



Northamptonshire Archaeology

Archaeological Geophysical Survey and Trial Trenching on land at Thurston Drive, Kettering Northamptonshire



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**Northamptonshire
County Council**

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Report 11/211

October 2011



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OASIS REPORT FORM

PROJECT DETAILS		
Project title	Archaeological Geophysical Survey and Trial Trenching on land at Thurston Drive, Kettering, Northamptonshire	
Short description	Northamptonshire Archaeology (NA) was commissioned by Wates Living Space to conduct trial trenching on land proposed for development at Thurston Drive, Kettering, Northamptonshire. The survey and subsequent trial trenching confirmed the presence of extensive modern disturbance. No archaeological features were recorded and no finds were recovered.	
Project type	Evaluation- geophysical survey and trial trenching	
Site status	None	
Previous work	None	
Current land use	Brownfield, scrub	
Future work	Unknown	
Monument type and period	Made ground	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Thurston Drive, Kettering, Northamptonshire	
Post code		
OS co-ordinates	SP 86635 76975	
Area	1.1ha	
Height aOD	67m	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Liz Mordue, Northamptonshire County Council Planning (NCCP)	
Project Design originator		
Director/Supervisor	Carol Simmonds (NA)	
Project Manager	Iain Soden and Steve Parry (NA)	
Sponsor or funding body	Wates Living Space	
PROJECT DATE		
Start date	August 2011	
End date	October 2011	
ARCHIVES	Location	Contents
Physical	NA store KTD11	Client report, site contexts, registers and permatrace drawings, colours slides and black and white prints and negatives
Paper		
Digital		
BIBLIOGRAPHY		
Journal/monograph, published or forthcoming, or unpublished client report (NA report)		
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Contents

1	INTRODUCTION	1
2	BACKGROUND	1
	2.1 Topography and geology	1
	2.2 Archaeological and historical background	4
3	AIMS AND METHODOLOGY	5
	3.1 Geophysical survey	5
	3.2 Trial trenching	6
4	RESULTS	9
	4.1 Geophysical survey	9
	4.2 Trial trenching	9
5	CONCLUSION	11
	BIBLIOGRAPHY	11

Appendices

- Appendix 1: Historic Environment Record data
 Appendix 2: Context Inventory

Figures

- Front cover: The site prior to excavation, looking north-west
 Fig 1: Site location, 1:17,500
 Fig 2: Historic Environment Record data, 1:17,500
 Fig 3: Magnetometer Survey Results, 1:1,000
 Fig 4: Trial Trench locations, 1:1,000
 Fig 5: General view of Trench 3, looking north-west
 Fig 6: Section at the south-eastern end of Trench 1, looking north-east
 Fig 7: Section at the north-western end of Trench 3, looking south-west

**ARCHAEOLOGICAL GEOPHYSICAL SURVEY AND TRIAL TRENCHING ON
LAND AT
THURSTON DRIVE, KETTERING, NORTHAMPTONSHIRE
OCTOBER 2011**

Abstract

Northamptonshire Archaeology (NA) was commissioned by Wates Living Space to conduct trial trenching on land proposed for development at Thurston Drive, Kettering, Northamptonshire. The survey and subsequent trial trenching confirmed the presence of extensive modern disturbance. No archaeological features were recorded and no finds were recovered.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by Wates Living Space, on behalf of their clients, to conduct geophysical survey and trial trenching on land at Thurston Drive, Kettering, Northamptonshire (NGR: SP 8663576975; Fig 1). Planning permission was granted with a condition for an archaeological programme of works by Kettering Borough Council for residential development (KET/2010/0741).

