BERKSHIRE ARCHÆOLOGICAL SOCIETY

President: Professor Michael Fulford CBE FBA FSA

Inkpen 2 geophysics survey 2022 report

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Issue 01

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Summary

This is the report of the geophysics survey of the field south west the Old Rickyard and south of Spray Road.

The survey found evidence of three phases of structures on the site;

Phase 1 was a structure some 20m north-south and 10m east-west

Phase 2 was a series of buildings aligned to Spray Road but located some 40m above the road. The largest of the buildings was some 14m x 5m

Phase 3 was a series of buildings on the side of Spray Road, these included what may prove to be two barns, the largest of which may have been 30m x 8m. They were aligned at right-angles to the road.

Unfortunately, a geophysics survey does not allow us to date these phases of use of the site.

Inkpen Parish Council and Inkpen History Group

Dr David Thomas, Woodwind, Folly Road, Inkpen, Hungerford. RG17 9QB.

Site owners

Alan and Josephine Stark: the then the owners of The Old Rickyard, Lower Green, Inkpen

Berkshire Archaeological Society Council:

Ann Griffin, Anne Harrison, Andrew Hutt, Catherine Petts, Griselda Truscott Wickes, James Peddle, Jean Curran, Keith Abbott, Paul Seddon and Tim Lloyd

West Berkshire Heritage Service

Sarah Orr, Beth Asbury

0 Document control

0.1 Contents

0.2 Change control

This document is controlled by the author

0.3 Change history

Issue 01 is the first complete draft of this document

0.4 Changes forecast

0.5 Acknowledgements

Thanks are due to David Thomas for inviting the Society to carry out this work and for supporting us while we were working on site.

Thanks are due to Alan and Josephine Stark the owners of The Old Rickyard, Lower Green when the survey was done.

The members of the Society who carried out the work on site were: Tim Lloyd, Geoff Anderson. Nigel Spencer. Philip Rawstrom and Tony Bakker. Thank you for your support.

1 This project

Early in 2022, David Thomas who is chair of Inkpen Parish Council and the Inkpen History Group emailed Andrew Hutt asking if the Society would like to carry out geophysics surveys on several different sites across Inkpen. He explained that he was hoping that the work would renew parishioner's interest in the archaeology and history of Inkpen and hence revive the Inkpen History Group.

At the time the Society was very busy with other fieldwork so work on Inkpen was delayed until autumn 2022.

This project is investigating 6 historic features across the parish of Inkpen. They are:

1. Westcourt Manor: which dates from 1167
2. Wansdyke: an earthwork which stretches from Bristol to Inkpen
3. Two 19th century cottages: which are shown on the 1815 enclosure map but have since be demolished
4. Inkpen mill site: land close to the site of the mill listed in Doomsday
5. Two fields near the Folly: which may hold Saxon remains
6. Fields near Trappshill House

This report is of the survey conducted on site 2.

2 Site locations

Site is the field to the south west the Old Rickyard and south of Spray Road (Centroid SU 3564 6376). It labelled F2S1 on figure 2.1 below.

3 Geological and topographical background

Using details from the British Geological Survey viewer, these sites are on a mix of solid and surface geology.

Site F2S1 is on bedrock a spur of Lewes Nodular Chalk Formation - Chalk. Running north east from the chalk escapement.

