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**Land at Brecks Lane, Pockley  
 North Yorkshire**

*Cartographic Appraisal &  
 Geophysical Survey*

*November 1996*



**West Yorkshire  
Archaeology Service**

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WYAS R407, 28 November 1996

# **Land at Brecks Lane, Pockley**

**North Yorkshire**

## **Cartographic Appraisal & Geophysical Survey**

**by**

**Kath Keith & Alistair Webb**

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# Land at Brecks Lane, Pockley

North Yorkshire

(SE 6380 8595)

centred at: 463770 485980

## 1. Summary

### *Client*

Nawton Tower Estate

c/o Carter Jonas

13 - 15 Albert Street

Harrogate

HG1 1JX

### *Objectives*

To establish any relevant features of post-medieval and modern land use and the susceptibility of any remains to the development of the site at Brecks Lane, Pockley.

To determine the presence/absence, location and extent of any possible archaeological features on the site.

### *Method*

To facilitate the first objective a cartographic appraisal was carried out through the collation of available records and air photographs.

Gradiometer and resistance surveys were carried out using a Geoscan FM36 fluxgate gradiometer with an ST1 sample trigger for the magnetic survey and a Geoscan RM15 resistance meter for the resistance survey in order to achieve the second objective.

### *Results and Conclusions*

The cartographic appraisal indicated that possible building foundations could be situated in the north-west corner of the plot. However, these were not detected by the geophysical survey.

Localised areas of high resistance that correspond to topographic features have been detected. One may indicate structural remains whilst a second is possibly the remnants of a former

banked land division.

The gradiometer survey was characterised by responses due to ferrous material in the topsoil. This may reflect the position of a smithy, recorded on the O. S map of 1914, on or close to the site. No anomalies thought to be archaeological were detected by this method.

Any development on the site would undoubtedly affect the earthworks and/or any archaeological features. For this reason it would be worthwhile trial trenching across the earthworks and the high resistance linear anomaly.

## **2. Introduction**

**2.1** The West Yorkshire Archaeology Service was commissioned by Carter Jonas, Chartered Surveyors and Property Consultants on behalf of the Nawton Tower Estate to undertake a cartographic appraisal and geophysical survey at Brecks Lane, Pockley (see Fig. 1).

