



Herefordshire Council

Herefordshire Archaeology
Conservation and Environmental Planning
Planning Services
Environment Directorate
Herefordshire Council

A Geophysical Survey at Longtown

Herefordshire Archaeology Report No.16

**Report prepared by
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Herefordshire Archaeology is Herefordshire Council's county archaeological service. It advises upon the conservation of archaeological and historic landscapes, maintains the county Sites and Monument Record, and carries out conservation and investigative field projects. The County Archaeologist is Dr. Keith Ray.

A Geophysical Survey at Longtown

Herefordshire Archaeology Report No. 16, August 2000.

Summary:

An enquiry was received from Longtown Parish Council concerning the possible new site for a village hall at NGR: SO 3255 2835. The field in which this might be sited is currently under permanent pasture and contains a number of subtle earthworks, (SMR no. 30545 and 30546)

In order to assess the potential impact of any construction works on the archaeology of the site, Herefordshire Archaeology requested the conduct of an archaeological field evaluation. At a site meeting it was agreed between the landowner, a representative of the Parish Council, the appointed architect and staff of Herefordshire Archaeology that three archaeological operations should be performed in order to ascertain the nature, extent and date of archaeological remains on the site. These operations would comprise of a geophysical survey, an earthwork survey and an evaluation excavation.

In order to minimise the consequent costs to the community and in view of the extensive areas Scheduled as Ancient Monuments in the village, Herefordshire Archaeology offered to undertake the geophysical survey. The survey was carried out on 23rd and 24th August 2000 using a Geoscan RM15 Resistivity Meter with PA5 electrode array. Six 30m square grids were surveyed in an area 60m wide by 90m long, (SMR 30547).

Results confirmed that the subtle earthworks were not natural but related to the remains of possible structures and boundaries. The survey also detected significant features that could not be related to the visible earthworks.

Note: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. NGRs are accurate to approximately 10m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50, and 0.02m at 1:20.

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Figure 1: Proposed Village Hall, Longtown, Herefordshire.
Location of Geophysical Survey

Introduction

An enquiry was received from Longtown Parish Council concerning a possible site for a new village hall at NGR: SO 3255 2835, (Figure1) This site is located in the north-western corner of a field currently under permanent pasture and bounded on its western side by the Cloddock to Longtown road. It forms the south – eastern corner of the Urban Area as designated in The Central Marches Historic Towns Survey, (Hereford and Worcester County Council 1996). The site comprises a gently sloping strip of ground parallel to the road approximately 55m wide. At its eastern edge the ground drops away steeply to the valley bottom. A number of subtle earthworks are present here, (HSM 30545) some of which are modern in nature, relating to drainage works undertaken in the 1970's. The southern boundary of the site is marked by a public footpath, which runs along the crest of an earthwork bank approximately 0.5m in height. This bank marks the northern most limit of a further series of earthworks, HSM 30546.

It was agreed at a site meeting held on 28th July 2000, between Mr. P. Hope, (landowner), a representative of the Parish Council, the appointed architect, (David Taylor Consultants Ltd) and staff of Herefordshire Archaeology that three archaeological operations should together constitute an archaeological field evaluation. The aim of such a project is to ascertain the nature, extent and date of archaeological remains on the site. These operations would be a geophysical survey, an earthwork survey and an evaluation excavation.

In order to minimise the costs to the community of this fieldwork, Herefordshire Archaeology offered to undertake the geophysical survey. The Parish Council agreed to commission an archaeological contractor to carry out the earthwork survey and field evaluation, for which a brief will be prepared by Herefordshire Archaeology staff.

Geophysical Survey Description

The aim of the geophysical survey was to locate features in order to facilitate the location of trenches.

The survey was carried out on 23rd and 24th August 2000, (HSM 30547). Weather conditions during the survey were fine and dry but heavy rain had fallen within the preceding week. A Geoscan RM15 Resistivity Meter with PA5 electrode array was used for the survey. The mobile electrodes were separated by 0.5m giving an approximate maximum depth of detection of 1m below ground level. The two remote probes were separated by approximately 3m from each other and were positioned at least 15m from the nearest part of the survey area. The current was set at 1mA and the mains frequency at 50Hz. Readings were taken at 1m intervals on traverses spaced 1m apart.

