



Wimpole Hall Farm, Wimpole, Cambridgeshire Report

In April 2010 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site.

Members participating: Pat Davies, Liz Livingstone, Ian Sanderson, Maureen Storey, Tony Storey.

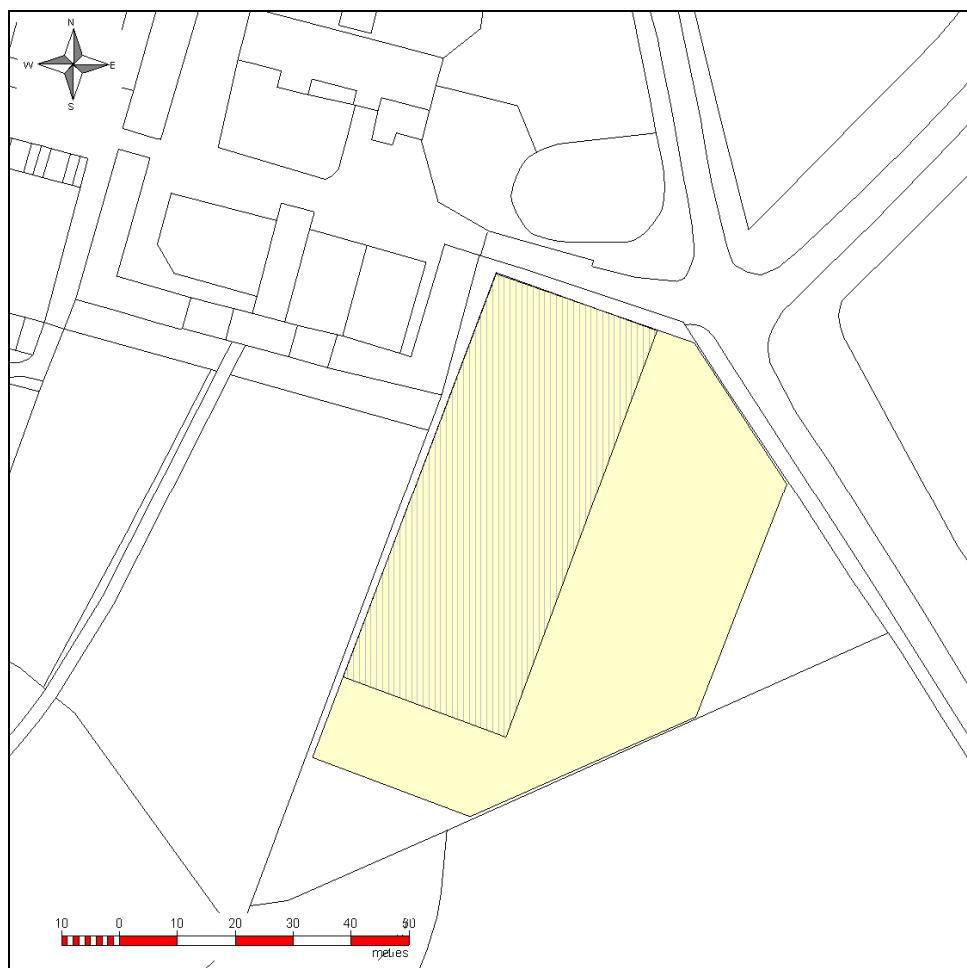
Site liaison: Simon Damant

Site conditions: Cropped grass paddock

Equipment: Bartington 601 gradiometer; TRCIA 50cm twin probe

Area covered: Magnetometry six 30 m × 30 m grids
Resistivity one 30 m × 30 m grid, three 30 m × 15 m grids

Location: TL341513 Wimpole, Cambs.



Location plan: Survey areas.

(resistivity survey area hatched,
magnetometry area solid).

