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THE OLD PUMPING STATION, IXWORTH, SUFFOLK CONTINUOUS ARCHAEOLOGICAL MONITORING AND RECORDING

Authors: Vinny Monahan (Field work and report)	
NGR: TL 940 697	Report No: 4921
District: St Edmundsbury	Site Code: IXW 112
Oasis Ref: archaeol7-210026	HER Event no. ESF23041
Approved: Claire Halpin MifA	Project No: 6213
Signed:	Date: 8 th September 2016

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SPECIFICATION
OASIS FORM

Project details			
Project name	<i>The Old Pumping Station, Ixworth, Suffolk.</i>		
<p><i>From July 2015 Archaeological Solutions Ltd (AS) carried out a programme of continuous archaeological monitoring and recording at the Old Pumping Station, Ixworth, Suffolk (TL 940 697). It is proposed to convert the redundant pumping station buildings into two dwellings with garaging and enlarge the access to Stow Road. The archaeological monitoring was undertaken to comply with a condition attached to planning consent (St Edmundsbury Council Planning Ref. SE/12/0298/FUL).</i></p> <p><i>The site lies within an area of archaeological importance recorded on the Suffolk Historic Environment Record, adjacent to the south of a nationally important Roman villa site (Scheduled as an Ancient Monument SF55; List Entry 1006047; HER IXW004). Excavations in 1993 for one of the settling tanks at the works in 1993 revealed intact Roman deposits (HER IXW136).</i></p> <p><i>The site was substantially truncated and the monitoring revealed no archaeological features or finds.</i></p>			
Project dates (fieldwork)	<i>12 June, 26 Nov 2015; 12 Jan; 1 July 2016</i>		
Previous work (Y/N/?)	<i>N</i>	Future work	<i>N</i>
P. number	<i>6213</i>	Site code	<i>IXW 112</i>
Oasis Ref	<i>archaeol7-210026</i>	HER event number	<i>ESF23041</i>
Type of project	<i>Archaeological Monitoring & Recording</i>		
Site status			
Current land use	<i>Former pumping station</i>		
Planned development	<i>2 dwellings with garaging and enlarged access to Stow Road.</i>		
Main features (+dates)	<i>-</i>		
Significant finds (+dates)	<i>-</i>		
Project location			
County/ District/ Parish	<i>Suffolk</i>	<i>St Edmundsbury</i>	<i>Ixworth</i>
HER/ SMR for area	<i>Suffolk Historic Environment Record</i>		
Post code (if known)			
Area of site			
NGR	<i>TL 940 697</i>		
Height AOD (min/max)	<i>c. 29m AOD</i>		
Project creators			
Brief issued by	<i>Suffolk County Council Archaeological Service Conservation Team</i>		
Project supervisor/s (PO)	<i>Archaeological Solutions Ltd</i>		
Funded by	<i>Tiverton Homes Ltd</i>		
Full title	<i>The Old Pumping Station, Ixworth, Suffolk.. Archaeological Monitoring & Recording</i>		
Authors	<i>Monahan, Vinny</i>		
Report no.	<i>4921</i>		
Date (of report)	<i>September 2016</i>		

THE OLD PUMPING STATION, IXWORTH, SUFFOLK

CONTINUOUS ARCHAEOLOGICAL MONITORING AND RECORDING

From July 2015 Archaeological Solutions Ltd (AS) carried out a programme of continuous archaeological monitoring and recording at the Old Pumping Station, Ixworth, Suffolk (TL 940 697). It is proposed to convert the redundant pumping station buildings into two dwellings with garaging and enlarge the access to Stow Road. The archaeological monitoring was undertaken to comply with a condition attached to planning consent (St Edmundsbury Council Planning Ref. SE/12/0298/FUL).

The site lies within an area of archaeological importance recorded on the Suffolk Historic Environment Record, adjacent to the south of a nationally important Roman villa site (Scheduled as an Ancient Monument SF55; List Entry 1006047; HER IXW004). Excavations in 1993 for one of the settling tanks at the works in 1993 revealed intact Roman deposits (HER IXW136).

The site was substantially truncated and the monitoring revealed no archaeological features or finds.

1 INTRODUCTION

1.1 From July 2015 Archaeological Solutions Ltd (AS) carried out a programme of continuous archaeological monitoring and recording at the Old Pumping Station, Ixworth, Suffolk (TL 940 697; Figs. 1-2). It is proposed to convert the redundant pumping station buildings into two dwellings with garaging and enlarge the access to Stow Road. The archaeological monitoring was undertaken to comply with a condition attached to planning consent (St Edmundsbury Council Planning Refs. SE/12/0298/FUL, DC/15/2047/VAR (Unit 2) and DC/16/0265/VAR (Unit 1).

1.2 The archaeological monitoring was carried out in accordance with a brief prepared by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT; Abby Antrobus, dated 30th July 2014), and a specification compiled by AS (dated 10th April 2015). The monitoring adhered to the procedures described in the Chartered Institute of Archaeologists (CIfA) *Standard and Guidance for Watching Briefs* (2014) and *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The project aimed to:

- Ensure the archaeological excavation and monitoring of all aspects of the development programme likely to affect buried archaeological remains;

- Secure the adequate recording of any archaeological remains revealed by the development programme;
- Secure the full analysis and interpretation of the site archive and the appropriate publication of the project results, if required;
- Secure the analysis, long-term conservation and storage of the project archive

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 Ixworth is 9km north-east of Bury St Edmunds in Suffolk. The town is to the east of the The Black Bourn.

2.2 The site is to the south of the town, in the A1088, and comprises a pumping station. The area to the west, on the opposite bank of the river, is named the Mickle Mere and is an area of wetland and a nature reserve.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The site is at c.29m AOD within a gently undulating landscape. The land rises to the north-east with a spot height of 56 in fields east of the town.

