

Archaeological Services & Consultancy Ltd

**EARTHWORK SURVEY:
CALDECOTE FARM QUARRY
WILLEN
MILTON KEYNES**

NGR: SP 8810 4216

on behalf of SGS Construction Ltd



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December 2013

ASC: 1609/CFQ/2



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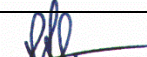
Site Data

<i>ASC project code:</i>	CFQ	<i>ASC Project No:</i>	1609
<i>OASIS ref:</i>	Archaeol2-161260	<i>Event/Accession no:</i>	EMK1195/ AYBMCM: 2013.112
<i>County:</i>	Milton Keynes		
<i>Village/Town:</i>	Newport Pagnell		
<i>Civil Parish:</i>	Newport Pagnell		
<i>NGR (to 8 figs):</i>	SP 8810 4216		
<i>Extent of site</i>	c.13.2ha		
<i>Present use:</i>	Pasture		
<i>Planning proposal:</i>	Gravel extraction		
<i>Local Planning Authority:</i>	Milton Keynes Council		
<i>Planning application ref:</i>	12/01284/MIN		
<i>Date of fieldwork:</i>	October 2013		
<i>Client:</i>	SGS Construction Ltd Hastings House Auckland Park Mount Farm Milton Keynes MK1 1BU		
<i>Contact name:</i>	Adrian Chiarello		

Internal Quality Check

<i>Primary Authors:</i>	M Cuthbert and A Hancock	<i>Date:</i>	18 th December 2013
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<i>Revisions:</i>		<i>Date:</i>	
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<i>Edited/Checked By:</i>		<i>Date:</i>	19 th December 2013
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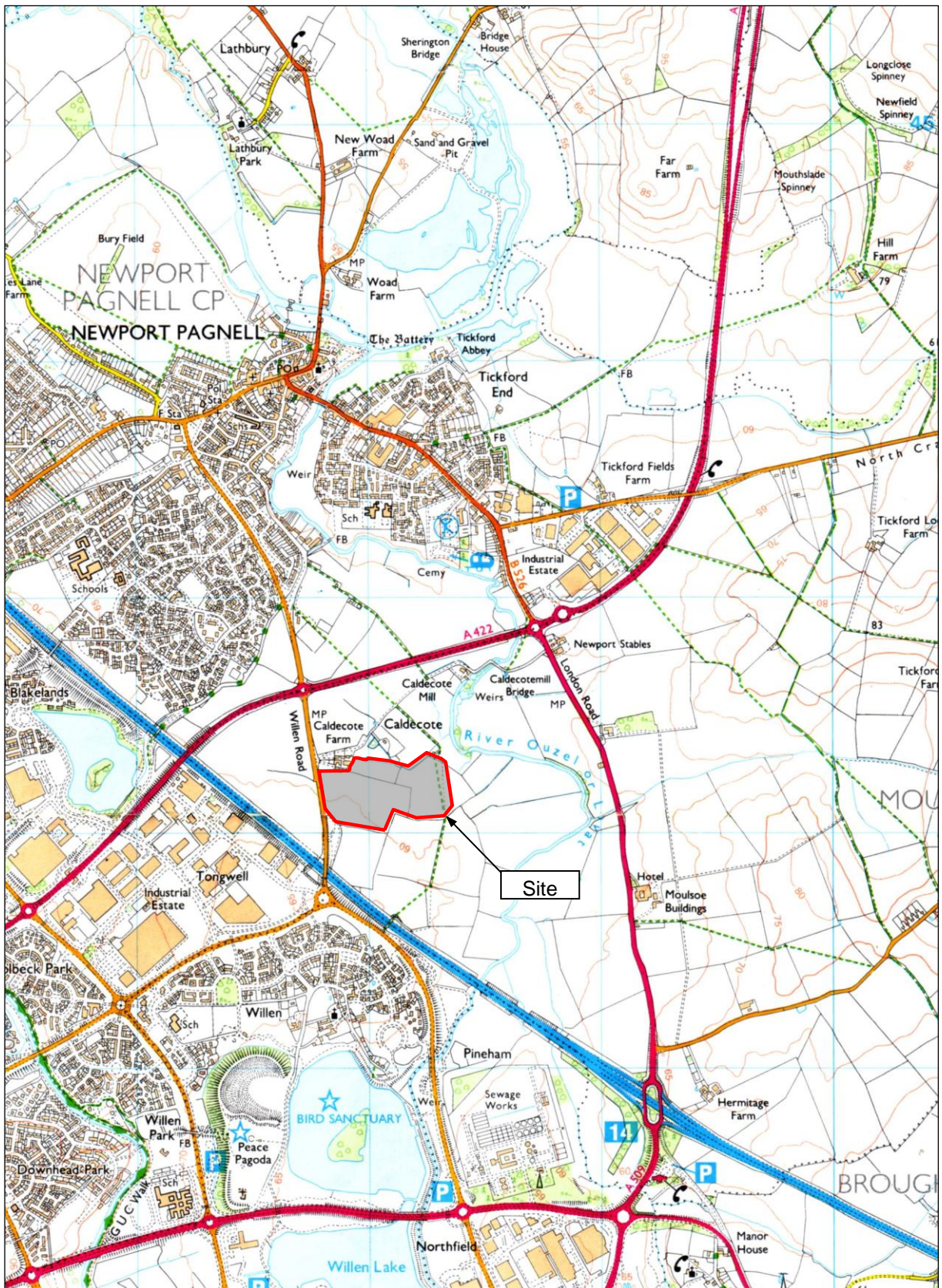


