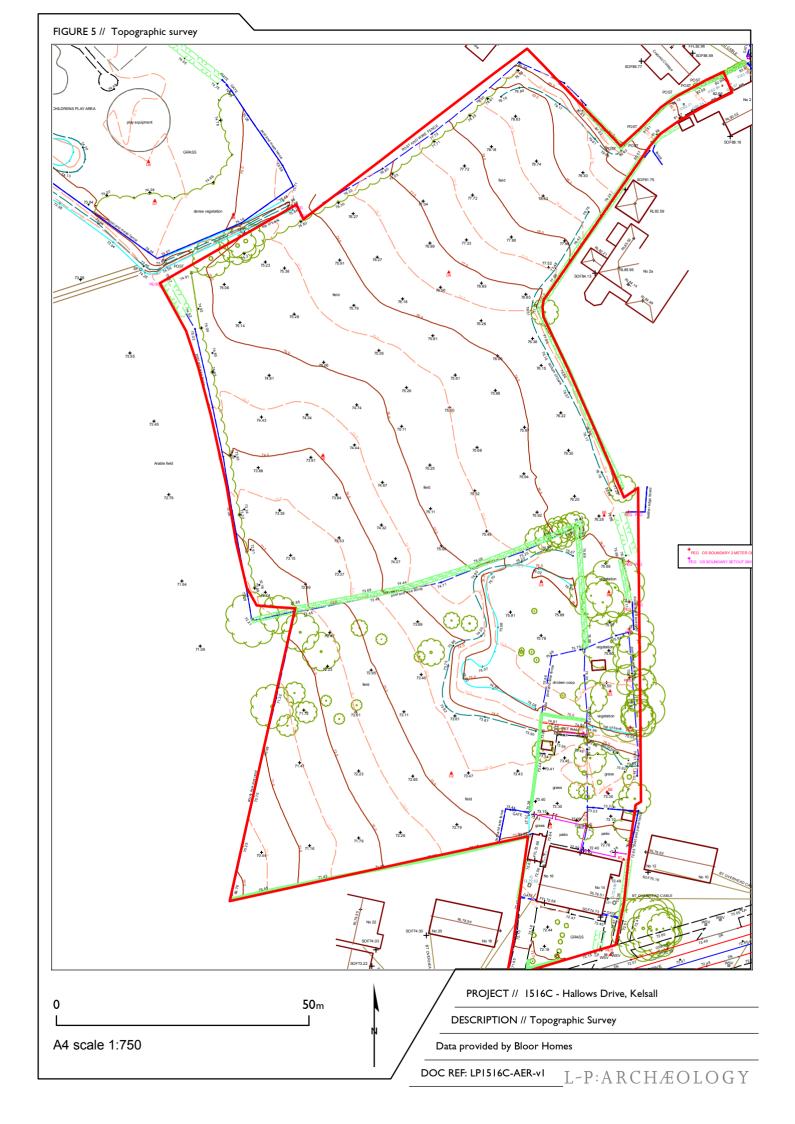
RIGHT: Results over Ordnance Survey Grid

