

# Northamptonshire Archaeology

Archaeological Evaluation
on Land South of Cooper's Lane,
Evesham,
Worcestershire



Mo Jones BA PIFA

July 2005

Report 05/112

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# **QUALITY CONTROL**

	Print name	Signed	Date
Checked by	P Chapman		
Verified by	I Meadows		
Approved by	A Chapman		

# **OASIS REPORT FORM**

PROJECT DETAILS					
Project title	Archaeological Evalu Evesham, Worcesters	ation on Land South of Cooper's Lane, hire (WSM 34478)			
Short description (250 words maximum)	Eight trenches were excavated. Four trenches contained medieval features. One trench contained post-medieval features. Three trenches contained undated features and/or vegetation disturbance. The development area as a whole contains archaeological features predominantly from the early medieval period with the main activity occurring in the areas south of Cooper's Lane and south-east of 'The Mansion House'.				
Project type (eg desk-based, field evaluation etc)	Trial trench evaluation				
Previous work (reference to organisation or SMR numbers etc)					
Future work (yes, no, unknown)					
Monument type and period					
Significant finds (artefact type and period) PROJECT LOCATION	Significant finds Medieval pottery (artefact type and period)				
	Worcestershire				
County Site address	Cooper's Lane, Evesh	nam Waraastarshira			
(including postcode)	Cooper's Lane, Evesii	iam, worcestersime			
Easting (use numeric 100km grid square no.)	0405				
Northing	4328				
Height OD	31m OD				
PROJECT CREATORS					
Organisation	Northamptonshire Arc	chaeology/WHEAS/Marches Arch			
Project brief originator	Mike Glyde for WHE				
Project Design originator	Northamptonshire Ard	chaeology			
Director/Supervisor	Mo Jones				
Project Manager	Ian Meadows for NA				
Sponsor or funding body	Crest Nicholson (Mid	lands) PLC			
PROJECT DATE					
Start date	25 <sup>th</sup> July 2005				
End date	29 <sup>th</sup> July 2005				
ARCHIVES	Content (eg pottery, animal bone etc)				
Physical	Pottery, bone, quern stone 41 sherds medieval pottery; 1 sherd Romano-British pottery, animal bone				
Paper	Contexts, registers 1 site file Plans, sections 2 plan sheets, 2 sections sheets				
Digital	Report, illustrations Evaluation report & illustrations				

# **Contents**

1	INTRODUCTION	4
2	TOPOGRAPHY AND GEOLOGY	4
3	BACKGROUND INFORMATION	. 5
5	THE EXCAVATED EVIDENCE	7
6	THE FINDS	12
7	DISCUSSION	13
	BIBLIOGRAPHY	14

# **Figures**

Fig 1: Site location

Fig 2: Trench location plan Fig 3: Trench plans

Fig 4: Trench plans

Fig 5: Sections

#### **Plates**

Plate 1: General view of Trench 4 Plate 2: General view of Trench 2

**APPENDIX 1: TRENCH SOIL DEPTHS** 

# ARCHAEOLOGICAL EVALUATION ON LAND SOUTH OF COOPER'S LANE EVESHAM, WORCESTERSHIRE (WSM 34478) JULY 2005

#### **ABSTRACT**

Northamptonshire Archaeology was commissioned by Andrew Josephs Ltd, on behalf of Crest Nicholson PLC, to carry out an archaeological trial excavation on land south of Cooper's Lane, Evesham, Worcestershire. Eight trenches were excavated. Four trenches contained medieval features, dated to the eleventh to early thirteenth centuries. One trench contained post-medieval features and three trenches contained undated features and/or vegetation disturbance. The development area as a whole contains archaeological features predominantly from the early medieval period with the main activity occurring in the areas south of Cooper's Lane and south-east of 'The Mansion House'.

#### 1 INTRODUCTION

Northamptonshire Archaeology was commissioned by Andy Josephs Ltd, on behalf of Crest Nicholson (Midlands) PLC to carry out an archaeological trial trench evaluation on land south of Cooper's Lane, Evesham, Worcestershire, ahead of proposed residential development (Planning Application Number: W/05/1019); NGR SP 0405 4328; Fig 1).

The work conformed to a specification prepared by Northamptonshire Archaeology and approved by Mike Glyde, the Historic Environment Planning Advisor for Worcestershire Historic Environment and Archaeology Service. The work was undertaken in accordance with the Institute of Field Archaeologists' Code of Conduct (IFA 1997), *Standard and Guideline for Archaeological Field Evaluations* (IFA 1999 revision) and English Heritage's procedural document *Management of Archaeological Projects* (MAP 2, 1991).

#### 2 TOPOGRAPHY AND GEOLOGY

#### **Topography**

The development area lies at a height of 31mOD, occupying about 1.25ha on an irregular block of land south-west of Cooper's Lane. It lies to the east of Evesham in the suburb of Bengeworth and consists of two areas, separated by a minor access track running south-westwards from Cooper's Lane. The land rises very gradually from the north-west levelling off at the eastern limit of the development area.

Recently the site has been used as an orchard, allotment and nursery. An electricity substation occupies the south-west corner of the development area. A septic tank located on the western part of the property known as 'The Nurseries' was demarcated with a rope fence. In addition, a small water pipe ran approximately north-south from the north-west corner of 'The Nurseries' and 10m from the south-east boundary wall of 'The Mansion House'. All archaeological trenches were located away from these areas.