On the ground location points:

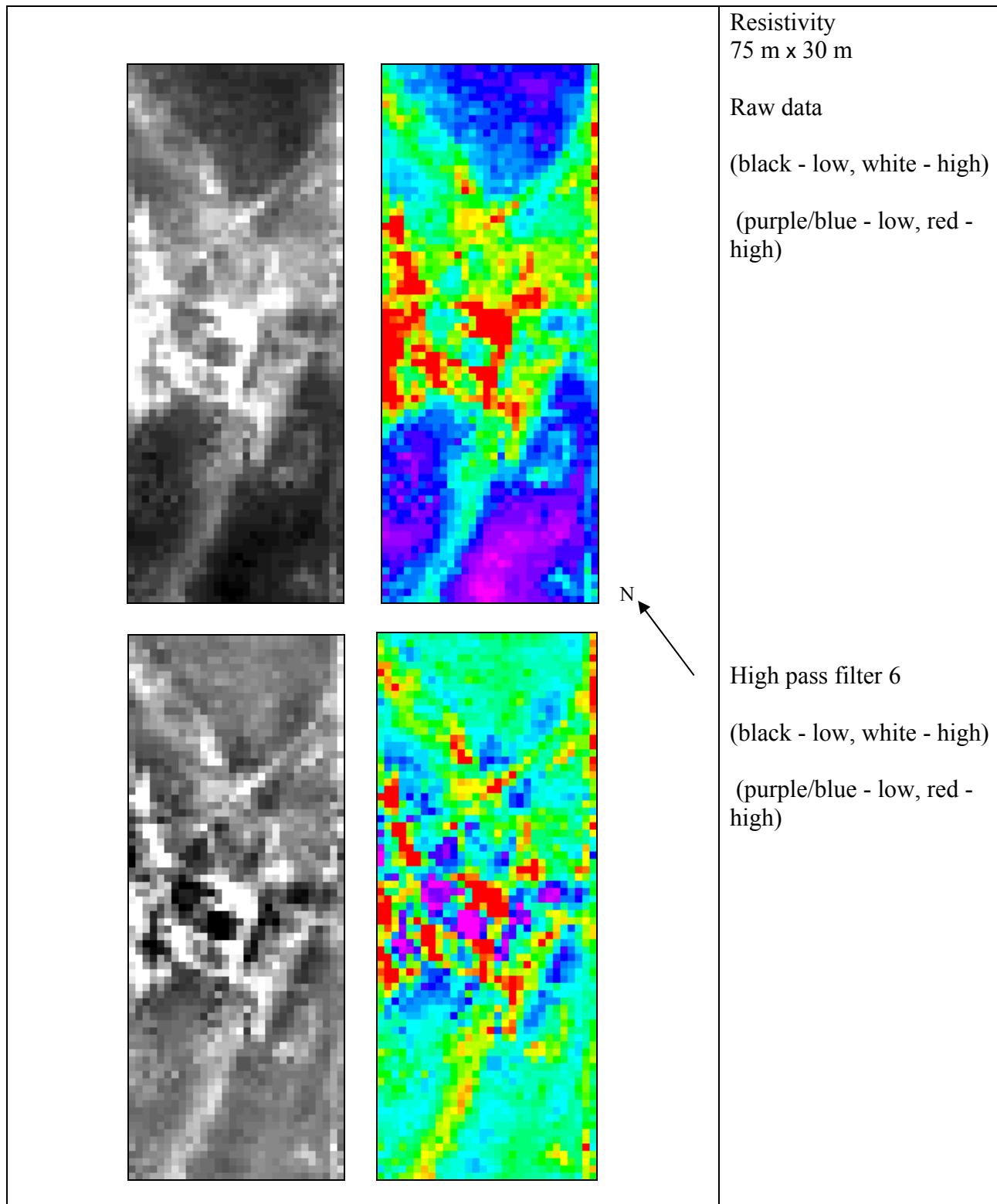
Distances in metres. N corner peg 4.82 to where the fence meets the barn and, 1.99 and 1.33 from nearest corners of water trough, 1.67 from 3rd fence post. E peg close to barn doors 5.30 from gatepost nearest barn, 2.71 from the other gatepost, 1.45 from barn corner.