3.2 The underlying geology of the area is the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation And Culver Chalk Formation; sedimentary bedrock formed in the Cretaceous Period. The overlying soil association is Newport 3; a glaciofluvial drift and chalky till with deep well drained sandy and coarse loamy soils.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prehistory

4.1 Early Mesolithic and late Neolithic flint scatters and pottery are recorded (SHER PKM 008 & IXW 047). Bronze Age barrows, ring ditches, inhumations and cremations have all been identified (SHER PKM 028, PKM 006). About 400m to the south-west an early Mesolithic / early Bronze Age perforated quartzite pebble macehead was found (SHER PKM 008).

4.2. Numerous Iron Age coins have been found in the area, for example, c.480m to the north-west (SHER IXW 029). The multi-period site at Grimstone End included Iron Age pottery sherds (SHER PKM 028). The Roman fort to the north-west contained Iron Age pottery and Icenic coins (SHER PKM 005).

Romano-British

4.3 The most substantial known evidence is Roman including finds spots of coins, brooches and pottery, and building remains (SHER IXW 028, 027, 047 &). A triple-ditched fort lies south of Ixworth and c.700m west of the site, identified by aerial photography and partly cut by a modern road. It was a large settlement, extending to approximately 4ha and probably dating from 60AD to the end of the 4th century. Finds include coins, pottery, jewellery, human remains, ovens, building remains and wells (SHER PKM 007, PKM 005 & PKM 002). Two Roman roads are thought to run east and west of this settlement, one heading south-west and the other south-east (PKM 001 & PKM 014).

4.4 A Roman villa and bathhouse are located directly to the north of the site. A Scheduled Ancient Monument (SAM), finds from this area include face masks, coins, figurines, spoons, glass and pottery. A geophysical survey conducted in 2009 (ESF19749) revealed multiple structures some barely c.100m from the site (SHER IXW 004).

Excavations within the site preceding the relocation of a water tank (ESF23041) revealed a Roman layer including pottery and tile but no evidence of occupation (SHER IXW 036).

Saxon and Medieval

4.5 Three Saxon hut sites, outside the SAM area, were identified. The fort and area of settlement towards Grimstone End is thought to have partly continued in use with Saxon burials and cremations and finds of combs, needles, brooches, arrowheads and beads found c.770m to the south-west (SHER PKM 028 & PKM 006). The fort contained evidence of being used as a Saxon cemetery (SHER IXW 005) with finds of coins, animal bone, tile and pottery (SHER IXW 022 & PKM 026).

4.6 During the medieval period settlement was focused within the centre of Ixworth. In 1384 the town was granted a market (SHER IXW 068). In the Domesday Book the settlement is listed as fairly large and under multiple lords, including King William and the Abbey of Bury St Edmunds (www.opendomesday.org). Medieval finds include a lead seal matrix dating from the 14th century (SHER MSF705), a bronze hooked tag with ring and dot decoration (SHER IXW 028) and pottery and window glass from the mid 12th to mid 13th century (SHER IXW 063). The geophysical survey of the adjacent villa recorded medieval field systems (ESF19749).

5 METHODOLOGY

5.1 The brief required the recovery of a record of archaeological deposits that may be damaged or removed by any development (in particular new foundations and services). Overburden was removed under close archaeological supervision in this area; all features were subject to excavation.

5.2 Exposed sections were cleaned by hand and examined for archaeological features. Deposits were recorded using pro forma recording sheets, drawn to scale and photographed as appropriate. Excavated spoil was searched for archaeological finds.

6 DESCRIPTION OF RESULTS

Sample sections of the stratigraphy encountered were recorded:

<i>Sample Section 1</i>		
<i>South facing</i>		
<i>0.00 = 29.04m AOD</i>		
0.00 – 0.20m	L1003	Concrete path. (= L1008, below).
0.20 – 0.63m	L1004	Made ground. Friable, mid greyish brown silty sand

		with concrete rubble.
0.63 – 0.96m+	L1005	Made ground. Friable, mid reddish brown silty sand with large patches of loose, pale grey mixed stone. It contained red brick and metal fragments.
<i>Sample Section 2</i> <i>Southwest facing</i> <i>0.00 = 29.10m AOD</i>		
0.00 – 0.16m	L1008	Concrete path. (= L1003, above).
0.16 – 0.30m	L1009	Made ground. Compact, pale grey cement with frequent red brick rubble.
0.30 – 0.62m	L1010	Made ground. Friable, mid grey brown silty sand.
0.62 – 0.76m+	L1002	Alluvium. Friable, grey brown fine silt.

F1011 was a modern electrical service trench (0.50+ x 0.80 x 0.70m), orientated east/west and adjacent to the concrete path, L1008. It had vertical sides and a flat base. Its basal fill, L1013, was a friable, pale yellow sand which covered the electric cables. Above L1013 was L1012, a friable, mid grey brown silty sand.

Sample sections were also recorded along an electrical service trench excavated on the eastern side of the site:

<i>Sample Section 3</i> <i>Southwest facing</i> <i>0.00 = 29.17m AOD</i>		
0.00 – 0.32m	L1014	Topsoil. Friable, dark-mid grey brown organic silty sand with occasional medium sub-angular and sub-rounded flints.
0.32 – 0.58m+	L1015	Made ground. Friable, dark-mid grey brown silty sand with patches of mid brown orange silty sand, and occasional lumps of pale yellow brown silty clay with occasional small sub-rounded chalk. Occasional sub-rounded flint and chalk flecks.

<i>Sample Section 4</i> <i>West facing</i> <i>0.00 = 29.32m AOD</i>		
0.00 – 0.05m	L1014	Topsoil. As Sample Section 3.
0.05 – 0.65m+	L1016	Backfill of modern service trench. Mixed patches of friable, pale brown yellow silty sand and dark brown grey sandy silt with occasional medium sub-angular and sub-rounded flints.

<i>Sample Section 5</i> <i>West facing</i> <i>0.00 = 29.33m AOD</i>		
0.00 – 0.58m+	L1017	Redeposited topsoil. Friable, dark-mid grey brown organic silty sand and occasional lumps of pale yellow brown silty clay and small patches of mid orange brown silty sand, and medium sub-angular

		and sub-rounded flints.
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<i>Sample Section 6</i> <i>West facing</i> <i>0.00 = 29.29m AOD</i>		
0.00 – 0.56m	L1018	Made ground. Friable, pale orange brown silty sand with occasional sub-angular and sub-rounded flint.
0.56 – 0.62m+	L1019	Made ground. Mixed patches of friable, dark brown grey silty sand and very firm pale orange brown silty clay with very occasional medium sub-rounded flint.

