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**QUICKTHORNS, WINDMILL HILL,
EXNING, SUFFOLK CB8 7PB**

AN ARCHAEOLOGICAL EVALUATION

Authors: Thomas Muir (Fieldwork and report)	
NGR: TL 627 658	Report No: 5512
District: Forest Heath	Site Code: EXG113
Approved: Claire Halpin MCIfA	Project No: P7322
	Date: 26 January 2018

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**PI House, 23 Clifton Road, Shefford,
Bedfordshire SG17 5AF
01462 850483**

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

**e-mail info@ascontracts.co.uk
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Project details			
Project name	<i>Quickthorns, Windmill Hill, Exning, Suffolk CB8 7PB</i>		
<p><i>In January 2018 Archaeological Solutions (AS) carried out an archaeological evaluation on land at Quickthorns, Windmill Hill, Exning, Suffolk (NGR TL 627 658; Figs. 1 - 2). The evaluation was undertaken in compliance with the initial requirements of a planning condition attached to planning approval for the proposed construction of a dwelling (Forest Heath Council Planning Approval DC/17/0988/FUL). It was required based on the advice of Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT)</i></p> <p><i>Only the southernmost trench, Trench 1 revealed archaeological features and it contained Pits F1004 and F1008, and Ditch F1011. Pit F1004 contained a struck flint flake with heavily rolled edges, possibly of Neolithic date; Pit F1008 contained a fragment of a sandstone grinding wheel with a relatively narrow diameter, possibly associated with grinding knives; and Ditch F1011 contained a post-medieval / modern fe. fragment. The preservation of the struck flint flake suggests it may be residual (Struck Flint report) and because of its technology the worked stone fragment is likely of post-medieval date. The profile of Ditch F1011 and the tip lines of its fill were similar to the cut of a mechanical excavator and the feature may represent a disturbance associated with the previous construction of the swimming pool.</i></p>			
Project dates (fieldwork)	<i>January 2018</i>		
Previous work (Y/N/?)	<i>N</i>	<i>Future work</i>	<i>TBC</i>
P. number	<i>P7329</i>	<i>Site code</i>	<i>EXG113</i>
Type of project	<i>Archaeological evaluation</i>		
Site status	<i>-</i>		
Current land use	<i>Garden</i>		
Planned development	<i>Residential</i>		
Main features (+dates)	<i>Pits, ditch</i>		
Significant finds (+dates)	<i>A residual struck flint of possible Neolithic date</i>		
Project location			
County/ District/ Parish	<i>Suffolk</i>	<i>Forest Heath</i>	<i>Exning</i>
HER/ SMR for area	<i>Suffolk County Council Historic Environment Record</i>		
Post code (if known)	<i>CB8 7PB</i>		
Area of site	<i>c.2420m²</i>		
NGR	<i>TL 6276 6591</i>		
Height AOD (min/max)	<i>25-30m AOD</i>		
Brief issued by	<i>Rachael Abraham, Suffolk County Council Archaeological Service Conservation Team (SCC ASCT)</i>		
Project supervisor/s (PO)	<i>Archaeological Solutions Ltd</i>		
Funded by	<i>Mr Griffin</i>		
Full title	<i>Quickthorns, Windmill Hill, Exning, Suffolk CB8 7PB. An Archaeological Evaluation</i>		
Authors	<i>Muir, T.</i>		
Report no.	<i>5512</i>		
Date (of report)	<i>January 2018</i>		

**QUICKTHORNS,
WINDMILL HILL, EXNING, SUFFOLK CB8 7PB**

AN ARCHAEOLOGICAL EVALUATION

SUMMARY

In January 2018 Archaeological Solutions (AS) carried out an archaeological evaluation on land at Quickthorns, Windmill Hill, Exning, Suffolk (NGR TL 627 658; Figs. 1 - 2). The evaluation was undertaken in compliance with the initial requirements of a planning condition attached to planning approval for the proposed construction of a dwelling (Forest Heath Council Planning Approval DC/17/0988/FUL). It was required based on the advice of Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT)

