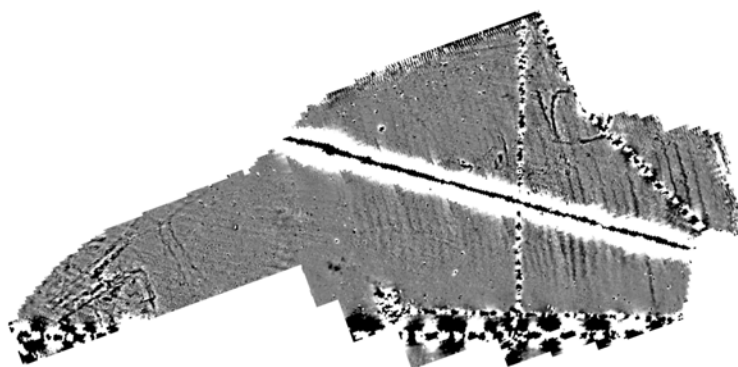




Northamptonshire Archaeology

Archaeological geophysical survey of land
East of Doddington Road, Wellingborough
Northamptonshire
October 2012



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QUALITY CONTROL

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Approved by	Andy Chapman	<i>AC</i>	9/11/12

OASIS REPORT FORM**OASIS No 137179**

PROJECT DETAILS		
Project name	Archaeological geophysical survey of land east of Doddington Road, Wellingborough, Northamptonshire, October 2012	
Short description	Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey on the site of a proposed crematorium on land east of Doddington Road, Wellingborough, Northamptonshire. The survey identified three areas of potential archaeological features. At the west of the site enclosure ditches and possible field boundaries were found which probably relate to a previously known Romano-British site. At the east of the survey area a further two undated enclosures and other ditches were present. Ridge and furrow cultivation was evident across the survey area, which was also traversed by a number of modern services.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Uncultivated arable farmland	
Future work	Unknown	
Monument type/ period	Romano-British	
Significant finds		
PROJECT LOCATION		
County	Northamptonshire	
Site address	Land east of Doddington Road, Wellingborough, Northamptonshire	
Study area	5.8ha	
OS grid reference	48902658	
Height OD	58m – 85m aOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator		
Project Design originator	Northamptonshire Archaeology	
Director/Supervisor	Mark Holmes	
Project Manager	Steve Parry	
Sponsor or funding body	Mercia Crematoria Developments Ltd	
PROJECT DATE		
Start date	29 October 2012	
End date	30 October 2012	
ARCHIVES		
	Location	Content
Physical	N/A	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
BIBLIOGRAPHY		
	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological geophysical survey of land east of Doddington Road, Wellingborough, Northamptonshire, October 2012	
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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND
EAST OF DODDINGTON ROAD, WELLINGBOROUGH,
NORTHAMPTONSHIRE
OCTOBER 2012**

ABSTRACT

Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey on the site of a proposed crematorium on land east of Doddington Road, Wellingborough, Northamptonshire. The survey identified three areas of potential archaeological features. At the west of the site enclosure ditches and possible field boundaries were found which probably relate to a previously known Romano-British site. At the east of the survey area a further two undated enclosures and other ditches were present. Ridge and furrow cultivation was evident across the survey area, which was also traversed by a number of modern services.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by Mercia Crematoria Developments Ltd, to carry out a detailed magnetometer survey on land east of Doddington Road, Wellingborough, Northamptonshire. (NGR SP 890 658; Fig 1). The work was intended to inform, in advance of determination, a planning application for the construction of a crematorium and associated infrastructure.

The geophysical survey was undertaken in accordance with a Written Scheme of Investigation prepared by Northamptonshire Archaeology (NA 2012) and approved by the Northamptonshire County Council Assistant Archaeological Advisor. An additional c 1.8ha was added onto the survey, subsequent to production of the WSI, at the request of the client. This was in order to account for retained land at the west and around the perimeter of the application area.

The fieldwork was undertaken from 29 to 30 October 2012, and comprised the detailed magnetometer survey of a total of c 5.8ha of land.

2 TOPOGRAPHY AND GEOLOGY

The proposed development area comprises a single large field of former arable farmland situated to the south of the A45 dual carriageway. It is bordered by the Doddington Road at the north-west and HM Prison Wellingborough at the north-east (Fig 1).