At the time of the evaluation, the western area, containing trenches 1 to 6, was overgrown with grasses and ragwort standing 5 to 6ft tall. The eastern area, containing trenches 7 and 8, was part orchard and garden, both of which were overgrown and neglected.

#### Geology

Soils on the site are composed of light sandy alluvial deposits and clayey mid-slope deposits, underlying these is the Jurassic Lower Lias series of limestone and clays (SSEW 1983; British Geological Survey 1960, Sheet 200).

#### 3 DESK-BASED ASSESSMENT

The Historic Environment Record (HER) for Worcestershire was consulted. All entries in a radius of 300m of the present site, along with the historic maps and transcripts held there, were examined. Available published sources for Bengeworth and archive reports were also examined. No sites were known from within the study area although several historic buildings lay in close proximity. The area of Coopers Lane was identified as a medieval street but previous fieldwork had only found occupation of that date to its north.

The HER contained evidence of activity ranging in date from the Mesolithic (WSM 23986) to the present, indicating a long history of occupation around the site. A total of 67 entries were held on the HER for the area around the site, most were however related to the structures and activity spreading south from Port Street, which had been the main medieval thoroughfare (Dalwood 1996). The evidence ranged from evidence of medieval structures, scatters of medieval pottery (HWCM 23986, 30068) and isolated finds in deep features variously interpreted as ponds and quarry pits (HWCM12683, 31802). That no coherent pattern of medieval or earlier occupation could be seen extending into the present study area was apparent with most of the closest finds being limited to pottery finds and small pits. The present

Evesham Hotel, which lies to the north of the present site, was formerly the Mansion House (WSM 03406) a seventeenth/eighteenth century building containing Queen Anne panelling and staircase. In this report it will be referred to as The Mansion House.

The Ordnance Survey maps all show the present study area as an open space with no structures, other than The Nursery and the Cottage and the twentieth century glasshouses. The area is shown as old enclosure on the conjectural map produced by J D Schooling in 1964 based upon the 1775 Inclosure Award for Bengeworth. The area was clearly gardens, orchards and allotments in the nineteenth century and it is possible that elements of the land may have once been part of the Mansion house formal gardens. This is to a degree suggested by the Ordnance Survey 1st edition of 1886 which depicted a number of paths that joined the system within the present grounds of the house. The area to the south is shown as orchard. By the time of the 1904 edition the paths are not shown although the orchard remains as it does up to the 4th edition of 1938.

The area to the east of the access track is shown on the 1st edition as open ground with an orchard to the east, this is not shown on the 1904 edition, 1923 edition or 1938 edition. As this was the area of the orchard at present on the site it could be suggested that it is of recent date, possibly post war.

The desk-based assessment produced no direct evidence suggesting the likely survival of substantial archaeological remains within the present study area.

#### 4 TRIAL TRENCHING OBJECTIVES AND METHODOLOGY

#### **Objectives**

The objectives of the evaluation are set out in the brief (Glyde 2005) as follows:

- To identify, characterise, record and date any archaeological features or deposits exposed by means of archaeological trial trench excavation.
- To provide detailed information on the presence or absence, area of extent, depth of burial and degree of survival for those archaeological features and deposits where the proposed construction works will affect them.
- To create an archaeological archive of information that will serve to inform any future work within the grounds or reinstatement of the gardens about the house, as yet undetermined.

#### Methodology

The evaluation comprised eight trenches arranged in a grid pattern (representing 4% or 410m<sup>2</sup> of the 1.25ha site) (Fig 2). No work took place in the area of 'The Cottage' which is unaffected by the proposed development. Overburden was removed under archaeological direction by a JCB 3CX mechanical excavator fitted with a 1m and/or 1.8m toothless ditching bucket. Deposits were removed in spits to reveal the surface of any significant archaeological deposits, or, where these were absent, the natural geology.

All significant archaeological deposits were excavated by hand and recorded using Northamptonshire Archaeology pro-forma record sheets.

All trenches were planned at a scale of 1:50 and appropriate sections drawn at 1:10 (Figs 3, 4 and 5). All levels were related to Ordnance Datum. A photographic record was kept in both black and white prints and colour slides.

On completion of the work the trenches were backfilled and lightly compacted to restore the surface.

#### 5 THE EXCAVATED EVIDENCE

Archaeological features were present in every trench except Trench 7, which only contained features derived from vegetation disturbance.

#### Trench 1

Trench 1 was orientated north-east to south-west and located between the access road and the boundary wall of 'The Mansion House' (Figs 2 & 3). It contained three pits and vegetation root disturbance features.

The natural (106) was at a depth of 0.57m and consisted of reddish orange clay sand. Cutting this was pit [112] = [114] (Fig 5, Section 3 and 4), a large oval feature with concave sides and a flat base. It measured 5m wide and 0.5m deep, filled by dark orange brown silty loam (111) = (113). Medieval pottery of up to thirteenth century date and animal bone were recovered from this deposit. Pit [108] (Fig 5, Section 1) was a small oval feature with straight, sloping sides at approximately 60° and a flat base. It measured 1.45m wide and 0.35m deep and was filled with mid greyish brown sandy silt (107). Pit [110] (Fig 5, Section 2) was a large oval feature with uneven gently sloping sides and a flat base. It measured 2.45m wide and 0.43m deep and was

filled with mid greyish brown sandy silt (109). Medieval pottery dated to the thirteenth century was recovered from this deposit.

