ARCHAEOLOGICAL SOLUTIONS LTD

FORMER GARAGES REAR OF 23 & 26, THE HALL CLOSE, ICKLINGHAM, SUFFOLK

CONTINOUS ARCHAEOLOGICAL MONITORING AND RECORDING & STRIP, MAP & SAMPLE

Authors: Sam Egan (Fieldwork & report) Peter Thompson (background)	
NGR: TL 771 730	Report No: 4363
District: Forest Heath	Site Code: IKL 195
Approved: Claire Halpin MIfA	Project No: 5292
Signed:	Date: 11 June 2014

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 info@ascontracts.co.uk
www.archaeologicalsolutions.co.uk

twitter.com/ArchaeologicalS

www.facebook.com/ArchaeologicalSolutions

CONTENTS

Project details			
Project name	*Former Garages Rear of 23 & 26 The Hall Close, Icklingham, Suffolk*		

In April, July, October 2013 and April 2014 and May 2014 Archaeological Solutions Ltd (AS) carried out a programme of archaeological monitoring and recording, and `strip, map and sample' during residential development of land formerly occupied by garage blocks to the rear of 23 & 26 The Hall Close, Icklingham, Suffolk (TL 771 730). It is proposed to construct three bungalows following the demolition of the garages. The archaeological monitoring was commissioned by Brooks and Wood Ltd to comply with a condition attached to planning consent (Forest Heath District Council Planning Ref. F/2010/0611/FUL).

The site has been subject to an archaeological trial trench evaluation (SCC AS Report 2012/177). A single trial trench excavated on the site revealed small undated features (predominantly post holes) sealed by recent overburden and a buried topsoil (at a depth of c.0.7-0.8m below existing ground level). The `strip, map and sample' exercise within this area of the site revealed tree throws, a modern dog burial and modern ditches. Unlike the evaluation trench the features were dated and were not predominantly post holes. The tree throws contained medieval (12th – 14th century) pottery and a struck flint of ?Mesolithic or early Neolithic date. Monitoring of the groundworks revealed no further archaeological features or finds.

Project dates (fieldwork)	April, July, October 2013, April & May 2014		
Previous work (Y/N/?)	*N*	Future work	*N*
P. number	*5292*	Site code	*IKL 195*
Type of project	*Archaeological Monitoring & Recording*		
Site status	*Within Area of Archaeological Importance*		
Current land use	*Former garages*		
Planned development	*3 bungalows*		
Main features (+dates)	*Three throws*		
Significant finds (+dates)	*Medieval (12th – 14th C) pottery, a struck flint*		
Project location			
County/ District/ Parish	*Suffolk*	*Forest Heath*	*Icklingham*
HER/ SMR for area	*Suffolk Historic Environment Record*		
Post code (if known)	-		
Area of site			
NGR	*TL 771 730*		
Height AOD (min/max)	*c. 15-18m*		
Project creators			
Brief issued by	*Suffolk County Council Archaeological Service Conservation Team*		
Project supervisor/s (PO)	*Sam Egan*		
Funded by	*Brooks & Wood Ltd*		
Full title	*Former Garages Rear of 23 & 26 The Hall Close, Icklingham, Suffolk. Archaeological Monitoring & Recording & Strip, Map & Sample*		
Authors	*Egan, S & Thompson, P.*		
Report no.	*4363*		
Date (of report)	*June 2014*		

FORMER GARAGES, REAR OF 23 & 26, THE HALL CLOSE, ICKLINGHAM, SUFFOLK

CONTINOUS ARCHAEOLOGICAL MONITORING AND RECORDING & STRIP, MAP & SAMPLE

SUMMARY

In April, July, October 2013 and April 2014 and May 2014 Archaeological Solutions Ltd (AS) carried out a programme of archaeological monitoring and recording, and `strip, map and sample' during residential development of land formerly occupied by garage blocks to the rear of 23 & 26 The Hall Close, Icklingham, Suffolk (TL 771 730). It is proposed to construct three bungalows following the demolition of the garages. The archaeological monitoring was commissioned by Brooks and Wood Ltd to comply with a condition *attached to planning consent (Forest Heath District Council Planning Ref. F/2010/0611/FUL).*

The site comprises an area of former garages to the rear of houses fronting The Hall Close, Icklingham, within an area defined as important on the Suffolk Historic Environment Record. It lies within the historic settlement core of Icklingham (HER IKL 180), north of the medieval parish church and churchyard (HER IKL 089). Before The Hall Close was developed, the site lay within the garden area of the post-medieval Icklingham Hall. Finds scatters of earlier periods are also known from the general area.

The site has been subject to an archaeological trial trench evaluation (SCC AS Report 2012/177). A single trial trench excavated on the site revealed small undated features (predominantly post holes) sealed by recent overburden and a buried topsoil (at a depth of c.0.7-0.8m below existing ground level). The `strip, map and sample' exercise within this area of the site revealed tree throws, a modern dog burial and modern ditches. Unlike the evaluation trench the features were dated and were not predominantly post holes. The tree throws contained medieval (12th – 14th century) pottery and a struck flint of ?Mesolithic or early Neolithic date. Monitoring of the subsequent groundworks revealed no archaeological features or finds.

1 INTRODUCTION

1.1 In April, July, October 2013 and April 2014 and May 2014 Archaeological Solutions Ltd (AS) carried out a programme of archaeological monitoring and recording, and `strip, map and sample' during residential development of land formerly occupied by garage blocks to the rear of 23 & 26 The Hall Close, Icklingham, Suffolk (TL 771 730; Figs. 1-2). It is proposed to construct three bungalows following the demolition of the garages. The archaeological

monitoring was commissioned by Brooks and Wood Ltd to comply with a condition attached to planning consent (Forest Heath District Council Planning Ref. F/2010/0611/FUL).

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; Jess Tipper, dated 4th February 2013), and a specification compiled by AS (dated 12th April 2013), approved by SCC AS-CT. The monitoring adhered to the Institute for Archaeologists' *Code of Conduct* (revised 2008), and the procedures described in the IfA *Standard and Guidance for Watching Briefs* (revised 2008) and *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The site has been subject to an archaeological trial trench evaluation (SCC AS Report 2012/177). A single trial trench excavated on the site revealed small undated features (predominantly post holes) sealed by recent overburden and a buried topsoil (at a depth of c.0.7-0.8m below existing ground level).

1.4 The project aimed to:

Generally:

- 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

1.5 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.

