



UNIVERSITY OF  
**LEICESTER**

## **Archaeological Services**



**Topographic Earthwork Survey  
for land at Bescaby Lane,  
Waltham-on-the-Wolds, Leicestershire**

**SK 80734 25042**

**Gavin Speed**

**ULAS Report No 2016-021**


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**A Topographic Earthwork for Land at  
Bescaby Lane,  
Waltham-on-the-Wolds,  
Leicestershire  
(SK80734 25042)**

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**For: Leicestershire County Council**

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## Contents

|                                                      |    |
|------------------------------------------------------|----|
| Summary .....                                        | 1  |
| 1. Introduction .....                                | 1  |
| 2. Site Description, Topography and Geology.....     | 1  |
| 3. Historical and Archaeological Background .....    | 2  |
| 3.1 Historical Background (from Baker 2016) .....    | 2  |
| 3.2 Archaeological Background (from Baker 2016)..... | 3  |
| 4. Aims and Objectives .....                         | 3  |
| 5. Methodology .....                                 | 3  |
| 6. Results.....                                      | 4  |
| 7. Discussion .....                                  | 6  |
| 9. Conclusion .....                                  | 8  |
| 10. Archive.....                                     | 8  |
| 11. Publication .....                                | 9  |
| 12. Bibliography .....                               | 9  |
| 13. Acknowledgements.....                            | 10 |

## Figures

|                                                                                |   |
|--------------------------------------------------------------------------------|---|
| Figure 1: Site location .....                                                  | 2 |
| Figure 2: Plan showing ridge and furrow earthworks.....                        | 5 |
| Figure 3: Profiles across the ridge and furrow earthworks .....                | 5 |
| Figure 4: Digital terrain model, looking north.....                            | 6 |
| Figure 5: Ridge and furrow in main field, looking west.....                    | 6 |
| Figure 7: Satellite image showing the ridge and furrow .....                   | 7 |
| Figure 8: Ridge and furrow in the fields surrounding Waltham on the Wolds..... | 8 |

(front cover: GPS surveying in largest field, ridge and furrow visible in background)

# **An Archaeological Earthwork Survey on land at Bescaby Lane, Waltham-on-the-Wolds, Leicestershire.**

**Gavin Speed**

## **Summary**

*University of Leicester Archaeological Services (ULAS) carried out an archaeological investigation on land at Bescaby Lane, Waltham-on-the-Wolds, Leicestershire (SK80734 25042). A topographic survey of an area of ridge and furrow earthworks was undertaken to fulfil a condition of planning permission. The survey confirmed that the earthworks are in a good state of preservation. Two sets of ridge and furrows were surveyed and cover an area of approximately 1.9 hectares. The site archive will be held by Leicestershire Museums Service, under accession number XA.10.2016.*

## **1. Introduction**

The application area contains known earthworks of ridge and furrow, and a topographic survey of the remains (which would be destroyed by any redevelopment), was requested by Leicestershire County Council.

In accordance with National Planning Policy Framework (NPPF), Section 12 (Conserving and Enhancing the Historic Environment) this document is a report on the results of the archaeological earthwork survey that took place on 28th January 2016. The fieldwork follows the Written Scheme of Investigation, as detailed in Clay 2016.

## **2. Site Description, Topography and Geology**

Waltham-on-the-Wolds lies in the Waltham and Thorpe Arnold Civil Parish in the Melton Borough of Leicestershire, 5 miles northeast of Melton Mowbray.

The assessment area is located at the eastern end of the village, on the northern side of Main Street and northwest of Bescaby Lane (Figure 1), at a height of *c.*172m O.D to the northeast, sloping slightly down to the southeast.

It comprises of three pasture fields, two containing ridge and furrow earthwork remains. The grass was reasonably short allowing good visibility of the existing earthworks. There was some minor disturbance to the earthworks from a recent borehole survey. The entire Site covers *c.*2.6ha, however the area containing earthworks consisted of *c.*1.9 ha.

The British Geological Survey website indicates that the underlying geology is likely to be superficial clay silt, sand and gravels above a bedrock of Lincolnshire Limestone member or Grantham member sandstone, siltstone and mudstone.