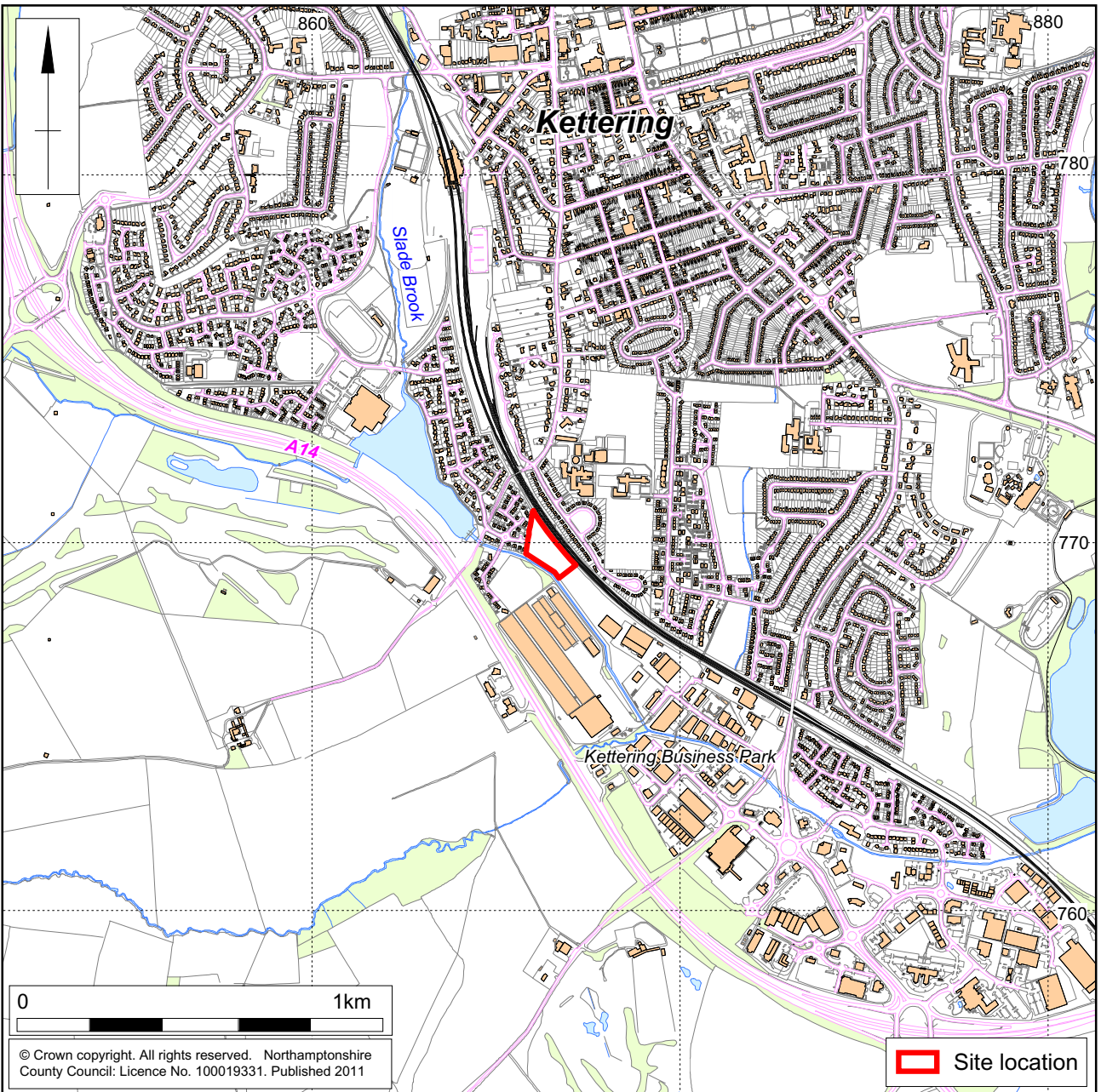
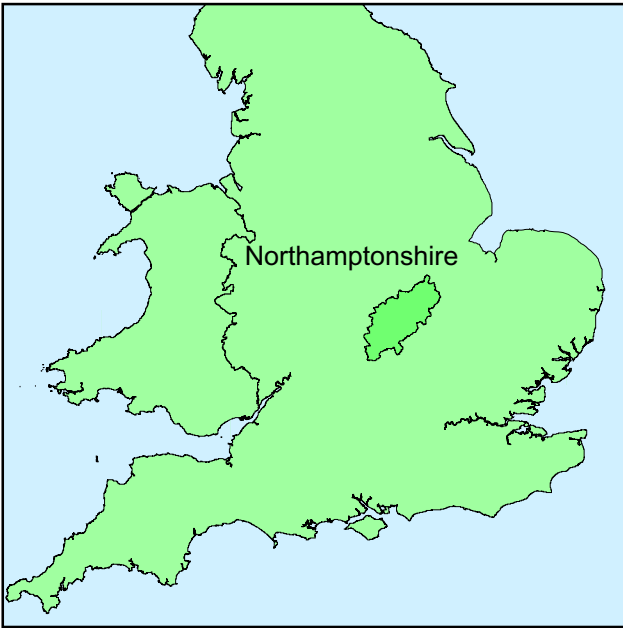
A total of 1.1ha of land was subject to survey and 160 linear metres of trench was excavated. A brief for archaeological works was issued by Northamptonshire County Council's Assistant Archaeological Advisor (Mordue 2011) and a Written Scheme of Investigation was prepared by NA (Wolfram-Murray 2011).

