A Resistivity Survey At Stanmer Village, Near Brighton

by the Brighton and Hove Archaeological Society

Historical Introduction

The village of Stanmer was in existence by the time of the Domesday Survey - in 1068 there were 49 villagers with 10 smallholders having 26 ploughs.

“Stanmer” (from P.Brandon Deserted medieval villages in the Brighton district SAC 112 1974 p.163) has a history which illustrated the adjustment to the ebb and flow of rural prosperity which has always characterised the downland. Credited with 25 taxpayers in 1327, the houses in the parish numbering only 3 in 1664. Owing to the fallibility of the surviving evidence, the critical period of decline remains an interesting source of conjecture. The probability is that Stanmer was still a large community when the manor passes from the Canons of South Mailing into lay hands at the Reformation.

Between 1598 and 1632 John Michelbourne, a notable local "improver", incorporated most of the tenant’s lands into the demesne and converted the estate into a large sheep farm. His activities held to explain the Hearth Tax return. The present village of Stanmer is an ‘estate’ village in a neat and uniform style of flint and brick which owes its 18th and early 19th c. origin to the great Whig family who built the Palladian mansion at Stanmer about 1724 and landscaped the park. It has little demonstrable relationship to the medieval settlement.”

Introduction

The field in Stanmer village known as the Paddocks (TQ 336 098 - see Fig.1) is on the known site of the deserted medieval village and there is a good array of mounds, ridges and nettle clumps over the area.

A resistivity survey was carried out there on 9th and 10th June 1984 in an attempt to discover whether the layout of part of the village could be plotted using this method.

A Martin-Clark resistivity meter was used, resistance readings being taken with the probes spaced 1 metre apart and along lines 2 metres apart.

Rain had fallen a few days prior to the survey and the ground was damp enough to give good results.

Results

The results have been plotted in two different ways. Fig.2 gives an impression of the relative rise and fall of the readings using dot, dash and hatched symbols - higher readings are indicated by darker symbols. In Fig.3 resistance readings are plotted on a vertical scale. The results are shown as a series of continuous fluctuating lines with high and low readings shown as peaks and troughs respectively. For extra clarity a straight line representing 12 ohms is included: readings higher than 12 ohms are blacked in, readings lower are hatched. This graph starts 5 metres further

along the lines than in Fig.2 because many of these first readings are too high to be plotted at the otherwise suitable scale.

Both diagrams show up the broad variations in the resistivity of the ground but the relatively narrow lines of high or low resistance indicative of the foundations of walls or ditches are, where present at all, very fragmentary e.g. area W may represent a short section of wall. The fact that the soil was suitable for detecting these underground features was proved by taking readings across a gap in a nearby partly broken down wall. The underlying wall foundation could be assumed with a high degree of confidences The readings across the wall were 10.4, 11.1, 15.2, 9.5 and 11.3 (ohms) with the 15.2 reading at the midpoint of the wall - an easily detectable rise in resistivity.

Notable features are the areas of very high resistance in the east (maximum reading of 40.0 ohms). These strangely seem to correspond with the position of three nearby large trees (possibly the root system acts in the same way as a stone foundation?). The area X (minimum reading of 5.2 ohms) is the site of the annual Nov.5th. bonfire and the lower readings may perhaps be due to the burnt soil retaining water more readily or be a result of the quantities of iron rubbish over the area.

Conclusions

There are many, possibly significant, variations in resistivity over the surveyed area but no clear linear patterns emerge. Consequently the layout of any buildings etc. of the medieval village could not be determined.

Acknowledgements

I am grateful to the farmer, Mr.D.West, for giving permission to carry out the survey on his land. I would also like to thank all the BHAS members that helped carry out the project, and Mr.W.Gorton for information about the site.

Bob Saville 26/8/84

Fig. 1 Location of the site.

