Archaeological evaluation of land at Kennels Lane, Fernhill Heath, Worcestershire

Worcestershire Archaeology
Archive and Archaeology Service
The Hive, Sawmill Walk,
The Butts, Worcester
WR1 3PB

Status: Revision 1
Date: 30 April 2014
Author: Graham Arnold, garnold@worcestershire.gov.uk
Illustrator: Carolyn Hunt
Project reference: P4318
Report reference: 2107
HER reference: WSM 57098

Contents

Archaeological evaluation of land at Kennels Lane, Fernhill Heath, Worcestershire

Graham Arnold

Summary

An archaeological evaluation was undertaken of land off Kennels Lane, Fernhill Heath, Worcestershire (NGR SO 86930 59890). It was undertaken on behalf of CgMs Consulting, acting for their client, who has submitted an application for residential development of the site.

A total of nine trenches were excavated over the site. The evaluation revealed the natural Mercian Mudstone and alluvial deposits. Occasional modern pits with 20th century agricultural refuse were found. In the north-east of the site, ridge and furrow activity was found, a remnant of strip field agriculture in the medieval and post-medieval periods, with a perpendicular field boundary evident at the head of the furrows. No significant archaeological deposits, features or artefacts were encountered during the works, demonstrating that the area is unlikely to have been settled in the past and that it has been primarily agricultural land.

Report

1 Background

1.1 Reasons for the project

An archaeological evaluation was undertaken on land off Kennels Lane, Fernhill Heath, Worcestershire (NGR SO 86930 59890). It was commissioned by CgMs Consulting, whose client has submitted an application for residential development of the site to Wychavon District Council (W/14/00308/PN).

The proposed development site is considered by the Planning Advisory Section of Worcestershire County Council to have the potential to affect an archaeological site.

The project conforms to the standard brief prepared by Worcestershire County Council and for which a project proposal (including detailed specification) was produced (WA 2014).

The project also conforms to the *Standard and guidance for archaeological field evaluation* (IfA 2008) and *Standards and guidelines for archaeological projects in Worcestershire* (WCC 2010).

The event reference for this project, given by the HER is WSM 57098.

2 Aims

The aims of this evaluation are:

- to describe and assess the significance of the heritage asset with archaeological interest;
- to establish the nature, importance and extent of the archaeological site;
- to assess the impact of the application on the archaeological site.

3 Methods

3.1 Personnel

The project was undertaken by Andrew Walsh (BSc MSc, AIfA, FSA Scot); who joined Worcestershire Archaeology in 2013 and has been practicing archaeology since 2004, and was assisted in the field by Graham Arnold (BA, MSc). Graham Arnold led the report preparation. The project managers responsible for the quality of the project were Tom Rogers (BA MSc) and Tom Vaughan (BA MA, AIfA). Illustrations were prepared by Carolyn Hunt (MIFA). Robert Hedge (BA, MA Cantab) contributed a personal comment for analysis of finds.

3.2 Documentary research

An archaeological desk-based assessment (DBA) was previously undertaken by CgMs Consulting (2014). The DBA identified a low potential for non-designated assets relating to all periods.

3.3 Fieldwork strategy

A detailed specification has been prepared by Worcestershire Archaeology (WA 2014).

Fieldwork was undertaken between 31 March 2014 and 2 April 2014. The site reference number and site code is WSM 57098.

Nine trenches, amounting to just over 690m² in area, were excavated over the site area of 7.7ha. The location of the trenches is indicated in Figure 2. Trench 3 was not excavated due to an access issue. This variation was agreed with the planning archaeologist for Warwickshire County Council. Trench 6 was reorientated to a north-east to south-west alignment due to the presence of trees and a gap of 6m was left due to the presence of services detected running towards the kennels building.

Deposits considered not to be significant were removed using a 360º tracked excavator, employing a toothless bucket and under archaeological supervision. Subsequent excavation was undertaken

by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012). On completion of excavation, trenches were reinstated by replacing the excavated material.

An on-site monitoring meeting was held with the planning archaeologist for Worcestershire County Council on the 2nd April 2014 at which he confirmed the approval of the works carried out.

