# Northamptonshire Archaeology

## Archaeological Geophysical Survey
## Land at 17-67 New Road, Woodston
## Peterborough


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Report 11/193

September 2011

REGISTERED ORGANISATION IfA

**STAFF**

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Text: Adrian Butler

Illustrations: Adrian Butler

**QUALITY CONTROL**

| | Print name | Signed | Date |
|---|---|---|---|
| Checked by | *Pat Chapman* | *PC* | 19/09/11 |
| Verified & Approved by | *Andy Chapman* | *AC* | 19/09/11 |

## *OASIS* REPORT FORM

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|---|---|---|
| **PROJECT DETAILS** | | |
| Project title | Archaeological Geophysical Survey, land at 17-67 New Road, Woodston, Peterborough | |
| Short description | Magnetometer survey carried out by Northamptonshire Archaeology on behalf of VE Parrott Ltd, at New Road, Woodston established that significant quantities of ferrous debris and brick rubble were present in the topsoil of this formerly overgrown copse. A highly magnetic feature in the south of the area, undoubtedly ferrous in nature, could possibly represent a large steel drum or tank. No magnetic anomalies indicating archaeological features were detected. | |
| Project type | Geophysical Survey | |
| Site Status | None | |
| Previous work | None | |
| Current land use | Brownfield | |
| Future work | Unknown | |
| Monument type and period | - | |
| **PROJECT LOCATION** | | |
| County | Peterborough | |
| Site address | 17-67 New Road, Woodston, Peterborough | |
| Post code | | |
| OS co-ordinates | TL 18483 97580 | |
| Area | 0.1 ha | |
| Height aOD | 12m | |
| **PROJECT CREATORS** | | |
| Organisation | Northamptonshire Archaeology (NA) | |
| Project brief originator | Rebecca Casa-Hatton, Peterborough City Council Archaeology Service | |
| Project Design originator | Northamptonshire Archaeology (NA) | |
| Director/Supervisor | Adrian Butler (NA) | |
| Project Manager | Adrian Butler (NA) | |
| Sponsor or funding body | VE Parrott Ltd | |
| **PROJECT DATE** | | |
| Start date | 30 August 2011 | |
| End date | 19 September 2011 | |
| **ARCHIVES** | **Location (Accession no.)** | **Contents** |
| Physical | NA store | Site records |
| Paper | | Client report PDF |
| Digital | | Survey data |
| **BIBLIOGRAPHY** | Journal/monograph, published or forthcoming, or unpublished client report (NA report) | |
| Title | Archaeological Geophysical Survey, land at 17-67 New Road, Woodston, Peterborough | |
| Serial title & volume | Northamptonshire Archaeology Reports 11/193 | |
| Author(s) | Adrian Butler | |
| Page numbers | 3 | |
| Date | 19 Sep. 2011 | |

# Contents


| | | |
|---|---|---|
| **1** | **INTRODUCTION** | **1** |
| **2** | **TOPOGRAPHY AND GEOLOGY** | **1** |
| **3** | **ARCHAEOLOGICAL BACKGROUND** | **1** |
| **4** | **METHODOLOGY** | **2** |
| **5** | **SURVEY RESULTS** | **2** |
| **6** | **CONCLUSION** | **2** |
| | **BIBLIOGRAPHY** | **3** |


**Figures**


| | |
|---|---|
| Fig 1: Site location | 1:5,000 |
| Fig 2: Magnetometer Survey Results | 1:500 |
| Fig 3: Magnetometer Survey Interpretation | 1:500 |

# ARCHAEOLOGICAL GEOPHYSICAL SURVEY
# LAND AT 17-67 NEW ROAD, WOODSTON, PETERBOROUGH
## AUGUST 2011

***Abstract***

*Magnetometer survey carried out by Northamptonshire Archaeology on behalf of VE Parrott Ltd, at New Road, Woodston established that significant quantities of ferrous debris and brick rubble were present in the topsoil of this formerly overgrown copse. A highly magnetic feature in the south of the area, undoubtedly ferrous in nature, could possibly represent a large steel drum or tank. No magnetic anomalies indicating archaeological features were detected.*

