ARCHAEOLOGICAL SOLUTIONS LTD

LAND OFF BURY ROAD, WORTHAM, SUFFOLK IP22 1PW

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

Authors:	Kerrie Bull (Fieldwor	k and report)
	Andrew Peachey (Re	esearch)
	Antony RR Mustchin	(Editor)
Illustrations: Kathren Henry and Thomas Light		
NGR: TM 087 771		Report No: 5071
District: Mid Suffolk		Site Code: WTM059
Approved: Claire Halpin CMIfA		Project No: 6584
Signed:		Date: 31 st March 2016
olgried.		Revised: 06/05/2016

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

Archaeological Solutions is an independent archaeological contractor providing the services which satisfy all archaeological requirements of planning applications, including:

Desk-based assessments and environmental impact assessments
Historic building recording and appraisals
Trial trench evaluations
Geophysical surveys
Archaeological monitoring and recording
Archaeological excavations
Post excavation analysis
Promotion and outreach
Specialist analysis

ARCHAEOLOGICAL SOLUTIONS LTD

Unit 6, Brunel Business Court, Eastern Way, Bury St Edmunds IP32 7AJ Tel 01284 765210

P I House, Rear of 23 Clifton Road, Shefford, Bedfordshire, SG17 5AF Tel: 01462 850483

e-mail: <u>info@ascontracts.co.uk</u> www.archaeologicalsolutions.co.uk





twitter.com/ArchaeologicalS



www.facebook.com/ArchaeologicalSolutions















CONTENTS

OASIS SUMMARY

SUMMARY

- 1 INTRODUCTION
- 2 DESCRIPTION OF THE SITE
- 3 TOPOGRAPHY, GEOLOGY AND SOILS
- 4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND
- 5 METHODOLOGY
- 6 DESCRIPTION OF RESULTS
- 7 CONFIDENCE RATING
- 8 DEPOSIT MODEL
- 9 DISCUSSION
- 10 DEPOSITION OF THE ARCHIVE

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

APPENDICES

- 1 CONCORDANCE OF FINDS
- 2 SPECIALIST REPORTS
- 3 SPECIFICATION
- 4 OASIS DATA COLLECTION FORM

OASIS SUMMARY SHEET

Project details	
Project name	Land off Bury Road, Wortham, Suffolk IP22 1PW

In March 2016 Archaeological Solutions Ltd (AS) undertook a trial trench evaluation at land off Bury Road, Wortham, Suffolk. The evaluation preceded the proposed residential redevelopment of the site. Previous investigations within and around the site have encountered multi-period remains including evidence for a Roman road and Iron Age and Anglo-Saxon occupation. Wortham Green, immediately to the north of the site, is also believed to have been a focus of medieval settlement activity, with remains of this date having been found in the immediate vicinity.

In the event, the evaluation encountered evidence spanning the Romano-British to post-medieval periods. Of particular note is a quantity of Roman (mid 1st to early 2nd century AD) pottery, particularly from Ditch F1077 (Trench 1), with soot on the exterior of one vessel indicating possible domestic activity within the immediate environs. A number of medieval and post-medieval features were also encountered.

Duning at plate a (finisher and a)	Mariah 2016		
Project dates (fieldwork)	March 2016		TDO
Previous work (Y/N/?)	Y	Future work?	TBC
P. number	6584	Site code	WTM059
Type of project	·	al Trench Evaluation	
Site status	None		
Current land use	Agriculture		
Planned development	Housing		
Main features (+dates)	Romano-British:	Ditches	
	Medieval:	Ditches; pits; posthol	es
	Post-medieval:	Ditches	
Significant finds	Romano-British:	Pottery	
(+dates)	Medieval:	Pottery	
	Post-medieval:	Pottery	
Project location			
County/ District/ Parish	Suffolk	Mid Suffolk	Wortham
HER/ SMR for area	Suffolk Historic Env	rironment Record (SHE	R search invoice No.
	9181590)		
Post code (if known)	IP22 1PW		
Area of site	c. 1.2ha		
NGR	TM 087 771		
Height AOD (min/max)	c. 52m AOD		
Project creators			
Brief issued by	Suffolk County Cou	ncil Archaeological Sei	rvice Conservation
-	Team		
Project supervisor/s	Archaeological Solu	ıtions Ltd	
(PO)			
Funded by	Danny Ward Builde	rs	
Full title	Land off Bury Road	l, Wortham, Suffolk. Ar	n Archaeological Trial
	Trench Evaluation		
Authors	Bull, K.		
Report no.	5071		
Date (of report)	March 2016 (Revise	ed 06/05/2016)	

LAND OFF BURY ROAD, WORTHAM, SUFFOLK IP22 1PW

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

SUMMARY

In March 2016 Archaeological Solutions Ltd (AS) undertook a trial trench evaluation at land off Bury Road, Wortham, Suffolk. The evaluation was carried out prior to the determination of a planning application for residential redevelopment.

Prehistoric, Romano-British and medieval remains were encountered during the laying of a pipe across the site in 1955. This included evidence for the route of a Roman road running along Bean's Lane. Ditches of this date were also encountered, while Iron Age and Anglo-Saxon occupation is evidenced nearby. Wortham Green is also believed to have been a focus of medieval occupation, with remains of this date having been identified in the immediate vicinity.

In the event, the evaluation encountered evidence spanning the Romano-British to post-medieval periods. Of particular note is a quantity of Roman (mid 1st to early 2nd century AD) pottery, particularly from Ditch F1077 (Trench 1), with soot on the exterior of one vessel indicating possible domestic activity in the area. A number of medieval and post-medieval features were also encountered.

1 INTRODUCTION

- 1.1 In March 2016 Archaeological Solutions Ltd (AS) undertook a trial trench evaluation at land off Bury Road, Wortham, Suffolk IP22 1PW (NGR TM 087 771; Figs. 1-2). The evaluation was carried out prior to the determination of a planning application for the residential redevelopment of the site. The project was required by Suffolk County Council and the Local Planning Authority, based on advice from Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (Mid Suffolk District Council Planning Ref. TBC).
- 1.2 The evaluation was conducted in accordance with a brief issued by SCC ASCT (dated 20/01/2016; Rachael Abraham) and a written scheme of investigation (specification) compiled by AS (dated 03/02/2016) and approved by SCC ASCT. The evaluation adhered to the Institute for Archaeologists' *Code of Conduct* (2014), and *Standard and Guidance for Evaluations*, as well as Gurney's (2003) *Standards for Field Archaeology in the East of England*.
- 1.3 The principal objectives of the evaluation were:
 - ➤ to establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*;

- ➤ to identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation;
- to evaluate the likely impact of past land uses, and the possible presence of masking colluvial/ alluvial deposits, along with the potential for the survival of environmental evidence; and
- ➤ to provide sufficient information to construct an archaeological conservation strategy dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

Planning Policy Context

- 1.4 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.
- 1.5 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2.1 Wortham is situated *c*. 3.8km south-west of the market town of Diss in the county of Suffolk. The proposed development site lies on the north-east boundary of the village and fronts Bury Road to the north. The site is roughly rectangular in shape and currently comprises agricultural land with a small cluster of trees towards its centre, and a further band of trees along its southern edge. Bean's Lane bounds the eastern edge of the site, agricultural land lies to the south and residential development along Bury road is present to the west.

3 TOPOGRAPHY, GEOLOGY AND SOILS

- 3.1 Wortham is between c. 50 and 52m AOD, sloping down slightly to the east as part of a gentle slope that peaks at c. 60m AOD approximately 1.8km to the west at Spears Hill. From Spears Hill the land gently falls away to the south, east and west. To the north is an area of flat fenland and the River Waveney, some 3km distant.
- 3.2 The underlying geological bedrock is formed by the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and the Culver Chalk Formation (British Geological Survey 1991). The overlying soil is freely draining, slightly acidic and sandy (Soil Survey of England and Wales 1983); typically found in acid dry pastures, acid deciduous and coniferous woodland or lowland heath.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND¹

Prehistory

4.1 Iron Age activity has been identified at Wortham including investigations on the site when later prehistoric pottery was recorded in a pipeline trench (SHER WTM008). More substantial evidence comprises two Iron Age occupation sites; one discovered during the same pipeline trenching in 1955 as above but further to the east (SHER WTM010), and the other during excavations prior to new housing development in 2009 (SHER WTM044) c. 400m to the south-west. The latter revealed early Iron Age evidence comprising postholes, pits and gullies. The former site revealed two 'hut sites', with one definitely Iron Age, while the other may have been Anglo-Saxon. Other features included ditches containing burnt stones, flints and pottery sherds (SHER WTM010).

Romano-British

4.2 The Romano-British period is represented by a Roman road, possible settlement evidence and a scatter of Roman coins in the area surrounding the village (SHERs WTM015, WTM016, BUR006 and BUR015). Previous investigations on the site recorded a Roman road, running north-south along Bean's Lane, during the pipe laying of 1955 (SHER WTM009). No finds were reported in association with the road but a large ditch was excavated along the width of the site running west to east and intersecting with the road to the east. Smaller north-south aligned ditches intersected the ditch at various points across the field and finds included animal bone, pottery sherds, kiln roof debris and oyster shells (SHER WTM008). Another area with evidence of Roman activity is situated south of the village, *c.* 640m to the south-west of the site. Excavations revealed three hut sites with hearths and a further three huts with the area around being strewn with pottery fragments and areas of burnt earth (SHER WTM007).

-

¹ Locations of SHER records within the immediate vicinity of the site are shown on Figure 1

Medieval

- 4.3 Saxon occupation at Wortham does not appear to exhibit any continuity with the areas of Roman activity, but rather is located in areas of landscape previously exploited in the Iron Age to the east of Bean's Lane and to the south of the village core. Excavations in the field east of Bean's Lane revealed one hut site with hearth which could be dated to the Saxon period due to the pottery present (SHER WTM010). The other area of Saxon activity is to the south of the village but is limited to a ditch and intrusive Saxon pottery (SHER WTM044).
- 4.4 At the time of the Norman Conquest Wortham is recorded as being two parishes that post-Conquest become two Norman Manors: Southmoor (owned by the Abbots of Bury) and Eastgate (held by the Barons of Rye). Excavations on the site during the pipe laying of 1955 originally suggested this was the site for the Church of St Thomas; one of the two churches listed in Wortham in 1086. Evidence for this included early building foundations, walls and pillar bases which may have then been included in a later medieval building surrounding a courtyard and enclosed by a moat. The inclusion of church ruins, which presumably might have included burials, into a later Tudor building have led to this report being treated with doubt (SHER WTM008). Areas of more certain medieval occupation are located nearer the village's core to the west along Bury Road. The earliest activity comprised 11th/ 12th century property plots running east-west fronting Mellis Road. During the 14th-16th centuries, these plots were presumably only used for pastoral farming and main occupation was located elsewhere (SHER WTM048).

Post-medieval

4.5 During the post-medieval period settlement at Wortham seems to have been sparsely scattered around a large area of common land called Long Green. The two parishes (formerly manors) were joined in 1769 under the village rector perhaps as a response to an increase in settlement, with a large amount of the surviving houses in the village dating to the 17th century. Some of the earliest buildings lie to the northwest of the settlement area and include 15th century and mid-late 16th century houses (SHER 1032774, 1352262 and 1182788). Cartographic sources suggest the site has lay in agricultural fields since at least the late 19th century (www.old-maps.co.uk).

5 METHODOLOGY

- 5.1 SCC AS-CT required a programme of archaeological trial trenching to cover the site of the proposed development, and stipulated that a 330 linear metres of trenching at 1.8m width are excavated within the site, to comprise a *c.*5% sample. Twelve trenches were excavated (Fig. 2).
- 5.2 Undifferentiated overburden was removed under close archaeological supervision using a mechanical excavator fitted with a toothless ditching bucket. Thereafter, all further investigation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Deposits were recorded using *pro forma* recording sheets, drawn to scale and

photographed. Excavated spoil was checked for finds and the trenches were scanned by metal detector.

6 DESCRIPTION OF RESULTS

Individual trench descriptions are presented below.

Trench 1 (Figs. 2-3)

Sample section 1A		
0.00m = 52.84m A	AOD	
0.00 – 0.22m	L1000	Topsoil. Firm, dark grey brown silty sandy clay with occasional small and medium sub-angular and sub-rounded flint
0.22 – 0.35m	L1001	Subsoil. Friable, mid grey yellow silty sand.
0.35m +	L1002	Natural deposits. Friable, mid greyish brown yellow silty sand with occasional small sub-angular flints.

Sample section 1 0.00m = 52.93m		
0.00 – 0.31m	L1000	Topsoil. As above.
0.31 – 0.41m	L1001	Subsoil. As above.
0.41m +	L1002	Natural deposits. As above.

Sample section 1C: 0.00m = 52.79m AO	D	
0.00 - 0.32m	L1000	Topsoil. As above.
0.32 – 0.43m	L1001	Subsoil. As above.
0.43m +	L1002	Natural deposits. As above.

Description: Two ditches containing Roman pottery (F1075 and F1077) were present within Trench 1. F1056 and five postholes (F1067, F1079, F1081, F1087 and F1091) contained medieval pottery, while five further postholes (F1083, F1085, F1089, F1093 and F1095) were undated.

Ditch F1056 was broadly linear (10.00+ x 1.08 x 0.46m), orientated north/south, with a rounded terminus at its northern end. It had moderately sloping sides and a concave base. Its lower fill (L1057) was a friable, mid yellow grey silty sand with moderate small to medium sub-angular and sub-rounded flints. It contained animal bone (32g). Its upper fill (L1058) comprised friable, mid yellow brown silty sand with moderate small and medium sub-angular and sub-rounded flints. It contained medieval (12th to 14th century) pottery (4; 32g) and animal bone (30g).

Posthole F1067 was sub-circular in plan with steep sides and a concave base $(0.50 \times 0.45 \times 0.30 \text{m})$. Its fill (L1068) was a friable, dark brown silty sand. It contained medieval (12th to 13th century) pottery (2; 15g).

Ditch F1075 was linear in plan and orientated north-west /south-east. It had moderately steep sides and an irregular base (1.80+ x 1.00 x 0.38m). F1075 cut the fill of Ditch F1077 and its fill (L1076) was cut by a tree hollow. L1076 comprised firm,

dark grey brown sandy silt with moderate medium to large flints. It contained Roman pottery (5; 71g), animal bone (32g) and shell (1; 18g).

Ditch F1077 was linear (10.5+ x 0.49 x 0.40m), orientated north-west/ south-east. It had moderately sloping sides and a concave base. Its fill (L1078) was cut by Postholes F1079, F1083 and F1095, and Ditch F1075. L1078 was a friable, mid grey brown silty sand with occasional small sub-rounded flints. It contained Roman (mid 1^{st} to early 2^{nd} century) pottery (99; 1902g).

Posthole F1079 was sub-circular in plan with steep sides and a concave base (0.75 x 0.75 x 0.48m). It cut Fill L1078 of Ditch F1077. Its fill (L1080) comprised friable, dark grey silty sand. It contained medieval (12th to 13th/ 14th century) pottery (2; 18g).

Posthole F1081 was sub-circular in plan with steep sides and a concave base (0.60 x 0.50 x 0.26m). Its fill (L1082) was a friable, dark grey silty sand. It contained medieval (13^{th} to 15^{th} century) pottery (2; 11g).

Posthole F1083 was sub-circular in plan (0.65 x 0.60 x 0.27m). It had steep sides and a concave base. It cut Ditch F1077. Its fill (L1084) was a friable, mid yellow brown silty sand with occasional small sub-rounded flints. It contained no finds.

Posthole F1085 was sub-circular ($0.45 \times 0.42 \times 0.15$ m). It had moderately sloping sides and a concave base. Its fill (L1086) was a friable, brown grey silty sand. It contained no finds.

Posthole F1087 was sub-circular (0.65 x 0.57 x 0.22m). It had moderately sloping sides and a concave base. Its fill (L1088) was a friable, dark brown grey silty sand. It contained medieval (11^{th} to 12^{th} / 13^{th} century) pottery (2; 5g).

Posthole F1089 was sub-circular in plan with steep sides and a narrow base (0.50 x 0.41 x 0.30m). Its fill (L1090) comprised friable, dark brown grey silty sand. It contained no finds.

Posthole F1091 was sub-circular in plan with moderately sloping sides and a concave base $(0.70 \times 0.60 \times 0.25m)$. Its fill (L1092) was a firm, mid grey green silty sandy clay with chalk. It contained medieval $(12^{th} \text{ to } 13^{th}/14^{th} \text{ century})$ pottery (1; 6g).

Posthole F1093 was sub-circular (0.50 x 0.40 x 0.27m). It had steep sides and a concave base. Its fill (L1094) was a friable, dark brown grey silty sand. It contained no finds.

