



Great Abington

On 17 September 2006 Archaeology RheeSearch carried out magnetometry and resistivity surveys in a paddock immediately southeast of St. Mary's Church, Great Abington, Cambridgeshire.

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

Local Facilitator: Derek Turnidge on behalf of the Abingtons History Group.

Site conditions: Predominantly medium height grass, with nettle banks and some linear dips. A north facing, slightly sloping field with an old stream course at the bottom. Northern and eastern boundaries to a recreation ground and a pool recreation area, respectively, six foot chain link fence. Western boundary post and wire fence. Access road to the south on the western side, access point from the church parking area at the northwest corner.

Weather: Warm and sunny. Previous week cooler with light rain.

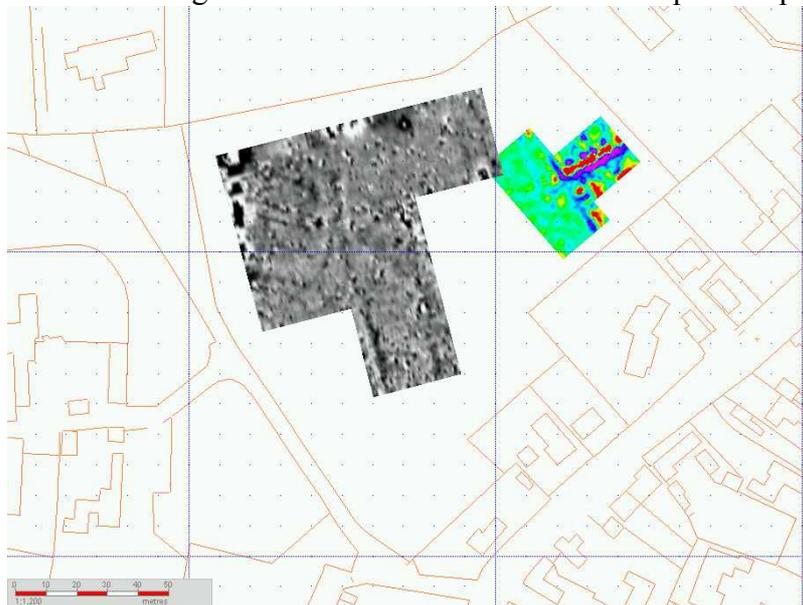
Soil: Not examined in detail but within the magnetometry survey area mole hills revealed a fine light soil with almost no inclusions. In the resistivity survey area coarse gravel was exposed in some places. Local knowledge suggests that the soil is predominantly alluvial from repeated flooding as evidenced by the fact that burials in the adjacent church yard had been discontinued in the past.

Equipment: Bartington 601 gradiometer; TRCIA 50 cm twin probe.

Area covered:	Magnetometry	six 30 m × 30 m grids (3 plus 2 plus 1)
	Resistivity	three 20 m × 20 m grids (2 plus 1 offset)

Location: TL 532488 SE of St. Mary's Church, Great Abington

(All location images are orientated with north to the top of the page)