<i>Sample Section 7</i> <i>North facing</i> <i>0.00 = 29.43m AOD</i>		
0.00 – 0.14m	L1020	Topsoil. Friable, dark-mid grey brown organic silty sand with occasional medium sub-angular and sub-rounded flints.
0.14 – 0.39m+	L1021	Made ground. Mixed patches of friable black organic compost material, firm dark mid red brown sandy silt, very firm very pale yellow brown clay with moderate small sub-rounded chalk, and friable mid orange brown silty sand. Occasional medium sub-angular and sub-rounded flints.

<i>Sample Section 8</i> <i>East facing</i> <i>0.00 = 29.10m AOD</i>		
0.00 – 0.45m+	L1022	Topsoil. Very friable, dark-mid grey brown organic silty sand with occasional medium sub-angular and sub-rounded flints.

A trench to house a septic tank for the southern building was excavated alongside the western boundary fence, and sample sections recorded:

<i>Sample Section 9</i> <i>Southwest facing</i> <i>0.00 = 29.15m AOD</i>		
0.00 – 0.40m	L1023	Topsoil. Firm, mid grey brown silty clay with frequent small - medium angular and rounded flints.
0.40 – 1.50m	L1024	Subsoil. Compact, mid orange brown silty clay, with frequent small – large angular and rounded flints.
1.40 – 1.50m	L1025	Alluvial patch. Friable, pale grey clay silt with frequent very small rounded stone.
1.50 – 2.10m	L1026	Buried soil. Firm, very dark brown humic silty clay.

<i>Sample Section 10</i> <i>Southeast facing</i> <i>0.00 = 29.18m AOD</i>		
0.00 – 0.44m	L1023	Topsoil. As Sample Section 9.
0.44 – 0.90m+	L1024	Subsoil. As Sample Section 9.

Description: The area of the septic tank contained a modern service trench, F1027.

F1027 was a linear service trench (2.30+ x 1.65+ x 0.40m+) with a steep north eastern side. Its fill, L1028, was a firm, mid brown sandy/silty clay. It contained a large plastic pipe (F1030) surrounded by c.80mm of loose, pale brown flint gravel (L1031). The trench also contained two smaller plastic pipes.

A service trench was excavated along the north eastern boundary of the site, from the old north eastern pump house to the water tanks in the north western corner. Five sample sections were recorded along its length.

<i>Sample Section 11</i> <i>Northwest facing</i> <i>0.00 = 29.63m AOD</i>		
0.00 – 0.30m	L1033	Topsoil. Friable, very dark grey sandy silt with occasional small and medium sub-angular flint.
0.30 – 0.70m+	L1034	Re-deposited topsoil. Friable, very dark grey sandy silt with moderate small and medium angular chalk and flint.

<i>Sample Section 12</i> <i>South southwest facing</i> <i>0.00 = 29.45m AOD</i>		
0.00 – 0.21m	L1033	Topsoil. As Sample Section 11.
0.21 – 0.53m	L1034	Re-deposited topsoil. As Sample Section 11.
0.53 - 0.69m+	L1035	Subsoil. Friable, mid red brown silty sand with occasional small and medium sub angular flint.

<i>Sample Section 13</i> <i>South southwest facing</i> <i>0.00 = 29.29m AOD</i>		
0.00 – 0.35m	L1033	Topsoil. As Sample Section 11.
0.35 – 0.70m+	L1035	Subsoil. As Sample Section 12.

<i>Sample Section 14</i> <i>South facing</i> <i>0.00 = 29.25m AOD</i>		
0.00 – 0.34m	L1033	Topsoil. As Sample Section 11.
0.34 – 0.57m	L1036	Redeposited topsoil. Friable, very dark grey sandy silt with occasional small and medium angular flints.
0.57 - 0.70m+	L1035	Subsoil. As Sample Section 12.

<i>Sample Section 15</i>		
<i>Southeast facing</i>		
<i>0.00 = 29.35m AOD</i>		
0.00 – 0.33m	L1033	Topsoil. As Sample Section 11.
0.33 – 0.45m+	L1035	Subsoil. As Sample Section 12.

7 CONFIDENCE RATING

7.1 Within the parameters of monitoring during groundworks it is not felt that any factors inhibited the recognition of archaeological features or finds.

8 DEPOSIT MODEL

8.1 At the northern end of the site Topsoil L1000 was a friable, dark brown silty sand (0.05 – 0.15m thick). It overlay Subsoil L1001, a friable, mid reddish brown silty sand (0.20m thick). L1001 in turn overlay Alluvium L1002, a friable, grey brown fine silt (0.10m+ thick).

8.2 Just to the north of the northern pump house building the current ground surface was concrete (L1008; 0.16m thick). L1008 overlay made ground, L1009, a compact, pale grey cement with frequent red brick rubble. Below L1009 was made ground, L1010, a friable, mid grey brown silty sand (0.32m thick). At the base of the sequence was Alluvium L1002 (0.14m+ thick).

8.3 To the north of the southern pump house building the current ground surface was concrete (L1003; 0.20m thick). L1003 overlay made ground, L1004, a friable, mid greyish brown silty sand with concrete rubble (0.43m thick). Below L1004 was made ground, L1005, a 0.33m+ thick layer of friable, mid reddish brown silty sand with large patches of loose, pale grey mixed stone (L1006 and L1007). It contained red brick (0.33m+ thick).

9 DISCUSSION

9.1 The site lies within an area of archaeological importance adjacent to a nationally important Roman villa site (Scheduled Ancient Monument SF55, HER IXW004). Excavations for one of the settling tanks at the station in 1993 revealed intact Roman deposits (IXW136). It was felt, therefore, that this site had potential for archaeological remains, particularly of Roman date. However, monitoring of these groundworks revealed no archaeological features and no residual finds.

