

Turnpike Farm, Potton Road, Biggleswade, Bedfordshire

Archaeological Evaluation Report

May 2019

Client: Mr Simon Auckland

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Turnpike Farm, Potton Road, Biggleswade, Bedfordshire Archaeological Evaluation Report

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Summary

Between the 1st and 3rd of April 2019, Oxford Archaeology East (OA East) conducted trial trenching at Turnpike Farm near Biggleswade, Bedfordshire, (centred TL 20326 46491) in advance of a planning application to construct a lake and plant trees.

A total of four trenches measuring 30m long, two measuring 25m long, and one measuring 15m long were opened within the *c.* 2.1ha site. Four ditches and two pits were revealed in four of the trenches. The ditches were mainly located in the western and southern parts of the site, whilst the two pits were located in the central area. One of these pits, in Trench 3, produced three sherds of Early Bronze Age Collared Urn pottery. Twenty sherds of mostly Middle-Late Iron Age pottery were recovered from the remaining features, with the largest assemblages recovered from a second pit in Trench 3 and a wide, shallow ditch in Trench 7. Flintwork was also recovered from several of the features and from the subsoil in the eastern part of the site, attesting to a prehistoric presence potentially from at least the Early Neolithic period.



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The project was managed for Oxford Archaeology by Louise Moan. The fieldwork was directed by Ro Booth, who was supported by James Green. Survey and digitising was carried out by Sarita Louzolo and Thomas Houghton. Thanks are also extended to the various finds processors, specialists, illustrator and editor for their contributions.



1 INTRODUCTION

1.1 Scope of work

- 1.1.1 OA East was commissioned by Mr Simon Auckland to undertake a trial trench evaluation at the site of Turnpike Farm, Potton Road, Biggleswade, Bedfordshire (TL 20326 46491, Fig. 1).
- 1.1.2 The work was undertaken as a pre-determination project to support an application for Planning Permission (planning ref. CB/18/00192/PAPC). A geophysical survey undertaken prior to the evaluation (Bunn 2019) produced inconclusive results due to the level of interference caused by static caravans situated across the site. As a result, trial trenching was necessary to verify the initial results of this geophysical survey (Fig. 2).
- 1.1.3 A brief was issued by CBCAT (Utrata 2019) outlining the Local Authority's requirements for work necessary to inform the planning process. A Written Scheme of Investigation (WSI) was produced by OA East (Moan 2019) detailing the methods by which OA East proposed to meet the requirements of the brief.

1.2 Location, topography and geology

- 1.2.1 The site lies on the north-eastern edge of Biggleswade. The L-shaped site consists of two plots of land which are currently utilised as a caravan park. The site is bounded on its western side by a watercourse, to the south is the farm and further caravan amenities and to the north and east are open fields.
- 1.2.2 Topographically, the site lies within the River Ivel valley and sits at a height of around 27m OD. The geology of the area is mapped as Woburn Sands Formation sandstone with superficial deposits of river terrace sands and gravels (http://mapapps.bgs.ac.uk/geologyofbritain/home. Accessed 30/4/2019).

1.3 Archaeological and historical background

1.3.1 The following section presents a period summary of known heritage assets within 1km of the site. This is based on the WSI prepared by Moan (2019) for OA East.

Undated

- 1.3.2 The land within which the site itself is situated contains a complex series of cropmarks (HER 509) recorded on air photos taken between 1951 and 1996. They indicate an impressive arrangement of rectilinear enclosures and linear features, some of which may be prehistoric or Roman in date, but many are also thought to represent the remains of the deserted medieval settlement (DMV) of Kinwick.
- 1.3.3 Land to the immediate west of this, on the opposite side of the stream, also contains cropmarks and earthworks of rectangular, linear and circular features, and the probable edges of medieval fields (HER 1615). Further extensive linear cropmarks, probably consisting mainly of a mixture of pre-enclosure landscape features and more modern drainage, has been recorded on land to the immediate south-east of the site (HER 3543).



Prehistoric

- 1.3.4 The cropmarks of a Bronze Age ring ditch (HER 701) have been recorded by aerial photographs c. 0.9km to the north-west of the site. To the immediate south of this, a group of cropmarks showing several ring ditches clustered around the eastern end of a long rectilinear enclosure, interpreted as a Neolithic cursus (HER 644), have been identified. Other small square and rectangular enclosures are visible to the north, east and south-west. The cursus runs west-north-west towards the site of a sewage treatment works where archaeological investigations in 2004 found continuations of the cursus ditches (EBD815; not on Fig. 1).
- 1.3.5 A further possible cursus (HER 16818) has been recorded *c*. 0.5km west-south-west of the site. A pit alignment (HER 15101; not on Fig. 1) and D-shaped enclosure (HER 15079) have also been recorded in this location. Archaeological works here identified a small number of Neolithic and Late Bronze Age/Early Iron Age pits.
- 1.3.6 Archaeological works 500m to the south of the current site revealed sporadic pitting of Late Neolithic and Late Bronze Age/Early Iron Age date (HER 13544).

Romano-British

1.3.7 The Sandy to Godmanchester Roman road (Viatores Road 22) is located around 1.2km to the west of the current site (not on Fig. 1). Further to this, a Roman settlement (HER 446; not on Fig. 1) has been recorded 1km to the north-west of the current site. Aerial photographs have revealed a double-ditched square enclosure with other smaller enclosures around it. Limited fieldwork undertaken in 1959 confirmed the presence of Roman remains dating from the 3rd to 4th centuries AD. Archaeological works around 0.6km south-west of the current site uncovered sub-rectangular and curvilinear enclosures, along with pits and ditches interpreted as field boundaries; these were dated to the Roman period (HER 3544).

Medieval to modern

- 1.3.8 The deserted medieval village of Kinwick (HER 775) is situated around 0.7m north-north-west of the current site. The Domesday Book refers to the village of Chenemondewiche for this vicinity and it is occasionally referred to in later medieval documents up until 1535. The precise location of the DMV is not certain, but the 1799 Enclosure Map and Award record a pre-enclosure field called Kinwick Field in this location. There is also an earthwork complex here (HER 110), which is believed to be related.
- 1.3.9 Land recorded as Park Field in 1777, around 0.6km to the west of site, may refer to a former medieval/post-medieval deer park (HER 13929).
- 1.3.10 Land c. 0.4km to the north-east of the site is recorded as being the location for a First World War airfield (HER 19778), however, there is little actual evidence to verify this.