At the time of the survey, the site was not cultivated and had been left as rough ground with some overgrown areas. Isolated ground disturbance, probably former test pits, was noted throughout the survey area. Tractor ruts and low plough ridges were also present. An overhead power line crossed the site from east to west.

The site is located on the northern slope of the Nene Valley. At the top of the slope, in the north-west, the ground height is approximately 85m aOD whilst at its lowest point in the south-east of the survey area the height is around 58m aOD. Towards the south of the survey area there is a dry slade which runs from west to east down towards the River Nene which lies c 500m to the east.

As the ground falls away to the south-east, a series of geological bedrock strata are present across the site (BGS 2012). The lower, southern half of the site is Whitby Mudstone formation, whilst in the northern half Northampton Sand (ironstone), Stamford Member (sandstone and siltstone) and Rutland Formation (mudstone) are progressively exposed.

3 ARCHAEOLOGICAL BACKGROUND

A cropmark complex, possibly a prehistoric settlement, is recorded in the county Historic Environment Record (HER) as being located c 300m south-west of the application area (HER 3837). Immediately at the north of this and situated c 160m to the west of the application area, but within retained land, previous archaeological observation and recording identified a limestone wall, ditches and pottery indicating the site of a Romano-British settlement (HER 3836).

Approximately 250m to the south-east of the application area, early-middle Saxon pottery has been recovered during fieldwalking (HER 3835). This latter scatter of pottery may represent the location of a settlement of this date.

A Second World War searchlight battery was previously located immediately north-west of the site (HER 9043). No finds or archaeological monuments are recorded from the application area itself.

In the wider environs, approximately 1km to the west, excavations in 1979 on the A45 new road examined a defended enclosure dating to the late Iron Age (Windell 1981) and in 1997-98 there was open area excavation of an adjacent area of extensive middle and late Iron Age settlement (Thomas and Enright 2003).

4 METHODOLOGY

The 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).

The survey area was divided into a grid of 30m squares, which were established with a tape measure and optical square and tied in to the Ordnance Survey National Grid by means of a Leica 1200 dGPS. The gradiometers were carried at a brisk but steady pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; IfA 2011).

The survey data were processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of a grey-tone plot, at a scale of +/- 5nT black/white. This has been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay (Fig 3) and a plot of the unprocessed data (Fig 5) have also been produced.

5 SURVEY RESULTS

A series of magnetic anomalies interpreted as archaeological features, ridge and furrow cultivation and modern service pipes and cables were located across the survey area.

5.1 Archaeological features

At the west of the survey area, occupying high ground, is a series of ditches (A), aligned north-east to south-west and north-west to south-east, possibly describing rectilinear enclosures. They display a magnetic response up to +10nT. Their southern extent has been obscured by a strong signal from a modern service pipe. To the north and east of (A) are further linear ditches (B) which may form the boundaries to either trackways or field systems. These are less magnetically enhanced, with readings of around +3nT.

These features coincide with a previously known archaeological site, recorded in the Northamptonshire Heritage Environment Record (HER: 3836). This comprised a limestone wall, ditches and pottery indicating the site of a Romano-British settlement. It is likely that the features recorded by the geophysical survey relate to this settlement.

Within the eastern half of the survey area a magnetically weaker and more sinuous linear feature (C), also possibly represents a ditch aligned approximately north-west to south-east. This possible ditch may curve around to the north-east at its southern end and based upon its form, may represent a prehistoric field boundary or enclosure. Its weak magnetic response, approximately +2nT, suggests that its fill may not derive from occupation material

Two linear ditches are present in the north-east corner of the survey area (D). The northernmost of these appears to have been bisected by a modern service pipe.

At the eastern edge of the survey area, a series of curvilinear ditches with a magnetic response up to +13nT form an enclosure approximately 38m by 34m (E). Its north-eastern corner lies just beyond the survey area. There is an entrance at its south-west corner, but immediately adjacent to this are a series of anomalies,

possibly representing pits. The eastern half of the enclosure has been crossed by a modern service pipe.

