

# NORTHAMPTONSHIRE ARCHAEOLOGY

**ADDITIONAL GEOPHYSICAL SURVEY  
AT NETHER HEYFORD,  
NORTHANTS**

ADDITIONAL GEOPHYSICAL SURVEY AT  
NETHER HEYFORD, NORTHANTS

**NORTHAMPTONSHIRE COUNTY COUNCIL  
NORTHAMPTONSHIRE ARCHAEOLOGY**

**June 2000**

**1. INTRODUCTION**

An additional geophysical survey was carried out by Northamptonshire Archaeology in March 2000 at Nether Heyford Farm, Nether Heyford, Northants. This work was undertaken on behalf of English Heritage through the North Valley Stabling Complex, a Grade II Listed Building, District Council.

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AT NETHER HEYFORD,  
NORTHANTS**

This site lies on a slight plateau above the Grand Union Canal (Fig 1). Geophysical surveys have been carried out at the site previously identified from fieldwalking, geophysics and excavation (Mortimer 1999).

**2. TOPOGRAPHY AND GEOLOGY**

The site lies on a slight plateau above the Grand Union Canal, approximately 1.20m OD. The ground here, from west to east, is composed of a variety of geological materials, including the Grand Union Canal.

# **ADDITIONAL GEOPHYSICAL SURVEY AT NETHER HEYFORD, NORTHANTS**

## *Abstract*

*An additional geophysical survey at Whitehall Farm, Nether Heyford, Northants (NGR ) was carried out in March 2000. During 1999 limited excavation confirmed the remains of buildings and some of the geophysical anomalies. The additional survey results established the extents of the settlement along with a complex of trackways, enclosures and a pit alignment.*

## **1. INTRODUCTION**

An additional geophysical survey was carried out by Northamptonshire Archaeology in March 2000 at Whitehall Farm, Nether Heyford, Northants (NGR ). The work was undertaken on behalf of Stephen Young through a further grant from the Nene Valley Steering Committee via South Northants District Council.

The site lies to the west of the village of Nether Heyford and to the south of Whitehall Farm (Fig 1). Geophysical survey was carried out in order to establish the extents of the settlement previously identified from fieldwalking, geophysical survey and subsequent excavation (Masters 1999).

## **2. TOPOGRAPHY AND GEOLOGY**

The site lies on a slight plateau above the Grand Union Canal to the east at approximately 120m OD. The ground slopes from west to east down towards the Grand Union Canal. The geology of the survey area is comprised of Northampton

Sand and Ironstone underlain by Glacial Sand and Gravel (British Geological Survey sheet 185, Northampton, published 1980).

### **3. BACKGROUND INFORMATION**

The site is situated to the 0.5km west of Watling Street Roman Road and 1.75km west of Nether Heyford Roman Villa (Fig 1). Trial excavation carried out by Stephen Young during 1999 revealed wall foundations and floor surfaces as well as ditches relating to the enclosures detected by geophysical survey (Masters 1999).

Within the vicinity of the site another Roman villa is located to the east of the village at SP , close to the River Nene. It was discovered during the 17<sup>th</sup> century when a polychrome mosaic with an elaborate geometrical design was found. Further discoveries were made in the early 1950's including part of a mosaic, Roman pottery and some wall footings. Approximately 2km to the south-west, a Roman settlement was uncovered during the construction of the M1 motorway (RCHME 1982, 89; NGR SP ).

### **4. GEOPHYSICAL SURVEY**

The magnetometer survey was carried out using a Geoscan Research FM36 Fluxgate Gradiometer in three separate fields (Fig 2). Parallel traverses were made from south to north at walking pace in fields 1 and 3 whilst in field 2 it was traversed in an east-west direction. Individual readings were taken at 0.25m intervals using a sample trigger for rapid recording of data. The sensor alignment or balance was checked upon completion of survey within each grid square and tilt error maintained below +/-2nT per +/- 20-degree tilt. A further 60 grids covering an area of 2.4ha, each 20m x 20m were surveyed.

The data were analysed using Geoplot 3.0 for windows software. Low magnetism is shown as white and high magnetism as black in the resultant plots (Fig 3.

### **Analysis and Interpretation of results (Figs 2, 3 and 4 )**

The magnetometer survey was carried out in three separate fields and produced extremely good results showing an extensive Roman settlement.