1.6 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 Icklingham is situated 10km north-west of Bury St Edmunds on the A1101 running between Bury St Edmunds and Littleport. The site comprises an area of former garages to the rear of houses fronting The Hall Close, Icklingham, within an area defined as important on the Suffolk Historic Environment Record.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The site is located at approximately 15-18m AOD towards the bottom of the north side of the river Lark valley. The local soil comprises chalky drift and chalk of the Swaffham Prior association. The underlying solid geology is Cretaceous Middle Chalk.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 Prehistoric artefacts have been found within 500m of the site recoveerd mainly from river gravels, most notably Palaeolithic tools were found at London Bottom (IKL 054), and other Palaeolithic flints were recovered from behind the church (IKL 045). A late Bronze Age socketed axe was found in gravel approximately 75m to the south-west (IKL 106). The ancient route way of the Icknield Way ran through Icklingham, which is believed to date back to prehistoric times linking Norfolk ultimately with the south coast.

4.2 A Roman small town, rather than the originally interpreted villa estate, was located at Icklingham with a centre point approximately 1km south of the site, near Weatherhill Farm (IKL 063, 167). The Roman town may have contained the site of an early Christian church

and is a Scheduled Monument (SAM 152). A scatter of Roman coins have been found in the vicinity of the site (IKL 066).

4.3 The Lark valley contains early Saxon settlement and cemetery sites such as West Stow and Lackford. The Black Ditches commencing approximately 550m south-west of the site is a Scheduled Monument linear earthwork which is the easternmost of a series of such dykes blocking the Icknield Way which probably served as territorial boundaries (RBY 002; SAM SF18b).

4.4 The settlement of Icklingham is listed in the Domesday Book where a church is mentioned (IKL 180). The current Church of St James has a chancel dated c.1300 and was restored in the 19th century (IKL 089). An archaeological evaluation at 35, The Street identified several medieval and post-medieval pits (IKL 166). Further 13th -14th century rubbish pits were recorded in 'the garden of the school house' (IKL 030). A medieval human skull, thought by the teeth to be an infant was dredged from the Lark at Icklingham (IKL 098). A single evaluation trench was excavated on land to the rear of 23 and 26 Hall Close, The Street. It revealed four postholes and three possible pits, as well as a further possible posthole, all sealed by an undated soil layer and a buried topsoil (at a depth of c.0.7-0.8m below existing ground level. No finds were recovered from the site, but the features pre-date the hall that stood on the site in the 19th century; the archaeological deposits were well preserved (IKL 195; Brook 2012). Earlier monitoring of ground works at Hall Close in 2008 noted no archaeological features or finds (IKL 169).

4.5 An English Civil War sconce is located on the river alluvium 500m south of the site which is a Scheduled Monument although there no historical record of it exists (IKL 071: SAM 213). The site is also located to the rear of the former Icklingham Hall, which was a post-medieval building shown on the 1882 and 1904 1st and 2nd Edition Ordnance Survey maps which fronted The Street (IKL 099; Brook 2012). Another house, Sexten Hall, was located in the southern part of the village, which is thought to have been the manor of the Sacristan of Bury St Edmunds it was gone by the beginning of the 20th century (IKL 100). A WWII pill box is located within the Scheduled area of the civil war earthwork and has partly destroyed it (IKL 124), and a second WWII pillbox is located 50m east of Mill Farm (CAM 053).

Previous Investigation

4.6 The site has been subject to an archaeological trial trench evaluation (SCC AS Report 2012/177). A single trial trench excavated on the site revealed small undated features (predominantly post holes) sealed by recent overburden and a buried topsoil (at a depth of c.0.7-0.8m below existing ground level).

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). The brief also required a strip, map and sample within the area of proposed Plot 3 (east and south of the proposed building). This is the area of the trial trench evaluation. 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:

Sample Section 1 *0.00 = 17.71m AOD*		
0.00 – 0.05m	L1000	Tarmac. Previous road surface for garages
0.05 – 0.22m	L1001	Type 1 Aggregate. Levelling layer for the previous road surface.
0.22 – 0.31m	L1002	Modern demolition layer. Firm, mid greyish brown sandy silt with frequent small to medium sub-rounded brick, CBM and chalk flecks.
0.31 – 0.50m+	L1003	Buried soil. Firm, dark orange / brown sandy silt with occasional small sub-rounded chalk
0.50m+	L1004	Natural. Compact, white with orange patches chalk and sand. Natural is predominantly chalk with small glacial scars which contain sand and silt.

Sample Section 2 *0.00 = 18.12m AOD*		
0.00 – 0.55m	L1009	Topsoil. Firm, dark orange / brown sandy silt with sparse small sub-rounded chalk nodules.
0.55 – 0.59m	L1002	Modern demolition layer. As above
0.59 – 0.87m	L1003	Buried topsoil. As above
0.59 – 0.87m	L1004	Natural deposits. As above

Sample Section 3 *0.00 = 18.42m AOD*		
0.00 – 0.03m		Surface. Medium rounded and sub-rounded flint gravel.
0.03 – 0.33m	L2009	Buried topsoil. Firm, darkish grey brown sandy silt with occasional medium angular flints.
0.33 – 2.40m+	L2001	Natural deposits.

Sample Section 4 *0.00 = 17.47m AOD*		
0.00– 0.21m	L2000	Topsoil. Firm, dark grey brown sandy silt with moderate small and medium angular and sub angular flint
0.21m+	L2001	Natural. Compact white chalk

Sample Section 5 *0.00 = 17.69m AOD*		
0.05 – 0.12m	L2006	Type 1 Aggregate. As above Sample Section 1, L1001
0.12– 0.30m	L2000	Topsoil
0.30m+	L2001	Natural

Sample Section 6 *0.00 = 17.39m AOD*		
0.00 – 0.10m	L2007	Rubble layer. Friable, mid yellow brown silty sand with moderate medium and small rounded flint and angular chalk. Frequent modern building rubble.
0.10– 0.17m	L2008	Made ground. Compact chalk with occasional medium angular flint.
0.17 – 0.40m	L2009	Buried soil. Dark grey brown silty sand with occasional medium angular flint and chalk
0.40 – 0.55m+	L2010	Made ground. Mixed patches of firm chalk and mid orange brown silty sand and occasional small and medium angular flint

Sample Section 7 *0.00 = 17.42m AOD*		
0.00 – 0.09m	L2007	Rubble layer. As above
0.09 – 0.12m	L2011	Very pale yellow brown, friable, coarse sand with occasional small angular flint
0.12 – 0.48m+	L2009	Buried soil. As above.

Description:

The excavation of the foundation trenches was undertaken with a tracked mechanical excavator. The foundations for the external walls

were 0.70m wide, and the internal walls were 0.50m wide. The trenches were between 2.00m and 2.40m deep.

Within Sample Section 4 (Fig.4) F2002 was a modern disused service trench with the service removed and the trench backfilled. It contained three layers. The basal layer, L2003, was a mid grey brown, firm, chalky sandy silt. The second layer, L2004, was a pale orange brown, friable, sand. The upper layer, L2005, was a mid grey brown, firm, sandy silt with moderate chalk and occasional flint.