Figure 1: The site (scale 1:25,000)

Summary

In October 2013 an earthwork survey was carried out at Caldecote Farm Quarry, Willen, Milton Keynes. The survey recorded banks, ditches and hollows focussed at the north of the site, which are interpreted as post medieval field boundaries and quarrying,. Evidence of modern agricultural activity was also present. None of the earthworks appear to be related to the medieval settlement of Caldecote, although subsurface features associated with the medieval village were discovered in the vicinity of the earthworks during earlier evaluation trenching.

1. Introduction

1.1 In October 2013 *Archaeological Services and Consultancy Ltd* (ASC) carried out an earthwork survey at Caldecote Farm Quarry, Willen Road, Milton Keynes. The project was commissioned by *SGS Construction Ltd*, and was carried out according to a project design prepared by ASC (Zeepvat 2013), which was approved by the Senior Archaeological Officer (SAO), *Milton Keynes Council*, archaeological advisor (AA) to the local planning authority (LPA), *Milton Keynes Council*.

1.2 *Planning Background*

The earthwork survey was required under the terms of the *National Planning Policy Framework* (NPPF), as a condition of planning permission for aggregate extraction at the site. The relevant planning application reference is 12/01284/MIN.

1.3 *Archaeological Services & Consultancy Ltd*

ASC is an independent archaeological practice providing a full range of archaeological services including consultancy, field evaluation, mitigation and post-excavation studies, historic building recording and analysis. ASC is recognised as a *Registered Organisation* by the Institute for Archaeologists and is also accredited ISO 9001, in recognition of its high standards and working practices.

1.4 *The Site*

1.4.1 *Location & Description*

The site is located to the east of the M1 and south of Newport Pagnell (Fig 1). It comprises the majority of a single field and encompasses c.13.2ha, which is centred on NGR SP 8810 4216 (Fig 2). The site was bounded by a hedgeline fronting Willen Road to the west; by fence lines delimiting the gardens, paddocks and barns of Caldecote Farm and residential buildings to the north; and by a hedged field boundary at the south. The eastern limit of the site was not defined by a physical boundary. At the time of the survey the site was down to pasture:

1.4.2 *Topography & Geology*

The site was bisected by the 60m AOD contour and descended very gradually from west to east as it approached the river Ouzel. The river is located approximately 80m from the north-eastern corner of the site but approximately 500m away from the south-eastern corner due to the presence of a substantial meander.

Soils in the area belong to the Bishampton 2 Association, described as '*deep fine loamy soils with slowly permeable subsoils and slight seasonal waterlogging*' (Soil Survey 1983, 572t). The underlying solid geology is river terrace drift over Cornbrash limestone (BGS sheet 203).

1.4.3 *Proposed Development*

The development will comprise construction of site access and compound; temporary siting of plant and machinery; extraction of sand and gravel followed by restoration to agricultural use by reinstatement with imported inert material and stored soils.