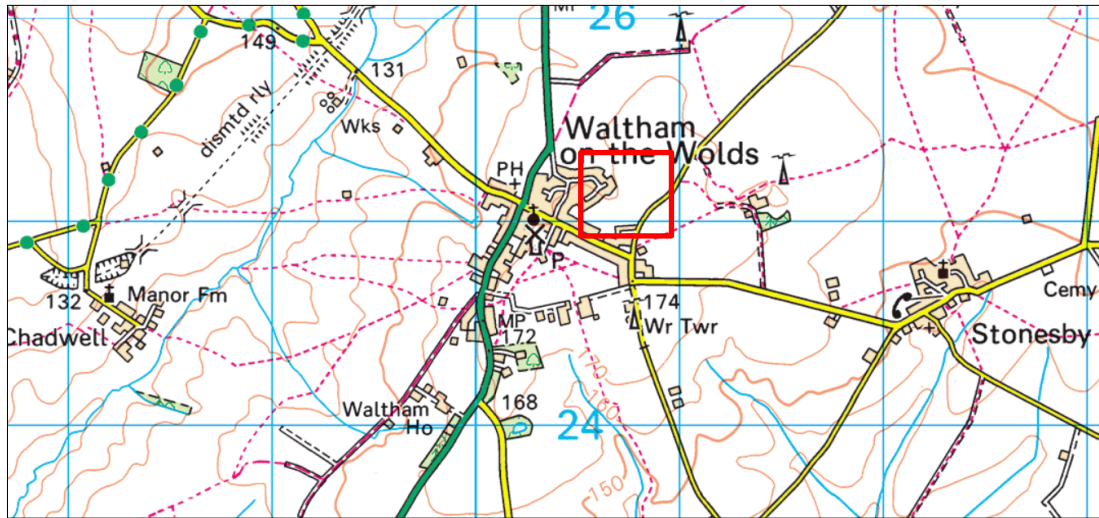


Figure 1: Site location

Reproduced from the Landranger Leicester area 1:25000 map by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright 1996. All rights reserved. Licence number AL 100029495

### 3. Historical and Archaeological Background

The Historic Environment Record (HER) for Leicestershire and Rutland indicates that there are no known archaeological sites within the development area itself or within the immediate area.

#### 3.1 Historical Background (from Baker 2016)

The name 'Waltham' derives from 'weald' (woody) and 'ham' (town), while the word 'wold' is from a Saxon word meaning 'hill or high place' (Nichols 1795, 379). One of the earliest mentions of this place is in the Domesday Book where it is listed amongst the lands given to Hugh de Grandmesnil by the King. There was 100 acres (0.40 km<sup>2</sup>) of meadow and land for 11 ploughs. It was valued at six pounds. The assessment area is c.450m to the northeast of the historic settlement core of Waltham, as mentioned in the Domesday Book. Waltham on the Wolds seems to have been primarily agricultural. The *Leicester Advertiser* remarks that farming was the only industry of the village and by the mid-1950s those that did not work on the land tended to work in Melton Mowbray. There was no piped water in the village until the late 1950s (*Leicester Advertiser* 1957, 10). There are a number of listed buildings in the village but none are particularly close to the development site.

Map regression analysis has shown that no significant change has taken place in the land use across the three fields included in the proposed development area, from the earliest map consulted 1880 through until 1930. By the 1970's there appears to have been the construction of a rectangular structure in the south-western field with a related field partition orientated north-west to south-east to the north-east.

### **3.2 Archaeological Background (from Baker 2016)**

The Roman Road (King Street Lane) (MLW3814), AD 43– AD 409, runs through the village centre, joining The Drift to the Salt way and continuing into Nottinghamshire. The southwest perimeter of the site is located *c.*50m to northeast of its line. Located *c.*550m to the northwest of the site is an undated rectangular enclosure (MLE4191), north of the church and discovered in the 1970's. Located *c.*900m northeast of the development area, a 13<sup>th</sup> century medieval ring (MLE9840) was found south of the Croxton Racecourse in 2001. 670m east of the site, *c.*1857, large number human remains (MLE9840), minus skulls, were discovered buried in a trench, in the Sproxton Parish, Melton and possibly a consequence of nearby quarrying identified on a 1<sup>st</sup> edition OS map for the area, the exact location of the original burials being unknown. A round ended, possible medieval, copper plate (MLE6885) with inscribed decoration, possibly a belt fitting, was found *c.*150m north of the site in the 1980s. Southeast of the site, at a distance of *c.*370m, along with a medieval strap or book clasp find (MLE6886), evidence for an early Roman occupation site was discovered in 1984. Finds included 2 Roman brooches, a fragment of cosmetic mortar and a sestertius (MLE4204). A ridge (MLE9478), running *c.*80m southeast of the parallel to the Roman road was discovered during a watching brief in 2002 and was tentatively interpreted as being part of the road, despite a sherd of medieval pot being found beneath it. To the west of the site, a post-medieval well is located on Burgins Lane (MLE20067). Roman pottery together with undated postholes in a garden of No.4 High Street (MLE4201), were found in the 1990's, possibly evidence of an occupation site. The site of an existing windmill, *c.*380m southwest of the site, was preceded by an earlier one, as indicated on 18<sup>th</sup> and 19<sup>th</sup> century maps (MLE10613). The lane to the old windmill continues as a hollow way and there are faint traces of earthworks between this and the main road, including the foundations of a substantial building 50m southwest of the windmill (Hartley 1987, 15). A burial site (MLE4206), *c.*960m southwest of the development area, has been tentatively identified. A map of 1985 records a Saxon coffin being found at this location although the accuracy of this information is dubitable. Vertical air photographs show earthwork remains in the village at grid reference (SK803 248), some distance south-east of the development site.