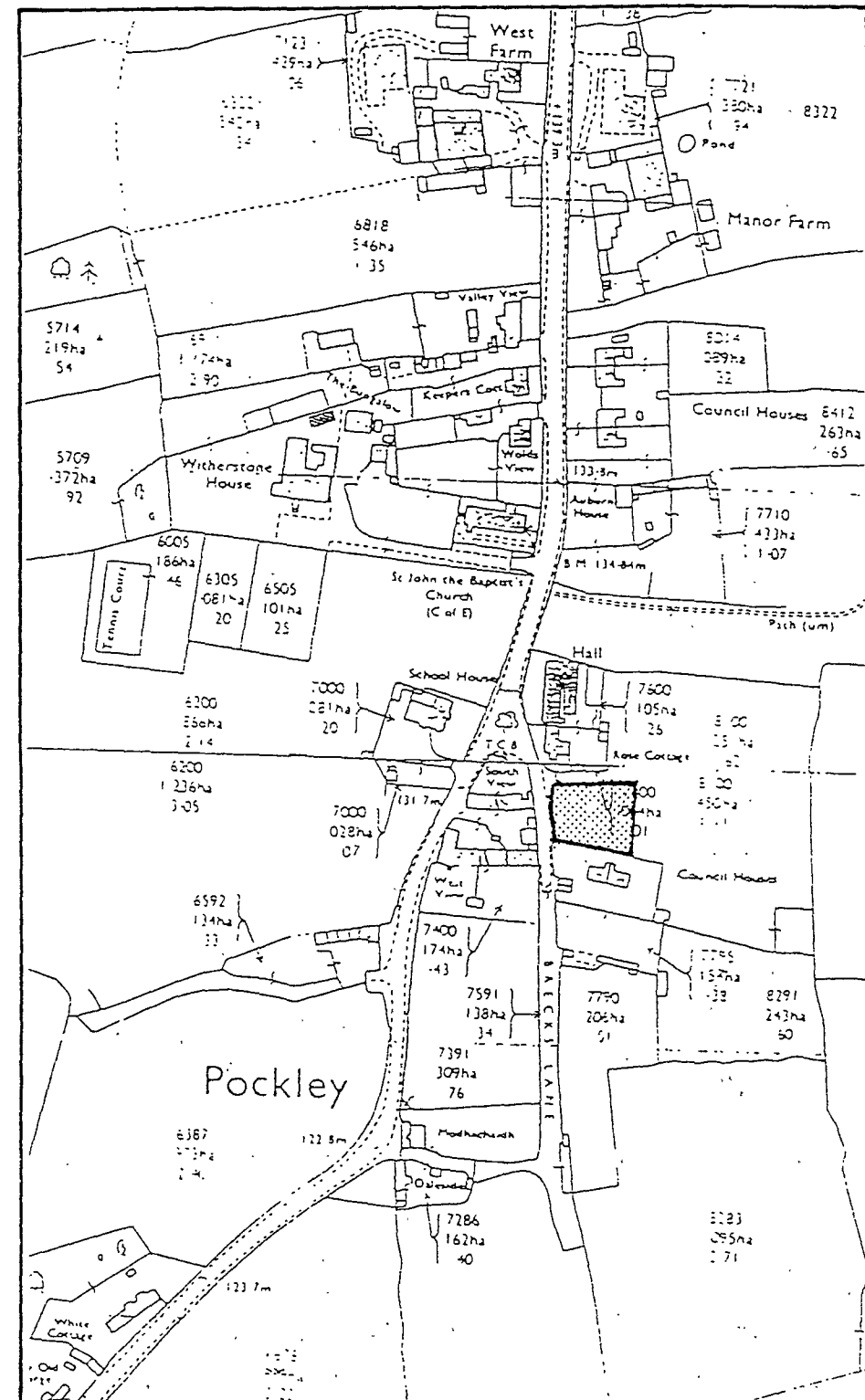
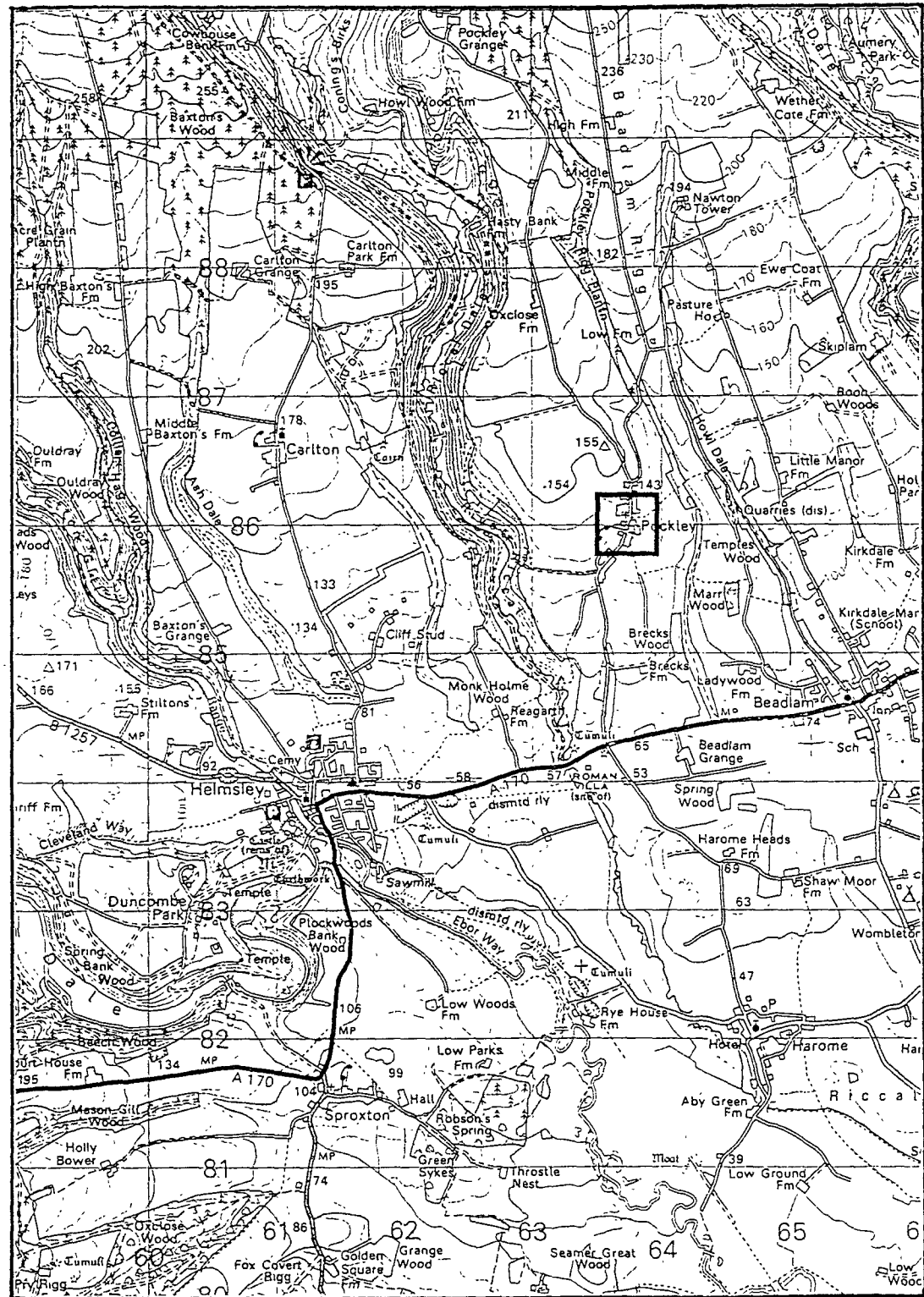
**2.2** Application for the renewal of outline planning permission is being sought on the plot where it is proposed to build a single house. The appraisal and surveys were required in order to establish the historical land usage and better understand the nature of any buried remains that might remain.