1.5 *Previous Archaeological Work*

In August 2010 a desk-based assessment was prepared for an area which incorporated the site (Zeepvat 2010). Extensive late prehistoric and Romano-British funerary and settlement activity was located *c.*200m to the west of the site (Hunn 2008). The majority of the site was probably agricultural land during the Saxon, medieval and post-medieval periods. However, the northern part of the site lay immediately to the south of the village green of the medieval hamlet of Caldecote and poorly defined earthworks of uncertain date were present here.

In late 2010 geophysical survey (ASWYAS 2010) and trial trenching (Hancock and Cuthbert 2011) was completed at the site. Conclusive evidence of medieval settlement was not defined at the north of the site by the geophysical survey. However, the evaluation trenching (Fig. 2) confirmed that remains of the medieval hamlet of Caldecote were present. Recovered finds suggested that the hamlet may have contracted during the latter part of the medieval period with the north of the site then becoming agricultural land.

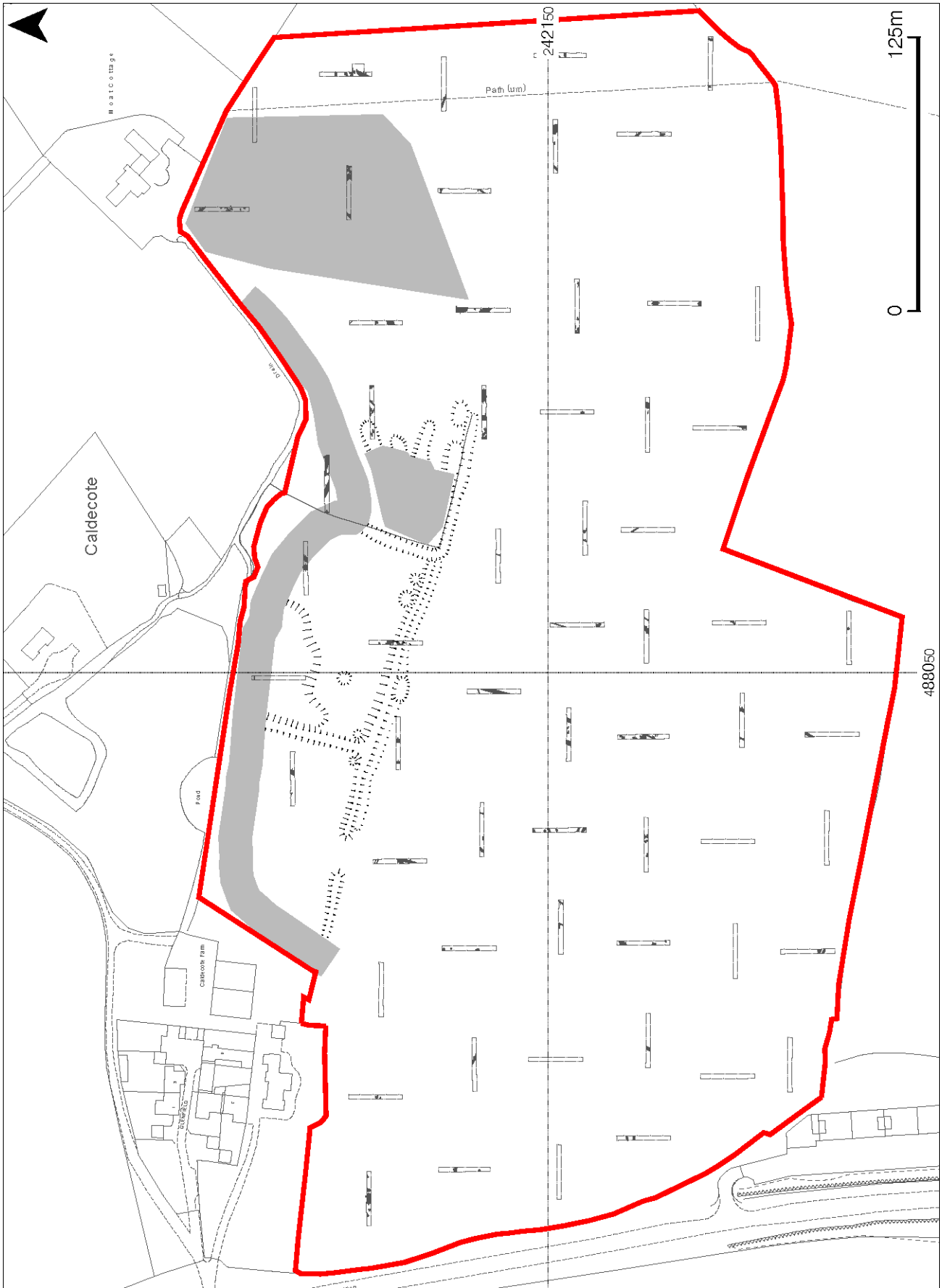


Figure 2: Earthwork and evaluation trench location (1:2500)

2. Aims & Methods

2.1 Aims

As described in the project design, the aims of the earthwork survey were:

- To gather sufficient information to record and interpret the form and function of the earthworks and relate them to the wider settlement of Caldecote.

