

REPORT ON MAGNETOMETER SURVEY

SURVEY: COTTENHAM, CAMBS.

DATE: 14 & 17 Oct 1980

Report no. G 29/80

1. SITE

OS grid reference: TL 486 691

Field no. 5600

Location: Area of gravel workings on west side of A10 $\frac{1}{2}$ mile NW of Denny Abbey.

Geology: Gravel

Archaeological evidence: Cropmarks indicate extensive Roman occupation. Before quarrying a double rectangular 'temple' enclosure existed alongside the area surveyed. Finds include settlement debris and bronze and iron slag.

2. SURVEY

Object: To locate any significant surviving features, especially industrial remains.

(a) Magnetic survey

An area of approximately 2 hectares as shaded on the plan was scanned using the fluxgate magnetometer with traverses at intervals of 2-5 metres.

(b) Other tests

(i) Magnetic susceptibility:

topsoil: 20.2

subsoil: 4.2

fill: -

 $\times 10^{-8}$ SI units/kg
(ac bridge readings)

(ii) —

Survey grid measured to:

Grid not required: free scan only.

Plans/charts enclosed:

Site plan showing cropmarks (as outlined on 1:10000 plan supplied by Cambs. Archaeological Committee), and area covered by magnetometer scan.

3. RESULTS

The plan shows that much of the area surveyed is free of cropmarks, but that it lies close to the former 'temple', and to a number of small enclosures. It was thought likely on the basis of surface finds and other fieldwork that evidence of industrial activity including kilns or remains of metal working might be present.

The measured magnetic susceptibility value is much higher for the topsoil than for the subsoil, which indicates that most features should be detectable provided there is some local contrast between subsoil and fill. This contrast does not always occur on gravel subsoils, but during a brief initial visit on 14th October the site was found to respond sufficiently well to justify an intensive scan which was carried out on 17th October.

The survey confirmed the presence of a number of ditches and pits, but since the main features of the site are sufficiently well known from cropmarks these were not measured in. On a site of this nature it is also possible that some of the weaker features observed were caused by natural variations in the depth of the gravel surface. No concentrations of magnetic disturbance of the kind that would be expected from occupation or industry were detected, and no strong anomalies indicating substantial baked clay kilns or furnaces were found. Anomalies representing small isolated hearths might have escaped detection in the scan, but it is very unlikely that any remains of extensive industrial activity occur within the area investigated.

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For: Cambridgeshire Archaeological Committee

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4027
5 090ha
12 58

7123
5 058ha
12 50

490

N

690
6 15
11 20
3900
113ha
28

6 21
11 20
3900
113ha
28

The Lods

COTTENHAM, CAMBS.
Magnetometer Scan, 1980



area of scan



cropmarks

A.M. Lab

1:2500

690

490