Posthole F1095 was sub-circular ($0.50 \times 0.46 \times 0.23$ m). It had moderately sloping sides and a concave base. It cut Ditch F1077. Its fill (L1096) was a friable, mid yellow brown silty sand with occasional small sub-rounded flints. It contained no finds.

Trench 2 (Figs. 2 and 4)

Sample section 2A: 0.00m = 52.69m AC)D	
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1.
0.30 – 0.46m	L1001	Subsoil. As above, Trench 1.
0.46m +	L1002	Natural deposits. As above, Trench 1.

Sample section 2B: 0.00m = 52.98m AO	D	
0.00 - 0.38m	L1000	Topsoil. As above, Trench 1.
0.38 – 0.51m	L1001	Subsoil. As above, Trench 1.
0.51m +	L1002	Natural deposits. As above, Trench 1.

Description: Two pits (F1045 and F1061) and a ditch (F1069) within Trench 2 yielded medieval pottery. Five undated ditches (F1052, F1054, F1059, F1071 and F1073) were also present, while Pit F1061 contained a residual sherd of Roman pottery.

Ditch F1052 was linear (1.00+ x 0.80 x 0.40m), orientated north/ south. It had moderately steep sides and an irregular base. Its fill (L1053) was a friable dark grey brown silty sand with occasional small and medium angular stones. It contained no finds and was cut by Ditch F1054.

Ditch F1054 was linear (1.00+ x 0.53 x 0.17m), orientated north/ south. It had moderately steep sides and a concave base. It cut the fill of Ditch F1052. Its fill (L1055) comprised friable, grey silty sand with occasional small and medium angular stones. It contained no finds.

Pit F1045 was linear in plan with moderately sloping sides and a concave base $(0.55 \times 0.54 \times 0.18m)$. Its fill (L1046) was a friable, dark grey brown silty sand with occasional small to medium angular stones. It contained medieval (11^{th}) to 13^{th} century) pottery (11; 105q).

Ditch F1059 was linear (0.85+ \times 0.85+ \times 0.70m), orientated north-east/ south-west. It had moderately steep sides and a concave base. Its fill (L1060) was a friable, mid grey brown silty sand with occasional small and medium sub-angular and subrounded flints. It contained no finds. L1060 was cut by Pit F1061.

F1061 was a large pit of uncertain shape in plan, with moderately sloping sides $(10.50 \times 1.80 + \times 0.60 + m)$; its base was not exposed. It cut the fill of Ditch F1059 and was cut in turn by Ditch F1069. Its fills are tabulated below:

Context	Description	Finds
L1062	Firm, dark-mid grey brown silty clay sand with occasional small and	Animal bone (3g);
(basal)	medium sub-angular and sub-rounded flints	
L1063	Friable, mid grey green clay sand mottled with mid yellow orange silty sand, with moderate small and medium sub-angular and sub-rounded flints and occasional sub-rounded chalk flecks	Residual Roman pottery (1; 5g)
L1064	Friable, mid grey brown silty sand with occasional small and medium sub-angular and sub-rounded flints	-
L1065	Friable, mid brown yellow silty sand with occasional very small subrounded stones.	Animal bone (194g); CBM (439g)

L1066	Friable, mid grey brown silty sand with occasional small and	Medieval (13 th to
(upper)	medium sub-angular and sub-rounded flints	14 th century) pottery
		(2; 4g);
		CBM (41g)

Ditch F1069 was linear (2.00+ x 1.75 x 0.35m), orientated east/ west. It had moderately sloping sides and a concave base. It was cut by Ditch F1071 and cut Ditch F1059 and Pit F1061. Its fill (L1070) was a friable, pale-mid grey brown silty sand with moderate small and medium angular stones. It contained medieval (11th to 13th century) pottery (1; 1g), CBM (3g) and animal bone (<1g).

Ditch F1071 was linear $(2.00+ x 1.31 \times 0.28m)$, orientated north/south. It had steep sides and an uneven base. It cut Ditch F1069. Its fill (L1072) was a friable dark grey brown silty sand with occasional small and medium angular stones. It contained no finds.

Ditch F1073 was linear (2.00+ x 1.30 x 0.27m), orientated north/south. It had moderately sloping sides and a concave base. Its fill (L1074) was a friable, dark-mid grey brown silty sand with occasional small and medium sub-angular and subrounded flints. It contained no finds.

Trench 3 (Figs. 2 and 5)

Sample section 3A:		
0.00m = 52.80m AC	OD .	
0.00 – 0.35m	L1000	Topsoil. As above, Trench 1.
0.35 – 0.60m	L1001	Subsoil. As above, Trench 1.
0.60m +	L1002	Natural deposits. As above, Trench 1.

Sample section 3B:			
$0.00m = 52.17m \ AOD$			
0.00 – 0.40m	L1000	Topsoil. As above, Trench 1.	
0.40 – 0.70m	L1001	Subsoil. As above, Trench 1.	
0.70m +	L1002	Natural deposits. As above, Trench 1.	

Description: Trench 3 contained two ditches with medieval pottery (F1031 and F135), three post-medieval ditches (F1014, F1016 and F1018), six undated ditches (F1020, F1022, F1033, F1037, F1039 and F1041), two modern animal burials (in pits F1012 and F1025), and a tree hollow (F1026).

Pit F1012 was sub-circular (1.25 x 1.05). It cut Ditch F1014. Its fill (L1013) was a friable, mottled dark yellow brown silty sand with occasional small sub-angular and sub-rounded flint. It contained the remains of an articulated young pig of suspected modern origin and as such it was not excavated. It cut Ditch F1014.

Ditch F1014 was linear (1.80+ \times 1.20+ \times 0.48m), orientated north/south. It had moderately sloping sides and a concave base. It was cut by Pit F1012, Ditch F1022 and a modern land drain. Its fill (L1015) was a friable, dark-mid grey brown silty sand with occasional small sub-angular and sub-rounded flint. It contained animal bone (202g), CBM (74g), and an iron horseshoe (397g).

Ditch F1016 was linear (17.00+ \times 0.80 \times 0.22m), orientated east/west with a rounded terminus at its western end. It had moderately sloping sides and an uneven base. It cut Ditch F1031 and was cut by Ditches F1018 and F1020, and Pit F1025. Its fill (L1017) was a friable, mid grey brown silty sand with occasional small sub-angular and sub-rounded flint. It contained post-medieval (17th - 18th century) pottery (1; 159g), CBM (1456g) and clay pipe stem fragments (3; 11g).

Ditch F1018 was linear (1.80+ x 1.85 x 0.49m), orientated north/south. It had moderately sloping sides and a concave base. It cut Ditches F1016 and F1020. Its fill (L1019) was a friable, dark brown grey sandy silt. It contained post-medieval (late $17th - 18^{th}$ century) pottery (2; 39g), animal bone (14g) and struck flint (1; 16g).

Ditch F1020 was linear (1.80+ x 1.70+ x 0.38m), orientated north/south. It had moderately sloping sides and a flattish base. It cut Ditch F1016 and was cut by Ditches F1018 and F1022. Its fill (L1021) was a friable, mid grey brown sandy silt with occasional small sub-angular and sub-rounded flint. It contained no finds.

Ditch F1022 was linear (1.80+ \times 2.40+ \times 0.41), orientated north/south. It had moderately sloping sides and a flattish base. It cut Ditches F1014 and F1020 and was cut by a modern land drain. Its fill (L1023) was a friable, mid grey brown sandy silt with occasional small sub-angular and sub-rounded flint. It contained no finds.

Pit F1025 was sub-circular (1.20 x 1.00) and cut Ditch F1016. Its fill (L1026) was a friable, mid grey brown silty sand with occasional small sub-angular and sub-rounded flint. It contained an articulated pig burial of possible modern date and as such, it was not excavated.

Tree Hollow F1026 was irregular in plan $(1.15 \times 0.75 + \times 0.22m)$ with irregular sides and an irregular base. Its fill (L1027) was a friable, mid grey brown, mottled with dark yellow grey, silty sand with moderate small sub-angular and sub-rounded flint. It contained no finds.

Ditch F1031 was linear in plan (1.80+ x 1.55+ x 0.37m), orientated north/south. It had moderately sloping sides and a concave base. It cut Ditch F1033 and was cut by Ditch F1016. Its fill (L1032) was a friable, mid-dark grey brown silty sand with occasional small and medium sub-angular and sub-rounded flint. It contained medieval (12^{th} to 14^{th} century) pottery (3; 15g).

Ditch F1033 was linear (1.80+ \times 1.10+ \times 0.48m), orientated north/south. It had moderately sloping sides and a concave base. It cut Ditch F1035 and was cut by Ditch F1031. Its fill (L1034) was a friable, mid grey brown, mottled with mid-dark grey yellow, silty sand with moderate small and medium sub-angular and sub-rounded flint. It contained no finds.

Ditch F1035 was curvilinear (1.10+ \times 0.70+ \times 0.30m). It had moderately sloping sides and a concave base. It was cut by Ditches F1033 and F1037. Its fill (L1036) was a friable, mid grey brown silty sand with occasional small and medium subangular and sub-rounded flint. It contained medieval (12th to 13th century) pottery (2; 6g).

Ditch F1037 was linear (2.00+ x 1.00 x 0.33m), orientated north-east/south-west. It had moderately sloping uneven sides and a concave base. It cut Ditches F1035 and F1039. Its fill (L1038) was a friable, mid grey brown silty sand with occasional small sub-angular and sub-rounded flint. It contained no finds.

Ditch F1039 was linear (2.00+ x 1.10+ x 0.27m), orientated north-east/south-west. It had moderately sloping sides and a concave base. It cut Ditch F1041 and was cut by Ditch F1037. Its fill (L1040) was a friable, mid grey brown silty sand with occasional small sub-angular and sub-rounded flint. It contained no finds.

Ditch F1041 was linear (0.55+x0.50+x0.36m), orientated north-east/south-west. It had moderately sloping sides and a concave base. It was cut by Ditch F1039. Its fill (L1042) was a friable, mid grey brown silty sand with occasional small sub-angular and sub-rounded flint. It contained no finds.

Trench 4 (Figs. 2 and 6)

Sample section 4. 0.00m = 52.04m		
0.00 – 0.36m	L1000	Topsoil. As above, Trench 1.
0.36 – 0.47m	L1001	Subsoil. As above, Trench 1.
0.47m +	L1002	Natural deposits. As above, Trench 1.

Sample section 4B 0.00m = 52.10m A		
0.00 – 0.32m	L1000	Topsoil. As above, Trench 1.
0.32 – 0.38m	L1001	Subsoil. As above, Trench 1.
0.38m +	L1005	Natural deposits. Friable, pale yellowish brown grey silty sand with moderate dark red brown iron pan inclusions and occasional small sub-angular flint.

Description: Trench 4 contained undated Ditch F1006.

Ditch F1006 was linear, running east/ west, with gently sloping sides and a concave base (1.90+ x 1.31 x 0.18m). Its fill (L1007) comprised friable, pale orange grey silty sand with moderate medium sub-angular and sub-rounded flint. It contained animal bone (94g) and an iron fragment (33g).

Trench 5 (Figs. 2 and 6)

Sample section 5A:		
$0.00m = 51.97m \ AOI$	D	
0.00 - 0.39m	L1000	Topsoil. As above, Trench 1.
0.39m +		Natural deposits. Friable, mid brownish orange yellow silty sand with frequent small medium and large sub-angular and sub-rounded flint.

Sample section 5B:			
$0.00m = 51.90m \ AOD$			
0.00 – 0.19m	L1000	Topsoil. As above, Trench 1.	
0.19 – 0.57m	L1001	Subsoil. As above, Trench 1.	
0.57m +	L1002	Natural deposits. As above, Trench 1.	

Description: Trench 5 contained undated Ditches F1010, F1047 and F1049.

Ditch F1010 was linear (2.00+ x 0.79 x 0.28m), orientated north/south. It had moderately steep sides and a concave base. Its fill (L1011) was a friable dark grey brown silty sand with occasional small and medium angular stones. It contained no finds.

Ditch F1047 was linear (1.80+ \times 1.68+ \times 0.46m), orientated north/ south. It had moderately sloping sides and a flattish base. Its fill (L1048) was a friable, mid grey brown silty sand with frequent iron panning. It contained no finds. F1047 cut the fill of ?Ditch Terminus F1049.

?Ditch Terminus F1049 was linear $(1.00+ \times 0.31 \times 0.20m)$, orientated north/ south. It had steep sides and a concave base. Its fill (L1050) was a friable, dark grey brown silty sand with occasional small sub-angular and sub-rounded flint. It contained no finds. L1050 was cut by Ditch F1047.

Trench 6A (Fig. 2)

Sample section 6A.A	:	
0.00m = 51.99m AO	D	
0.00 – 0.35m	L1000	Topsoil. As above, Trench 1.
0.35 – 0.45m	L1001	Subsoil. As above, Trench 1.
0.45m +	L1005	Natural deposits. As above, Trench 4.

Sample section 6A.B:			
0.00m = 52.04m A	OD		
0.00 – 0.35m	L1000	Topsoil. As above, Trench 1.	
0.35 – 0.65m	L1001	Subsoil. As above, Trench 1.	
0.65m +	L1002	Natural deposits. As above, Trench 4.	

Description: No archaeological features or finds were present in Trench 6A.

Trench 6B (Fig. 2)

Sample section 6B.A.		
	L1000	Topsoil. As 1A above.
0.47m +	L1005	Natural deposits. As 4B above.

Sample section 6E 0.00m = 51.49m A		
0.00 – 0.37m	L1000	Topsoil. As 1A above.
0.37m +	L1005	Natural deposits. As 4B above.

Description: No archaeological features or finds were present in Trench 6B.

Trench 7 (Fig. 2)

Sample section 7A		
0.00m = 51.54m A	4 <i>OD</i>	
0.00 – 0.40m	L1000	Topsoil. As above, Trench 1.
0.40m +	L1005	Natural deposits. As above, Trench 4.

Sample section 7B:		
0.00m = 51.82m AC	DD	
0.00 – 0.39m	L1000	Topsoil. As above, Trench 1.
0.39 – 0.48m	L1001	Subsoil. As above, Trench 1.
0.48m +	L1005	Natural deposits. As above, Trench 4.

Description: No archaeological features or finds were present in Trench 7.

Trench 8 (Fig. 2)

Sample section 8A:		
0.00m = 51.61m A0	OD .	
0.00 – 0.41m	L1000	Topsoil. As above, Trench 1.
0.41m +	L1005	Natural deposits. As above, Trench 4.

Sample section 8B:	,	
$0.00m = 51.60m \ AOD$		
0.00 – 0.48m	L1000	Topsoil. As above, Trench 1.
0.48m +	L1005	Natural deposits. As above, Trench 4.

Description: No archaeological features or finds were present in Trench 8.

Trench 9 (Fig. 2)

Sample section 9A: 0.00m = 51.60m AO	D	
0.00 - 0.36m	L1000	Topsoil. As above, Trench 1.
0.36 - 0.42m	L1001	Subsoil. As above, Trench 1.
0.42m +	L1005	Natural deposits. As above, Trench 4.

Sample section 98 0.00m = 51.70m							
0.00 – 0.38m L1000 Topsoil. As above, Trench 1.							
0.38 – 0.58m	L1001	Subsoil. As above, Trench 1.					
0.58m +	L1005	Natural deposits. As above, Trench 4.					

Description: No archaeological features or finds were present in Trench 9.

Trench 10 (Figs. 2 and 6)

Sample section 10 0.00m = 51.42m A		
0.00 - 0.42m	L1000	Topsoil. As above, Trench 1.
0.42m +	L1002	Natural deposits. As above, Trench 1.

Sample section 10B: 0.00m = 51.61m AO		
0.00 - 0.41m	L1000	Topsoil. As above, Trench 1.
0.41 – 0.48m	L1001	Subsoil. As above, Trench 1.
0.48m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 10 contained undated Ditch F1008.

Ditch F1008 was linear $(1.90 + x 1.83 \times 0.10 m)$, orientated north/south. It had gently sloping sides and a shallow concave base. Its fill (L1009) was a friable, light orange brown silty sand with occasional small sub-angular and sub-rounded flint. It contained no finds.

Trench 11 (Figs. 2 and 7)

Sample section 11A:		
$0.00m = 51.70m \ AOL$)	
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1.
0.0m +	L1002	Natural deposits. As above, Trench 1.

Sample section 1: 0.00m = 52.11m		
0.00 - 0.29m	L1000	Topsoil. As above, Trench 1.
0.29m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 11 contained five large, ill-defined features. One (F1101) was medieval in date, while two (F1103 and F1106) were post-medieval, and two (F1097 and 1099) were undated. Investigative slots were cut across these features in order to determine their character (Fig. 7). In section, three (F1097, F1099 and F1101) appeared to represent cut features (probably ditches), while F1103 and F1106 were more ambiguous. Instead of fills, it is possible that L1104, L1105, L1108 and L1109 (see below) constituted spreads of some kind; possibly demolition material based on their CBM content and other finds.