2 BACKGROUND

2.1 Topography and geology

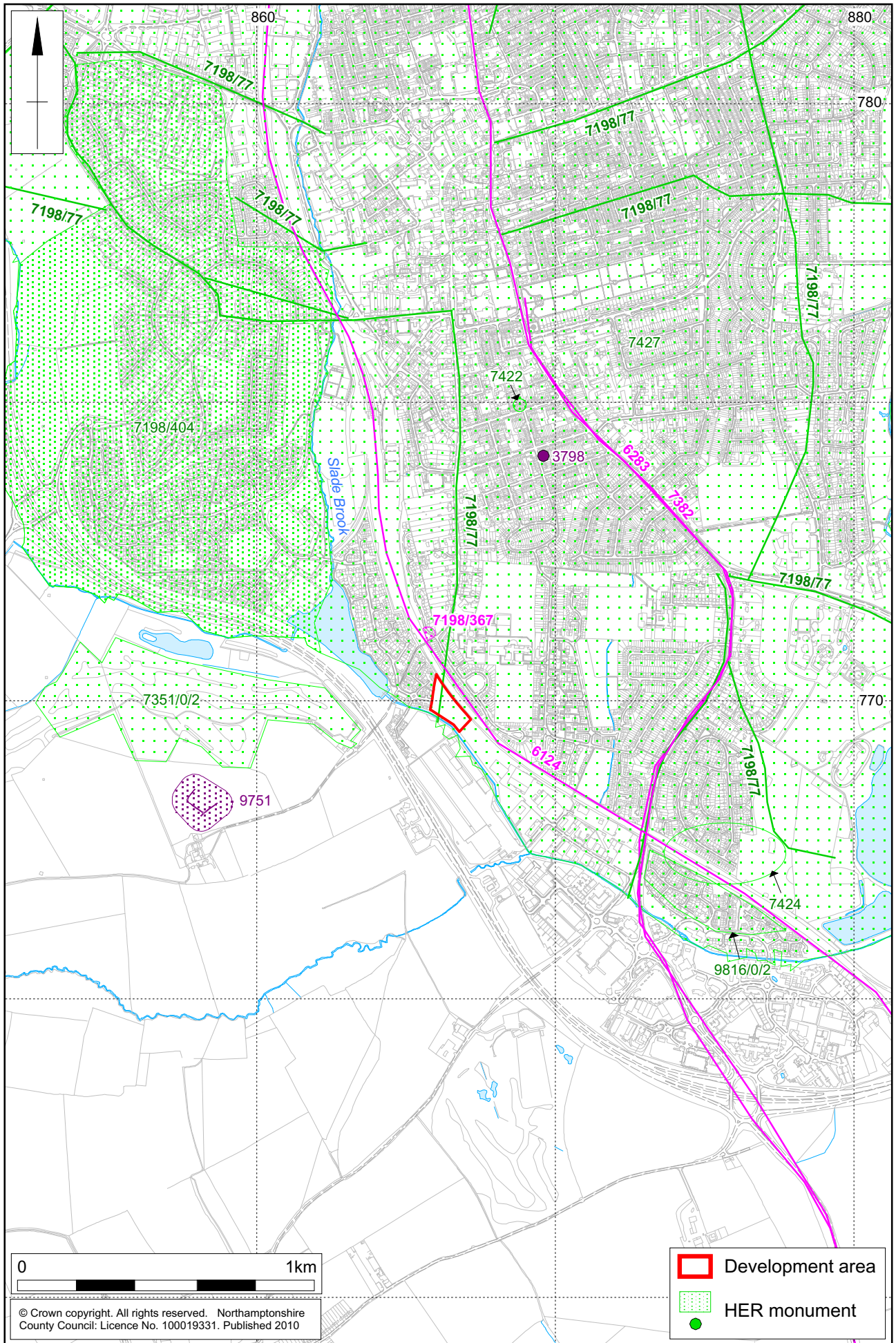
The development area is situated to the south of Kettering town centre, adjacent to Kettering Business Park. The A14 trunk road between Cathorpe and Lowestoft is situated 200m to the south-west. The site is bounded to the north by a railway line and to the south by a deeply incised stream (Slade Brook). Modern residential development around Thurston Drive lies to the west and the industrial and commercial units of Kettering Business Park and Pytchley Lodge Road to the east.