### **4. Aims and Objectives**

The overall aim of the survey was to accurately record the visible ridge and furrow that could be destroyed by redevelopment, and to place the earthworks in their wider surroundings, and to produce a report showing the results.

### **5. Methodology**

Photographs were taken of the earthworks prior to work being carried out. The earthwork survey was undertaken using a Topcon Hyper V Global Positioning System (dGPS). This can provide resolution to an accuracy of 10mm. The changes in level of all the earthworks and sections across the earthworks were recorded. The ridge and furrows were recorded as a topographical survey using a survey grade Differential Global Positioning System (dGPS) manufactured by Topcon to record appropriate points across the earthworks. The tops and bases of earthwork features were recorded to provide a plan. Spot heights across areas without earthworks or where there are large gaps between points were also recorded. Profiles were recorded across the full length of the area illustrating the vertical and horizontal differences in the ground surface. The location of any profiles will be marked

on the plan. The survey is referenced to the Ordnance Survey National Grid (OSGB1936) and Ordnance Datum. The results will be used to produce a topographical plan of the area sufficient to see the extent, height and survival of the earthworks. Point and vector topographic data were edited in ARCGIS and AUTOCAD. A surface model was created for display (Figure 4). The survey was undertaken following guidance from Historic England (2015) and RCHME (1999).

## 6. Results

The earthwork survey has confirmed that the earthworks are in a good state of preservation. The well-preserved ridge and furrow earthworks, represent the upstanding remains of medieval and post-medieval agricultural cultivation. Ridge and Furrow earthworks are a characteristic feature of the Leicestershire landscape and are a diminishing resource.

Well-preserved ridge and furrow earthworks are in evidence, running approximately northeast/southwest in the largest field, they were also visible in the south-east field, though less pronounced (Figure 2).

In the largest field, 20 ridges and furrows survived, these ran for *c.*150m in length, these were spaced at roughly 7m intervals (Figure 3). The ridges were more pronounced in the north-east area, whilst they were virtually non-existent in the west-end of the field. The system is mostly straight, with a slight curve at the east-end. This curve may have occurred at the headland at the (northern half) of the east-end of the field, there was a big rise in the ground level in this area.

In the south-east field the ridge and furrows were far less well-defined, around 8 ridges and furrows were present, also at 7m intervals, they were also on a northeast/southwest alignment. There was no evidence for ridge and furrow in the central area, this appears to have been utilised as a NE-SW trackway.

There was no evidence for earthworks in the north-east field (within the application area). However, further east (outside the application area) ridge and furrow on a similar alignment was observed.