?Ditch F1097 was large with moderately sloping sides and a concave base (1.00+ x 5.50+ x 0.47m). Its fill (L1098) was a friable, mid grey brown silty sand. It contained CBM (481g), animal bone (100g) and an iron fragment (11g).

?Ditch F1099 was ill-defined in plan with moderately sloping sides and a concave base $(1.00+ \times 2.63 \times 0.45m)$. Its fill (L1100) was a friable, mottled yellow brown and mid grey brown silty sand with frequent small sub-angular and sub-rounded flint. It contained CBM (142g).

?Ditch F1101 was ill-defined in plan with moderately sloping sides and a concave base (1.00+ \times 1.57 \times 0.33m). Its fill (L1102) was a friable, mid grey brown silty sand, containing medieval (12th to 14th century) pottery (1; 6g), CBM (52g), animal bone (47g) and shell (1; 4g).

?Pit F1103 was ill-defined in plan with gently sloping sides and a concave base $(1.50+x8.00 \times 0.60m)$. Its basal fill (L1104) was a friable, mottled yellow brown and mid grey brown silty sand with frequent small sub-angular and sub-rounded flint. It

contained late 15th to early 17th century pottery (4; 93g), CBM (537g), animal bone (588g), shell (1; 5g) and iron fragments (4; 364g). Its upper fill (L1105) comprised friable, mid grey brown silty sand with frequent small sub-angular and sub-rounded flint. It contained 16th to early 17th century pottery (9; 262g), CBM (9978g), struck flint (1; 1g), animal bone (375g) and shell (2; 18g).

?Pit F1106 was ill-defined in plan with gently sloping sides and a concave base (1.25+ x 12.00 x 0.50m). Its basal fill (L1107) was a friable, mid grey brown silty sand with sparse sub-angular gravel and flint. It contained no finds. Its secondary fill (L1108) was a friable, mid to dark grey brown silty sand with occasional small to medium gravel and flint. It contained 15th to 16th century pottery (4; 81g), CBM (1128g), animal bone (386), shell (2; 36g), iron fragments (4; 114g) and clay pipe (1; 9g). Its upper fill (L1109) comprised friable, mid to dark yellow brown silty sand with moderate flint and gravel. It contained 17th to 18th century pottery (9; 161g), CBM (87g), animal bone (47g) and an iron fragment (1; 91g).

Trench 12 (Figs. 2 and 7)

Sample section 1.	Sample section 12A:								
0.00m = 52.37m AOD									
0.00 – 0.40m	L1000	Topsoil. As above, Trench 1.							
0.40m +	0.40m + L1003 Natural deposits. As above, Trench 4.								

Sample section 12E	3:										
0.00m = 52.42m AOD											
0.00 – 0.35m	0.00 - 0.35m L1000 Topsoil. As above, Trench 1.										
0.35 – 0.37m	L1004	Layer. Compact, mid brownish yellow sandy clay with frequent medium sub-rounded stone.									
0.37 - 0.41m +	L1030	Depression fill. Friable, mid brownish grey silt sand with occasional large and moderate small and medium sub-rounded stone.									

Description: Trench 12 contained a depression or hollow containing 15th to 16th century pottery.

Depression F1029 was irregular in plan with gently sloping sides and an irregular base (2.10+ x 1.90+ x 0.46m). test slots were excavated across F1029 in order to ascertain its character. Its fill (L1030) was a friable, mid grey brown silty sand with occasional large sub-angular and sub-rounded flint. It contained 15th to 16th century pottery (2; 11g), ?residual 13th to 15th century pottery (13; 243g), animal bone (108g) and shell (10; 116g). Like some of the material encountered in Trench 11 (above), it is possible that L1030 comprised a spread of demolition material or similar.

7 CONFIDENCE RATING

7.1 It is not felt that any factors inhibited the recognition of archaeological features or finds.

8 DEPOSIT MODEL

8.1 Uppermost across the site was Topsoil L1000, comprising firm, dark grey brown silty/ sandy clay with occasional small and medium sub-angular and sub-rounded flint. L1000 sealed a friable, mid grey yellow silty sand subsoil (L1001). Below the subsoil was the natural drift geology (L1002), comprising friable, mid greyish brown/ yellow silty sand with occasional small sub-angular flints.

9 DISCUSSION

9.1 The features present in each trench are tabulated below:

Trench	Context	Description	Date/ Finds
1	F1056	Ditch	Medieval (12 th -14 th century)
	F1067	Posthole	Medieval (12 th -13 th century)
	F1075	Ditch	Roman
	F1077	Ditch	Roman (Mid 1 st - early 2 nd century)
	F1079	Posthole	Medieval (12 th -13 th / 14 th century)
	F1081	Posthole	Medieval (13 th -15 th century)
	F1083	Posthole	-
	F1085	Posthole	-
	F1087	Posthole	Medieval (11 th -12 th / 13 th century)
	F1089	Posthole	-
	F1091	Posthole	Medieval (11 th -12 th / 13 th century)
	F1093	Posthole	-
	F1095	Posthole	-
2	F1043	Tree hollow	
	F1045	Pit	Medieval (11 th -13 th century)
	F1052	Ditch	-
	F1054	Ditch	-
	F1059	Ditch	-
	F1061	Pit	Medieval (13 th -14 th century) Residual Roman
	F1069	Ditch	Medieval (11 th -13 th century)
	F1071	Ditch	-
	F1073	Ditch	-
3	F1012	Pit	Modern animal burial
	F1014	Ditch	Post-medieval (CBM; iron horseshoe)
	F1016	Ditch	Post-medieval (17 th -18 th century)
	F1018	Ditch	Post-medieval (late 17 th -18 th century)
	F1020	Ditch	-
	F1022	Ditch	-
	F1025	Pit	Modern animal burial
	F1026	Tree Hollow	-
	F1031	Ditch	Medieval (12 th -14 th century)
	F1033	Ditch	-
	F1035	Ditch	Medieval (12 th -13 th century)
	F1037	Ditch	-
	F1039	Ditch	-
	F1041	Ditch	-
4	F1006	Ditch	-
5	F1010	Ditch	-
	F1047	Ditch	-
	F1049	Ditch	-
10	F1008	Ditch	-
11	F1097	?Ditch	?Post-medieval
	F1099	?Ditch	?Post-medieval
	F1101	?Ditch	1 Sherd: Medieval (12 th -14 th century)
	F1103	?Pit	Post-medieval (15 th -17 th century)
	F1106	?Pit	Post-medieval (17 th -18 th century)
12	F1029	Depression/ hollow	15 th -16 th century
14	1 1028	Debiession, Honow	110 10 Contary

Romano-British

- 9.2 Ditch F1077 (Trench 1) contained a substantial quantity of Roman (mid 1st to early 2nd century pottery). Ditch F1075 (also Trench 1) yielded further Roman pottery, while residual Roman pottery was present within Pit F1061 (Trench 2). The Roman pottery assemblage comprises 145 sherds in total, entirely made up of well-preserved Wattisfield/ Waveney Valley-region reduced ware. The core of this coarse ware industry is located a short distance to the west. The majority of the pottery was contained in Ditch F1077, and soot on the exterior of one vessel may be indicative of nearby domestic activity.
- 9.3 Previous investigation of the site in 1955 by Basil Brown (SHER WTM008) recorded a number of Romano-British ditches containing a mix of finds including plain Samian sherds, kiln fabric and wasters, animal bone and oyster shell. These finds suggest a significant level of local activity adjacent to a Roman road following the line of Bean's Lane. The current evidence would tend to suggest a date for this activity in the earlier part of the Roman occupation. Brown (*ibid.*) reported that the 'greasy black earth' of the Romano-British period was sealed by medieval demolition debris and associated finds.

Medieval and Post-Medieval

- 9.4 Numerous medieval features were present in Trenches 1 (Ditch F1056 and Postholes F1067, F1079, F1081, F1087, F1091), 2 (Pit F1045, Pit F1061 and Ditch F1069) and 3 (Ditches F1031 and F1035). Pottery from these features comprises early medieval sandy wares and medieval coarse wares. Small quantities of associated CBM, animal bone and shell were also found. Late medieval (15th to 16th century) and early post-medieval (16th to 17th century) pottery was found in Trenches 11 (?Ditch F1103) and 12 (Depression/ Hollow F1029). Post-medieval (17th to 18th century) features were recorded in Trenches 3 (Ditches F1016 and F1018) and 11 (?Pit F1106). Modern animal burials were recorded in Trench 3 (F1012 and F1025).
- 9.5 Some ?features in Trenches 11 and 12 were difficult to define (i.e. F1029, F1103 and F1106). It is possible that their fills the majority of which could be dated to the post-medieval period (some ?residual medieval pottery was also present) in fact constituted spreads of some description; possibly demolition material. This interpretation would complement the findings of earlier investigations, which recorded later demolition debris sealing Romano-British layers (SHER WTM008). This stratigraphic sequence was also noted in Trial Trench 1 of the recent evaluation; e.g. Romano-British Ditch Fill L1078 (F1077) was truncated by medieval Posthole F1079 (Fig. 3).
- 9.6 The site's location, adjacent to Wortham Green, suggests that it lay relatively close to the core of the medieval settlement (located to the west). Although earlier investigations suggested that the site may have been the location of the Church of St Thomas (recorded in AD 1086; SHER WTM008), this cannot be stated with any certainty. It is more probable that the site resembled nearby building plots excavated on Mellis Road (SHER WTM048), with a subsequent pastoral use such as a croft also possible (*ibid.*). Similar roadside plots are a feature of medieval and later rural settlements across Suffolk (e.g. Mustchin *et al.* 2015).

10 CONCLUSIONS

- 10.1 The encountered Romano-British archaeology adds usefully to the known corpus of evidence from the area, including the significant remains from within the site. Around Wortham, the Romano-British period is represented by a Roman road, possible settlement evidence and a scatter of Roman coins (SHERs WTM015, WTM016, BUR006 and BUR015). Evidence from the site itself includes a variety of finds and a Roman road, running north-south along Bean's Lane (SHER WTM008). Rural settlements and landscapes have been identified by Medlycott (2011, 47) as an important area of research for the Roman period in East Anglia. Further work at this site has the potential to contribute to this research area, as well as more accurately date the encountered archaeology.
- 10.2 The density of medieval archaeology encountered confirms that the site lay close to the core of settlement at this time, most probably comprising a roadside plot of some description. As such, further work has the potential to contribute to current research themes concerning medieval rural settlement in the region, including the form and development of rural settlements Medlycott (2011). A summary of overall project findings will be prepared for publication in the county journal, *Proceedings of the Suffolk Institute of Archaeology and History*.

11 DEPOSITION OF THE ARCHIVE

11.1 Archive records, with an inventory, will be deposited at Suffolk County Archive Store. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

ACKNOWLEDGEMENTS

Archaeological Solutions Ltd (AS) is grateful to Danny Ward Builders funding the works and for their assistance, and their architects, Roberts Molloy Associates (in particular Alex Bloss for assistance).

AS is also pleased to acknowledge the input and advice of Rachael Abraham (Suffolk County Council Archaeological Service Conservation Team).

BIBLIOGRAPHY

British Geological Survey 1991 East Anglia Sheet 52°N-00° 1:250,000 Series Quaternary Geology. Ordnance Survey, Southampton

Chartered Institute for Archaeologists 2014 Standard and Guidance for Archaeological Evaluation, Reading, CIfA

Gurney, D. 2003 Standards for Field Archaeology in the East of England. East Anglian Archaeology Occasional Paper no. 14

Mustchin, A.R.R., Cussans, J.E.M. and Summers, J.R. 2015 'Three Medieval Village Sites in Suffolk: archaeological excavations at Church Farm, Brettenham; Mill House, Darsham; and Semer Road, Whatfield, 2014', *Medieval Settlement Research* 30

Soil Survey of England and Wales 1983 Soil Survey of England and Wales: Legend for the 1:250,000 Soil Map of England and Wales Harpenden, Rothamsted Experimental Station/Lawes Agricultural Trust

Web resources

www.old-maps.co.uk

22

APPENDIX 1 CONCORDANCE OF FINDS

Other (g)	99		33	397	11	16		116													18							
Other (Qty)	6		_	←	3	_		10													_							
Other Material	Fe.Frag		Fe. Frag	Horseshoe	Clay Pipe	S.Flint		Shell													Shell							
A.Bone (g)	78		94	202		41	37	71				32	11	19	3		194			<u>V</u>	32							
CBM (g)	92	36		74	1456												439	41		3								
Pot (Qty) Pottery (g)	17	530			159	39	11	232	15	9	105		16	16		5		4	15	1	71	69	1607	226	18	11	5	9
Pot (Qty)	2	40			_	2	2	7	3	2	11		2	2		_		2	2	1	2	9	85	80	2	2	2	1
Spot Date (Pot Only)	18th - 19th C	Mid 1st - early 2nd C			17th - 18th C	Late 17th - 18th C	15th - 16th C	13th - 15th C	12th - 14th C	12th - 13th C	11th - 13th C		12th - 14th C	12th - 14th C		Roman		13th - 14th C	12th - 13th C	11th - 13th C	Roman	Roman	Mid 1st - early 2nd C	Mid 1st - early 2nd C	12th - 13th/14th C	13th - 15th C	11th - 12th/13th C	12th - 13th/14th C
Description	Topsoil	Subsoil	Ditch Fill	Ditch Fill	Ditch Fill	Ditch Fill	Depression/Hollow		Ditch Fill	Ditch Fill	Pit Fill	Basal Fill of Ditch	Upper Fill of Ditch		Pit Fill	Pit Fill	Pit Fill	Pit Fill	Post Hole Fill	Ditch Fill	Ditch Fill	Ditch Fill			Post Hole Fill	Post Hole Fill	Post Hole Fill	Post Hole Fill
Trench			4	3	3	3	12		3	3	2	_	-		2	2			_	2	-	-			_	-	-	-
Seg.					В		٧	В				В	4	В									В	O				
Context	1000	1001	1007	1015	1017	1019	1030		1032	1036	1046	1057	1058		1062	1063	1065	1066	1068	1070	1076	1078			1080	1082	1088	1092
Feature			1006	1014	1016	1018	1029		1031	1035	1045	1056			1061				1067	1069	1075	1077			1079	1081	1087	1091

Land off Bury Road, Wortham, Suffolk IP22 1PW

		4	78	286	5	18	_	18	36	114	25	3	6	91	<1
_		_	2	2	_	2	_	2	2	4	_	_	_	_	1
Fe.Frag		Shell	Fe.Frags	Fe.Frag	Shell	Shell	S.Flint	Shell	Shell	Fe.Frags	B.Flint	Pb.Frag	Clay Pipe	Fe.Frag	Snail
100		47	226	362		53	322		35		307		44	47	298
481	142	52	537				8266		214				170	87	
		9	38	22		222	40		9/		2			161	9
		_	2	2		9	က		3		_			6	2
		12th - 14th C		Late 15th - early 17th C		16th - early 17th C	16th - early 17th C		16th C		15th - 16th C			17th - 18th C	15th - 16th C
Ditch Fill ?	Ditch Fill ?	Ditch Fill ?	Ditch Fill ?			Pit Fill ?			Pit Fill ?						Tree Hollow
	11	11	11			11			11					11	1
			٧	В		⋖	В		⋖		В		O	В	
1098	1100	1102	1104			1105			1108					1109	S/N
1097	1099	1101	1103						1106						

APPENDIX 2 SPECIALIST REPORTS

The Pottery

Andrew Peachey MCIfA

The assemblage contains a total of 145 sherds of Roman pottery, entirely comprised of well-preserved Wattisfield/Waveney Valley-region reduced ware, a coarse ware produced by a significant pottery industry close to the west. The Roman pottery was predominantly contained in a single ditch (Table 1), with form types represented by several cordoned jars of the same type and size that are indicative of a date in the mid 1st to early 2nd centuries AD. The jars do not appear to include any waster material that might be associated with pottery production; however soot on the exterior of one vessel may be indicative of domestic activity in the close vicinity.

Feature	Date	F	W
Ditch F1077	Mid 1 st -early 2 nd century AD	99	1902
Subsoil L1001	Mid 1 st -early 2 nd century AD	40	530
Other features	Roman	6	76
Total		145	2508

Table 1: Quantification of Roman pottery (WAT RE) by frequency (F) and weight (W, in grams) in feature groups

Methodology

The pottery was quantified by sherd count, weight (g) and R.EVE with fabrics examined at x20 magnification. Rim type, profile and decoration were also recorded in separate fields and free-text comments in accordance with the guidelines developed by the Study Group for Roman Pottery (Webster 1976; Darling 2004; Willis 2004). All fabrics are described in the text or archive with Roman fabrics cross-referenced, where possible to the National Roman Fabric Reference Collection (Tomber and Dore 1998) or appropriate regional kiln/assemblage groups. All data has been entered into a Microsoft Excel spreadsheet that will form part of the site archive.