**2.3** The site was a roughly rectangular plot measuring 32m by 23m at its greatest extent. It was under short grass at the time of the geophysical survey (November 25th 1996).

## **3. Archaeological Background**

**3.1** Pockley, recorded as *Pochelaf* in the Domesday Book of 1086, records that *Ulfr* had one manor here and one carucate of land was taxable (Faull & Stinson 1986). The name of Pockley is possibly derived from the personal element of *Poca* and *leah* meaning Poca's forest clearing (Smith 1928).

**3.2** Documents reveal that there were eighteen taxpayers by 1300 (Brown 1897) and evidence of medieval activity is depicted on air photographs in the form of old field systems. These are situated all around the village. Indeed, on the eastern side of Brecks Lane the earthworks and current land boundaries seem to indicate that there might have been platforms along the current lane with a back lane to the east, and medieval fields running off beyond this.



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Fig. 1 General and Detailed Site Location

Fig.1

**3.3** Listed buildings in the village date from the 17th to the 19th century, although it is possible that the 17th century houses are of earlier origin, some having cruck frames.

#### **4. Cartographic Appraisal: methodology**

**4.1** Material held by both the North Yorkshire County Council Archives Office and the Sites and Monuments Record Office at Northallerton was collated. This material contains relevant documentary sources and plans, listed buildings of historic interest as well as air photographs. The latter source is important for the correlation of cropmark features with cartographic material. This collation of source material allows the nature, location and proximity of features to the proposed development to be assessed. It involves transcribing sketches of cartographic material and known available cropmark features onto a location map.

**4.2** The purpose of this appraisal was to identify and locate changes in past landscapes and potential features in order to place the geophysical results in context. The main available sources were the early editions of the Ordnance Survey mapping and estate plans. A list of maps consulted is provided in the bibliography.

#### **5. Fluxgate Gradiometry: technical information and methodology**

**5.1** In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches, and the magnetic susceptibility of the geology into which these features have been cut, which causes the most recognisable responses. Other features, such as kilns and ovens, can be more difficult to identify, although their responses are generally stronger than soil filled features. The highest responses are usually due to iron objects and these produce a characteristic response with a rapid change from positive to negative readings (iron "spikes").

**5.2** There are a number of methods employing the fluxgate gradiometer. The most basic of these is referred to as scanning and requires the operator to identify responses whilst covering the site in widely spaced traverses. This method is used as a means of selecting areas for detailed survey when only a sample area is required or to map out the full extent of features located during a sample detailed survey.