During the site monitoring visits the excavation of a `strip map and sample' area, with a 5 tonne 360° tracked mechanical excavator, for Plot 3 in the south-eastern quadrant of site was monitored (Figs. 3 - 4). This is the area of the previous trial trench evaluation. The depth of the excavated area varied from 0.50m - 0.85m and the natural was exposed.

Two tree throws were present:

F1005 was amorphous in plan, (3m x 1.30m x 0.31m), It had irregular moderately sloping sides and an irregular concave base. It cut the natural, L1004, and was overlain by the buried soil L1003. F1005 was located on the western side of excavated area. Its fill, L1006, was mid orangish brown friable sandy silt with occasional small to medium sub-rounded chalk nodules. It contained a sherd of medieval (12^{th} – 14^{th} century) pottery (4g).

F1007 was also irregular in plan, (4m x 2.60 m x 0.41m), It had irregular gently sloping sides and an irregular concave base. It also cut the natural, L1004, and was overlain by the buried soil L1003. It was located on the eastern side of the excavated area. Its fill, L1008, was a dark orange brown friable sandy silt with occasional small to medium sub-angular/angular flint and sub-rounded chalk nodules. L1008 contained medieval (12^{th} – 14^{th} century) pottery (20g), a small struck flint (1g), modern glass (1g) and animal bone (2g).

The excavation also revealed modern (20^{th} century) ditches and a dog burial.

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 The area had been surfaced with a layer (L1001) of tarmac (0.10m). The latter overlay Type 1 Aggregate, L1001 (0.17m thick). L1001 overlay a modern demolition layer, L1002, a firm, dark greyish brown sandy silt with frequent CBM and chalk flecks (0.23m thick). L1002 overlay a buried soil, L1003, a firm, dark orange brown sandy silt with occasional small sub-rounded chalk (0.19m thick). Below L1003 were the natural deposits which comprised compact, white and orange, chalk and sand. The natural was c.0.50m below the present day ground surface

9 DISCUSSION

9.1 The site has been subject to an archaeological trial trench evaluation (SCC AS Report 2012/177). A single trial trench excavated on the site revealed small undated features (predominantly post holes) sealed by recent overburden and a buried topsoil (at a depth of c.0.7-0.8m below existing ground level). The `strip, map and sample' exercise within this area of the site revealed tree throws, a modern dog burial and modern ditches. Unlike the evaluation trench the features were dated and were not predominantly post holes.

9.2 The tree throws contained medieval (12th – 14th century) pottery (Pottery Report below) and a struck flint of ?Mesolithic or early Neolithic date (Struck Flint Report below).

9.3 Monitoring of the remaining groundworks revealed no further archaeological features or finds.

9.4 The site lies within the historic settlement core of Icklingham (HER IKL 180), north of the medieval parish church and churchyard (HER IKL 089). Before The Hall Close was developed, the site lay within the garden area of the post-medieval Icklingham Hall. Finds scatters of earlier periods are also known from the general area. The site had a potential for prehistoric and medieval finds and the material from within the tree throws is consistent with the site's location and previous finds within the area.

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 Brooks and Wood Ltd for commissioning the investigation.

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

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

SCC AS, 2012, *Land to the rear of 23 and 26 Hall Close, Icklingham, IKL 195; Archaeological Evaluation Report,* SCC AS Report 2012/177

WEB SITE

Heritage Gateway

APPENDIX 1 CONCORDANCE OF FINDS

IKL195, Hall Close, Icklingham
Concordance of finds by
feature

Feature	Context	Segment	Trench	Description	Spot Date	Pottery	CBM (g)	A.Bone (g)	Other
1005	1006		1	Fill of Tree Throw	12th-14th	(1) 4g			
1007	1008		1	Fill of Tree Throw	12th-14th	(4) 20g		2	Glass (1) - 1g Str. Flint (1) - 1g

APPENDIX 2 SPECIALIST REPORTS

The Pottery
by Peter Thompson

The investigation recovered 4 light to moderately abraded medieval coarse ware sherds from two tree throws, which are described and quantified below (Table 1).

Key:
MSW1: Medieval sandy ware 1; pale grey surfaces and core; fine-medium quartz sand; occasional small reddish iron mineral and white calcitic inclusions 12th-14th centuries
MSW2: Medieval sandy ware 2; as for MSW1 but finer sand matrix with occasional larger rounded quartz but few other inclusions, pale grey, x1 sherd pale orange brown core 12th-14th
MSW3: Medieval sandy ware 3; pale grey throughout, fine sandy fabric with moderate larger quartz inclusions and tiny vesicles from burnt organic 12th-14th
MCWG: medieval gritty coarseware: thick walled, moderate coarse rounded quartz in a sandy matrix. Grey with oxidised inner surface 12th-13th

Feature	Context	Description	Spot Date	Quantity	Comment
1005	1006	Fill of Tree Throw	12th-14th	1x4g MSW1	
1007	1008	Fill of Tree Throw		2x8g MSW2 1x2g MSW3 1x9g MCWG	

Table 1: Quantification of sherds by context

The Struck Flint
Andrew Peachey MIfA

A single small flake (<1g) was contained in Tree Throw F1007 (L1008). The flake of dark grey raw flint may comprise a bladelet or micro-blade, or simply incidental debitage, struck form an abraded (prepared) blade core using in-direct percussion. It is probably of Mesolithic to earlier Neolithic date.

Animal Bone Report
Dr Julia E. M. Cussans

A single piece of mammal bone was recovered from trial trench excavations at Icklingham; this derived from L1008 (Tree Throw F1007). It is most likely a medium mammal (sheep or pig sized) long bone fragment; no signs of butchery, pathology or other modification were noted.

APPENDIX 3 SPECIFICATION

FORMER GARAGES REAR OF 23 & 26, THE HALL CLOSE, ICKLINGHAM, SUFFOLK

WRITTEN SCHEME OF INVESTIGATION FOR CONTINUOUS ARCHAEOLOGICAL MONITORING/RECORDING & STRIP, MAP & SAMPLE

12th April 2013

FORMER GARAGES REAR OF 23 & 26, THE HALL CLOSE, ICKLINGHAM, SUFFOLK

ARCHAEOLOGICAL MONITORING & RECORDING & STRIP, MAP & SAMPLE

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, Jess Tipper, dated 4th February 2013). It provides for continuous archaeological monitoring/recording of groundworks and also a programme of 'strip, map & sample' during residential development of land formerly occupied by garage blocks to the rear of 23 & 26 The Hall Close, Icklingham, Suffolk (NGR TL 771 730). The works are required to comply with a planning condition on approval for the erection of 1No single storey bungalow and 2No dormer bungalows, following demolition of existing garages (Forest Heath DC Ref. F/2010/0611/FUL).