Discussion

The distinctly micaceous Wattisfield/Waveney Valley-region reduced ware (Tomber and Dore 1998, 184: WAT RE) was a Roman grey coarse ware produced in large quantities by a pottery industry that spanned the period, with kilns situated in the parishes of Wattisfield, Hepworth, Hinderclay, Rickinghall, Market Weston and Botesdale; the latter of whish is situated *c*.3km to the west. The Roman pottery is entirely comprised of WAT RE, including a significant concentration in segments of Ditch F1077, notably L1078 Segment B; with moderate sherds recovered from Subsoil L1001, and sparse sherds contained in Pit F1061 and Ditch F1075. Ditch F1077 (L1078 Segment B) contained the bulk of a single necked jar with an everted bead rim, a shoulder cordon decorated with a zig-zag pattern of parallel burnished lines, and a rounded shoulder. Fragments of comparable jars with plain shoulder cordons were also contained Ditch F1077 (L1078 Segment B) and Subsoil L1001, while an everted bead rim in Ditch F1077 (L1078) is likely from the same type. The jars all occur in the same size range, with rim diameters of 18-20mm, a consistency

that might suggest their production in the close vicinity, but there is no evidence for waster material or mis-firing, and the soot on the exterior of the jar from Subsoil L1001 suggests its use as a cooking pot, more characteristic of domestic activity leading to refuse disposal into nearby ditches. This type of jar is common in the repertoire of coarse wares in the region, typically produced between the mid 1st and early 2nd centuries AD (Symonds and Wade 1999: type Cam.218C); with examples recorded in kiln deposits at Wattisfield (Maynard *et al* 1936: plate 2.VI), and at settlements including Scole and Hacheston (Lyons and Tester 2014: fig.6.3.94; Arthur and Plouviez 2004,166: type 22B/C).

References

Arthur, P. and Plouviez, J. 2004 'The pottery from the 1973 excavation' in Blagg, T., Plouviez, J. and Tester, A. *Excavations at a Large Romano British settlement at Hacheston* 1973-1974, East Anglian Archaeology 106, 160-186

Darling, M. 1994 *Guidelines for the Archiving of Roman Pottery*. Study Group for Roman Pottery.

Lyons, A. and Tester, C. 2014 'Specialist Reports I: Pottery' in Ashwin, T. and Tester, A. (eds.) A Romano-British Settlement in the Waveney Valley: Excavations at Scole, 1993-4. East Anglian Archaeology 152, CD (Chapter 6)

Maynard, G, Brown, B, Spencer, H E P, Grimes, W F, and Moore, I E, 1936 Reports on a Roman pottery-making site at Foxledge Common, Wattisfield, Suffolk, *Proc Suffolk Inst Archaeol Hist* 22, 178–97

Symonds, R. and Wade, S. (eds) 1999 Roman Pottery from Excavations in Colchester, 1971-86; Colchester Arch. Rep. 10

Tomber, R. and Dore, J. 1998 *The National Roman Fabric Reference Collection*. Museum of London, London

Webster, G. (ed.) 1976 Romano-British Coarse Pottery: a Students Guide. CBA Research Report No. 6

Willis, S. 2004 'The Study Group for Roman Pottery Research Framework Document for the Study of Roman Pottery in Britain, 2003', J. Roman Pottery Stud. 11, 1–20

The Post-Roman Pottery

Peter Thompson

Introduction

The archaeological evaluation recovered 75 sherds weighing 1.425kg from 25 contexts. The assemblage spans the medieval and earlier post-medieval periods (Table 2).

Period	Sherd Number	Fabric Weight	Date Range
Medieval	44	454	11 th -15 th
Late Medieval and Transitional	14	361	15 th -16 th
Post-medieval	17	610	16 th -19 th

Table 2: Quantification of pottery by period

Methodology

The sherds were examined under x35 binocular microscope and recorded in keeping with the Post-Roman Pottery Research Group Guidelines (Slowikowski 2001, Table 2). The Suffolk fabric codes and numbers are provided in brackets in the **Key** below.

The Pottery

The majority of the assemblage comprises early medieval sandy wares, medieval coarsewares and glazed wares. The fabrics are almost exclusively sand tempered with just two sherds containing a small amount of calcareous inclusions. The transitional sherds are represented by Late Medieval and Transitional Ware, Raeren/Frechen stoneware and early glazed post-medieval red earthenware, the latter having probably begun in production probably in the early 16th century (Jennings 1981, 157).

The medieval pottery assemblage can generally be described as lightly to moderately abraded and, with the exception of Pit F1045, comprises small sherds. Pit F1045 (L1046) contained 11 EMW body sherds probably deriving from the same early medieval cooking pot, with mottled firing and containing charcoal residue. Posthole F1087 (L1088) which contained a sherd of early medieval ware also contained a small Thetford-type ware body sherd as did Ditch F1031 (L1032). Fabric MCW1 can be equated with Grimston ware of which a simple everted jar rim came from Post-hole F1067 (L1068) and a jug neck with narrow girth grooves was recoverd from Post-hole F1079 (L1082). The single MCW2 oxidised sandy sherd from Ditch F1101 (L1102) containing small amounts of calcareous and ferrous oxide inclusions is of similar description to Rickinghall Sandy Ware (RKSW1) dated between the 13th-15th centuries which is seen as a precursor to the local LMT industry (Anderson 1996, 7). Ditch F1031 (L1032) contained an MCW5 developed E5 type bowl rim that would fit a 13th-14th centuries date. The only other diagnostic sherd was a body/sagging base angle of a cooking pot in MCW3 medieval gritty coarseware. Depression F1029 (L1030 B) contained 11 mixed medieval coarsewares and glazed wares comprising Grimston ware and unsourced local wares.

There were 11 sherds of Late Medieval and Transitional ware including the partial upper profiles of a cistern and pancheon from Ditch? F1103 (L1105 A). The feature also contained a fragment of German stoneware either from Frechen or Cologne, with part of an oak leaf decoration. Two sherds from a Raeren stoneware drinking jug came from L1104 B. The Waveney Valley was a centre for Late Medieval and Transitional ware some reaching Norwich and probably further afield. The closest known production sites are located at Hinderclay and Rickinghall in Suffolk, and Fersfield in Norfolk (Anderson 1996, 9-11). Contexts Ditch F1018 (L1019) and Pit F1106 (L1109 B) are probably the latest features on site, based on pottery, which contained glazed red earthenware of 17th-18th centuries date.

Key:

Thetford ware 10th-mid 12th THET (2.52):

EMW (3.10): Early medieval sandy coarse ware- abundant well sorted fine to medium sub-

angular to sub-rounded grey and clear quartz, few other inclusions. Mottled red-

brown to grey surfaces 11th-13th

Grimston type ware - abundant, well sorted fine to medium sub-rounded to MCW1 (3.22):

rounded grey and occasionally clear and white guartz. Rare ferrous oxide. Grey,

orange and buff colours 12th-15th

Medieval coarse ware - fine sandy fabric oxidised throughout. Rare white MCW2 (3.24):

calcareous inclusions and sparse to moderate mica on surfaces12th-14th

MCW3 (3.21): Medieval coarse ware – abundant medium to coarse sub-rounded clear and grey

quartz. Occasional red iron mineral. Grey surfaces 12th-14th

Medieval coarse ware - moderate medium to coarse sub-rounded to rounded MCW4 (3.50):

quartz and sparse white shell 12th-14th

General medieval Suffolk type sandy coarse wares containing small amounts of MCW5 (3.20):

flint. Coarse quartz and or calcareous material 12th-14th

Fabric as for MCW1 with a thin patchy external green or clear glaze 13th-15th UPG1 (4.00):

UPG2 (4.00): Common fine to medium clear and grey quartz; sparse to moderate red and black

iron mineral. External green copper speckled glaze 13th-15th
As for MCW5 with thin patchy green glaze late 12th-15th
Late Medieval Transitional 15th-16th UPG3 (4.00):

LMT (5.10): Raeren stoneware late 15th-early 17th RAER (7.13):

Cologne stoneware 16th KOLS: (7.14): Glazed red earthenware 16th+ GRE (6.12):

English stoneware 18th+ ENGS (8.20):

Feature	Context	Quantity	Date	Comment
Topsoil	1000	1x117g GRE	18 th - 19 th	
		1x1g ENGS		
Ditch 1016	1017 B	1x158g GRE	17 th -18 th	GRE: bowl rim, brown
				glaze, band of impressed
				below rim
Ditch 1018	1019	1x38g LMT	Late 17 th -18 th	LMT: rounded base
		1x1g GRE		
Depression 1029	1030 A	2x11g LMT	15 th -16 th	LMT: ?Jar rim
Depression 1029	1030 B	3x20g MCW1	13 th -15 th	MCW5: x1 sagging base
		1x12g UPG1		2x98g UPG3
		2x21g UPG2	220	
		2x63g MCW5		
		2x93g UPG3		
		1x11g UPG2		
Ditch 1031	1032	1x2g THET	13 th -14 th	MCW1: flanged bowl rim
		2x12g MCW5		
Ditch 1035	1036	2x7g MCW1	12 th -13 th	MCW1: MNV 2; x1
DIGIT 1000	1030	ZX7 g WICW I	12 -13	sooting
				9
Pit 1045	1046	11x103g EMW	11 th -13 th	EMW: MNV 1; cooking
				pot with internal charcoa
				residue
Ditch 1056	1058 A	1x9g MCW1	12 th -14 th	
		1x6g MCW5		
Ditch 1056	1058 B	1x14g MCW1	12 th -14 th	MCW1: external sooting
				on body sherd
Pit 1061	1066	1x4g EMW	13 th -14 th	
		1x1g UPG1		
Post-hole 1067	1068	1x6g MCW1	12 th -13 th	MCW1: simple everted
Post-noie 1007	1000	TX69 MCW I	12 -13	cooking pot rim
		1x9g MCW4		MCW4: sooting to body
		1x9g MCVV4		sherd
Ditch 1069	1070	1x1g EMW	11 th -13 th	Sileiu
Post-hole 1079	1080	1x1g EMW	12 ^{th-} 13 th / 14 th	MCW3: base/body angle
1 031-11010 1013	1000	1x17g MCW3	12 13 / 14	WiC VV 3. Dase/Dody allgle
Post-hole 1079	1082	1x3g EMW	13 th -15 th	MCW1: jug neck with
		1x9g MCW1		narrow girth grooves

Post-hole 1087	1088	1x2g THET? 1x3g EMW	11 th -12 th / 13 th	EMWS: MNV 2				
Post-hole 1091	1092	1x6g MCW1	12 th -13 th /14 th					
Ditch? 1101	1102	1x6g MCW2	12 ^{th-} 14 th	MCW2: double horizontal incised lines above shoulder				
Ditch/Pit? 1103	1104 B	2x55g RAER	Late 15 th -early 17 th	RAER: MNV 1				
	1105 A	3x192g LMT	16 th -early 17 th	LMT: MNV 2; x1 jug rim and strap handle, x1 bowl				
		1x7g KOLS		upper profile				
		2x21g GRE		GRE: MNV 1				
	1105 B	1x12g UPG1 1x5g LMT 1x21g GRE	16 th – early 17 th					
Pit? 1106	1108 A	2x43g LMT 1x32g GRE	16 th	LMT: MNV 1; x1 bowl rim GRE: base/body angle				
	1108 B	1x5g LMT	15 th -16 th					
	1109 B	9x259g GRE	17 th -18 th	GRE: MNV				
Tree throw	TT01	1x5g LMT	15 th -16 th	LMT: rilling				

Table 2: Quantification of pottery by context

References

Anderson, S. 1996 'The Pottery' in *The Late Medieval Pottery Industry on the North Suffolk Border* Medieval Ceramics Volume 20, 3-12

Jennings, S. 1981 Eighteen Centuries of Pottery from Norwich East Anglian Archaeology 13

Slowikowski, A., Nenk, B. and Pearce, J. 2001 Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics, *Medieval Pottery Research Group Occasional Paper 2*

The Ceramic Building Materials

Andrew Peachey

The evaluation recovered a total of 188 fragments (13786g) of medieval to Tudor CBM (Table 3), in a highly fragmented condition. The assemblage was manufactured in a single locally-produced fabric and included peg tile and brick that suggest a production date in the 14th to 15th centuries, including a single significant concentration in ?Ditch F1103, potentially representing subsequent packing or levelling material recycled in the late medieval period from a structure in the vicinity.

Feature Group	Peg Tile		Brick	Brick					
	Frequency	Weight (g)	Frequency	Weight (g)					
?Ditch F1103	133	8548	9	1967					
?Pit F1106	10	471	-	-					
Ditch F1016	8	269	2	1187					
Other pots (2 features)	3	41	1	439					
Other ditches (5 features)	17	605	1	147					
Topsoil/subsoil	4	112	-	-					
Total	175	10046	13	3740					

Table 3: Quantification and Distribution of CBM in feature groups

Methodology

The CBM was quantified by fragment count and weight with fabrics examined at x20 magnification, extant dimensions measured and manufacturing traits recorded in free text; with all data entered into a Microsoft Excel spreadsheet that will be deposited as part of the archive.

Discussion

The CBM occurs in a single fabric that is consistent with the exploitation of local raw materials. The fabric is well-fired red-orange throughout, with inclusions of common moderately-sorted quartz (0.1-0.5mm), sparse red iron rich grains (<2.5mm) and occasional angular flint/quartzite (2-10mm).

The bulk of the assemblage is comprised of peg tile, notably in ?Ditch F1103; albeit limited to small fragments that suggest secondary deposition, probably through salvage and re-deposition. The peg tile is *c*.15mm thick with two circular peg holes (12mm wide) at one end and a sanded base. Peg tile emerges as a roofing material in the late 12th to 13th century and its dimensions are standardised in the mid 15th century (Drury 1981, 131). This peg tile is better fired than the earliest peg tile, but is slightly thicker than types produced after standardisation was enforced, therefore likely represent types produced as production evolved towards what would become the standardised type, probably in the 14th to mid 15th centuries. The peg tile recorded frequently exhibits traces of mortar on its upper and lower surfaces, and edges, suggesting that it once was a component of a structure, but the high fragmentation is not consistent with a primary demolition deposit, suggesting the tile was possibly deliberately broken down to function as a filling or packing material.

Sparse brick fragments are also present in the assemblage, notably in ?Ditch F1103, and also in Ditch F1016. The bricks have partial dimensions of ?x110x45mm with a rough base, slightly irregular arrises and frequently pock-marked upper faces; but like the peg tile are consistently fired red-orange throughout. This type of brick maintains dimensions similar to less well-manufactured bricks produced from the 14th century onwards, but appears most consistent with types produced between the 15th to early 17th centuries (Ryan 1996, 95). The relatively rough finish suggests they do not post-date the Tudor period, but the surfaces are not well preserved and like the peg tile the bricks appear to be re-deposited and incorporated into packing or levelling material.

Bibliography

Drury, P. 1981 'The production of brick and tile in medieval England' in Crossley, D. (ed) *Medieval Industry*. Council of British Archaeology Research report 40, 126-142

Ryan, P. 1996 *Brick in Essex: From the Roman Conquest to the Reformation.* Privately Published, Colchester.

The Animal Bone

Dr Julia E.M. Cussans

A moderately sized animal bone assemblage was recovered during trial trench excavations at Wortham totalling 76 fragments (Table 4). Overall the bones were well preserved with the majority of contexts being rated as having good preservation on a five point scale from very poor through to excellent; a smaller number were rated as having ok or poor preservation (Table 4). Bone abrasion was rated as minimal and fresh breaks were not particularly common. Gnawed bones were present in approximately half of the contexts.

Approximately half of the bone fragments could only be identified as large (cattle or horse sized) or medium (sheep or pig sized) mammal, the former being the much larger group. Several domestic mammal taxa were identified; these were cattle, sheep/ goat, pig, horse and cat. Sheep/ goat and pig were the most numerous although the group of pig bones from L1098B all likely came from the same animal. The modern pig remains from F1012 (L1013) are not included here. Cattle were next most numerous and then cat, although again these bones likely only represent a single individual; horse was represented by the smallest quantity of bones. No wild mammal bones were present, but two bird bones were noted, these may have belonged to wild or domestic birds.

Butchery marks were observed on all taxa with the exception of cat and medium mammal; chop and cut marks were both present. No pathological bones were noted. Several ageable elements were present in the form of both mandibles and unfused epiphyses. Very few measurable elements were present for cattle and none for the other taxa. Several of the cattle bones were noted as being particularly large. Further excavation would likely provide a substantial, data rich assemblage that would provide significant information on the medieval economy in the area. However, the current assemblage is too small to allow meaningful comparison between the different periods represented.

