



**Land off Crookbarrow Road
Norton
Worcestershire**

Programme of Archaeological Work

for

Persimmon Homes

CA Project: 3575
CA Report: 11296

January 2012

Land off Crookbarrow Road
Norton
Worcestershire

Archaeological Watching Brief

CA Project: 3575
CA Report: 11296

prepared by	Rebecca Riley, Project Supervisor
date	03/01/2012
checked by	Cliff Bateman, Project Manager
date	10/01/2012
approved by	Mark Collard, Head of Contracts
signed	
date	19/01/2012
issue	01

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

CONTENTS

SUMMARY	2
1. INTRODUCTION.....	3
2. RESULTS (FIGS 2-5).....	5
3. DISCUSSION.....	11
4. CA PROJECT TEAM.....	14
5. REFERENCES.....	14
APPENDIX A: CONTEXT DESCRIPTIONS	16
APPENDIX B: THE FINDS.....	18
APPENDIX C: OASIS REPORT FORM	20

LIST OF ILLUSTRATIONS

- Fig. 1 Site location plan 1:25,000
- Fig. 2 Trench location plan showing archaeological features 1:1000
- Fig. 3 Plan of Strip, Map and Sample area showing archaeological features 1:500
- Fig. 4 Sections and photographs
- Fig. 5 Sections and photographs



SUMMARY

Project Name:	Land off Crookbarrow Road
Location:	Norton, Worcestershire
NGR:	SO 8676 5144
Type:	Programme of Archaeological Work
Date:	27th September to 27th October 2011
Planning Reference:	W/10/2978
Location of Archive:	Worcestershire County Museum
Site Code:	CBR 11

A programme of archaeological work was undertaken by Cotswold Archaeology in October 2011 prior to groundworks associated with a residential development at land off Crookbarrow Road, Norton, Worcestershire.

Four ditches were identified (A-D), expanding on the results of the evaluation and providing a chronology for three phases of archaeological activity at the site from the mid to late Iron Age to the Roman period. Ditch A/B contained pottery dating to the mid to late Iron Age and was orientated north-east/south-west, returning to the north-west towards Crookbarrow Road and possibly defining the north-east corner of an enclosure. It had been re-cut by Ditch D, which extended beyond Ditch A/B to the north-east and contained Roman pottery broadly dating from the 1st to the 4th-centuries AD. The third phase of activity was marked by the addition of Ditch C, which provided three sides of a small, square paddock, using Ditch D as the final boundary to the north-west.

The characterisation and dating of discreet features was hampered by two phases of post-Roman ridge and furrow and poor ground conditions. Four undated pits and three areas of animal poaching were recorded within the site.



1. INTRODUCTION

- 1.1 In September and October 2011 Cotswold Archaeology (CA) carried out a programme of archaeological works for Persimmon Homes on land off Crookbarrow Road, Norton, Worcestershire (centred on NGR: SO 8676 5144; Fig. 1). The programme of archaeological works was undertaken to fulfil a condition attached to planning consent for a residential development (Planning ref: W/10/2978). The objective of the programme of archaeological works was to remove the modern overburden and record all archaeological remains exposed within the development area prior to construction.
- 1.2 The programme of archaeological works was carried out in accordance with a *Brief* issued by Mr Mike Glyde, Historic Environment Planning Advisor, Worcestershire Historic Environment & Archaeology Service, archaeological advisor to Wychavon District Council (WDC), and with a subsequent detailed Written Scheme of Investigation (WSI) produced by CA (2011) and approved by WDC acting on the advice of Mr Glyde. The fieldwork also followed the *Standard and Guidance for excavation* (IfA 2008),, *Standard and Guidance for an archaeological watching brief* (IfA 2008), the *Standards and Guidelines for Archaeological Projects in Worcestershire* (WHEAS 2010) and the *Management of Archaeological Projects 2* (English Heritage 1991), the *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* (EH 2006). It was monitored by Mike Glyde, including a site visit on 28th September 2011.

The site

- 1.3 The site is situated to the south of Worcester, in the suburban area of Norton, on land to the immediate west of a housing estate adjacent to Norton Road and to the north and east of St Peter's Garden Centre (Fig. 1). The site lies at approximately 32m AOD, with ground levels dropping gently from north to south.
- 1.4 The development area is approximately 3.2ha and comprises two fields. The proposed archaeological works were targeted upon an area measuring 0.31ha adjacent to Crookbarrow Road (see Fig. 1 for location and extent).

- 1.5 The underlying solid geology of the area is mapped as Branscombe Mudstone Formation of the Norian period of the Upper Triassic era (BGS 2011). The natural substrate encountered comprised pinkish red clay overlying hard orangey red clay containing degraded red and light greenish grey mudstone flecks.

Archaeological background

- 1.6 A desk based assessment of the site undertaken by CSa describes the cultural heritage of the site and its environs fully (CSa 2010). A summary of that information is provided below.
- 1.7 The assessment note that the proposed development area occupies part of the site of the former Norton Barracks and lies in an area of archaeological potential. An undated cropmark enclosure is recorded by Worcestershire HER (WSM01367) approximately 120m to the west of the application area, and a large Roman farm or hamlet, with a specialist industrial character, approximately 650m to the north-east (Jackson et al 1992). A small watercourse along the southern boundary formerly fed a large medieval fishpond located 65m beyond the site (CSa 2010).
- 1.8 An archaeological watching brief was undertaken throughout the site in September 2010 during groundworks associated with ground clearance for suspected unexploded ordnance (UXO) identified during a preceding geophysical survey. The mechanical excavation of 186 test-pits, typically measuring 0.8m by 0.5m, was archaeologically monitored (Fig. 2). The depths of the excavations were determined by the depth of the suspected UXO, and were typically between 0.05m and 0.36m below the present ground surface (the majority of the excavated test-pits did not penetrate below the existing topsoil). However, deeper excavations within 31 of the test-pits did identify evidence that modern demolition rubble had been spread throughout much of the site. No features or deposits of archaeological interest were observed during the groundworks and, despite visual scanning of spoil, no artefactual material pre-dating the modern period was recovered (CA 2010a).
- 1.9 Subsequent archaeological evaluation, comprising thirteen trenches, was undertaken by CA in October 2010 (see Fig. 2 for location and extent). Two intercutting ditches, mostly probably dating to the Roman period although there is a possibility that the earliest is Iron Age in origin, were identified. The earlier of the ditches may have defined the northeast corner of an enclosure. Small quantities of iron slag were

recovered from both ditches. No other archaeological remains were uncovered during the evaluation. Extensive modern disturbance and dumping was revealed in the southern field of the proposed development (CA 2010b).

Methodology

- 1.10 The fieldwork followed the methodology set out within the WSI (CA 2011). The excavation area was set out on OS National Grid (NGR) co-ordinates using a Leica 1200 series SmartRover GPS, and scanned for live services by trained Cotswold Archaeology staff using CAT and Genny equipment. All non-archaeologically significant soils were removed, under constant archaeological supervision, using a toothless ditching bucket (Fig. 3).
- 1.11 Where archaeological deposits were encountered written, graphic and photographic records were compiled in accordance with CA Technical Manual 1: *Fieldwork Recording Manual* (2007).
- 1.12 The archive and artefacts from the programme of archaeological work are currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the artefacts will be deposited with Worcestershire County Museum, along with the site archive. A summary of information from this project, set out within Appendix C, will be entered onto the OASIS online database of archaeological projects in Britain.