**5.3** Detailed gradiometer survey employs the use of an ST1 Geoscan sample trigger and FM36 fluxgate gradiometer to take readings at 0.5m intervals on zig-zag traverses 1m apart within grids measuring 20m by 20m. This means that 800 readings are taken within each 20m grid square. In-house software (Geocon Version 8) was used to interpolate the "missing" line of

data so that 1600 readings are obtained for each complete grid. This method was employed during the survey, with traverses being from north to south and the instrument pointing east.

## **6. Earth Resistance: technical information and methodology**

**6.1** This method of measuring variations in ground resistance involves injecting an electric current into the ground via electrodes (*current electrodes*) and then measuring these variations using another pair of electrodes (*potential electrodes*).

**6.2** For archaeological purposes one current and one potential electrode are placed 15m apart, and at least 20m away from, the area being surveyed. The other two electrodes are mounted on a frame and are moved from one survey point to the next. A Geoscan RM15 resistance meter/data logger combination is employed, with the instrument logging each reading automatically.

**6.3** The technique relies on contrasts existing between the resistance of the archaeological features and surrounding deposits. As this resistance is predominantly dependent on the water content of features the most striking variations will occur between masonry structures (which have a high resistivity) and soil (which has a lower resistivity). It is also possible that the infill of a ditch which is less compact (*i.e* more waterlogged) or contains more stones (*i.e* more resistant than the surrounding sub-soil/geology) will also be mapped as either a low or high resistance anomaly respectively.

**6.4** In this case the resistance survey was done using a remote probe separation of 15m with a mobile probe separation of 0.5m.

## **7. Cartographic Appraisal Results**

**7.1** A survey of the earthworks at Pockley, carried out by Brian Roberts of Durham University in 1991, shows an area of raised earthworks divided by land boundaries or trackways within the proposed development area. Part of this is reproduced as Figure 2. These earthworks appear to be of similar plan to those shown on vertical air photographs where east-west land boundaries and a possible trackway or back lane runs in a north-south direction through the centre of the enclosed land. A possible enclosure is also shown on air photographs and is situated in the north-west corner of the plot (Fig. 3). The enclosure however is difficult to define due to the shadows of trees.





Fig. 2 Part of the earthwork survey of Pockley (Roberts 1991)