9.2 It would appear that a large degree of truncation associated with the construction of the pumping station has taken place over much of

the site. This would suggest that any remains, if present, will have been lost except possibly around the perimeter of the site.

10 DEPOSITION OF THE ARCHIVE

10.1 The requirements for archive storage will be agreed with the Suffolk HER, and the archive deposited there within three months of the conclusion of fieldwork.

ACKNOWLEDGEMENTS

Archaeological Solutions Limited would like to thank the client Steve Fitch of Tiverton Homes Ltd for funding the monitoring, and for assistance.

AS would also like to acknowledge the input and advice of the Suffolk County Council Archaeological Service Conservation Team, in particular Dr Abby Antrobus.

BIBLIOGRAPHY

British Geological Survey (BGS), 1978, *Legend for the 1:625,000 Geological map of the United Kingdom (solid geology)*: London. Mansfield

Brook, R. 2012 *Land to the Rear of 23 & 26 Hall Close, Icklingham, IKL 195* SCCAS Report No. 2012/177

Gurney, D., 2003, *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Papers 14/ALGAO

Institute of Field Archaeologists (now Institute for Archaeologists), 1994 (revised 2008), *Standard and Guidance for An Archaeological Watching Brief*. IfA Reading.

Soil Survey of England and Wales (SSEW), 1983, *Legend for the 1:250,000 Soil Map of England and Wales*. SSEW, Harpenden

WEB SITE

Heritage Gateway

APPENDIX 1 SPECIFICATION

THE OLD PUMPING STATION, IXWORTH, SUFFOLK

**WRITTEN SCHEME OF INVESTIGATION FOR
CONTINUOUS ARCHAEOLOGICAL MONITORING/RECORDING**

10th April 2015

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
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THE OLD PUMPING STATION, IXWORTH, SUFFOLK ARCHAEOLOGICAL MONITORING & RECORDING

1 INTRODUCTION

1.1 This specification (written scheme of investigation) has been prepared in response to a brief issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT, Abby Antrobus, dated 30th July 2014). It provides for continuous archaeological monitoring/recording of groundworks associated with the change of use and conversion of redundant pumping stations to form 2No dwellings, garaging and enlarged access at The Old Pumping Station, Stow Road, Ixworth, Suffolk (NGR TL 940 697). The works are required to comply with a condition of planning approval (St Edmundsbury Council Ref. SE/12/0298/FUL), based on advice from SCC AS-CT, and this WSI has been prepared for their approval.

2 COMPLIANCE

2.1 The brief has been read and understood. If AS carried out the programme of archaeological works, AS would comply with SCC AS-CT's requirements.

3 SITE & DEVELOPMENT DESCRIPTION ARCHAEOLOGICAL BACKGROUND

3.1 The site lies on the southern side of Stow Road at Ixworth and comprises a former pumping station. It is proposed to convert the two pumping station buildings for residential use and construct two new garages.

3.2 The site lies within an area of archaeological importance recorded on the Suffolk Historic Environment Record, adjacent to the south of a nationally important Roman villa site (Scheduled as an Ancient Monument SF55; List Entry 1006047; HER IXW004). Excavations in 1993 for one of the settling tanks at the works in 1993 revealed intact Roman deposits (HER IXW136).

3.3 The detailed project background will be presented in the project report, with reference to the Suffolk Historic Environment Record.

4 BRIEF FOR ARCHAEOLOGICAL MONITORING ARRANGEMENTS FOR ARCHAEOLOGICAL MONITORING SPECIFICATION FOR MONITORING OF GROUNDWORKS

4.1 As set out in the brief (Sections 2 -4).

4.2 Research Design

4.2.1 The regional research frameworks are set out in Glazebrook (1997 and Brown & Glazebrook (2000) and updated by Medlycott and Brown (2008) and Medlycott (2011). 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 & Plouviez (in Brown & 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 & 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.

4.2.2 As set out above, the principal research objectives will be to identify any further evidence associated with outlying areas of the Roman villa complex to the immediate north during the limited groundworks required for the conversion of the pumping station buildings.

References

Brown, N & 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

Gurney, D, 2003, *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Paper 14

Medlycott, M & 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 ARCHAEOLOGICAL MONITORING

5.1 The brief requires the recovery of a record of archaeological deposits that may be damaged or removed by any development. A Method Statement is provided (Appendix 2). The main objective surrounds the potential for the groundworks for the development to produce evidence for Roman occupation. The principal groundworks to be monitored will be ground reduction/foundation trenches required for the two new garages, service trenches and landscaping.

5.2 The brief requires the continuous monitoring of all groundworks in order to provide a record of any archaeological deposits which might be damaged or removed by any development permitted by the current planning consent. Any ground works, and also the upcast soil, are to be closely monitored during and after stripping in order to ensure no damage occurs to any heritage assets. Adequate time is to be allowed for archaeological recording of archaeological deposits during excavation, and of soil sections following excavation.

5.3 The programme of work will include the following stages:

- Initial clearance of soil/overburden under archaeological observation;
- Inspection of sub-soil deposits for archaeological features and environmental deposits;
- The rapid investigation and recording of any archaeological features/deposits;
- Sub-soil stripping under archaeological supervision;
- Examination of any service and foundation trenches and subsequent recording of any exposed archaeological deposits;
- Rapid examination of spoil-heaps for archaeological material;
- A programme of post-fieldwork analysis, archiving and publication, as appropriate to the results of the project.

5.4 All of the above stages and operations will be carried out in accordance with MAP2 (EH 1991) and MoRPHE (2006).

Stage Details

5.5 **Site clearance:** under archaeological observation

5.6 **Excavation and recording:** of those features which cannot be preserved and will be substantially disturbed. In accordance with the following standards:

- excavation of all discrete features
- all industrial features to be sampled for appropriate scientific analysis
- full written records of each context and all contexts to be planned
- sampling will adhere to the guidelines prepared by English Heritage (*Environmental Archaeology; A guide to the theory and practice of methods, from sampling and recovery to post-excavation*, 2011).