Context	Segme nt	Spot Date	Preservat ion	Catt le	Shee p/ goat	Pi g	Hor se	Ca t	Large Mamm al	Mediu m mamm al	Bir d	Tot al
1000		Medieval	good	1					4		1	6
1007			good	1					2			3
1015			good				1					1
1019		Medieval	good					6				6
1030	Α	Medieval	good		1				1			2
	В	Medieval	ok						6			6
1057	В		good	1								1
1058	Α	Medieval	good		1	1						2
	В	Medieval	good		1					1		2
1062			ok		1							1
1065			good				1					1
1070		Medieval	ok								1	1
1076		Roman	poor						2			2
1098			poor						1			1
	В		good		1	6			1			8
1102		Medieval	good						1			1
1104	Α		good		1	1			3			5
	В	Medieval/Post- medieval	good	1					1			2
1105	Α	Medieval	ok						2			2
	В	Medieval/Post- medieval	good	2	2				4	1		9
1108	Α	Medieval	ok						2	1		3
	В		ok	2		1			2			5
	С		ok						2			2
1109	В	Medieval/Post- medieval	ok						2			2
No Context	TT01	Medieval	good		1		1					2
			Total	8	9	9	3	6	36	3	2	76

Table 4: Quantifiaction of animal bone from the trail trench evaluation at Wortham

The Environmental Samples

Dr John Summers

Introduction

During trial trenching of land off Bury Road, Wortham, nine bulk soil samples for environmental archaeological assessment were taken and processed. Sampled deposits have been spot dated to the Roman period (two samples) and the medieval period (five samples), and two samples were undated. This report presents the results from the assessment of the bulk sample light fractions and discusses the significance and potential of any remains recovered.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds was consulted where necessary. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

Results

The assessment data from the bulk sample light fractions are presented in Table 5. Carbonised plant remains were present in five of the samples in the form of low concentrations of carbonised cereal grains. Specimens of free-threshing type wheat (*Triticum aestivum/ turgidum* type) and oat (*Avena* sp.) were present in the deposits spot-dated to the medieval period, while a single indeterminate wheat grain (*Triticum* sp.) was the only identifiable material from a Roman deposit (L1078B). The low concentration of remains makes it difficult to make any detailed comment regarding diet or the arable economy of the site in either period and the material most likely originated as scattered carbonised debris on the site which became incorporated into feature fills.

Conclusions and statement of potential

The results from the assessment of bulk sample light fractions from land off Bury Road, Wortham, showed only limited input to the deposits of carbonised plant macrofossil remains during both the Roman and medieval periods. Based on the present evidence, it is clear that none of the sampled deposits were receiving large concentrations of carbonised debris from domestic or arable processing activities.

References

Cappers, R.T.J., Bekker R.M. and Jans J.E.A. 2006, *Digital Seed Atlas of the Netherlands. Groningen Archaeological Studies Volume 4*, Barkhuis Publishing, Eelde

Jacomet, S. 2006, *Identification of Cereal Remains from Archaeological Sites* (2nd edn), Laboratory of Palinology and Palaeoecology, Basel University

Kerney, M.P. 1999, *Atlas of the Land and Freshwater Molluscs of Britain and Ireland*, Harley Books, Colchester

Kerney, M.P. and Cameron, R.A.D. 1979, *A Field Guide to Land Snails of Britain and North-West Europe*, Collins, London

							Cereals			No	n-cereal taxa		Ch	arco	М	olluscs	Contaminants				
Trench a	Sample number	Context	Spot date	Volume taken (litres)	Volume processed (litres)	% processed	Cereal grains	Cereal chaff	Notes P	Seeds	Notes	Hazelnut shell	Charcoal>2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules
2	1	104 6	Medi eval	2	1	50 %	Х	-	NF I (1)	_	_	_	_	_	_	-	Х	X	X		_
	2	105 8A	Medi eval	4	2	50 %	-	_	-	_	_	_	_	_	_	_	Х	Х	-	_	_
	3	106 8	Medi eval	2 0	1 0	50 %	X		Tri t (1) , Oa t (1) , NF I (1)	1		1	X	-	X	Cochli copa sp.	X	X	X		1
	4	107 8A	Rom an	2 0	1 0	50 %	- 1	1	1	-	_	- 1	-	_	Х	<i>Trichia</i> hispida group	Х	X	X		-
1	5	107 8B	Rom an	4 0	2 0	50 %	X	1	Tri t (1) , NF I (1)	1		-	X	-	1	-	X	X	X	1	1
	6	108	Medi eval	2	1 0	50 %	_	_	_	_	_	_	_	_	Х	Trichia hispida group	Х	X	_	-	_
	7	108 6	-	1 0	1 0	100	Х	-	Oa t (1) , NF I (4) FT W (1)	-	-	-	х	-	Х	Trichia hispida group Cochli copa	××	X	X	ı	-
	8	108 8	Medi eval	1 0	1	100 %	Х	-	, NF I (3)	-	_	-	Х	-	Х	sp., <i>Trichia</i> <i>hispida</i> group	Х	X X	Х	-	-
	9	109 0	-	1 0	1 0	100 %	_	_	-	-	-	<u>.</u>	X	-	Х	Trichia hispida group from Jan	X	X	-		-

Table 5: Results from the assessment of bulk sample light fractions from land off Bury Road, Wortham. Abbreviations: FTW = free-threshing type wheat (Triticum aestivum/ turgidum); Trit = wheat (Triticum sp.); Oat (Avena sp.); NFI = not formally identified (indeterminate cereal grain)

APPENDIX 3 SPECIFICATION

LAND OFF BURY ROAD, WORTHAM, SUFFOLK IP22 1PW

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION

3rd February 2016

LAND OFF BURY ROAD, WORTHAM, SUFFOLK IP22 1PW ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

1 INTRODUCTION

- 1.1 This specification has been prepared in response to a brief issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (dated 20th January 2016). It provides for an archaeological trial trench evaluation to be carried out prior to the determination of a planning application for residential redevelopment of Land off Bury Road, Wortham, Suffolk IP22 1PW (NGR TM 087 771). The evaluation is required by Suffolk County Council and the LPA, based on advice from SCC AS-CT (Mid Suffolk District Council Planning Ref. TBC).
- 1.2 It is understood that the programme of archaeological investigation should comprise an archaeological field evaluation, to comply with the planning requirement of the local planning authority (on advice from SCC AS-CT). This WSI for archaeological evaluation has been prepared for the approval of SCC AS-CT.
- 1.3 If further work is required following the evaluation, the final decision for such a need will be made by SCCAS-CT, who will require a separate WSI for any such further work.

2 COMPLIANCE

2.1 If AS carried out the evaluation, AS would comply with SCC AS-CT's requirements.

3 SITE AND DEVELOPMENT DESCRIPTION ARCHAEOLOGICAL BACKGROUND

- 3.1 It is proposed to construct a new residential development on land off Bury Road, Wortham. The site lies on the southern side of Bury Road at Wortham, on the western side of Bean's Lane, and extends to some 1.2ha. It is proposed to erect 14 new dwellings to the rear of the site. The frontage part of the site is likely to be left as open space, though a water pipe diversion may need to take place in this area.
- 3.2 The Suffolk Historic Environment Record (HER) confirms that the site is an area of high archaeological potential. Archaeological remains were recorded in 1955 during pipe laying on the site relating to prehistoric, Roman and medieval occupation (HER WTM 008), including evidence for the course of a Roman road passing across the site (HER WTM 009) to join one following Bean's Lane, with a number of ditches. Furthermore, archaeological investigations carried out to the east and south west of the site have recorded Iron Age and Saxon occupation evidence (HER WTM 010 and 044). Wortham Green is also believed to have been a focus for medieval occupation, with remains of this date identified during recent investigations to the west (HER WTM 048).

3.3 The proposed works will cause significant ground disturbance that has the potential to damage any archaeological deposits that exist. The archaeological and historical background of the site will be discussed in the project report and the HER will be consulted (a search will be commissioned).

4 BRIEF FOR THE ARCHAEOLOGICAL EVALUATION SPECIFICATION FOR TRIAL TRENCH EVALUATION GENERAL MANAGEMENT

- 4.1 The principal objectives for the evaluation include:
 - To establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*
 - To identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
 - To evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits, along with the potential for the survival of environmental evidence
 - To provide sufficient information to construct an archaeological conservation strategy dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

4.2 Research Design

- 4.2.1 The regional research frameworks are set out in Glazebrook (1997 and Brown and Glazebrook (2000) and updated by Medlycott and Brown (2008) and Medlycott (2011). Research topics for the Iron Age set out by Bryant (in Brown and Glazebrook 2000, 14-18) include further research into chronologies, precise dating and ceramic assemblages, further research into the development of the agrarian economy (particularly with regard to field systems), research into settlement chronology and dynamics, research into processes of economic and social change during the late Iron Age and Romano-British transition (particularly with regard to the development of Aylesford/Swarling and Roman culture, and also regional differences and tribal polities in the late Iron Age and further research into oppida and ritual sites), further analysis of development of social organisation and settlement form/function in the early and middle Iron Age, further research into artefact production and distribution and the Bronze Age/Iron Age transition. Medlycott and Brown (2008) and Medlycott (2011, 29-32) build on these themes, paying particular attention to chronological and spatial development and variation and adding subjects as the Bronze Age/Iron Age transition and manufacturing and industry.
- 4.2.2 Medlycott (2011, 47) identifies regional variation and tribal distinctions as underlying themes for research in the Roman period. Research topics for the Roman period previously set out by Going and Plouviez (in Brown and Glazebrook 2000, 19-22) include analysis of early and late Roman military developments, further analysis of large and small towns, evidence of food consumption and production, further

research into agricultural production, landscape research (in particular further evidence for potential woodland succession/regression and issues of relict landscapes, as well as further research into the road network and bridging points), further research into rural settlements and coastal issues. Medlycott (2011, 47-48) states that these research areas remain valid and presents updated consideration of them. To these themes Medlycott and Brown (2008) and Medlycott (2011, 47-48) add rural settlements and landscapes, the process of Romanisation in the region, the evidence for the Imperial Fen Estate, and the Roman/Saxon transition.

- 4.2.3 Wade (in Brown and Glazebrook 2000, 23-26) identifies research topics for the rural landscape in the Saxon and medieval periods. These include examination of population during this period (distribution and density, as well as physical structure), settlement (characterisation of form and function, creation and testing of settlement diversity models), specialisation and surplus agricultural production, assessment of craft production, detailed study of changes in land use and the impact of colonists (such as Saxons, Danes and Normans) as well as the impact of the major institutions such as the Church. Ayers (in Brown and Glazebrook, 2000) discusses more 'urban' research topics in more detail. For demography, issues include assessment of population structures, density and mobility, urban sustainability, immigration and rural colonisation and housing/provisioning. For social organisation, issues include assessment of the impact of royal vills, major institutions and the Church on urban settlement, territorial boundaries in proto-urban and urban settlements, the effect of national political developments, ranking and status in settlements, spatial analysis, wealth distribution, specialism, acquisition of raw materials, building form and function, markets and commercial/corporate activity. Economic issues of the above also need to be considered, particularly with regard to industrial zoning. The impact of culture and religion could include issues such as identifying characteristics of urban culture, its growth, complexity and values. The Church and its influence on the burgeoning towns must also be addressed. As Murphy notes in Brown and Glazebrook (2000, 31), urban environmental archaeology should be approached by analysis of environmental 'events', processes and study of relationships with producing sites in the rural hinterland.
- 4.2.4 Medlycott (2011, 57) states that he study of the Anglo-Saxon period still requires further cooperation between historians and archaeologists. Important research issues for this period comprise: the Roman/Anglo-Saxon transitional period; settlement distribution, which suffers from problems associated with the identification of Saxon settlement sites; population modelling and demographics, which has the potential to be advanced by modern scientific methods; differences within the region in terms of settlement type and economic practice and subjects related to this such as links with the continent, trading practices and cultural influences; rural landscapes and settlements, including detailed study of the changes and developments in such settlements over time and the influence of Saxon landscape organisation and settlements on these issues in the medieval period; towns and their relationships with their hinterland; infrastructure, including river management, the identification of ports and harbours and the role of existing infrastructure in shaping the Saxon period landscape; the economy, based on palaeoenvironmental studies; ritual and religion; the effect of the Danish occupation; and artefact studies (Medlycott 2011, 57-59).

- 4.2.5 The issues identified by Ayers (in Brown and Glazebrook, 2000) and Wade (in Brown and Glazebrook, 2000) remain valid research subjects (Medlycott 2011, 70) for the medieval period. The study of landscapes is dominated by issues such as water management and land reclamation for large parts of the region, the economic development of the landscape and the region's potential to reveal information regarding field systems, enclosures, roads and trackways. Linked to the study of the landscape are research issues such as the built environment and infrastructure; the main communication routes through the region need to be identified and synthesis needs to be carried out regarding the significance, economic and social importance of historic buildings in the region (Medlycott 2011, 70-71). Also considered to be important research subjects for the medieval period are rural settlements, towns, industry and the production and processing of food and demographic studies (Medlycott 2011, 70-71).
- 4.2.6 The research subjects identified as important for the post-medieval and modern periods (see Medlycott 2011, 72-80) expand on those set out by Gilman et al (in Brown and Glazebrook, 2000) which focussed on the subjects of fortifications, parks and gardens and industrialisation and manufacture. Medlycott (2011) stresses the importance of the built and environment and the use of the Listed Buildings databases and thematic surveys in understanding this. The subject of industry and infrastructure, which is clearly of great importance for this period, remains a key research subject for the region with particular attention being paid to rural industries, the processing of food for urban markets and the development and character of the region's primary communication roots. Landscapes, and the effect of social changes, such as the Dissolution and the enclosure of greens and commons, on them are considered to be an area of research. The region's military sites and their impact on the development of eastern England, on its landscapes and on its appearance are also considered to be of importance. Towns, their development and their impact on the landscape, require further study. Issues such as economic and social influences of towns on their hinterlands and neighbours are identified as being of importance. as are the development of specific urban forms.
- 4.2.7 As set out above, the principal research objectives will be to identify any further evidence of the prehistoric, Roman and medieval features located during pipe trenching on the site in the 1950s, and specifically to identify any evidence of the Roman road believed to traverse the site and any evidence of medieval occupation of the green.

References

Brown, N and Glazebrook, J (eds), 2000, Research and Archaeology: A Framework for the Eastern Counties. 2. Research Agenda and Strategy, East Anglian Archaeology Occasional Papers 8

Glazebrook, J (eds), 1997, Research and Archaeology: A Framework for the Eastern Counties. 1. Resource Assessment, East Anglian Archaeology Occasional Papers 3

Medlycott, M and Brown, N, 2008, *Revised East Anglian Archaeological Research Frameworks*, www.eaareports/algaoee

Medlycott, M. (ed.) 2011, Research and Archaeology revisited: a revised framework for the East of England, ALGAO East of England Region, East Anglian Archaeology Occasional Papers 24

5 SPECIFICATION TRENCHED EVALUATION

5.1 Details of Senior Project Staff

- 5.1.1 AS has developed a professional and well-qualified team who have undertaken numerous archaeological projects (both desk-based and field evaluations) on all types of developments, including commercial, residential, road schemes and golf courses. AS is a Registered Organisation of the CIfA.
- 5.1.2 Profiles of key project staff are provided (Appendix 2).

A Method Statement is presented
Trial Trench Evaluation Appendix 1

- 5.1.3 The evaluation will conform with the guidelines set down in the brief and the Chartered Institute for Archaeologists Standard and Guidance for Archaeological Evaluations (revised 2014) and Standard and Guidelines for Historic Environment Desk-based Assessment (revised 2014). It will also adhere to the document Standards for Field Archaeology in the East of England (Gurney 2003) and the requirements of the SCC document Requirements for a Trenched Evaluation 2011 Ver. 1.3.
- 5.1.4 SCC AS-CT require a programme of archaeological trial trenching to cover the site of the proposed development, and stipulate that a 330 linear metres of trenching at 1.8m width are excavated within the site, to comprise a *c*.5% sample. Seven trenches each 40m x 1.8m and three trenches of 10m x 1.8m are therefore proposed across this area. A trench plan is appended. The trenches are located to avoid an existing large water pipe traversing the site. AS is happy to review the scale/location of the trench following comment from the client and/or SCC AS-CT.
- 5.1.5 The environmental strategy will adhere to the guidelines issued by English Heritage (now Historic England) (*Environmental Archaeology; A guide to the theory and practice of methods, from sampling and recovery to post-excavation,* Centre for Archaeology Guidelines, 2011). An environmentalist will be invited to visit the site if remains of interest are found. Dr Rob Scaife/Dr John Summers will be the Environmental Coordinator for the project. The specialist will make his/her results known to the regional science advisor who co-ordinates environmental archaeology in the region on behalf of Historic England.