2. RESULTS (FIGS 2-5)

- 2.1 This section provides an overview of the results of the programme of archaeological work; detailed summaries of the recorded contexts, and finds are to be found in Appendices A and B respectively. The archaeological work was undertaken within the area shaded in blue, at the north-east corner of the site (Fig. 2). Two phases of ridge and furrow were identified, and these have affected the survival of archaeological features (Fig. 3). The stratigraphic evidence, particularly intercutting ditches, was hampered by poor ground conditions, therefore the chronological sequence of the site has been based on artefactual evidence.

- 2.2 The excavation revealed four ditches (A-D; Fig. 3), broadly dating from the Middle to Late Iron Age through to the Roman period, and four undated pits. The majority of the pottery recovered was Malvernian ware, which continued in use from the Iron Age in to the Roman period, therefore the spot dates for some contexts are necessarily broad where unfeatured sherds occurred in isolation. All post-Roman pottery was considered to be intrusive. The results of the excavations are presented below in chronological order.
- 2.3 Natural geological substrate 2002, comprising dark red silty clay sealing an orangey red mudstone at a depth of 0.50m-0.70m, was typically revealed at an average depth of 0.26m below present ground level. The clay natural substrate was dry, hard and cracked for a depth of at least 0.5m. For the majority of the site the natural substrate was overlain by subsoil 2001, averaging 0.14m in thickness, which was in turn sealed by 0.16m of topsoil (2000). Along the north-eastern edge of site, parallel to Crookbarrow Road, topsoil 2000 was overlain by 0.16m of made ground, 2004, presumably associated with the construction of the adjacent road and sealed by 0.1m of topsoil 2003.

Iron Age

- 2.4 North-east/south-west orientated Ditch A was 45m in length, V-shaped in profile and a maximum of 1.56m deep (Fig. 3, Fig. 4; Section BB). Middle to Late Iron Age pottery was recovered from primary and secondary silting deposits 2033 and 2011 within cut 2010 and secondary deposit 2060 from cut 2055. A ceramic fragment identified as a possible sherd of Droitwich briquetage was also retrieved from fill 2060 and dated to the Iron Age. Two sherds of oxidised Severn Valley ware dating from the mid 1st-century to the 4th-century AD were recovered from primary fill 2056 within cut 2055, however these are possibly intrusive, being associated with Ditch D (see section 2.8 below) as they were recovered with Middle to Late Iron Age pottery made from the same fabric as the pottery recovered from fills 2033, 2011 and 2060. Poorly-preserved animal bone identified as cattle, sheep/goat, pig or horse or a combination of these was recovered from fills 2011, 2033, 2056, and 2060.
- 2.5 The return of Ditch A, curving to the north-west to become Ditch B, was observed during the evaluation (CA 2010b, Fig. 4; Section AA). Cut 206 contained a small amount of iron slag, animal bone and a single sherd of Iron Age/ Early Roman pottery within fill 207.

- 2.6 Ditch B was orientated north-west/south-east and had a U-shaped profile and a maximum depth of 1.20m (Fig. 4; Section CC). Pottery dating to the Middle to Late Iron Age and the Late Iron Age to 1st-century AD was recovered from fills 2017 and 2018 respectively within cut 2019, as well as quantities of fuel ash which is routinely encountered in Iron Age assemblages. Fragments of sheep/goat bone were recovered from primary fill 2018.

Roman

- 2.7 Ditch C formed three sides of a small, broadly square enclosure or paddock measuring approximately 15m across. The south-west and south-east sides were characterised by a narrow, V-shaped ditch (Fig. 5; section EE), and middle to late Iron Age pottery was recovered from upper fills 2026 and 2039 of ditch slots 2028 and 2042 respectively. Small quantities of fuel ash, typically dated to the Iron Age, were recovered from fills 2027 and 2026 of cut 2028. The north-eastern side of the paddock comprised a wider, more substantial ditch (Fig. 5; Section FF). Middle to late Iron Age pottery was recovered from upper fills 2029 and 2030 of ditch slot 2032, and fuel ash was recovered from fills 2029 and 2031. Fill 2030 also contained fragments of sheep/goat bone, while poorly-preserved indeterminable animal bone fragments were recovered from fills 2031, 2035, 2040 and 2043. In spite of the Iron Age pottery recovered from this ditch, the chronological sequence suggests that it is more likely to be contemporary with the Roman activity associated with Ditch D.
- 2.8 Ditch D was 84m in length and orientated north-east/south-west (Fig. 3). At the north-eastern extent of the site Ditch D comprised two intercutting ditches (Fig. 5; Section GG). Ditch 2006 was steep-sided with a flat base and contained two fills (2008 and 2009). Upper fill 2009 had been cut by narrower V-shaped ditch 2005, which produced mid 1st to 2nd-century AD pottery and fragments of sheep/goat bone from its upper fill 2007. At the south-western extent of the site Ditch D had a much wider, U-shaped profile (Fig. 4; Section BB) and cut the upper fills of Ditch A. Roman pottery dating to the mid 2nd to mid 3rd-centuries AD and the 2nd to 4th-centuries AD was retrieved from fill 2014 of cut 2013 and fill 2059 of cut 2057 respectively. This U-shaped profile was also evident in cut 2034 (Fig. 5; Section DD), therefore despite the lack of dateable material (the sherd of post-medieval roof tile recovered from upper fill 2037 was considered to be intrusive), this intervention is likely to have been part of Ditch D.

- 2.9 The intersection between ditches B and D was excavated in Trench 2 during the evaluation (CA 2010b) (Fig. 4; Section AA). North-east/south-west aligned ditch cut 203 had moderately sloping sides and a flat base. Pottery dating to the 2nd and 3rd centuries AD, animal bone and a small quantity of iron slag were recovered from fill 204. The orientation and Roman date for cut 203 suggests it is a continuation of Ditch D.

Medieval or later

- 2.10 Pottery dating to the 2nd to 3rd-centuries AD was recovered from upper fill 2016 of Ditch B (cut 2019), however this fill also contained intrusive fragments of glass and sherds of a post-medieval vessel and was considered to be the result of the soft upper fills of the ditch being poached by animals. Quantities of residual fuel ash were also recovered from this deposit.
- 2.11 A sherd of medieval pottery was retrieved from upper fill 2049 of ditch slot 2051; a single fragment of post-medieval ceramic roof tile was recovered from upper fill 2037 of ditch slot 2034 and fragments of post-medieval pottery were recovered from medial fill 2040 of ditch slot 2042. On all three occasions these sherds were considered to be intrusive. They all derive from the upper fills of interventions through Ditch C, which by necessity were positioned between the furrows that severely truncate the ditch.
- 2.12 **Undated**
Pits 2020, 2022, 2024 and 2064 were all undated. They ranged from 0.6m to 1.0m in diameter and from 0.10m to 0.30m in depth and had asymmetrical uneven sides and undulating bases. Given the dry, cracked ground conditions and lack of finds evidence it was not possible to determine whether these were archaeological features or areas of tree root activity; although the latter seems probable.
- 2.13 Undated deposits 2054 and 2062 were located to the north-west of Ditch A and provide further evidence of the poaching of the upper fill of the ditch by animal trampling (Fig. 3). It is possible that they are contemporary with the poaching evident in the upper fill (2016) of Ditch B (see paragraph 2.10).



The Finds and Palaeoenvironmental Evidence

- 2.14 The finds assemblage is summarised in Appendix B. Pottery of late prehistoric, Roman and later date was recovered, together with quantities of fuel ash, animal bone and post-medieval vessel glass.
- 2.15 Where referred to in the text and in appendix B, pottery fabric codes are in accordance with the Worcestershire pottery type series (Hurst and Rees 1992; Hurst 1994; and at www.worcestershireceramics.org). It should be noted that the dating of some pottery, particularly unfeathered sherds in Malvernian rock-tempered fabrics (fabric 3 or 3.2) is hindered by the long-lived nature of this 'native' tradition and its continuance well into the Roman period. Context spot-dates given in appendix B for such types are necessarily broad when occurring in isolation, although there are indications (below) that most material belongs to the earlier part of the given date range.