The site is on gently sloping open ground, falling from north-west to south east (between 61.0m and 63.5m aOD). The land has been brown field scrub for some time. The underlying geology comprises Lias Group mudstone, siltstone, limestone and sandstone (www.bgs.ac.uk/geoindex/home.html).



Scale 1:17,500

Site location Fig 1



2.2 Archaeological and historical background

A search of Northamptonshire County Council's Historic Environment Record (HER) was undertaken (Fig 2; Appendix 1). The following summarises the information taken from the HER, selected historic maps and other archaeological reports. The Kettering area is rich in archaeological sites and finds. Although there are no Scheduled Monuments or other registered sites within the application zone, there are two HER records that fall within the site area (**HER7427** and **7198/367**).

There is evidence for prehistoric activity in the surrounding area with the site of a probable Iron Age settlement approximately 800m to the north-east of the site (**HER 3798** and **3798/0/0**). An undated enclosure (**HER 9751**) overlooks Slade Brook to the south-west of the site.

The principal element of the local landscape was the establishment of the Saxon township of *Cyrtringan* (**HER7427**) by charter by the 10th century (Foard and Ballinger 2000). The development area falls just within its recorded boundary and to the south of the core of the township and later medieval town. A Saxon manor in royal hands is also recorded, which later passed to the Abbots of Peterborough. Kettering was, until the 13th century, a township with a number of small hamlets around it. Such a hamlet is putatively identified at Sharlecotes, to the east of the site (**HER 7424**). After 1227 (date of a market charter issued by the abbot of Peterborough) Kettering began to grow. As part of this growth a network of roads (**HER 7198/77**) is recorded in the Extensive Urban Survey for Kettering, the prominent of which was the London to Oakham road (**HER 6283**). Many of these roads are recorded on historic maps and in post medieval documents. The demesne lands for the manor at Kettering (**HER7198/404**) lay to the north-west of the site, but other aspects of the manorial landscape included a windmill (**HER7422**) which is first recorded in the 13th century. After the dissolution, the demesne land was divided into smaller parcels.

The surviving open fields and areas of ridge and furrow to the south of Kettering have been surveyed as part of the Open Fields Survey of Northamptonshire or identified from aerial photographs (**HER7351/0/2** and **9816/0/2**).

Kettering as a town flourished in the later medieval and post-medieval periods as the woollen and then the shoe industries developed. The turnpike road between Kettering and Newport Pagnell (**HER 7382**) was situated on the same line as the medieval London to Oakham road. Kettering, as with many other towns, saw great change brought about by the railway (**HER 6124**).

The available historic maps for the development area (www.old-maps.co.uk) show a sinuous course to Slade Brook and the railway line. Between the production of the 1880s first edition Ordnance Survey and the 1958 (1:10,560) edition the size of the development area and the watercourse changed little. Between 1958 and the production of 1970s (1:2,500) edition the course of the stream had been straightened and much of the commercial units around Pytchley Lodge Road had been constructed.

Military activity is represented by a possible Second World rifle range to the north of the site (**HER7198/367**).

