

# Northamptonshire Archaeology

Archaeological observation, investigation and recording at Ampthill Road DG5, Shefford, Bedfordshire March-May 2012



Northamptonshire Archaeology 2 Bolton House Wootton Hall Park Northampton NN4 8BE t. 01604 700493 f. 01604 702822 e. <u>sparry@northamptonshire.gov.uk</u> w. www.northantsarchaeology.co.uk

> Northamptonshire County Council



James Ladocha Report 12/116 August 2012 BEDFM: 2012.14

### STAFF

Project Manager	Jim Brown BSc PGDip MIfA
Fieldwork	Jonathan Elston BA
	Pete Townend MA
	James Ladocha BA
Text and illustrations	James Ladocha

## QUALITY CONTROL

	Print name	Signed	Date
Checked by	Charlotte Walker		
Verified by	Jim Brown		
Approved by	Steve Parry		

# OASIS REPORT FORM

PROJECT DETAILS			
Project title	Archaeological Observation, Investigation and Recording at Ampthill Road DG5, Shefford, Bedfordshire, March-May 2012		
Short description	Northamptonshire Archaeology undertook observation,		
	investigation and recording at Ampthill Road DG5, Shefford,		
	Bedfordshire from March to May 2012. The work was carried out		
		rks for a weir relief scheme. A possible	
		litch was uncovered that was sealed by a	
		n contained Roman finds. A possible brick	
	observation area.	osed within a pipe trench outside the	
Project type	Observation, Investigat	ion and Recording	
Previous work	None		
Current land use	Grassland		
Future work	Unknown		
Monument type			
and period	Possible prehistoric or	Roman ditch	
Significant finds	Pottery, tile and animal	bone	
PROJECT LOCATION	,,,		
County	Central Bedfordshire		
Site address	Ampthill Road, Sheffor	d	
Easting Northing	TL 13732 38988		
Area (sq m/ha)	<i>c</i> 0.6ha		
Height aOD	45m above Ordnance I	Datum	
PROJECT CREATORS			
Organisation	Northamptonshire Arch	aeology (NA)	
Project brief originator	Hannah Firth (Central Bedfordshire Council)		
Project Design originator	Jim Brown (Northampto		
Director/Supervisor	Jonathan Elston and Ja		
· · · · · · · · · · · · · · · · · · ·	(Northamptonshire Arc		
Project Manager	Jim Brown (Northampto		
Sponsor or funding body	Anglian Water Services	3	
PROJECT DATE			
Start date	14/03/2012		
End date	16/05/2012		
ARCHIVES	Location (Accession no.)	Contents	
Physical		Finds (1 small box)	
Paper	Bediold Museum Site records (1 small archive box)		
Digital	BEDFM 2012.14 Client report PDF		
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (NA report)		
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# ARCHAEOLOGICAL OBSERVATION, INVESTIGATION AND RECORDING AT AMPTHILL ROAD DG5, SHEFFORD BEDFORDSHIRE

#### MARCH-MAY 2012

#### Abstract

Northamptonshire Archaeology undertook observation, investigation and recording at Ampthill Road DG5, Shefford, Bedfordshire from March to May 2012. The work was carried out during the ground works for a weir relief scheme. A possible prehistoric or Roman ditch was uncovered that was sealed by a layer of alluvium, which contained Roman finds. A possible brick culvert was also exposed within a pipe trench outside the observation area.

#### 1 INTRODUCTION

The archaeological work, comprising observation, investigation and recording on a proposed weir relief scheme, also included a haul road, off-line storage tank, lagoon and manholes with associated pipe trenches. The development site comprised c0.6ha of land, located in the north of Shefford, Bedfordshire, and centred on NGR TL 13732 38988 (Fig 1). The work was carried out by Northamptonshire Archaeology (NA) and was commissioned by Anglian Water in accordance with the requirements of a brief from the local planning authority (Firth 2012) issued by the Central Bedfordshire Council Archaeology Team (CBCAT). The brief was issued following guidance under the National Planning Policy Framework (DCLG 2012) and the policies of Central Bedfordshire.