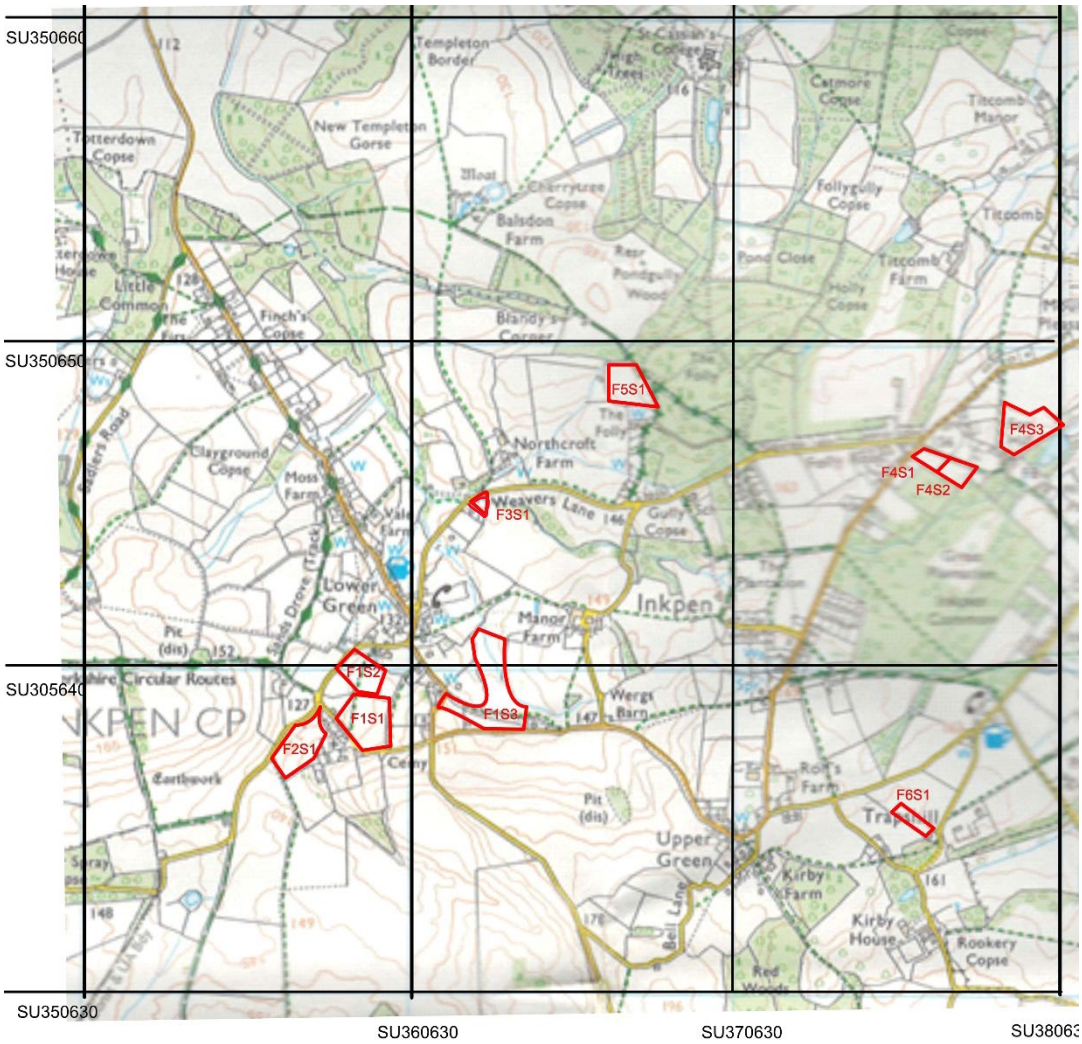

Figure 2.1. Inkpen sites on an OS background

4 The historical background

There are the remains of a dyke by the side of Old Dyke Lane (BNGR SU 351 637). These remains were called Wan's dyke in the common award of 1733 (West Berkshire HER MWB1597). Site F2S1 (BNGR SU 356 637) is 500m to the east.

The Wansdyke stretches from Maes Knoll Tump, near Bristol, along a line to the south of the A4 until it reaches point SU 195 665 which seems to be the last point which is identified on an OS map. Wikipedia suggests it terminates at SU 221 649 in Savenake Forest but there is no confirmation of this in the Wiltshire HER.

In West Berkshire, there are several sites related to Wansdyke (Table 4.1). Plotting these points on a map (Figure 4.1) shows the line of Wansdyke may go through the site F2S1.

Figure 3.1. Sites related to Wansdyke (Magic map)

5 General and specific aims of this project

The aims of the project are to identify evidence of the past use of this site and hence enhance our knowledge of the associated features.

6 The results

6.1 The survey grid

This field runs south west of the Old Rickyard on the south side of Spray Road. The survey grid (Figure 6.1) was laid out parallel to Spray Road and surveyed with the gradiometer and earth resistance meter.

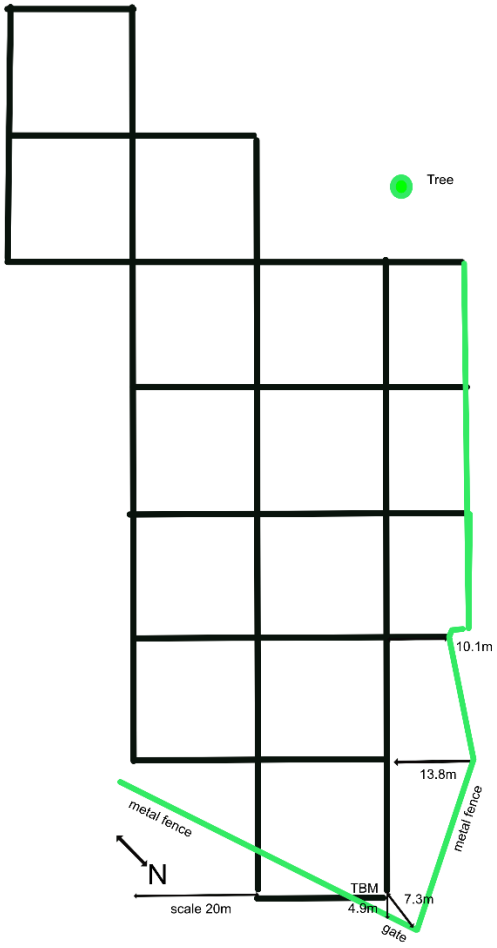

Figure 6.1. The survey grid of 20m x 20m squares

6.2 The gradiometer survey results

Figure 6.2 shows the data collected using a Bartington 601 gradiometer with 2 sensors. Figure 6.3 labels the anomalies seen in these results