Six 30m square grids were surveyed in an area 60m wide by 90m long on a north-west / south-east axis. The survey area included the northern-most earthworks in the area immediately to the south of the possible development site. This will enable comparison of

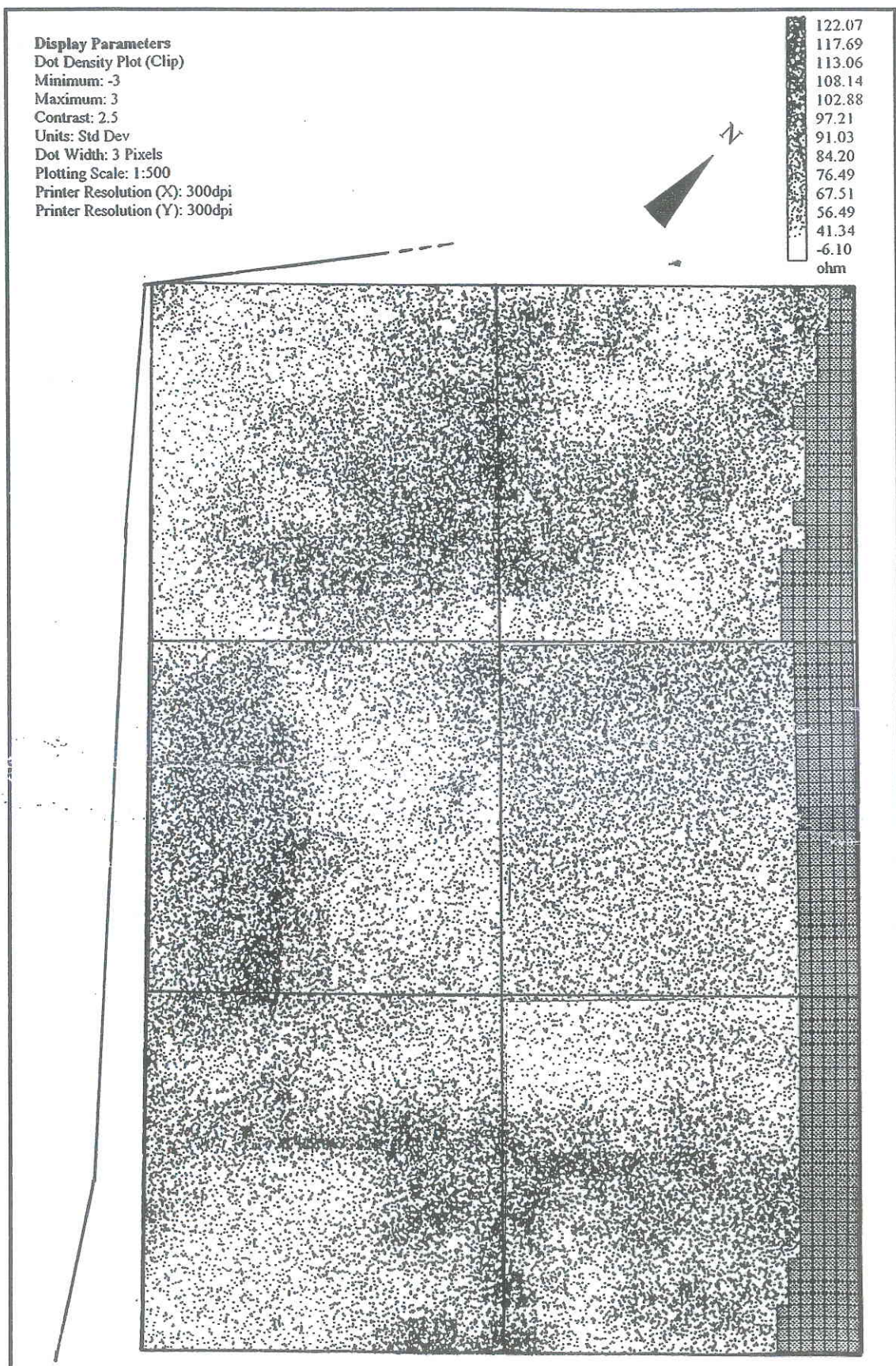


Figure 2: Raw data plot and grid details.

readings and results with those from less prominent earthworks within the development area. The survey continued over the break of slope on the eastern edge of the site, for approximately 4m. A survey grid was established and the position of the north – western and south – western corners marked with posts in order to re-locate the grid if necessary, (see Figure 2).