3 AIMS AND METHODOLOGY

In order to examine the archaeological resource within the proposed development, the general aims were:

- To determine and understand the nature, function, and character of the archaeological site in its cultural and environmental setting
- The location, extent, nature and date of any archaeological features or deposits that may be present
- The integrity and state of preservation of any archaeological features or deposits that may be present.

More specific aims were to:

- Establish the date, nature and extent of activity or occupation the development site
- Recover artefacts to assist in the development of type series within the region
- Recover palaeo-environmental remains to determine local environmental conditions

The site lies within an area highlighted in the county Historic Environment Records (HER) as part of the Saxon Borough of *Cytringan* (Wolfram-Murray 2011). As such the following parameters suggested by the East Midlands Regional Research Framework were considered (Cooper 2006).

- The identification of estate centres
- The 5th to 9th-century landscape
- Economy and settlement in the 5th to 9th centuries

3.1 Geophysical survey

The geophysical survey fieldwork and reporting conformed to established English Heritage and Institute for Archaeologists guidelines (EH 2008 and Gaffney, Gater and Ovendon 2002).

Magnetometer survey had been specified as the prospection technique, utilising Bartington Instruments Grad 601-2 fluxgate magnetic gradiometers. The Grad 601-2 is constructed as a dual-sensor instrument with two vertical gradiometers separated on a yoke to enable two lines of survey to be recorded in tandem. Survey recorded data on a contiguous 30m x 30m grid system across each area, taking readings at 0.25m intervals along traverses at 1.0m separations.

Prospection will be by grid squares set out manually by tape measure and optical square. All survey grids were measured in to permanent, re-locatable landmarks and also to the Ordnance Survey using Leica System 1200 dGPS (see EH 2008, 19). A total of 12 grids full and partial grids were surveyed in August 2011.

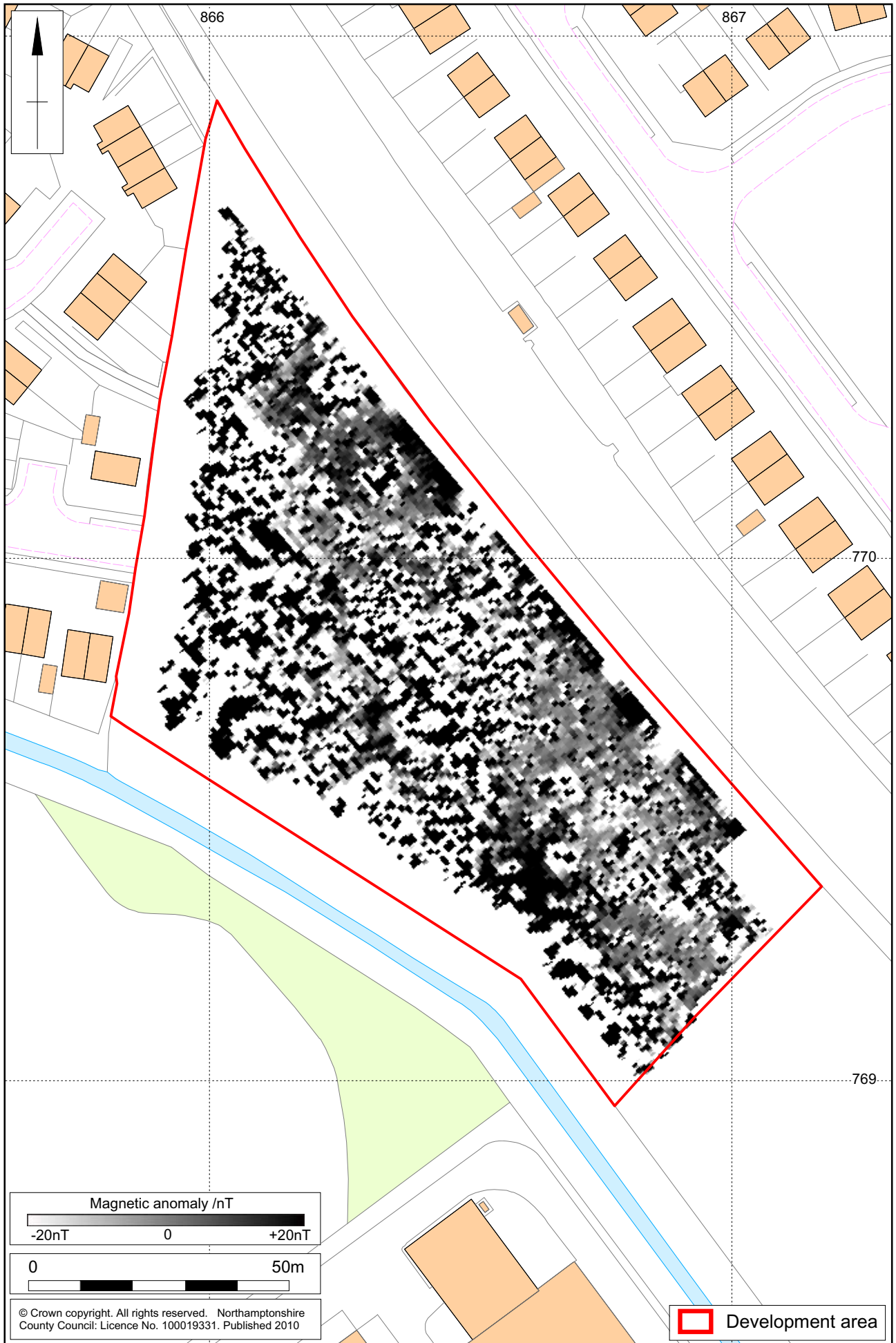
Following the completion of the fieldwork, the data was processed utilising appropriate software (-20nT to +20nT) and grey tone images will be produced. The images were geo-rectified to Ordnance Survey base mapping.