3.4 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

3.5 Statement of confidence in the methods and results

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

4 The application site

4.1 Topography, geology and archaeological context

The topography, geology and archaeological context are discussed in the DBA (CgMs Consulting 2014). The following is taken from the DBA:

The solid geology of the study site comprises Mudstone of the Mercia Mudstone Group. No superficial geology is identified for the study site, although sand and gravel of Kidderminster Station Member is recorded to the southwest and east. Alluvium is recorded along Martin Brook which forms the study site's eastern boundary (British Geological Survey online).

There has been no previous investigation of the study site itself. However, as the HER events plan included at Appendix 1 shows, there have been a number of investigations undertaken in the wider study area. Two desk-based assessments covering the Fernhill Heath area are recorded on the HER (WSM 36103 and WSM 38579). Land between the railway line and Droitwich Road, *c* 250m to the southeast of the study site, has been subject to trial trench evaluation (30 trenches) which found no significant archaeological deposits and no artefactual 'background noise' (WSM 42101). Land *c* 400m to the southwest of the study site, on the eastern side of Dilmore Lane and to the west of Station Road, has been subject to desk-based assessment and recent geophysical survey (WSM 49805). Smaller watching briefs (WSM 30119 and WSM 42284) and metal detecting (WSM 42354) have been carried out within the wider search area with no significant archaeology recorded.

4.2 Current land-use

The site is currently open fields used as pasture for animals.

5 Structural analysis

The trenches and features recorded are shown in Fig 2. The results of the structural analysis are presented in Appendix 1.

5.1.1 Phase 1: natural deposits

The natural geological strata was a compact dark reddish brown weathered Mercian Mudstone with natural variations of clay marl, with occasional blue grey silt mottling, lenses of reddish sand and occasional areas of sub rounded gravels. The natural geology was found at between 0.30 and 0.45m below the ground level. In areas down slope to both the east and west this was overlain by a sterile, amorphous light yellowish brown silty clay alluvium from the Martin Brook to the east, which was a maximum of 0.52m in depth (Plates 2 and 5).

5.2 Phase 2: medieval / post-medieval deposits

A series of equally spaced furrows orientated north-east to south-west were recorded in the north-east field, in Trenches 8, 9 and 10 (Plate 6). The ridge and furrow field system was visible as earthworks on the surface. None of the furrows contained any dateable material but it is thought that they related to medieval or post-medieval strip field agriculture. An undated linear (Plate 7) running perpendicular to the furrows was recorded in Trench 10 and is thought to relate to a previous field boundary dividing the arable land from the meadow to the north-east. It was 0.28m in depth and contained no finds.

5.2.1 Phase 3: modern deposits

Various pits were observed, and the finds suggest that they were created for the disposal of agricultural waste. Trenches 2 and 9 contained modern agricultural refuse pits that were backfilled with redeposited natural and mixed material and contained 20th century ceramic land drain fragments and nails (Robert Hedge pers comm). A stake hole for a modern fence post that contained coal and charcoal fragments was also recorded in Trench 7. A number of modern land drains ran across the site orientated north-east to south-west in the south-eastern field.

6 Synthesis

6.1 Medieval/ post-medieval

The furrows recorded in the north-east of the site are a remnant of strip field agriculture. No dating evidence was retrieved from the features.

6.2 Modern

Various pits were observed, and are known to have been created for the disposal of agricultural waste, containing modern concrete, iron nails and ceramic land drains. A modern stake-hole for a fence post was also observed.

7 Significance

No significant archaeological deposits, artefacts or environmental evidence were present on site. Only natural alluvial deposits were observed with undated ridge and furrow and modern agricultural pits.

8 The impact of the development

The negative results from the evaluation, apart from extensive ridge and furrow activity in the north of the site, demonstrate that the development will not adversely impact upon any archaeological deposits.

9 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

An archaeological evaluation was undertaken on behalf of CgMs Consulting on land off Kennels Lane, Fernhill Heath, Worcestershire (NGR SO 86930 59890; HER ref WSM 57098*). A total of nine trenches were excavated over the site. The evaluation revealed the natural Mercian Mudstone and alluvial deposits. Occasional modern pits with 20th century agricultural refuse were found. In the north-east of the site, ridge and furrow activity was found, a remnant of strip field agriculture in the medieval and post-medieval periods, with a perpendicular field boundary evident at the head of the furrows. No significant archaeological deposits, features or artefacts were encountered during the works, demonstrating that the area is unlikely to have been settled in the past and that it has been primarily agricultural land.*

10 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Cathy Patrick (CgMs Consulting) and Mike Glyde (Worcestershire County Council Historic Environment Planning Officer).