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 comprises an area of former garages to the rear of houses fronting The Hall Close, Icklingham, within an area defined as important on the Suffolk Historic Environment Record. It lies within the historic settlement core of Icklingham (HER IKL 180), north of the medieval parish c hurch and churchyard (HER IKL 089). Before The Hall Close was developed, the site lay within the garden area of the post-medieval Icklingham Hall. Finds scatters of earlier periods are also known from the general area. The site has been subject to an archaeological trial trench evaluation (SCC AS Report 2012/177). A single trial trench excavated on the site revealed a number of small undated features (predominantly post holes) sealed by recent overburden and a buried topsoil (at a depth of c.0.7-0.8m below existing ground level).

3.2 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).

4.2.2 Wade (in Brown & 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 & 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.

4.2.3 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).

4.2.4 The issues identified by Ayers (in Brown & Glazebrook, 2000) and Wade (in Brown & 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).

4.2.5 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 & 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.

4.2.6 As set out above, the principal research objectives will be to identify any further evidence of activity recorded during the evaluation, and to date this activity.

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

SCC AS, 2012, *Land to the rear of 23 and 26 Hall Close, Icklingham, IKL 195; Archaeological Evaluation Report,* SCC AS Report 2012/177

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 to reveal further archaeological features.

5.2 The brief requires the continuous monitoring of all groundworks (removal of existing foundations) in order to provide a record of any archaeological deposits which might be damaged or removed by any development (such as structural features, pits, postholes, hearths, surfaces etc) permitted by the current planning consent. Any ground works, and also the upcast soil, are to be closely monitored during and after removal 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 A programme of ‘strip, map & sample’ is required within the area of proposed Plot 3 (east and south of the proposed building).

Overburden will be removed under close archaeological supervision in this area, and any archaeological remains subject to excavation.

5.4 It is understood that if any further ground reduction/stripping is required by the development elsewhere on the site, a buffer of at least 250mm is to be maintained between formation level and the archaeological horizon defined in the evaluation (c.0.7-0.8m below existing). If this cannot be achieved, 'strip, map & sample' excavation will additionally be required in these areas.

5.5 The programme of work will include the following stages:

- Initial clearance of 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;
- 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.

All discrete features (other than modern features) to be fully excavated
50% excavation of post-holes (unless part of a recognised structure or containing significant deposits/assemblages)
Stratified deposits to be excavated stratigraphically, if present
Metal detecting and 3D recording of any metalwork finds
Full written records of each context, using single context planning system
Full photographic record (including high quality publication shots)
Sampling for palaeoenvironmental evidence, as required

- assessment
- post-excavation and publication, as appropriate to the results of the project

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

Stage Details

5.7 **Site clearance**: under archaeological observation

5.8 **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).

5.9 **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

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

5.11 The resultant project report will follow the principles of MAP 2 / MoRPHE (as set out in the brief, section 6.6).

5.12 *Staffing*

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

5.12 *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 A summary report will be prepared for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute of Archaeology*.

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, 2008). 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 KEY 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.

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 project-manages) 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

PROJECTS MANAGER
(FIELD & ARCHIVES) **Martin Brook BA**

Qualifications: University of Leicester BA (Hons) Archaeology (2003 -2006)

Experience: Martin worked on archaeological excavations throughout his university career in and around Leicester including two seasons excavating a medieval abbey kitchen at Abbey Park, Leicester with ULAS. He specialised in Iron Age funeral traditions and grave goods for his 3rd year dissertation advancing his skills in museum research, database use and academic correspondence. He joined AS in September 2006 as an excavator involved in projects such as Earsham Bronze Age Barrow and cremation site. From May 2007, Martin has moved across to the Post-Excavation team to become Assistant Archives Officer, and thereafter Martin has returned to fieldwork as a Supervisor before being promoted to project management in 2009

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 **Stephen Quinn BSc**

Stephen Quinn joined AS as a Site Assistant 2009, and in 2012 was promoted to the role of Supervisor. After graduating in Archaeology and Palaeoecology at Queens University Belfast, he worked for several commercial archaeology units including on Neolithic settlement and burial sites and a Bronze Age henge monument in Northern Ireland; early industrial pottery productions sites in Glasgow, and urban Roman excavation in Lincoln. In 2012 Stephen has been heading AS' excavation of a Roman fenland settlement site at Soham, Cambridgeshire.

Stephen is qualified in the Construction Skills Certification Scheme (CSCS).

SUPERVISOR **Kamil Orzechowski BA, MA**

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 **Samuel Egan BSc**

Samuel Egan joined AS in 2012 as an experienced field archaeologist after working on a range of excavations in Northamptonshire including a large-scale road project, community projects, evaluation and excavation projects, and geophysical syrveys. Samuel graduated from Bournemouth University

with two degrees: Fdsc Field Archaeology and BSc (hons.) Field Archaeology.

Samuel is qualified in the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work (Red Cross).

SUPERVISOR **Laszlo Lichtenstein MA, MSc, PhD**

Laszlo Lichtenstein joined AS in 2012 as a Supervisor, highly experienced in a range of archaeological project management, field archaeology and archaeozoology. Laszlo has extensive experience spanning Hungary, and later Northamptonshire, including directing evaluation and excavation projects; managing project set-up including written schemes of investigation, desk-based assessments and geophysical survey; and post-excavation analysis. Laszlo completed his academic studies at University of Szegad, Hungary, including his PhD on geophysical and archaeological investigations of late Bronze Age to early Iron Age settlements in south-east Hungary, and has published numerous articles on his areas of research.

Laszlo is qualified in the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work.

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 11 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 is part-way through writing up a PhD on Viking Age demographics, a long-term academic interest that has led to his gaining considerable research excavation experience across the North Atlantic. 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/ Føroya Fornminnissavn, 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, 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) Julia Cussans PhD

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 c. 12 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 villa 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 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.

HISTORIC BUILDING RECORDING **Lisa Smith BA**

Qualifications: University of York, BA Archaeology (1998-2001)

Experience: Lisa has nine years archaeological experience undertaken mainly in the north of England previously working as a senior site assistant for Field Archaeology Specialists in York on both rural and urban sites as well as Castle Sinclair Girnigoe and Tarbat in Scotland. Prior to working for FAS Lisa was involved in various excavation projects for Oxford Archaeology North and Archaeological Services, University of Durham. Lisa joined AS as a supervisor in January 2008 and in November 2009 transferred to historic building recording and has since worked on a variety of buildings dating from the medieval period onwards, working closely with external consultant Dr Lee Prosser.