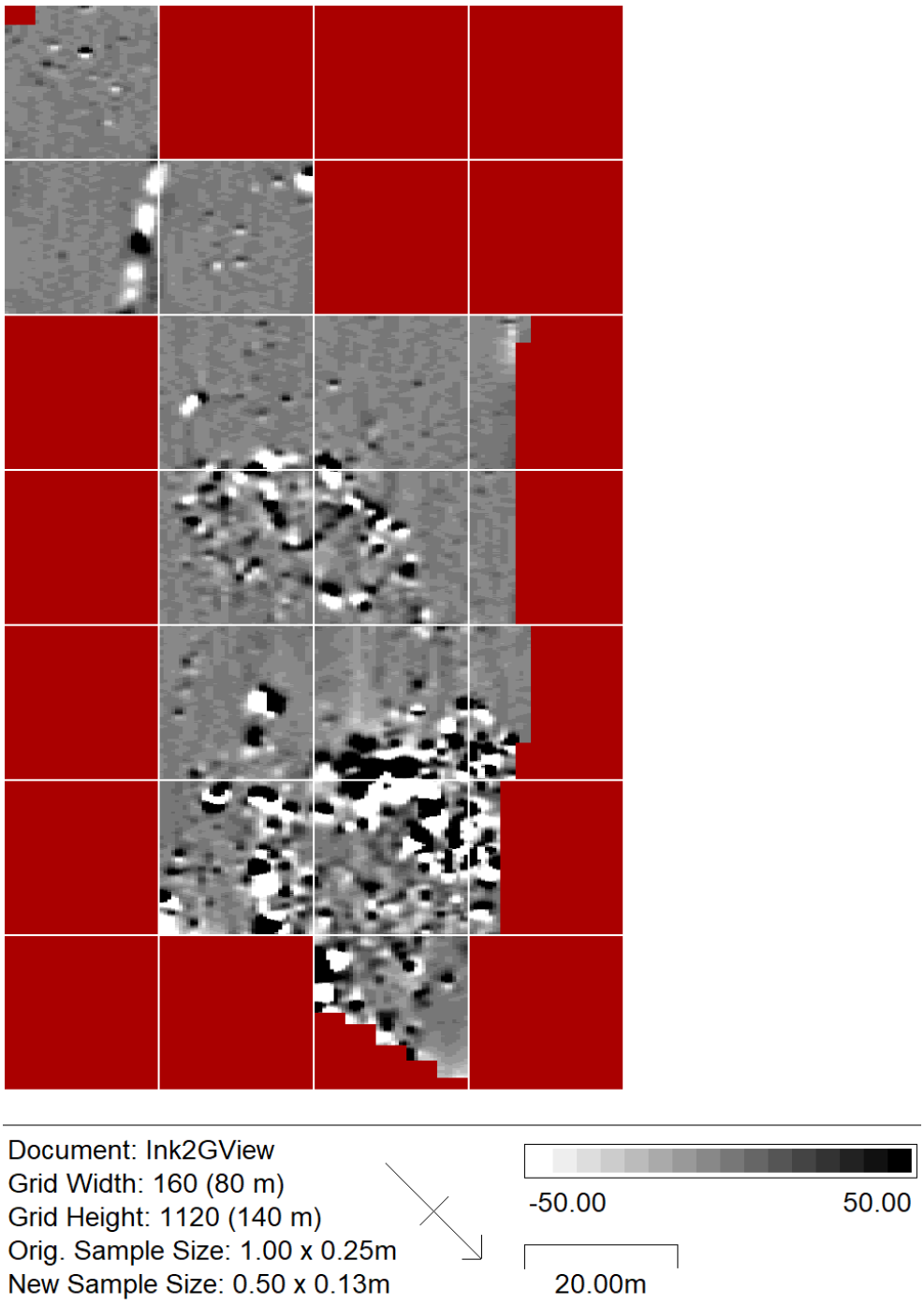

Figure 6.2. Gradiometer results

The anomalies seen in the results are:

G01: a straight line of 5 anomalies some 2m in diameter evenly spaced over 20m which suggests they may be pits arising from the removal of small trees along a field boundary

G02: an irregular spread/line of 8 to 10 anomalies about 1m in diameter

G03: a straight line of 7 anomalies some 8m long.

G04: two anomalies each some 5m long with an angle of 80^0 between them

G05 a group of anomalies each about 1m in diameter over a distance of some 30m.

G06 a pair of very distinct anomalies each about 2m in diameter separated by a gap of 3m to 4m

G07 a pair of circular anomalies. One some 6m in diameter and the other some 4m in diameter. These are probably large pits