3.2 Trial trenching

The trial trenching comprised the excavation of four trenches measuring 40m long. The work was carried out in accordance with the Institute for Archaeologists (IfA) *Standard and Guidance for Archaeological Field Evaluation* (IfA 2008) and the English Heritage procedural document *Management of Research Projects in the Historic Environment* (2006). The works were monitored by Liz Mordue, Assistant Archaeological Advisor to Northamptonshire County Council.

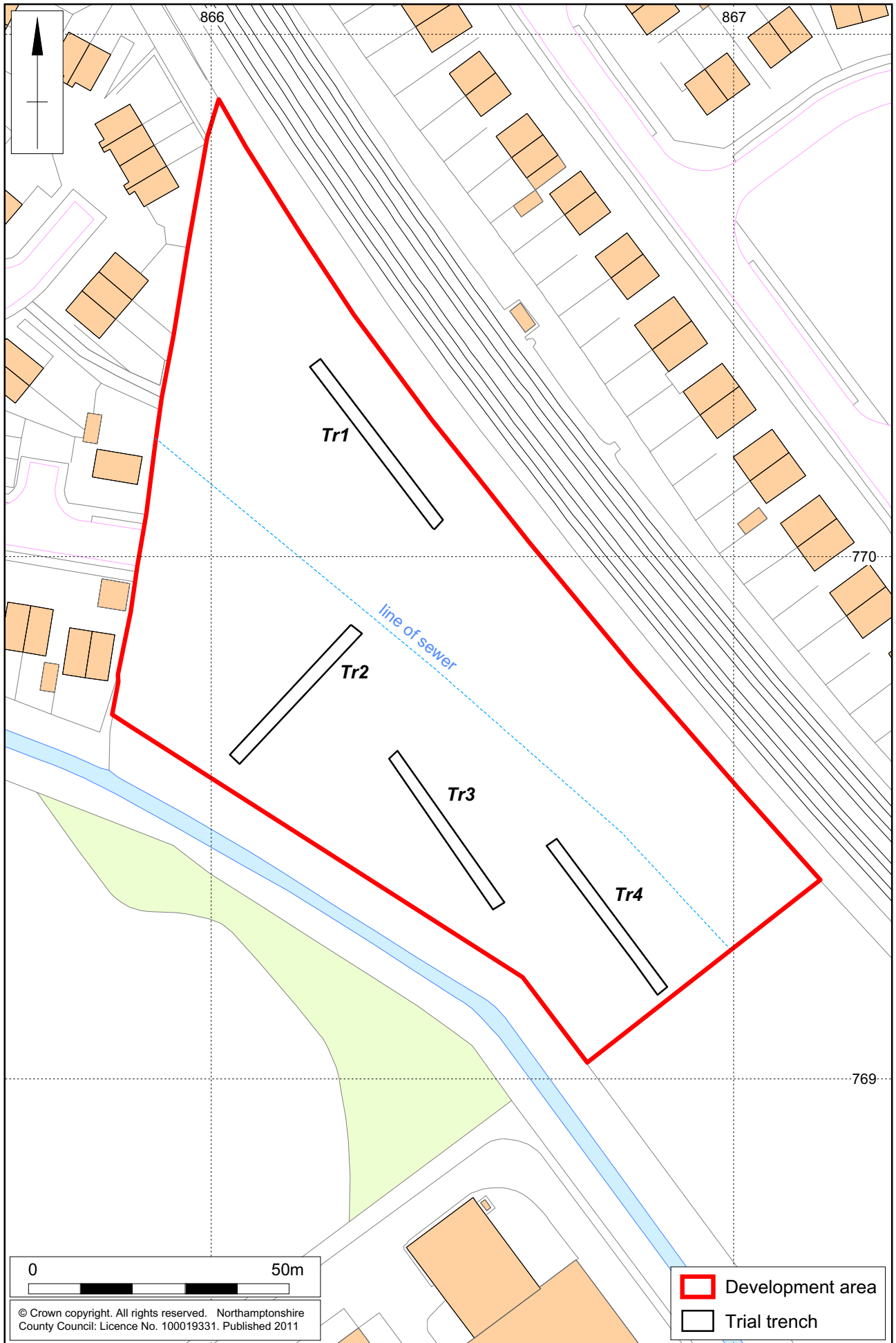
Topsoil and subsoil were removed separately by machine using a flat-bladed bucket to reveal underlying archaeological remains or, where absent, the natural substrate under the direct supervision and control of an experienced and qualified archaeologist.

All archaeological features have been related to the Ordnance Survey National Grid and Datum. Recording followed standard NA procedures (NA 2006). Deposits were described on NA *pro-forma* sheets to include details of the context, its relationships, interpretation and a check-list of associated finds. A indexed photographic record was kept of the excavation, comprising 35mm black and white negatives and colour slides. Digital images were taken to supplement the photographic archive.



1:1,000

Magnetometer Survey Results Fig 3



1:1,000

Trial trench locations Fig 4

4 RESULTS

4.1 Geophysical survey

The magnetometer survey recorded extreme variations in positive and negative magnetic readings (Fig 3). No discernable archaeological features were recorded and the readings suggest metal or brick debris masking the underlying substrate.