At the southern end of the trench a (0.3m) deepening of the subsoil was into the underlying natural occurred. It aligned with the current southern boundary wall of 'The Mansion House'. This feature was examined in a single machine dug slot. It was interpreted as possibly a continuation of the hollow that is shown on large scale Ordnance Survey maps in the Mansion House garden to the northwest. This might suggest that much of the ground to the west of the present access track was once part of a larger garden.

There were three post-medieval soil layers: (104) light greyish brown silty loam; (103) dark brown clay loam; (102) light greyish brown silty loam. The topsoil (101) was a dark brown silty loam.

#### Trench 2

Trench 2 (Figs 2 & 3) was orientated north-west to south-east and located parallel to the present southern boundary fence of 'The Mansion House'. It contained two ditches, one pit, vegetation disturbance features, a modern square pit and two modern brick foundations of a glasshouse.

The natural was light reddish orange clay sand (205) at a depth of 0.57m. Cutting this was ditch [207] (Fig 3). It was orientated east to west and had shallow concave sides and an uneven concave base. It measured 1.02m wide and 0.17m deep and was filled by (206) light brown sandy silt. Ditch [209] (Fig 5, Section 5) was orientated north to south and had gently sloping sides and a flat base. It measured 1.3m wide and 0.25m deep and was filled with dark brown silt (208). Pottery of late eleventh century date and animal bone was recovered from this deposit. Pit [213] (Fig 3) was a small rounded feature with straight to gently sloping sides and an uneven base. It measured 0.64m wide by 0.15 deep and was filled with (212) mid greyish brown sandy silt.

The features were overlain by subsoils (204) reddish orange sandy silt and (203) orange brown silt, and also by an earlier topsoil (202) greyish brown silt. All underlay the present topsoil (201) dark brown silty loam.

#### Trench 3

Trench 3 (Figs 2 & 3) was located west of 'The Nurseries' and orientated north-east to south-west. It contained one ditch, one gully, vegetation disturbance and a modern feature.

The natural was reddish orange sandy silt (304) at a depth of 0.68m. Cutting this was ditch [306] (Fig 5). It was orientated approximately north to south and had short, concave sides with a shallow concave base. It measured 0.45m wide by 0.13m deep and was filled by (305) mid orange brown clay silt. Truncating [306] was ditch [308] (Fig 5, Section 25). It was orientated north-west to south-east with an even, concave profile and a concave base. It measured 0.6m wide and 0.2m deep and was filled by (307) dark brown clay silt.

The features were overlain by subsoil (303) mid reddish orange sandy silt, a lower topsoil (302) mid orange brown sandy silt and the present topsoil (301) dark greyish brown silty loam.

#### **Trench 4**

Trench 4 (Figs 2 & 3) was orientated north-west to south-east, running parallel with the southern boundary of 'The Mansion House'. It contained one gully.

The natural (404) was light reddish orange sandy clay at a depth of 0.66m. Cutting this was gully [406] = [408] (Fig 5, Sections 9 and 10). It was orientated approximately north-west to south-east and had a variable profile. The butt end [406] was rounded, with slightly convex, steep sides and a concave base and [408] had short, gently sloping profile with a flat base. Both [406] and [408] were filled by, respectively, (405) and (407) mid reddish brown silt clay. Animal bone was recovered from (407).

The features were overlain by subsoil (403) mid reddish brown sandy clay and an upper subsoil (402) orange brown sandy silt. The topsoil (401) was a dark brown silty loam.

#### Trench 5

Trench 5 (Figs 2 & 4) was orientated north-west to south-east, running parallel with the southern site boundary. It contained 3 ditches, vegetation disturbance and one modern ditch.

The natural (504) was light reddish brown silty clay at a depth of 0.75m. Cutting into it was ditch [506]. It was orientated approximately north to south and had a wide, even concave profile and a concave base. It measured 2m wide and 0.6m deep and was filled by (505) mid orange brown clay silt. Animal bone was recovered from this deposit. Ditch [510] was also orientated approximately north to south and had a similar profile. It measured 1.3m wide and 0.33m deep and was filled by (509) mid orange brown clay silt. Truncating both these features was ditch [508] (Fig 5) which was orientated approximately north to south and had short, steep sides and a flat base. It measured 1.3m wide and 0.33m deep and was filled by (507) dark

brown silty loam. This deposit was a deepening of topsoil (501). All three ditches were cut from the base of the topsoil layer and are probably post-medieval allotment features.

Overlying these features was subsoil (503) mid reddish orange sandy clay, an upper subsoil (502) light orange brown silty clay. The topsoil (501) was a dark brown silt loam.

#### Trench 6

Trench 6 (Figs 2 & 4) was located at the western edge of the development area and orientated north-east to south-west. It contained two ditches.

The natural in this trench consisted of two deposits, (605) dark orange red sands and gravels and (604) dark yellowish orange sandy silt. Cutting this was ditch [607] (Fig 5, Section 11). It was orientated north-west to south-east and had a shallow, uneven profile. It measured 1.3m wide and 0.1m deep and was filled with (606) mid greyish brown clay silt. Ditch [609] (Fig 5, Section 11) lay parallel to [607] approximately 0.5m to the north and had a similar shallow profile. It measured 1.08m wide and 0.08 deep and was filled with (608) mid greyish brown clay silt which contained twelfth century pottery.

The features were overlain by subsoil (603) light brown sandy silt and an upper subsoil (602) mid brown sandy loam. The topsoil (601) was a dark brown sandy loam.