2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as follows:

- to establish the character, date and state of preservation of archaeological remains within the proposed development area;
- ground truth geophysical results, by testing a range of anomalies of likely archaeological origin, and areas where no anomalies registered;
- establish the presence or absence of archaeological remains on the site, characterise where they are found (location, depth and extent), and establish the quality of preservation of any archaeology and environmental remains;
- provide sufficient coverage to establish the character, condition, date and purpose of any archaeological deposits;
- provide sufficient coverage to evaluate the likely impact of past land uses, and the possible presence of masking deposits;
- determine the nature, function and character of the archaeological site within its cultural and environmental setting; and
- provide sufficient information to construct an archaeological mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables, and orders of cost.

2.2 Methodology

- 2.2.1 The development area covered c. 2.1ha, of which a 2% sample was investigated.
- 2.2.2 A total of 185 linear metres of trenching (one trench measuring 15x2.1m, two trenches measuring 25x2.1m and four trenches measuring 30x2.1m) were positioned over the available parts of the site, with consideration given to both the position of static caravans which could not be moved and the existing vegetation, which comprised several small trees.
- 2.2.3 Service plans were checked before work commenced on site and before trenching. The footprint of each trench was scanned by a qualified and experienced operator using a CAT and Genny with a valid calibration certificate.
- 2.2.4 Machine excavation was carried out under constant archaeological supervision with a 360°excavator using a 2.1m wide toothless ditching bucket. Overburden was excavated in spits not greater than 0.1m thick.
- 2.2.5 Trial trenches were excavated to the depth of geological horizons, or to the upper interface of archaeological features or deposits, whichever was encountered first.
- 2.2.6 All archaeological features were cleaned and excavated by hand. All ditches were investigated by excavating a slot into the feature which measured a minimum of one metre wide, whilst discrete features were half sectioned. Natural features were 'tested' to prove they were not of anthropogenic origin.



- 2.2.7 All archaeological features and deposits were recorded using OA East's pro-forma sheets. Trench locations, features and sections were recorded at appropriate scales. Digital and 35mm black and white photographs were taken of all relevant features.
- 2.2.8 The survey was carried out with a Leica GS08 GPS fitted with "smartnet" technology with an accuracy of 5mm horizontal and 10mm vertical.
- 2.2.9 A total of eight bulk environmental soil samples were taken to assess for the possible survival of micro- and macro-botanical remains. Sampling and sieving of 90 litres of subsoil (20) was carried out on site, specifically to recover struck flint.
- 2.2.10 Metal detecting was carried out at all stages of the excavation by an experienced metal detector user.



3 RESULTS

3.1 Introduction and presentation of results

- 3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the trenches which contained archaeological remains. Trench plans and selected sections illustrating the findings are given as Figures 3 and 4. A selection of trenches and excavated features can be seen in Plates 1 to 6. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds and environmental reports are presented in Appendices B and C.
- 3.1.2 Cut numbers are given in **bold** type.

3.2 General soils and ground conditions

- 3.2.1 The soil sequence between all trenches was fairly uniform. The natural geology of sands and gravels (22) was overlain by a silty sandy subsoil (20) with an average depth of 0.34m, which in turn was overlain by topsoil (21) with an average depth of 0.16m.
- 3.2.2 Ground conditions throughout the evaluation were variable. Constant rain showers during the evaluation period were not particularly problematic given the free draining nature of the geology. Archaeological features were also easy to identify against the background geology, despite the extremely bright conditions encountered at times during the evaluation.

3.3 General distribution of archaeological deposits

3.3.1 Figure 3 provides a plan of the results of the evaluation. Archaeological features were present in Trenches 1, 3, 5 and 7. These consisted of five ditches and a pit. Trenches 2, 4 and 6 were devoid of archaeology, although three natural features were observed within Trench 2.

3.4 Trench **1**

3.4.1 Trench 1 (Plate 1) was 30m long and located in the north-western part of the evaluated area. It was orientated north-west to south-east and a substantial ditch (13), was revealed at its north-western end. Ditch 13 (Fig. 4, Section 5 and Plate 1) was aligned north-north-west to south-south-east and was visible for 16m before it disappeared under the trench baulks. It measured 1.06m wide and 0.32m deep and had steep sides with a concave base. The fill (14), consisted of a light brownish grey clayey silt with rare charcoal inclusions. This fill produced a single cattle tooth, two struck flints (Appendix B.3) and a sherd of Middle-Late Iron Age pottery (6g; Appendix B.2).

3.5 Trench 2

3.5.1 Three natural features were observed in Trench 2, which was 30m long and lay northeast of Trench 1 on a west-north-west to east-south-east alignment. Two natural features (3 and 7) were tested to confirm that they were not archaeological. The fill (4) of feature 3 consisted of a light brown silty sand, whilst fill (8) of feature 7 consisted of a light brownish grey clayey sand. Neither feature produced any finds.



3.6 Trench 3

- 3.6.1 Two pits (**5** and **1**) were encountered in Trench 3, which was 30m long and orientated from north-east to south-west. It was located to the south of Trench 2.
- 3.6.2 Pit **5** (Fig. 3, Section 3) at the north-eastern end of the trench was partially obscured by the baulk edge. It measured 1.45m wide and 0.34m deep and had steep sides with a concave base. The lower fill (12) consisted of an indurated light grey clayey sand which was overlain by a mid greyish brown sandy silt (6). This upper fill (6) produced three sherds (36g) of Early Bronze Age pottery and two flint flakes, all of which were recovered from the bulk environmental sample (Appendix C.1).
- 3.6.3 Toward the western end of the trench, pit 1 (Fig. 4, Section 1 and Plate 2) was circular in plan. It had a diameter of 1.4m and was 0.13m deep; it had gently sloping sides with an irregular base. The lower fill (15), an indurated clayey sand, was flecked with iron panning and contained rare charcoal. It produced a single sherd (11g) of Middle Iron Age pottery. This fill was only visible in the eastern half of the pit after it was fully excavated. The upper fill (2), a mid greyish brown silty sand produced seven (56g) sherds of Late Iron Age pottery.