G08: a rectangular area some 16m x 10m dense with anomalies

G09: a 6m x 78x rectangular area dense with anomalies

G10: a line of at least 5 rectangular anomalies about 2m x1m

G11: a roughly square area of anomalies measuring circa 12m x 12m

G12: an anomaly measuring 2m x 3m on the edge of the survey area

G13: an anomaly measuring 5m x12m on the edge of the survey area

G14: an anomaly measuring 4m x 10m on the edge of the survey area

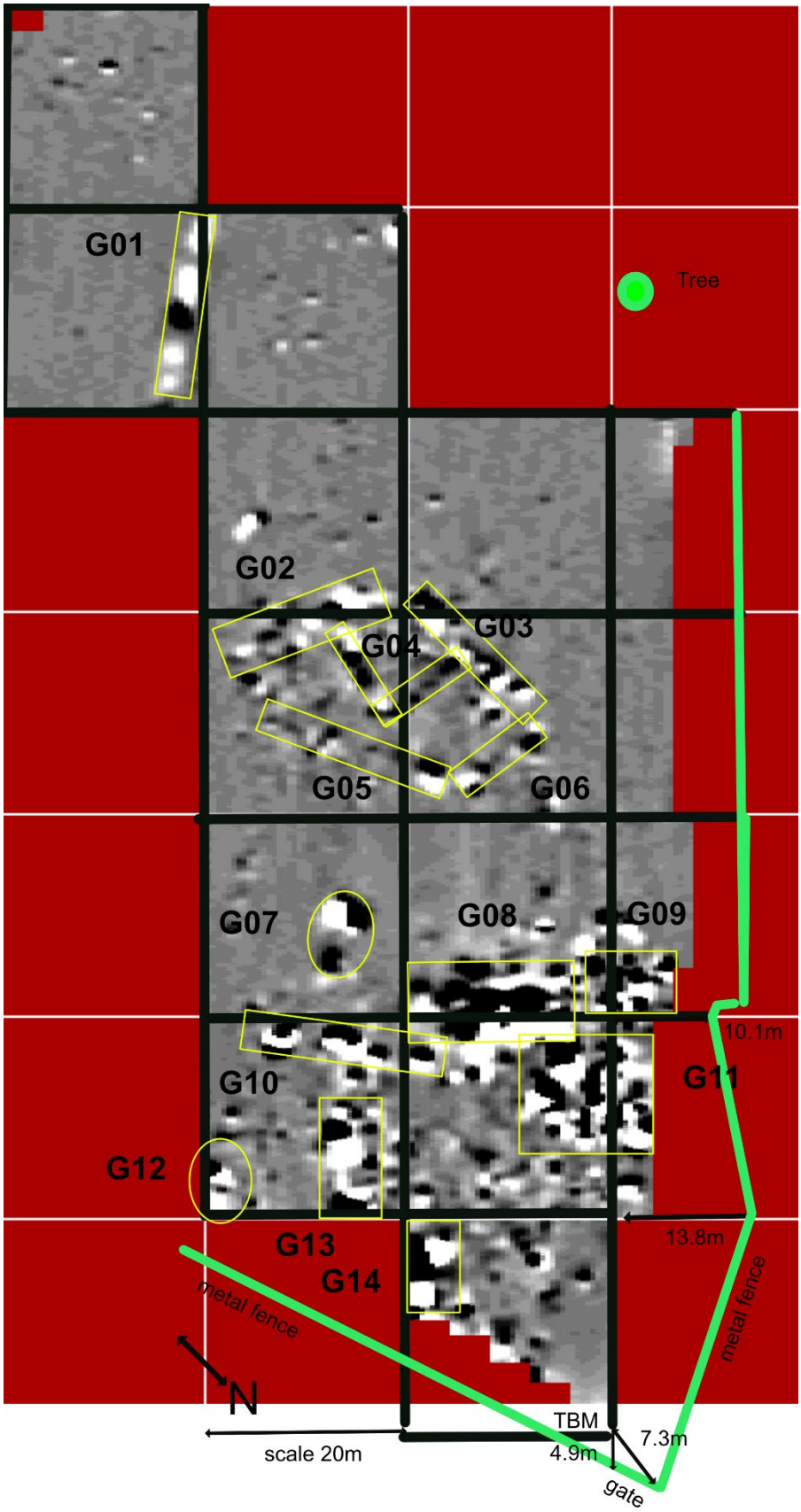