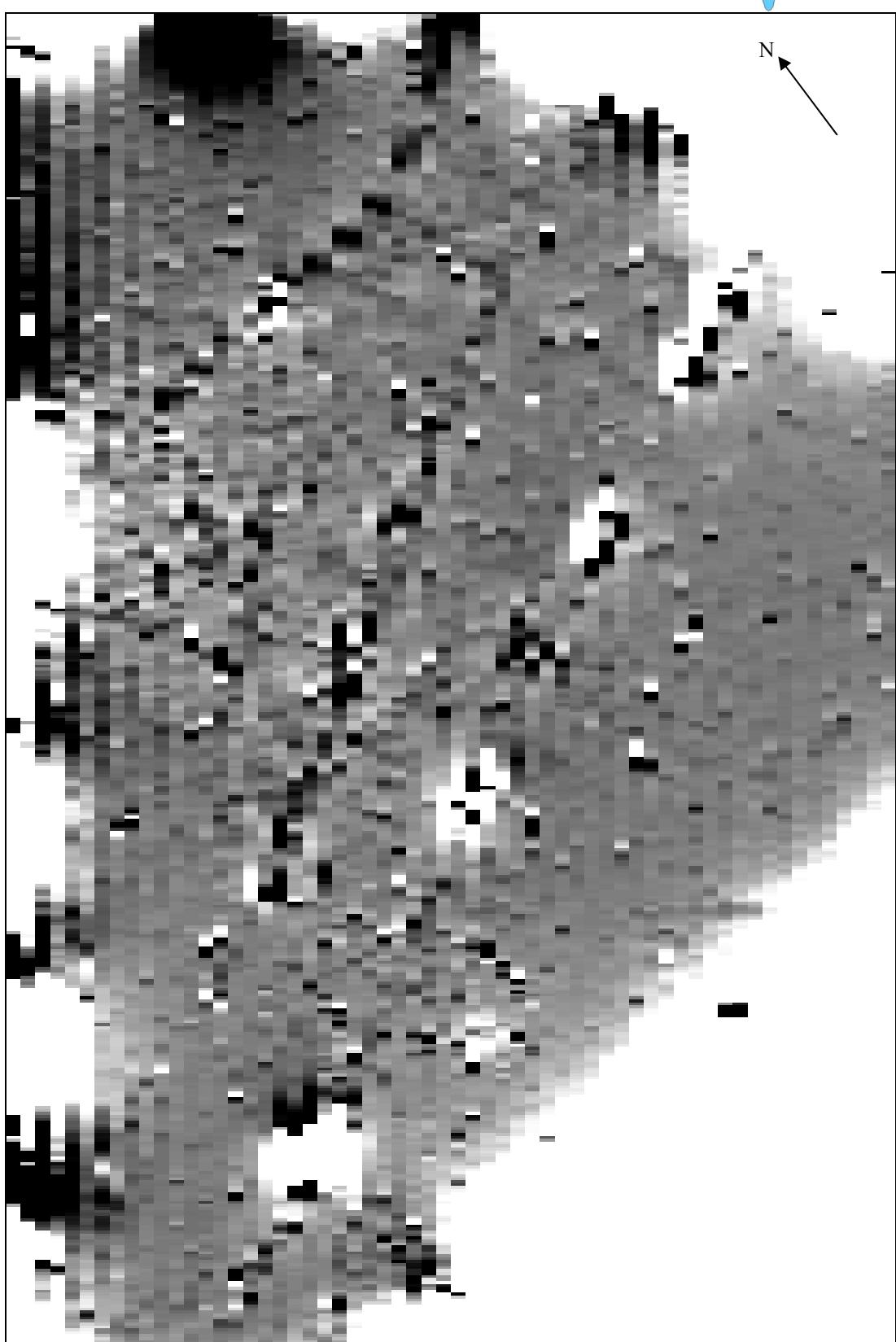
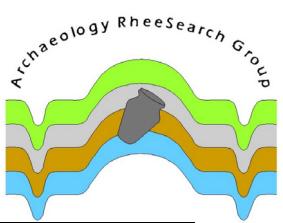
Purpose of survey: To determine if any sub surface features could be detected which would help locate a building shown on old maps prior to excavation.