Ground locators

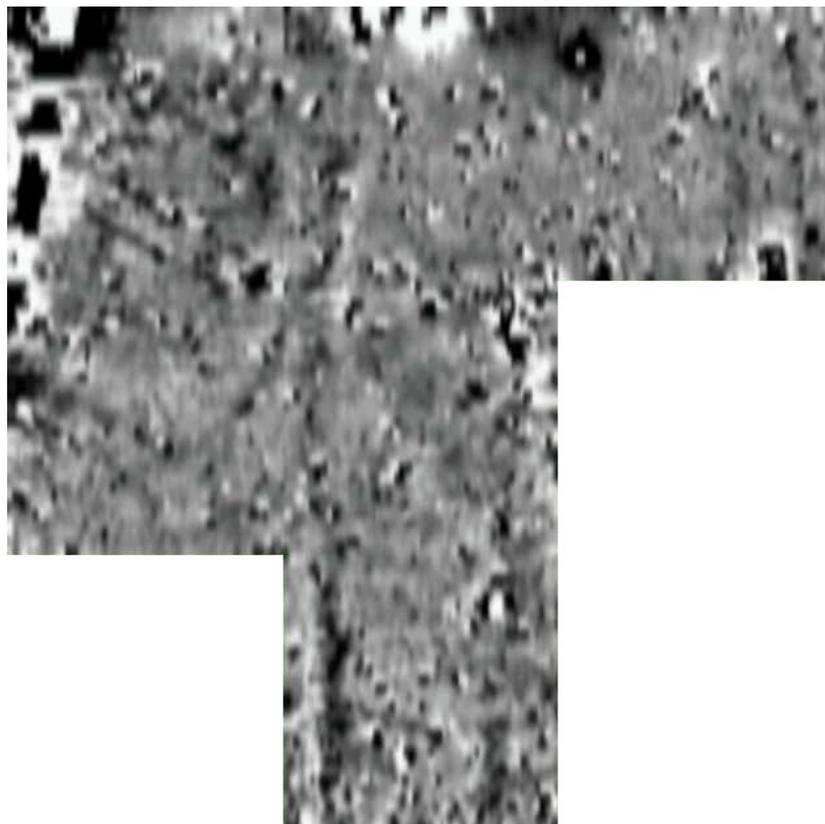
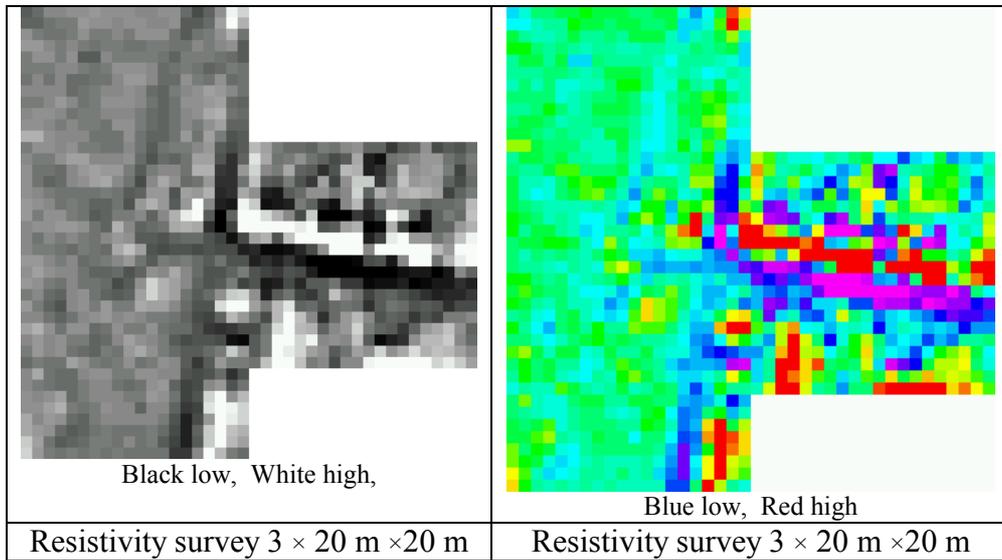
Resistivity grid 1 (S main) 21.8 m and 41.4 m from SW property corners 25.53m and 7.14 m from E side of same property. Property length 46 m offset res grid 3 starts 12 m S of N edge of res 2 (main).

Magnetometry grid 6 (S):

SW corner; 26.75 m from silver birch nearest High St and 34.90 m from nearest property corner (braced concrete posts). SE grid corner; 21.89 m from property corner above and 27.91 m from property to E outer corner.

Purpose of survey: To look for evidence supporting building structures.

Results:

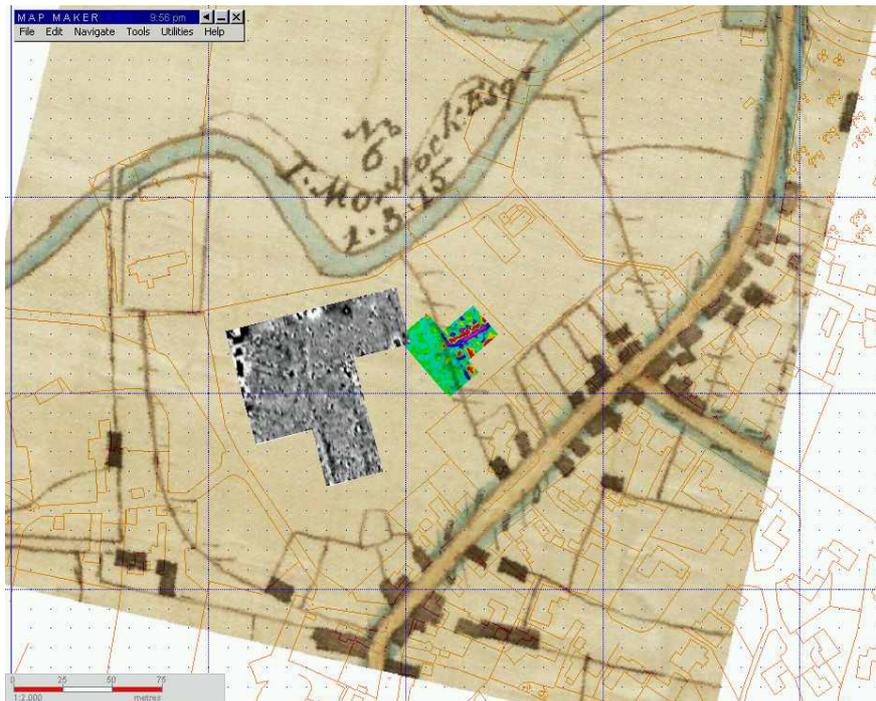


Magnetometry Survey 6 × 30 m × 30 m grids

Raw data are available as a separate appendices document.