#### Trench 7

Trench 7 (Figs 2 & 4) was located in the eastern half of the development area in the orchard, aligned with the proposed access road and orientated east to west.

The natural (704) was mid reddish orange fine sand at a depth of up to 0.8m. A selection of the features uncovered were excavated and found to be uneven with undercutting and were therefore interpreted as tree or shrub root disturbance. There was also mixing of topsoil and subsoil into the upper surface of the natural in this trench by root activity. Most of the tree disturbance features were characterised by having mid orange brown fill. One sherd of pottery was recovered from (711) (Fig 5, Section 18).

The subsoil (703) was mid reddish brown sandy silt. The lower topsoil (702) mid orange brown sandy silt was overlain by topsoil (701) dark brown silty loam.

#### **Trench 8**

Trench 8 (Figs 2 & 4) was located east of 'The Cottage' orientated north-east to south-west, it was to target potential medieval deposits relating to plots fronting on Cooper's Lane. It contained one ditch, three pits, two postholes, vegetation disturbance and ten unexcavated vegetation features.

The natural (804) was mid brownish orange sands and gravels at a depth of 0.55m. Cutting this was ditch [822]. It was orientated east-west and had a shallow, uneven profile. It measured 0.75m wide and 0.08m and was filled by (821) mid greyish brown silty clay. Pit [807] was a small, oval feature with concave, initially steep, sides and a concave base. It measured 0.56m wide by 0.2m deep and was filled by (806) dark greyish brown sandy silt. Pit [813] (Fig 5, Section 23) was a rounded feature with steep, almost vertical sides that taper slightly towards a U-shaped base. It measured 0.6m wide by 0.43m deep and was filled by (812) mid greyish brown sandy silt. A single, small iron nail and animal bone were recovered from this deposit. Pit [824] was rounded and had a concave tapering profile. It measured 1m wide by 0.7m deep and was filled by (823) mid greyish brown silty sand. Three post-medieval brick fragments were recovered from this deposit. Pit [811] (Fig 5, Section 14) was an oval feature with a shallow profile. It measured 0.64m wide by 0.12m deep and was filled by (810) mid greyish brown sandy silt. It was cut by posthole [809] (Fig 5, Section 14), a small rounded feature with a symmetrical, U-shaped profile. It measured 0.36m wide and 0.17m deep and was filled by (808) dark greyish brown sandy silt. Posthole [820] was a small round feature with concave sides leading to a tapering base. It measured 0.35m wide (to the point of truncation) and 0.35m deep and was filled by (819) light yellowish brown silty clay with slight greyish mottling.

Features [816] and [817] (Fig 4) were interpreted as post medieval tree disturbance. They had similar profiles – gently sloping sides breaking to vertical and/or undercutting sides – and had similar mid greyish (ashy) blue/black fills with sherds of (residual medieval and) post-medieval pottery, and a flint flake. Neither was fully excavated. Immediately to the west of these features and up to 15m from the north end of the trench lay a series of intercutting features, most of which were post-medieval. A sample were excavated; [820] (see above) and [818] (Fig 4), which had a similar profile to [816] and [817]. It measured 1.8m wide and was filled by mid greyish brown silty clay.

All features were sealed by subsoil (803) light brown sandy silt and upper subsoil (802) mid brown sandy silt. The topsoil (801) was dark brown silty loam.

#### 6 THE FINDS

## Medieval pottery by Paul Blinkhorn

The pottery assemblage comprised 42 sherds with a total weight of 504g. It was all Saxo-Norman or medieval apart from a single, small, abraded and redeposited Romano-British sherd. The range of fabric types suggests that occupation at the site started around the time of the Norman Conquest, and continued until the early part of the 13<sup>th</sup> century.

The assemblage was recorded using conventions of the Worcestershire on-line ceramic database (http://www.worcestershireceramics.org/hms/home), as follows:

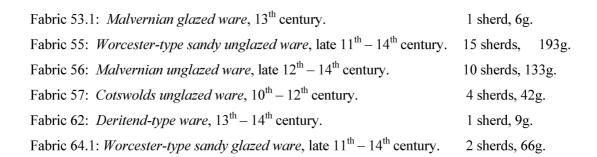


Table 1: Pottery occurrence by number and weight (g) of sherds per context by fabric type

	R	В	F5.	3.1	F:	55	F	56	F:	57	F	62	F6	4.1	19t	hC	
Context	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
0															8	52	U/S
109			1	6	2	21											13thC
111					1	2							1	14			L11thC?
113					6	63	6	64			1	9	1	52			13thC
207					1	32											L11thC?
208					3	57			2	28							L11thC?
210							1	12	1	12							12thC
505									1	2							10thC?
608							1	40									12thC
711					1	4											L11thC?
816					1	14											L11thC?
upper																	
816 lower	1	3					2	17									12thC
Total	1	3	1	6	15	193	10	133	4	42	1	9	2	66	8	52	

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*.

Generally, although this is only a small assemblage, the sherds were all in good, fresh condition, with little sign of abrasion, and there was no evidence of disturbance of medieval layers by later activity.

# The Worked Flint by Andy Chapman

Two struck flints were recovered. These comprise a small blade-like cortical flake, 29mm long, that has been struck from a prepared core (trench 7, unstratified), and a small broken flake (context 816). The blade-like flake is in grey granular flint, with a light brown cortex, while the other piece is a pale grey flint with a blue-grey surface patination. Neither piece is diagnostic of date.