5.1.6 Estimate of time and resources required for each phase, to complete the trial trenching, project archive and the production of an evaluation report.

Trial Excavation

Processing, Cataloguing and Conservation of Finds

Preparation of Report and Archive

c.10-15 Days

Staff on site: a Project Officer and Site Assistant/s (as necessary)

- 5.1.7 In advance of the field work AS will liaise with the County HER to fulfil their requirements for the long term deposition of the project archive. These will encompass: their collection policy, and their financial and technical requirements for long term storage. The resources include provision for the long term-deposition of the project archive.
- 5.1.8 Details of staff and specialist contractors are provided (Appendix 2). The project will be managed by Claire Halpin MCIFA /Jon Murray MCIFA.
- 5.1.9 AS is a member of FAME formerly the Standing Conference of Archaeological Unit Managers (SCAUM) and operates under the 'Health and Safety in Field Archaeology Manual'. A risk assessment and management strategy will be completed prior to the start of works on site.
- 5.1.10 AS is a member of the Council for British Archaeology and is insured under their policy for members.

6 SERVICES

6.1 The client is to advise AS of the position of any services which traverse the site.

7 SECURITY

7.1 Throughout all site works care will be taken to maintain all existing security arrangements, and to minimise disruption.

8 REINSTATEMENT

8.1 No provision has been made for reinstatement, excepting simple backfilling.

9 REPORT REQUIREMENTS

- 9.1 The report will include (as a minimum):
- a) the archaeological background

- b) a consideration of the aims and methods adopted in the course of the recording
- c) a detailed account of the nature, location, extent, date, significance and quality of any archaeological evidence recorded.
- d) Excavation methodology and detailed results including a suitable conclusion and discussion
- e) plans and sections of any recorded features and deposits
- f) discussion and interpretation of the evidence. An assessment of the projects significance in a regional and local context and appendices.
- g) All specialist reports or assessments
- h) A concise non-technical summary of the project results
- i) A HER summary sheet
- j) An OASIS summary sheet
- 9.2 Draft hard and digital PDF copies of the report will be submitted to SCC ASCT for approval. If any revisions are required, final hard and digital PDF copies will be supplied to SCC AS-CT for deposition with the HER.
- 9.3 The project details will be submitted to the OASIS database, and the online summary form will be appended to the project report.
- 9.4 A summary report will be submitted suitable for inclusion in the annual roundups of *Proceedings of the Suffolk Institute of Archaeology and History*, dependent on the results of the project.

10 ARCHIVE

- 10.1 The requirements for archive storage will be agreed with the County HER.
- 10.2 The archive will be deposited within six months of the conclusion of the fieldwork. It will be prepared in accordance with the UK Institute for Conservation's Conservation Guideline No.2 and according to the document Deposition of Archaeological Archives in Suffolk (SCC AS Conservation Team, 2010). A unique event number will be obtained from the County HER Officer.
- 10.3 The full archive of finds and records will be made secure at all stages of the project, both on and off site. Arrangements will be made at the earliest opportunity for the archive to be accessed into the collections of Suffolk HER; with the landowner's permission in the case of any finds. It is acknowledged that it is the responsibility of the field investigation organisation to make these arrangements with the landowner and HER. The archive will be adequately catalogued, labelled and packaged for transfer and storage in accordance with the guidelines set out in the United Kingdom Institute for Conservation's *Conservation Guidelines No.2* and the other relevant reference documents.
- 10.4 Archive records, with inventory, are to be deposited, as well as any donated finds from the site, at the county HER and in accordance with their requirements. The archive will be quantified, ordered, indexed, cross-referenced and checked for

internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data. A unique accession number will be obtained from the HER.

11 MONITORING and DISCHARGE OF THE ARCHAEOLOGICAL PLANNING CONDITION

- 11.1 It is understood that SCCAS-CT will monitor the project on behalf of the local planning authority.
- 11.2 **Notification** Archaeological Solutions will give SCCAS-CT notification prior to the commencement of the project on site
- 11.3 **Monitoring** SCCAS-CT will be responsible for monitoring progress and standards throughout the project, both on site and during the post-survey/report stages, to ensure compliance with the planning condition, the approved WSI and any subsequent Brief and approved WSI for further fieldwork, analyses and publication.
- 11.4 Any variations to the WSI will be agreed in advance with SCCAS-CT prior to them being carried out.

APPENDIX 1 METHOD STATEMENT

Method Statement for the recording of archaeological remains

The archaeological evaluation will be conducted in accordance with the project brief, and the code of the Chartered Institute for Archaeologists.

1 Mechanical Excavation

- 1.1 A mechanical excavator fitted with a wide toothless bucket will be used to remove the topsoil/overburden. The machine will be powerful enough for a clean job of work and be able to mound spoil neatly, at a safe distance from the trench edges.
- 1.2 The mechanical stripping will be controlled, and the mechanical excavator will only operate under the full-time supervision of an experienced archaeologist. The trenches will be stripped to the natural horizon or the first archaeological horizon (whichever comes first).

2 Site Location Plan

2.1 On conclusion of the mechanical excavation, a `site location plan', based on the current Ordnance Survey 1:1250 map and indicating site north, will be prepared. This will be supplemented by an `area plan' at 1:200 (or 1:100) which will show the location of the area(s) investigated in relationship to the development area, OS grid and site grid.

3 Manual Cleaning and Base Planning of Archaeological Features

3.1 Exposed areas will be hand-cleaned to define archaeological features sufficient to produce a base plan.

4 Full Excavation

Excavation of Stratified Sequences

The trenches will be excavated according to phase, from the most recent to the earliest, and the phasing of features will be distinguished by their stratigraphic relationships, fills and finds.

Deep features e.g. quarry holes, may incorporate stratified deposits which will be excavated by hand-dug sections and recorded.

Excavation of Buildings

Building remains are likely to comprise stake holes, postholes and slots/gullies, masonry foundations and low masonry walls. Associated features may be present e.g. hearths.

The features comprising buildings will be excavated fully and in plan/phase, to a level sufficient for the requirements of an evaluation.

Full Excavation

Industrial remains and intrinsically interesting features e.g hearths, burials will clearly merit full excavation, though will be excavated sufficient to characterise such deposits within the context of an evaluation.

Discrete features associated with possible structures and/or settlement will be fully excavated, again sufficient to characterise them for the purposes of an evaluation. Otherwise discrete features (eg pits, postholes) will be half-sectioned.

Ditches

The ditches will be excavated in segments up to 2m long, and the segments will be placed to provide adequate coverage of the ditches, establish their relationships and obtain samples and finds.

5 Written Record

- 5.1 All archaeological deposits and artefacts encountered during the course of the excavation will be fully recorded on the appropriate context, finds and sample forms.
- 5.2 The site will be recorded using AS.'s excavation manual which is directly comparable to those used by other professional archaeological organisations, including English Heritage's own Central Archaeological Service.

6 Photographic Record

6.1 An adequate photographic record of the investigations will be made. It will include black and white prints and colour transparencies (on 35mm) illustrating in both detail and general context the principal features and finds discovered. It will also include 'working and promotional shots' to illustrate more generally the nature of the archaeological operations. The black and white negatives and contacts will be filed, and the colour transparencies will be mounted using appropriate cases. All photographs will be listed and indexed.

7 Drawn Record

7.1 A record of the full extent, in plan, of all archaeological deposits encountered will be drawn on A1 permatrace. The plans will be related to the site, or OS, grid and be drawn at a scale of 1:50 or 1:20, as appropriate. In addition where appropriate, e.g. recording an inhumation, additional plans at 1:10 will be produced. The sections of all archaeological contexts will be drawn at a scale of 1:10 or, where appropriate, 1:20. The OD height of all principal strata and features will be calculated and indicated on the appropriate plans and sections.

8 Recovery of Finds

GENERAL

The principal aim is to ensure that adequate provision is made for the recovery of finds from all archaeological deposits.

The Small Finds, e.g. complete pots or metalwork, from all excavations will be 3-dimensionally recorded.

A metal detector will be used to enhance finds recovery. The metal detector survey will be conducted on conclusion of the topsoil stripping, and thereafter during the course of the excavation. The spoil tips will also be surveyed. Regular metal detector surveys of the excavation area and spoil tips will reduce the loss of finds to unscrupulous users of metal detectors (treasure hunters). All non-archaeological staff working on the site should be informed that the use of metal detectors is forbidden.

In the event of items considered as being defined as treasure being found, then the requirements of the Treasure Act 1996 (with subsequent amendments) will be followed. Any such finds encountered during the investigation will be reported immediately to the Suffolk Portable Antiquities Scheme Finds Liaison Officer whoo will in turn inform the Coroner within 14 days

WORKED FLINT

When flint knapping debris is encountered large-scale bulk samples will be taken for sieving.

POTTERY

It is important that the excavators are aware of the importance of pottery studies and therefore the recovery of good ceramic assemblages.

The pottery assemblages are likely to provide important evidence to be able to date the structural history and development of the site.

The most important assemblages will come from 'sealed' deposits which are representative of the nature of the occupation at various dates, and indicate a range of pottery types and forms available at different periods.

`Primary' deposits are those which contain sherds contemporary with the soil fill and in simple terms this often means large sherds with unabraded edges. The sherds have usually been deposited shortly after being broken and have remained undisturbed. Such sherds are more reliable in indicating a more precise date at which the feature was `in use'. Conversely, `secondary' deposits are those which often have small, heavily abraded sherds lacking obvious conjoins. The sherds are derived from earlier deposits.

HUMAN BONE

Any human remains present would not normally be excavated at the stage of an evaluation, but would be protected and preserved in situ, on advice from SCC ASCT. Should human remains be discovered and be required to be removed, the coroner will be informed and a licence from the Ministry of Justice sought immediately; both the client and the monitoring officer will also be informed. Any excavation of human remains at the stage of an evaluation would only be carried out following advice from SCC AS-CT. Excavators would be made aware, and comply with, provisions of Section 25 of the Burial Act of 1857 and pay due attention to the requirements of Health and Safety.

ANIMAL BONE

Animal bone is one of the principal indicators of diet. As with pottery the excavators will be alert to the distinction of primary and secondary deposits. It will also be important that the bone assemblages are derived from dateable contexts. All animal bone will be collected.

ENVIRONMENTAL SAMPLING

The sampling will adhere to the guidelines prepared by English Heritage (now Historic England), and the specialist will make his/her results known to the regional science advisor who co-ordinates environmental archaeology in the region on behalf of Historic England. The project will also accord with the guidelines of the English Heritage (now Historic England) document *Environmental Archaeology, a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines 2011.

Provision will be made for the sampling of appropriate materials for specialist and/or scientific analysis (e.g. radiocarbon dating, environmental analysis). The location of samples will be 3-dimensionally recorded and they will also be shown on an appropriate plan. AS has its own environmental sampling equipment (including a pump and transformer) and, if practical, provision will be made to process the soil samples during the fieldwork stage of the project.

If waterlogged remains are found advice on sampling will be obtained on site from Dr Rob Scaife/Dr John Summers. Dr Rob Scaife/Dr Summers and AS will seek advice from the HE Regional Scientific Advisor if significant environmental remains are found.

The study of environmental archaeology seeks to understand the local and near-local environment of the site in relation to phases of human activity and as such is an important and integral part of any archaeological study.

Environmental remains, both faunal and botanical, along with pedological and sedimentological analyses may be used to understand the environment and the impact of human activity.

There may be a potential for the recovery of a range of environmental remains (ecofacts) from which data pertaining to past environments, land use and agricultural economy should be forthcoming.

Sampling strategies on evaluations aim to determine the potential of the site for both biological remains (plants, small vertebrates) and small sized artefacts which would otherwise not be collected by hand. The number/range of samples taken will represent the range of feature types encountered, but with an aim of at least three samples from each feature type.

For plant remains, the samples taken at evaluation stage would aim to characterise:

- The range of preservation types (charred, mineral-replaced, waterlogged) and their quality
- Any differences in remains from dated/undated features
- Variation between different feature types/areas

To realise the potential of the environmental material encountered, a range of specialists from different disciplines is likely to be required. The ultimate goal will be the production of an interdisciplinary environmental study which can be of value to an understanding of, and integrated with, the archaeology.

Organic remains may allow study of the contemporary landscape (occupation/industrial/agricultural impact and land use) and also changes after the abandonment of the site.

The nature of the environmental evidence

Aspects of sampling and analysis may be divided into four broad categories; faunal remains, botanical remains, soils/sediments and radiocarbon dating measurements.

- **a) Faunal remains:** These comprise bones of macro and microfauna, birds, molluscs and insects.
- **a.i) Bones:** The study of the animal bone remains, in particular domestic mammals, domestic birds and marine fish will enhance understanding of the development of the settlement in terms of the local economy and also its wider influence through trade.

The study of the small animal bones will provide insight into the immediate habitat of any settlement.

The areas of study covered may include all of the domestic mammal and bird species, wild and harvested mammal, birds, marine and fresh water fish in addition to the small mammals, non-harvest birds, reptiles and amphibia.

Domestic mammalian stock, domestic birds and harvest fish

The domestic animal bone will provide insight into the different phases of development of any occupation and how the population dealt with the everyday aspect of managing and utilising all aspects of the animal resource.

Small animal bones

Archaeological excavation has a wide role in understanding humans' effect on the countryside, the modifications to which have in turn affected and continue to affect their own existence. Small animals provide information about changing habitats and thereby about human impact on the local environment.

- **a.ii) Molluscs:** Freshwater and terrestrial molluscs may be present in ditch and pit contexts which are encountered. Sampling and examination of molluscan assemblages if found will provide information on the local site environment including environment of deposition.
- **a.iii) Insects:** If suitable waterlogged contexts (pit, pond and ditch fills) are encountered (which can potentially be expected to be encountered on the project), sampling and assessment will be carried out in conjunction with the analysis of waterlogged plant remains (primarily seeds) and molluscs. Insect data may provide information on local site environment (cleanliness etc.) as well as proxies for climate and vegetation communities.
- **b) Botanical remains:** Sampling for seeds, wood, pollen and seeds are the essential elements which will be considered. The former are most likely to be charred but possibly also waterlogged should any wells/ponds be encountered.
- **b.i) Pollen analysis:** Sampling and analysis of the primary fills and any stabilisation horizons in ditch and pit contexts which may provide information on the immediate vegetation environment including aspects of agriculture, food and subsistence. These data will be integrated with seed analysis.
- **b.ii) Seeds:** It is anticipated that evidence of cultivated crops, crop processing debris and associated weed floras will be present in ditches and pits. If waterlogged features/sediments are encountered (for example, wells/ponds) these will be sampled in relation to other environmental elements where appropriate (particularly pollen, molluscs and possibly insects).
- c) Soils and Sediments: Characterisation of the range of sediments, soils and the archaeological deposits are regarded as crucial to and an integral part of all other

aspects of environmental sampling. This is to afford primary information on the nature and possible origins of the material sampled. It is anticipated that a range of 'on-site' descriptions will be made and subsequent detailed description and analysis of the principal monolith and bulk samples obtained for other aspects of the environmental investigation. Where considered necessary, laboratory analyses such as loss on ignition and particle size may also be undertaken. A geoarchaeologist will be invited to visit the site as necessary to advise on sampling.

d) Radiocarbon dating: Archaeological/artifactual dating may be possible for most of the contexts examined, but radiocarbon dating should not be ruled out

Sampling strategies

Provision will be made by the environmental co-ordinator that suitable material for analysis will be obtained. Samples will be obtained which as far as possible will meet the requirements of the assessment and any subsequent analysis.

- **a) Soil and Sediments:** Samples taken will be examined in detail in the laboratory. An overall assessment of potential will be carried out. Analysis of particle size and loss on ignition, if required would be undertaken as part of full analysis if assessment demonstrates that such studies would be of value.
- **b) Pollen Analysis:** Contexts which require sampling may include stabilisation horizons and the primary fills of the pits and ditches, and possibly organic well/pond fills. It is anticipated that in some cases this will be carried out in conjunction with sampling for other environmental elements, such as plant macrofossils, where these are also felt to be of potential.
- c) Plant Macrofossils: Principal contexts will be sampled directly from the excavation for seeds and associated plant remains. It is anticipated that primarily charred remains will be recovered, although provision for any waterlogged sequences will also be made (see below). Sampling for the former will, where possible (that is, avoiding contamination) comprise samples of an average of 40-60 litres which will be floated in the AS facilities for extraction of charred plant remains. Both the flot and residues will be kept for assessment of potential and stored for any subsequent detailed analysis. The residues will also be examined for artifactual remains and also for any faunal remains present (cf. molluscs). Where pit, ditch, well or pond sediments are found to contain waterlogged sediments, principal contexts will be sampled for seeds and insect remains. Standard 5 litre+ samples will be taken which may be sub-sampled in the laboratory for seed remains if the material is found to be especially rich. The full sample will provide sufficient material for insect assessment and analysis.
- d) Bones: Predicting exactly how much of what will be yielded by the excavation is clearly very difficult prior to excavation and it is proposed that in order to efficiently target animal bone recovery there should be a system of direct feedback from the archaeozoologist to the site staff during the excavation, allowing fine tuning of the excavation strategy to concentrate on the recovery of animal bones from features which have the highest potential. This will also allow the faunal remains to materially

add to the interpretation as the excavation proceeds. Liaison with other environmental specialists will need to take place in order to produce a complete interdisciplinary study during this phase of activity. In addition, this feedback will aid effective targeting of the post-excavation analysis.