Figure 6.3. The gradiometer anomalies

6.3 Earth resistance survey results

Figure 6.4 shows the results of the earth resistance survey

Figure 6.5 shows the anomalies identified in these results

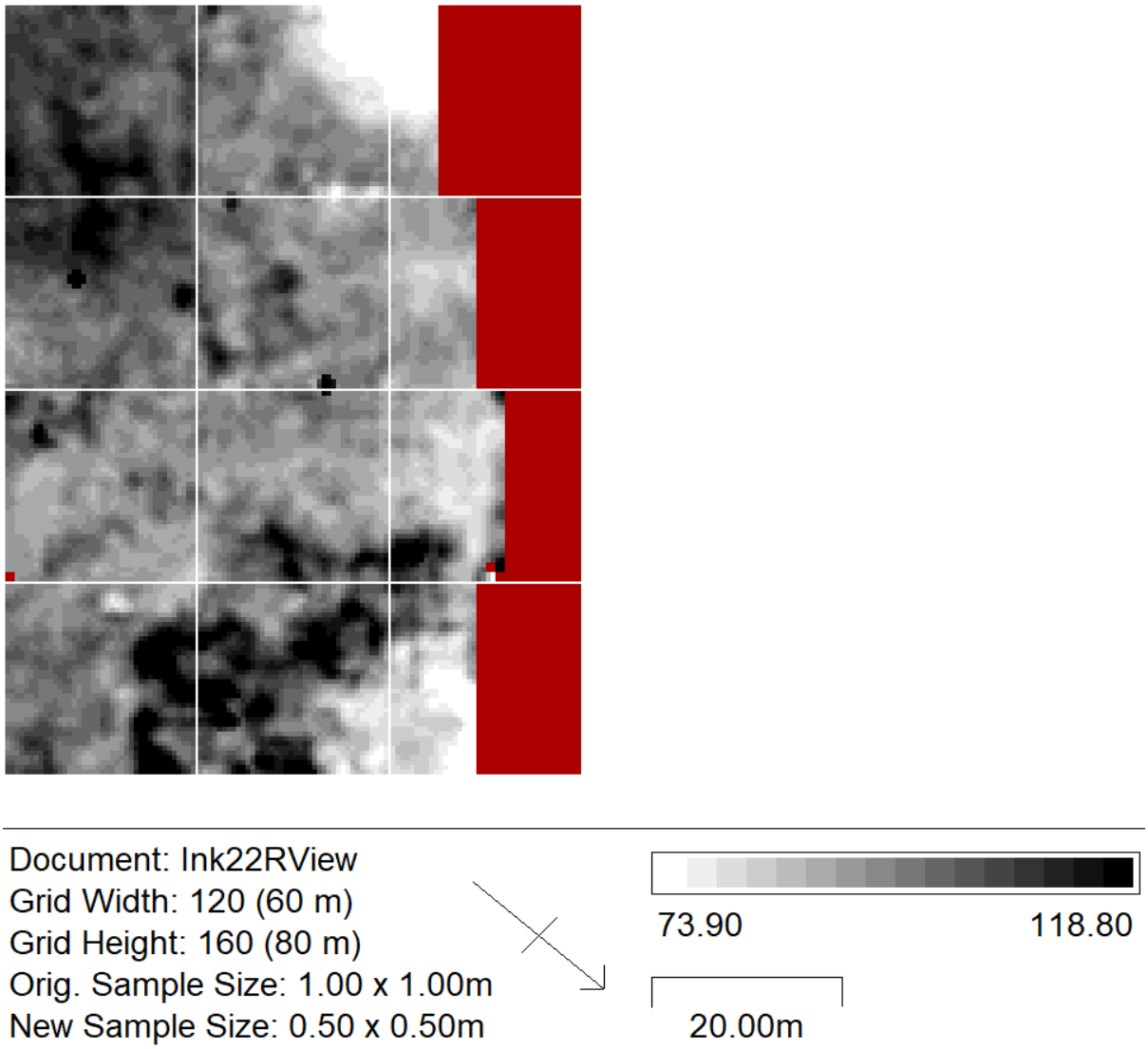

Figure 6.4. Earth resistance survey results

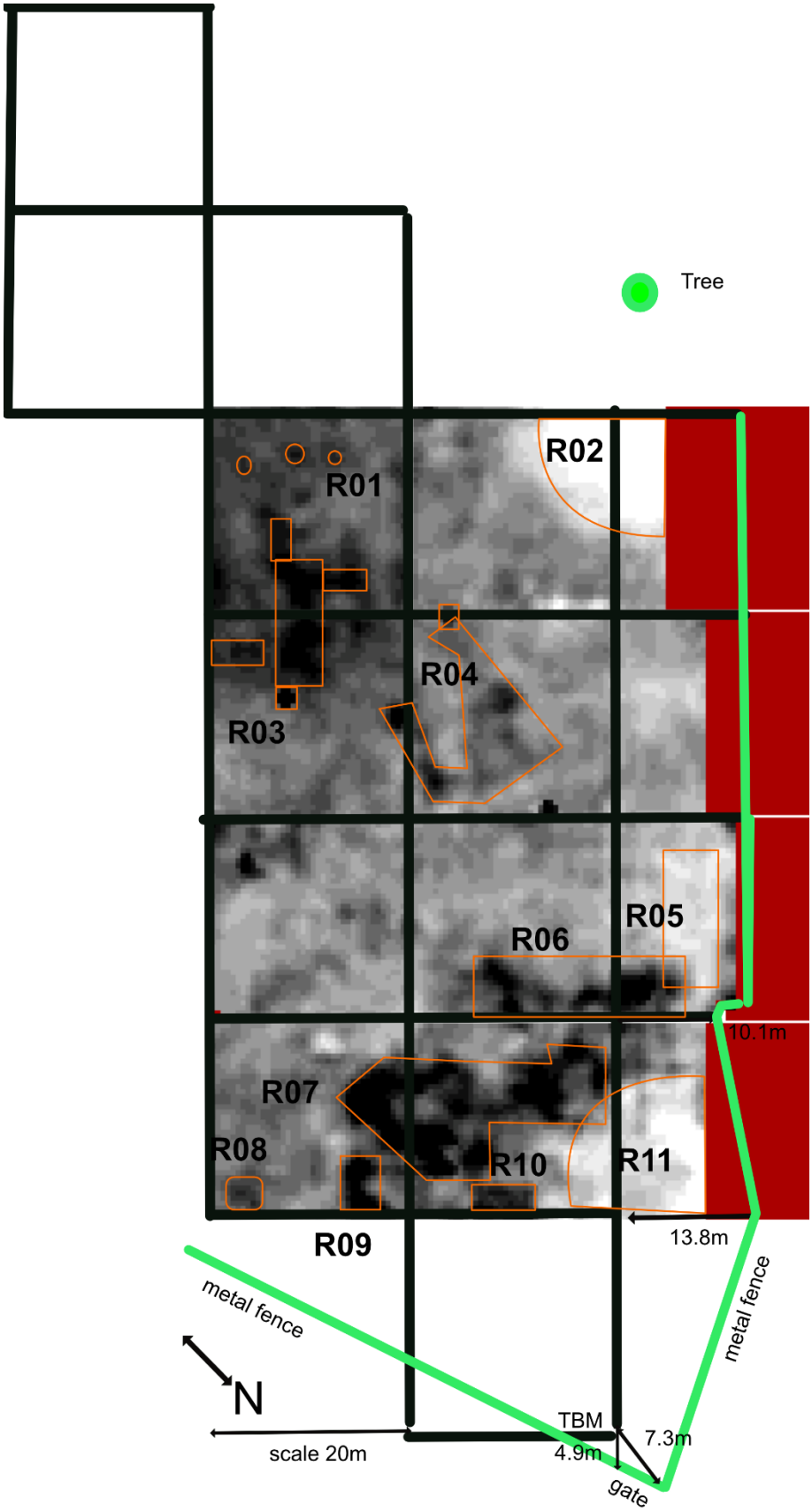

Figure 6.5. Earth resistance survey results

The anomalies found in the earth resistance survey results (Figure 6.5) are:

R01: a group of three circular high resistance anomalies around 2m in diameter

R02: a quadrant of a circular low resistance anomaly which if complete would be 24m in diameter. The physical conditions to create this anomaly would be wet marshy land maybe the remains of a pond. There is nothing on the ground or in the gradiometer results to suggest the existence of marshy ground or a pond which had been in filled

R03: a group of high resistance anomalies aligned to the survey grid and hence Spray Road. The largest is 14m x 5m which may represent the remains of a building which suggests that the others in the group which are on a similar alignment may represent outhouses. There are no gradiometer anomalies which align to this anomaly

R04: a group of anomalies in size 20m north -south and 10m east-west alignment. These correspond to anomalies G03 and G06 in the gradiometer results

R05: a rectangular low resistance anomaly (14m x 6m) near the edge of the survey near to Spray Road. There is nothing in gradiometer results which corresponds to this

R06: a long bow shaped anomaly which measures 20m x 8m on an alignment at right angles to Spray Road. It corresponds to gradiometer anomaly G08

R07: is a confusion of several anomalies in an area 30m x 10m. It does not correspond directly with a single gradiometer anomaly. There are several gradiometer anomalies round the periphery of this anomaly

R08: is a small 4m x4m anomaly which corresponds to gradiometer anomaly G12

R09: is a small 6m x 2m anomaly which lies at the centre of gradiometer anomaly G13

R10: is a small 6m x 2m anomaly on the edge of the survey plot

R11: is a quadrant of a circular anomaly which may be 30m in diameter. As with anomaly R02, there is no direct evidence of what this may represent

7 Discussion

A review of the survey results shows that there are anomalies on two different alignments. This suggests that there may have been two or three phases of development of the site. The following section highlights anomalies which provide evidence of these phases.

This evidence does not support any dating of these phases.

7.1 Phase 1: Anomalies aligned north south

Anomalies G03, G04, G06 and R04 show evidence of a structure which was on a north/south or east/west alignment. Anomaly G6 and the northern edge of R04 are well matched which suggests they represent the northern extent of the structure while anomalies G03 and G04 may represent evidence of its internal layout.

If we make the assumption that the structure represented by these anomalies was a wooden structure which was burnt down then the outlying anomalies G02 and G05 may represent evidence of burning and hence demolition.

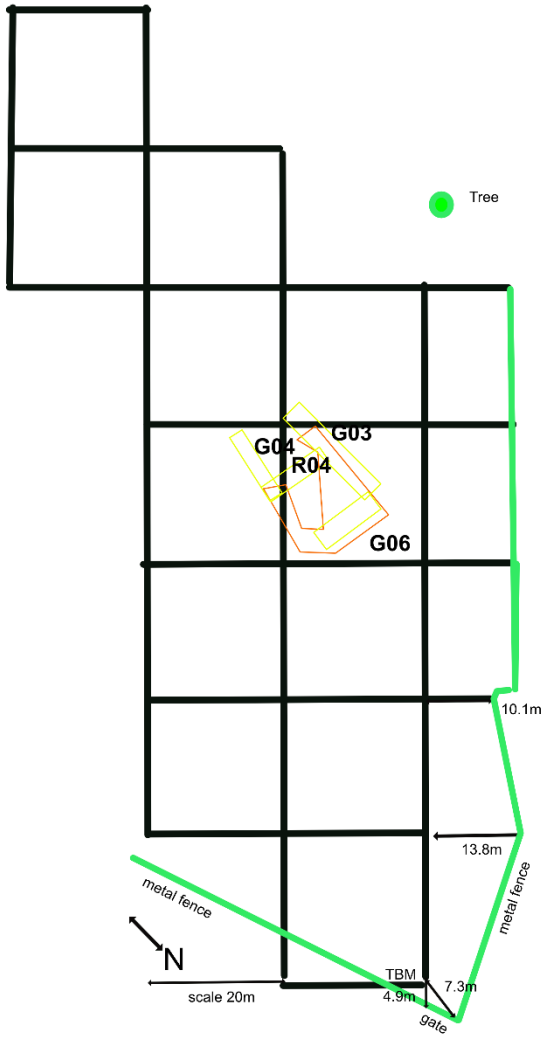

Figure 7.1. Phase 1 anomalies

7.2 Phase2: Anomalies aligned to Spray Road.

Anomalies R03 may represent the remains of a rectangular building several meters above the level of Spray Road but parallel to it.