#### The Animal Bone by Karen Deighton

355 grams of animal bone was recovered by hand during the course of excavation. This material was scanned to determine the level of preservation, the species present and the potential for further analysis.

Fairly heavy fragmentation was noted for all contexts. Surface condition was reasonable although evidence of mottling and abrasion in was noted on material from context 207. No burning or canid gnawing was observed. A single example of butchery (two short diagonal knife marks) was seen on a large ungulate rib.

Table 2: The species present

Context	Date	Bos	Ovicaprid	sus	1.ungulate	indet	Totals
113	C13th					3	3
207	C12th	2					2
210	C12th					1	1
505	C10th		1		1		2
808	Post -			1			1
	medieval						
Totals		2	1	1	1	4	9

Context 407 was undated ,but produced several large ungulate rib fragments.

# Potential

The value of further analysis was severely limited by heavy fragmentation and lack of material. No further work is recommended.

#### 7 DISCUSSION

The evaluation suggests the development area contains a low to medium density of archaeological features. The density increases towards the north and east of the development area with a series of medieval and post-medieval features, mainly located in Trenches 1, 2 and 8, and consisting of ditches, pits, postholes and tree disturbance. Trench 8 in particular contains a series of features of 19th century origin that appear to relate to formal garden activity on land belonging to 'The Cottage' as shown on the 1886 1st Edition Ordnance Survey map.

Ditch [209] in Trench 2 is aligned with the south-east boundary wall of 'The Mansion House' and may be a continuation of this boundary. This line is shown on the 1886 OS map as a boundary wall. The hollow at the southern end of trench 1 continued the line of the hollow, possible wilderness walk, shown on the Ordnance Survey maps in the Mansion House gardens, this might suggest that much of the ground to the west of the present access track was once part of a larger formal garden.

In the south of the study area the features consist primarily of undated ditches and gullies, although pottery recovered from ditch (505) and the shallow gully or possible furrow (608) are of 10th to 12th century date, perhaps reflecting early agricultural use.

In the northern area there are features of a similar date, but of a different type, being mainly pits. One of these, [112] = [114] could be for gravel extraction.

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Northamptonshire Archaeology a service of Northamptonshire County Council

9<sup>th</sup> August 2005

# **APPENDIX 1: TRENCH SOIL DEPTHS**

Trench 1

			Distance Along Trench					
		0m	10m	20m	30m			
	Topsoil (101)	0.15	0.10	0.04	0.11			
Dej	Subsoil (102)	0.10	0.08	0.07	0.10			
Depth of Layer (m)	Subsoil (103)	0.04	0.10	0.10	0.20			
Layer	Subsoil (104)	0.14	0.11	0.10	0			
(m)	Natural (105)	0.14	0.30	0.27	0.26			
	Total Depth	0.67	0.69	0.58	0.67			

Trench 2

			Distance Along Trench						
		0m	10m	20m	27m				
	Topsoil (201)	0.10	0.15	0.17	0.15				
Depth of Layer (m)	Subsoil (202)	0.15	0.35	0.30	0.30				
of La	Subsoil (203)	0.15	0.25	0.17	0.12				
yer (m	Natural (204)	0.25	0	0	0				
	Total Depth	0.65	0.75	0.64	0.57				

Trench 3

			Distance Along Trench							
		0m	10m	20m	30m					
Depth	Topsoil (301)	0.18	0.20	0.15	0.15					
oth of	Topsoil (302)	0.20	0.25	0.25	0.30					
of Layer (m)	Subsoil (303)	0.30	0.40	0.30	0.35					
(m)	Natural (304)	0	0	0	0					

Total	0.68	0.85	0.70	0.80
Depth				

Trench 4			I	Distance Along Trend	ch
		0m	10m	20m	26m
	Topsoil (401)	0.18	0.25	0.28	0.27
Depth	Subsoil (402)	0.28	0.30	0.30	0.24
of Lay	Subsoil (403)	0.20	0.35	0.35	0.34
Depth of Layer (m)	Natural (404)	0	0	0	0
	Total Depth	0.66	0.90	0.93	0.85

# Trench 5

			Distance Along Trench						
		0m	10m	20m	28.5m				
	Topsoil (501)	0.30	0.30	0.26	0.20				
Depth of Layer (m)	Topsoil (502)	0.22	0.30	0.22	0.30				
of La	Subsoil (503)	0.28	0.45	0.35	0.25				
yer (m	Natural (504)	0	0	0	0				
	Total Depth	0.80	1.05	0.83	0.75				

# Trench 6

			Distance Along Trench						
		0m	10m	20m	25m				
	Topsoil (601)	0.20	0.18	0.19	0.20				
Depth	Subsoil (602)	0.16	0.15	0.17	0.14				
Depth of Layer (m)	Subsoil (603)	0.09	0.10	0.09	0.11				
yer (m	Natural (604)/(605)	0	0	0	0				
	Total Depth	0.45	0.43	0.45	0.45				

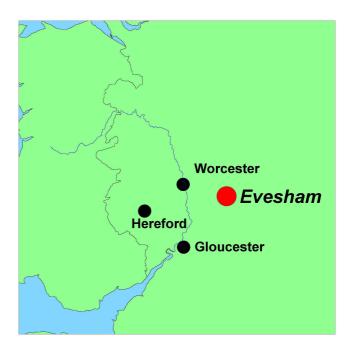
Trench 7

			Distance Along Trench					
		0m	10m	20m	27m			
Depth of Layer (m)	Topsoil (701)	0.30	0.20	0.20	0.18			
	Topsoil (702)	0.25	0.20	0.20	0.12			
	Subsoil (703)	0.25	0.25	0.25	0.15			
	Natural (704)	0	0	0	0			
	Total Depth	0.80	0.65	0.65	0.45			

