THORNHOLME PRIORY, LINCS
Geophysical Survey

A resistivity survey was carried out by the Geophysics section of the Ancient Monuments Laboratory in the roughly triangular field between the level crossing and the West Drain. It set out to resolve three main questions: firstly to describe the extent and to define the structure if possible of two long banked mounds running westwards along the field, converging at the western end; to map the buried walls, if any, of a square feature sited on the northern bank and visible in early aerial photographs; and lastly to define as far as possible the area adjoining the West Drain, thought to contain the gatehouse of the Priory.

Survey method

1) The banks were surveyed using 1m probe spacing, with Wenner and Double Dipole configurations, on traverses 20m apart, placed at right angles to the banks and extending fully across the field.

2) An area of 20m x 23m surrounding a bump supposed to contain a square walled structure was surveyed with the Twin Electrode configuration with 1m probe spacing on traverses 1m apart The results were subsequently plotted by computer in a dot density form.

3) Due to the difficulty of inserting probes into the surface of the area of the gatehouse and associated buildings, and because of limited surveying time available, the area was surveyed as shown on the plan, with a grid of traverses placed 5m apart. Towards the railway line the ground had been too greatly churned up by mechanical excavating machinery to be properly surveyed; it was possible therefore to extend only one long traverse in that direction.

Results and conclusion

The traverses across the banks failed to give clear definition of a stone revetment as had been hoped. They did show that the banks were almost certainly built of sand from the surrounding area, however, most probably with a stone top surface which had slipped down the sides. These results are marked by hachures on the accompanying plan to show the the line of the banks best fitting the resistivity traverses; interpolation of the contours from the topographic survey shows that the two methods of indication conform closely.

The area survey of the possible square stone building again confirmed the findings from the examination with the widely spaced traverses. It also showed that the edges of the bank were not continuously stony across the survey area, which suggested extreme decay through ploughing or levelling but gave no indication of a building.

As is to be expected, the extreme nearness of the remains to the surface in the area of the gatehouse coupled with the spread of rubble masking the pattern of walls rather confuses the results from the traverses spaced at 5m intervals. However there is a distinct edge on the western side where all traverses show a drop in overall reading together with a reduction in activity. This appears to offer a clear western boundary to this portion of the gatehouse complex, which is not, unfortunately, matched by one on the southern side. The clearest interpretations are

marked on the plan.

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THORNHOLME PRIORY

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