2.2 Methods

The work was carried out in accordance with the requirements of the project design, which are summarised as:

- Earthwork survey comprising the preparation of a detailed record of standing man-made earthworks; banks, ditches, etc, by a combination of written description, measured survey and photography.

2.3 Standards

The work conformed to the project design, which specified earthwork survey to English Heritage Level 2 standard (EH 2007). The survey also conformed to the relevant sections of the Institute for Archaeologists' *Standard & Guidance Notes* (IfA 2008a & b) and *Code of Conduct* (IfA 2010), to current English Heritage guidelines (EH 2006) and to the relevant sections of ASC's *Operations Manual*.

2.4 Constraints

A recently constructed 15m wide earthen quarry bund had been laid down along the northern boundary of the site and any earthworks covered by the bund were not recorded. In addition the east of the site was covered by dense, knee high vegetation, which may have hampered identification of earthworks, although none was noted at this part of the site during previous phases of archaeological work.

3. Archaeological & Historical Background

3.1 The following sections summarise the information presented in a desk-based assessment (Zeepvat 2010), which is relevant to understanding of the earthworks.

3.2 *Saxon* (c.450-1066)

In the Milton Keynes area evidence for early and mid-Saxon settlement has been discovered at Bancroft, Hartigan's Pit, Water Eaton and Wolverton. Many of the historic villages of Milton Keynes probably have a late Saxon origin and Newport Pagnell was established as a trading settlement at the confluence of the Ouse and Ouzel during the late Saxon period (Page 1927, 409).

The village at Caldecote probably originated in the Saxon period (*ibid*, 412). It has been suggested that *cote* is a Middle Saxon, rather than a Late Saxon place-name element, which may indicate the date the settlement was established (Croft & Mynard 1994, 47). Prior to the Norman Conquest two men of Ulf, a Thegn of King Edward, held the manor of Caldecote (Williams and Martin 1992).

3.3 *Medieval* (1066-1500)

Caldecote is recorded in the Domesday Survey of 1086 (Williams and Martin 1992). At this time the parish of Newport included the manors of Newport, Tickford and Caldecote. The site fell within the manor of Caldecote, which comprised two fees.

The site of Caldecote manor house (Giggins 2008, HER 05) is located near the river Ouzel approximately 40m to the northeast of the site. The northern part of the site lies immediately to the south of the medieval village green. Ridge and furrow earthworks of the villages' open field system covered much of the site on mid-20th century aerial photographs. However, the ridge and furrow was destroyed by ploughing in the latter part of the 20th century.

The southern boundary of the site separated Newport Pagnell and Willen parishes, and is therefore of some antiquity.

3.4 *Post-Medieval* (1500-1900)

Early mapping suggests that the villages' triangular green was located immediately north of the site. A small number of buildings are shown to the south and north of the green on Jeffrey's 1770 map of Buckinghamshire although none appear to be present within the site. The buildings are not shown on subsequent 19th-century mapping, by which time the majority of the site had been inclosed.

3.5 *Modern* (1900-present)

The subdividing inclosure field boundaries were removed during the latter part of the 20th century. Apart from ploughing, the only significant modern disturbance has been the laying of two services at the east of the site; one is a main sewer linking the former Newport Pagnell Sewage Farm with Cotton Valley Sewage Works.

4. Results

4.1 Earthworks were only identified at an area located to the east of Caldecote Farm (Fig. 2). Visual examination did not identify earthworks elsewhere, although dense knee high vegetation covered part of the east of the site. The following sections set out the character, and interpret the chronology and function of the identified earthworks (See Fig. 3 for location of numbered earthworks).

4.2 Post Medieval Boundary Banks and Ditches

4.2.1 Two broad and low rectilinear banks (1 and 2; plates 1 and 2) were identified to the east of Caldecote Farm. The banks were 6-7m wide and varied in height from 0.1-0.4m. The majority of the southern side of bank 1 was flanked by a partly infilled *c.*0.2m deep and *c.*2.5m wide ditch (3).