Late Prehistoric (Iron Age) pottery

- 2.16 Pottery considered of Late Prehistoric, almost certainly Iron Age date, accounts for the bulk of the recovered assemblage and was identified from nine separate deposits (appendix B). The larger part of this group comprises bodysherds in handmade Malvernian type igneous/metamorphic rock-tempered fabrics (fabric 3). As already noted, such fabrics have a long period of currency, extending into the 2nd century AD. One sherd, seemingly residual from upper ditch fill 2016, features scored decoration common to Iron Age wares (Peacock 1968). Decoration of any kind was however absent from seemingly stratified Iron Age groups (appendix B). One rim from deposit 2060 is unlike the neck-less, squared forms typical for 'tubby cooking pot' of the earlier Roman period and would be consistent with a Middle Iron Age date. The overall coarseness of Malvernian (rock-tempered) fabrics and absence of Roman types further encourages Iron Age dating for material from ditch fills 2011, 2012, 2017, 2026, 2029, 2033, 2039 and 2046.
- 2.17 Material from ditch fill 2018 comprises several sherds in a finer Malverns rock-tempered fabric which is more consistent with fabric 3.2, commonly used for tubby cooking pot forms. A rimsherd from a large, thick-walled vessel which occurs in a fabric with abundant coarse rock inclusions, would fit best with a Late Iron Age or Early Roman date (1st centuries BC/AD).

- 2.18 Material more definitely of Iron Age date was recovered from primary ditch fill 2033. This group comprises 28 sherds from one or possibly two vessels in a coarse fossil shell-tempered fabric (fabric 4.3). Rim sherds from this deposit are suggestive of a vessel (probably a jar), probably of slack-shouldered form and with upright neck/simple rim, for which a Middle Iron Age date would be likely.

Roman and later pottery

- 2.19 Pottery certainly of Roman date was identified from six deposits (appendix B) and comprises mainly sherds in oxidised Severn Valley ware (fabric 12). Identifiable vessel forms are confined to tankards of common type (Webster 1976: Form E). The example from ditch fill 2007 appears to derive from a moderately straight-walled form (as Webster 1976, nos 41-42) which would indicate 2nd to 3rd century dating. An abraded sherd of samian, tentatively identified as of east Gaulish type (fabric 43) was recorded from ditch fill 2014. As such it probably dates to the mid 2nd to earlier 3rd centuries AD.
- 2.20 A single sherd in Malverns redware fabric (fabric 69) from ditch fill 2049 is broadly dateable across the late 16th to early 17th centuries. Highly fragmented sherds in a red-firing glazed earthenware fabric (fabric 78) probably date to the 18th or 19th centuries.

Other finds

- 2.21 Quantities of a lightweight, vesicular and vitreous material from ditch fills 2007, 2016-18, 2026-27, 2029 and 2031 are identified as fuel ash. The high temperature processes leading to the creation of fuel ash 'slags', which are routinely encountered in Iron Age assemblages, are poorly understood (Salter 2005). These might include metallurgical processes or the burning of timber and daub structures.
- 2.22 A small ceramic fragment from ditch fill 2060 which occurs in a re-firing fabric with paler surfaces and with common organic inclusions has been tentatively identified as Droitwich briquetage. Briquetage containers of vase-like form were used to transport salt from the brine springs at Droitwich throughout the Iron Age and are common finds from Iron Age sites in Worcestershire.
- 2.23 Fired clay was noted from a number of contexts, although its small and fragmentary condition made identification of original purpose impossible. Flat (roof) tile fragments in a hard red fabric from ditch fill 2037 are of a class common from the late medieval

and post-medieval periods. Further fragments of tile recovered as unstratified finds are not closely dateable, although the fabric and thickness would be consistent with Roman dating.

- 2.24 Animal bones were recovered from 17 contexts (Table 1), and comprised a total of approximately 238 fragments at a total weight of 394g. These were in general of very poor preservation: four contexts (2031, 2035, 2040 and 2043) contained only flecks of bones, and the majority of the bone material in the remaining deposits comprised only fragments of teeth and long bone cortices.
- 2.25 Four species were identified in the material: bones from cattle (*Bos taurus*) were present in six contexts, caprovine (*Ovis aries/Capra hircus*) in seven contexts, pig (*Sus sp.*) in one context, and horse (*Equus caballus*) in one context. No cut marks due to slaughter and/or butchery practices were noted, although this is likely to be due to taphonomic factors.

3. DISCUSSION

- 3.1 The results of the programme of archaeological work addressed the original aims of the project set out within the WSI, which were to record and date any evidence of past settlement or other land use. Four ditches were identified (A-D), expanding on the results of the evaluation and providing a chronology for three phases of archaeological activity at the site from the mid to late Iron Age through to the Roman period. The stratigraphic evidence was hampered by hard, dry ground conditions and two phases of later ridge and furrow and was therefore inconclusive in some areas. Where discreet relationships could not be observed, the chronology of the site sequence has been drawn from the finds evidence. However, further analysis of the phasing of the site, based on the distribution of the finds and the profiles of the ditches, suggests that in spite of the Iron Age pottery recovered from the upper fills of Ditch C, which is probably residual, the area of Iron Age activity does not extend this far north and this feature is more likely to represent a the third phase of activity on the site, associated with Roman Ditch D.

3.2 *Iron Age*

Ditches A and B date to the mid to late Iron Age and are similar in profile and depth, suggesting they are contemporary. Ditch A/B therefore belongs to the first and

earliest phase of activity on the site; a ditch orientated north-east/south-west, returning to the north-west towards Crookbarrow Road and possibly defining the north-east corner of an enclosure (Fig. 3). An undated cropmark enclosure is recorded by Worcestershire HER (WSM01367) approximately 120m to the west of the application area, providing a possible parallel for Iron Age enclosures in the area.

- 3.3 The evaluation results suggested that ditch 206 (subsequently Ditch B) may have had Iron Age origins due to the presence of Malvernian rock-tempered ware from fill 207, which was a long-lived native tradition from the Mid Iron Age in to the Roman period (CA 2010b, 7). The overall coarseness of the Malvernian rock-tempered fabrics and absence of other Roman pottery types has now given a more secure Iron Age date for fills 2011, 2012, 2017 and 2033 of Ditch A/B; therefore the programme of archaeological work has enhanced the results of the evaluation. The rim-shoulder from a large thick-walled vessel recovered from ditch fill 2018 has a Late Iron Age to Early Roman date; however this does not provide enough evidence for the ditch to be Roman, instead perhaps suggesting that the ditch may have gone out of use in the later Iron Age. The small fragment of possible Droitwich briquetage from ditch fill 2060 also supports an Iron Age date for the ditch; these vessels were used to transport salt from brine springs in Droitwich throughout the Iron Age. The ditch appears to have infilled naturally through a series of silty clay deposits eroding and weathering from the sides of the cut. It is also probable that the ditch had an adjacent bank, although there was no clear evidence (in the form of tip lines or differential preservation of the natural) for which side of the ditch it may have occupied.
- 3.4 Four fragments of a vitreous iron-working slag were recovered from fill 207 of ditch 206 (subsequently Ditch B) during the evaluation. Quantities of a similar lightweight, vesicular and vitreous material were recovered from ditch fills 2007, 2016, 2017, 2018, 2026, 2027, 2029 and 2031 during the excavation and were interpreted as fuel ash. The processes behind the creation of fuel ash slags are poorly understood; however they are frequently encountered in Iron Age assemblages and might relate to metallurgical processes or the burning of timber and daub structures. Fuel ash can therefore be considered indicative of industrial processes or the disuse of domestic or industrial structures. A large Roman farm or hamlet, with a specialist industrial character, is situated approximately 650m to the north-east of the site (Jackson et al 1992). The presence of fuel ash slag in Iron Age ditch fills could suggest

a pre-Roman date for metalworking in the area, and provides evidence that the site is on the periphery of an area of domestic or industrial activity.