GRAPHICS OFFICER **Rosanna Price BSc**

Qualifications: University of Kent, Medical Anthropology BSc (Hons) (2005 - 2008)

Experience: Rosanna's interests have always revolved around art and human history, and she has combined these throughout her work and education. During her degree she specialised in Osteoarchaeology and Palaeopathology, and personally instigated the University's photographic database of human remains. This experience gained her the post of Osteoarchaeologist at Kent Osteological Research and Analysis in early 2009, where she worked on a number of human bone collections including the Thanet Earth Skeletons. In January 2010 she joined AS as a Finds and Archives assistant, and by the summer had achieved a new role as graphics officer. In her current position Rosanna uses a range of computer programmes, such as AutoCAD, Adobe Illustrator and CorelDraw to produce digital figures and finds illustrations. These accompany a wide range of archaeological reports, from desk-based assessments and interim reports through to publication standard.

GRAPHICS OFFICER **Charlotte Davies MPhil**

Qualifications: University of Exeter, Archaeology BA (Hons) (2004-2007)
Surrey Institute of Art & Design, BTEC Foundation Diploma in Art & Design (2003-2004)
University of Cambridge, Archaeology (Heritage & Museum Studies) MPhil (2010-2011).

Experience: Charlotte has always had a passionate interest in art and archaeology, and has combined these interests in her higher education. Charlotte worked on archaeological excavations in South Dakota, USA, before joining AS in 2007 as part of the graphics team. Charlotte's role within AS comprises the production of a wide range of high quality figures and illustrations for reports, from desk-based assessments and interim reports through to publication. Charlotte became a member of the Association of Archaeological Illustrators and Surveyors in 2009 (this subsequently became incorporated into the Institute for Archaeologists), and in 2010 undertook a masters degree in archaeology at the University of Cambridge.

ARCHAEOLOGICAL SOLUTIONS: PRINCIPAL SPECIALISTS

GEOPHYSICAL SURVEYS	Stratascan Ltd
AIR PHOTOGRAPHIC ASSESSMENTS	Air Photo Services
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 J Curl
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

HISTORIC BUILDINGS CONSULTANT Lee Prosser BA PhD AIFA

Lee Prosser is a specialist in historic buildings, with a particular interest in historic brickwork and timber-framing. After taking a degree in Archaeology and Victorian Studies at the University of Wales, Lampeter, he completed a doctoral thesis in landscape archaeology, formulating a model for the study of poorly documented landscapes by using a combination of toponymy, historic buildings and economic theory. Whilst employed by the former Hertfordshire Archaeological Trust for five years, he produced over a hundred historic building recording reports, many in conjunction with the late Adrian Gibson MBE.

Lee is currently curator (Historic Buildings) at Historic Royal Palaces, the organisation which manages and cares for The Tower of London, Hampton Court Palace, Kensington Palace, Kew Palace and The Banqueting House, Whitehall.

For ten years Lee was an associated tutor with academic status at Bristol University

APPENDIX 2
METHOD STATEMENT

The archaeological excavations will be conducted in accordance with the project brief, and the code and guidelines of the Institute for Archaeologists

1 Topsoil Stripping

1.1 A mechanical excavator with a 1.8-2 m wide toothless bucket will be used to remove the topsoil. 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.

1.3 Removal of overburden will be controlled, under the full-time supervision of an experienced archaeologist.

2 Grid and Bench Marks

2.1 Following the stripping the temporary bench marks (with corrected levels) and an accurate site grid (pegs at 5-10 m intervals) will be surveyed.

3 Site Location Plan

3.1 On conclusion of the site stripping, 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. The location of the OS bench marks used and site TBMs will also be indicated.

4 Manual Cleaning & Base Planning of Archaeological Features

4.1 As set out in the brief.

4.2 Ahead of any excavation a complete site plan will be composed. The principal purpose will be to quantify the composition of the site from the outset in order to agree a detailed excavation strategy.

5 Archaeological Excavation

The archaeological features will be excavated according to the requirements of the SCCAS brief

Archaeological Excavation Strategy

Negative features will be half-sectioned and box sections may be excavated through more homogeneous layers as appropriate. These may provide a window into any underlying deposits present on the site.

Where archaeological features are encountered at a 'high' level; e.g. cutting earlier horizons, they will be base planned, cleaned, hand excavated and recorded prior to excavation proceeding to the underlying archaeological horizons.

100% excavation will be undertaken of

- **structural features;** (including post holes unless clearly not part of a recognisable structure)

- **surviving internal floors;** e.g. within ring gullies, or buildings, will be fully exposed, carefully cleaned, planned (at 1:50 or 1:20) and photographed, prior to being hand excavated to reveal possible underlying features. Where appropriate these surfaces will be excavated in a grid of $1m^2$ test pits, in 5cm spits in order to assess artefact density and distribution.

- **positive features obscuring earlier features;** will be cleaned, photographed and planned (at 1:50 or 1:20) prior to being excavated stratigraphically and in phase. Component deposits or structural elements will be recorded on *pro-forma* recording (Context) sheets and in section if appropriate prior to 100% excavation.

- **hearths;** will be hand cleaned and planned, hand excavation of 50% of the feature will be carried out stratigraphically and in phase in order for a profile to be drawn and a full assessment the component deposits be made. Additional environmental and specialist sampling will be carried out on specialist advice, prior to 100% hand excavation of the feature.

- **graves or animal burials;** each grave cut will be cleaned, fully defined and planned. The grave fill(s) will be hand excavated in phase and any skeletal remains carefully cleaned and exposed; environmental bulk samples will be taken from the grave fill(s) and abdominal cavity (for stomach contents, kidney stones etc) as appropriate. The exposed skeletal remains will be recorded using *pro forma* recording (Skeleton) sheets photographed and planned at 1:20 or 1:10 dependant on size and complexity.

Small finds such as grave goods, shroud pins or coffin fittings will be will be three dimensionally recorded.

- **industrial features**; (pottery kilns, furnaces etc) will be excavated stratigraphically and in phase. Sections will be recorded through the length of each feature (large features such as a limekiln may be quadranted) incorporating any surviving flue or stoke hole allowing a full assessment the component deposits be made and any industrial waste, or structural components (e.g. kiln furniture, tuyeres) to be identified. These features will photographed and planned at 1:20. All industrial features will be sampled for appropriate scientific analysis (e.g. archaeometallurgical, artefactual and environmental analysis). The document Archaeomaetallurgy (English Heritage Centre for Archaeology Guidelines 2001) will be used to give guidance to the project. Advice on archaeomagnetic dating will be obtained from the relevant specialists (e.g. Dr Cathy Batt, University of Bradford) as necessary.

- **wells;** will be hand excavated stratigraphically and in phase. The backfills of the well shaft will be 'half-sectioned' to a maximum depth of 1.2m. The deposits revealed will be recorded using *pro-forma* recording (Context) sheets, photographed and drawn at 1:10 or 1:20 as appropriate, any lining or structure will be cleaned and recorded prior to 100% excavation and investigation of any possible construction cut. Excavation will only continue beyond a depth of 1.2m once the area of excavation has been made safe either by 'stepping' or shoring. Specialist advice (such as Maisie Taylor) will be sought if a preserved wooden lining or water-logged remains are encountered.

