



Impington Geophysics Report

In October 2006 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys to search for evidence of a mill on this site.

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

Site liaison: Pene Nudds. (Owners: Mr & Mrs Biggs)

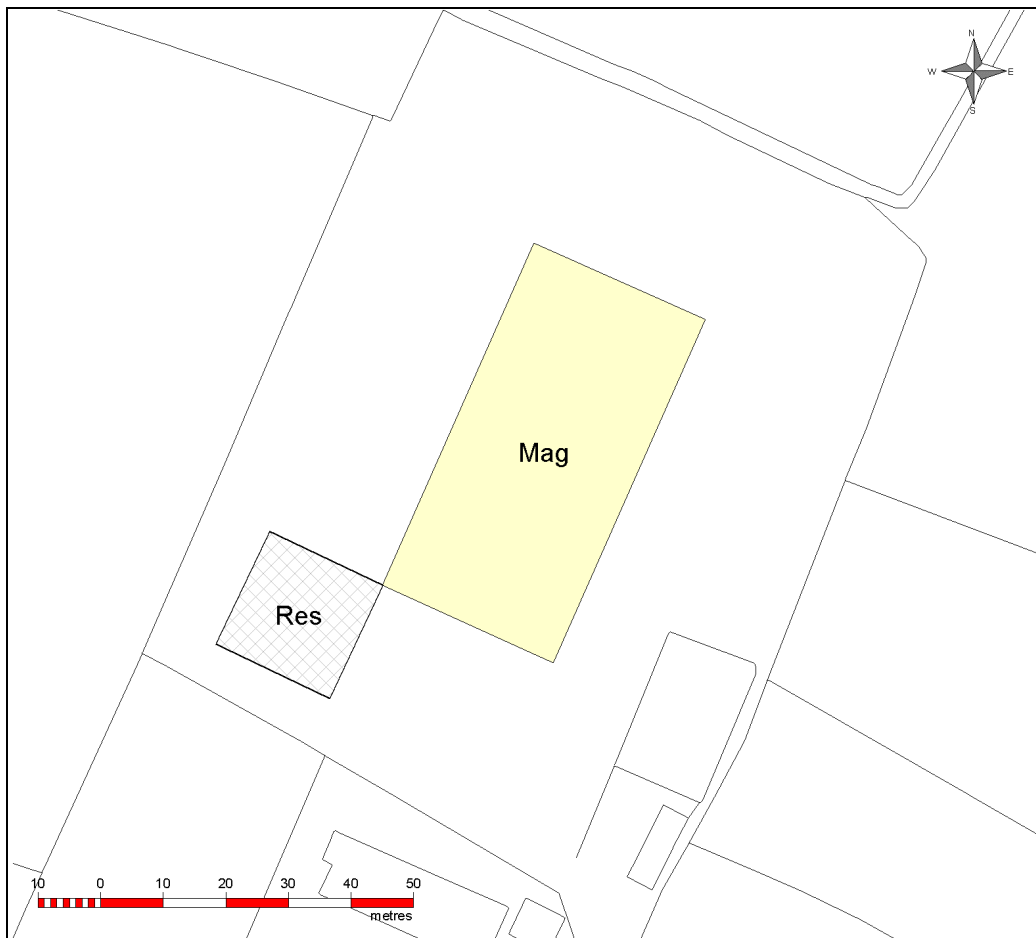
Site conditions: Grass paddock sloping down to NE. Planting of small fruit trees around the perimeter reduced the easily accessible area for surveying.

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

Area covered: Magnetometry two 30 m × 30 m grids
Resistivity one 20 m × 20 m grid

Location: TL 445 635, Impington.

Images are orientated with north to the top of the page except where indicated otherwise.

