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Archaeological Services

**An Archaeological Evaluation
on Land to the West of the Grand Union
Canal, North Kilworth, Leicestershire
(SP 606 834)**



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**An Archaeological Evaluation on Land to the
West of the Grand Union Canal,
North Kilworth, Leicestershire
(NGR: SP 626 834)**

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For: CgMs Consulting

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Summary

An archaeological trial trench evaluation was undertaken in June 2013 by University of Leicester Archaeological Services (ULAS) on behalf of CgMs Consulting. The fieldwork was undertaken subsequent to the granting of planning permission for construction of a new canal marina on land to the west of the Grand Union Canal at North Kilworth, Leicestershire in order to assess the potential impact of the development on any archaeological remains as may be present.

The archaeological evaluation followed a geophysical survey and produced no evidence of archaeological activity, either in artefactual or structural terms. The anomalies identified by the geophysical survey are likely to be geological in origin.

The site archive will be deposited with the Leicestershire County Council under the accession number X.A76. 2013.

Introduction

An archaeological evaluation was undertaken on land to the west of the Grand Union Canal at North Kilworth, Leicestershire, in June 2013. A preliminary geophysical survey undertaken by Stratascan identified a small number of discrete positive and linear anomalies, the majority of which were interpreted as likely to be geological or pedological, rather than archaeological in origin.

Consequently a programme of archaeological investigation was produced by CgMs, in agreement with the Planning Archaeologist, in order to evaluate the development site's archaeological potential and to enable the impact of the new development to be fully assessed. The agreed scheme was set out in a Written Scheme of Investigation (WSI; Dawson 2013). The fieldwork specified was intended to provide further indications of the character and extent of any buried archaeological remains in order that the potential impact of the development on such remains might be assessed. Fieldwork was carried out in June 2013 and involved the machine excavation of 18 trial trenches, a number of which targeted anomalies identified by the geophysical survey, in order to assess the archaeological potential of the development area.

The archaeological evaluation was undertaken in accordance with National Planning Policy Framework Section 12: Conserving and Enhancing the

Historic Environment (DCLG March 2012). All archaeological work was in accordance with the Institute for Archaeologists (IfA) Code of Conduct (2010) and adhered to their *Standard and Guidance for Archaeological Field Evaluation* (2008). The LCC *Guidelines and Procedures for Archaeological work Leicestershire and Rutland* (1997) was also adhered to.

Site Description, Topography and Geology

The development site is located on land to the west of the Grand Union Canal, North Kilworth, Leicestershire (Fig. 1). The overall application area measures approximately 38 hectares in extent and is centred at National Grid Reference SP 626 834. The site is bounded by the A4304 to the north, by light industrial units to the west, by the Grand Union Canal to the east, and by arable land to the south. The land is currently under arable agricultural cultivation and rough pasture.

The Ordnance Survey Geological Survey of Great Britain indicates the bedrock below the site to predominantly comprise the Mercia Mudstone Group, part of the Triassic Series formerly known as the Keuper Marl. This is a sequence dominated by mudstones underlying much of central and southern England.

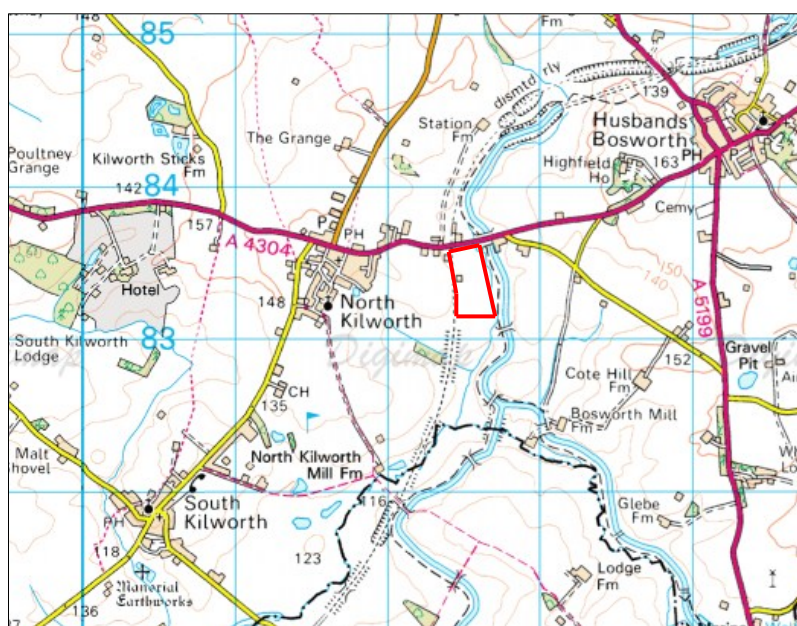


Figure 1: Site Location (Scale 1:50 000)

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Archaeological and Historical Background

The Historic Environment Record for Leicestershire and Rutland indicates that no archaeological sites, finds or discoveries have been forthcoming from the study site or its immediate environs. This may reflect a lack of archaeological potential but may be the result of the lack of archaeological fieldwork in this area.