Roman

- 3.5 The second phase of activity on the site is characterised by Ditch D which runs north-east/south-west throughout the site, cutting Ditch A/B, and contains pottery dating from the mid 1st to the 4th-centuries AD. Given the size of Ditch A/B, and the later Iron Age date, it is probable that it was visible as a landscape feature well in to the Roman period. It appears that this extant ditch was re-cut and extended to the north-east to provide a boundary in the Roman period. Ditch D was not as uniform as Ditch A/B, instead being characterised by a number of varying profiles that appear to have been influenced by the ease of cutting through the backfills of Ditch A/B rather than the natural clay; slots 2013 and 2057 were much more substantial than those to the north-east. There was evidence for the maintenance or enlargement of the ditch at the north-eastern extent where V-shaped ditch 2005 cut through the backfills of earlier, shallower ditch 2006.
- 3.6 Ditch C forms three sides of a small square paddock, measuring broadly 15m across, that marks the third phase of archaeological activity on the site. The south-west and south-east sides were characterised by a narrow, V-shaped ditch, the north-eastern side comprised a wider, more substantial ditch and the north-western side was enclosed by Ditch D. Although much of the pottery from Ditch C was mid to late Iron Age in date, the stratigraphic evidence at the intersections with Ditch D was inconclusive. As the Iron Age activity represented by Ditch A/B does not extend towards the northern part of Ditch D, it is possible that the paddock was constructed after Ditch D. The poaching of the upper fills of ditches A/B and D provides further evidence of animal activity in the area at this time.

Medieval or later

- 3.7 All sherds of medieval or later material have been identified as intrusive. The poaching of ditch fills by animal activity and the two phases of ridge and furrow demonstrates that there is high potential for intrusive (and residual) material to penetrate at least the upper fills of the archaeological features. The poor ground conditions make it difficult to effectively characterise discreet features. It is still uncertain whether undated pits 2020, 2022, 2024 and 2064 are genuine archaeological features or areas of root activity; although the latter seems more probable.

4. CA PROJECT TEAM

Fieldwork was undertaken by Rebecca Riley, assisted by Tim Havard, Jamie Wright, Roy Poulter, Chris Watts, Jay Wood, Jon Pick, Hazel O'Neill and Sophie Wood. The report was written by Rebecca Riley. The illustrations were prepared by Jonathan Bennett. The archive has been compiled by Rebecca Riley, and prepared for deposition by James Johnson. The project was managed for CA by Cliff Bateman.

5. REFERENCES

BGS (British Geological Survey) 2011 Geology of Britain Viewer http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html viewed 29 November 2011.

CA (Cotswold Archaeology) 2010a *Norton Lane, Worcester, Worcestershire: Archaeological Watching Brief*. CA typescript report **10141**

CA (Cotswold Archaeology) 2010b *Norton Lane, Worcester, Worcestershire: Archaeological Evaluation*. CA typescript report **10194**

CA (Cotswold Archaeology) 2011a Land off Crookbarrow Road, Norton, Worcestershire: Written Scheme of Investigation for a Programme of Archaeological Work

CA (Cotswold Archaeology) 2011b *Norton Lane, Worcester, Worcestershire: Archaeological Watching Brief. Addendum to CA typescript report 10141*

CSa (CSa Environmental Planning) 2010 *Land off Norton Lane, Worcester: Archaeological Desk-based Assessment*. Typescript report CSA/1596/02a

Hurst, J. D. and Rees, H., 1992 Pottery fabrics. A multi-period series for the County of Hereford and Worcester. In Woodiwiss, S. G. (ed), Iron Age and Roman salt production and the medieval town of Droitwich, CBA Research Report **81**

Hurst, J. D., 1994 (as amended) *Pottery fabrics. A multi-period series for the County of Hereford and Worcester*, County Archaeological Service, Hereford and Worcester County Council, report **445**

- Jackson R, Hurst D, Pearson E and Ratkai S (1992). *Archaeology on the Strensham to Worcester Aqueduct. In Transactions of the Worcestershire Archaeological Society 3rd Series, 15*, 1-62.
- Peacock, D P S, 1968, A petrological study of certain Iron Age pottery from Western England, *Proc Prehistoric Soc* 34, 414-27
- Salter, C. 2005, 10. The Slag-Like Material, in G. R. Lock, C. Gosden, and P. Daly, *Segsbury Camp: Excavations in 1996 and 1997 at an Iron Age Hillfort on the Oxfordshire Ridgeway*, Oxford University School of Archaeology Monograph **61**. Oxford: Oxford University School of Archaeology
- Seager-Smith, R. and Davies, S.M., 1993. Black Burnished ware Type Series. *The Roman Pottery from Excavations at Greyhound Yard, Dorchester, Dorset*, in P.J. Woodward, S.M. Davies and A.H. Graham, *Excavations at the Old Methodist Chapel and Greyhound Yard, Dorchester 1981-1984 (1993)*. Dorset Natural History and Archaeology Society Monograph Series: Number **12**, 229-289
- Webster, P.V., 1976. 'Severn Valley Ware: a preliminary study', *Trans. Bristol Gloucestershire Archaeol. Soc.. BGAS 94*, 18-46
- WHEAS (Worcestershire Historic Environmental and Archaeology Service) 2011 *Requirement for a programme of archaeological works at land off Crookbarrow Road, Norton, Worcestershire.*