11 Bibliography

DCLG 2012 *National Planning Policy Framework*, Department for Communities and Local Government

DCLG/DCMS/EH 2010 *PPS5 Planning for the historic environment: historic environment planning practice guide*, Department for Communities and Local Government/Department for Culture, Media and Sport/English Heritage

IfA 2008 *Standard and guidance for archaeological field evaluation*, Institute for Archaeologists

CgMs Consulting 2014 Archaeological *Desk-based Assessment Kennels Lane, Fernhill Heath, Worcestershire*, unpublished report dated

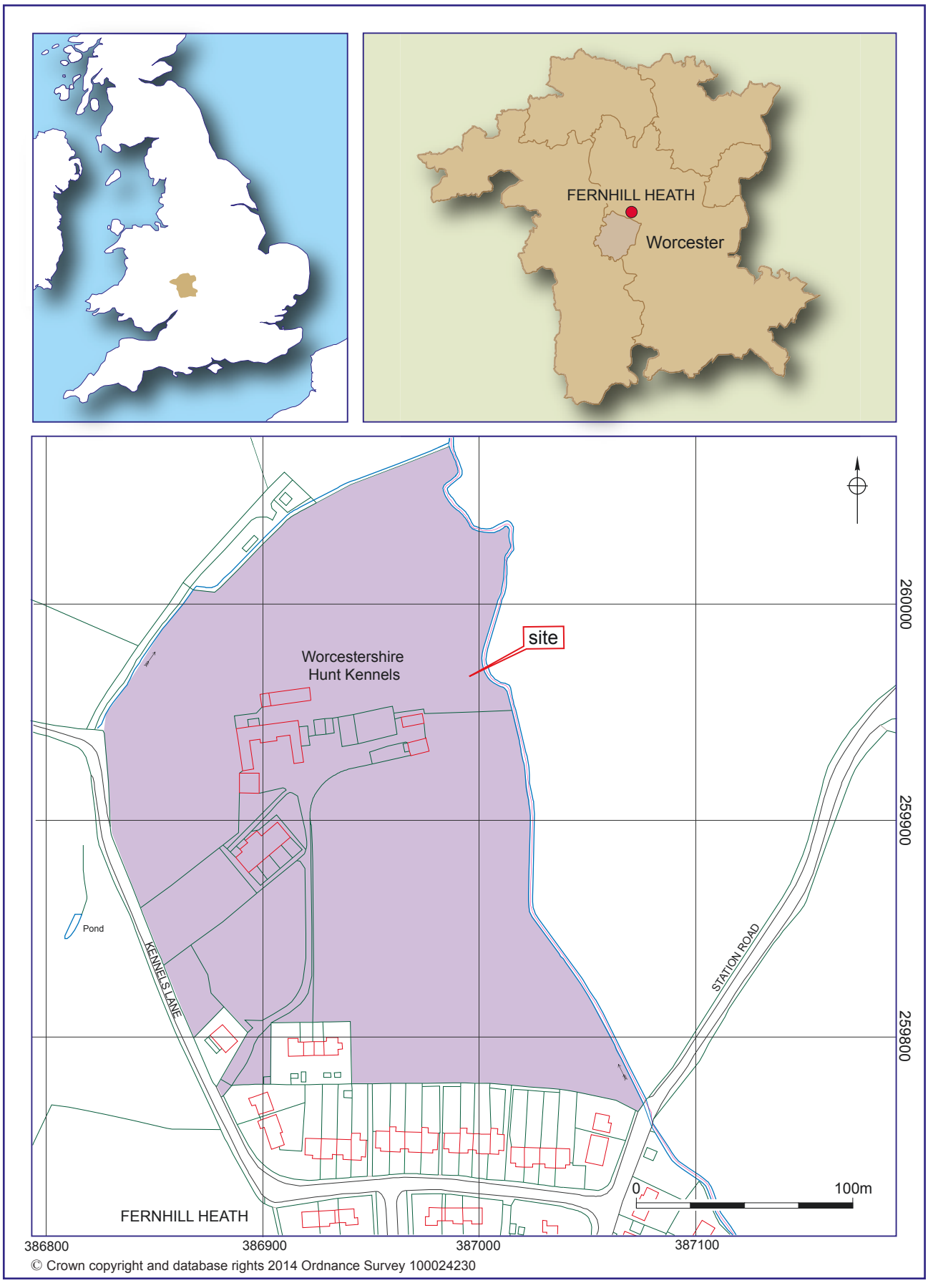
Ragg, J M, Beard, G R, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 *Soils and their use in midland and western England*, Soil Survey of England and Wales, **12**