There are no surviving enclosure or tithe maps for North Kilworth, with the earliest maps represented by the Second Edition Ordnance Survey maps of 1900 and 1904 (Marsden 2000).

Aims and Objectives

The general aims of the evaluation were as follows:

- To determine the presence, date, character, integrity, state of preservation and depth of burial of any archaeological deposits.
- To examine the potential of the site in its relation to its environment, economy, land use and development from the prehistoric to post medieval periods. In particular the results were anticipated to reflect the medieval origins of the historic village or post medieval development.
- To examine evidence from the site for palaeoenvironmental and/or economic development.
- To inform a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains
- To produce a site archive for deposition with an appropriate museum and to provide information for accession to the Leicestershire HER.

Specific evaluation aims were to:-

- Seek to establish the nature of the geophysical anomalies and to determine if they are of archaeological significance

Methodology

Archaeological Trial Trenches

Prior to the commencement of works an Accession Code was obtained and the required archive deposition forms completed. An OASIS online record was initiated and the key fields completed on Details, Location and Creator forms.

CgMs Consulting had agreed with the Planning Archaeologist for Leicestershire County Council that the trial trench evaluation should assess those geophysical anomalies identified in addition to providing comprehensive representative coverage across the development area.

It was proposed that 1080m² of archaeological trial trenches (18 trenches each measuring 30 m by 2m) should be opened in the locations indicated on Figure 2.



Figure 2: Location of the proposed development site showing trench locations with geophysical survey results overlaid (plan supplied by CgMs; not to scale)

Topsoil and overburden was removed by a mechanical excavator using a toothless ditching bucket (*c.*2 m wide), under archaeological supervision. The spoil generated during the evaluation was mounded away from the edges of each trench. Topsoil and subsoil was stored separately. Mechanical excavation ceased at undisturbed natural deposits.

The trenches were recorded at an appropriate scale by measured drawing and photography and were located to Ordnance Survey National Grid. A photographic record, utilising black and white negative film, supplemented by high resolution digital data capture, was maintained during the course of the fieldwork. Upon completion of the evaluation trenching, the excavated trenches were backfilled and loosely compacted.

Results

As set out in the Written Scheme of Investigation (Dawson, M. 2013), 1080m² of archaeological trial trenches, comprising 18 trenches each measuring 2m x 30m were excavated in order to assess geophysical anomalies and to provide comprehensive sample coverage of the development area, notably in the eastern area, which had not been included in the preliminary geophysical survey. **Trenches 1-10** targeted the area of geophysical survey to the west of the brook running north-south through the development area, whilst **Trenches 10-18** were located in rough pasture between the brook and the canal (Fig. 2).

Excavation was undertaken using a 360° mechanical excavator fitted with a 2m wide toothless ditching bucket, with topsoil and overburden removed carefully in level spits, under continuous archaeological supervision.

The topsoil comprised a dark brown silty-clay approximately 0.3-0.4m deep across the area.

Table 1 below describes each trench.

Table 1: Description of each trench.

TRENCH	ORIENTATION	LENGTH AND WIDTH (metres)	DESCRIPTION	DEPTH (MIN- MAX metres)
1	N-S	30 x 2	Topsoil 0.26-0.34m, alluvium 0.30-0.46m. No archaeological finds or features.	0.75-0.97
2	E-W	30 x 2	Topsoil 0.25-0.36m, alluvium 0.83-1.03m. No archaeological finds or features.	1.34-1.60
3	E-W	30 x 2	Topsoil 0.25-0.37m, alluvium 0.52-0.97m. No archaeological finds or features.	0.96-1.68
4	NW-SE	30 x 2	Topsoil 0.19-0.32m, alluvium 0.30-0.51m. No archaeological finds or deposits.	0.65-1.02
5	N-S	30 x 2	Topsoil 0.19-0.33m, alluvium 0.15-0.32m. No archaeological finds or deposits.	0.55-0.88
6	E-W	30 x 2	Topsoil 0.19-0.38m, alluvium 0.13-0.29m. No archaeological finds or deposits.	0.48-0.73
7	N-S	30 x 2	Topsoil 0.28-0.41m, alluvium not present. No archaeological finds or deposits.	0.35-0.61
8	E-W	30 x 2	Topsoil 0.26-0.31m, alluvium 0.18-0.36m. No archaeological finds or deposits.	0.63-0.83
9	N-S	30 x 2	Topsoil 0.21-0.39m, alluvium not present. archaeological finds or deposits.	0.36-0.61
10	N-S	30 x 2	Topsoil 0.22-0.31m, alluvium 0.15-0.37m. Single modern pit.	0.66-0.79
11	N-S	30 x 2	Topsoil 0.29-0.39m, alluvium 0.40-1.41m. No archaeological finds or deposits.	0.95-2.10
12	E-W	30 x 2	Topsoil 0.19-0.44m, alluvium 0.31-0.47m. No archaeological finds or deposits.	0.86-1.14
13	NW-SE	30 x 2	Topsoil 0.22-0.30m, alluvium 0.37-0.50m. No archaeological finds or deposits.	0.89-0.97
14	E-W	30 x 2	Topsoil 0.21-0.46m, alluvium 0.38-0.65m. No archaeological finds or deposits.	0.86-1.16
15	N-S	30 x 2	Topsoil 0.20-0.33m, alluvium 0.30-0.63m. No archaeological finds or deposits.	0.69-1.14
16	E-W	30 x 2	Topsoil 0.21-0.42m, alluvium 0.55-0.84m. No archaeological finds or deposits.	0.92-1.42
17	N-S	30 x 2	Topsoil 0.29-0.34m, alluvium 0.50-0.82m. No archaeological finds or deposits.	0.92-1.22
18	E-W	30 x 2	Topsoil 0.24-0.33m, alluvium 0.51-0.72m. No archaeological finds or deposits.	0.89-1.11