APPENDIX A: CONTEXT DESCRIPTIONS

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
2000	Layer	Buried topsoil: mid greyish brown sandy silty clay			0.16	Modern
2001	Layer	Buried subsoil; light greyish brown sandy silty clay			0.14	Modern
2002	Natural Substrate	Dark purplish red silty clay			0.50-0.70	-
2003	Layer	Topsoil: Mid brown sandy silty clay			0.10	Modern
2004	Layer	Made ground associated with Crookbarrow Road			0.16	Modern
2005	Cut	Cut of a NE/SW aligned ditch, v-shaped profile, cuts fill 2008	3m slot	1.0	0.60	
2006	Cut	Cut of a NE/SW aligned ditch	3m slot	>0.50	0.50	
2007	Fill	Upper fill of ditch 2005; greyish brown silty clay	3m slot	1.0	0.50	MC1-C2
2008	Fill	Fill of ditch 2006; greyish brown silty clay	3m slot	>0.50	0.50	
2009	Fill	Lower fill of ditch 2006; reddish grey silty clay	3m slot	0.20	0.40	
2010	Cut	Cut of large, v-shaped, NE/SW ditch	2.8m slot	2.7	1.56	
2011	Fill	Secondary phase of silting within ditch 2010	2.8m slot	1.92	0.53	MLIA+
2012	Fill	Upper fill of ditch 2010	2.8m slot	2.7	0.65	
2013	Cut	Cut of a NE/SW aligned ditch; cuts 2012	2.8m slot	1.50	0.62	
2014	Fill	Upper fill of ditch 2013	2.8m slot	1.45	0.37	MC2-MC3
2015	Fill	Primary fill of ditch 2005; greyish brown silty clay	3m slot	0.30	0.10	
2016	Fill	Final phase of silting in ditch 2019	0.8m slot	3.6	≤0.25	C2-C3
2017	Fill	Fill of ditch 2019	0.8m slot	2.30	≤0.25	MLIA+
2018	Fill	Primary fill of ditch 2019	0.8m slot	2.11	≤0.73	LIA-C1
2019	Cut	Cut of NW/SE ditch; return of ditch 2010/2055	0.8m slot	2.30	≤1.20	
2020	Cut	Cut of possible pit or natural feature	1.10	1.0	0.30	
2021	Fill	Fill of pit/natural feature 2020	1.10	1.0	0.30	
2022	Cut	Cut of a possible pit or natural feature		0.60	0.10	
2023	Fill	Fill of pit/natural feature 2022		0.60	0.10	
2024	Cut	Cut of a possible pit or natural feature		0.80	0.10	
2025	Fill	Fill of pit/natural feature 2024		0.80	0.10	
2026	Fill	Upper fill of ditch 2028	1m slot	1.30	0.24	MLIA+
2027	Fill	Primary fill of ditch 2028	1m slot	0.65	0.38	
2028	Cut	Cut of a NW/SE ditch; part of a small enclosure	1m slot	1.30	0.58	
2029	Fill	Upper fill of ditch 2032	1m slot	2.30	≤0.27	MLIA+
2030	Fill	Fill of ditch 2032	1m slot	2.13	≤0.20	MLIA+
2031	Fill	Fill of ditch 2032	1m slot	1.50	≤0.14	
2032	Cut	Cut of a NW/SE ditch; part of a small enclosure	1m slot	2.30	0.82	
2033	Fill	Primary fill of ditch 2010; silting phase	2.8m slot	1.23	≤0.37	MIA
2034	Cut	Cut of NE/SW aligned ditch	2m slot	1.47	0.73	
2035	Fill	Primary fill of ditch 2034	2m slot	0.77	0.12	
2036	Fill	Fill of ditch 2034	2m slot	1.38	0.30	
2037	Fill	Upper fill of ditch 2034	2m slot	1.47	0.27	Pmed
2038	-	NUMBER VOIDED	-	-	-	-
2039	Fill	Upper fill of ditch 2042	1m slot	0.79	0.24	MLIA+
2040	Fill	Fill of ditch 2042	1m slot	1.15	0.50	C18+
2041	Fill	Primary fill of ditch 2042	1m slot	0.70	0.53	
2042	Cut	Cut of E/W aligned ditch	1m slot	1.20	0.70	

2043	Fill	Primary fill of ditch 2032	1m slot	0.98	≤0.20	
2044	Cut	Cut of NE/SW ditch; part of a small enclosure	1.33m	0.82	0.27	
2045	Cut	Cut of a N/S aligned ditch	0.82m	>0.22	>0.36	
2046	Fill	Fill of ditch 2044	1.33m	0.82	0.27	MLIA+
2047	Fill	Fill of ditch 2045	0.82m	>0.22	>0.36	
2048	Fill	Primary fill of ditch cut 2013	2.8m slot	3.6	≤0.25	
2049	Fill	Upper fill of ditch 2051	1m slot	1.46	0.27	LC13-EC17
2050	Fill	Primary fill of ditch 2051	1m slot	0.95	0.24	
2051	Cut	Cut of E/W ditch; part of a small enclosure	1m slot	1.46	0.36	
2052	Cut	Cut of NE/SW ditch	0.75	0.90	0.30	
2053	Fill	Fill of ditch 2052	0.75	0.90	0.30	
2054	Deposit	Deposit adjacent to the large NE/SW ditch that has been reworked through poaching	2.30m slot	2.0	0.24	
2055	Cut	Cut of large, v-shaped, NE/SW ditch	2m slot	2.77	1.30	
2056	Fill	Primary fill of ditch 2055; silting phase	2m slot	1.40	0.49	MC1-C4
2057	Cut	Cut of a NE/SW aligned ditch; cuts 2061	2m slot	1.03	0.54	
2058	Fill	Primary fill of ditch cut 2057	2m slot	0.78	0.09	
2059	Fill	Upper fill of ditch 2057	2m slot	1.03	0.45	C2-C4
2060	Fill	Secondary phase of silting within ditch 2055	2m slot	1.98	0.27	MLIA+
2061	Fill	Upper fill of ditch 2055	2m slot	2.77	0.51	
2062	Deposit	Deposit adjacent to the large NE/SW ditch that has been reworked through poaching	3.90m	1.67	0.15	
2063	Fill	Fill of possible tree bowl 2064	1.13	0.88	0.26	
2064	Cut	Cut of possible tree bowl	1.13	0.88	0.26	
2065	Cut	Cut of NW/SE ditch; part of a small enclosure	0.28	0.31	0.05	
2066	Fill	Fill of ditch 2065	0.28	0.31	0.05	
2067	Cut	Cut of NE/SW ditch	0.75	0.96	0.26	
2068	Fill	Fill of ditch 2067	0.75	0.96	0.26	
2069	Fill	Upper fill of ditch 2067	0.75	0.96	0.05	