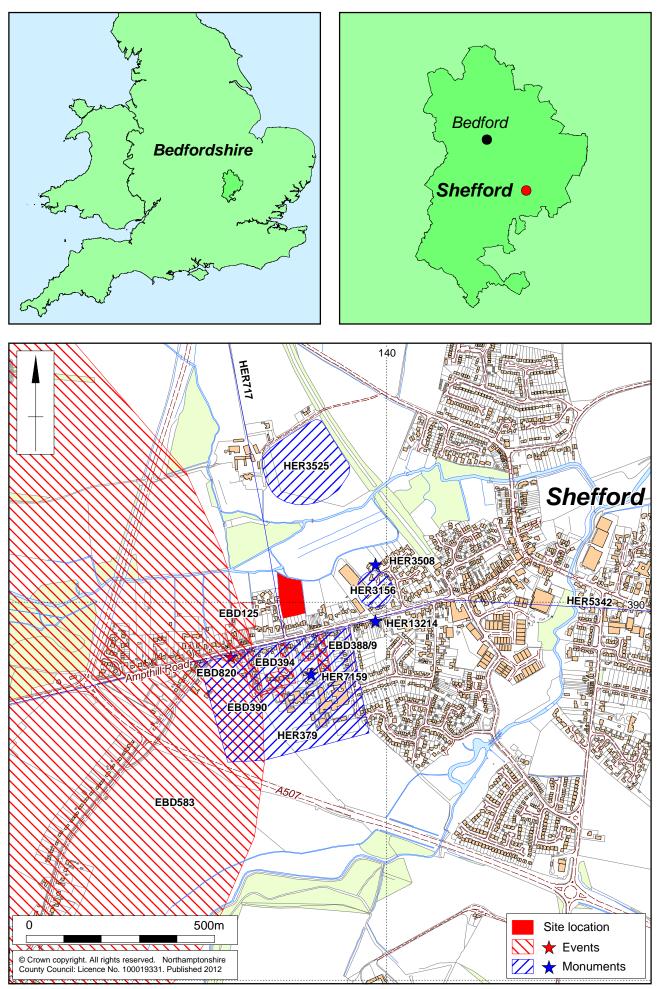
The scope of works was outlined and detailed in the Written Scheme of Investigation (WSI) prepared by NA (Brown 2012). The objective of the work was to determine the presence of any archaeological features or deposits within the development area given its close proximity to the Roman villa site to the south, and to date and characterise their extent, depth of burial and state of preservation.

#### 2 BACKGROUND

#### 2.1 Topography and geology

The development area comprised a small parcel of grassland lying on the northern side of Ampthill Road. It is bounded to the west by Hazel Close, to the north by the River Flit and to the east by small fields and residential areas. The site is on level ground on the flood plain, close to the river, at *c*45m above Ordnance Datum.

The underlying geology comprises the Woburn Sand Formation, overlain by sands and gravels (BGS 2001). The soils are of the Evesham 3 and Hanslope Associations, largely slowly permeable calcareous clayey soils that form above Jurassic and Cretaceous clays, and chalky till (LAT 1983).



Scale 1:10,000

#### 2.2 Archaeological background

Roman occupation in the area was first identified in the 1820's during gravel extraction south of Ampthill Road (Luke, Preece and Wells 2010, 270-274). Further discoveries were made during the mid-19th century that were interpreted as a cemetery and a temple (Firth 2012).

Excavations at Shefford Lower School including the levelling of the playing field (south of Ampthill Road) in 1940 and a set of field evaluations, watching briefs and open area excavations over the past 20 years, have identified a settlement dating from the late Iron Age, which subsequently developed well into the 4th-century (Luke *et al* 2010).

A small late Bronze Age to early Iron Age pottery assemblage was residual in later contexts. The late Iron Age occupation took the form of a large 1st-century AD enclosure, which was maintained into the 2nd and 3rd centuries. The original enclosure contained a possible roundhouse and other features.