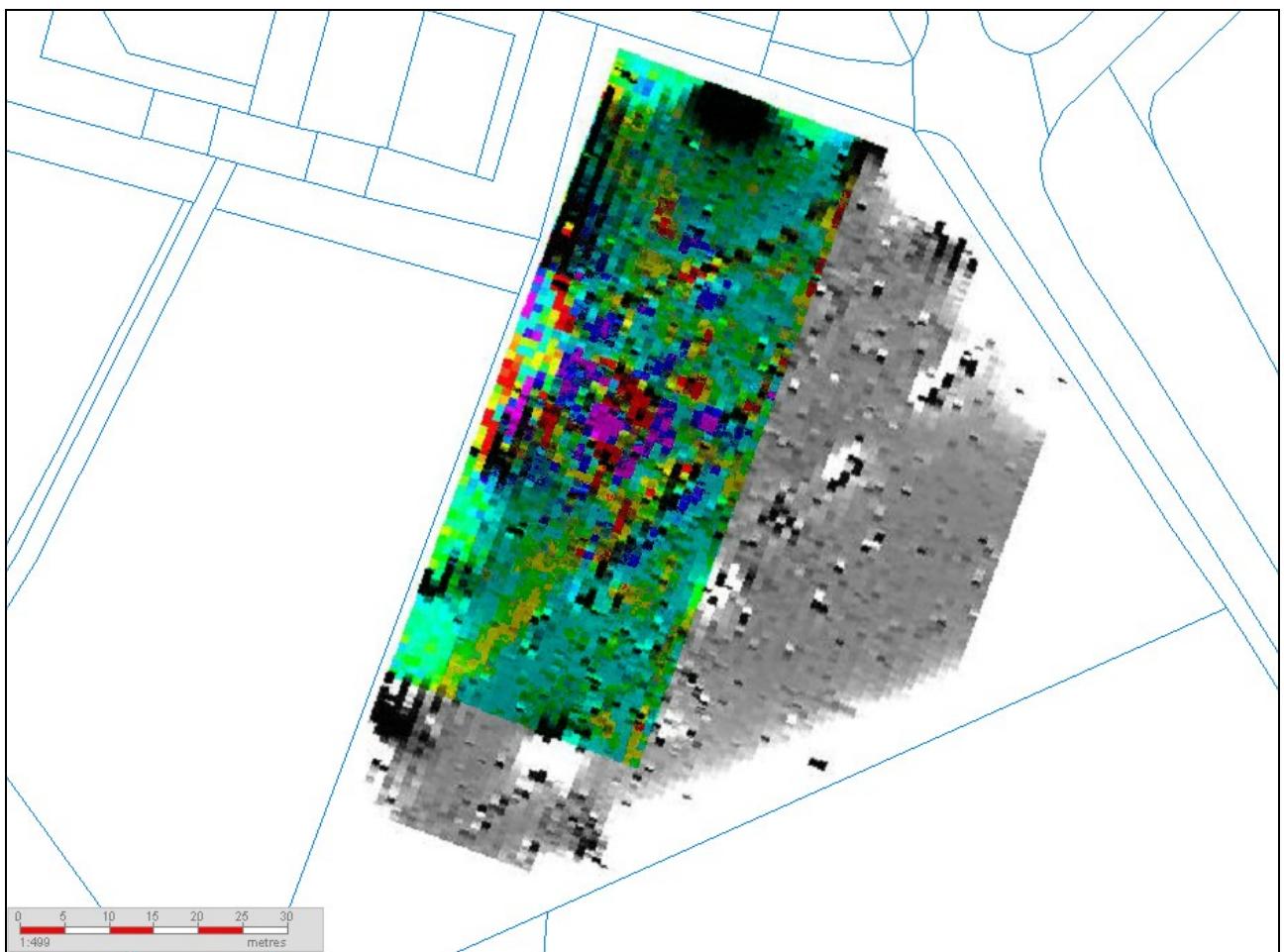
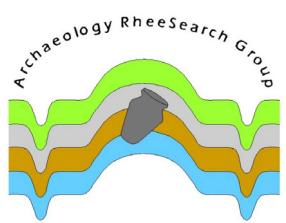
Results:

The images in this section are orientated for presentation. They are not to a common scale.
Grid north may be determined by reference to the context diagrams below.





Magnetometry 90 m x 60 m
range ± 29 nT
(black - high, white - low or null)