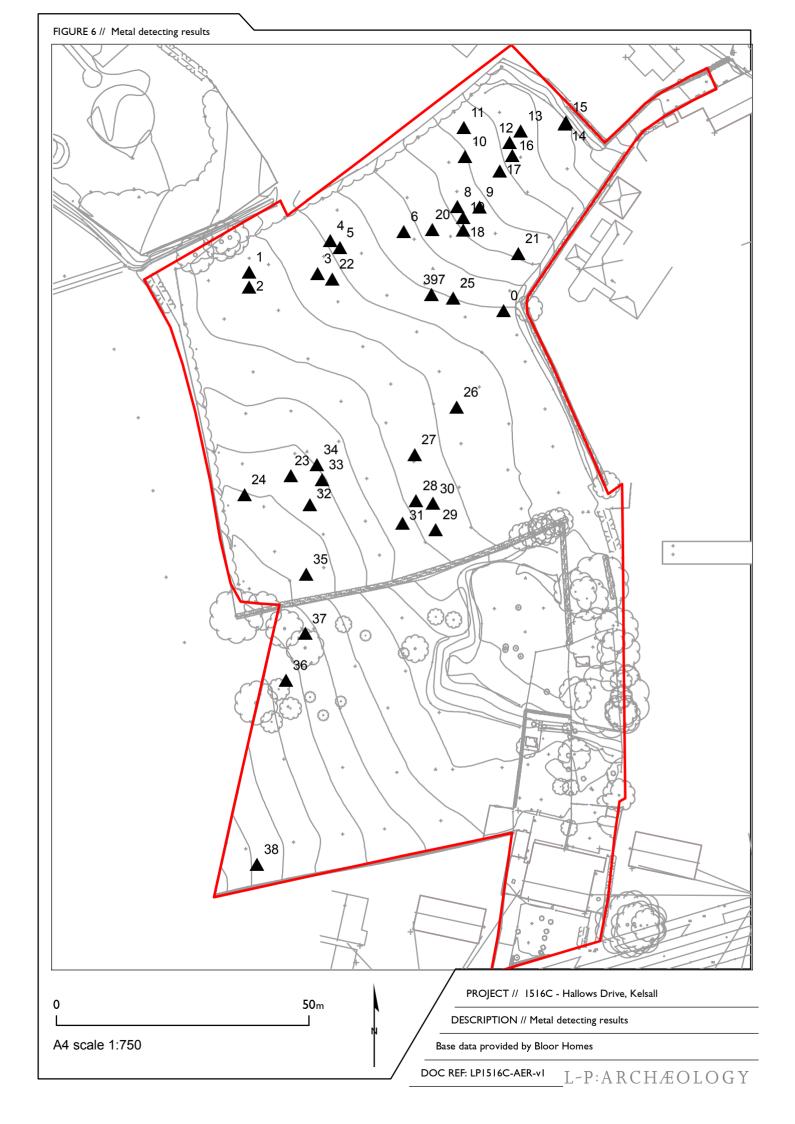
Not to scale











## **OASIS FORM**

APPENDIX I

## OASIS DATA COLLECTION FORM: England

List of Projects | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

#### **Printable version**

#### OASIS ID: lparchae1-157144

#### **Project details**

Project name Hallows Drive, Kelsall

Short description of the project Geophysical, topographical and metal detecting survey

Project dates Start: 19-07-2013 End: 24-07-2013

Previous/future work No / Not known

Any associated project reference

codes

KEL/HAD13 - Sitecode

Type of project Field evaluation

Site status None

Current Land use Other 13 - Waste ground

Monument type NONE None

Monument type NONE None

Significant Finds SPINDLE WHORL Medieval

Significant Finds COIN Roman

Methods & techniques "Geophysical Survey", "Metal Detectors", "Topographic Survey"

Development type Housing estate

Prompt Direction from Local Planning Authority - PPS
Position in the planning process After full determination (eg. As a condition)

Solid geology (other) Helsby Sandstone Formation

Drift geology GLACIAL SAND AND GRAVEL

Techniques Magnetometry

#### **Project location**

Country England

Site location CHESHIRE CHESTER KELSALL Hallows Drive

1 of 2 15/08/2013 13:56

Postcode CW6 0QG

Study area 1.10 Hectares

Site coordinates SJ 389345 390180 52 -2 52 56 41 N 002 54 31 W Point

#### **Project creators**

Name of Organisation L - P : Archaeology

Project brief originator Local Authority Archaeologist and/or Planning

Authority/advisory body

Project design originator L - P : Archaeology
Project director/manager Matthew Williams
Project supervisor Matthew Williams

Type of sponsor/funding body Landowner

#### **Project archives**

Physical Archive recipient Cheshire Museum Service

Physical Contents "Ceramics", "Metal"

Digital Archive Exists? No

Digital Media available "GIS"

Paper Archive recipient Cheshire Museum Service

Paper Contents "Metal"
Paper Media available "Report"

Entered by Matthew Williams (m.williams@lparchaeology.com)

Entered on 15 August 2013

#### **OASIS:**

Please e-mail English Heritage for OASIS help and advice

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2 of 2 15/08/2013 13:56