4.2.2 The western part of bank 1 was breached by a trackway used by modern agricultural machinery to access the southern part of the field. It was unclear whether the bank was once a continuous feature subsequently truncated by modern activity; or if the entrance is an original, long lived feature.

4.2.3 Evaluation trenching (Hancock and Cuthbert 2011) showed that bank 1 partly overlay the final fill of a large, similarly aligned ditch and had been constructed over a small number of other archaeological features. However, none of the features was dated by finds.

4.2.4 The alignment of bank 1 is recorded on 1st Edition OS mapping (1886) as a hedged field boundary. A 1945 aerial photograph shows that the hedge line had been removed by the mid-20th century.

4.2.5 A rectilinear ditch (4) cut the eastern end of bank 1. Part of the alignment of the ditch is marked on the 1st Edition OS map as a hedge line forming an eastward continuation of the hedge at bank 1. In contrast to the western part of the hedge line, aerial photographs show that the eastern section survived intact in 1945 and was still extant, although much thinned, at the end of the 20th century.

4.2.6 Banks 1, 2 and ditches 3 and 4 appear to locate the remnants of field boundaries established during the post medieval period to enclose three small agricultural plots, perhaps paddocks or orchards associated with Caldecote Farm. Ditch 4 probably defines a relatively recent redefinition of the boundary of the easternmost and last surviving of the three enclosures.

4.3 Late Post-Medieval and Modern Extraction

4.3.1 A large, shallow hollow (5) was present at the north of the focus of earthworks. The hollow was a maximum of 0.6m deep, it was irregular in plan and it partially truncated the eastern side of bank 2. It is interpreted as an area of relatively intensive quarrying of late post medieval or modern date.

4.3.2 Six smaller (*c.*5–12m diameter x *c.*0.3m deep), sub-circular hollows were distributed around the focus of the earthworks. One (6) had no relationship with any other earthworks, but five (7-11) partially truncated bank 1 (plate 3). The hollows are interpreted as small late post medieval quarries, although some

could identify the position of grubbed out trees that formed part of the removed hedge line.

4.4 **Modern Agricultural Activity**

- 4.4.1 At the east of the focus of the earthworks was a low, sub-rectangular, uneven mound of earth covered with shrubs and dense vegetation (12: plate 4). The mound is not present on a 1965 aerial photograph, but is clearly visible as recently dumped material on a modern Google Earth aerial photograph (c.2000). The aerial photographs indicate that this material was dumped during the latter part of the 20th century and visible vehicle tracks suggest that it derived from the farm located a few hundred metres to the west.
- 4.4.2 Five low (c.0.2m) linear earthworks (13-17) extended eastward from the modern dump (12). Prior evaluation trenching identified two medieval pits and structural features under and slightly to the east of earthwork 13. However, the position and alignment of the medieval features suggests that they pre-date the earthworks, which may be contemporary with the dumped modern material.



Figure 3: Earthwork Survey (1:750)



Plate 1: Bank 1 and ditch 3: looking northwest



Plate 2: Bank 2, looking north: 1m scale



Plate 3: Quarry 9, looking west-southwest: 1m scale



Plate 4: Modern dump 12 covered by vegetation, looking west-northwest

5. Conclusions

- 5.1 The earthworks were exclusively located at the north of the site and were unaffected by episodes of modern ploughing, which had impacted the area immediately to the south. However, they were only in moderate condition, having been damaged by post medieval/modern gravel extraction, movement of agricultural machinery and by the presence of a dump of modern material.
- 5.2 Aerial photographs and 19th century Ordnance Survey mapping show that banks 1, 2 and ditches 3 and 4 are the remnants of since removed field boundary hedge lines. The hedge lines were probably established during the latter part of the post medieval period to inclose three small agricultural plots, perhaps paddocks or orchards associated with Caldecote Farm.
- 5.3 Use of the area of the earthworks altered and the hedge lines were gradually removed during the late post medieval and modern periods. The change of use included episodic quarrying and the dumping of agricultural waste.
- 5.4 The earthworks probably characterise agricultural and small scale industrial activity of post medieval and modern date; none appear to be associated with the medieval village. As such the recorded earthworks are heritage assets of local significance.
- 5.5 Results of earlier archaeological trenching show that bank 1 partly overlies and may preserve the alignment of a substantial boundary ditch, which perhaps separated medieval infield/settlement activity from the medieval open field system.
- 5.6 The evaluation trenching also identified medieval settlement features at the area of the recorded earthworks and the potential of this area to enable definition of the character, form and date of part of the medieval village remains high.