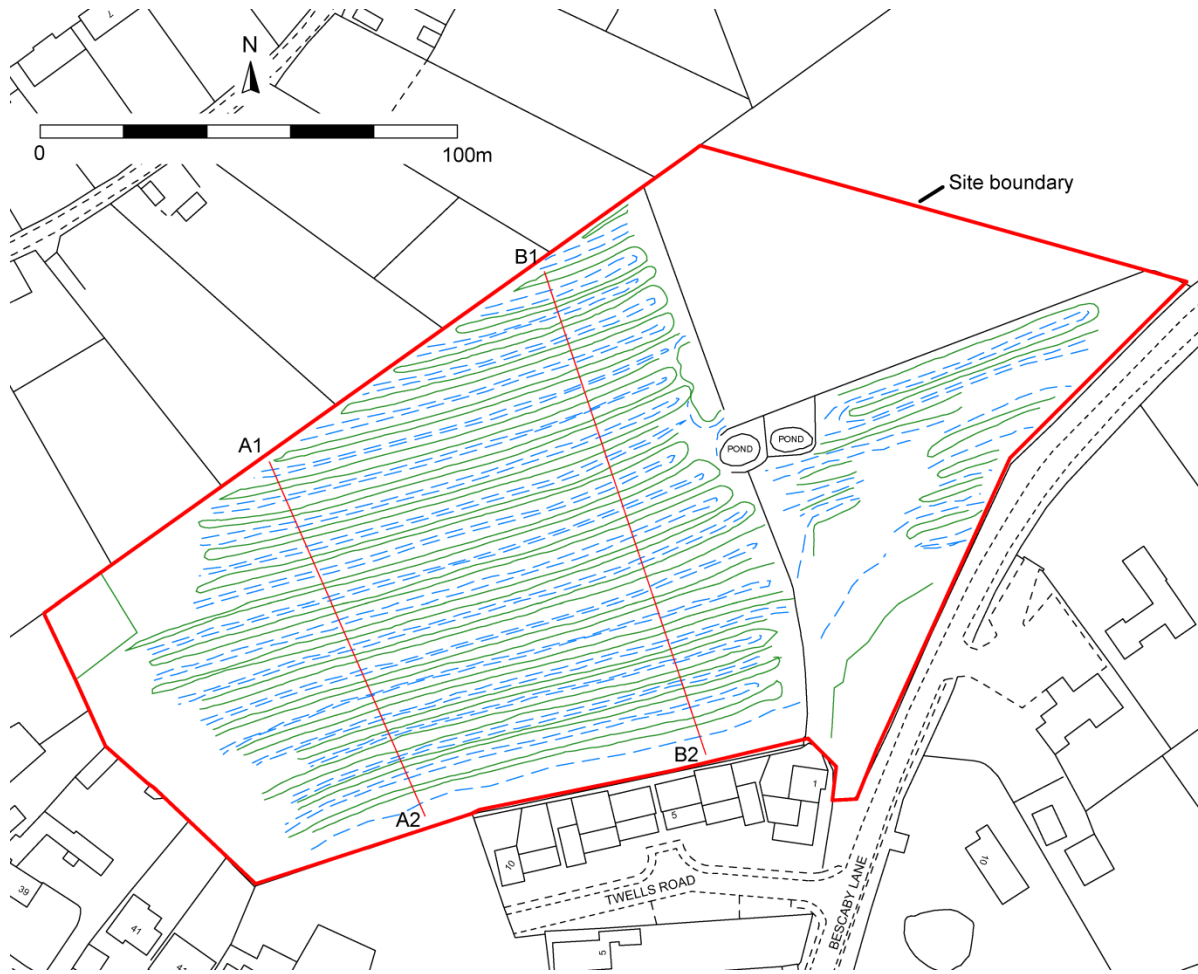


Figure 2: Plan showing ridge and furrow earthworks. Solid line=top of slope, dashed =base of slope, A1 and B2 = profiles (base map provided by client)