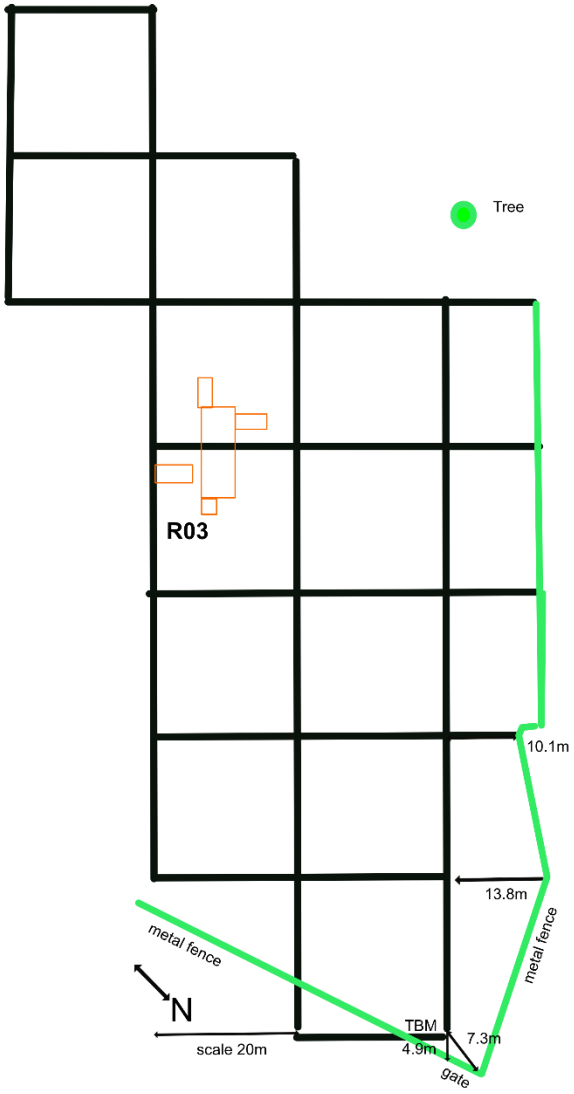

Figure 7.2. Phase 2 anomalies

7.3 Phase 3: Anomalies at the level of Spray Road

Figure 7.3 shows a very close correspondence between the anomalies found in the earth resistance and the gradiometer results. Examples of this are the combinations of G09and R05, G08 and R06 and G11 and R10.

This suggests that these represent the remains of a range of buildings which are aligned along and at right angles to Spray Road.

The main building was probably represented by G11 and R10 which suggests it was barn for holding corn. This makes sense as its alignment would allow a wagon and horses to move through the barn in the same direction as they were walking along Spray Road and hence save them from having to turn with a full load.

The G08 and R06 combination may represent the remains of another barn which was in use before or after the G11/R10 barn.

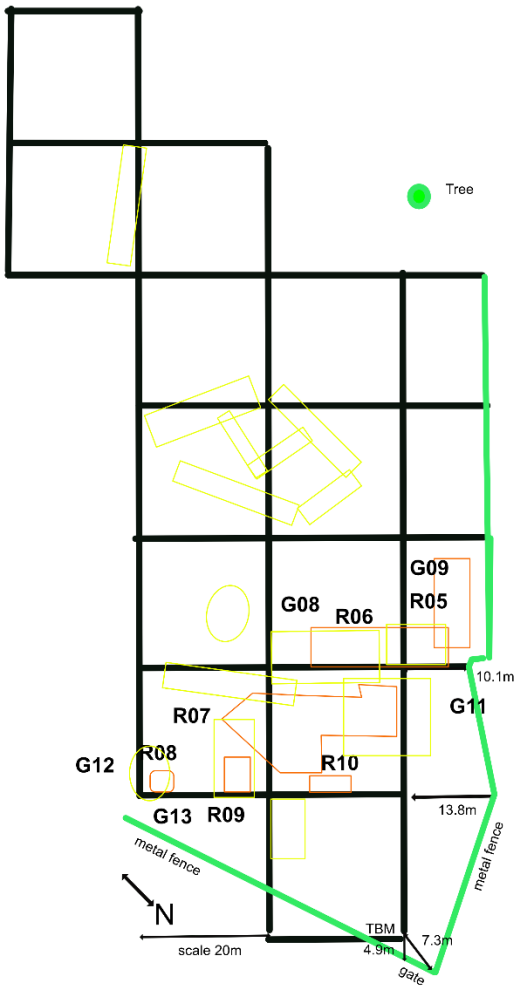

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Figure 7.3. Phase 3

8 Conclusions

Before we started work on this the evidence (see section 4) above suggested that parts of the Wansdyke may lie in this field. As shown above, there is no evidence of the earthwork in this field.

The three phases of use of the site offer opportunities for further work such as digging test pits or excavating trenches to gain more evidence and insights as to the use of the site.

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Schmidt, A., Linford, P., Linford, N., David, A., Gaffney, C., Sarris, A., and Fassbender, J. 2014. EAC Guidelines for the use of Geophysics in Archaeology.

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Appendix A. The Survey

A1. The survey grid

The survey grid of 20m x 20m squares was laid out roughly parallel to Spray Road. The Temporary Bench Mark (TBM) was positioned relative to the eastern end of the gate (4.9m) and the corner of the fence (7.9m) and then aligned to the east side of the tree at the far end of the field. The distances from the field boundary are shown in Figure A.1.