WA 2012 *Manual of service practice, recording manual*, Worcestershire Archaeology, Worcestershire County Council, report **1842**

WA 2014 *Proposal for an archaeological evaluation of land at Kennels Lane, Fernhill Heath, Worcestershire*, Worcestershire Archaeology, Worcestershire County Council, unpublished document dated 20 March 2014, P4318

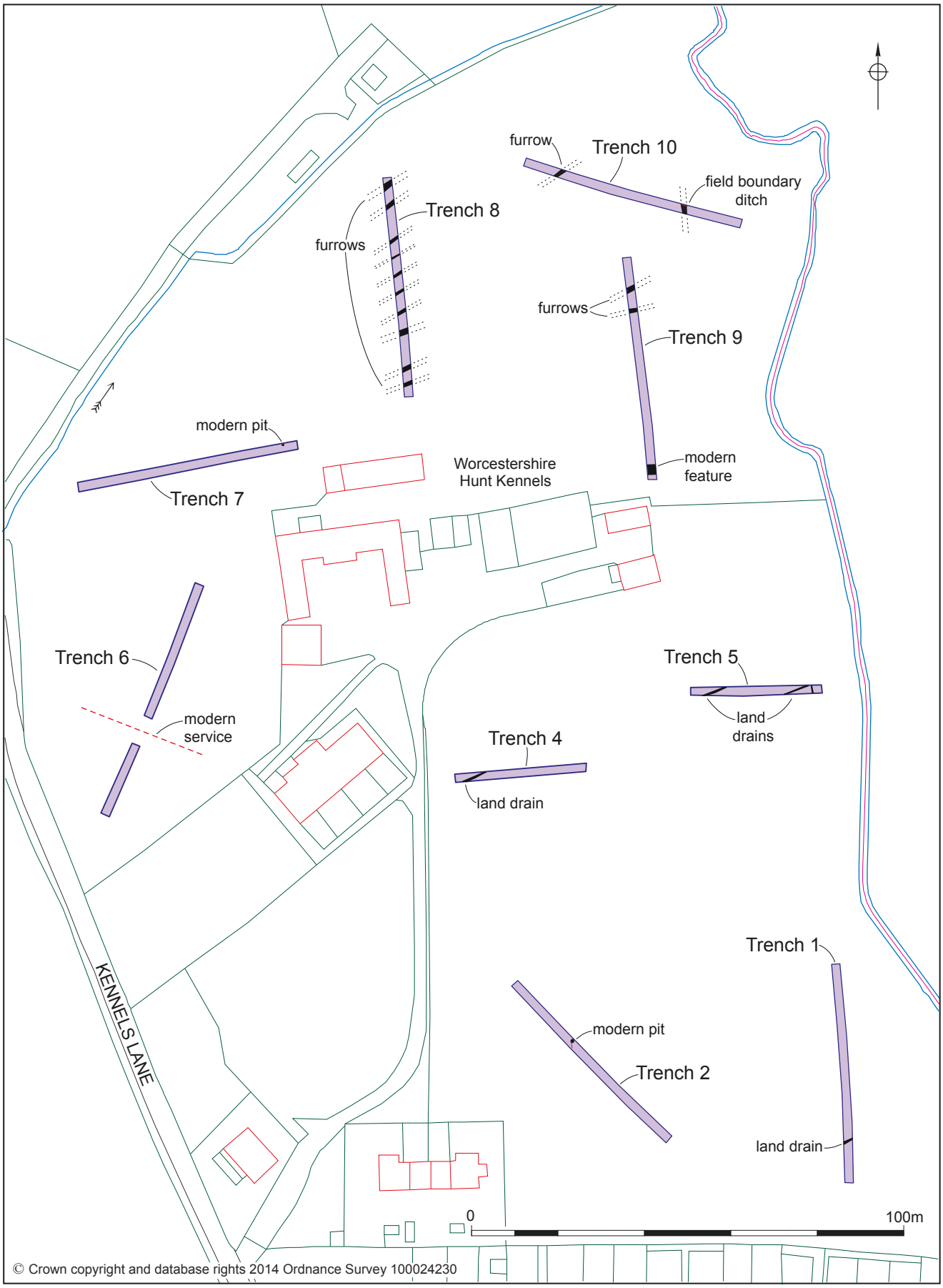
WCC 2010 *Standards and guidelines for archaeological projects in Worcestershire*, Planning Advisory Section, Worcestershire Archive and Archaeology Service, Worcestershire County Council unpublished report **604**, amended July 2012