## 1 INTRODUCTION

Northamptonshire Archaeology was commissioned by the developer, VE Parrott Ltd, to undertake a geophysical survey of a plot of land to the rear of 17-67 New Road, Woodston, Peterborough (Fig 1). A planning application has been submitted to Peterborough City Council (planning application ref. 10/01684/FUL) for a residential development. The site lies in an area archaeological interest so a condition was attached to planning consent for a programme of archaeological evaluation to be undertaken to determine the archaeological potential of the site. A brief for the archaeological works has been issued by Peterborough City Council's Archaeological Service (PCCAS 2011),

## 2 TOPOGRAPHY AND GEOLOGY

The survey area comprised approximately 0.1 hectares of brownfield land and former copse located to the rear of 17-67 New Road, Woodston, Peterborough (NGR: TL 18483 97580; Fig 1). Due to the nature of the site, including demolished buildings and trees only the northern half of the site was available for prospection. At the time of survey the remaining trees were in the process of being removed. A steel fence around Brewster Avenue County Infants School bounds the site to the east, and a raised area of former allotments adjacent to housing, to the north. Further housing is to the west, with a band of mixed refuse against the fencing. The south of the site included a wood pile from the cut-down tree awaiting chipping, and a brick-hardcore ramp to the demolished stable blocks beyond (Fig 2).

The solid geology of the site is mapped as Great Oolite Group sandstones, limestones and argillaceous rocks. Drift geology is river terrace sands and gravels (Geological Survey of Great Britain Online www.bgs.ac.uk/geoindex/home.html accessed 19/09/11). The site is situated at an elevation of approximately 12m AOD.

## 3 ARCHAEOLOGICAL BACKGROUND

The brief states that the proposed development site is located in an area of known archaeological potential (PCCAS 2011). Early prehistoric activity is attested by a Neolithic pit at 'The Walnuts', off Oundle Road 200m east of the site (ads.ahds.ac.uk/archsearch/record.jsf?titleId=1893200).

Features tentatively identified as prehistoric were discovered at the former British Sugar plant *c* 500m west of the development area (ads.ahds.ac.uk/archsearch/record.jsf?titleId=1853330). Saxon archaeology has

been recorded at several locations around Woodston. In particular a 5th-6th century inhumation and cremation cemetery discovered *c* 100m east of the site (PCCAS 2011).

A sequence of Medieval and post-medieval occupation has been identified at the 'Walnuts' site.

## 4 METHODOLOGY

The magnetometer survey was conducted with *Bartington Grad 601-2*, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

A tape measure and optical square were used to divide the site into 10m grid squares, which formed the basic units of survey. The grid was then located to permanent landscape features. The gradiometers were carried at a brisk but steady pace through each grid, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 400 measurements per grid.

All fieldwork methods complied with the written scheme of investigation (NA 2011), and guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; I*f*A forthcoming).

Survey data was processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function.

Both the raw and processed data are presented in this report in the form of greyscale plots (scale +50nT to -50nT black ~ white) which have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative plot has been produced and overlaid on the data in Figure 3.

## 5 SURVEY RESULTS (Figs 2 & 3)

The survey recorded considerable amounts of dipolar (paired positive/negative anomalies) magnetic activity across the area. A halo of high readings resulted from the iron fence on the eastern edge of the site. Most of the magnetic anomalies in the north and west of the area will have resulted from both surface and sub-surface brick and ferrous debris. A larger magnetic anomaly was detected towards to centre of the southern half of the area, reflecting a substantial unknown ferrous feature.

## 6 CONCLUSION

Magnetometer survey at New Road established that significant quantities of ferrous debris and brick rubble were present in the topsoil of this formerly overgrown copse. A highly magnetic feature in the south of the area, undoubtedly ferrous in nature, could possibly represent a large steel drum or tank. No magnetic anomalies indicating archaeological features were detected.