5.7 **Archaeological Observation and Recording** of all groundworks

- Observation of all groundworks, and subsequent recording of archaeological deposits
- Inspection of subsoil for archaeological features
- Investigation and recording of any exposed archaeological features/deposits
- Examination of spoil-heaps for archaeological material
- If significant remains are identified a meeting will be convened with the client and SCC AS-CT in order to agree an appropriate investigation
- A programme of post-excavation field work analysis, archiving and publication

5.8 Where possible effective **mitigation measures** will be devised according to the circumstances on site, in consultation with SCC AS-CT.

5.9 The resultant project report will follow the principles of MoRPHE (2006)

5.10 *Staffing*

Details of Archaeological Solutions Limited staff and specialist contractors are provided (Appendix 1).

5.11 *Method Statement*

The investigation will adhere to the IFA's *Standard and Guidance for Archaeological Excavations and Watching Briefs* and (revised 2008), in addition to the ALGAO East of England *Standards for Field Archaeology in the East of England* (Gurney 2003). A Method Statement for dealing with archaeological remains, where present, is presented (Appendix 1).

6 HEALTH AND SAFETY

6.1 Risk Assessment

A risk assessment will be completed before the work on site commences

6.2 Advice

Archaeological Solutions Limited is a member of FAME, formerly the Standing Conference of Archaeological Unit Managers (SCAUM) and operates under the 'Health & Safety in Field Archaeology Manual'.

6.3 Insurances

Archaeological Solutions Limited is a member of the Council for British Archaeology and is insured under their policy for members.

7 REPORT REQUIREMENTS

7.1 The report will include, as appropriate:

- 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) A section/s drawing showing the depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale
- e) Excavation methodology and detailed results including a suitable conclusion and discussion
- f) Plans and sections of any recorded features and deposits
- g) Discussion and interpretation of the evidence. An assessment of the project's significance in a regional and local context and appendices
- h) All specialist reports or assessments
- i) A concise non-technical summary of the project results
- j) A HER/OASIS summary sheet as required

7.2 Draft hard and digital PDF copies of the report will be submitted to SCC AS-CT and EH 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, and EH.

7.3 The project details will be submitted to the OASIS database, and the online summary form will be appended to the project report.

7.4 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.

8 ARRANGEMENTS FOR ACCESS

8.1 Access to the site is to be arranged by the client.

9 SERVICES & CONSTRAINTS, SECURITY

9.1 The client is to advise AS of the position of any services which traverse the site and any constraints which are present e.g. Tree Preservation Orders, Rights of Way.

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

10 FINDS

10.1 As set out in the brief (Section 5) and below (Appendix 1).

11 ARCHIVE

11.1 The requirements for archive storage will be agreed with the Suffolk HER, and the archive deposited there.

11.2 The archive will be deposited within three months of the conclusion of the fieldwork.

11.3 The archive 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.

11.4 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 the 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 Museums Service. 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.

11.5 Archive records, with inventory, are to be deposited, as well as any donated finds from the site, at the 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.

12 MONITORING

12.1 It is understood that the project will be monitored by SCC AS-CT.

13 OASIS PROJECT REPORTING

13.1 The results of the project will be reported to the OASIS Project.

APPENDIX 1

ARCHAEOLOGICAL SOLUTIONS LIMITED: PROFILES OF STAFF & SPECIALISTS

DIRECTOR

Claire Halpin BA MifA

Qualifications: Archaeology & 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 MifA

Qualifications: Member of the IfA

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

SENIOR PROJECTS MANAGER

Jon Murray BA MifA

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 projectmanages) 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 & 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 & 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 PIfA

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 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 Lyninge 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 & 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 PIFA

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 & Jarlshof Environs Project, Shetland (2000-2003), the Viking Unst Project, Shetland (2006-2007), the Heart of the Atlantic Project Føroys Fornminnisavni, Faroe Islands (2006-2008) and City University New York/ National Museum of Denmark/ Greenland National Museum and Archives, Greenland (2006 & 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 MifA**

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, Cambridgeshire. 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 ARCHAEOLOGIST

Dr 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)

Experience: 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.

FINDS AND ARCHIVE ASSISTANT

Adam Leigh

Experience: Adam joined AS in January 2012. In his time with the company he has helped process hundreds of finds from a variety of sites going on to concord them. Adam has helped prepare a large number of sites for deposition with museums making sure that the finds are prepared in strict accordance with the guidelines and requirements laid out by the receiving museum.

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 Photo Services
AIR PHOTOGRAPHIC ASSESSMENTS	
PHOTOGRAPHIC SURVEYS	Ms K Henry
PREHISTORIC POTTERY	Mr A Peachey
ROMAN POTTERY	Mr A Peachey
SAXON & MEDIEVAL POTTERY	Mr P Thompson
POST-MEDIEVAL POTTERY	Mr P Thompson
FLINT	Mr A Peachey
GLASS	H Cool
COINS	British Museum, Dept of Coins & Medals
METALWORK & 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:	English Heritage Ancient Monuments Laboratory (for advice).
CONSERVATION	University of Leicester

APPENDIX 2 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 Institute of Field Archaeologists.

1 Mechanical Excavation

1.1 Mechanical excavation will be monitored by an experienced archaeologist.

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 & 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, post holes and slots/gullies, masonry foundations and low masonry walls. Associated features may be present e.g. hearths.

The features comprising buildings will be excavated in plan/phase where revealed, as appropriate to the project

Full Excavation

Industrial remains and intrinsically interesting features e.g hearths, burials will clearly merit full excavation where revealed. Discrete features associated with the possible structure and/or settlement will be fully excavated.

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.

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

Should human remains be discovered, which is possible on this site, 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 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 & 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.

ENVIRONMENTAL SAMPLING

The sampling will adhere to the guidelines prepared by English Heritage (2011) and the specialist will make his results known to Zoe Outram who co-ordinates environmental archaeology in the region on behalf of English Heritage. If important environmental remains are present a visit to the site by an environmental specialist will be arranged

Environmental sampling will follow guidelines outlined in *Working papers of the Association for Environmental Archaeology, No. 2: Environmental archaeology and archaeological evaluation* (1995) and *Environmental Archaeology; a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines (2011).