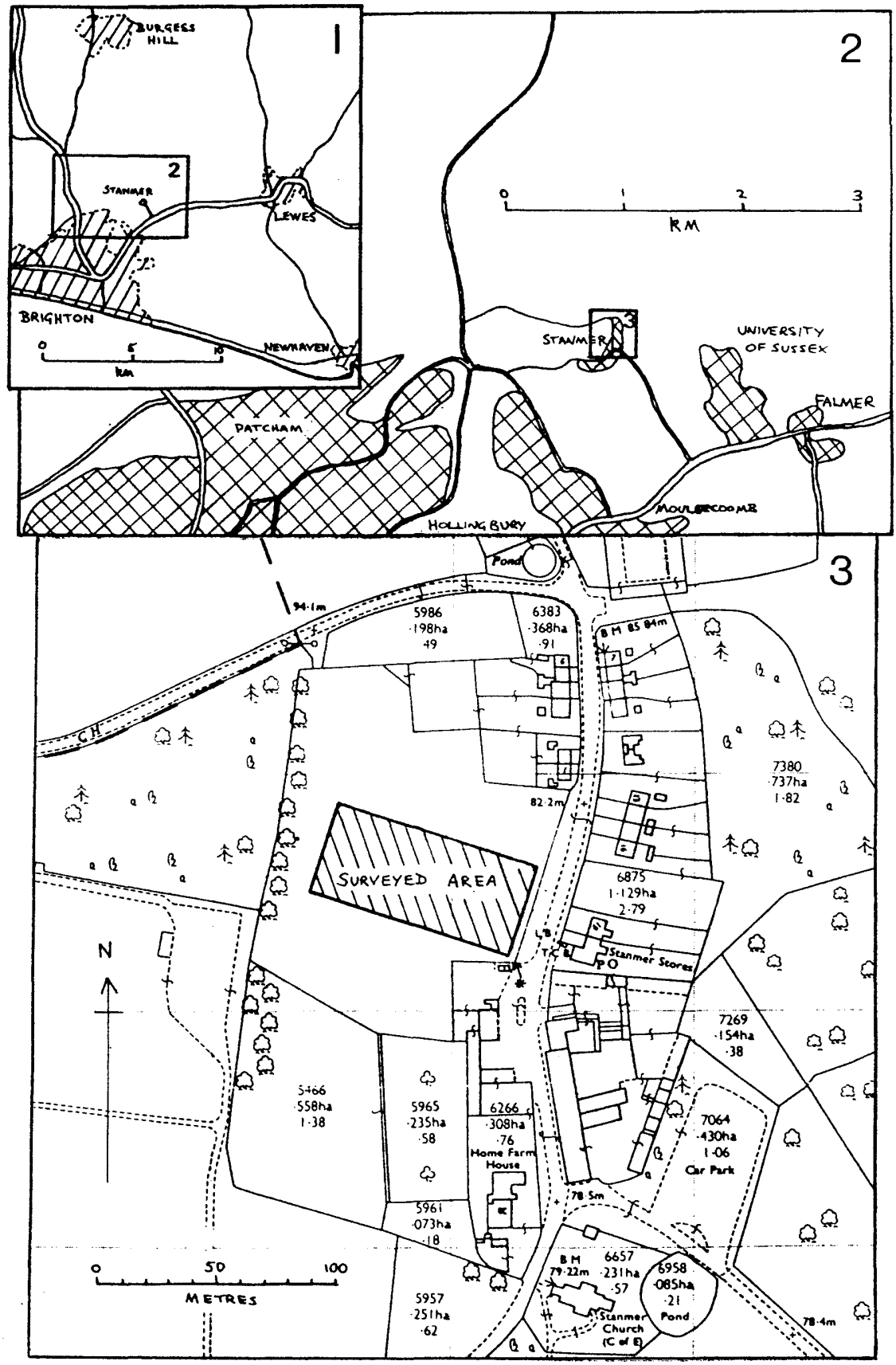

Fig.2 Distribution of resistance readings