3.7 Trench 4

3.7.1 Trench 4 (Plate 3) lay in the southern part of the development area. It was 30m long, orientated north-north-east to south-south-west. No archaeological features were observed but the superficial geology was clay rich and indicative of its close proximity to a watercourse.

3.8 Trench 5

- 3.8.1 Two ditches were located in the northern half of Trench 5 (Plate 4), which was aligned north-north-west to south-south-east and located to the east of Trench 4. The northernmost of the ditches (18) (Fig. 4, Section 7; Plates 4 and 5) lay on a north-north-east to south-south-west alignment. It measured 0.8m wide and 0.46m deep and had steep sides with a flat base. This was the only feature to have a V-shaped profile. The mid greyish brown silty sand fill (19) produced a single struck flint.
- 3.8.2 Ditch **16** (Fig. 4, Section 6 and Plate 4) extended on almost the same alignment but was orientated slightly more towards north-east to south-west than ditch **18**. It measured 0.92m wide and 0.2m deep and had steep sides with a concave base. The mid greyish brown clayey sand fill (17) produced two sherds (7g) of Iron Age pottery, one of which was recovered from the bulk environmental sample.

3.9 Trench 6

3.9.1 Trench 6 formed a T-shaped trench along with Trench 7 in the north-eastern part of the development area. It was 25m long, aligned east to west, and was devoid of archaeological remains.

3.10 Trench 7

3.10.1 The subsoil within Trench 7 (20) produced 11 pieces of struck flint, one of which was recovered from the sampling and sieving of 90 litres of material on site.



3.10.2 Trench 7 (Fig. 4, Section 4 and Plate 6) was 25m long and formed the north to south arm of the T-shaped trench with Trench 6. A wide ditch-like feature (9), at the southern end of the trench, continued beyond the limit of excavation. With a minimum width of 4.5m and a depth of 0.43m, it is possible that this was a substantial hollow, rather than a ditch *per se*. The lower fill (10) of the feature consisted of an indurated light brownish grey silty sand mottled with iron panning. Six sherds (41g) of Middle and Late Iron Age pottery were recovered from the fill, with three of these recovered from the bulk environmental sample. The upper fill (11), a mid brown silty sand, produced three (18g) sherds of Middle Iron Age pottery and a single flint flake.

3.11 Finds summary

- 3.11.1 An incomplete iron nail (Appendix B.1) recovered from ditch 16 is likely to be intrusive.
- 3.11.2 Twenty-three sherds (175g) of pottery (Appendix B.2) were recovered during the trial trenching from seven contexts. Three Early Bronze Age sherds (36g), including two fragments of Collared Urn, were recovered from pit (5) in Trench 3. The Iron Age pottery was recovered from pit 1 in Trench 3 and ditches 9, 13 and 16 in Trenches 7, 1 and 5 respectively.
- 3.11.3 Eleven struck flints potentially dating from the Mesolithic to the Bronze Age were recovered from the subsoil in Trench 7 (20). The on-site sampling and sieving strategy employed on site had limited success, as only one struck flint was added to those recovered by hand collection. A further six pieces were found within archaeological contexts (pit 5 and ditches 9, 13 and 18). All were probably residual within those contexts and represent a limited prehistoric presence.
- 3.11.4 Ditch **13** produced a single cattle maxillary molar (M1/M2). The tooth was in poor condition precluding further analysis (Z. Ui Choileain *pers. comm*).

3.12 Environmental summary

3.12.1 Eight bulk environmental samples were taken from six archaeological features. A small amount of charcoal was found in all the samples, indicating wood was burnt across the site. A single charred grain recovered from each of two samples, along with a large quantity of rootlets, were probably intrusive.



4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The results of the evaluation are deemed to be reliable despite the variable conditions.

4.2 Evaluation objectives and results

- 4.2.1 The project aims and objectives defined in the WSI (Moan 2019) are listed in Section 2.1. The following statements outline the remains encountered on the site and how these help in achieving these objectives.
- 4.2.2 Archaeological features were encountered in four out of the seven trenches (Trenches 1, 3, 5 and 7). The features were disparately located across the site and consisted mainly of ditches and two pits.
- 4.2.3 The paucity and quality of the artefacts recovered from the features, evidenced as abraded and worn pottery sherds, can only be used as tentative dating evidence, although the assemblages in pits **1** and **5** in Trench 3 and ditch **9** in Trench 7 provide convincing dates for the features. The flint recovered was also residual.
- 4.2.4 The paucity of skeletal material and plant remains recovered during excavation and during post-excavation environmental processing, indicates the potential for survival of faunal remains and plant material is extremely low.

4.3 Interpretation

- 4.3.1 The presence of a mixed-date worked flint assemblage is indicative of a prehistoric presence from at least the Early Neolithic to the Bronze Age. The nearest prehistoric monuments include two Neolithic cursus monuments (HER 644 and HER 16818), a Bronze Age ring ditch (HER 701), and numerous Neolithic and Bronze Age pits (HER 15101, HER 15079 and HER 13544).
- 4.3.2 Pit **5** in Trench 3 were dated to the Early Bronze Age. Early Bronze Age Collared Urns, as found within the fill of pit **5**, usually occur in East Anglia, as isolated examples or as small groups (Garrow 2006).
- 4.3.3 Features that were convincingly Iron Age in date included pit 1 in Trench 3, which contained a total of eight sherds (68g) of Middle-Late Iron Age pottery, and ditch 9 in Trench 7, which contained nine sherds (59g) of similarly dated pottery. It is possible that ditch 9 represents a hollow rather than a large ditch and fills 10 and 11 represent layers rather than the fills of a feature. Due to the feature being only partially exposed, further interpretation was not possible and the abraded nature of the pottery means there is a possibility that the material is residual.
- 4.3.4 The evaluation also revealed a limited number of boundary or enclosure ditches in Trenches 1 and 5. The dating of these ditches is problematic as few datable finds were recovered. An Iron Age date might be posited based on the pottery recovered, although this must remain tentative given the size and condition of the sherds.