A further linear anomaly, possibly a ditch, lies immediately adjacent to the western side of the enclosure. However, this lies on the same alignment as the series of plough furrows and may simply be a magnetically enhanced furrow.

5.2 Ridge & furrow cultivation

Magnetic anomalies representing ploughed out ridge and furrow cultivation, probably dating to the medieval period, are present across the site. Two directions of furrows are evident. In the western half of the survey area furrows are aligned west-north-west to east-north-east. In the eastern half of the survey area they are aligned north-north-west to south-south-east. Some furrows displayed enhanced magnetic susceptibility, probably due to the inclusion of soils from nearby or underlying archaeological features.

5.3 Modern services

Five pipe and cable runs were located by the geophysical survey. At the south, an east west service (thought to be a gas pipe) crosses the entire width of the survey area. Immediately at its north, and parallel with it, is a second buried service which terminates in an area of magnetic disturbance (F). This area of disturbance corresponds with a pond shown on Ordnance Survey mapping but not extant in the field at the time of survey. A north to south anomaly, probably an electricity cable, runs from this latter service towards the northern corner of the field. A fourth buried service line also enters in the northern corner and skirts the eastern edge of the field before carrying on towards the south-east. The survey area is bisected by a further buried service that runs from the Doddington Road in the north-west towards the south-east corner of the field.

5.4 Other anomalies

Various discreet dipolar anomalies occur at random across the site. Most of them will relate to insignificant pieces of ferrous debris. Some larger ferrous halos are also present around the margins of the field, reflecting the presence of adjacent metal fences.

6 CONCLUSION

The geophysical survey identified three separate areas of substantive archaeological activity, two of which were located within the application area, the third being in the reserved land to the west.

The archaeological features at the west of the survey area comprised enclosures and ditches probably related to a known Romano-British site. In the eastern half of the survey, within the application area, two further enclosures were present. Although undated, their form would perhaps suggest a prehistoric date. The

easternmost of these displayed relatively strong magnetic readings, possibly suggesting that its fill derived from occupation material. Isolated anomalies at its southern entrance may represent pits. The other enclosure, by contrast, had low magnetic enhancement which may indicate it lay away from a settlement focus. There were further possible ditches towards the northern edge of the survey area.

The buildings, car parks and access roads of the proposed development are predominantly located outside the areas of archaeological features detected by the geophysical survey (Fig 4). Where archaeological features were detected by the survey, the development proposes gardens and woodland burial.

The survey results are thought likely to provide a reasonable overview of the main archaeological features within the proposed development area, although it should not be assumed that all significant remains have been detected.