Resistivity readings: 1 m interval, 1 m separation.

Magnetometry readings: 4/m, 1 m separation.



Superimposition of results on 1844 Inclosure Map



Superimposition of results on aerial photograph

Discussion:

The greater part of the survey area is undoubtedly alluvial. This is supported by the type of the soil visible, the old meander course of the river (clearly visible in the field to the north on the aerial photograph) and the shape of the river on the Inclosure map. The position of the church is somewhat surprising but it was presumably built on land that once was consistently dry. Little Abington's Inclosure map shows a portion of Great Abington lying to the north of the river which suggests a river shift, as a parish boundary might be expected to follow the river in this type of situation. The majority of the current buildings are on very slightly higher ground to the south. From a geophysical perspective an alluvial site is unpromising because



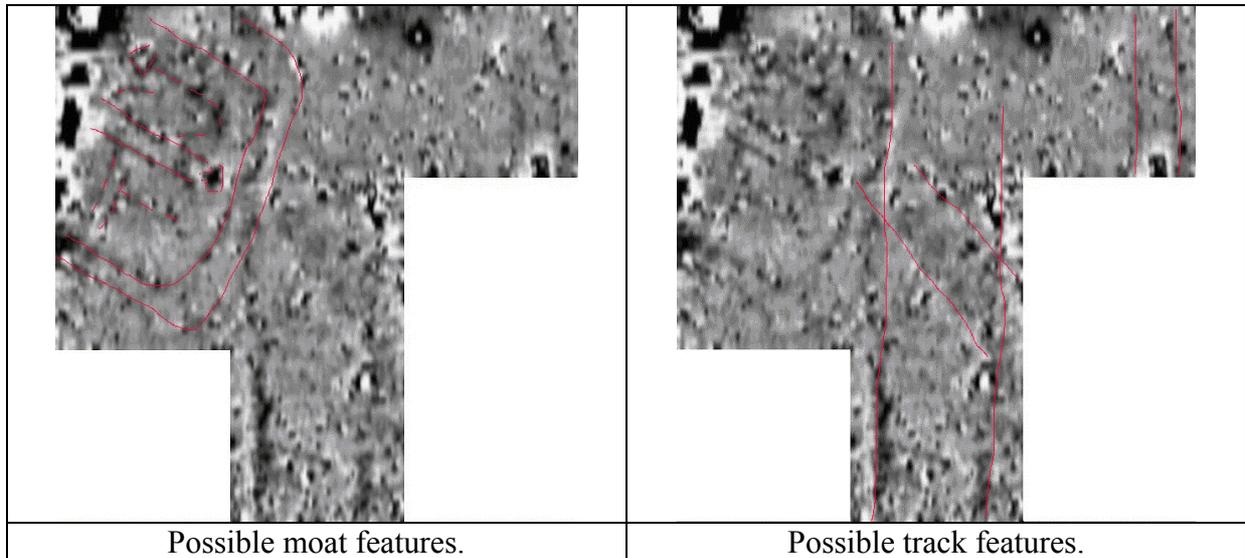
the periodic immersion washes or leaches out those components which may differentiate both magnetic and resistance signals.

Magnetometry results

Two parallel linear features run from the south before becoming indistinguishable in the north. These are approximately 20 m apart, and probably represent drainage ditches on either side of a track running to the river, although the separation is somewhat excessive. Another pair with a smaller separation but the same alignment run along the eastern edge of the survey. There is also a much weaker hint of a track which, if it were extended, might run between the church and the eastern end of the street frontage of the field on the Inclosure map.

In the north west corner of the survey area there appears to be a complex structure, indicated by parallel linear features about 5 m apart forming three sides of an apparently square structure approximately 40 m across. The square is incompletely bisected by another pair of parallel linear features with the same separation. The latter could alternatively be interpreted as the gap between two rectangular features. A strong fragmented but linear magnetic anomaly cuts across the square feature on the western edge of the survey area. This strong response does not seem to be of the type that would result from proximity to the low post and wire fence 10 m away.

The size of the square feature is suggestive of a moated site, aligned to the boundary of the churchyard. It is also displaced from but aligned to the southern portion of the village High Street which can be traced as a straight line to the county boundary before passing close to Great Chesterford.



Resistivity results

A low resistance band runs broadly north-south, close to the field boundary shown on the Inclosure map. Another low resistance band with an adjacent high resistance band runs into the first from the eastern side. The north-south feature probably reflects a ditch associated with the old field boundary. The feature from the east appears in the aerial photograph to continue, but at an angle to the boundary fences to the south. This suggests that it is a more recent drainage feature associated with the recreation area to the east of the survey area. However, if that were true, this leaves the question of why it terminates at, or enters, an old field boundary ditch which presumably was not visible when the recreation area was built.