

**SURVEY RESULTS****2005 / 70 Alfoldean, West Sussex****1. Survey Areas**

- 1.1 Approximately 5 ha of gradiometer survey (using a Bartington grad 601-2) and 0.02 ha of resistance survey (using a Geoscan RM15) was carried out over two fields. The location of the survey areas can be seen in Figure 1 at a scale of 1:2500.
- 1.2 The survey grid was set out and tied in to the Ordnance Survey (OS) grid by Dr Henry Chapman using a Trimble real time differential GPS system.

**2. Display**

- 2.1 Figure 2 is a summary greyscale image and Figure 3 an interpretation of the gradiometer data shown *in situ* on the OS map at a scale of 1:1500.
- 2.2 On the Archive CD, in the front of the report, the gradiometer data are displayed as XY trace plots and greyscale images. All the data have accompanying interpretations. The display formats are discussed in the *Technical Information* section, at the end of the text.
- 2.3 Numbers and letters in parentheses in the text of the report refer to anomalies highlighted in the relevant interpretation diagram.

**3. General Considerations - Complicating Factors**

- 3.1 Conditions for survey were adequate but not ideal. Although a maize crop had been removed, the stubble remained to a height of some 50cms which made walking with the instruments difficult. These difficulties were exacerbated by wet weather which made the ground very slippery.

**4. Results of Survey****Area 1 – Eastern Field**

- 4.1 The magnetic survey revealed a complex of anomalies of archaeological interest. While the stronger anomalies are associated with the enclosure, the better defined responses reflect the settlement that extends southwards. The results are discussed starting with the presumed mansio complex and then moving beyond the earthwork.
- 4.2 Anomalies (1) and (2) coincide with the western and southern defences of the enclosure. It is unclear if the internal bank (1) is surrounded by one or two ditches (2); the pair of parallel anomalies may simply be the edges of a broad ditch rather than two separate features. It is thought that the strong ferrous anomalies (3) are modern in origin. Unfortunately it is not possible to ascertain whether the defences turn north-west or whether they continue right up to the river. The fact that anomalies (4) do turn might support an argument that the defences also follow this line but the results are not clear. This line (4) is thought to represent either a road or wall discovered by Winbolt; his interpretation is

uncertain.

- 4.3 The complex of anomalies (5) includes a number of short linears at right angles to each other. On excavation these proved to be shallow brick foundation trenches that clearly related to the mansio. On this basis it was possible to identify in the magnetic data a number of small rooms and a linking corridor. It was then possible to predict the position of the internal courtyard (6) and the inner western wall (7) of the mansio building. The latter prediction was confirmed by a small excavation trench.
- 4.4 Along the eastern edge of the A29 / Stane Street is a peculiar band of anomalies (8). The strength of the results suggest that the features have a highly enhanced magnetic fill; perhaps indicating that small scale industrial processes have been taking place in the immediate vicinity, or that the area has been subjected to some form of conflagration. Further north at (9) are several well-defined strong anomalies that could indicate small kilns or similar burnt / fired features. Their location immediately alongside the road is perhaps unexpected and as such an alternative interpretation is that the anomalies indicate large rubbish pits that contain burnt material.
- 4.5 In the northern quarter of the enclosure is an area of very strong enhancement (10) that is also difficult to interpret. The results could indicate areas of disturbance associated with the construction of the bridge over the River Arun (it is possible that this area was a works compound) or with Winbolt's backfilled excavations. Alternatively the results could be due to the presence of furnaces and hypocausts associated with a Roman bathhouse alongside the river. All of these possibilities could explain the observed magnetic anomalies.
- 4.6 Moving south of the enclosure and immediately east of Stane Street the complex of anomalies at (11) was earmarked as being of interest largely because of the curving length of ditch enclosing a number of presumed pits. These features looked prehistoric in date rather than Roman based simply on their appearance. Excavation showed that the archaeology is even more complex than appears in the magnetic data, though an Iron Age element was confirmed.
- 4.7 Linear anomalies (12) at various points along the field boundary would support the view that the line of Stane Street was originally further east than the present day A29. It would seem that the course has changed by a few metres and that the anomalies (12) indicate the position of the easternmost roadside ditch.
- 4.8 Running alongside and to the east of Stane Street the magnetic results suggest an extensive settlement which extends for at least 300m south of the enclosure and covers an area of at least 3 hectares. There are several double ditched anomalies (e.g. 13 and 14) which presumably indicate trackways running both N-S and E-W. These connect paddocks, small fields and presumably areas of houses / workshops. There is a number of very large pit-like responses (e.g. clusters at 15 – 17) the function of which remains uncertain; unfortunately excavation failed in the time available to confirm the nature of the activity associated with one of the pits selected for trial investigation. It is noticeable that the concentration of these pits is much greater closer to the road than in the east though it is possible that the settlement or related agriculture extends right down to the river in this direction.

## **Area 2 – Western Field**

- 4.9 The results indicate that approximately one quarter of the mansio enclosure survives in this field. Although the defences are visible in the south west corner as ditch anomalies (18), the western defences are only really apparent due to a lack of magnetic responses in a band (19) that delimits the areas of enhancement (e.g.20) inside the site. While the responses are of a different character to the anomalies inside the enclosure in the eastern field, perhaps indicating fewer disturbances to the archaeological features, they still suggest the presence of dense occupation.