6. Acknowledgements

The project was commissioned by SGS Construction Ltd. The project was monitored for the local planning authority by Nick Crank, Senior Archaeological Officer for Milton Keynes Council.

The project was managed for ASC by Alastair Hancock BSc PgDip MI(A). Fieldwork was carried out by Martin Cuthbert BA (Hons) AI(A). The report was prepared by Martin Cuthbert and Alastair Hancock. The report was edited by Bob Zeepvat BA MI(A).

7. Archive

7.1 The project archive will comprise:

1. Brief
2. Project Design
3. Initial Report
4. Clients site plans
5. Site records
6. Site record drawings
7. List of photographs
8. B/W prints & negatives
9. CDROM with copies of all digital files.

7.2 The archive will be deposited with Buckinghamshire County Museum.

8. References

Standards & Specifications

- EH 2006 *Management of Research Projects in the Historic Environment*. English Heritage (London).
- EH 2007 *Understanding the Archaeology of Landscapes: A guide to good recording practice*. English Heritage (London).
- IFA 2010 Institute for Archaeologists' *Code of Conduct*.
- IFA 2008 Institute for Archaeologists' *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.
- IFA (various dates) Institute for Archaeologists' *Standard & Guidance* documents (*Desk-Based Assessments 2011, Watching Briefs 2008, Evaluations 2009, Excavations 2008, Investigation and Recording of Standing Buildings 2008, Finds 2008, Archiving 2009*).
- Zeepvat B 2013 *Project Design for Earthwork Survey & Archaeological Strip, Map & Sample Excavation at Caldecote Farm Quarry, Willen, Milton Keynes*, ASC ref: 1609/CFQ/1.

Secondary Sources

- ASWYAS 2010 *Geophysical Survey: Land south of Caldecote Farm, Willen Road, Milton Keynes*. ASWYAS report ref: 2149.
- BGS *British Geological Survey 1:50,000 Series, Solid & Drift Geology*.
- Croft RA & Mynard DC 1994 *The Changing Landscape of Milton Keynes*. Buckinghamshire Archaeol. Soc. Monograph 5 (Aylesbury).
- Giggins B 2008 *Report on the SMV & Manorial Site at Caldecote, Newport Pagnell, Milton Keynes*. Milton Keynes Council internal report (unpublished).
- Hancock A & Cuthbert M 2011 *Archaeological Evaluation: Area A, Caldecote Farm, Willen, Milton Keynes*. ASC rep. ref. 1335/CFQ/2
- Hunn JR 2008 *Interim Report: Land West of Caldecote Farm, Willen Road, Newport Pagnell. Excavations Undertaken in 2006*. ASC rep. ref. 781/MKC/04.
- Soil Survey 1983 *1:250,000 Soil Map of England and Wales, and accompanying legend* (Harpenden).
- Williams A & Martin GH 1992 *Domesday Book: A Complete Translation*. Penguin (London).
- Zeepvat RJ, Roberts JS & King NA 1994 *Caldecote, Milton Keynes: excavation and fieldwork 1971-1991*. Buckinghamshire Archaeol. Soc. Monog. Ser. 9 (Aylesbury).
- Zeepvat B 2010 *Desk Based Assessment: Land at Caldecote Farm, Willen Road, Milton Keynes*. ASC rep. ref: 1335/CFQ/1.