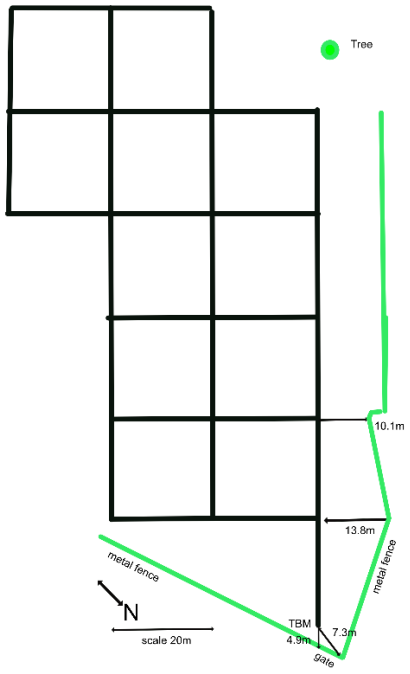

Figure A1. The survey

A2. The gradiometer survey

A number of squares were surveyed using a Bartington 601 gradiometer with 2 sensors. The data was downloaded into Snuffler (Snuffler 2006) where it was processed and the resulting image (Figure 6.2) was transferred to Affinity Designer where the anomalies found in the results were marked and labelled (Figure 6.3).

Figure A.2 shows names the files with the data collected in the survey. The file names show the order in which the squares were surveyed. In all the squares surveying started in the bottom left-hand corner when seen in the figure (hence the black arrow) except for square Ink22G16 which was survey from the top right-hand corner.

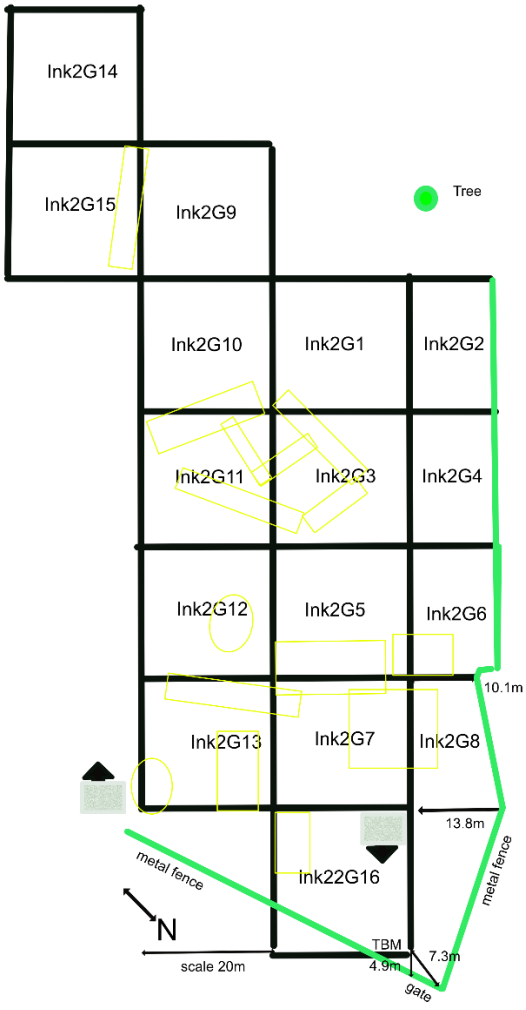

Figure A.2 Gradiometer survey data files

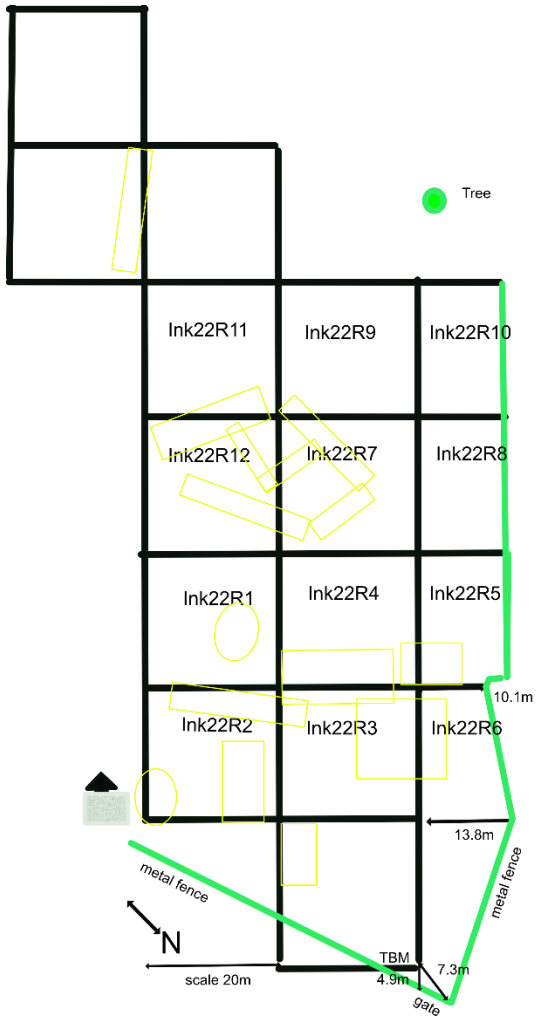

Figure A.3. Earth resistance survey data files

A.3 Earth Resistance survey

A number of squares were surveyed using a Frobisher earth resistance meter. The data was downloaded into Snuffler (Snuffler 2006) where it was processed and the resulting image (Figure 6.4) was transferred to Affinity Designer where the anomalies found in the results were marked and labelled (Figure 6.5).

Figure A.3 shows names the files with the data collected in the survey. The file names show the order in which the squares were surveyed. In all the squares surveying started in the bottom left-hand corner when seen in the figure (hence the black arrow).