- **e) Insects:** If contexts having potential for insect preservation are found, samples will be taken in conjunction with waterlogged plant macrofossils. Samples of 5 litres will suffice for analysis and will be sampled adjacent to waterlogged seed samples and pollen; or where insufficient context material is available provision will be made for exchange of material between specialists.
- **f) Molluscs:** Terrestrial and freshwater molluscs. Samples will be taken from a column from suitable ditches. Pits may be sampled, based on the advice of the Environmental Consultant and / or Historic England Regional Advisor. Provision will also be made for molluscs obtained from other sampling aspects (seeds) to be examined and/or kept for future requirements.
- **g) Archiving:** Environmental remains obtained should be stored in conditions appropriate for analysis in the short to medium term, that is giving the ability for full analysis at a later date without any degradation of samples being analysed. The results will be maintained as an archive at AS and supplied to the HE regional coordinator as requested.

Waterlogged Deposits/Remains

Should waterlogged deposits (such as wells/deep ditches) be encountered, provision has been made for controlled hand excavation and sampling. Dr Rob Scaife/Dr John Summers will visit to advise on sampling as required, and AS will take monolith samples as necessary for the recovery of palaeoenvironmental information and dating evidence.

Scientific/Absolute Dating

• Samples will be obtained for potential scientific/absolute dating as appropriate (eg Carbon-14).

Provision will be made for the sampling of appropriate materials for specialist and/or scientific analysis (e.g. radiocarbon dating, environmental analysis). The location of samples will be 3-dimensionally recorded and they will also be shown on an appropriate plan. AS has its own environmental sampling equipment (including a pump and transformer) and, if practical, provision will be made to process the soil samples during the fieldwork stage of the project.

If waterlogged remains are found they will be sampled by Dr Rob Scaife/Dr John Summers. Dr Rob Scaife and AS will seek advice from the HE Regional Scientific Advisor if significant environmental remains are found.

FINDS PROCESSING

The project director will have overall responsibility for the finds and will liaise with AS's own finds personnel and the relevant specialists. A person with particular responsibility for finds on site will be appointed for the excavation. The person will ensure that the finds are properly labelled and packaged on site for transportation to AS's field base. The finds processing will take place in tandem with the excavations and will be under the supervision of AS's Finds Officer.

The finds processing will entail first aid conservation, cleaning (if appropriate), marking (if appropriate), categorising, bagging, labelling, boxing and basic cataloguing (the compilation of a Small Finds Catalogue and quantification of bulk finds) i.e. such that the finds are ready to be made available to the specialists. The Finds Officer, having been advised by the Project Officer and relevant specialists, will select material for conservation. AS's Finds Officer, in conjunction with the Project Officer, will arrange for the specialists to view the finds for the purpose of report writing.

APPENDIX 2 ARCHAEOLOGICAL SOLUTIONS LIMITED: PROFILES OF STAFF and SPECIALISTS

DIRECTOR Claire Halpin BA MCIfA

Qualifications: Archaeology and History BA Hons (1974-77). Oxford University Dept for External Studies In-Service Course (1979-1980). Member of Institute of Archaeologists since 1985: IFA Council member (1989-1993)

Experience: Claire has 25 years' experience in field archaeology, working with the Oxford Archaeological Unit and English Heritage's Central Excavation Unit (now the Centre for Archaeology). She has directed several major excavations (e.g. Barrow Hills, Oxfordshire, and Irthlingborough Barrow Cemetery, Northants), and is the author of many excavation reports e.g. St Ebbe's, Oxford: Oxoniensia 49 (1984) and 54 (1989). Claire moved into the senior management of field archaeological projects with Hertfordshire Archaeological Trust (HAT) in 1990, and she was appointed Manager of HAT in 1996. From the mid 90s HAT has enlarged its staff complement and extended its range of skills. In July 2003 HAT was wound up and Archaeological Solutions was formed. The latter maintains the same staff complement and services as before. AS undertakes the full range of archaeological services nationwide.

DIRECTOR Tom McDonald MCIfA

Qualifications: Member of the CIfA

Experience: Tom has twenty years' experience in field archaeology, working for the North-Eastern Archaeological Unit (1984-1985), Buckinghamshire County Museum (1985), English Heritage (Stanwick Roman villa (1985-87) and Irthlingborough barrow excavations, Northamptonshire (1987)), and the Museum of London on the Royal Mint excavations (1986-7)., and as a Senior Archaeologist with the latter (1987-Dec 1990). Tom joined HAT at the start of 1991, directing several major multi-period excavations, including excavations in advance of the A41 Kings Langley and Berkhamsted bypasses, the A414 Cole Green bypass, and a substantial residential development at Thorley, Bishop's Stortford. He is the author of many excavation reports, exhibitions etc. Tom is AS's Health and Safety Officer and is responsible for site management, IT and CAD. He specialises in prehistoric and urban archaeology, and is a Lithics Specialist.

OFFICE MANAGER Rose Flowers

Experience: Rose has a very wide range of book-keeping skills developed over many years of employment with a range of companies, principally Rosier Distribution Ltd, Harlow (now part of Securicor) where she managed eight accounts staff. She has a good working knowledge of both accounting software and Microsoft Office.

OFFICE ADMINISTRATOR Sarah Powell

Experience: Sarah is an experienced and efficient administrative assistant with more than ten years' experience of working in a variety of office environments. She is IT literate and proficient in the use of Microsoft Word, particularly Microsoft Excel. She has completed NVQ

2 and 3 in Administration and Office Skills. She recently attended and completed a course in Microsoft Excel – Advanced Level.

SENIOR PROJECTS MANAGER Jon Murray BA MCIfA

Qualifications: History with Landscape Archaeology BA Hons (1985-1988).

Experience: Jon has been employed by HAT (now AS) continually since 1989, attaining the position of Senior Projects Manager. Jon has conducted numerous archaeological investigations in a variety of situations, dealing with remains from all periods, throughout London and the South East, East Anglia, the South and Midlands. He is fluent in the execution of (and now projectmanaes) desk-based assessments/EIAs, historic building surveys (for instance the recording of the Royal Gunpowder Mills at Waltham Abbey prior to its rebirth as a visitor facility), earthwork and landscape surveys, all types of evaluations/excavations (urban and rural) and environmental archaeological investigation (working closely with Dr Rob Scaife), preparing many hundreds of archaeological reports dating back to 1992. Jon has also prepared numerous publications; in particular the nationally-important Saxon site at Gamlingay, Cambridgeshire (Anglo-Saxon Studies in Archaeology and History). Other projects published include Dean's Yard, Westminster (Medieval Archaeology), Brackley (Northamptonshire Archaeology), and a medieval cemetery in Haverhill he excavated in 1997 (Proceedings of the Suffolk Institute of Archaeology). Jon is a member of the senior management team, principally preparing specifications/tenders, co-ordinating and managing the field teams. He also has extensive experience in preparing and supporting applications for Scheduled Monument Consent/Listed Building Consent

PROJECT OFFICER Zbigniew Pozorski MA

Qualifications: University of Wroclaw, Poland, Archaeology (1995-2000, MA 2003)

Experience: Zbigniew has archaeological experience dating from 1995 when as a student he joined an academic group of excavators. He was involved in numerous archaeological projects throughout the Lower Silesia region in southwest Poland and a number of projects in old town of Wroclaw. During his university years he specialized in medieval urban archaeology. He had his own research project working on an early/high medieval stronghold in Pietrzykow. He was a member of a University team which located and Excavated an unknown high medieval castle in Wierzbna, Poland. Zbigniew has worked for archaeological contractors in Poland on several projects as a supervisor where he gained experience in all types of evaluations and excavations in urban and rural areas. Recently he worked in Ireland where he completed two large long-term projects for Headland Archaeology Ltd. He joined AS in January 2008 as a Project Officer. Zbigniew is qualified in the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work (St Johns Ambulance).

SUPERVISOR Gareth Barlow MSc

Qualifications: University of Sheffield, MSc Environmental Archaeology and Palaeoeconomy (2002-2003)

King Alfred's College, Winchester, Archaeology BA (Hons) (1999-2002)

Experience: Gareth worked on a number of excavations in Cambridgeshire before pursuing his degree studies, and worked on many archaeological projects across the UK during his university days. Gareth joined AS in 2003 and has worked on numerous archaeological projects throughout the South East and East Anglia with AS. Gareth was promoted to

Supervisor in the Summer 2007. Gareth is qualified in the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work (St Johns Ambulance).

SUPERVISOR

Kamil Orzechowski BA, MA

Experience: Kamil Orzechowski joined AS in 2012, as an experienced field archaeologist after spending five years in various commercial archaeology units working on large-scale construction projects including railways and pipelines. Before becoming a field archaeologist, Kamil graduated from the Institute of Ethnology and Cultural Anthropology, Adam Mickiewicz University, Poznan, Poland. Kamil is qualified in the Construction Skills Certification Scheme (CSCS).

SUPERVISOR

Julie Walker BSc MA PCIfA

Qualifications: Queens University Belfast: BSc Archaeology (2007-2010)

University of Southampton: MA Osteoarchaeology (2010-2011)

Experience: Julie is a member of the Institute for Archaeologists (PIfA grade) and the British Association for Biological Anthropology and Osteoarchaeology. Professionally, Julie has worked for organisations including Albion Archaeology (2014) and Oxford Archaeology East (2014). Julie has a thorough knowledge and experience of archaeological fieldwork and post-excavation practice. Julie's personal research interests include congenital and developmental defects in the Romano-British and Anglo-Saxon periods and she has made several conference presentations on this subject.

SUPERVISOR

Matthew Baker BA MA

Qualifications: Cardiff University: BA Archaeology (2008-2011)

Cardiff University: MA Archaeology (2012-2013)

Experience: Since concluding his higher education, Matthew has worked for a number of archaeological projects and organisations including GeoArch (Cardiff), the Damerham Archaeology Project and Cambridge University. He has a gained a varied experience of archaeological fieldwork and post-excavation practice including geophysical survey/interpretation and isotopic analysis.

SUPERVISOR Kerrie Bull BSc

Qualifications: University of Reading: BSc Archaeology (2008-2011)

Experience: During her undergraduate degree at the University of Reading Kerrie worked on the Lyminge Archaeological Project (2008), the Silchester 'Town Life' Project (2009) and the Ecology of Crusading Research Programme (2011). Through her academic and professional career, Kerrie has gained good experience of archaeological fieldwork and post-excavation techniques.

SUPERVISOR

Thomas Muir BA MSc

Qualifications: University of Edinburgh: BA Archaeology (2007-2011)

University of Edinburgh: MSc Mediterranean Archaeology (2011-2012)

Experience: Thomas is an affiliate member of the Institute for Archaeologists. Throughout his higher education, Thomas volunteered on research excavations at sites including Port Sec Sud, Bourges (France; 2008), the Hill of Barra (the Hillforts of Strathdon Project; 2010)

and Prastio Mesorotsos, Cyprus (2010-2012). In 2013 Thomas returned to Prastio Mesorotsos – a research project run by the Cyprus American Archaeological Institute – in a supervisory capacity. Professionally, Thomas has worked for CFA Archaeology (2013) and thereafter AS Ltd. Through his academic and professional career, Thomas has gained a broad working knowledge of archaeological fieldwork and post-excavation techniques including environmental sampling, on-site recording and digital archiving.

SUPERVISOR Vincent Monahan BA

Qualifications: University College Dublin: BA Archaeology (2007-2012)

Experience: Professionally, Vincent has worked for various archaeological groups and projects including the Stonehenge Riverside Project (Site Assistant/ Supervisor; 2008), University College Dublin Archaeological Society (Auditor; 2009-2010) and the Castanheiro do Vento Research Project (Site Assistant/ Supervisor; 2009-2010 (seasonal)). Vincent has gained good experience of archaeological fieldwork including excavation, various sampling techniques and on-site recording. He also gained experience of museum-grade curatorial practice during his undergraduate degree.

PROJECT OFFICER (DESK-BASED ASSESSMENTS) Kate Higgs MA (Oxon)

Qualifications: University of Oxford, St Hilda's College Archaeology and Anthropology MA (Oxon) (2001-2004)

Experience: Kate has archaeological experience dating from 1999, having taken part in clearance, surveying and recording of stone circles in the Penwith area of Cornwall. During the same period, she also assisted in compiling a database of archaeological and anthropological artefacts from Papua New Guinea, which were held in Scottish museums. Kate has varied archaeological experience from her years at Oxford University, including participating in excavations at a Roman amphitheatre and an early church at Marcham/Frilford in Oxfordshire, with the Bamburgh Castle Research Project in Northumberland, which also entailed the excavation of human remains at a Saxon cemetery, and also excavating, recording and drawing a Neolithic chambered tomb at Prissé, France. Kate has also worked in the environmental laboratory at the Museum of Natural History in Oxford, and as a finds processor for Oxford's Institute of Archaeology. Since joining AS in November 2004, Kate has researched and authored a variety of reports, concentrating on desk-based assessments in advance of archaeological work and historic building recording.

ASSISTANT PROJECTS MANAGER (POST-EXCAVATION) Andrew Newton MPhil PCIFA

Qualifications: University of Bradford, MPhil (2002-04)

University of Bradford, BSc (Hons) Archaeology (1998-2002)

University of Bradford, Dip Professional Archaeological Studies (2002)

Experience: Andrew has carried out geophysical surveys for GeoQuest Associates on sites throughout the UK and has worked as a site assistant with BUFAU. During 2001 he worked as a researcher for the Yorkshire Dales Hunter-Gatherer Research Project, a University of Bradford and Michigan State University joint research programme, and has carried out voluntary work with the curatorial staff at Beamish Museum in County Durham. Andrew is a member of the Society of Antiquaries of Newcastle-upon-Tyne and a Practitioner Member of the Institute for Archaeologists. Since joining AS in early Summer 2005, as a Project Officer writing desk-based assessments, Andrew has gained considerable experience in post-excavation work. His principal role with AS is conducting post-excavation research and authoring site reports for publication. Significant post-

excavation projects Andrew has been responsible for include the Ingham Quarry Extension, Fornham St. Genevieve, Suffolk – a site with large Iron Age pit clusters arranged around a possible wetland area; the late Bronze Age to early Iron Age enclosure and early Saxon cremation cemetery at the Chalet Site, Heybridge, Essex; and, Church Street, St Neots, Cambridgeshire, an excavation which identified the continuation of the Saxon settlement previously investigated by Peter Addyman in the 1960s. Andrew also writes and co-ordinates Environmental Impact Assessments and has worked on a variety of such projects across southern and eastern England. In addition to his research responsibilities Andrew undertakes outreach and publicity work and carries out some fieldwork.

PROJECT OFFICER (POST-EXCAVATION) Antony Mustchin BSc MSc DipPAS

Qualifications: University of Bradford BSc (Hons) Bioarchaeology (1999-2003)

University of Bradford MSc Biological Archaeology (2004-2005)

University of Bradford Diploma in Professional Archaeological Studies (2003)

Experience: Antony has over 14 years' experience in field archaeology, gained during his higher education and in the professional sector. Commercially in the UK, Antony has worked for Archaeology South East (2003), York Archaeological Trust (2004) and Special Archaeological Services (2003). He has also undertaken a six-month professional placement as Assistant SMR Officer/ Development Control Officer with Kent County Council (2001-2002). Antony's academic interests have led to his gaining considerable research excavation experience across the North Atlantic region. He has worked for projects and organisations including the Old Scatness and Jarlshof Environs Project, Shetland (2000-2003), the Viking Unst Project, Shetland (2006-2007), the Heart of the Atlantic Project Føroys Fornminnissavn, Faroe Islands (2006-2008) and City University New York/ National Museum of Denmark/ Greenland National Museum and Archives, Greenland (2006 and 2010). Shortly before Joining Archaeological Solutions in November 2011, Antony spent three years working for the Independent Commission for the Location of Victims Remains, assisting in the search for and forensic recovery of 'the remains of victims of paramilitary violence ("The Disappeared") who were murdered and buried in secret arising from the conflict in Northern Ireland'. Antony has a broad experience of fieldwork and post-excavation practice including specialist (archaeofauna), teaching, supervisory and directing-level posts.