The site is adjacent to a site where prehistoric and Roman features have been found (HER EXG099). To the west of the site a large Iron Age enclosure (HER EXG082), and an early Saxon cemetery and other inhumation burials have been recorded (HER EXG005 & 028). During an excavation at No.7 The Highlands a substantial ditch was investigated, and it was probably associated with a large hilltop enclosure. Regionally important Late Bronze Age/Early Iron Age activity was uncovered; similar to material from excavations in nearby Landwade to the north. The ditch likely enclosed a settlement on the high ground of Windmill Hill to the north-west. Of significance is the pottery assemblage found in the upper feature fills. The assemblage is one of the largest known in Suffolk, with sherds derived from nearly 800 separate vessels and a date range of 800-600/550 BC (HER EXG 082). Between 1894 and 1911 an Early Saxon cemetery containing inhumations with grave goods was excavated on Windmill Hill. The date of the majority of burials centred on the 6th century (EXG 005). Two Early Saxon inhumations were also found on Windmill Hill during the digging of house footings at The Highlands (EXG 028). One was a warrior burial with iron spear and shield boss, and the other was unaccompanied. These burials indicate the presence of either two cemeteries in close proximity or a single large cemetery.

Exning was an important centre in Middle Saxon times and the location of a postulated royal palace. In the 13th century merchants from Exning set up a new market on the Cambridge to Bury St. Edmunds Road and this became the town of Newmarket. Thereafter Exning was largely surpassed.

Only the southernmost trench, Trench 1 revealed archaeological features and it contained Pits F1004 and F1008, and Ditch F1011. Pit F1004 contained a struck flint flake with heavily rolled edges, possibly of Neolithic date; Pit F1008 contained a fragment of a sandstone grinding wheel with a relatively narrow diameter, possibly associated with grinding knives; and Ditch F1011 contained a post-medieval / modern fe. fragment. The preservation of the struck flint flake suggests it may be residual (Struck Flint report) and because of its technology the worked stone fragment is likely of post-medieval date. The profile of Ditch F1011 and the tip lines of its fill were similar to the cut of a

mechanical excavator and the feature may represent a disturbance associated with the construction of the swimming pool.

1 INTRODUCTION

1.1 In January 2018 Archaeological Solutions (AS) carried out an archaeological evaluation on land at Quickthorns, Windmill Hill, Exning, Suffolk (NGR TL 627 658; Figs. 1 - 2). The evaluation was undertaken in compliance with the initial requirements of a planning condition attached to planning approval for the proposed construction of a dwelling (Forest Heath Council Planning Approval DC/17/0988/FUL). It was required based on the advice of Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT)

1.2 The evaluation was undertaken in accordance with a brief issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (Rachael Abraham, dated 17th August 2017), and a Written Scheme of Investigation prepared by AS (dated 22nd August 2017) and approved by SCC AS-CT. It followed the procedures outlined in the Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Evaluation* (2014). It also adhered to the relevant sections of *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The objectives of the evaluation were to determine the location, date, extent, character, condition significance and quality of any archaeological remains liable to be threatened by the proposed development.

Planning Policy Context

1.4 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

1.5 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent

significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2.1 It is proposed to erect a new detached dwelling on existing garden land to the immediate south of the existing dwelling at Quickthorns. The property is located on the southern side of Windmill Hill, Exning. The site extends to some 0.27ha and is garden land with an existing swimming pool present.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The site is located at approximately 30m AOD on top of a small hill with the land dropping gently to the south-east. A small stream flows c.350m to the east.

3.2 The local soils comprise a well drained loamy soil of the Moulton association, base-rich which encourages pastures and deciduous woodland. This is overlain by drift deposits over Middle Cretaceous Chalk. Exning lies in an area dominated by the Zig Zag Chalk Formation but to the west a pocket of the Holywell Nodular Chalk Formation is bordered by the Melbourn Rock Member and the site could be located within either of these areas.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prehistoric

4.1 During an excavation at No.7 The Highlands, c.70m to the west of the site, a substantial ditch probably associated with a large hilltop enclosure was investigated (ESF21205; Craven & Brundenell 2011). Late Bronze Age/Early Iron Age activity was revealed; similar to material from excavations in nearby Landwade to the north. The ditch may have enclosed a settlement on the high ground of Windmill Hill to the north-west. Of significance is the pottery assemblage found in the upper feature fills. It is one of the largest known assemblages in Suffolk with sherds derived from nearly 800 separate vessels and a date range of 800-600/550 BC (SHER EXG 082). To the east of the site a geophysical survey (ESF23763; Woolhouse 2012) and subsequent trial trenching (ESF23760) also revealed evidence of Middle Bronze settlement activity (SHER EXG 099 & EXG 105).