4.2 Trial trenching

The underlying geology of the site, comprising orange sandy or silty clays, was encountered between 0.74m to 1.05m below the modern ground surface (Appendix 2) at a height of approximately 61.00m aOD. The natural clays were interspersed with patches of manganese flecking and were heavily disturbed in places by modern intrusion (Fig 5).



General view of Trench 3, looking north-west Fig 5

In Trench 1 (Fig 6) there was a subsoil comprising sterile brownish-orange sandy clay (0.17m thick). This was overlain by a buried topsoil comprising a brown sandy loam up to 0.09m thick.

At the north-western end of Trench 1, a layer of made ground overlay the buried topsoil. This comprised a brown loam with masonry rubble (up to 0.40m thick).



Section at the south-eastern end of Trench 1, looking north-east Fig 6

The site was covered in two layers of made ground which were seen in Trenches 2, 3 and 4 (Fig 7). The earlier layer of made ground typically comprised a greyish-orange silty clay with pockets of blue clay overlain by a brown loam with substantial amounts of rubble, tarmac and, in Trench 2, asbestos.



Section at the north-western end of Trench 3, looking south-west Fig 7

5 CONCLUSION

The geophysical survey and subsequent trial trenching was successful in recording that the site had been extensively remodelled and used to dump waste material in modern times.