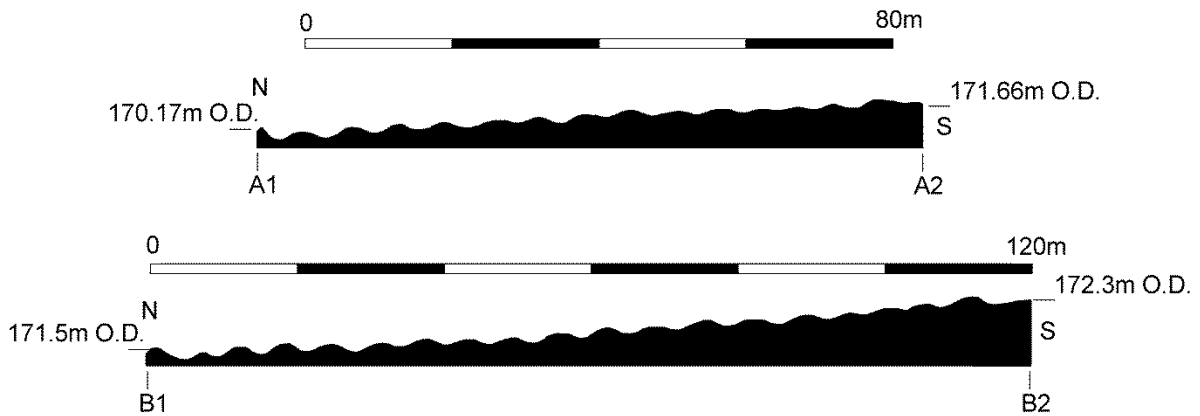


Figure 3: Profiles across the ridge and furrow earthworks



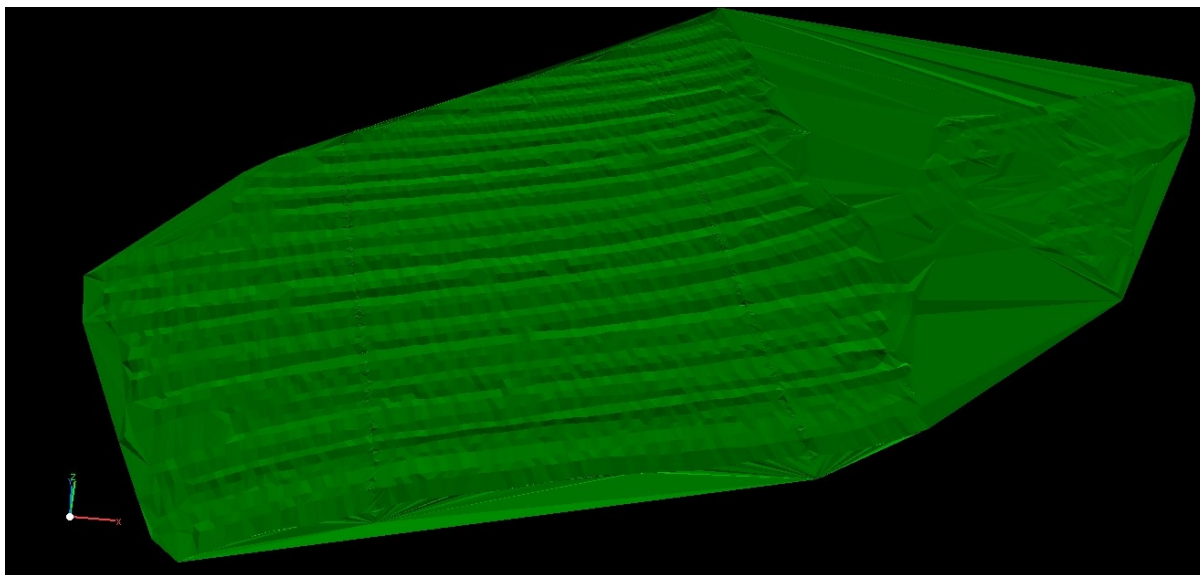


Figure 4: Digital terrain model, looking north



Figure 5: Ridge and furrow in main field, looking west

## 7. Discussion

Ridge and Furrow earthworks represent the upstanding remains of medieval and post-medieval agricultural cultivation. They were formed within the cultivation strips of medieval Open Fields, and several studies have been made (Hall 1982, 1998; Astill 1988; Anderton and Went 2002). The earliest ridge and furrow cultivation dates to the 10th century (Anderton and Went 2002, 52). Medieval villages or townships within the Open Field system were surrounded by two or three substantial fields of cultivated land which could be several kilometres across. The ridges, interpreted as intentionally created free-draining seed beds, with the furrows acting as open drains (Hall 1998), were created by ploughing in a clockwise spiral with a plough constantly throwing soil to the right, over many years. Later medieval ploughs were reversible and threw soil in both directions. The vertical difference between furrow and ridge may have been up to 1m in height (Hall 1982, 6) when at their maximum. The fields of a system were usually cultivated on a three year rotation comprising cereals, legumes, and a fallow year. In the fallow year, the ridges were slightly lowered by ploughing in an anticlockwise direction, to prevent infertile subsoil being ploughed up from the furrows the following year (Hall 1998, 1).

Ridge and furrow is most common in the Midlands, and these are viewed as “nationally significant heritage assets” (Catchpole and Priest 2012, 7). In a recent wide study a significant amount of ridge and furrow earthworks were shown to have been lost or badly damaged in recent years (*ibid*, 7), and so recording their form in detail prior to redevelopment or removal of the earthworks is of vital importance.

The ridge and furrow earthworks recorded on land at Bescaby Lane, Waltham-on-the-Wolds, Leicestershire are a partly eroded (but still a relatively clear) example of medieval and post medieval strip cultivation.