Trench 4, positioned centrally in the northern field, targeted possible archaeological and ferrous/magnetic signals identified in the geophysical survey (Fig. 2). A shallow (0.09m-0.31m) silty clay sand plough soil overlay 0.30m-0.1m of pale orange-brown silty clay alluvium, masking natural gravels with grey silt patches (Fig. 3).



Figure 3: Trench 04: view west (1m scales)

A yellow-red patch of natural sand midway along the trench possibly explains the anomaly. There were no indications of archaeology and none of the remaining trenches in the field (**Trenches 1-3**) produced any evidence of archaeology. **Trench 2** did, however, demonstrate substantial accumulations of alluvial material (0.84m-1.03m deep) overlying the river gravels, suggesting a slightly southerly earlier course of the brook.

In the southern field, **Trench 7** was one of three trenches within an area of medieval ridge and furrow cultivation which, whilst not surviving as standing earthworks, had been identified via geophysical survey (Fig. 2). The furrows were visible at the base

of as slight darker 1m-wide bands crossing the trench at 5m intervals beneath the same plough soil and alluvium as observed in **Trench 4** (Fig. 4). Furrows were also present in **Trenches 8, 9 and 10** but not in **Trenches 5 and 6**.



Figure 4: Trench 07: view south; 1m scales

Trench 11 was located at the southern end of the site directly east of the brook and aligned north-south. It revealed steeply deepening alluvial deposits (from 0.46m at the north to 1.41m at the southern end) overlying clean river gravels, suggesting the presence of an earlier, slightly more easterly course of the brook (Fig. 5). There were no indications of underlying archaeology. The remainder of trenches in this zone (**12-18**) demonstrated similar but substantially shallower (typically 0.50m) depths of alluvium. None of the deposits revealed any potential for the preservation of organic deposits.



Figure 5: Trench 11: view north (1m scales)

Conclusions

The archaeological evaluation at land to the west of the Grand Union Canal, North Kilworth, produced no features or artefactual evidence for archaeological activity. Consequently, the anomalies identified in the geophysical survey appeared to be geological in origin with the exception of ridge and furrow that was identified in several trenches. Machine removal of deeper alluvial deposits observed on the eastern side of the site revealed clean river gravels, with no indications of archaeology. The alluvium indicates that the area was susceptible to flooding and that the course of the brook is likely to have altered in the past.

Archive and Publications

The site archive (X.A76.2013), consisting of paper and photographic records, will be deposited with Leicestershire Museums Service.

The archive consists of:

- 18 trench recording sheets
- Photographic record indices
- 18 digital photographs
- A risk assessment form

Publication

A version of the excavation summary (see above) will appear in due course in the *Transactions of the Leicestershire and Rutland Archaeological and Historical Society*.

Acknowledgements

Roger Kipling and Nick Henson of ULAS undertook the archaeological evaluation on behalf of CgMs Consulting. The project was managed by Patrick Clay/Vicki Score.

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Oasis Information

Project Name	Land to the West of the Grand Union Canal, North Kilworth, Leicestershire
Project Type	Archaeological evaluation
Project Manager	Vicki Score
Project Supervisor	Roger Kipling
Previous/Future work	Development
Current Land Use	Agricultural
Development Type	Marina
Reason for Investigation	NPPF
Position in the Planning Process	Post-determination
Site Co ordinates	NGR SP 626 834
Start/end dates of field work	June 2013
Archive Recipient	Leicestershire County Council
Study Area	unknown

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