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

OASIS FORM

OASIS DATA COLLECTION FORM: England

[List of Projects](#) | [Manage Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

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OASIS ID: archaeol7-210026

Project details

Project name	The Old Pump Station, Off Stow Lane, Ixworth, Suffolk
Short description of the project	From July 2015 Archaeological Solutions Ltd (AS) carried out a programme of continuous archaeological monitoring and recording at the Old Pumping Station, Ixworth, Suffolk (TL 940 697). It is proposed to convert the redundant pumping station buildings into two dwellings with garaging and enlarge the access to Stow Road. The archaeological monitoring was undertaken to comply with a condition attached to planning consent (St Edmundsbury Council Planning Ref. SE/12/0298/FUL). The site lies within an area of archaeological importance recorded on the Suffolk Historic Environment Record, adjacent to the south of a nationally important Roman villa site (Scheduled as an Ancient Monument SF55; List Entry 1006047; HER IXW004). Excavations in 1993 for one of the settling tanks at the works in 1993 revealed intact Roman deposits (HER IXW136). The site was substantially truncated and the monitoring revealed no archaeological features or finds.
Project dates	Start: 12-06-2016 End: 01-07-2016
Previous/future work	No / No
Any associated project reference codes	P6213 - Contracting Unit No.
Any associated project reference codes	IXW 112 - Sitecode
Any associated project reference codes	ESF23041 - HER event no.
Type of project	Recording project
Site status	None
Current Land use	Other 3 - Built over
Monument type	NONE None
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Planning condition

Project location

Country England

Site location SUFFOLK ST EDMUNDSBURY IXWORTH The Old Pump Station, Off Stow Lane, Ixworth, Suffolk

Study area 0 Square metres

Site coordinates TL 940 697 52.290657091254 0.84493870945 52 17 26 N 000 50 41 E Point

Height OD / Depth Min: 29m Max: 29m

Project creators

Name of Organisation Archaeological Solutions Ltd

Project brief originator Suffolk County Council Archaeological Service Conservation Team

Project design originator Jon Murray

Project director/manager Jon Murray

Project supervisor Archaeological Solutions Ltd

Project archives

Physical Archive Exists? No

Digital Archive recipient Suffolk County Archaeological Store

Digital Contents "Survey"

Digital Media available "Images raster / digital photography","Survey","Text"

Paper Archive recipient Suffolk County Archaeological Store

Paper Contents "Survey"

Paper Media available "Drawing","Photograph","Plan","Report","Survey "

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title The Old Pumping Station, Ixworth, Suffolk

Author(s)/Editor(s) Monahan, V

Other bibliographic details Archaeological Solutions Report no. 4921

Date 2016

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OASIS:

Please e-mail [Historic England](#) for OASIS help and advice

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Cite only: <http://www.oasis.ac.uk/form/print.cfm> for this page

PHOTOGRAPHIC INDEX



1

General shot of site looking west.



2

General shot of site looking south.



3

General shot of site looking north.



4

General shot of north end of site, looking southeast.



5

Slot trench, north end, looking southeast.



6

Slot trench, centre, looking southeast.



7

Shaft in site centre, looking southwest.



8

Shaft in site centre, looking southwest.



9

Sample Section 1, looking north.



10

Sample Section 2, looking northeast.



11

View of service trench. Looking south.



12

Sample Section 3. Looking northeast.



13
Sample Section 4. Looking east.



14
Sample Section 5. Looking east..



15
Sample Section 6. Looking east



16
Sample Section 7. Looking south.



17
View of manhole adjacent to northern building.
Looking southwest



18
View down manhole adjacent to northern building.



18

Excavating trench for septic tank. Looking north.



19

Sample Section 9 (northern half), looking northeast.



20

Sample Section 9 (southern half), looking northeast.