Figures



Location of the site

Figure 1



Trench location plan

Figure 2

Plates

Plate 1 Trench 4, view east

Plate 2 Trench 5 view west showing alluvium and land drains

Plate 3 Trench 6, excavated in two sections, view north-east

Plate 4 Trench 7, view east

Plate 5 Trench 7 alluvial deposit overlying the natural Mercian Mudstone; view north

Plate 6 Trench 8, showing evenly spaced furrows, view north

Plate 7 South-west facing section of linear 1004 in Trench 10

Appendix 1 Trench descriptions

Main deposit description

Trench 1

Maximum dimensions: Length: 50.00m Width: 1.80m Depth: 0.42 – 0.68m

Orientation: N - S

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
100	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.20m
101	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.20 – 0.32m
102	Natural	Compact dark reddish brown clay with moderate rounded gravels and occasional lenses of reddish sand and blueish grey silts. Naturally occurring geological variations	0.32m +
103	Alluvium	Soft light brown sterile clayey silt	0.32 – 0.62m

Trench 2

Maximum dimensions: Length: 50.00m Width: 1.80m Depth: 0.45m

Orientation: NE - SW

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
200	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.20m
201	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.20 – 0.32m
202	Natural	Compact dark reddish brown clay with moderate rounded gravels and occasional lenses of reddish sand and blueish grey silts. Naturally occurring geological variations	0.32m +
203	Fill	Redeposited natural with frequent coal, charcoal and ashy inclusions. Fill of pit 204	0.45 - 0.74m
204	Cut	Cut for modern farm agricultural pit	0.45 – 0.74m

Trench 3 – not excavated due to access issues

Trench 4

Maximum dimensions: Length: 30.00m Width: 1.80m Depth: 0.42m

Orientation: E - W

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
400	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.30m
401	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.30 – 0.40m
402	Natural	Compact dark reddish brown clay with moderate rounded gravels and occasional lenses of reddish sand and blueish grey silts. Natural geological variations.	0.40m +
403	Fill	Modern land drain fill of backfilled mixed subsoil and redeposited natural and modern cbm. Unexcavated.	0.42m
404	Cut	Modern land drain orientated NE – SW. 0.30m wide. Unexcavated.	0.42m

Trench 5

Maximum dimensions: Length: 30.00m Width: 1.80m Depth: 0.42 – 0.68m

Orientation: E - W

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
500	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.20m
501	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.20 – 0.60m
502	Natural	Compact dark reddish brown clay with moderate rounded gravels and occasional lenses of reddish sand and blueish grey silts. Naturally occurring geological variations	0.60 – 0.90m
503	Fill	Modern land drain fill of backfilled mixed subsoil and redeposited natural and modern cbm. Unexcavated.	Base of trench Unexcavated
504	Cut	Modern land drain orientated NE – SW. 0.30m wide. Unexcavated.	Base of trench

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
			Unexcavated
505	Fill	Modern land drain fill of backfilled mixed subsoil and redeposited natural and modern cbm. Unexcavated.	Base of trench Unexcavated
506	Cut	Modern land drain orientated NE – SW. 0.30m wide. Unexcavated.	Base of trench Unexcavated
507	Fill	Modern land drain fill of backfilled mixed subsoil and redeposited natural and modern cbm. Unexcavated.	Base of trench Unexcavated
508	Cut	Modern land drain orientated NE – SW. 0.30m wide. Unexcavated.	Base of trench Unexcavated
509	Alluvium	Soft light brown sterile clayey silt	0.60 – 0.90m