#### **Field 1**

Previous survey results identified a staggered junction of trackways (Fig 4, A) with a series of enclosures to either side (Fig 4, B). Evidence of the ploughed out remains of the pre-enclosure field system of ridge and furrow can be clearly seen in the resultant plots (Fig 4, C). An additional nine grids were surveyed on the eastern side downslope from the previous survey. A continuation of the side ditches of the trackway can be clearly seen (Fig 4, D). A short rectilinear ditch was detected on the north side of the trackway indicating a small enclosure (Fig 4, E). No other significant anomalies were detected.

#### **Field 2**

The survey carried out in this field in 1999 to the south of the main site indicated two side ditches of a trackway extending in this direction. An additional 1.5ha was surveyed which produced exceptionally significant results allowing for a re-interpretation of the previous results but has also established the extents of the settlement.

A large rectilinear enclosure ditch (Fig 4, F) forms the southern boundary of the Roman settlement. Internally, field divisions can be seen having long strips measuring 17m wide by 30m long. These field divisions are very similar to many Roman settlement sites throughout England. For example, Roughground, Lechlade, Gloucestershire as similar regular system of paddocks and droeways delineated by boundary ditches (Allen et al 1993, 179). To the west are two possible areas indicating ploughed out remains of buildings (Fig 4, H). No other significant anomalies were detected.

### Field 3

The survey in this field was extended to understand the linear anomalies recorded in 1999. An additional area of 0.5ha was surveyed and produced some interesting results. The results show two possible pit alignments (Fig 4, J), one running in a south-west to north-east direction and the other in a south-east to north-west direction which forms a right-angle with the former. To the north-east and south of the pit alignments, a series of enclosure ditches were detected (Fig 4, K). The enclosure to the north-east contains a circular anomaly (Fig 4, L) with an opening to the east indicating the remains of a ring ditch/hut circle. In the north-east corner is a D-shaped anomaly (Fig 4, M) possibly denoting the outline of a smaller division within the larger enclosure. To the south the rectilinear ditches denote partial detection of enclosure ditches. The majority of the anomalies have been truncated by a modern pipeline (Fig 4, N). No other significant anomalies were detected.

## **5. DISCUSSION**

The Roman settlement is very similar in its layout to Roughground, Lechlade, Gloucestershire (Allen et al 1993) and other known Roman settlements of the same

character, date and extent can be equated with this. The Roman site is quite extensive with further work needed to find the total extents of the settlement. However, its setting has been established by placing it into a wider landscape context with its relationship to other Roman sites and the Roman road network in the vicinity.

## REFERENCES

Allen, T , Darvill, T, Green, S, and Jones, M 1993 Excavations at Roughground Farm, Lechlade, Gloucestershire: a prehistoric and Roman landscape, Oxford Archaeology Unit , The Oxford University Committee for Archaeology.

Masters, P 1999 Geophysical Survey at Nether Heyford, Northants, Northamptonshire Archaeology Report.

RCHME 1982 An Inventory of Archaeological Sites in South-west Northamptonshire, Vol. IV, Royal Commission on Historical Monuments England.

## ILLUSTRATIONS

Fig. 1 - 1:12500 location plan in association with the Watling Street Roman Road and Roman sites in the vicinity.

Fig. 2 - Location of survey areas – fields 1 – 3, scale: 1:2500.

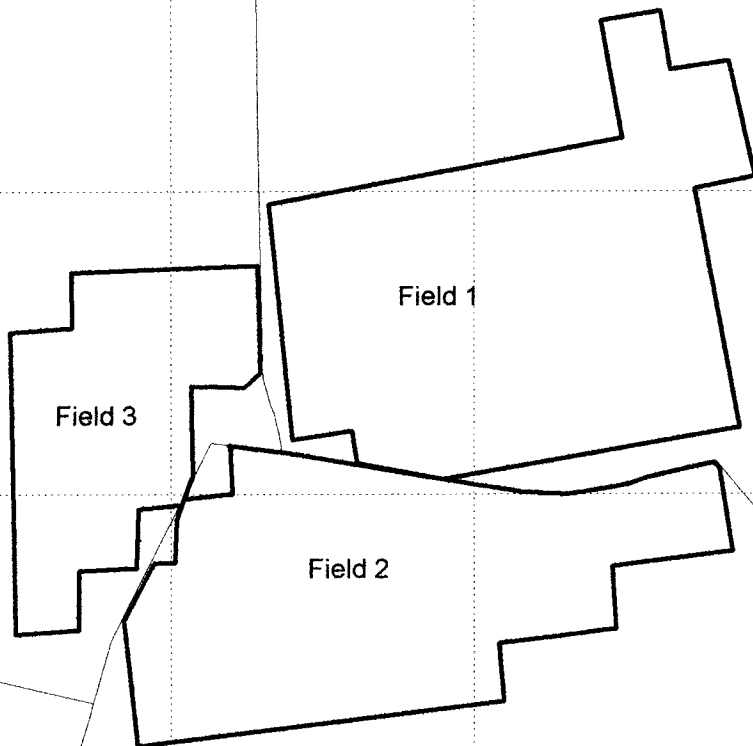
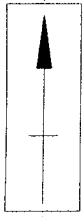
Fig. 3 - Magnetometer Survey plots, scale: 1:1250