Appendix 1: List of Photographs

SITE NAME: Caldecote Farm Quarry, Willen Road, Milton Keynes		SITE NO/CODE: 1609/CFQ
Shot	Subject	
1	General site shot, looking east	
2	Trackway through bank 1 at its western end, looking east	
3	Western end of survey area, looking southwest	
4	Recently constructed bund of earth	
5	West-central end of survey area, looking south	
6	Western end of survey area, looking southwest	
7	Western end of survey area, looking southwest	
8	Recently constructed bund of earth	
9	Recently constructed bund of earth	
10	Recently constructed bund of earth, quarry 5 in foreground, looking west	
11	Modern dump 12 with linear earthworks 13-15 (foreground), looking southwest	
12	Eastern limit of site, looking north	
13	Eastern end of survey area, looking west	
14	Overall site shot of western limit of survey area., looking west	
15	Modern dump 12, looking south	
16	Earthworks 13 and 14, looking west, 1x1m scale	
17	Earthworks 14 and 15, looking southwest, 1x1m scale	
18	Earthwork 14, looking southwest, 1x1m scale	
19	Earthwork 16, looking west, 1x1m scale	
20	Earthwork 17, looking west, 1x1m scale	
21	Ditch 4, looking southwest, 1x1m scale	
22	Ditch 4, looking southwest, 1x1m scale	
23	Ditch 4, looking north, 1x1m scale	
24	Ditch 4, looking north 1x1m scale	
25	Bank 1, looking west, 1x1m scale	
26	Bank 1, looking west, 1x1m scale	
27	Bank 1, looking west, 1x1m scale	
28	Bank 1, looking west, 1x1m scale	
29	Bank 1, looking west, 1x1m scale	
30	Bank 1, looking west, 1x1m scale	
31	Bank 1, looking west, 1x1m scale	
32	Bank 1, looking east, 1x1m scale	
33	Bank 1, looking east, 1x1m scale	
34	Bank 1, looking east, 1x1m scale	
35	Bank 2, looking east, 1x1m scale	
36	Bank 2, looking northeast, 1x1m scale	
37	Overgrown vegetation at the east of survey area, looking south	
38	Overgrown vegetation at the east of survey area, looking south	
39	Overgrown vegetation at the east of survey area, looking south	
40	Quarries 10 and 11, looking northeast, 1x1m scale	
41	Quarry 7, looking southeast	
42	Quarry 9, looking west-southwest, 1x1m scale	
43	Quarry 5, looking north, 1x1m scale	
44	Quarry 12, looking north, 1x1m scale	

Appendix 2: ASC OASIS Form

PROJECT DETAILS			
Project Name:	Earthwork Survey, Caldecote Farm Quarry, Willen Road, Newport Pagnell	OASIS reference:	Archaeol2-161260
Short Description:	In October 2013 an earthwork survey was carried out at Caldecote Farm Quarry, Willen, Milton Keynes. The survey recorded banks, ditches and hollows interpreted as post medieval field boundaries and quarrying, which were focussed at the north of the site. Evidence of modern agricultural activity was also present. None of the earthworks appear to be related to the medieval settlement of Caldecote, although subsurface features associated with the medieval village were discovered in the vicinity of the earthworks during earlier evaluation trenching		
Project Type:	Earthwork survey		
Previous work: (eg. SMR refs)	Yes: Geophysics and trial trenching	Site status: (eg. none, SAM, listed)	None
Current land use:	Pasture	Future work: (yes/no/unknown)	Yes
Monument type:	Earthworks: ditches, banks, quarrying	Monument period:	Post Medieval
Significant finds: (artefact type & period)	None		
PROJECT LOCATION			
County:	Buckinghamshire	OS reference: (8 figs min)	SP 8810 4216
Site address: (+ postcode if known)	Caldecote Farm Quarry, Willen Road, Newport Pagnell, Milton Keynes		
Study area: (sq. m. / ha)	13.2 ha	Height OD: (metres)	60m OD
PROJECT CREATORS			
Organisation:	Archaeological Services & Consultancy Ltd		
Project brief originator:	Milton Keynes Council	Project design originator:	ASC Ltd
Project Manager:	Alastair Hancock	Director/Supervisor:	Martin Cuthbert
Sponsor / funding body:	SGS Construction Ltd		
PROJECT DATE			
Start date:	October 2013	End date:	October 2013
PROJECT ARCHIVES			
	Location (Accession no.)	Content (eg. pottery, animal bone, files/sheets)	
Physical:	Buckinghamshire County Museum	None	
Paper:		Site records, site drawings	
Digital:		CD with all digital files	
BIBLIOGRAPHY (Journal/monograph, published or forthcoming, or unpublished client report)			
Title:	Earthwork Survey: Caldecote Farm Quarry, Willen Road, Newport Pagnell, Milton Keynes		
Serial title & volume:	Unpublished ASC Ltd Report ref. 1609/CFQ/2		
Author(s):	Martin Cuthbert BA (Hons) MfA and Alastair Hancock BSc, PgDip MfA		
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