4.4 Significance

- 4.4.1 The existence of three boundary ditches, at the western and southern ends of the site, and the two pits in the central area, indicate that activity took place at the site from at least the Early Bronze Age through to the Iron Age and potentially beyond, whilst the worked flint signifies an earlier, perhaps more sporadic presence from the Early Neolithic period onwards. There appeared to be tangible Middle-Late Iron Age activity at the site in the form of pit 1 in Trench 3 and ditch 9 in Trench 7, although a later date for the features, based on the small, abraded sherds of pottery possibly being residual, should not be discounted.
- 4.4.2 Given that the artefactual and environmental evidence was sparse, the potential for specificity regarding past land use at the site is limited.



APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
	description	n			Orientation	NW-SE
			ditch (1	3). Consists of topsoil (21)	Length (m)	30
		_	-	and gravels (22).	Width (m)	2.1
, 0	•	0 0,		5 ,	Avg. depth (m)	0.30
Context	Туре	Width	Depth	Description	Finds	Date
No.	/1	(m)	(m)			
21	Layer	-	0.32	Topsoil	-	-
22	Layer	-	-	Natural	-	-
13	Cut			Ditch	-	-
14	Fill			Ditch	Pottery, flint	Iron Age
Trench 2					,	
General o	description	n			Orientation	NW-SE
			y, two na	atural features (3 and 7) were	Length (m)	30
		_		and subsoil (20) overlying	Width (m)	2.1
superficia	l geology	of sands	and grav	els (22).	Avg. depth (m)	0.51
Context	Туре	Width	Depth	Description	Finds	Date
No.						
21	Layer	-	0.38	Topsoil	-	-
20	Layer - 0.20 Subsoil				-	-
22	Layer	-	-	Natural	-	-
3	Cut	0.93	0.64	Natural feature	-	-
4	Fill	-	0.64	Natural feature	-	-
7	Cut	0.80	0.14	Natural feature	-	-
8	Fill	-	0.14	Natural feature	-	-
Trench 3						,
General o	description	n			Orientation	NE-SW
Trench co	ntained t	wo pits (5 and 1).	. Consists of topsoil (21) and	Length (m)	30
subsoil (2	0) overlyii	ng superf	icial geol	ogy of sands and gravels (22).	Width (m)	2.1
					Avg. depth (m)	0.48
Context	Туре	Width	Depth	Description	Finds	Date
No.		(m)	(m)			
21	Layer	-	0.38	Topsoil	-	-
20	Layer	-	0.20	Subsoil	-	-
22	Layer	-	0.12	Natural	-	-
1	Cut	1.4	0.13	Pit	-	-
2	Fill	-	0.13	Pit	Pottery	Iron Age
15	Fill	-	0.08	Pit	Pottery	Iron Age
5	Cut	1.44	0.34	Pit	-	-
6	Fill - 0.16 Pit		Pit	Pottery	Early	
						Bronze
						Age
12	Fill	-	0.24	Pit	-	-



Trench 4							
General o	descriptio	n			Orientation	NE- SW	
Trench d	evoid of a	archaeolo	gy. Cons	ists of topsoil (21) overlying	Length (m)	30	
superficia	al geology	of sands	and grav	els (22).	Width (m)	2.1	
					Avg. depth (m)	0.30	
Context	Туре	Width	Depth	Description	Finds	Date	
No.		(m)	(m)	-			
21	Layer	-	0.30	Topsoil	-	-	
22	Layer	-	-	Natural	-	-	
Trench 5		<u>'</u>	•				
General o	descriptio	n			Orientation	NW-SE	
			es (16 an	d 18). Consists of topsoil (21)	Length (m)	15	
			-	geology of sands and gravels		2.1	
(22).		, 0		<i>C</i> ,	Avg. depth (m)	0.36	
Context	Туре	Width	Depth	Description	Finds	Date	
No.	712	(m)					
21	Layer	-	Topsoil	-	-		
20	Layer	-	0.44 0.15	Subsoil	-	-	
22	Layer	-	-	Natural	-	_	
16	Cut	0.92	0.20	Ditch	_	_	
17	Fill	-	0.20	Ditch	Pottery Iron Ag		
18	Cut	0.80	0.46	Ditch			
19	Fill	-	0.46	Ditch	Flint	Neolithic?	
Trench 6	1 1111		0.40	Dittell	Time	iveolitine:	
General	description	n			Orientation	NNE-SSW	
			v Consis	sts of topsoil (21) and subsoil		25	
		_		sands and gravels (22).	Width (m)	2.1	
(20) 0 (2)	iyiig sape	inclui Sc	51087 01 5	arias aria graveis (22).	Avg. depth (m)	0.25	
Context	Туре	Width	Depth	Description	Finds	Date	
No.	Турс	(m)	(m)	Description	Tillus	Bute	
21	Layer	-	0.30	Topsoil	_	-	
20	Layer	-	0.16	Subsoil	_		
22	Layer	_	-	Natural	_	_	
Trench 7	Layer			- Natural			
General	description	n			Orientation	E-W	
			tch (9) (Consists of topsoil (21) and	Length (m)	25	
			. ,	ology of sands and gravels	Width (m)	2.1	
(22).	LO) OVERTY	ing super	iliciai ge	ology of salids and gravels	Avg. depth (m)	0.40	
Context	Туре	Width	Depth	Description	Finds	Date	
No.	Type	(m)	(m)	Description	i iilus	Date	
21	Layer	- (***)	0.30	Topsoil	_	_	
20			Subsoil	Flint	Later		
20	Layer	_	0.03	Jubsuii	1 11110	prehistoric	
22	Lavor	_	_	Natural	_		
9	Layer	4.5		Ditch or hollow	-	-	
	Cut	4.5	0.43				
10	Fill	-	0.25	Ditch or hollow	Pottery	Iron Age	
11	Fill	-	0.16	Ditch or hollow	Pottery, flint	Iron Age, prehistoric	



APPENDIX B FINDS REPORTS

B.1 Metalwork

By Denis Sami

Introduction

B.1.1 A single incomplete hand forged fragment of iron was recovered from ditch 16 (fill 17) within Trench 5, which also contained Iron Age pottery. It consists of a tapering shaft possibly with a sub-square cross-section probably from a nail (Table 1).