50% excavation will be undertaken of

discrete features, pits, post and stake holes (the latter which are clearly not part of a structure). Pits with a suggestion of 'placed' deposits or which contain significant artefactual/ecofactual assemblages will be 100% excavated as required

10% excavation will be undertaken of

simple linear features not directly associated with core settlement, with more detailed investigation of intersections/terminals/re-cuts/specialised deposits etc

A minimum of 25% excavation will be undertaken of linear features associated with settlement in hand excavated slots up to 2m in length.

Building remains

Building remains may be encountered. These structures are likely to comprise stake holes, post holes, beam slots, gullies and, more rarely

masonry foundations or low masonry walls. Associated features may be represented e.g. stone, tile floors, cobbled yard surfaces and hearths.

These features will be fully excavated in plan/phase.

Where encountered the structural remains of early buildings will be hand cleaned to reveal their full extent and then planned at 1:50 or 1:20 as appropriate.

The internal areas will be stratigraphically excavated and recorded by quadrants where appropriate to establish the sequence of post-use deposition and abandonment and to identify any *in situ* occupation or floor surfaces.

Any surviving walls or foundations of structures will be cleaned and recorded using *pro forma* recording (Masonry) sheets. Elevations will be drawn of external and internal wall faces as appropriate. Sections will be excavated and recorded through the fabric of the walls in order to fully understand their construction.

Samples of worked stone, early tile and any bonding or render material will be taken for specialist analysis.

Waterlogged Deposits/Remains

Should deposits such as the above be encountered, provision has been made for controlled hand excavation and sampling. Appropriate specialists will be on hand to advise as necessary.

Industrial Features

All industrial features will be sampled for appropriate scientific analysis (eg archaeometallurgical, artefactual and environmental analysis). The document *Archaeomaetallurgy* (English Heritage Centre for Archaeology Guidelines 2001) will be used to give guidance to the project.

Sieving Strategy

Dry-sieving of onsite deposits will be carried out to enhance finds recovery.

6 Written Record

6.1 All archaeological deposits and artefacts encountered during the course of the excavation will be fully recorded on the appropriate context, finds and sample forms.

6.2 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. Information contained on the site record forms will be entered into a database programme to enable computerised manipulation of the data. The data entry will be undertaken in tandem with the fieldwork.

7 Photographic Record

7.1 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.

8 Drawn Record

8.1 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. 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.

9 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. A Roman ceramic specialist will visit during the excavations as required, to provide on-site advice.

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.

The pottery specialist is likely to seek important or key groups which will be studied in detail.

If several sherds from a single pot are found, the other half of the feature will be dug to obtain conjoins and a more complete pottery profile.

METALWORKING

The excavation team will be made fully aware of the potential presence of any early metalworking evidence. It is envisaged that where there is evidence for industrial activity, large technological residues will be collected by hand. Separate smaller samples will be collected for micro-slags, as detailed in the EH/HMS *Archaeometallurgy in Archaeological Projects*, Centre for Archaeology Guidelines 2001. Appropriate specialists (e.g. Jane Cowgill/Oxford University Research

Laboratory for Archaeology) will be invited to visit the site if significant deposits (e.g. slag) are encountered.

The requirements of the Treasure Act 1996 (with subsequent amendments) will be adhered to, in the event of significant items of metalwork being recovered.

HUMAN BONE

If human remains are encountered, AS will obtain an exhumation licence for human remains from the Ministry of Justice.

Post-excavation analysis will follow the guidelines outlined in the English Heritage document *Human Bones from Archaeological Sites, Guidelines for producing assessment documents and analytical reports*, Centre for Archaeology Guidelines 2002.

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.

SAMPLING

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.

The programme of environmental sampling will adhere to the guidelines, in particular, it will accord with *Model clauses on Archaeological Science for Briefs and Specifications* (EH Advisors for Archaeological Science from all 9 regions), December 2000 and the document *Environmental Archaeology; a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, English Heritage, Centre for Archaeology Guidelines 2011.

If waterlogged remains are found advice on sampling will be obtained on site from Dr Rob Scaife. Dr Rob Scaife and AS will seek advice from the EH 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. The evaluation report notes the potential of deposits within the site for the preservation of charred plant remains.

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.

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 (Romano-British 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. Where wood is found, representative material will be sampled during the excavation and stored wet/moist to facilitate later identification.

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 English Heritage 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 EH regional co-ordinator 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 will visit to advise of 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).