Ridge and furrow earthworks are also visible north of the site in the land now used as paddocks. The western boundary of the field nearest to the modern day village can be projected northwards, this projection corresponding to the eastern limit of the earthworks, showing that the northern boundary of the development area post-dates the field system (Figure 6). Indeed the ridge and furrow earthworks are clearly cut by this later ditch. Taking these field boundaries into account, the length of the ridges/furrows would have been c.200m, this equates to a 'furlong' (220 yards), a standard length. The total length of the furrows would be wider. The wider ridge and furrow fields surrounding Waltham-on-the-wolds has previously been investigated and mapped broadly by Hartley (Figure 7), this detailed survey adds extra research value to the earlier investigations.



Figure 6: Satellite image showing the ridge and furrow in the application area and fields to the north (Map data: Google, DigitalGlobe)

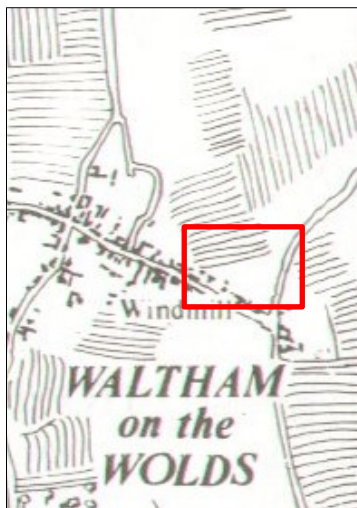


Figure 7: Ridge and furrow in the fields surrounding Waltham on the Wolds (from Hartley 1987)

## 9. Conclusion

The remains of surviving earthwork ridge and furrow on land at, Leicestershire have been recorded by GPS Survey. Ridge and Furrow earthworks represent the upstanding remains of medieval and post-medieval agricultural cultivation. Ridge and furrow are viewed as “nationally significant heritage assets” (Catchpole and Priest 2012, 7), and so recording their form prior to removal of the earthworks is of vital importance. The ridge and furrow earthworks recorded on land at Bescaby Lane, Waltham-on-the-Wolds, Leicestershire are a relatively clear example of medieval and post medieval strip cultivation. The detailed topographic survey adds extra research value to earlier studies in the area (Catchpole and Priest 2012, Hartley 1987).

## 10. Archive

The site archive will be deposited with Leicestershire Museums Service, under accession number XA.10.2016.

The archive contains:

- CD containing digital photographs and report
- Survey data
- Unbound copy of this report
- Thumbnail print of digital photographs

The report is listed on the Online Access to the Index of Archaeological Investigations (OASIS) held by the Archaeological Data Service at the University of York. Available at: <http://oasis.ac.uk>, record ID: universi1-241053.

|                 |                                                                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ID</b>       | <b>OASIS entry summary universi1-241053</b>                                                                                                                                |
| Project Name    | Land to the north of Oakham Road, Tilton on the Hill, Leicestershire                                                                                                       |
| Summary         | The survey confirmed that the earthworks are in a good state of preservation. Two sets of ridge and furrows were surveyed and cover an area of approximately 1.9 hectares. |
| Project Type    | Earthwork survey                                                                                                                                                           |
| Project Manager | Patrick Clay                                                                                                                                                               |

|                                    |                                                       |
|------------------------------------|-------------------------------------------------------|
| Project Supervisor                 | Gavin Speed                                           |
| Previous/Future work               | Previous: DBA, geophysics, Future: unknown            |
| Current Land Use                   | Field                                                 |
| Development Type                   | Residential                                           |
| Reason for Investigation           | National Planning Policy Framework (NPPF), Section 12 |
| Position in the Planning Process   | Condition                                             |
| Site Coordinates                   | SK80734 25042                                         |
| Start/end dates of field work      | 28/01/2016                                            |
| Archive Recipient                  | Leicestershire Museums Service                        |
| Study Area                         | 1.9ha                                                 |
| Associated project reference codes | Project ID: XA.10.2016<br>OASIS ID: universi1-241053  |

## 11. Publication

A summary of the work will be submitted for publication in the local archaeological journal *Transactions of the Leicestershire Archaeological and Historical Society* in due course. The report has been added to the Archaeology Data Service's (ADS) Online Access to the Index of Archaeological Investigations (OASIS) database held by the University of York.

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Royal Commission for Historic Monument of England

### 13. Acknowledgements

The earthwork survey was undertaken out by Gavin Speed. Patrick Clay managed the project. Richard Clark (Planning Archaeologist of Leicestershire County Council) monitored the work on behalf of the planning authority.

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