The initial settlement was replaced in the 2nd century by a substantial aisled building and two other rectangular timber buildings. The Roman aisled building was periodically repaired and effectively rebuilt during its lifetime of use. The southern end contained several rooms, which included a hypocaust. The buildings may have been linked by cobbled yards and paths. Pottery indicated continuous occupation, with a new enclosure being established in the 3rd and 4th centuries, in roughly the same position.

#### 2.3 Historic Environment Record data search

The Historic Environment Record was consulted for all recorded events and monuments within 250m radius of the development site. The data is summarised in Table 1. A series of evaluations in and around the Robert Bloomfield Middle School have provided the majority of information for the area.

The presence of Neolithic and Bronze Age activity in the valley is largely indicated by flint scatters and residual finds. Cut features have yet to be found and securely dated to these earlier prehistoric periods.

Late Iron Age settlement features are more securely dated and have been found, principally as the pre-cursor to Roman occupation, which is most prominently focused upon the villa site, south of Ampthill Road. The site may also have incorporated a small temple (*ibid*).

A 6th-century inhumation in close proximity to the Roman villa may indicate that the evidence for Saxon re-occupation of the land has yet to be fully explored.

Medieval evidence is limited to signs of cultivation, which would be expected to continue through the post-medieval period as part of an agricultural unit up until the 19th century.

Quarrying in the 19th-century severely impacted the Roman villa site, and would have swept away any other evidence within its footprint. Fortunately the extent of the quarry was limited to the south of Ampthill Road.

Earliest period	HER Ref.	Event or monument
Negative	EBD125	72-88 Ampthill CI: evaluation, unoccupied marginal wetland
Negative	EBD820	95 Ampthill Rd: watching brief
Neo/Bze Age	EBD583	Chicksands: DBA
Neo/Bze Age	EBD394	77-81 Ampthill Rd: evaluation, residual worked flint and prehistoric pottery, late Iron Age boundary ditch, Roman ditches, pits, posthole and cobbled surface
Neo/Bze Age	3508	Flint scatter
Late Iron Age	379	Settlement evidence: pit, ditch, posthole and hearth
Roman	EBD388	59 Ampthill Rd: evaluation stage 1, boundary ditch and posthole, finds suggestive of high status Roman occupation, C19th quarries
Roman	EBD389	59 Ampthill Rd: evaluation stage 2, no features, finds suggestive of high status Roman occupation, C19th quarries
Roman	EBD390	Robert Bloomfield Middle School: evaluation, ditches/gullies, postholes, C19th disturbance
Roman	379	Villa & cemetery: ditches, pits, postholes, temple, villa, building, hypocaust, mosaic, floors, cremation, animal burial
Roman	717	Conjectural Roman road, Viatores no. 223
Roman	3525	Cropmarks: probable field boundaries and trackways
Roman	5342	Conjectural Roman road, Viatores no. 176
Early Saxon	379	Inhumation
Medieval	379	Ridge and furrow
C16th-18th	379	Pits
C16th-18th	3156	Windmill
C16th-18th	13214	23-29 Ampthill Rd: building of local interest
C19th	379	Quarry
C19th	7159	Shefford Lower School, established 1875