APPENDIX B: THE FINDS

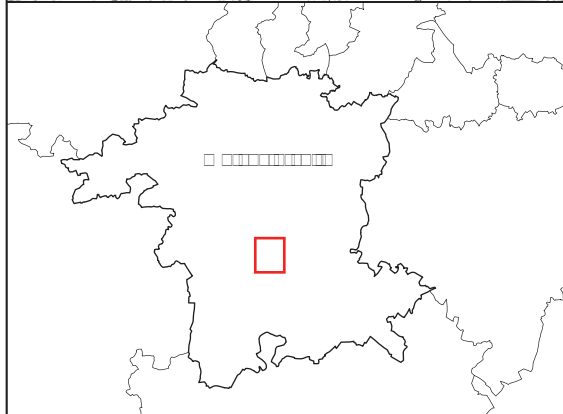
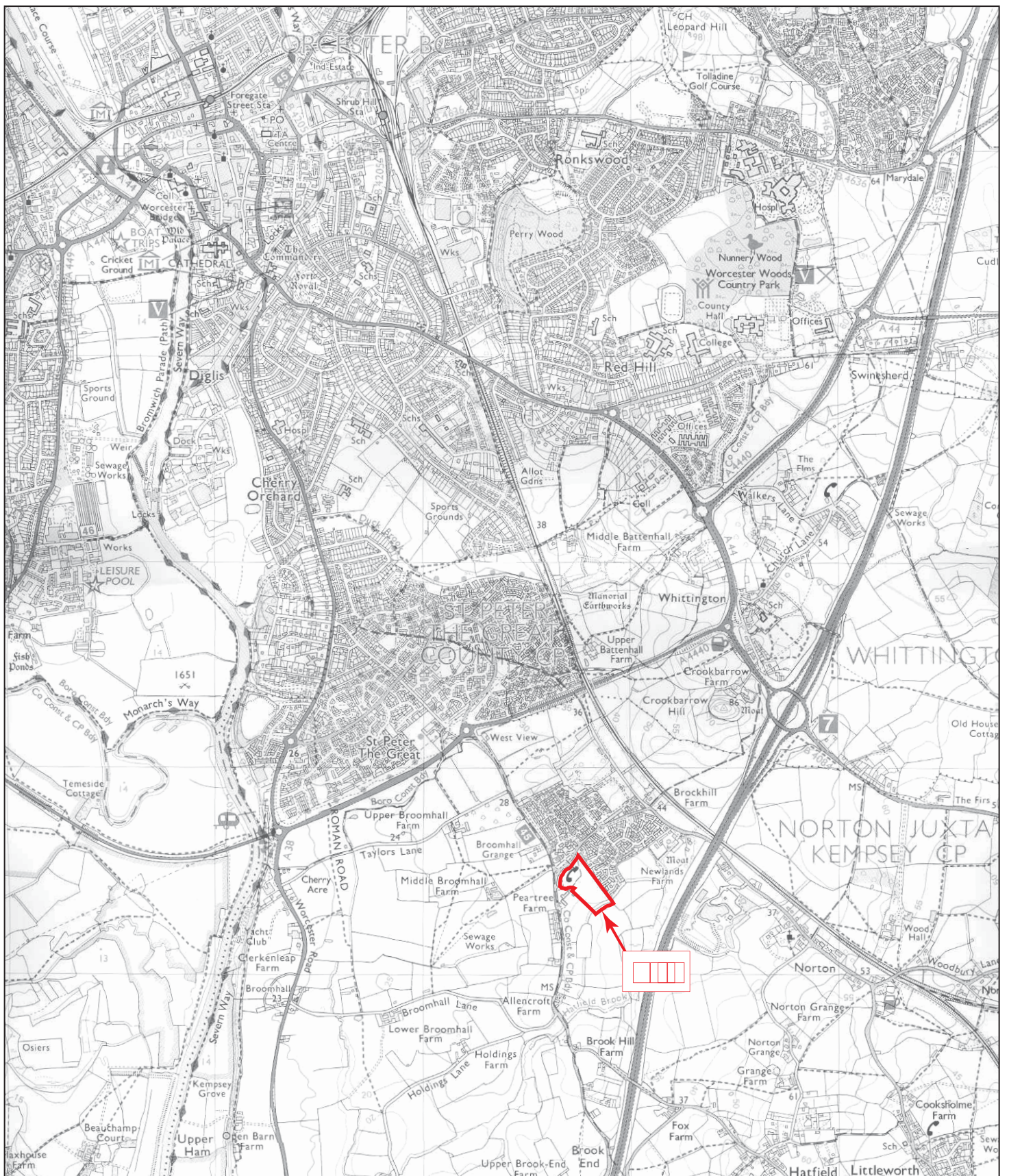
Context	Description	Ct.	Wt.	Date
2007	Roman pottery: oxidised Severn Valley ware (fabric 12), Malvernian ware (fabric 3.2)	10	99	MC1-C2
	Fuel ash	4	19	
	Fired clay	11	9	
	Bone: animal	1	<1	
2011	Malvernian ware (fabric 3 or 3.2)	17	54	MLIA+
	Bone: animal	24	70	
2012	Bone: animal	8	4	
2014	Roman pottery: samian (east Gaulish)	1	1	MC2-MC3
	Fired clay	1	4	
2016	Roman pottery: oxidised Severn Valley ware (fabric 12), Prehistoric/Roman pottery: Malvernian rock-tempered (fabric 3/3.2)	7	35	C2-C3
	Fired clay	7	10	
	Fired clay	8		
	Fired clay	1	12	
	Fuel ash	6	8	
	Bone: animal	2	5	
	Glass: post-medieval vessel (intrusive)		9	
2017	Prehistoric pottery: Malvernian ware (fabric 3 or 3.2)	4	15	MLIA+
	Fuel ash	2	20	
	Bone: animal	4	4	
2018	Prehistoric/Roman pottery: Malvernian rock-tempered (fabric 3/3.2)	9	205	LIA-C1
	Fuel ash?	1	1	
	Bone: animal	15	17	
2026	Prehistoric pottery: Malvernian rock-tempered (fabric 3)	1	4	MLIA+
	Fuel ash	10	26	
2027	Fuel ash	1	9	-
2029	Prehistoric pottery: Malvernian rock-tempered (fabric 3)	7	20	MLIA+
	Fuel ash	3	6	
2030	Prehistoric pottery: Malvernian rock-tempered (fabric 3)	1	4	MLIA+
	Bone: animal	13	2	
2031	Fuel ash	3	2	-
	Bone: degraded animal bone and soil	present	665	
2033	Prehistoric pottery: shell-tempered (fabric 4.3), Malvernian rock-tempered (fabric 3)	28	43	MIA
	Bone: animal	2	36	
2035	Bone: degraded animal bone and soil	present	438	-
2037	Ceramic building material: roof tile	1	27	Pmed
2039	Prehistoric pottery: Malvernian rock-tempered (fabric 3)	1	2	MLIA+
2040	Post-medieval pottery: red-sandy ware (fabric 78)	present	99	C18+
	Bone: degraded animal bone and soil			
2042	Bone: degraded animal bone and soil	present	267	-
2043	Stone: fire cracked	1	137	-
2046	Iron Age pottery: Malvernian rock-tempered (fabric 3)	5	19	MLIA+
	Fired clay: amorphous fragment	1	5	
	Bone: degraded animal bone	47	62	
2047	Bone: animal	35	115	-
2049	Medieval pottery: oxidised glazed Malvernian ware (fabric 69)	1	3	LC13-EC17
2056	Roman pottery: oxidised Severn Valley ware (fabric 12)	2	3	MC1-C4
	Prehistoric pottery: Malvernian rock-tempered	1	2	
	Bone: animal	8	15	
2059	Roman pottery: Dorset Black-burnished ware	1	6	C2-C4
	Prehistoric pottery: Malvernian rock-tempered (fabric 3 or 3.2)			
2060	Prehistoric pottery: Malvernian rock-tempered (fabric 3)	31	61	MLIA+
	Fired clay: possibly Droitwich briquetage	2	6	
	Bone: animal	18	22	
2061	Bone: animal	2	45	
u.s.	Roman pottery: oxidised Severn Valley ware (fabric 12)	1	27	
	Undated ceramic building material	3	85	

Table 1. Quantification of animal bones, recovered from excavated contexts at Land off Crookbarrow Road. Abbreviations: NISP = Number of identified specimens; S/G = sheep/goat

Context	NISP	Weight (g)	Species	
2007	1	0.21	S/G	
2011	25	68.30	Cattle, S/G, pig, horse, indet.	
2012	1	4.17	Cattle	
2016	2	5.69	S/G	
2017	4	2.24	MM	
2018	13	14.65	S/G, Indet.	
2030	1	1.79	S/G	
2031	c. 40	c. 40.00	Indet	Flecks of bone only
2033	1	35.90	Cattle	
2035	c. 30	c. 30.00	Indet	Flecks of bone only
2040	1	1.00	Indet.	Flecks of bone only
2043	c. 20	c. 20.00	Indet	Flecks of bone only
2046	44	58.48	Cattle, indet.	
2047	29	29.37	Cattle, indet.	
2056	7	13.99	S/G	
2060	17	23.00	S/G, Indet.	
2061	2	44.74	Cattle	

APPENDIX C: OASIS REPORT FORM

PROJECT DETAILS		
Project Name	Land off Crookbarrow Road	
Short description	<p>A programme of archaeological work was undertaken by Cotswold Archaeology in October 2011 prior to groundworks associated with a residential development at land off Crookbarrow Road, Norton, Worcestershire.</p> <p>Four ditches were identified (A-D), expanding on the results of the evaluation and providing a chronology for three phases of archaeological activity at the site from the mid to late Iron Age to the Roman period. Ditch A/B contained pottery dating to the mid to late Iron Age and was orientated north-east/south-west, returning to the north-west towards Crookbarrow Road and possibly defining the north-east corner of an enclosure. It had been re-cut by Ditch D, which extended beyond Ditch A/B to the north-east and contained Roman pottery broadly dating from the 1st to the 4th-centuries AD. The third phase of activity was marked by the addition of Ditch C, which provided three sides of a small, square paddock, using Ditch D as the final boundary to the north-west.</p> <p>The characterisation and dating of discreet features was hampered by two phases of post-Roman ridge and furrow and poor ground conditions. Four undated pits and three areas of animal poaching were recorded within the site.</p>	
Project dates	27th September – 27th October 2011	
Project type	Programme of Archaeological Works	
Previous work	Watching Brief; August 2010 (CA Projects 3193) on detection for UXO Evaluation; October 2010 (CA Project 3257) Watching Brief; March 2011, Geotechnical test pits (CA Project 3401)	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Norton, Worcestershire	
Study area (M ² /ha)	0.31ha	
Site co-ordinates (8 Fig Grid Reference)	SO 8676 5144	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator	Worcestershire County Council	
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Cliff Bateman	
Project Supervisor	Rebecca Riley	
MONUMENT TYPE		
None		
SIGNIFICANT FINDS		
None		
PROJECT ARCHIVES		
	Intended final location of archive (museum/Accession no.)	Content (e.g. pottery, animal bone etc)
Physical	Worcestershire County Museum	Pottery, animal bone, glass
Paper	Worcestershire County Museum	Context registers and sheets, drawing registers and sheets, photographic registers
Digital	Worcestershire County Museum	digital photos, geomatics data
BIBLIOGRAPHY		
CA (Cotswold Archaeology) 2011 <i>Land at Crookbarrow Road, Norton, Worcestershire: Programme of Archaeological Works</i> . CA typescript report 11296		