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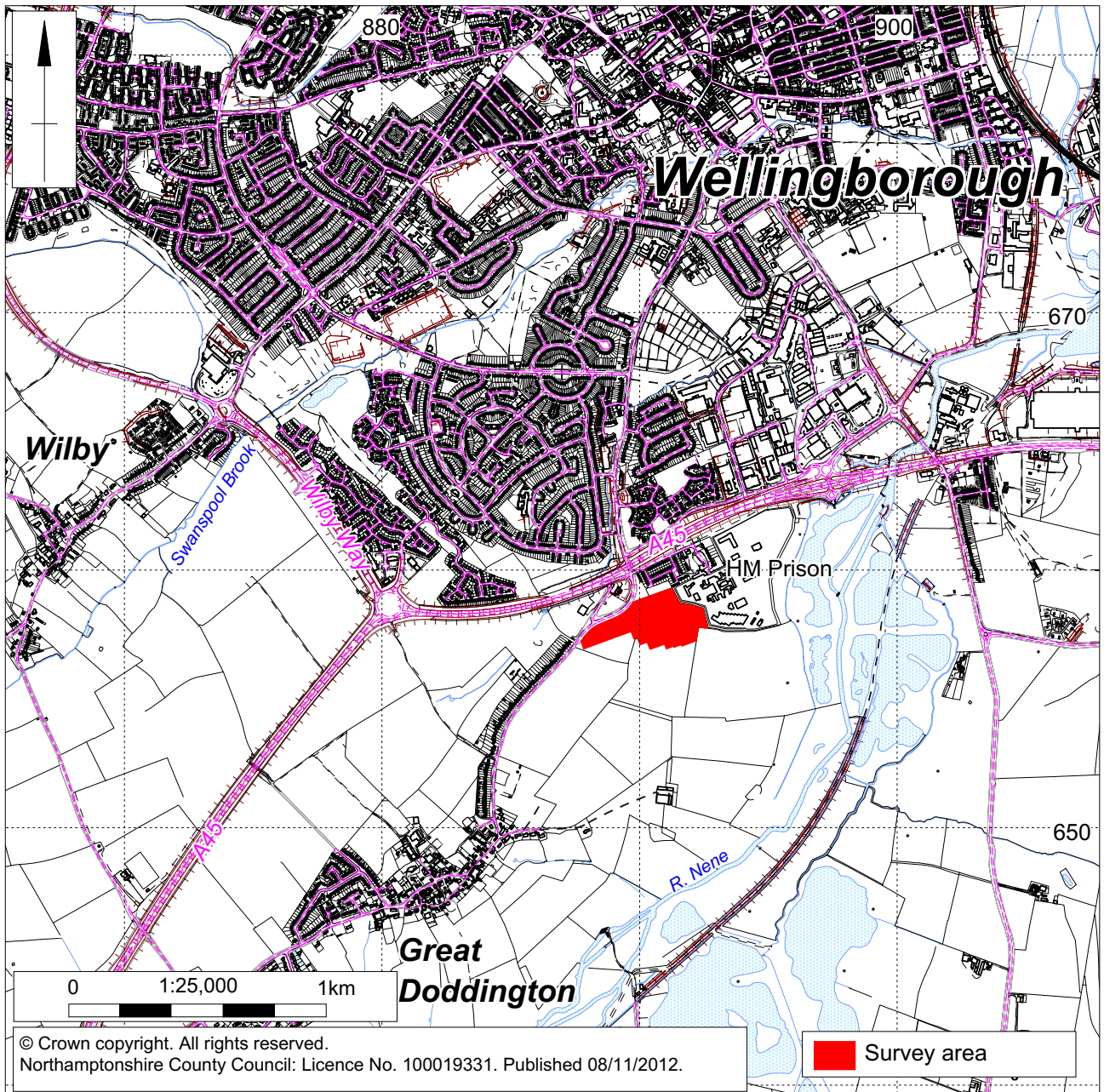
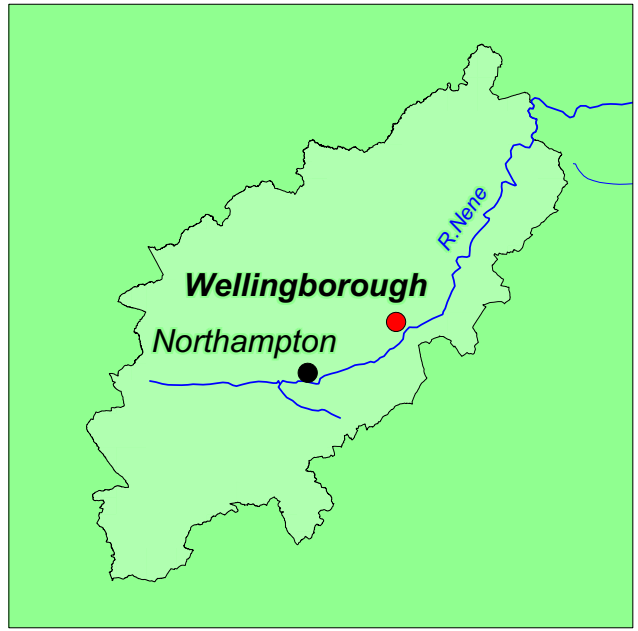