Discussion

- B.1.2 Given their limited variation in shape, size and forging technique, iron nails are difficult artefacts to date and generally their chronology is established through associated, more datable finds. Considering the stratigraphic context and the associated ceramic evidence, there is the possibility that this small fragment is intrusive.
- B.1.3 The small artefact is poorly preserved, incomplete and heavily encrusted.

Trench	Context	Cut	Sample	Description	Length (mm)	Width (mm)
5	17	16	6	An incomplete tapering shaft	23.8	3.2
				with sub-square cross-section		

Table 1: Iron artefact catalogue.

B.2 Pottery

By Nick Gilmour

Introduction

- B.2.1 The evaluation yielded 23 sherds of prehistoric pottery (175g) with a low mean sherd weight (MSW) of 7.6g. The pottery was recovered from seven contexts relating to three ditches and two pits in Trenches 1,3,5 and 7 (Table 2).
- B.2.2 The pottery dates from the Early Bronze Age and Iron Age. It includes a small number of feature sherds characteristic of Collared Urn, together with fabrics typically associated with these ceramic traditions in the region.
- B.2.3 The pottery is in moderate to poor condition. Most sherds are small and abraded, as reflected by the low MSW, and shell (where present) has leached from the sherds surface, resulting in friable corky fragments.

Trench	Context	Cut	Feature Type	Pottery Spot Date	No. sherds	Weight (g)
1	14	13	Ditch	E-MIA	1	6
3	2	1	Pit	LIA	7	56
3	15	1	Pit	MIA	1	11
3	6	5	Pit	EBA	3	36
5	17	16	Ditch	LIA	1	4
5	17	16	Ditch	IA	1	3



Trench	Context	Cut	Feature Type	Pottery Spot Date	No. sherds	Weight (g)
7	11	9	Ditch	MIA	3	18
7	10	9	Ditch	LIA	1	7
7	10	9	Ditch	MIA	2	28
7	10	9	Ditch	IA	3	6
Total					23	175

Table 2: Quantification of prehistoric pottery.

Methodology

- B.2.4 All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2011). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group. Sherd type was recorded, along with evidence for surface treatment, decoration, and the presence of soot and/or residue. Rim and base forms were described using a codified system recorded in the catalogue and were assigned vessel numbers. Where possible, rim and base diameters were measured, and surviving percentages noted. In cases where a sherd or groups of refitting sherds retained portions of the rim, shoulder and/or other diagnostic features, the vessel was categorised by ceramic tradition (Collared Urn, Deverel-Rimbury etc.)
- B.2.5 All pottery was subject to sherd size analysis. Sherds less than 4cm in diameter were classified as 'small' (16 sherds); sherds measuring 4-8cm were classified as 'medium' (seven sherds), and sherds over 8cm in diameter will be classified as 'large' (no sherds). The quantified data is presented on an Excel data sheet held with the site archive.

Prehistoric pottery fabrics

B.2.6 Seven different pottery fabrics were identified across this assemblage. These are listed below and a quantification by fabric is given in Table 3.

G1: Frequent medium and course grog (2-4mm)

G2: Frequent fine grog

GS1: frequent sand, including gulconite.

S1: moderate medium and course shell, most leached leaving plate-like voids, sparse quartz sand

SG1: Frequent quartz sand and sparse fine grog

SA: moderate quartz sand and rare micaceous sand

SF1: Frequent sand and occasional fine flint



Fabric	No sherds	Weight (g)	% fabric (by wt.)
G1	3	36	20.57
S1	4	40	22.86
SA	6	40	22.86
SG1	3	27	15.43
GS1	4	19	10.86
SF1	2	9	5.14
G2	1	4	2.29
Total	23	175	100

Table 3: Quantification of prehistoric pottery by fabric. MNV calculated as the total number of different rims and bases (nine rims, five bases).

Early Bronze Age pottery

- B.2.7 Just three sherds (36g) were assigned an Early Bronze Age date. The pottery derived from context 6, relating to pit **5** in Trench 3.
- B.2.8 The assemblage is all in soft grog tempered fabric G1, which is typical of the earlier Bronze Age in this region. Diagnostic sherds comprise two fragments from a decorated collar belonging to a Collared Urn. This collar is decorated with incised chevrons with horizontal lines incised above there chevrons. The other sherd from this context is a plain body sherd (3g), which has been assigned to the Early Bronze Age on the basis of the fabric.

Iron Age pottery

- B.2.9 Pottery assigned to the Iron Age comprises 20 sherds weighing 139g. The pottery derived from six contexts relating to ditches **9**, **13**, and **16**, in Trenches 1, 5 and 7 respectively, and pit **1** in Trench 3.
- B.2.10 The assemblage is characterised by sherds in a variety of fabrics; G2, GS1, S1, SG1, SA and SF1, which are typical of Iron Age ceramics. There are very few diagnostic sherds, although a single sherd (9g, from ditch **9**, Trench 7) is from a slack-shouldered vessel typical of the Middle Iron Age.

Trench 1

B.2.11 Ditch **13**, context **14**, yielded a single small sherd (6g) of pottery in fabric SF1. This is most likely to be of Earlier or Middle Iron Age date, on the basis of the flint in the fabric.

Trench 5

B.2.12 Ditch **16**, context 17, produced two sherds (7g) of Iron Age pottery. One sherd (4g) is in fabric G2 and is a plain body sherd. The fabric of this sherd is characteristic of a Late Iron Age date. The second sherd (3g) is in fabric SF1 and is also a plain body sherd. This second sherd is not closely datable by fabric but is likely to be of Iron Age date.