- 4.10 To the west and south west of the defences there are two clusters of anomalies (21 and 22) that are of interest. The former may indicate features alongside a trackway that leads into the enclosure from the west but this interpretation is speculative. The interpretation of the latter, apart from being archaeological in origin, is uncertain.
- 4.11 By contrast to the eastern field the area south of the enclosure has fewer anomalies of archaeological interest. In particular, linear ditch anomalies are lacking, though large pits are present (23) close to the western flanks of Stane Street. These could indicate unenclosed workshops or small scale industrial activity along the road, again taking advantage of the trade that the mansio attracted.

#### **Resistance Survey**

- 4.12 Two 20m grids of resistance data were collected in the eastern field, inside the enclosure and over the mansio building in an attempt to clarify the plan details. Unfortunately, the maize stubble badly hindered the recording of the readings and the fluctuating rain levels affected the moisture levels in the topsoil. The results failed to provide any positive information, though clearly this technique would be of benefit when ground and weather conditions were more favourable.

### **5. Conclusions**

- 5.1 The geophysical survey was successful in not only pinpointing the general footprint of the mansio building but also in identifying an extensive complex of other archaeological features.
- 5.2 Although the survey has added considerable archaeological detail to the plan and layout of the enclosure, the work hasn't resolved the issue of whether the defences ran up to the River Arun or formed an enclosure in their own right.
- 5.3 Field systems, trackways, settlement and workshop type activity have been mapped over an area in excess of 3 hectares outside of the enclosure; it was not possible to determine the limits in the time available.

**Project Co-ordinator:** J Gater

**Project Assistants:** J Anderson, F Robertson, C Stephens and E Wood

**Date of Survey:** 10<sup>th</sup> October 2005

**Date of Report:** 29th November 2005

#### **References:**

- Edwards K, Twinch O and Gillam-Smith N 2005 Proposed archaeological evaluation at Alfoldean, West Sussex, Project Design, October 2005, unpublished.

## SITE SUMMARY SHEET #

2005 / 70 Alfoldean, West Sussex

NGR: TQ 11730 33050

### Location, topography and geology

The site is located approximately 6km west of Horsham within the parish of Slinford in West Sussex. The areas under investigation occupy two fields located both sides of the A29 road and immediately south of the River Arun. Prior to the survey a maize crop had been removed from both fields; however, stubble survived to a height of 50cms or more. The soils are alluvial silts sitting on the Arun 3<sup>rd</sup> and 4<sup>th</sup> gravel terraces; the bedrock is sandstone overlying clay and sandstone.

### Archaeology

The site gets its name from the modern bridge over the Arun and known locally as Alfoldean Bridge. The Roman road Stane Street largely underlies the modern A29 and bisects the site. Roman remains found in fields either side of the road point to the existence of a mansio and associated settlement. The site was excavated by S. E. Winbolt in the 1920s and is now partially Scheduled – County Record Number WS222. A rectangular enclosure is clearly visible as a cropmark and as an earthwork; the mansion – a ‘motel’ type complex that is thought to comprise rooms set around a courtyard – sits within this enclosure, though the relative dating of the two features is uncertain. The fields are regularly ploughed and dense pottery scatters are still evident; these extend a few hundred metres south of the enclosure.

### Aims of Survey

It was hoped that geophysical survey would pinpoint the mansio within the enclosure and also map the presumed associated settlement that lies to the south. The work forms part of a wider evaluation undertaken as part of *Channel 4's Time Team*.

### Summary of Results

The geophysical survey was successful in providing not only a general footprint of the mansio but also in identifying an extensive complex of archaeological features extending south of the enclosure.

While the actual wall foundations associated with the mansio are only partly visible in the data, this has still permitted the general layout of the structure to be identified. The shallow brick foundations, particularly in the eastern part of the mansio, can be determined more readily than those in the west and it is possible to see individual rooms.

In the northern half of the enclosure, close to the river, there are very strong anomalies. It is unclear whether these are associated with a bath-house, Winbolt's excavations or modern disturbance connected with the construction of the road / bridge.

While the eastern and southern defences of the enclosure are visible in the magnetic data, the western defences are less clear and unfortunately it is not possible to ascertain whether there is a bank and ditch to the north.

A series of pits, ditched enclosures and trackways is visible extending some 300m south of the enclosure; the results indicate the presence of an extensive settlement outside the mansio complex.

# Background information taken from Edwards *et al*, 2005

<b>List of Figures</b>
------------------------

**Main Report**

Figure 1	Location of Survey Areas	1:2500
Figure 2	Summary Gradiometer Greyscale	1:2000
Figure 3	Summary Gradiometer Interpretation	1:2000

**Archive CD**

Figure A1	Gradiometer Data: Area 1A - XY Trace Plot	1:500
Figure A2	Gradiometer Data: Area 1A - Greyscale Image	1:500
Figure A3	Gradiometer Data: Area 1A - Interpretation	1:500
Figure A4	Gradiometer Data: Area 1B - XY Trace Plot	1:500
Figure A5	Gradiometer Data: Area 1B - Greyscale Image	1:500
Figure A6	Gradiometer Data: Area 1B - Interpretation	1:500
Figure A7	Gradiometer Data: Area 1C - XY Trace Plot	1:500
Figure A8	Gradiometer Data: Area 1C - Greyscale Image	1:500
Figure A9	Gradiometer Data: Area 1C - Interpretation	1:500
Figure A10	Gradiometer Data: Area 2A – XY Trace Plot	1:500
Figure A11	Gradiometer Data: Area 2A – Greyscale Image	1:500
Figure A12	Gradiometer Data: Area 2A- Interpretation	1:500
Figure A13	Gradiometer Data: Area 2B – XY Trace Plot & Greyscale Image	1:500
Figure A14	Gradiometer Data: Area 2B - Interpretation	1:500