## BIBLIOGRAPHY

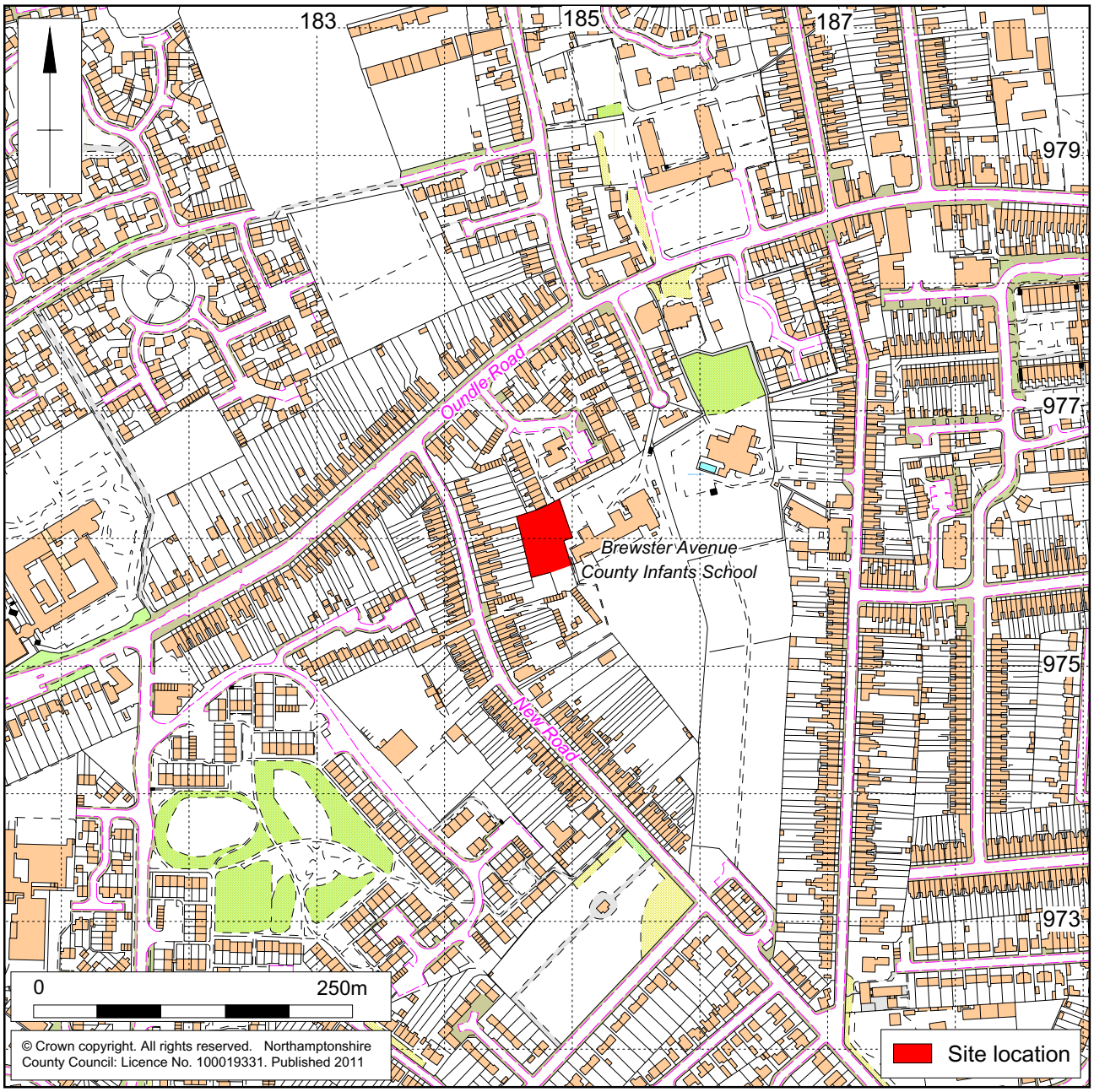
Bartington, G, and Chapman, C, 2003 A high-stability fluxgate magnetic gradiometer for shallow geophysical survey applications, *Archaeological Prospection*, **11**, 19-34

EH 2008 *Geophysical Survey in Archaeological Field Evaluation,* English Heritage

IfA forthcoming (2011) *Standard and Guidance for Archaeological Geophysical Survey,* Institute for Archaeologists Technical Paper