Trench 7

B.2.13 A total of nine plain body sherds (59g) of pottery in fabric SG1 and SA were recovered from ditch **9**, context 10. One sherd (7g) is in fabric SG1, which is diagnostic of the Late



Iron Age in this region. The remaining eight sherds (52g) are in fabric SA, which is likely to indicate a Middle Iron Age origin. A single sherd (9g) in fabric SA, is from a slack-shouldered vessel; a form diagnostic of the Middle Iron Age.

Discussion

- B.2.14 Most of the prehistoric pottery assemblage dates to the Iron Age, with a mix of small, fragmented Middle and Late Iron Age wares recovered. Diagnostic feature sherds are relatively rare but include a fragment from a slack-shouldered vessel.
- B.2.15 Three sherds of Early Bronze Age pottery, all likely to have come from the same Collard Urn vessel, were recovered from a single pit. Pits containing Collared Urn are not frequent finds across East Anglia, however, when they do occur it is usually as isolated examples or in small groups (Garrow 2006).

B.3 Flint

By Rona Booth

Introduction

B.3.1 Seventeen pieces of struck flint were recovered from four cut features (ditches **5**, **9**, **13** and **18**) and the subsoil (20). The majority of the struck flint was hand collected, whilst one additional flake was recovered from the subsoil (20) as a result of the sampling and sieving strategy employed at the site. The assemblage is quantified by type and context in Table 4.

Discussion

- B.3.2 All of the flint recovered from the cut features is likely to be residual and most pieces show signs of post-depositional disturbance in the form of edge damage. The assemblage is of mixed date. A finely retouched broken bladelet and some small bladelike elements, as well as two thermally fractured core fragments, are indicative of a broad Mesolithic or earlier Neolithic date. Two of the flakes might be assigned a Neolithic or Early Bronze Age date, whilst the remaining flakes are probably later.
- B.3.3 One flake and a miscellaneous piece of debitage both display heavily worn retouch but cannot be assigned to a particular tool category, nor are they closely datable.

Significance

B.3.4 The assemblage provides limited evidence for a prehistoric presence at the site probably from the Neolithic onwards. The potential for further characterisation is limited owing to the relatively low occurrence of material within cut features. The evidence as it stands suggests some task-based activities took place at the Turnpike Farm site, which itself lies in near proximity to a wider Neolithic and Bronze Age landscape.



Trench	Context	Cut	Sample	Context type	Chip	Irregular Waste	Secondary Flake	Secondary Blade like	Retouched	Core fragment	Total worked
1	14	13		ditch					1	1	2
3	6	5	2	ditch	1			1			2
5	19	18		ditch						1	1
7	11	9	3	ditch			1				1
7	20			subsoil		2	6		2		11
				totals	1	2	7	1	3	2	17

Table 4: Quantification of the flint assemblage by context and type.



APPENDIX C ENVIRONMENTAL REPORTS

C.1 Environmental Samples

By Martha Craven

Introduction

C.1.1 Eight bulk samples were taken from features, in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. Samples were taken from features encountered within Trenches 1, 3, 5 and 7 from deposits of uncertain date.

Methodology

- C.1.2 The total volume (up to 18L) of each of the samples was processed by tank flotation using modified Sīraf-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve.
- C.1.3 The dried flots were scanned using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 5. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al.* 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

C.1.4 For the purpose of this initial assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

```
# = 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens
```

C.1.5 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance

```
+ = occasional, ++ = moderate, +++ = frequent, ++++ = abundant
```

Results

- C.1.6 Preservation of plant remains is by carbonisation and is generally poor; many of the flots contain rootlets which may have caused movement of material between contexts.
- C.1.7 Cereals were present in only two of the samples. Sample 1, fill 2 of pit 1 (Trench 3) and Sample 3, fill 11 of ditch 9 (Trench 7), each contain a single grain that were too heavily abraded for positive identification. All the samples from the site contain a small quantity of charcoal which signifies the burning of wood for fuel.



C.1.8 No molluscs were present in the samples taken from this site.

Discussion

- C.1.9 The recovery of a small quantity of charred grain and charcoal indicates that there is limited potential for the preservation of plant remains at this site. The presence of a single cereal grain and a large quantity of rootlets in Sample 1 and Sample 2 suggest that these grains might be intrusive.
- C.1.10 If further excavation is planned for this area, it is recommended that environmental sampling is carried out in accordance with Historic England guidelines (2011).

Trench No.	Sample No.	Context No.	Cut No.	Feature Type	Volume	Flot Volume (ml)	Cereals	Charcoal Volume (ml)	Pottery	Flint Debitage	Metal Fe
1	4	14	13	Ditch	14	20	0	<1	0	0	0
3	1	2	1	Pit	18	80	#	3	0	0	0
3	2	6	5	Ditch	15	10	0	5	#	#	0
3	5	15	1	Pit	13	50	0	5	0	0	0
5	6	17	16	Ditch	16	50	0	15	#	0	#
5	7	19	18	Ditch	14	50	0	<1	0	0	0
7	3	11	9	Ditch	13	5	#	<1	0	#	0
7	8	10	9	Ditch	14	10	0	10	#	0	0

Table 5: Environmental samples from Turnpike Farm, Biggleswade.