# Trench 8

			Distance Along Trench					
		0m	10m	20m	30m			
Depth of Layer (m)	Topsoil (801)	0.25	0.28	0.26	0.30			
	Subsoil (802)	0.12	0.16	0.14	0.12			
	Subsoil (803)	0.13	0.16	0.15	0.15			
	Natural (804)	0	0	0	0			
	Total Depth	0.50	0.60	0.55	0.57			





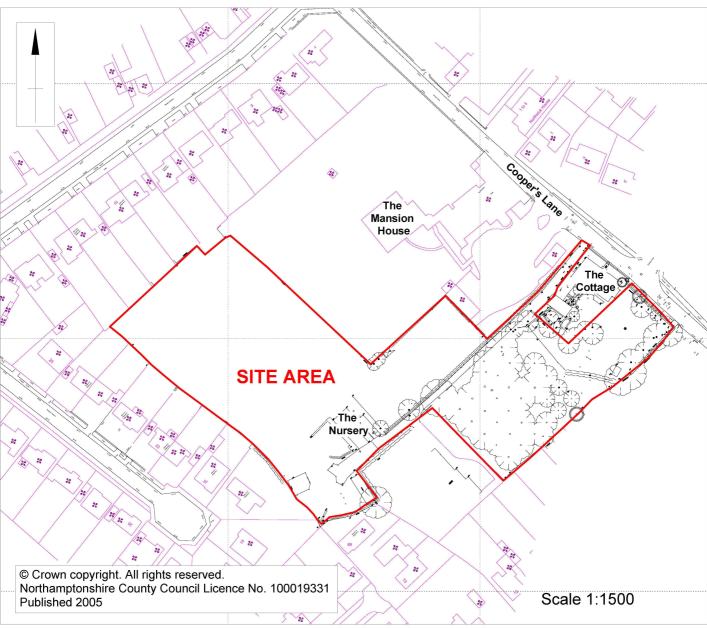
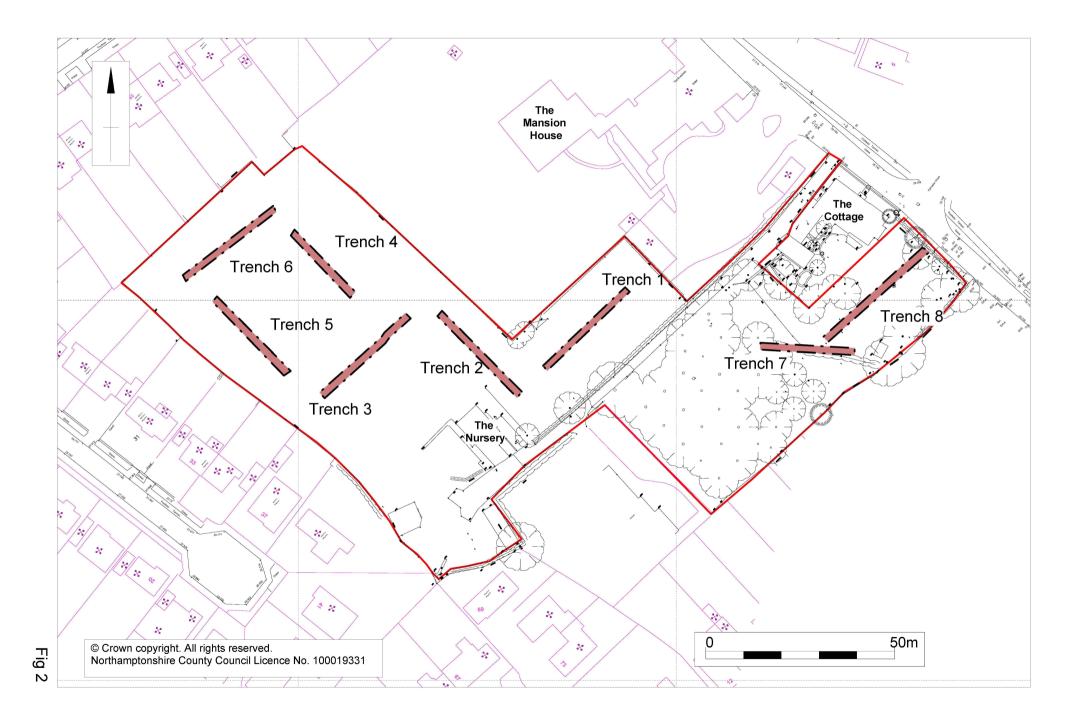
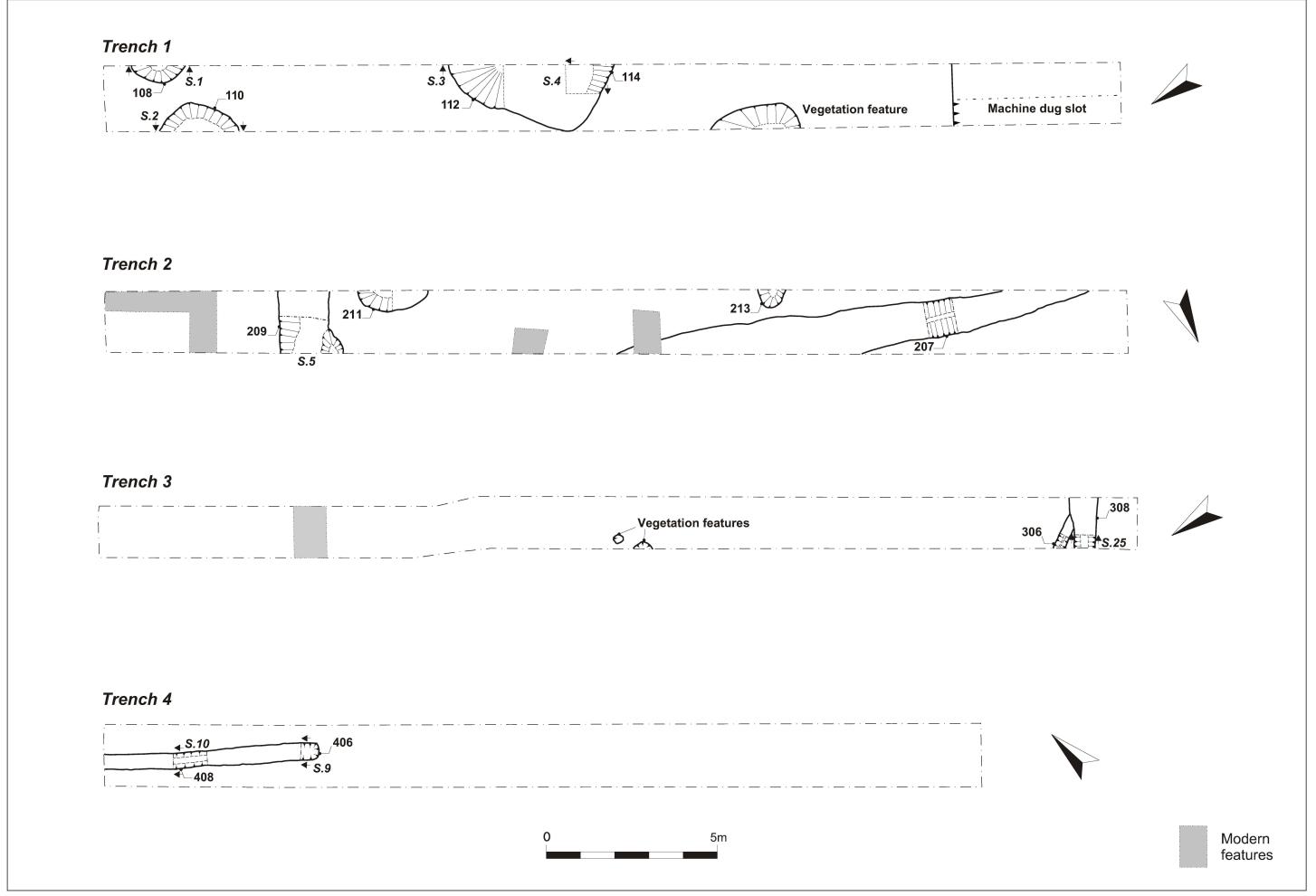
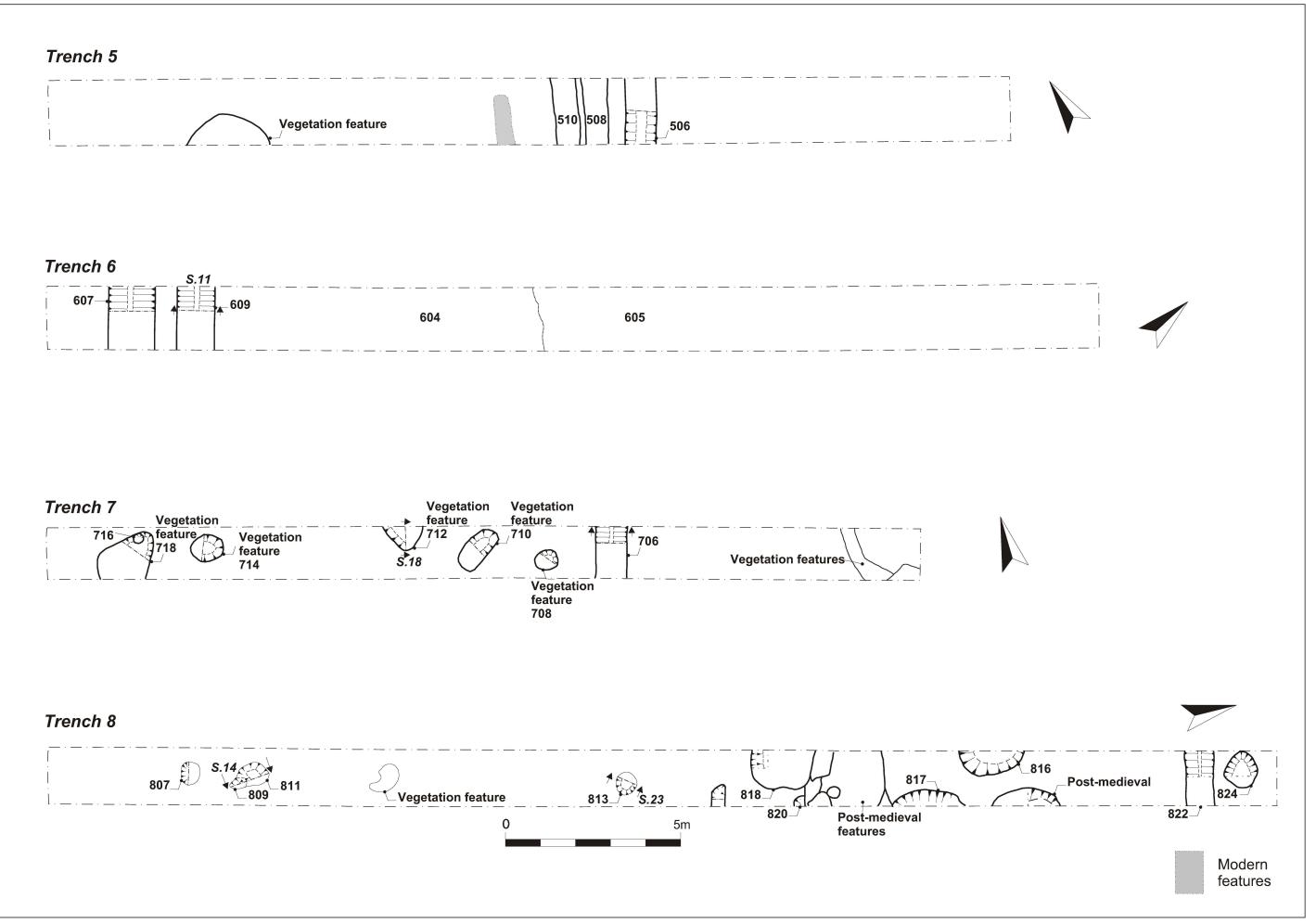