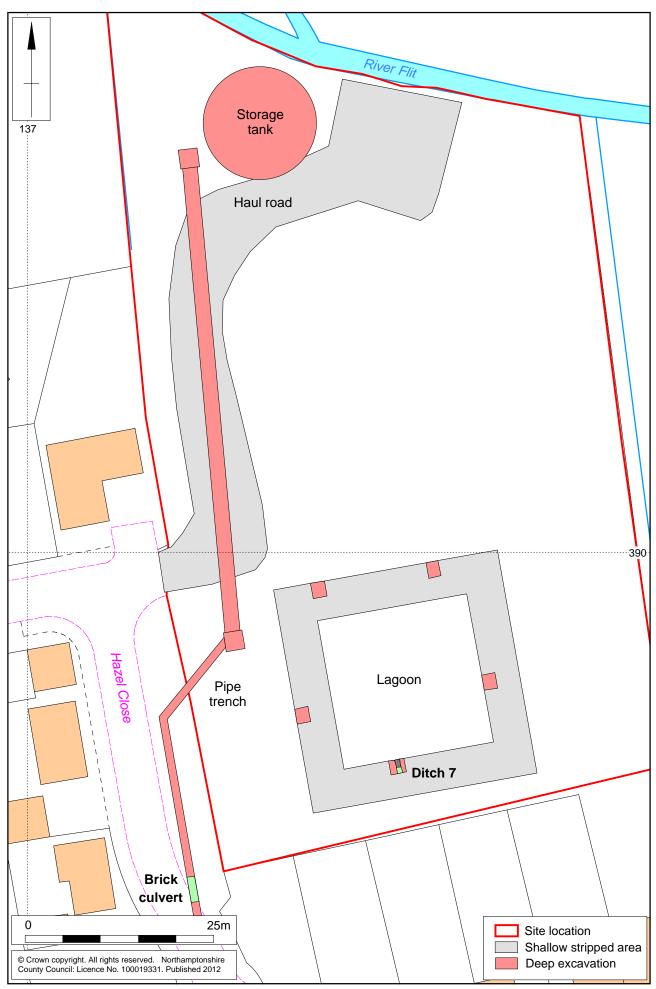
#### 3 AIMS AND OBJECTIVES

The aim of the investigation was to determine if archaeological remains were present within the development area. The objectives were established in pursuit of national and regional research agendas (EH 1997; Glazebrook 1997; Brown & Glazebrook 2000; Medlycott 2011; Oake *et al* 2007).

The specific objectives of the watching brief, as set out in the Brief (Firth 2012), were to:

- establish the location, nature, extent and date of any archaeological features or deposits that may be impacted upon by the development
- establish the relationship of any remains found to those in the surrounding contemporary landscapes
- recover palaeo-environmental remains, where present, to determine local environmental conditions

It was not possible to advance these specific objectives, given the overall lack of archaeological remains.



Scale 1:500 (A4)

#### 4 METHODOLOGY

The footprint of the proposed haul road and lagoon perimeter were excavated by a  $360^{\circ}$  excavator with a 1.8m wide smooth ditching bucket to remove overburden to the required depth, on average *c*300mm. The natural substrate was not present within the lagoon strip, five test pits were excavated down to this level, each 2.0m long by 1.8m wide and 0.65-0.70m deep (Fig 2).

The principal pipe trench was 58m long by 2m wide by 2m deep. The manholes at either end were cubical, 2.5m long by 2.5m wide by 2.5m deep. There was also a further pipe trench excavated alongside Hazel Close, which linked the southern manhole to pipes along Ampthill Road (Fig 2). This trench was 1.0m wide by 2.0m deep.

The off-line storage tank excavation was approximately 15m in diameter and 3.25m deep. Prior to excavation, metal shuttering was piled into the ground around the circumference to prevent collapse during and after excavation. A further 9m shaft was to be excavated within the centre of this but was not observed as the natural substrate had already been exposed.

The areas were cleaned sufficiently to enable the identification and definition of any potential archaeological features. Recording followed standard NA procedures as described in the *Fieldwork Manual* (NA 2011). Deposits were described on *pro-forma* sheets to include measured and descriptive details of the context, its relationships, interpretation and a checklist of associated finds. The excavated areas were located using a Leica System 1200 GPS. Furthermore, the lagoon area was planed at 1:100 scale with the test pit sections drawn at 1:10 scale. A full photographic record comprising both 35mm monochrome negatives and colour transparencies was maintained, supplemented by digital photographs for the purpose of this report.