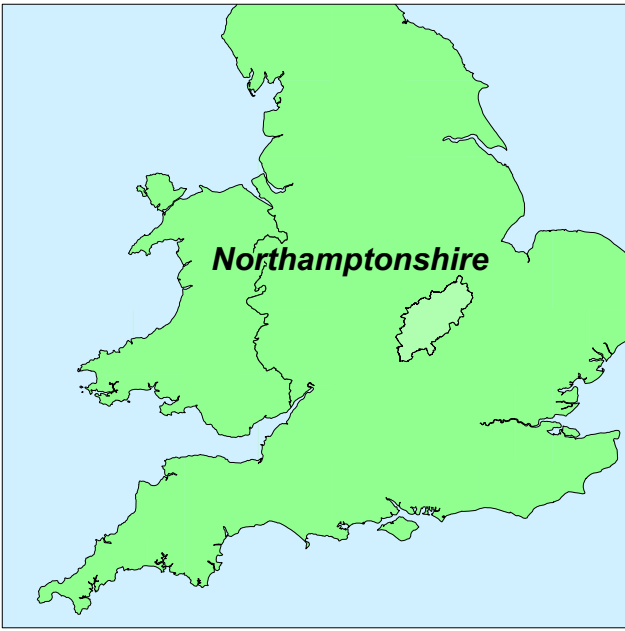
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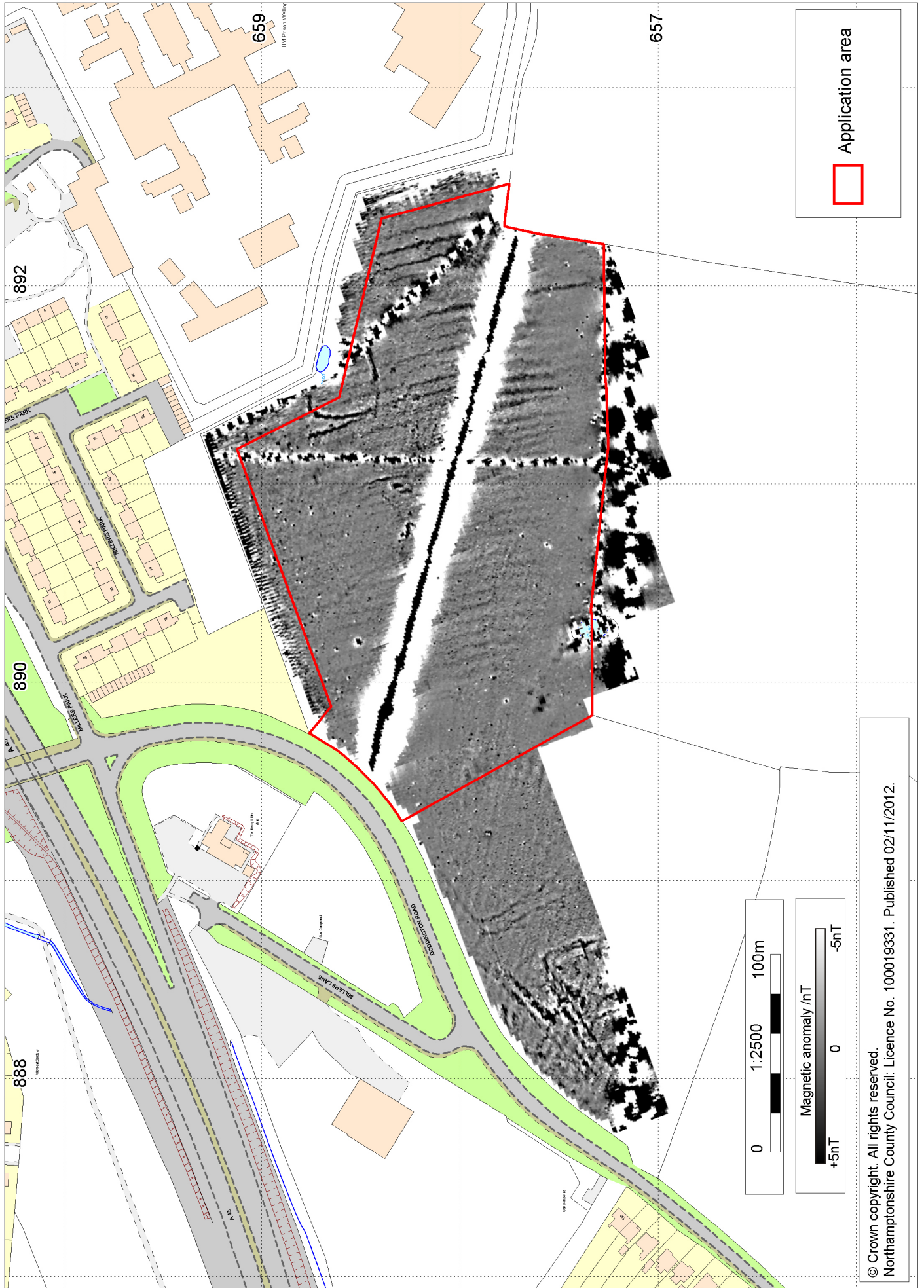
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