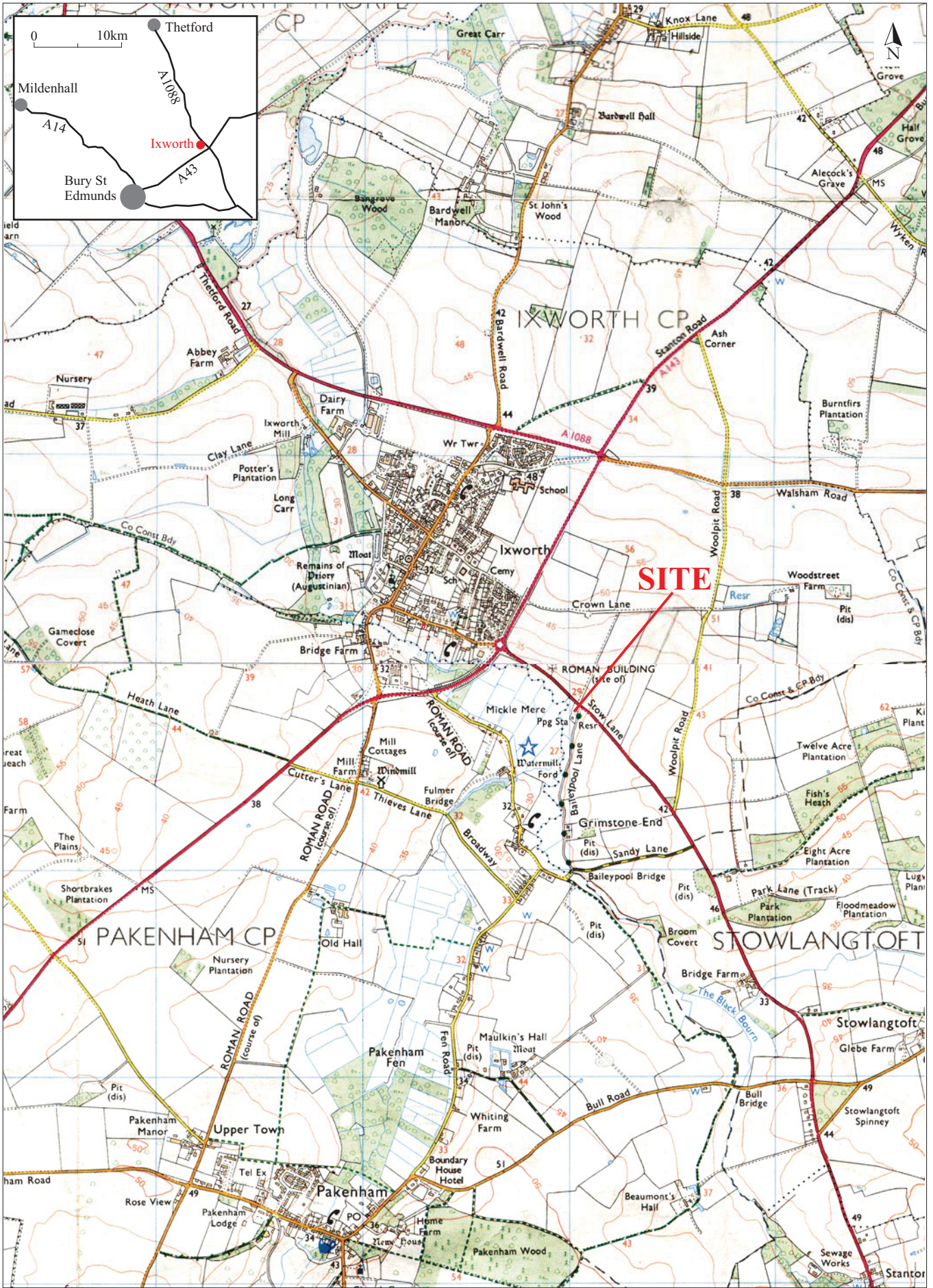
21

Sample Section 10, looking northwest.



22

Placing septic tank. Looking north.



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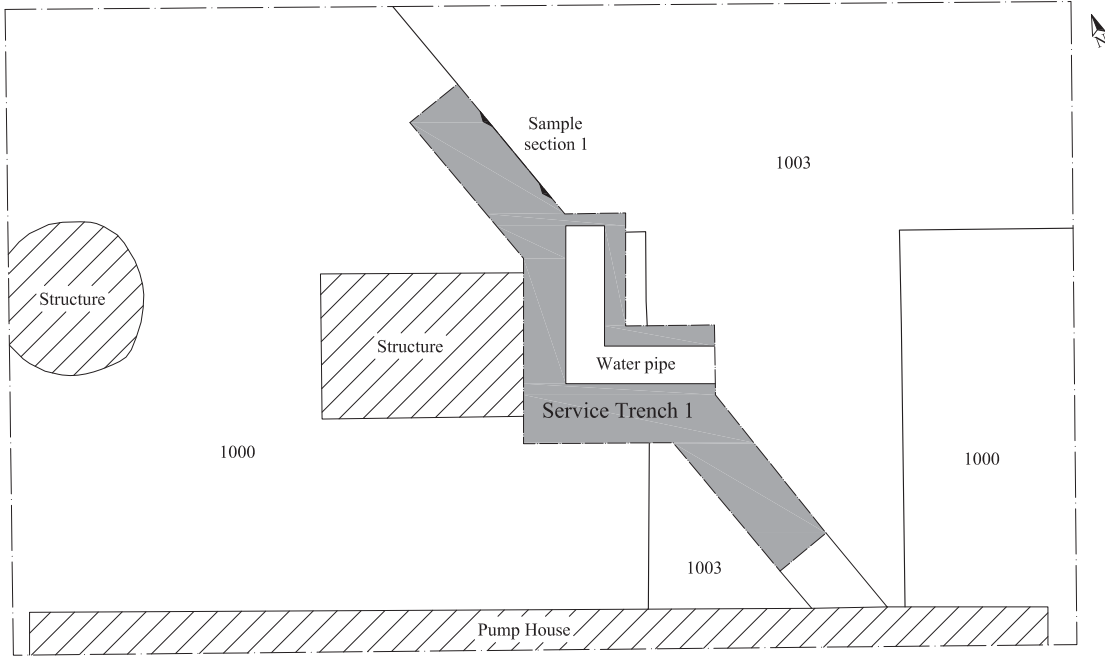
<i>Archaeological Solutions Ltd</i>
Fig. 1 Site location plan
Scale 1:25,000 at A4
Old Pump Station, Ixworth, Suffolk (P6213)