PHOTOGRAPHIC INDEX

1
General site shot, topsoil stripping **(July 2013)**

2
Site after topsoil stripping **(July 2013)**

3
F1005 looking north-east (July 2013)

4
F1007 looking north-east **(July 2013)**

5
Modern dog burial looking south-east **(July 2013)**

6
Sample section 1 looking north-west **(July 2013)**

7
View of service trench looking east **(10/10/13)**

8
F2002 (SS4) looking south-west **(10/10/13)**

9
View of footings looking south-west **(29/10/13)**

10
Sample section 3 looking north-west **(29/10/13)**

11
View of footings looking south-east **(04/11/13)**

12
Sample section 5 looking north-west **(09/04/14)**

13
Service trench looking north-east **(09/04/14)**

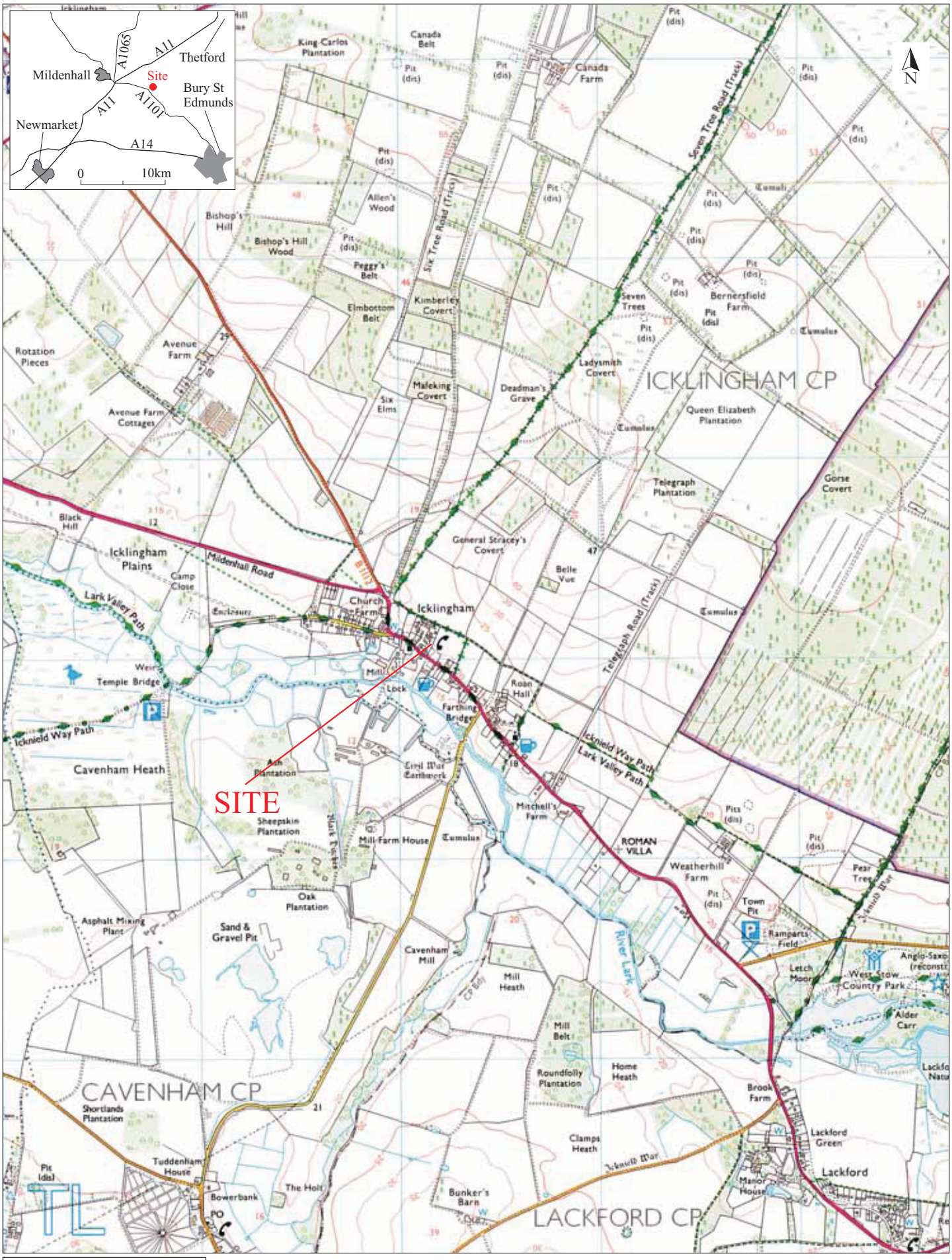
14
Service trench looking north-west **(09/04/14)**