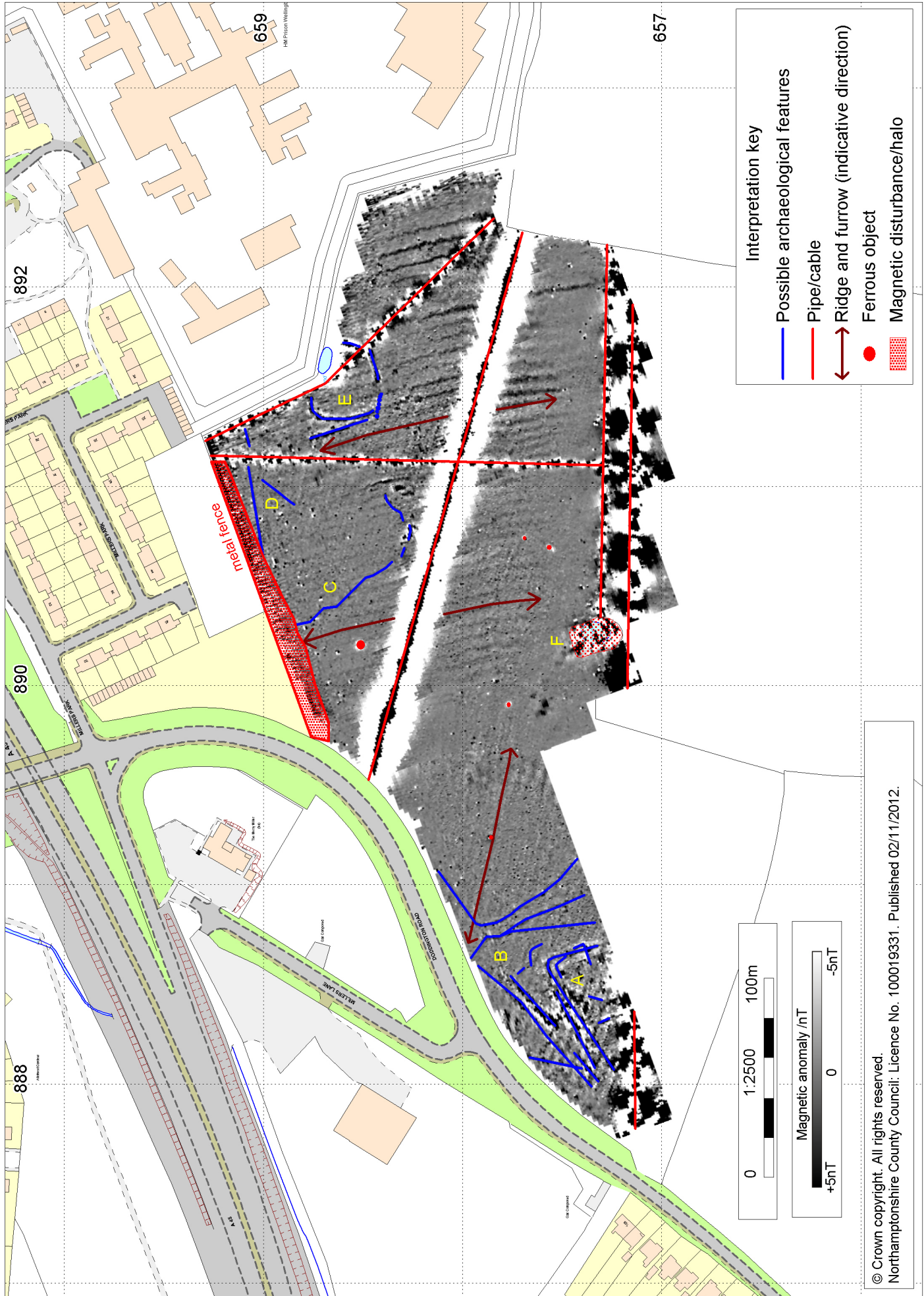
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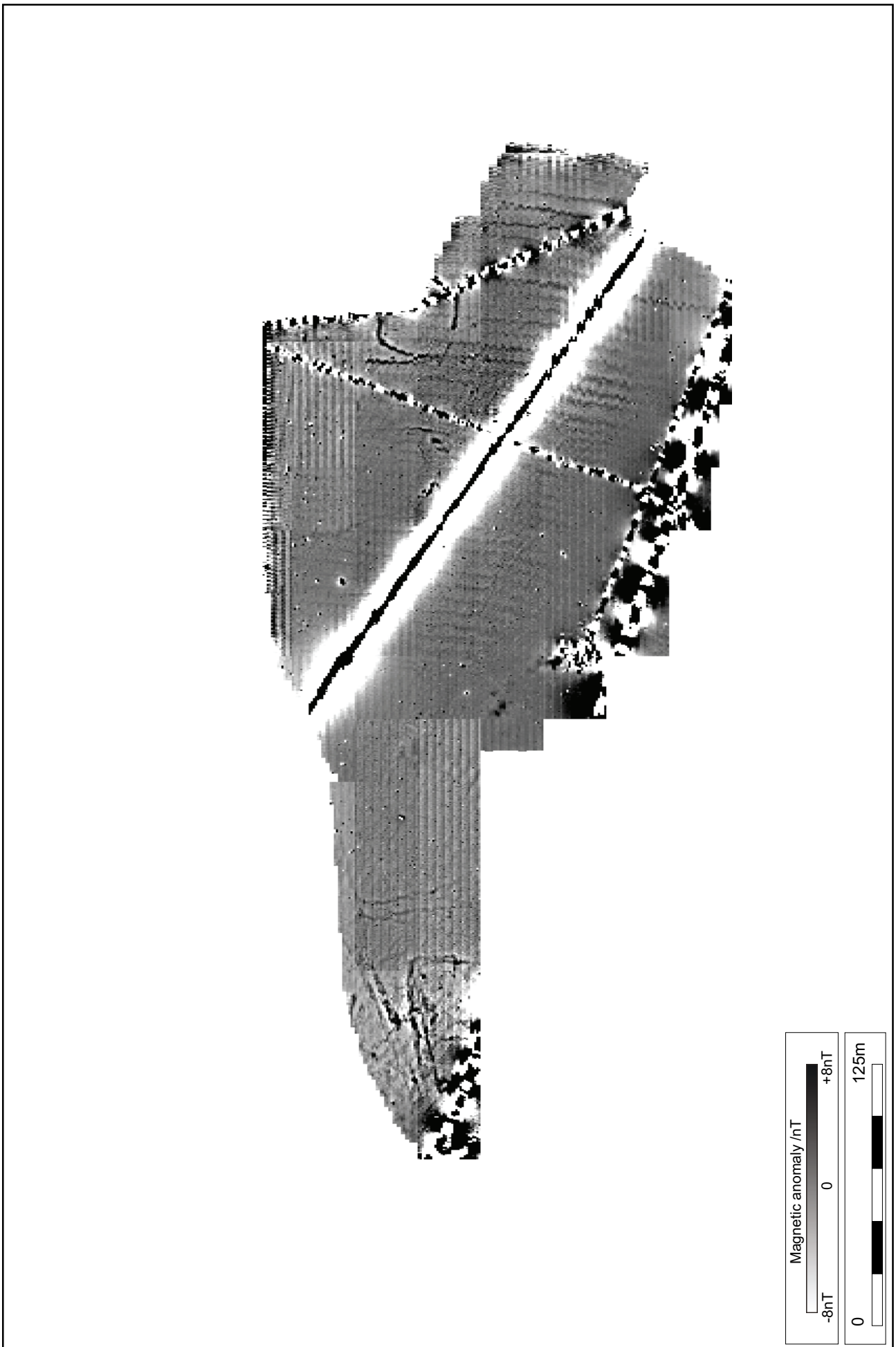


Scale 1:25,000

Site Location Fig 1







Scale 1:2500

Unprocessed magnetometer data Fig 5



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