Fig 1







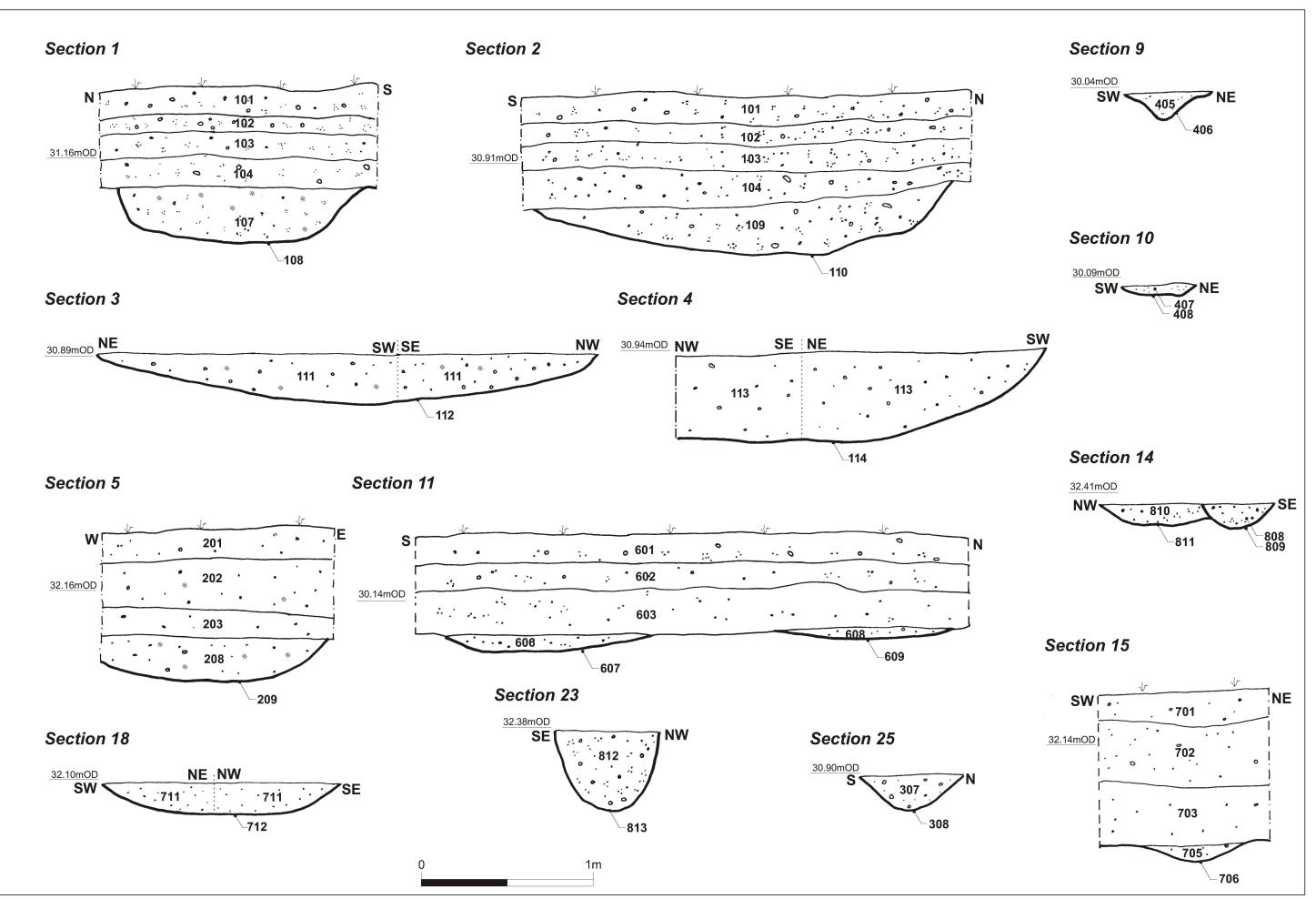


Fig. 5



Plate 1



Plate 2