Magnetometry and resistivity results superimposed in context



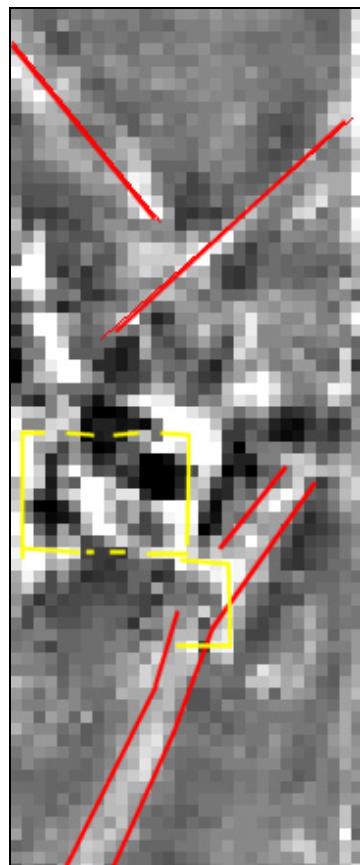
Resistivity

The resistivity results show four principal features, three lines and an area of apparently disconnected high responses. In the adjacent diagram, the lines from top to bottom in red are perhaps best described as mildly diffuse, precise and as demarking a broad band of high resistance, respectively. The area of high signal responses is concentrated in the area marked in yellow but has significant patches outside that area. A narrow line of high resistance runs towards the top along the right edge survey which is not marked on the diagram.

Magnetometry

This site was not particularly suitable for magnetometry; the perimeter was fenced with metal except for a small section of brick wall and there were metal barriers around a hole in the field. It also had overhead power cables, which, whilst not being apparent in the results, would have contributed to the high level of background noise on the site. The magnetometry image is therefore presented at a signal range which is too wide to show any subtle features.

There are three lines running approximately SW - NE across the site. The southernmost line is broken and has a large anomaly at the SW end arising from the metal fencing placed around an exposed brickwork drain. The middle line does not reach either end of the useful survey area. Immediately N of the large anomaly on the S line there appears to be an oval feature which extends as far as the middle line. At the SW end of the most northerly line extending towards the central line there is an area of disturbance.



Resistivity - main features

Discussion:

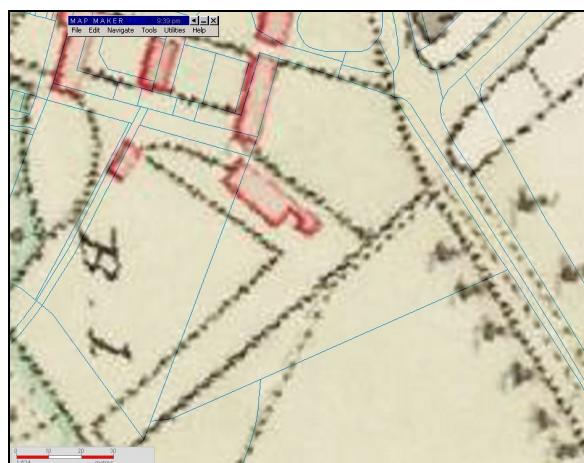
The images below are an attempt to show how the Withers' and Bridgeman's plans of the area relate to the present boundaries. A precise fit of an old plan to a modern map is almost impossible to achieve so such attempts should always be viewed as indicative. In this case there is a reasonable degree of correlation between the old plans and the survey results.

Buildings are shown on both plans in almost the same position as the concentration of high resistivity response (indicated in yellow) and an area of magnetic disturbance. Boundaries are shown corresponding to some of the linear features in both surveys.

The southernmost boundary in the Withers map corresponds particularly closely to the strongest line in the magnetometry responses. Unfortunately the magnetic response is characteristic of a field drainage system, suggesting that a drain has been laid in an older boundary ditch. The middle line in the magnetometry responses corresponds fairly closely to the S side of the broad band linear response in the resistivity results. The resistivity suggests a trackway with some metalling of the surface, the magnetometry line may however represent further field drainage as a similar signal might be expected on the N side of the resistivity band if it reflected a roadside ditch. The middle magnetometry line has a right angle bend to the N apparently linking it to the N magnetometry line. This suggests that both of the lines



represent drainage channels. The line running NW - SE (the most northerly) in the resistivity results, produced no noticeable response in the magnetometry. The alignment suggests another drainage line, either deeper than the others or based on non-fired material, for example gravels rather than brick. The high resistance line on the edge of the survey terminating at the N corner is not reflected in the magnetometry results, but without extending the survey area, it remains unexplained.



Withers' map c1815



Bridgeman's map c1720

The area of dispersed high resistance responses suggests the remains of building foundations. The yellow lines drawn on the resistivity results above are less than convincing in looking for a rectilinear pattern which would clearly indicate the location of a building. This suggests that the foundations of any buildings have been extensively robbed out and that different structures have existed in the same vicinity but not in exactly the same place.

Conclusion

Several drainage channels have been located. Building foundation remains have been found in one area suggesting that multiple structures were built with little reutilisation of earlier foundations.

Raw data are available as separate appendices.

Magnetometry readings: 8/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.