Fig. 4 – Interpretation plot, scale 1:1250

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Environment Directorate

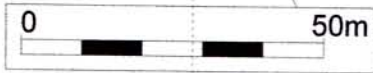
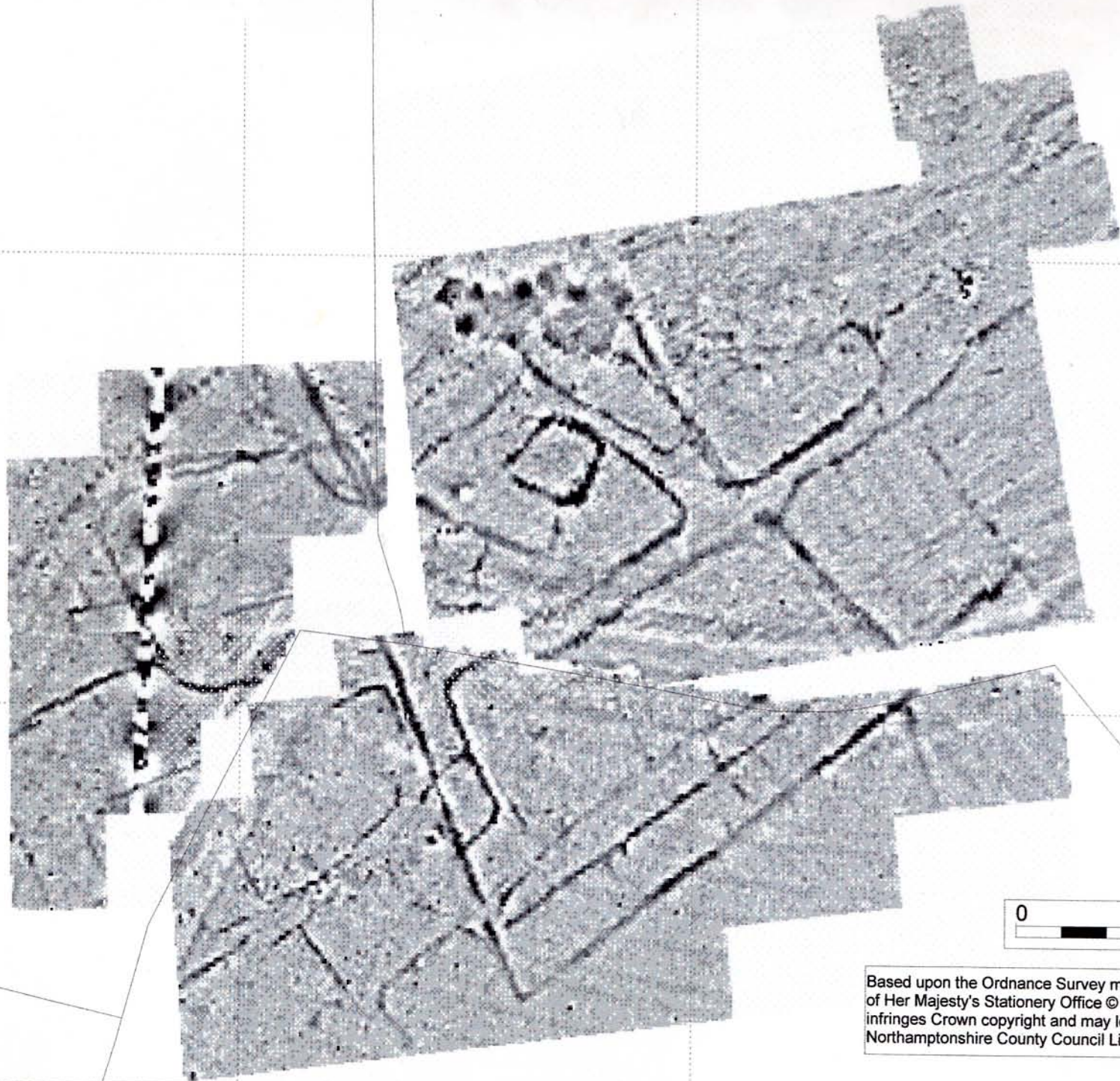