15
General shot looking north-east **(02/05/14)**

16
Service trench looking north-west **(02/05/14)**

17
Sample section 6 looking west **(02/05/14)**

18
Sample section 7 looking north-west **(02/05/14)**



Archaeological Solutions Ltd

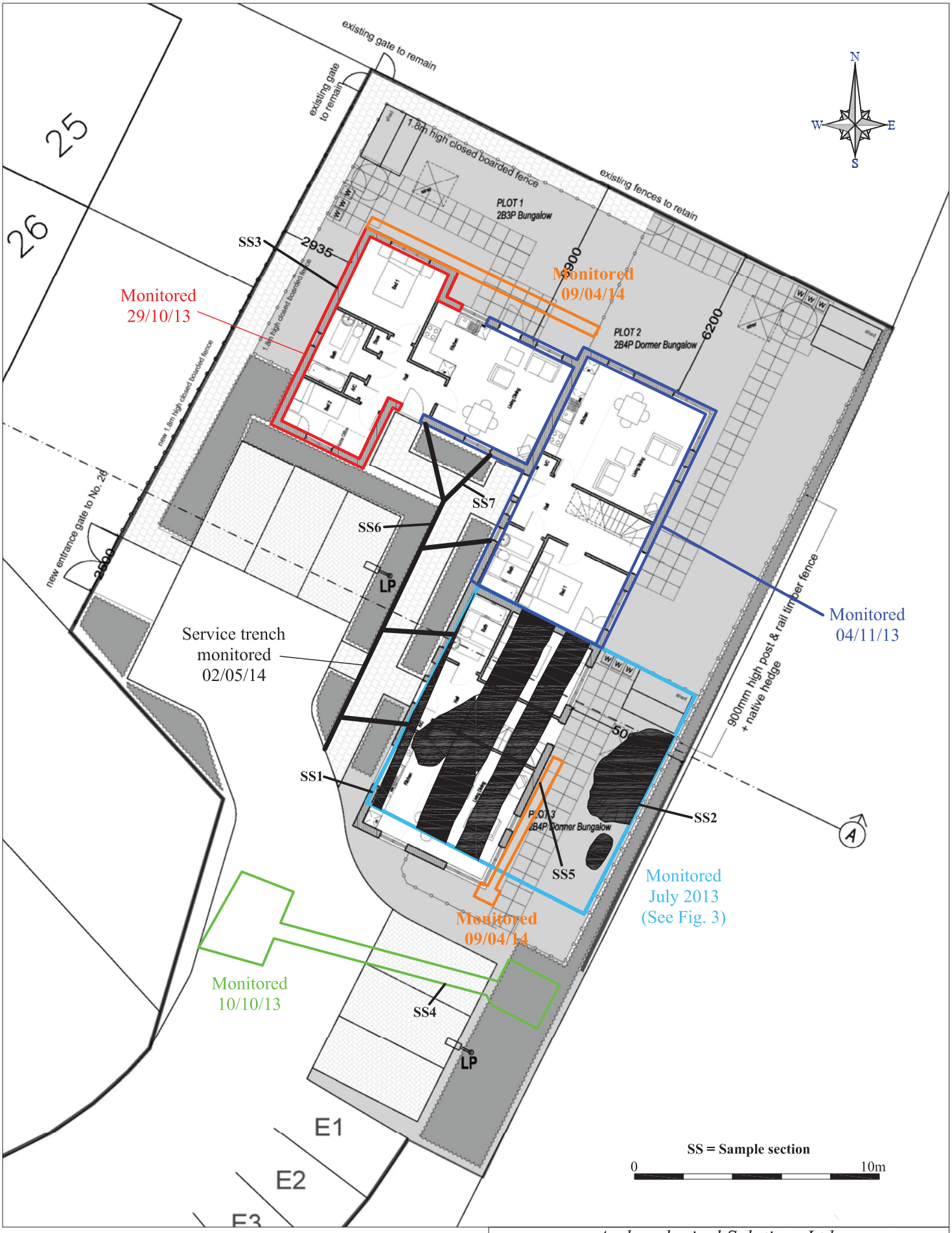
Fig. 1 Site location plan

Scale 1:25,000 at A4

Archaeological Solutions Ltd

Fig. 2 Detailed site location plan

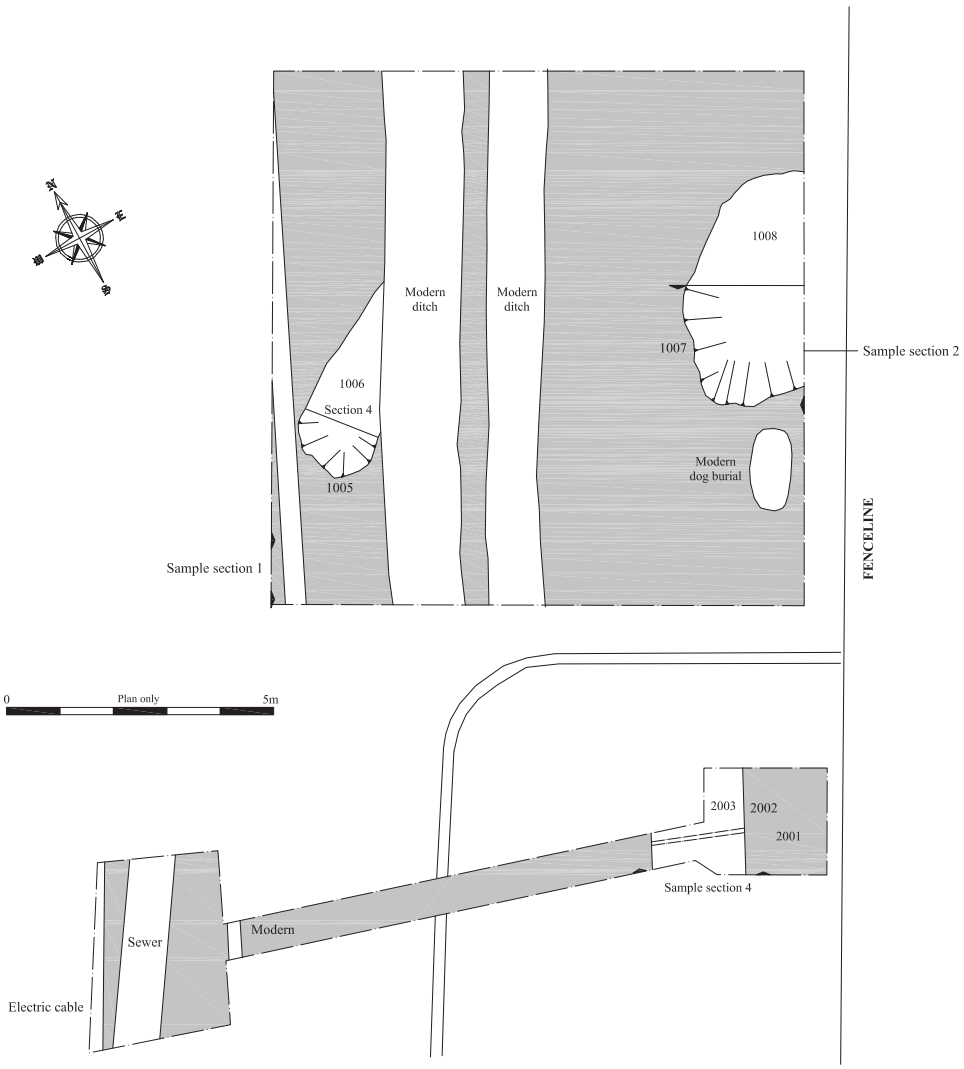
Scale 1:800 at A4

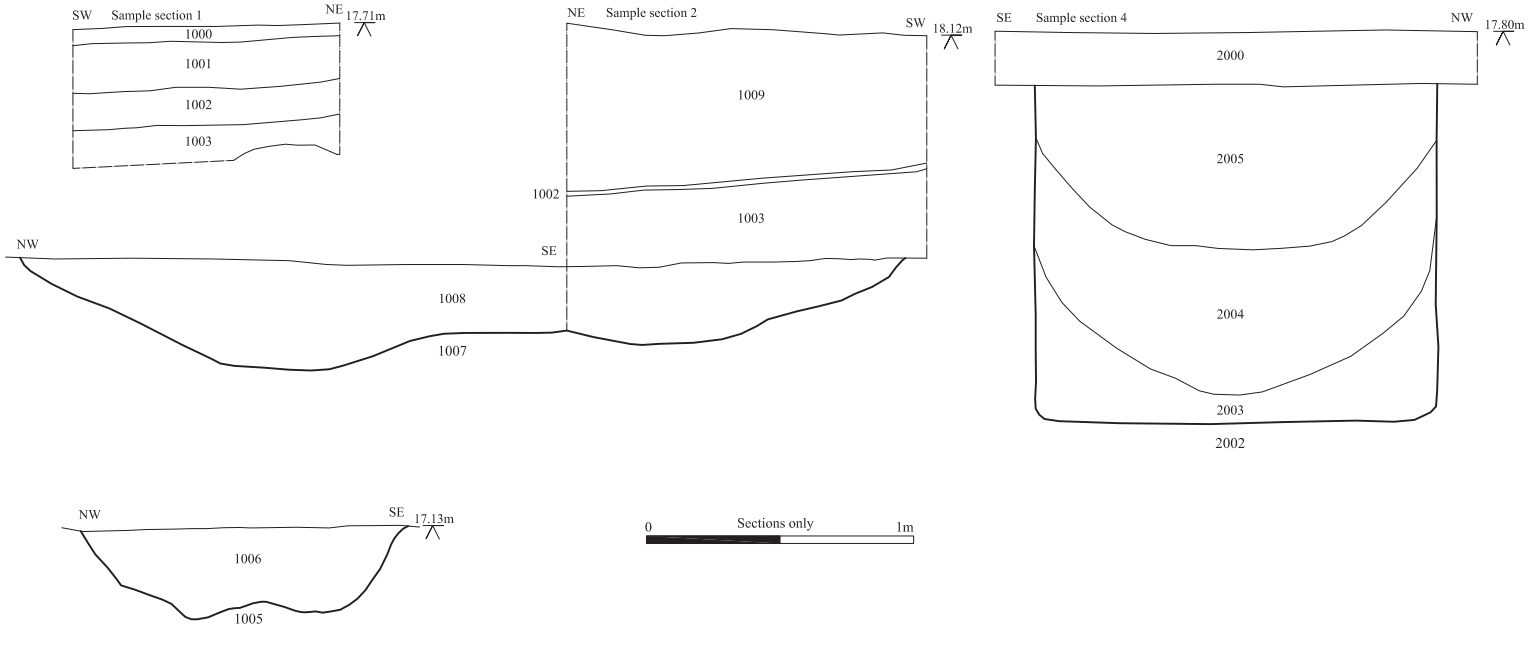


Archaeological Solutions Ltd

Fig. 3 Proposed development plan

Scale 1:200 at A4





Archaeological Solutions Ltd
Fig. 4 Trench plans and sections
Scale 1:100 and 1:20 at A3