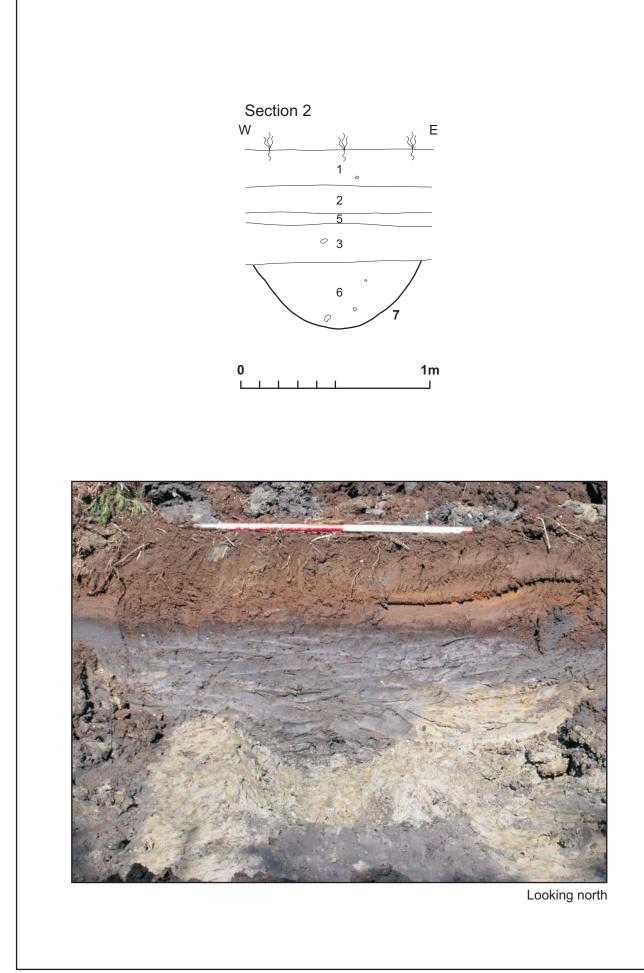
The archaeological investigation was undertaken in accordance with current best archaeological practice as defined in the Institute for Archaeologists' *Standards and Guidance* (IfA 2008), *Code of Conduct* (IfA 2010) and the procedural documents of English Heritage (EH 1991; 2009).

#### 5 OBSERVATION, INVESTIGATION AND RECORDING

#### 5.1 Lagoon

The only archaeological feature within the lagoon lay in the southern-most test pit (Fig 2). The ditch, 7, was aligned north to south, 0.8m wide by 0.33m deep, with a U-shaped profile and was cut into natural mottled light yellowish-grey and orangeybrown clay (Fig 3). The ditch contained dark brownish-grey fine silty clay, 6, with a single small sherd of prehistoric pottery and two horn cores from a juvenile goat.

The ditch was sealed by mid to dark grey very silty clay alluvium, 3. The alluvium was found across the lagoon area, and the majority of the site; it contained charcoal flecks, Roman ceramic tile, a sherd of Samian pottery and animal bone, and was on average 240mm thick. This was overlain by a thin layer of dark brownish clay, 5, which were probably further alluvial accumulations carrying cultivated soil, 60-180mm thick. This contained 19th/20th-century pottery. Overlying this was mid-reddish-brown loamy clay subsoil, 2, which was 120mm thick and mottled orangey-brown and grey clay loam topsoil, 1, 200mm thick. Both of these layers were heavily disturbed by root action (Fig 3).



#### 5.2 Pipe trenches and manholes

River gravel was exposed within the pipe trenches and manholes beneath up to 0.7m of alluvial clay. A ridge of gravel within the principal pipe trench between the two manholes suggested that the development area lies above the course of former river channels, largely filled by greyish-blue clayey alluvium. Above this, the alluvium was dark brownish clay, similar to layer 5 in the lagoon, 200-300mm thick. This was overlain by rubble layer 12, comprising mottled orangey-brown sand with very frequent broken and whole bricks, 0.4-0.5m thick. The layer was probably related to the building of the houses on Hazel Close as it only occurred in the west of the site and was overlain by topsoil (Fig 4).