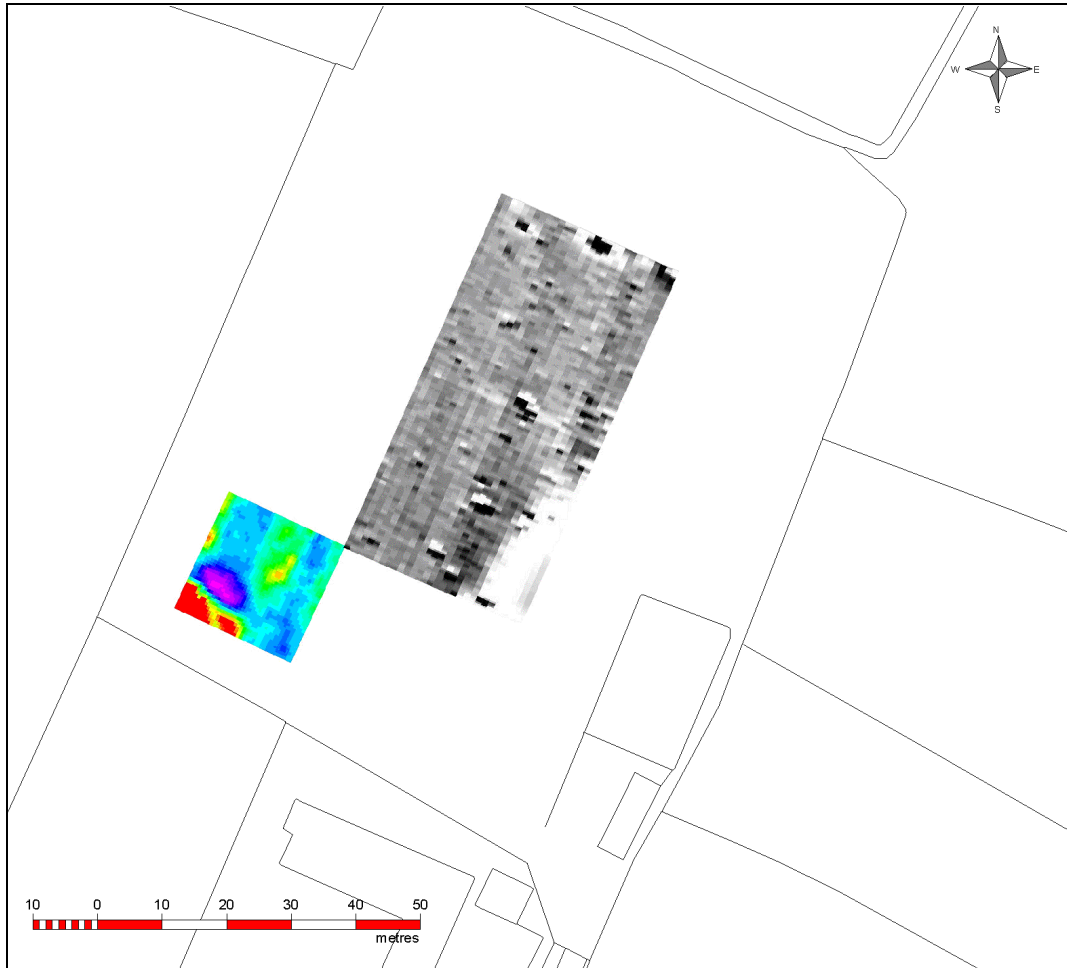


Location plan: Survey areas.
(Resistivity area crosshatched, magnetometry area solid.)



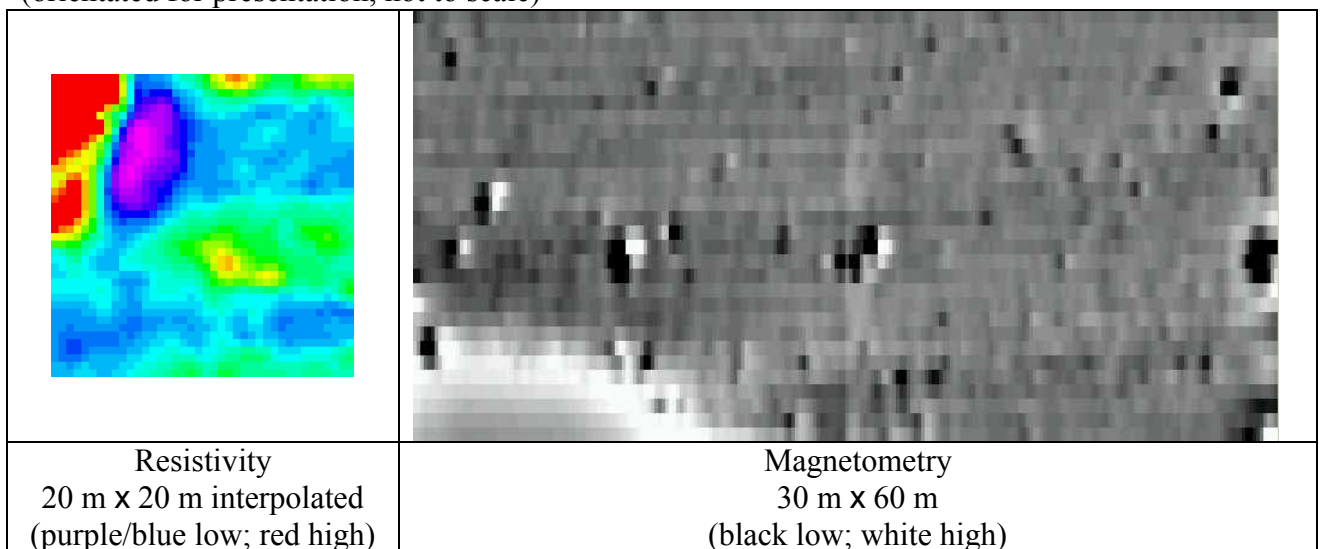
Purpose of survey: To determine if any subsurface structures were detectable which might relate to a mill on the site.