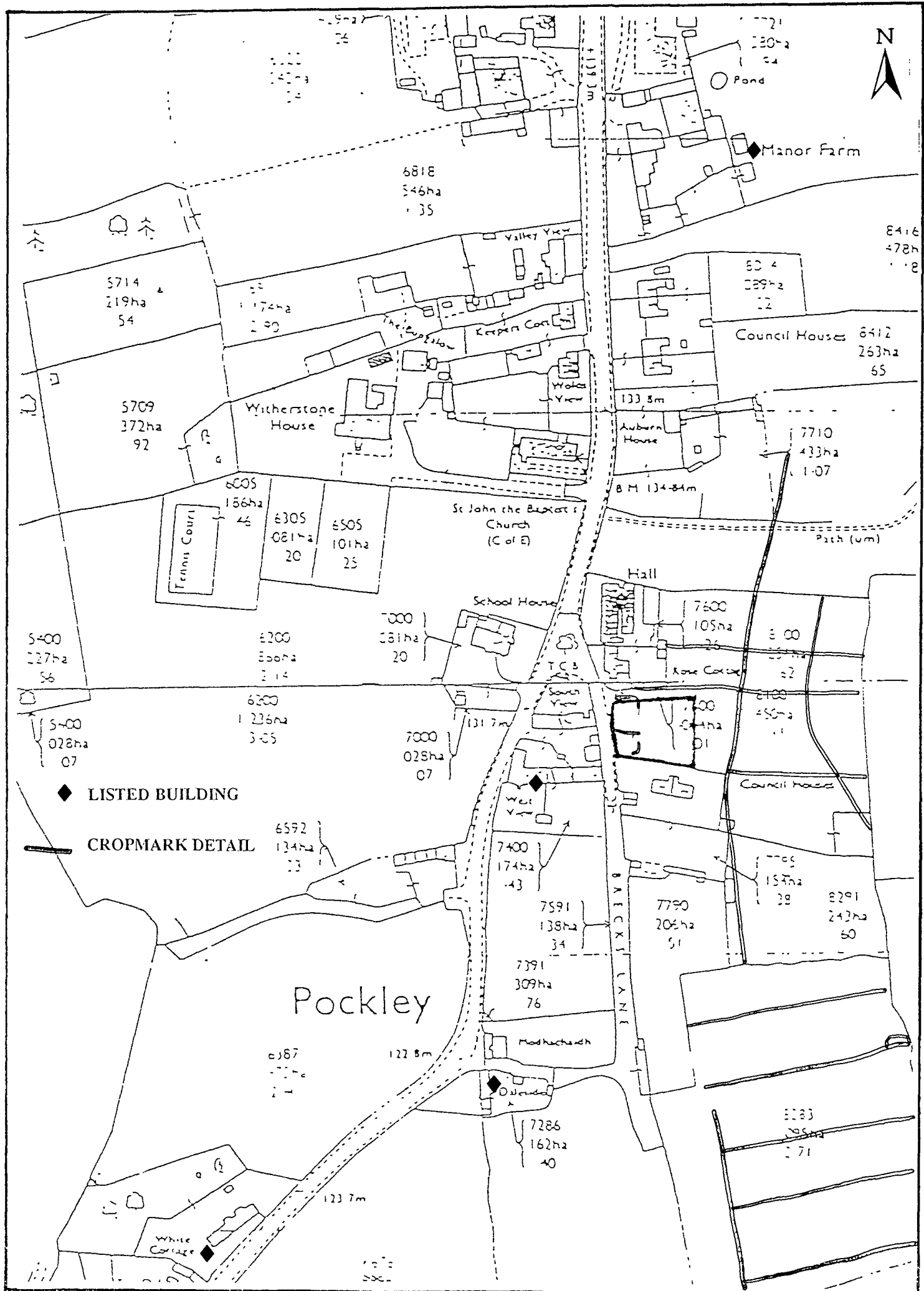


Fig. 3 Location of Listed Buildings and Cropmark Details

**7.2** According to the 18th century estate map (Fig. 4), the majority of plots of land which adjoined the village streets contained buildings, many of which were positioned adjacent to the road and to one corner of their respective plots (Tuke 1785). Land to the east of Brecks Lane and south of the footpath, in this period was divided into nine enclosures of varying widths, six of which were narrow strips and probably relate to the layout of medieval plots.

Three of these plots were placed to the immediate south of the footpath (Field nos 34-36, Fig. 4) each containing a building in the north-west corner and aligned with Brecks Lane. Two narrow plots, adjoining to south (Field nos 37, 40; Fig. 4), which represent the area of proposed development, are recorded as having no houses and are devoid of any features. A further two buildings are situated in the two plots south of the development area (Field nos 41, 43; Fig 2) both in the south-west corner, although the southernmost building appears to be situated to the outside of the boundary on the lane side. A total number of five buildings therefore are situated to the east of Brecks Lane each aligned with the lane and positioned to a north-west or north-east corner of their respective tenements.

**7.3** By the 19th century some of the medieval boundaries had disappeared to form five rather than nine enclosures, a few being further sub-divided to create smaller enclosures at the western edge near Brecks Lane (O.S. 1853; Fig. 5). The majority of buildings are shown to be no longer extant, the only surviving structures being situated to the north, near the road junction of Brecks Lane and placed in one enclosure rather than the two 18th century plots (Field nos 35, 36; Fig. 4). The boundary situated within the development area has also been removed to form a larger enclosure. The layout of the land in the area in question had therefore changed by the mid-19th century.

**7.4** The Ordnance Survey map of 1914 (Fig. 6) shows that the boundaries and enclosures, both then and at present, are similar to those of the mid-19th century (see Fig. 4). The name of *Smithy* is, however, annotated across the development site in 1914, but since no features are depicted in the area the smithy was probably situated in buildings to the west of Brecks Lane or to the south of the site.

**7.5** Vertical air photographs possibly show two sides of an enclosure or building platform in the corner of the area where the proposed development would (Fig. 3). Present listed buildings, within the area of the proposed development, could provide an indication of the age of the houses that used to exist on Brecks Lane.

**7.6** Listed buildings include the 18th century Manor Farm, to the north, (DoE 4/95) and West View Cottage, early 17th century in date and situated to the west of the development area (DoE 4/96). Other buildings to the south of West View Cottage include White Cottage dated to