Southern manhole, section, looking south Fig 4

Large sections of the trench along Hazel Close were excavated with the use of shuttering because of the unstable ground, making a detailed study of their stratigraphy difficult. In the north of the trench, where sections were visible, the stratigraphy appeared consistent with the general observations of the site.

South of the site alongside Hazel Close the stratigraphy changed. There was a possible brick culvert 3.4m wide and 1.5m tall, consisting of two east west aligned walls and a further north south wall, just visible under the baulk. The interior was filled with concrete blocks, steel work and bricks, and the structure was topped with a possible tin sheet cover. Due to the depth and space constraints of the trench further investigation was not possible. The brickwork was overlain by a possible earlier road surface consisting of a layer of concrete overlain by tarmac, covered by a 200mm-thick layer of coarse aggregate, with the current tarmac road surface above.

#### 5.3 Storage tank and haul road

Due to the size, depth and shuttering, all measurements for the storage tank excavation are approximate, and for safety recording had to take place from the edge of excavation. River gravel was exposed at a depth of *c*3.0m (Fig 5). This was largely overlain by 0.60m of natural mottled orangey-brown sandy clay. Greyish-blue clayey alluvium, 3, accumulated above this, which was 1.5-2.2m thick. The thicker deposit on the north side of the excavation may indicate the edge of a palaeochannel. The alluvium was overlain by 700mm of subsoil layers, which probably included the later brownish clayey alluvial layers, and 100mm of topsoil.



Natural gravel substrate exposed within the storage tank Fig 5

The haul road strip exposed the upper stratigraphy of these same layers but did not cut below the later, brownish-coloured, alluvial deposits.

#### 6 THE FINDS

#### 6.1 The prehistoric pottery by Andy Chapman

There is a single small plain body sherd of hand-built pottery, weighing 3g, from the fill, 6, of a ditch 7. The sherd is in a soft fabric containing small rounded pellets of grog, and the core is light grey while the single surviving surface is a dull orangebrown. This sherd is likely to be prehistoric in date, late Iron Age at the latest, but cannot be more precisely dated.

#### 6.2 The Roman pottery by Tora Hylton

A worn and exceedingly abraded piece of Samian, weighing 5.1g, was recovered from alluvium (3). The curvature of the piece suggests that it may be a rim sherd from a Dragendorf Type 27 cup (Webster 1996, fig 25). The sherd has a double curved wall and a bead rim dating to the 1st and early 2nd century.

#### 6.3 The Roman ceramic tile by Pat Chapman

There are four tile sherds, weighing 685g, from alluvium (3). One broken curved *imbrex* roof tile sherd 12mm thick, was made from quite hard orange-brown sandy clay and a large flat sherd with one smooth surface, 20mm thick, was made from hard red-brown sandy clay with small shell, grog and gravel. The fabric of these tiles is similar to the *Grog and sand* fabric of the Bedfordshire Ceramic Type Series. One other sherd, 18mm thick, was made from hard sandy orange to brown clay with a black core, very like the *Blue-grey-cored sandy* fabric. The other sherd was too small to determine. These tiles are very similar in fabric to those excavated from the aisled building by Ampthill Road (Wells 2010, 343 appendix 2), and also to small assemblages found in excavations around Shefford Lower School in the same area (Chapman in Walker 2007, Flavell 2010, Jones 2012).

#### 6.4 The post-medieval pottery by Tora Hylton

A base sherd from a flatware item in a utilitarian whiteware fabric dating to the 19th/20th century weighs 5.0g and comes from the upper brownish alluvial deposit (5). The piece has a brownish tinge, which is the product of iron staining, indicating that it may have been immersed in water for some period of time.

#### 7 THE ANIMAL BONE by Laszlo Lichtenstein

A total of nine animal bone elements and fragments were collected from the fill of a possible prehistoric ditch and overlying alluvium, weighing 0.163kg (NISP). Following cleaning and drying all fragments of animal bone were analysed and recorded, using standard zooarchaeological methods. This material was analysed to determine the taxa present, state of preservation and it is potential to provide evidence on the function and ecomomy of the site.