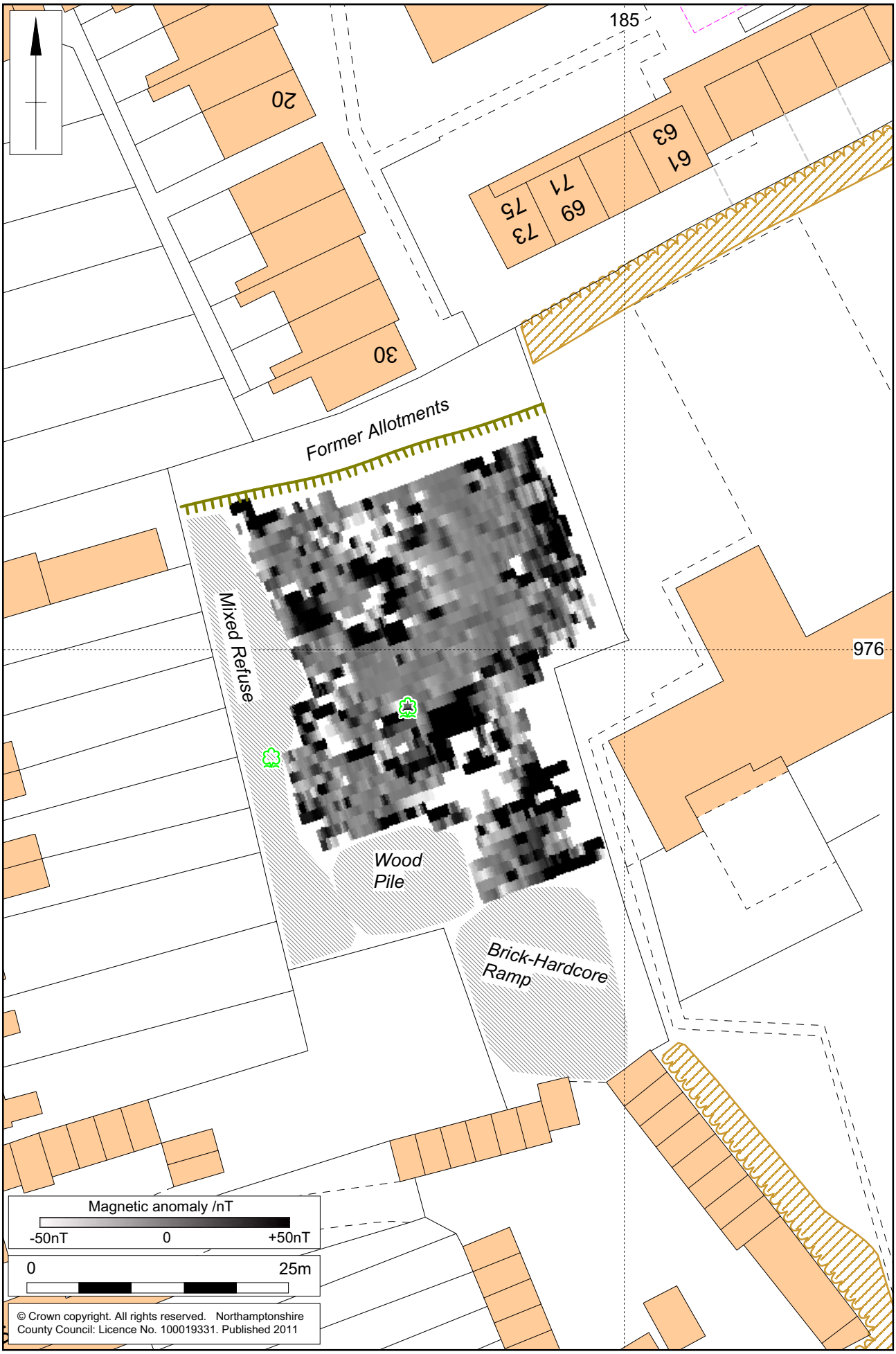
PCCAS 2011 *Brief for Archaeological Investigations: Land to the rear of 17-67 New Road, Woodston, Peterborough,* Peterborough City Council Archaeological Service