over surveyed area

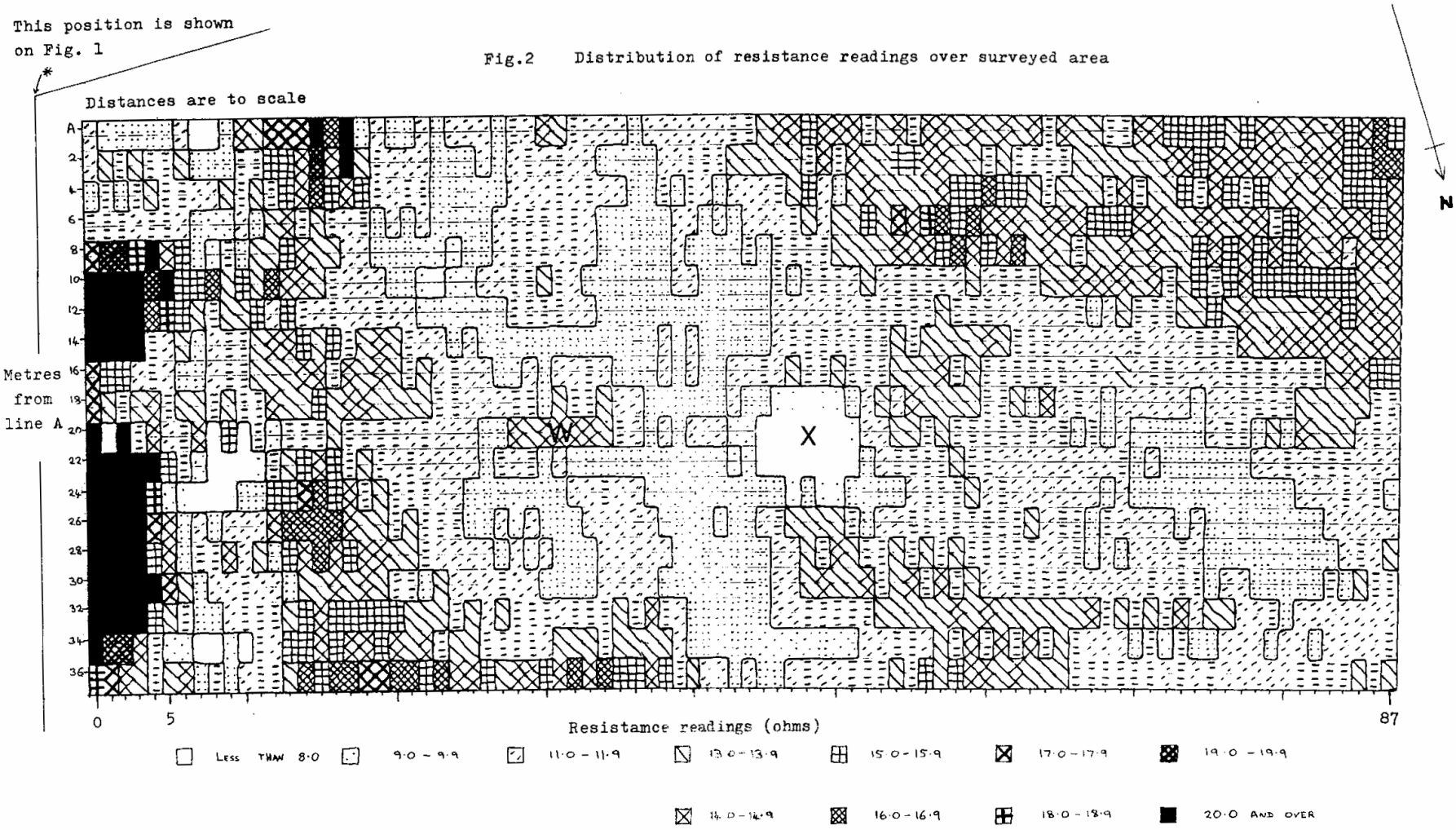