Much of the waste material lies against the south-western area of the application area, flanking the stream. This watercourse had been straightened in the mid 20th century, and it is probable that the layers of made ground relate to the infilling of the water course and the subsequent levelling of the field.

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APPENDIX 1: HISTORIC ENVIRONMENT RECORD DATA

NHER	Name	Period	Type	NGR SP
3798	Iron Age settlement?	Iron Age?	Aerial	86960 77820
3798/0/0	Iron Age pottery	Unknown	Artefacts	8696 7782
6124	Railway line between Leicester to Hitchin (via Kettering and Bedford)	Post-medieval to Modern	Extensive Urban Survey	84671 75497
6283	London to Oakham road	Medieval to post-medieval?	None Recorded	87987 75019
7198/77	Kettering's medieval roads	Medieval	Digital Archive	85478 79523
7198/367	Firing Range	Modern	Digital Archive	86578 77222
7198/404	Manor- Kettering Demesne Lands	Medieval/ post-medieval	Digital Archive, Map	85682 78153
7351/0/2	Ridge and Furrow	Medieval	Archive, Book	85803 76992
7382	Turnpike road (Kettering to Newport Pagnell)	Modern	Digital Archive, Report	88806 68196
7422/1	Windmill	Medieval	Digital Archive, Map	86880 77988
7424	Putative settlement of Sharlecotes	Early Saxon to Mid Saxon	Digital Archive	87567 76486
7427	Cyrtingan Charter Boundary	Late Saxon	Digital Archive, Book	86520 78624
9751	Enclosure?	Unknown	Aerial	85817 76658
9816/0/2	Ridge and Furrow	Medieval	Open Fields Survey	8753 7635

APPENDIX 2: CONTEXT INVENTORY

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
1	40m x 2m NW-SE	486631/277021	62.35m aOD	0.74m, 61.61m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
101	Topsoil	Mid brown soft loam.	0.15m thick (average)	
102	Made Ground	Mix of mid brown soft loam and extensive modern disturbance, including brick, tarmac, rubble	0.30m thick (average)	
103	Buried Topsoil	Mid brown, sandy loam.	0.09m thick (average)	
104	Buried Subsoil	Mid brownish-orange sandy clay.	0.26m thick (average)	
105	Natural	Mid orange sandy clay, rare manganese inclusions <50mm.	0.44m average visible	

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
2	40m x 2m SW-NE	486616/276973	61.75m aOD	0.79m, 60.96m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
201	Topsoil	Mid brown soft loam frequent root intrusions.	0.15m thick (average)	
202	Made Ground 1	Mix of mid brown loam and extensive modern disturbance including brick, tarmac etc	0.33m thick (average)	
203	Made Ground 2	White layer not present at NE end of trench, contaminated with asbestos.	0.24m thick	
204	Layer	Mid brownish-orange silty clay.	0.17m thick	
205	Natural	Mid orange silty clay.	0.36m average visible	

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
3	40m x 2m SE-NW	486645/276947	62.00m aOD	1.05m, 60.95m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
301	Topsoil	Mid brown soft loam, frequent root intrusions.	0.29m thick (average)	
302	Made Ground 1	Mix of mid brown loam and extensive modern disturbance.	0.57m thick (average)	
303	Made Ground 2	Mid brownish-orange silty clay with frequent pockets of blue clay. Not visible at SE end of trench.	0.17m thick (average)	
304	Natural	Mid orange silty clay with rare manganese inclusions. Only visible at NW end of trench.	0.15m visible	

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
4	40m x 2m SE-NW	486675/276931	62.00m aOD	0.89m, 61.11m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
401	Topsoil	Mid brown soft loam, frequent root intrusions.	0.15m thick (average)	
402	Made Ground 1	Mix of mid brown loam with extensive modern disturbance and mid brownish-orange silty clay with frequent pockets of blue clay.	0.40m thick (average)	
403	Natural	Mid orange silty clay with rare manganese inclusions. Not visible at SE end of trench.	0.13m thick (average)	
404	Made Ground 2	Firm, brown silty clay	C10m long (NW end) 0.20m thick	



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