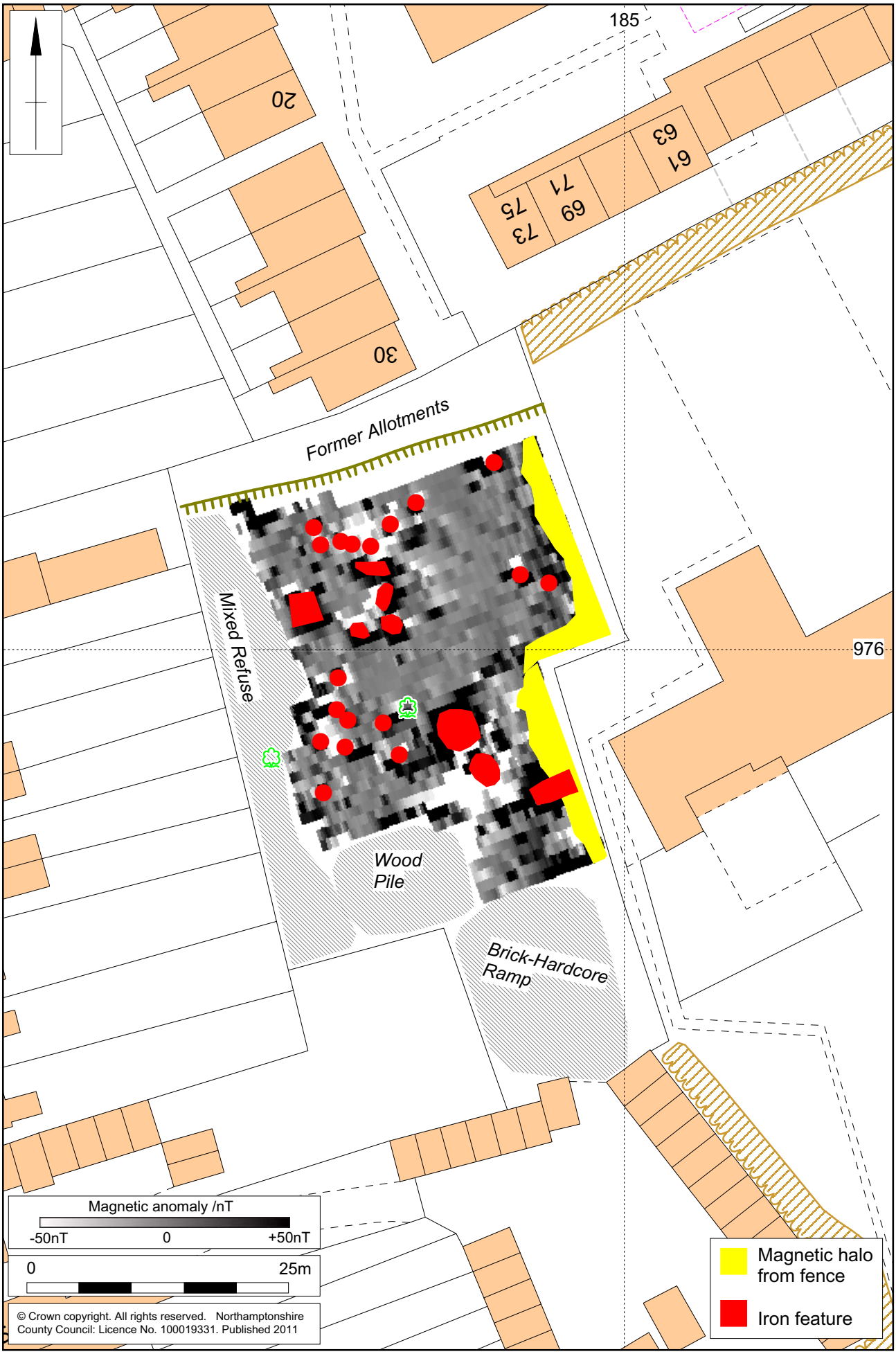

Scale 1:5000

Site Location Fig 1




1:500

Magnetometer Survey Results Fig 2




1:500

Magnetometer Survey Interpretation Fig 3

Northamptonshire County Council

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