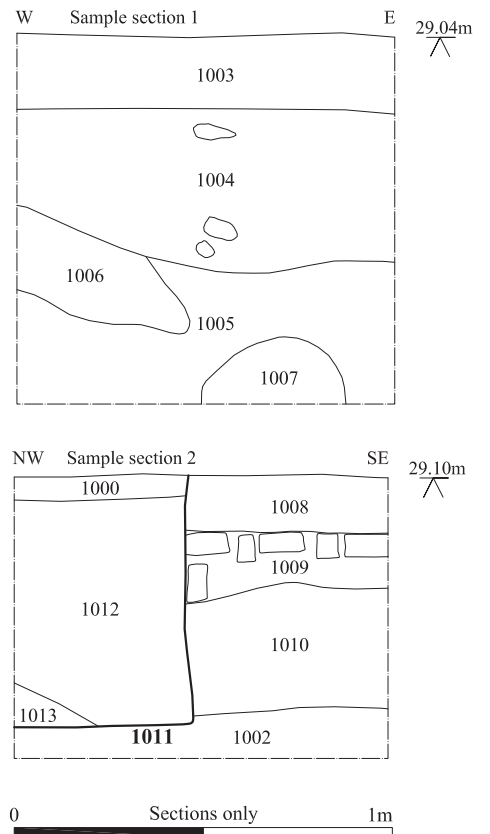
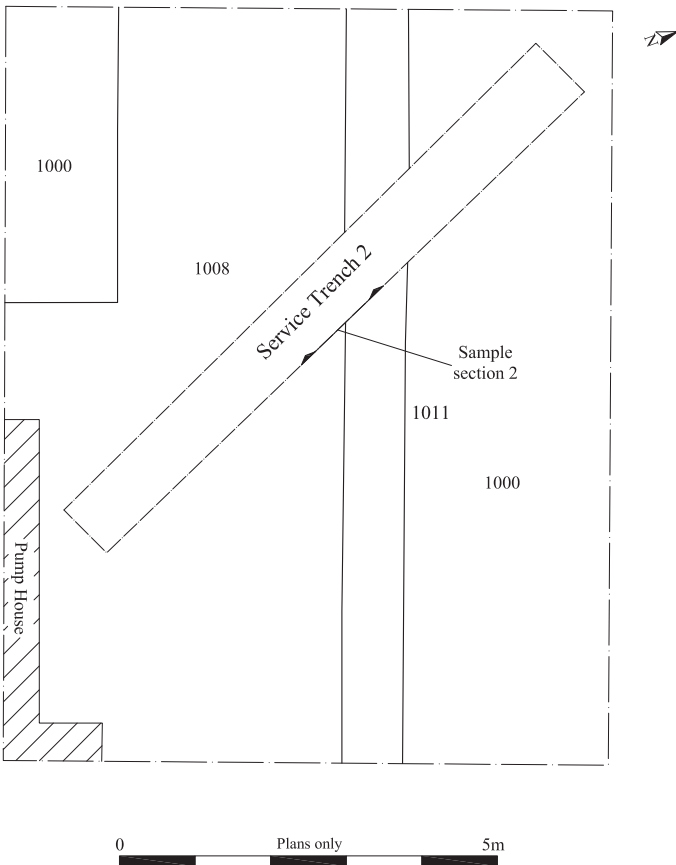
0 50m

<i>Archaeological Solutions Ltd</i>
Fig. 2 Detailed site location plan
Scale 1:750 at A4
Old Pump Station, Ixworth, Suffolk (P6213)

Trench 1 area

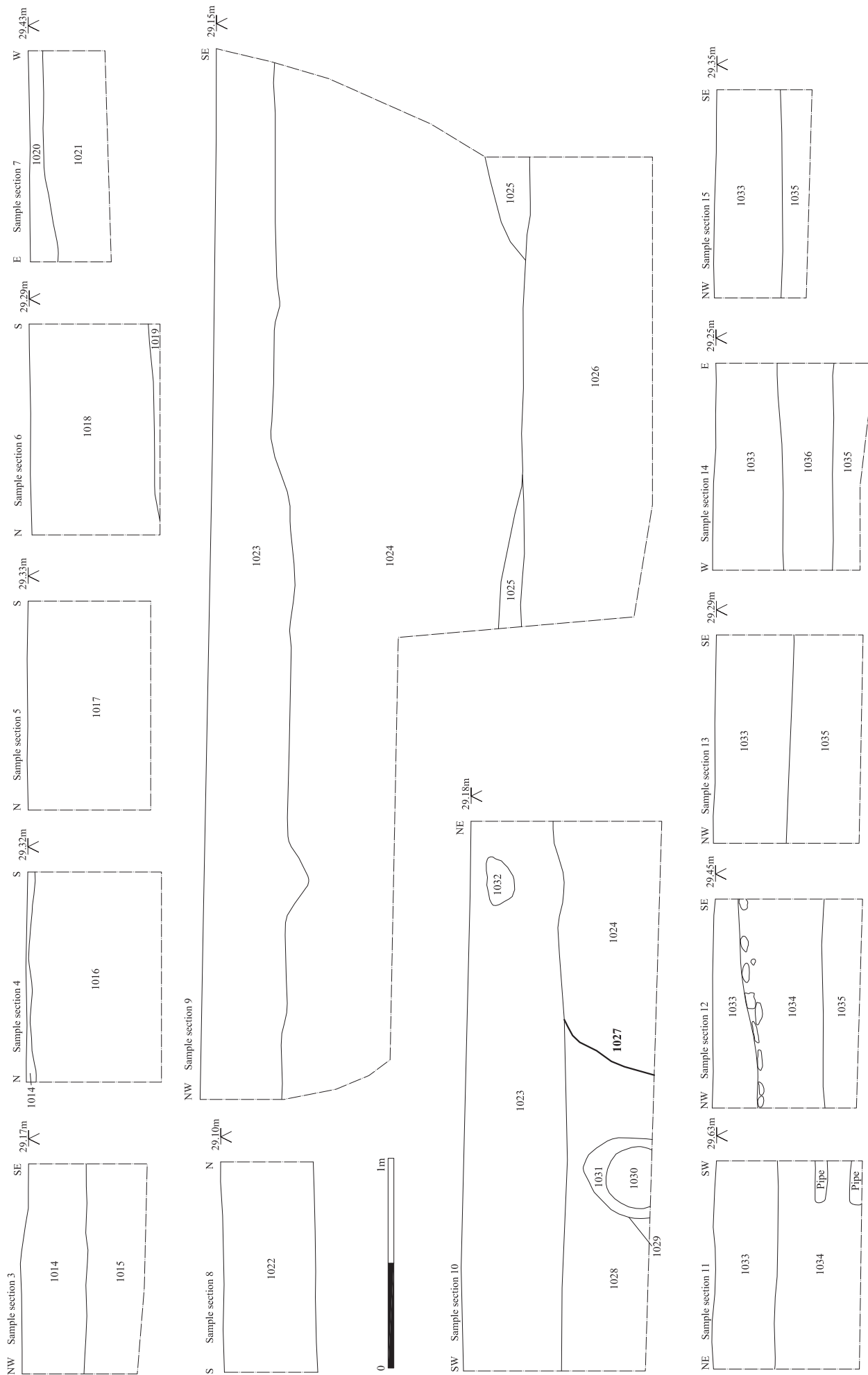


Trench 2 area



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Fig. 3 Plans of Trenching Areas and Sample sections
 Scale 1:100 and 1:20 at A4
 Old Pump Station, Ixworth, Suffolk (P6213)



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Fig. 4 Sample sections

Scale 1:25 at A4

Old Pump Station, Ixworth, Suffolk (P6213)