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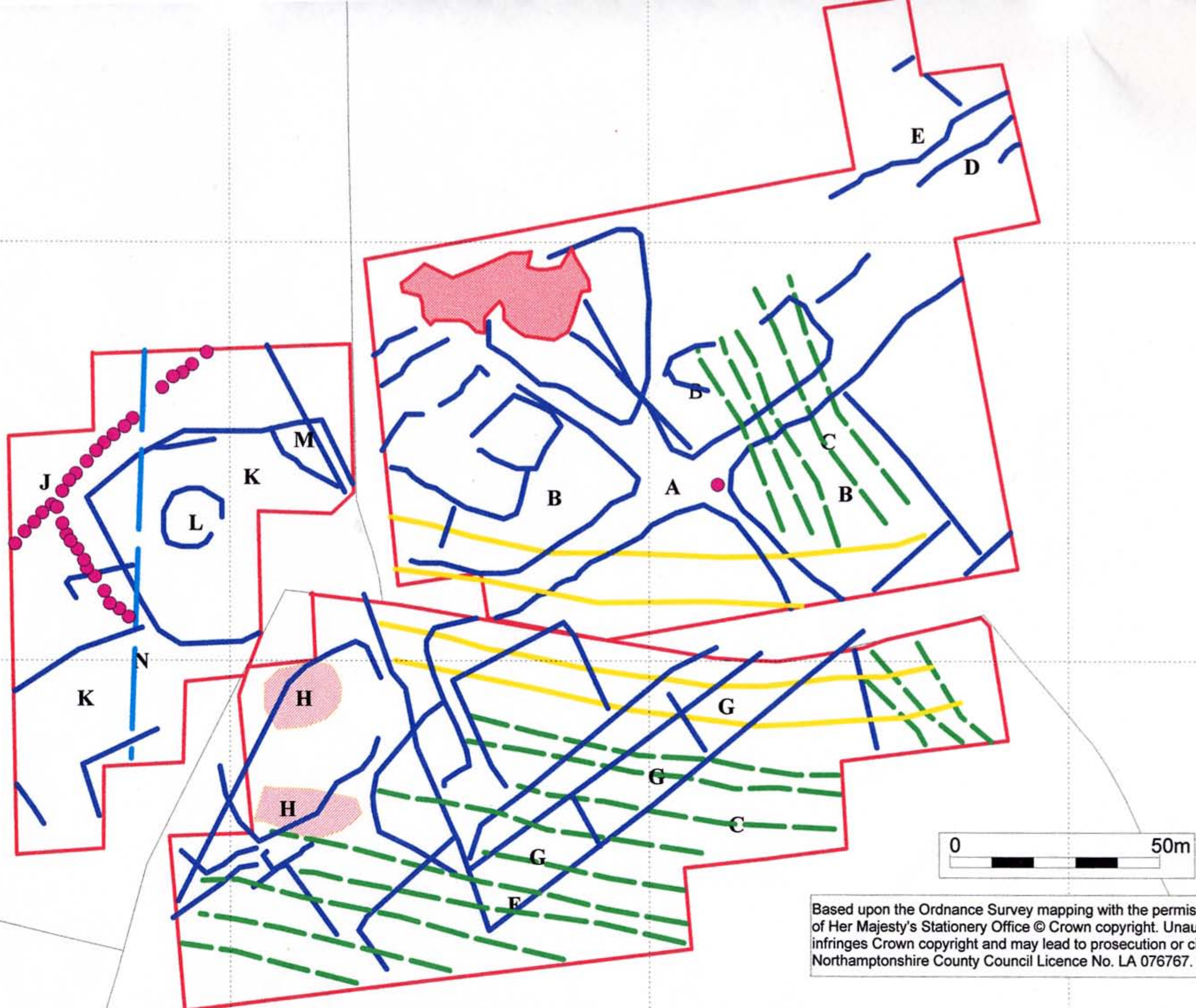
Fig. 2





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Fig. 3



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Fig. 4