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APP	ENDIX I	E	OA	SIS R	EPORT FORM	VI					
Proje	ect Detail	S									
OASIS Number oxford			ar3-350185								
Project Name Turnp				ike Farm, Potton Road, Biggleswade, Bedfordshire							
						,					
Star	t of Fieldw	ork/	1st Ap	ril 2019		End	End of Fieldwork Future Work		3rd April 2019		
Prev	ious Work	<	no			Fut			unknown		
Proje	ect Refere	ence	Codes								
Site	Code		XBDTF	D19		Pla	Planning App. No.		CB/18/00192/PAPC		
HER	Number		BEDFN	1 2019.3	1 2019.37		Related Numbers				
Pror	nnt			NPPI							
	elopment	Tyna				ıt.					
	e in Plann		ncess	Estate management Pre-application							
riac	C III I Idilii		00033	1100	аррпсилоп						
	niques us			-				_			
	Aerial Photo interpretati		y —	\boxtimes	Grab-sampling				Remote Operated Vehicle Survey		
	Aerial Photo		v - new		Gravity-core				Sample Trenches		
	Annotated				Laser Scanning				Survey/Recording of		
				✓ Measured Survey✓ Metal Detectors					Fabric/Structure		
	Augering	nologic	ral Survey						Targeted Trenches Test Pits		
□ Dendrochonological Survey□ Documentary Search⊠ Environmental Sampling			☐ Phosphate Survey					Topographic Survey			
		☐ Photogrammetric☐ Photographic Surv			Survey □ vey ⊠		Vibro-core				
☐ Fieldwalking							Visual Inspection (Initial Site Visit)				
\boxtimes	Geophysica	l Surve	ey.		Rectified Photog	graph	У				
Mo	nument	Peri	od				Object	Perio	od		
Ditc	h	Unce	ertain	rtain			pottery	Early Bronze Age (- 2500 to -			
								1500)		
Pit		Unce	ertain				flint	Late	Prehistoric (- 4000 to 43)		
Pit		Early	/ Bronze	Age (-	2500 to -		pottery	Iron /	Age (- 800 to 43)		
		1500	D)			╛╽					
Proie	ect Locati	on									
Cou			Bedfor	dshire			Addre	ess (inc	luding Postcode)		
,		l Bedfor	dshire		Turnpike Farm						
Parish Biggles						Potton Road					
HER office CBCA ⁻						Biggleswade					
Size of Study Area 2.1ha						Bedfordshire					
,			326 46491			SG18	0EP				
Duois	at Origin										
•	ect Origin	ators		O 4 Fa							
_	anisation	\! =!		OA East							
Project Brief Originator				Slawek Utrata (CBCAT)							
Project Design Originator			nator	Louise Moan							
Project Manager			Louise Moan								

Rona Booth

Project Supervisor



Project Archives

Physical Archive (Finds)

Digital Archive Paper Archive

Location	ID
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The Higgins Art Gallery and	BEDFM 2019.37
Museum, Bedford	
Oxford Archaeology East	XBDTFD19
The Higgins Art Gallery and	BEDFM 2019.37
Museum, Bedford	

Physical Contents	Present?		Digital files associated with Finds	Paperwork associated w	/ith
Animal Bones Ceramics Environmental Glass Human Remains					
Industrial Leather Metal Stratigraphic					
Survey Textiles Wood Worked Bone Worked Stone/Lithic None					
Other Digital Media Database		\boxtimes	Paper Media Aerial Photos		
GIS Geophysics Images (Digital photos) Illustrations (Figures/Pla Moving Image	tes)		Context Sheets Correspondence Diary Drawing Manuscript		
Spreadsheets Survey Text Virtual Reality			Map Matrices Microfiche Miscellaneous Research/Notes		
			Photos (negatives/prints Plans Report Sections Survey	/slides)	