PROJECT TITLE

Land off Crookbarrow Road, Norton
Worcestershire

FIGURE TITLE

Site location plan



PROJECT NO. 3575 DATE 12-12-2011
DRAWN BY JB REVISION 00
APPROVED BY PJM SCALE@A4 1:25,000

FIGURE NO.

1

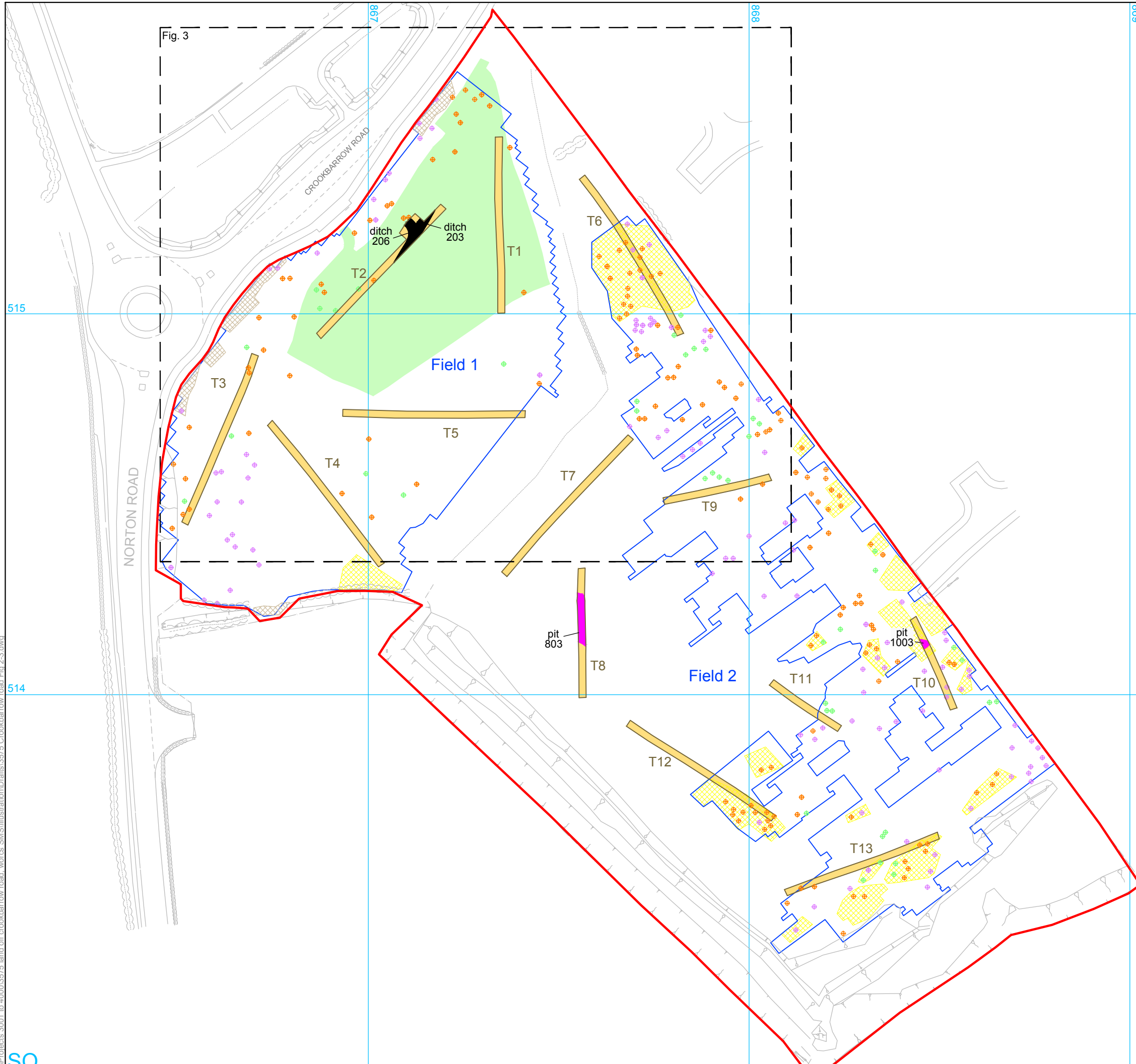


Fig. 3

515

514

867

898

698

CROOKBARROW ROAD

NORTON ROAD

ditch 206

ditch 203

T1

T2

T3

T4

T5

T6

T7

T8

T9

T10

T11

T12

T13

Field 1

Field 2

pit 803

pit 1003

N

- site
- evaluation trench
- excavation area
- archaeological feature
- modern feature

geophysical survey results

- geophysical survey area
- Areas of high metal content
- Influence of above ground structures

Locations of test pits

- observed: no object found
- observed: ferrous object present (non-archaeological)
- unexcavated

0 50m

Reproduced from the Ordnance Survey Digital mapping with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office © Crown copyright Cotswold Archaeology Ltd 100002109.