#### Methodology

The animal bone was identified using Northamptonshire Archaeology's and the author's vertebrate reference collection, and further guidelines from Schmid (1972), Driesch (1979), Sisson & Grossman (1953) and Feher (1990). Due to anatomical similarities between sheep and goat the criteria set out by Boessneck (1969) were used to separate the two species.

All the animal remains were counted and weighed, and where possible identified to species, anatomical element, fragmentacion, side, zone and fusion.

Bones that could not be identified to species were, where possible, categorised according to the relative size of the animal represented (large ungulate size: cattle or horse sized, small ungulate size: pig or sheep/goat). All fragments were recorded. Unfortunatelly biometrical data was not possible.

#### Results

Seven specimens (77.7% of the total NISP) were identified to taxa and parts of anatomy, representing at least two mammalian Bos (cattle) and Ovicaprid (sheep or goat) species (Table 2). The majority of bones came from sheep/goat (55.6%) and the remainder came from cattle (22.2%).

Table 2: Species present in the animal bone assemblage by fragment count (including teeth)

Species	NISP	Percentage
Bos taurus L. (Linne 1758)	2	22.2%
Capra hircus L. (Linne 1758)	2	22.2%
Ovicaprid	3	33.4%
Unidentificated	2	22.2%
Total	9	100%

#### Taphonomy

The fragmentation was low, but surface abrasion was high (Table 3), with 36.5% of the bones being less than 50mm in size. No complete long bones were recorded. Taphonomic factors affecting the material were noted including recently broken bones.

The bone was generally in good condition, although the bone surface was abraded and distorted by acidic soils. The high degree of surface erosion exhibited by these bones suggests that they may have been exposed on the surface for some time before burial.

No evidence for canid gnawing, burning, butchery, bone working or pathological signs were observed. No fish or amphibian bones were recovered.

Size (mm)	Count	Percentage
<20	2	25%
20-50	1	12.5%
50-100	4	50%
100-150	1	12.5%
Total	8	100%

Table 3: Size of the animal bone assemblage (excluding teeth)

#### Discussion

Not enough bone was presented for body-part analysis. The fragmentation was moderate and 77.7% of the assemblage could be identified to species. The assemblage is dominated by sheep/goat (55.6%) followed by a lower number of cattle (22.2%). There are anatomical similarities between sheep and goats, but in this case the ovicaprid remains almost certainly came from goat. The goat skull remains with horn cores came from a juvenile individual.

Species/Taxa	Common name	MNI
Bos taurus L. (Linne 1758)	Cattle	1
Capra hircus L. (Linne 1758)	Sheep or goat	1

The very small size of the assemblage precludes any attempt at interpreting the settlement's economy and animal husbandry practices.

#### 8 DISCUSSION

The archaeological works identified a single small ditch of possible prehistoric or Roman date which was cut into the natural clay substrate. The ditch was sealed by greyish-blue alluvium which spread across the majority of the site and contained some Roman finds, but is likely to have accumulated over an extended period of time beside the River Flit.

The distribution of the alluvium, its variable thicknesses and the heights at which the differing substrates were encountered suggested that earlier river channels may be preserved within the site. Insufficient material was exposed in plan or section to determine their orientation or true extent.

The uppermost alluvial deposit was brownish in colour and contained 19th/20thcentury pottery. In the north of the site this was overlain by subsoil and topsoil, and in the west it was overlain by modern make-up and topsoil. A possible brick culvert was also noted within a pipe trench along Hazel Close.

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**Northamptonshire County Council** 

# Northamptonshire Archaeology



Northamptonshire Archaeology 2 Bolton House Wootton Hall Park Northampton NN4 8BE t. 01604 700493 f. 01604 702822 e. sparry@northamptonshire.gov.uk w. www.northantsarchaeology.co.uk





Northamptonshire County Council