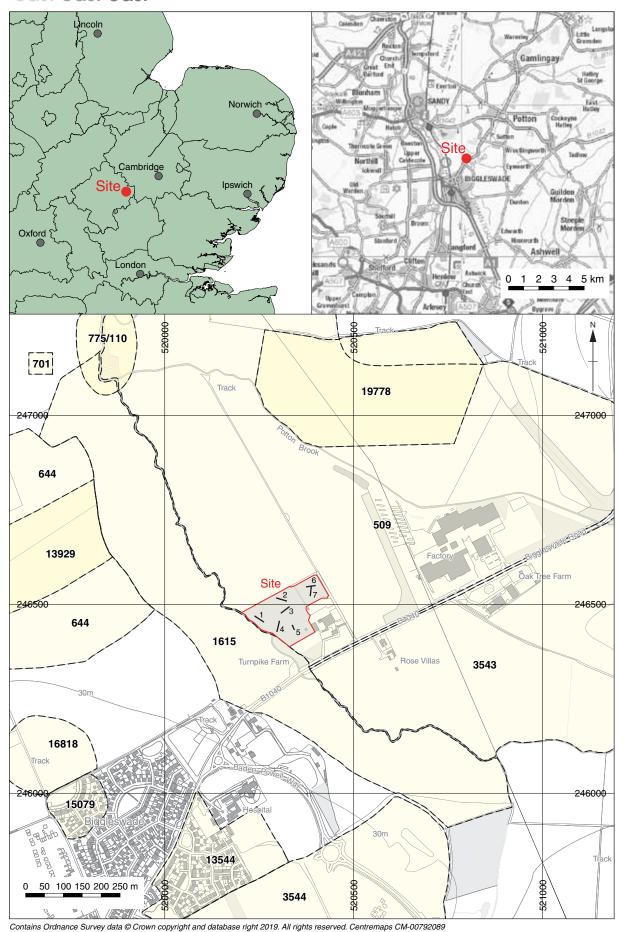


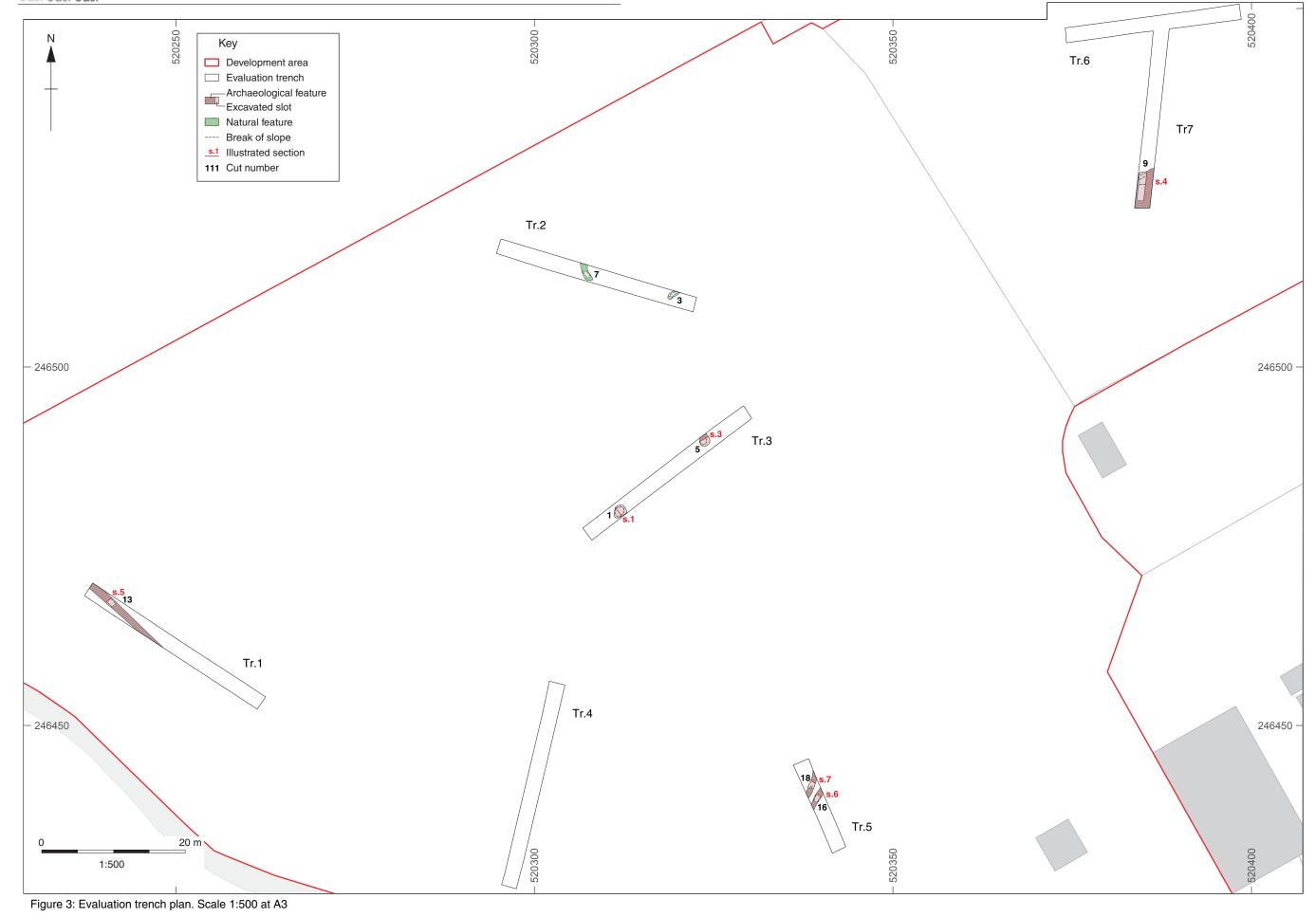
Figure 1: Site location showing archaeological trenches (black) in development area (red), with HER entries mentioned in the text. Scale 1:10000

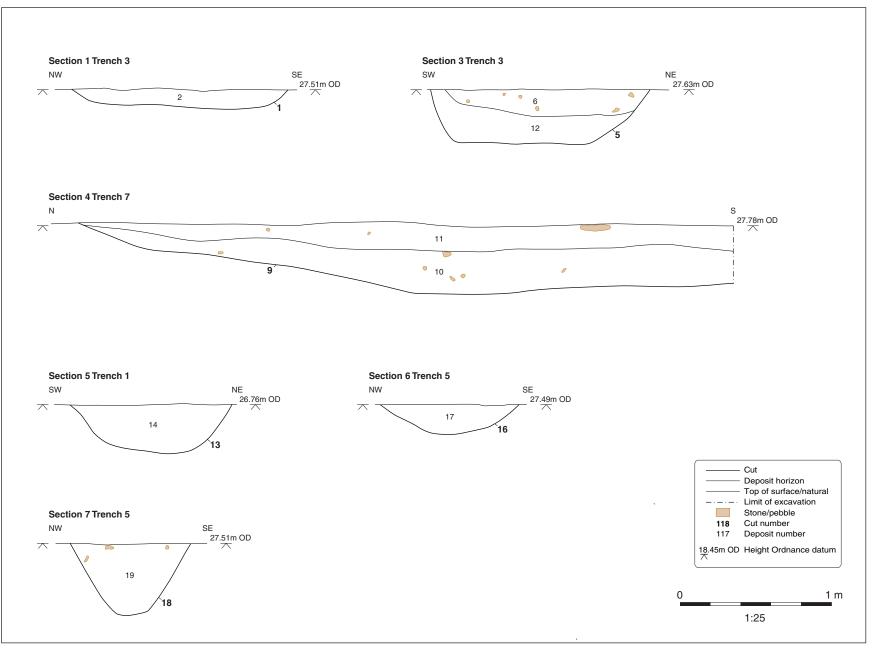


QST

Figure 2: Trenches overlain on geophysical survey results (Bunn 2019, fig. 3)







east

Figure 4: Selected sections



Plate 1: Trench 1, ditch 13, looking south-east



Plate 2: Trench 2, looking west







Plate 3: Trench 3, looking south-west



Plate 4: Trench 3, pit 1, looking north-east





Plate 5: Trench 3, pit 5, looking north



Plate 6: Trench 4, looking north-north-east



Plate 7: Trench 5, ditches **16** and **18**, looking south-east

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Plate 8: Trench 5, ditch 18, looking north-north-east

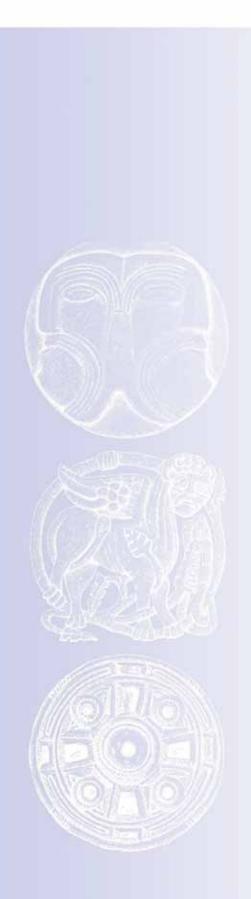


Plate 9: Trench 6, looking north-west





Plate 10: Trench 7, ditch 9, looking north





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