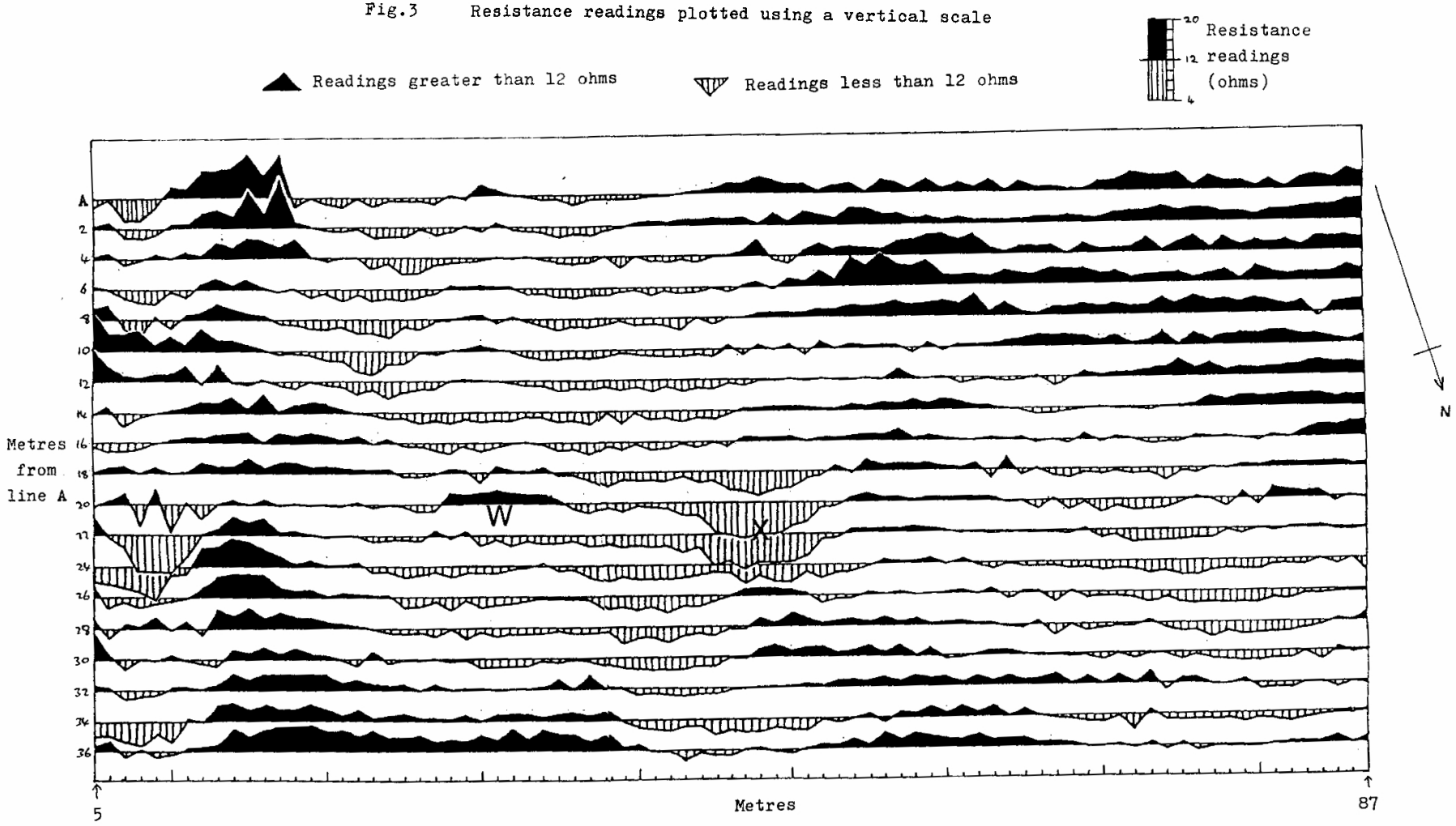
Fig.3 Resistance readings plotted using a vertical scale