Results in context:



Results detail:

(orientated for presentation, not to scale)





Discussion:

Magnetometry

The corner of the magnetometry survey area was affected by the barn in the adjacent field to the E. Some point source strong signals were detected within the survey area which are probably the result of ferrous debris from farming activities. There was a subtle variation in magnetic response running almost NS which could be due to ridge and furrow cultivation. No evidence of ditches or structures was discovered.

Resistivity

Two bands of low resistance are noticeable in the resistivity survey. These run in a similar direction to the subtle magnetic responses and have a similar spacing. The high resistance area to the S is probably a result of soil moisture depletion by the shrubs on the S and SW field boundary, although the area of low resistance immediately to the N may have an effect. The area of particularly low response suggests a sump effect pulling soil moisture from the area of high resistance and to a lesser extent from the low resistance band to the E. This effect could arise from a pit that has been filled with peaty or moisture retentive soil. There is no evidence within the resistivity survey area for residual building foundations.

Conclusion:

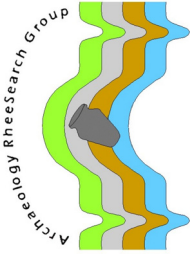
No evidence for any building foundations were found within the areas surveyed. Subtle traces of ridge and furrow cultivation were noted.

Raw data are appended.

Magnetometry readings: 4/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.