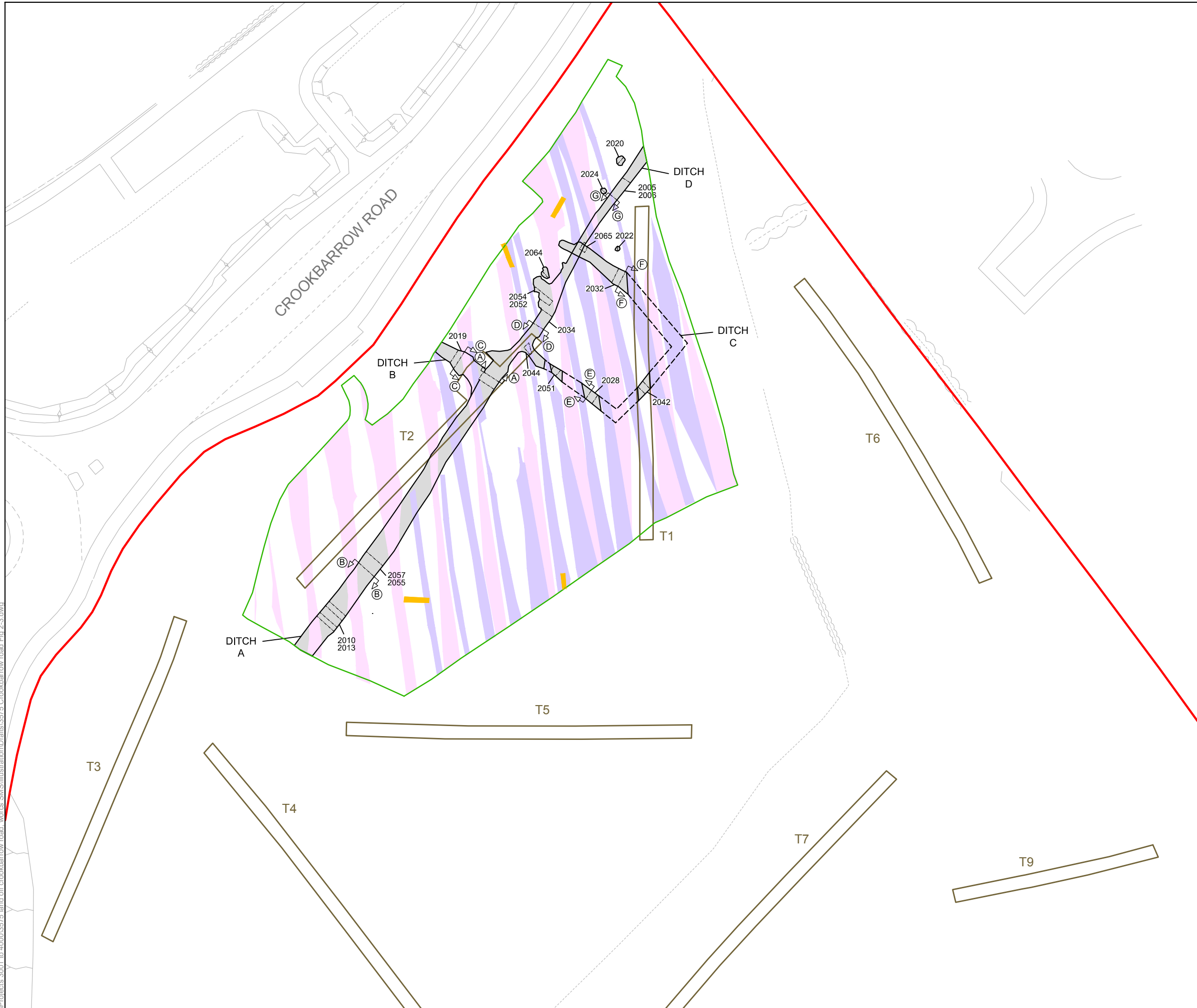
Cotswold Archaeology

Cirencester 01285 771022
Milton Keynes 01908 218320
www.cotswoldarchaeology.co.uk
enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE
**Land off Crookbarrow Road, Norton
Worcestershire**

FIGURE TITLE
**Trench location plan showing results
of evaluation and geophysical survey**

PROJECT NO.	3575	DATE	13-12-2011	FIGURE NO.
DRAWN BY	JB	REVISION	00	2
APPROVED BY	PJM	SCALE@A3	1:1000	



-  site
-  excavation area
-  evaluation trench
-  archaeological feature
-  modern feature
-  furrow type # 1
-  furrow type # 2



Reproduced from the Ordnance Survey Digital mapping with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office © Crown copyright Cotswold Archaeology Ltd 100002109.



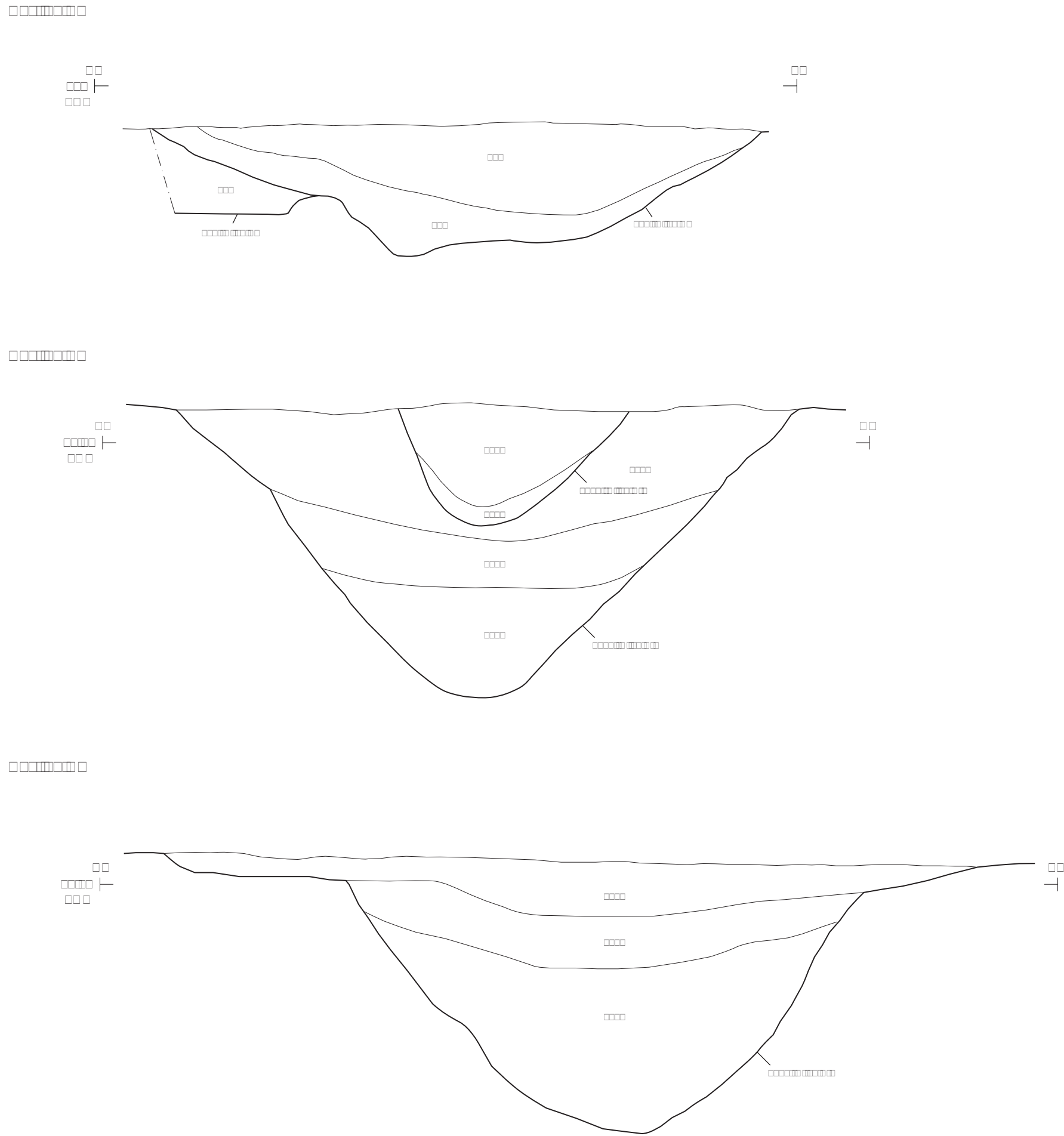
Cirencester 01285 771022
 Milton Keynes 01908 218320
 www.cotswoldarchaeology.co.uk
 enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE
 Land off Crookbarrow Road, Norton
 Worcestershire

FIGURE TITLE
 Location of excavation showing
 archaeological features and previous
 evaluation trenches

PROJECT NO.	3575	DATE	13-12-2011	FIGURE NO.
DRAWN BY	JB	REVISION	00	
APPROVED BY	PJM	SCALE@A3	1:500	3

R:\Projects_3001 to 4000\3575 land off crookbarrow road_worcs_SMS\Illustration\Drafts\3575 Crookbarrow road Fig 2-3.dwg



PROJECT TITLE
 Land off Crookbarrow Road, Norton
 Worcestershire

FIGURE TITLE
Sections and photographs

PROJECT NO. 3575	DATE 16-12-2011	FIGURE NO.
DRAWN BY JB	REVISION 00	4
APPROVED BY PJM	SCALE@A3 1:20	