Trench 6

Maximum dimensions: Length: 33.00m + 17.50m Width: 1.80m Depth: 0.65 – 0.80m

Orientation: NE - SW

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
600	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.20m
601	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.20 – 0.32m
602	Natural	Compact dark reddish brown clay with moderate rounded gravels and occasional lenses of reddish sand and blueish grey silts. Naturally occurring geological variations	0.45m +

Trench 7

Maximum dimensions: Length: 50.00m Width: 1.80m Depth: 0.45 – 1.02m

Orientation: E - W

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
700	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.20m
701	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.20 – 0.60m
702	Alluvium	Soft light brown sterile clayey silt	0.60 – 0.90m
703	Natural	Weathered Mercian mudstone geology with occasional blue grey silt mottling and pockets of gravel	0.45 – 1.05m
704	Fill	Modern stake hole for fence post . Friable dark greyish black silty clay with frequent charcoal, degraded wood and coal.	0.45 – 0.64m
705	Cut	Modern stake hole for fence post. U –shaped profile 0.21m in diameter and 0.19m in depth	0.45 – 0.64m

Trench 8

Maximum dimensions: Length: 50.00m Width: 1.80m Depth: 0.45m

Orientation: N - S

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
800	Topsoil	Friable, dark greyish brown silty sandy clay with occasional charcoal flecking and sub rounded pebbles.	0 – 0.22m
801	Subsoil	Moderately compact mid brown silty clay with moderate small rounded gravels	0.18 – 0.37m
802	Natural	Compact red clay with frequent patches of gravel and occasional blue grey gleyed silt mottling.	0.37 – 0.45m
803	Fill	Fill of furrows. Friable mid brown silty clay with moderate small rounded gravels, similar to subsoil 801. Unexcavated. No finds.	0.45m
804	Cut	Cut of furrows. Equally spaced furrows measuring 1.00m – 1.50m in width and aligned NE - SW	0.45m

Trench 9

Maximum dimensions: Length: 50.00m Width: 1.80m Depth: 0.32 – 0.50m

Orientation: N - S

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
900	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.20m
901	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.20 – 0.30m
802	Natural	Compact red clay with frequent patches of gravel and occasional blue grey gleyed silt mottling.	0.30 – 0.50m
903	Fill	Fill of modern feature with redeposited natural, topsoil and concrete. Not excavated.	0.45m
904	Cut	Cut of modern linear feature aligned east-west.	0.45m
905	Fill of furrow	Fill of furrows. Friable mid brown silty clay with moderate small rounded gravels, similar to subsoil. Unexcavated. No finds.	0.45m
906	Cut of furrows	Cut of furrows. Equally spaced furrows measuring 1.00m – 1.50m in width and aligned NE - SW	0.45m

Trench 10

Maximum dimensions: Length: 50.00m Width: 1.80m Depth: 0.45 – 1.02m

Orientation: NW - SE

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1000	Topsoil	Friable, dark brown silty sandy clay with occasional charcoal flecking, sub rounded pebbles and high humic content	0 – 0.20m
1001	Subsoil	Moderately compact orangey brown silty clay with occasional small rounded gravels	0.20 – 0.35m
1002	Natural	Weathered Mercian mudstone geology with occasional blue grey silt mottling and pockets of gravel	0.35 – 0.70m
1003	Fill	Fill of field boundary. Firm reddish brown clayey silt with occasional charcoal flecking and small cobbles, Perpendicular to furrows in the field.	0.45 – 1.05m

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
1004	Cut	Cut of field boundary. Shallow ditch with sloping sides and a rounded base.	0.45 – 0.64m
1005	Alluvium	Soft light brown sterile clayey silt	0.35 – 0.70m

Appendix 2 Technical information

The archive (site code: WSM 57098)

The archive consists of:

2	Context records AS1
1	Field progress reports AS2
1	Photographic records AS3
1	Drawing number catalogues AS4
1	Scale drawings
79	Digital photographs
9	Trench record sheets AS41
1	CD-Rom/DVDs

1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Worcestershire County Museum
Museums Worcestershire
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ
Tel Hartlebury (01299) 250416