Report by Dr I Sanderson, February 2008



Resistivity raw data

Resistivity	2,15,29,151	8,13,29,722	11,12,30,363	14,11,29,974	17,10,29,587
Data	2,16,29,196	8,14,29,596	11,13,30,422	14,12,29,724	17,11,29,752
x, y, ohms	2,17,29,012	8,15,29,811	11,14,30,256	14,13,29,778	17,12,29,405
	2,18,29,026	8,16,29,973	11,15,30,208	14,14,30,289	17,13,29,37
	3,0,33,849	8,17,29,797	11,16,29,911	14,15,29,815	17,14,29,667
	3,1,34,121	8,18,29,589	11,17,30,264	14,16,29,869	17,15,29,387
	3,2,35,589	8,19,29,884	11,18,30,695	14,17,29,997	17,16,29,411
	3,3,33,343	9,0,33,164	11,19,30,301	14,18,29,754	17,17,29,465
	3,4,30,8	9,1,33,123	12,0,29,716	14,19,30,685	17,18,29,419
	3,5,28,956	9,2,31,662	12,1,30,161	15,0,29,207	17,19,29,514
	3,6,29,192	9,3,29,983	12,2,29,705	15,1,29,092	18,0,28,656
	3,7,29,202	9,4,29,436	12,3,29,272	15,2,29,267	18,1,28,376
	3,8,29,077	9,5,29,318	12,4,29,669	15,3,29,489	18,2,28,772
	3,9,29,191	9,6,29,379	12,5,29,904	15,4,29,228	18,3,28,859
	3,10,29,148	9,7,29,531	12,6,29,851	15,5,29,009	18,4,28,87
	3,11,29,08	9,8,29,86	12,7,29,965	15,6,29,411	18,5,29,058
	3,12,29,039	9,9,29,938	12,8,30,048	15,7,29,248	18,6,29,288
	3,13,29,197	9,10,29,842	12,9,30,135	15,8,29,251	18,7,29,511
	3,14,29,367	9,11,29,998	12,10,30,64	15,9,29,364	18,8,29,592
	3,15,29,215	9,12,30,014	12,11,32,066	15,10,29,805	18,9,29,535
	3,16,29,496	9,13,29,834	12,12,31,114	15,11,29,739	18,10,29,643
	3,17,29,061	9,14,29,952	12,13,30,454	15,12,29,662	18,11,29,76
	3,18,29,257	9,15,30,008	12,14,30,574	15,13,29,907	18,12,30,297
	3,19,29,3	9,16,30,045	12,15,30,334	15,14,29,688	18,13,30,398
	4,0,35,518	9,17,30,111	12,16,30,393	15,15,29,344	18,14,30,003
	4,1,35,263	9,18,30,07	12,17,30,154	15,16,29,548	18,15,29,593
	4,2,32,784	9,19,29,9	12,18,30,073	15,17,29,428	18,16,29,868
	4,3,32,085	10,0,32,575	12,19,29,864	15,18,29,261	18,17,29,839
	4,4,29,858	10,1,31,727	13,0,29,675	15,19,29,156	18,18,29,801
	4,5,29,24	10,2,30,931	13,1,29,793	16,0,28,919	18,19,30,408
	4,6,28,944	10,3,30,099	13,2,29,633	16,1,28,994	19,0,28,788
	4,7,29,125	10,4,29,589	13,3,29,736	16,2,29,022	19,1,28,869
	4,8,29,192	10,5,29,647	13,4,29,325	16,3,28,983	19,2,29,026
	4,9,29,263	10,6,29,704	13,5,29,063	16,4,29,002	19,3,28,852
	4,10,29,179	10,7,30,156	13,6,29,433	16,5,28,834	19,4,29,018
	4,11,29,156	10,8,30,227	13,7,29,737	16,6,28,959	19,5,29,229
	4,12,29,136	10,9,30,049	13,8,29,652	16,7,29,17	19,6,29,416
	4,13,29,329	10,10,30,226	13,9,29,823	16,8,29,08	19,7,29,601
	4,14,29,446	10,11,30,473	13,10,30,325	16,9,29,245	19,8,29,918
	4,15,29,331	10,12,30,292	13,11,30,924	16,10,29,373	19,9,30,08
	4,16,29,194	10,13,30,09	13,12,30,903	16,11,29,681	19,10,29,635
	4,17,29,112	10,14,30,424	13,13,31,282	16,12,29,222	19,11,30,475
	4,18,29,193	10,15,29,614	13,14,31,715	16,13,29,869	19,12,30,021
	4,19,29,405	10,16,30,529	13,15,30,658	16,14,29,269	19,13,30,04
	5,0,34,467	10,17,30,557	13,16,30,1	16,15,29,284	19,14,30,02
	5,1,32,461	10,18,30,485	13,17,30,637	16,16,29,488	19,15,30,08
	5,2,32,958	10,19,30,082	13,18,30,119	16,17,29,338	19,16,29,962
	5,3,31,474	11,0,30,38	13,19,30,316	16,18,29,638	19,17,30,254
	5,4,29,641	11,1,30,878	14,0,29,636	16,19,29,524	19,18,29,951
	5,5,29,203	11,2,30,047	14,1,29,54	17,0,28,829	19,19,29,898
	5,6,29,012	11,3,29,792	14,2,29,625	17,1,28,626	
	5,7,29,084	11,4,29,474	14,3,29,716	17,2,28,64	
	5,8,29,026	11,5,29,875	14,4,29,324	17,3,28,667	
	5,9,29,299	11,6,30,046	14,5,29,205	17,4,28,81	
	5,10,29,113	11,7,30,089	14,6,29,513	17,5,28,882	
	5,11,29,114	11,8,30,361	14,7,29,703	17,6,29,227	
	5,12,29,246	11,9,30,521	14,8,29,604	17,7,29,295	
	5,13,29,935	11,10,31,013	14,9,29,51	17,8,29,413	
	5,13,29,15	11,11,30,818	14,10,30,089	17,9,29,163	