Results

Upon completion of the survey the data was downloaded to Geoplot 3, version 1 for plotting. Figure 2 represents the raw data of a dot density composite plot of all six grids at scale of 1:500. Figure 3 represents a low level filtered plot.

Features of note have been allocated a letter (A-H) and are described below.

- A** This represents the southern half of a building orientated north - west / south - east. It lies close to the northern boundary of the survey area. This structure is approximately 5m wide and in excess of 8m long. It appears to have possessed at least stone foundations. It is not apparent as an earthwork at ground surface.
- B** A curving feature containing much stone and approximately 10m wide, it appears to curve southwards and westwards from the break of slope and may represent a buried boundary or enclosure bank. It is not apparent as an earthwork at ground surface.
- C** A large area of high resistance suggesting the presence of a considerable quantity of stone. This feature appears to run on a roughly north - east / south - west axis. Two parallel “spurs” running to the north – west may represent ancillary structures. It is not apparent as an earthwork at ground surface.
- D** This area is similar in size to feature D, being approximately 30m in length and 12m wide. It is apparently aligned parallel to the road on a north – south axis. The feature is quite distinct, having a conspicuously straight and abrupt north-eastern edge. The northern part of this feature is visible at ground surface as a level earthwork platform.
- E** There is an area of relatively high resistance readings southwards of feature B that has an abrupt northern edge but a very indistinct southern edge. Its western end appears to be bulbous. This corresponds to a very low, wide earthwork ridge or bank and may represent upcast from recent drainage works to the south.
- F** This is a very localised area of very high resistance and corresponds to a concrete drain cover from drainage works carried out in the 1970’s which feature a drain running eastwards to and beyond the break in slope marking the eastern edge of the survey area.