POTTERY, LITHICS AND CBM RESEARCHER Andrew Peachey BA MCIfA

Qualifications: University of Reading BA Hons, Archaeology and History (1998-2001) Experience: Andrew joined AS (formerly HAT) in 2002 as a pottery researcher, and rapidly expanded into researching CBM and lithics. Andrew specialises in prehistoric and Roman pottery and has worked on numerous substantial assemblages, principally from across East Anglia but also from southern England. Recent projects have included a Neolithic site at Coxford, Norfolk, an early Bronze Age domestic site at Shropham, Norfolk, late Bronze Age material from Panshanger, Hertfordshire, middle Iron Age pit clusters at Ingham, Suffolk and an Iron Age and early Roman riverside site at Dernford, Cambridgshire. Andrew has worked on important Roman kiln assemblages, including a Nar Valley ware production site at East Winch Norfolk, a face-pot producing kiln at Hadham, Hertfordshire and is currently researching early Roman Horningsea ware kilns at Waterbeach, Cambridgeshire. Andrew is an enthusiastic member of the Study Group for Roman Pottery, and also undertakes pottery and lithics analysis as an 'external' specialist for a range of archaeological units and local societies in the south of England.

POTTERY RESEARCHER Peter Thompson MA

Qualifications: University of Bristol BA (Hons), Archaeology (1995-1998)

University of Bristol MA; Landscape Archaeology (1998-1999)

Experience: As a student, Peter participated in a number of projects, including the excavation of a Cistercian monastery cemetery in Gascony and surveying an Iron Age promontory hillfort in Somerset. Peter has two years excavation experience with the Bath Archaeological Trust and Bristol and Region Archaeological Services which includes working on a medieval manor house and a post-medieval glass furnace site of national importance. Peter joined HAT (now AS) in 2002 to specialise in Iron Age, Saxon and medieval pottery research and has also produced desk-based assessments. Pottery reports include an early Iron pit assemblage and three complete Early Anglo-Saxon accessory vessels from a cemetery in Dartford, Kent.

PROJECT OFFICER (OSTEOARCHAEOLOGY) Dr Julia Cussans

Qualifications: University of Bradford, PhD (2002-2010)

University of Bradford, BSc (Hons) Bioarchaeology (1997- 2001) University of Bradford, Dip. Professional Archaeological Studies (2001)

Experience: Julia has over 14 years of archaeozoological experience. Whilst undertaking her part time PhD she also worked as a specialist on a variety of projects in northern Britain including Old Scatness (Shetland), Broxmouth Iron Age Hillfort and Binchester Roman Fort. Additionally Julia has extensive field experience and has held lead roles in excavations in Shetland and the Faroe Islands including, Old Scatness, a large multi-period settlement centred on an Iron Age Broch; the Viking Unst Project, an examination of Viking and Norse houses on Britain's most northerly isle; the Laggan Tormore Pipeline (Firths Voe), a Neolithic house site in Shetland; the Heart of the Atlantic Project, an examination of Viking settlement in the Faroes and Við Kirkjugarð, an early Viking site on Sanday, Faroe Islands. Early on in her career Julia also excavated at Sedgeford, Norfolk as part of SHARP and in Pompeii, Italy as part of the Anglo-American Project in Pompeii. Since joining AS in October 2011 Julia has worked on animal bone assemblages from Beck Row, a Roman agricultural site at Mildenhall, Suffolk and Sawtry, an Iron Age, fen edge site in Cambridgeshire. Julia is a full and active member of the International Council for Archaeozoology, the Professional Zooarchaeology Group and the Association for Environmental Archaeology.

ENVIRONMENTAL ARCHAEOLOGISTDr John Summers

Qualifications: 2006-2010: PhD "The Architecture of Food" (University of Bradford)

2005-2006: MSc Biological Archaeology (University of Bradford) 2001-2005: BSc Hons. Bioarchaeology (University of Bradford)

Experience: John is an archaeobotanist with a primary specialism in the analysis of carbonised plant macrofossils and charcoal. Prior to joining Archaeological Solutions, John worked primarily in Atlantic Scotland. His research interests involve using archaeobotanical data in combination with other archaeological and palaeoeconomic information to address cultural and economic research questions. John has made contributions to a number of large research projects in Atlantic Scotland, including the Old Scatness and Jarlshof Environs Project (University of Bradford), the Viking Unst Project (University of Bradford) and publication work for Bornais Mound 1 and Mound 2 (Cardiff University). He has also worked with plant remains from Thruxton Roman Villa, Hampshire, as part of the Danebury Roman Environs Project (Oxford University/ English Heritage). John's role at AS is to analyse and report on assemblages of plant macro-remains from environmental samples and provide

support and advice regarding environmental sampling regimes and sample processing. John is a member of the Association for Environmental Archaeology.

SENIOR GRAPHICS OFFICER Kathren Henry

Experience: Kathren has over twenty-five years' experience in archaeology, working as a planning supervisor on sites from prehistoric to late medieval date, including urban sites in London and rural sites in France/ Italy, working for the Greater Manchester Archaeological Unit, Passmore Edwards Museum, DGLA and Central Excavation Unit of English Heritage (at Stanwick and Irthlingborough, Northamptonshire). She has worked with AS (formerly HAT) since 1992, becoming Senior Graphics Officer. Kathren is AS's principal photographer, specializing in historic building survey, and she manages AS's photographic equipment and dark room. She is in charge of AS's Graphics Department, managing computerised artwork and report production. Kathren is also the principal historic building surveyor/illustrator, producing on-site and off-site plans, elevations and sections.

HISTORIC BUILDING RECORDING

Tansy Collins BSc

Qualifications: University of Sheffield, Archaeological Sciences BSc (Hons) (1999-2002) Tansy's archaeological experience has been gained on diverse sites throughout England, Ireland, Scotland and Wales. Tansy joined AS in 2004 where she developed skills in graphics, backed by her grasp of archaeological interpretation and on-site experience, to produce hand drawn illustrations of pottery, and digital illustrations using a variety of packages such as AutoCAD, Corel Draw and Adobe Illustrator. She joined the historic buildings team in 2005 in order to carry out both drawn and photographic surveys of historic buildings before combining these skills with authoring historic building reports in 2006. Since then Tansy has authored numerous such reports for a wide range of building types; from vernacular to domestic architecture, both timber-framed and brick built with date ranges varying from the medieval period to the 20th century. These projects include a number of regionally and nationally significant buildings, for example a previously unrecognised medieval aisled barn belonging to a small group of nationally important agricultural buildings, one of the earliest surviving domestic timber framed houses in Hertfordshire, and a Cambridgeshire house retaining formerly hidden 17th century decorative paint schemes. Larger projects include The King Edward VII Sanatorium in Sussex, RAF Bentley Priory in London as well as the Grade I Listed Balls Park mansion in Hertfordshire.

ASSISTANT ARCHIVES OFFICER Karen Cleary

Experience: Karen started her administrative career as Youth Training Administrator for a training company (TSMA Ltd) in 1993, where she provided administrative support for NVQ Assessors' of trainees and apprentices on the youth training scheme and in work placements they'd helped set up. Amongst her administrative duties she was principally in charge of preparing the Training Credits Claims and sending off for government funding. She gained NVQ's Level's 2 and 3 in Administration whilst working in this role. Karen started out with AS as Office Assistant in February 2009 and within a few months was promoted to Archives Assistant. Principally her role involves the preparation of Archaeological archives for long term deposition with museums. She has developed a good understanding of the preparation process and follows each individual museum's guidelines closely. She has a good working knowledge of Microsoft Office and is competent with FileZilla- Digital File Transfer software and Fastsum-Checksum Creation software.

ARCHAEOLOGICAL SOLUTIONS: PRINCIPAL SPECIALISTS

GEOPHYSICAL SURVEYS David Bescoby

Dr John Summers
AIR PHOTOGRAPHIC ASSESSMENTS
Air Photo Services

PHOTOGRAPHIC SURVEYS
PREHISTORIC POTTERY
ROMAN POTTERY
Mr A Peachey
SAYON and MEDIEVAL POTTERY
Mr B Thompson

SAXON and MEDIEVAL POTTERY

POST-MEDIEVAL POTTERY

Mr P Thompson
Mr P Thompson
Mr A Peachev

FLINT Mr A Peachey
GLASS H Cool
COINS British Museum

COINS British Museum, Dept of Coins and Medals METALWORK and LEATHER Ms Q Mould, Ms N Crummy

SLAG Ms J Cowgill

ANIMAL BONE Dr J Cussans
HUMAN BONE: Ms S Anderson
ENVIRONMENTAL CO-ORDINATOR Dr R Scaife
POLLEN AND SEEDS: Dr R Scaife
CHARCOAL/WOOD Dr J Summers

SOIL MICROMORPHOLOGY Dr R MacPhail, Dr C French

CARBON-14 DATING: Historic England Ancient Monuments

CONSERVATION Laboratory (for advice).
University of Leicester

4 OASIS DATA COLLECTION FORM

PHOTOGRAPHIC INDEX



Post-excavation view of Trench 1 looking west



3 F1067 in Trench 1 looking east



2 Post-excavation view of Trench 1 looking north



4 F1077A, F1079 and F1081 in Trench 1 looking east



5 F1077B in Trench 1 looking east



7 F1087, F1089, F1091 and F1093 in Trench 1 looking east



6 F1077C and F1083 in Trench 1 looking east



8 Sample section 1B in Trench 1 looking south-east



Post-excavation view of Trench 2 looking north west



11 F1059 F1069 in Trench 2 looking south-east



10 F1052 and F1054 in Trench 2 looking north



12 F1069 and F1071 in Trench 2 looking north



13 Post-excavation view of Trench 3 looking east



F1014, F1018, F1020 and F1022 in trench 3 looking south



17 F1035, F1037, F1039 and F1041 in Trench 3 looking south-west



14 F1012 in Trench 3 looking west



16 F1016C, F1031, F1033 and F1035 in Trench 3 looking north



Sample section 3A in Trench 3 looking south



19 Post-excavation view of Trench 4 looking south



21 Sample section 4B in Trench 4 looking west



20 F1006 in Trench 4 looking east



22 Post-excavation view of Trench 5 looking west



23 F1010 in Trench 5 looking north



25
Post-excavation view of Trench 10 looking east



24 Sample section 5A in Trench 5 looking north



26 F1008 in trench 10 looking south



Post-excavation view of Trench 11 looking south



29
Post-excavation view of Trench 12 looking west



28 F1097B and F1103C in trench 11 looking west



30 F1029A in Trench 12 looking north

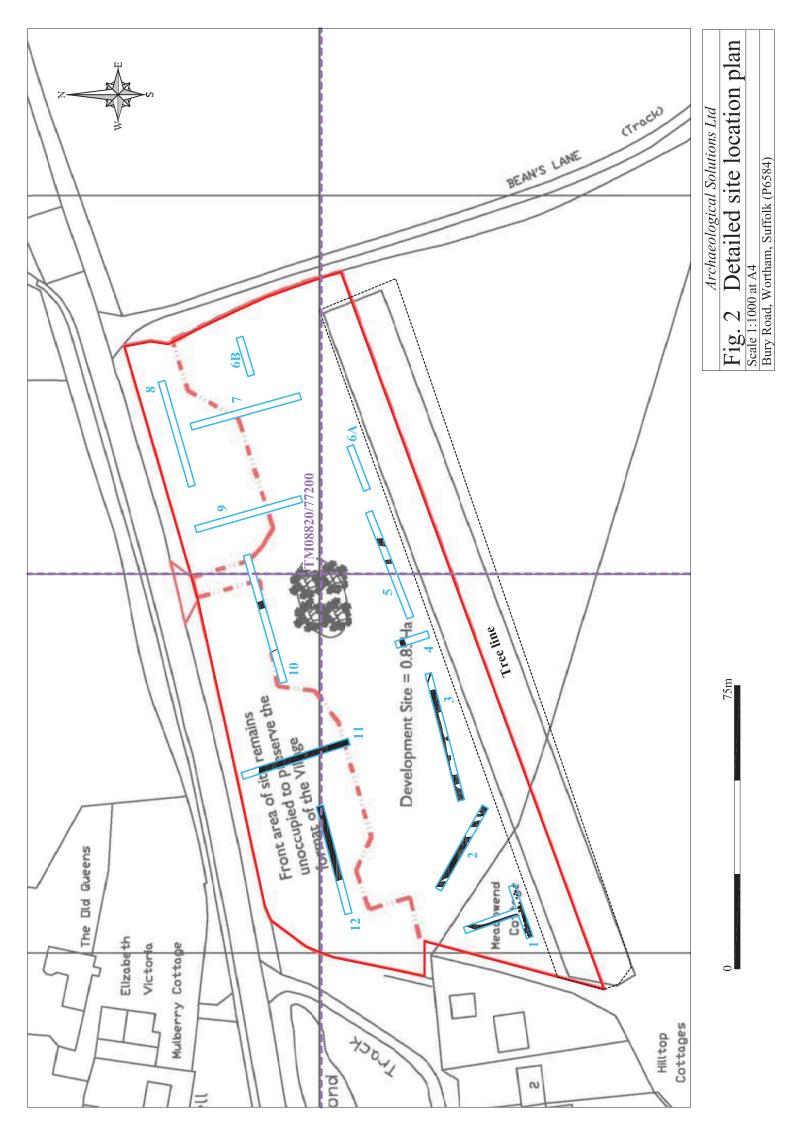


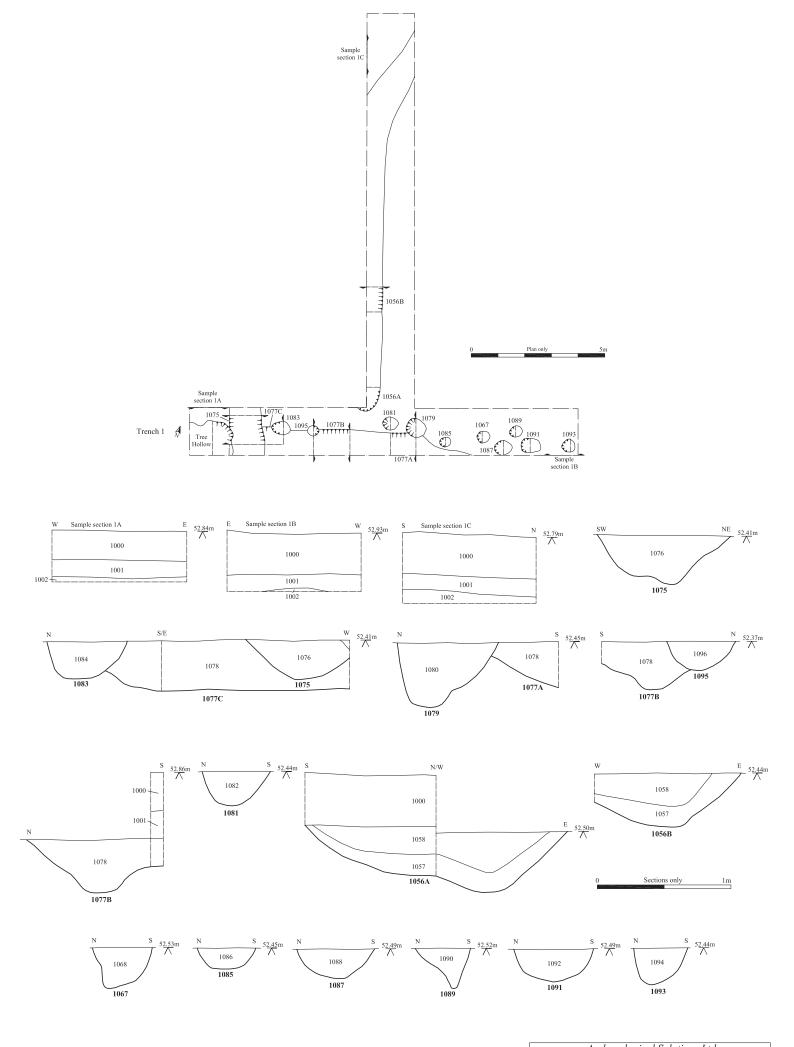
Reproduced from the 1999 Ordnance Survey 1:25000 map with the permission of Her Majesty's Stationery Office. Ó Crown copyright Archaeological Solutions Ltd Licence number 100036680 Archaeological Solutions Ltd

Fig. 1 Site location plan

Scale 1:25,000 at A4

Bury Road, Wortham, Suffolk (P6584)





Archaeological Solutions Ltd

Fig. 3 Trench plan and sections
Scale 1:100 and 1:20 at A3
Bury Road, Wortham, Suffolk (P6584)