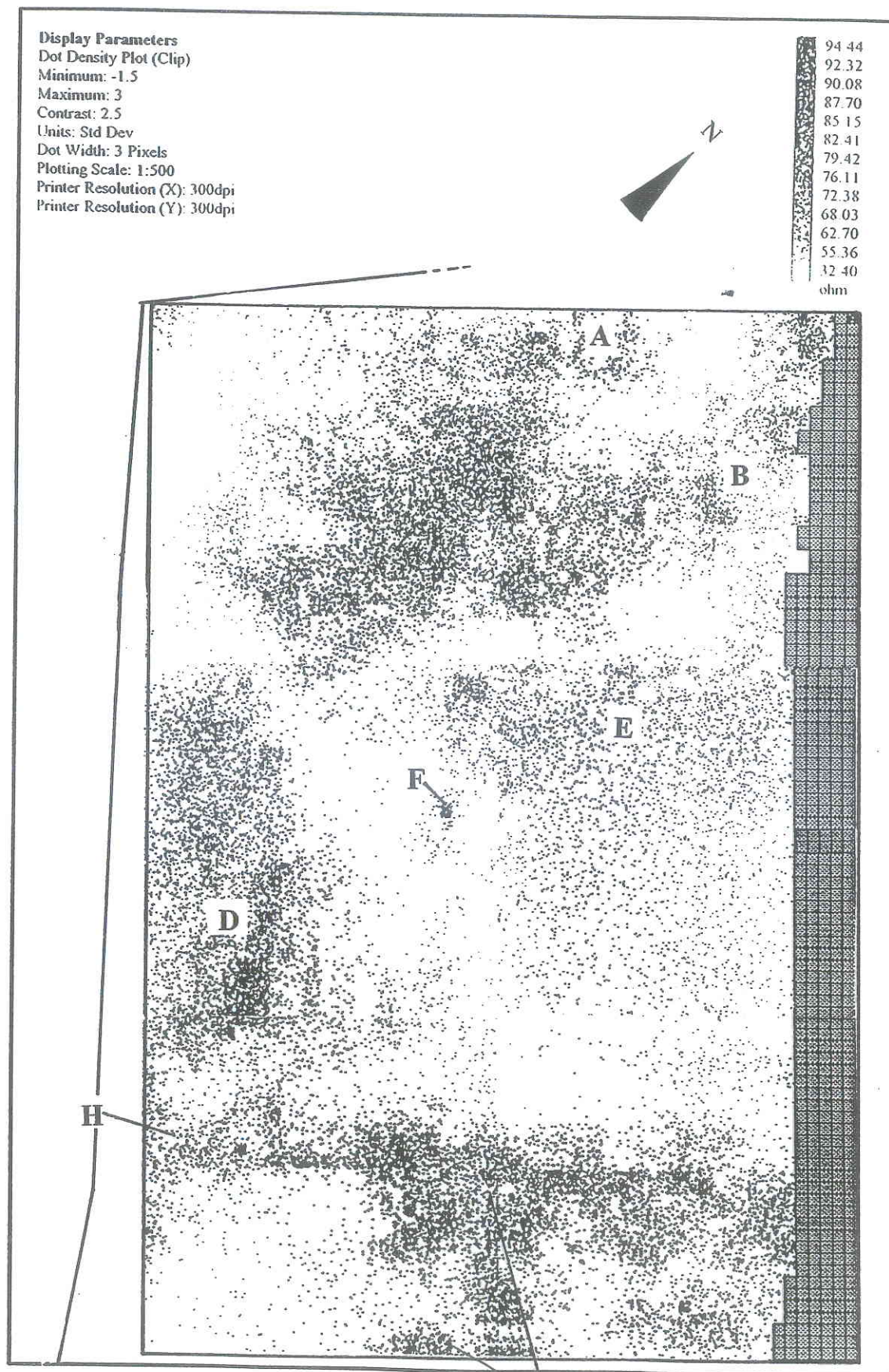


Figure 3: Filtered data plot.

- G** These two areas of high resistance readings may represent two roughly square buildings marked at ground surface as earthworks. These features lie outside the area subject to field evaluation.
- H** A linear feature which runs parallel with and to the south of the public footpath. This feature is apparent as a 0.5m high bank at ground surface. It contains considerable quantities of stone. It is suggested that this feature forms the northern boundary for the series of earthworks that lie southwards of the site under field evaluation.

Discussion

The data can be interpreted as indicating the presence of at least five areas of archaeological interest within the area subject to field evaluation, and the subject of the Longtown Parish Council enquiry. (A,B,C,D and E). Whilst the possibility cannot be discounted that features B and C may represent features of the underlying geology, this is unlikely as it does not correlate well with the local topography. Areas C and D may represent rubble spreads associated with a number of buildings potentially both domestic and or agricultural / industrial in nature. Feature E is quite uniform and may represent disturbance associated with the modern drainage works. Feature A is clearly a small rectangular structure with traces of stone walls or at least wall footings.

Significance

This resistivity survey has shown that there are a number of features of potential archaeological significance within the area of interest to Longtown Parish Council. Some of these features are visible as low earthworks. The survey provides much information concerning the potential for evaluation excavations and at least for feature A, indicates a good level of preservation.

Acknowledgements

Herefordshire Archaeology would like to thank Sam Meadows for his assistance during the survey and Mr. P. Hope for site access.

Archive arising from this piece of fieldwork

- 1 3.5" data disk
This document.

References

Archaeological Assessment of Longtown, Hereford and Worcester. **The Central Marches Historic Town Survey**. Hereford and Worcester County Council 1996.

Validation

Herefordshire Archaeology operates a validation system for its reports, to provide quality assurance and to comply with Best Value procedures.

This report has been checked for accuracy and clarity of statements of procedure and results.

Dr. K. Ray County Archaeologist.