4.2 Adjacent to No.7 The Highlands, No.8 The Highlands has also been the subject of archaeological investigations (ESF20056; Craven 2009,

ESF23856; Blagg-Newsome *et al* 2016, ESF22356; Lichtenstein 2014). The investigations revealed isolated Iron Age finds (SHER EXG090). At Beech House c.860m to the north-east (SHER EXG074) and c.750m to the south-west (SHER EXG102) assemblages of Late Iron Age pottery were recorded.

Roman

4.3 A Roman settlement lies to the north-east at Beech House (SHER EXG074). Enclosures, pits, postholes and a dump of roof tiles suggest the presence of a building in the vicinity (SHER EXG083). A Roman road was identified and finds which suggest the presence of Roman buildings (SHER EXG102). Closer to the site Roman ditches are indicative of a field system (SHER EXG099 & EXG105).

Saxon/Medieval

4.4 Exning was an important centre in Middle Saxon times and the location of a postulated royal palace of King Anna. The historic Anglo-Saxon and medieval core of the town is located approximately 800m to the west of the site (SHER EXG098). In the 13th century merchants from Exning set up a new market on the Cambridge to Bury St. Edmunds Road and this became the town of Newmarket. Thereafter Exning was largely surpassed. Excavation prior to the construction of Newmarket bypass, c.650m to the south of the town centre, identified a previously unknown settlement consisting of several buildings (SHER EXG052).

4.5 The site is an area of high archaeological potential being in the immediate vicinity of an early Anglo-Saxon cemetery (HER EXG 005 and EXG 008). Between 1894 and 1911 an Early Saxon cemetery containing inhumations with grave goods was excavated on Windmill Hill, with the majority of burials centred on the 6th century (SHER EXG005). Two Early Saxon inhumations were also found on Windmill Hill during digging of house footings at The Highlands c.70m to the west (SHER EXG028). One was a warrior burial with iron spear and shield boss, the other was unaccompanied. These burials indicate either two cemeteries in close proximity or a single large cemetery.

4.6 An archaeological evaluation at No. 8A The Highlands c.70m to the south-west of the site revealed no archaeological features but residual Iron Age, Roman and medieval finds were found (Craven 2009; SHER EXG090). Monitoring of the groundworks for a new house plot to the west of No.8 revealed no archaeological remains (Lichtenstein 2014; SHER EXG103).

Post-medieval

4.7 The site lay outside the main settlement of Exning during this period with a brick kiln lying c.480m to the south of the site, attesting to light industrial but isolated activity within the landscape (SHER EXG048). Cartographic sources from the 19th century indicate Windmill Hill is so named

after a cornmill located c.200m to the west of the site. It was removed before 1902 and the land utilised as a gravel pit (www.old-maps.co.uk).

5 METHODOLOGY

5.1 SCC AS-CT required a programme of archaeological trial trenching and stipulated that 15m of trenching at 1.8m width should be excavated. One trench of 10m x 1.8m traversed the house plot avoiding the existing swimming pool footprint. And one trench 5m x 1.8m trench was excavated across the footprint of the proposed garage (Fig.3).

5.2 The archaeological evaluation comprised the inspection of the subsoil and natural deposits for archaeological features, the examination of spoil heaps and the recording of soil profiles. Encountered features and deposits were cleaned by hand and recorded using *pro-forma* recording sheets, drawn to scale and photographed as appropriate.

5.3 Open trenches and excavated spoil were manually / visually searched and scanned by metal detector to enhance the recovery of archaeological finds.

6 DESCRIPTION OF RESULTS

6.1 The individual trench descriptions are presented below:

Trench 1 Figs. 3 & 4

Sample section 1A 0.00 = 28.19m AOD		
0.00-0.30m	L1000	Topsoil. Friable, dark grey brown silty sand with occasional sub-rounded flints
0.30m +	L1002	Natural. Friable, mid yellow brown sandy gravel with frequent small sub rounded flints

Sample section 1B 0.00 = 28.38m AOD		
0.00-0.10m	L1003	Layer. Sand associated with patio / swimming pool.
0.10-0.19m	L1000	Subsoil. As above.
0.19m+	L1002	Natural. As above.

Description: Trench 1 contained Pits F1004 and F1008, and Ditch F1011. Pit F1004 contained a struck flint possibly of Neolithic date, and Pit F1008 contained a fragment of a stone grinding wheel possibly associated with grinding knives.

Pit F1004 was sub-circular in plan (0.90+ x 0.85+ x 1.10m+). It had near vertical sides and its base was unseen. Its basal fill, L1005, was a firm, dark grey brown silty sand. It contained a struck flint (6g) possibly of Neolithic date.

Its secondary fill, L1006, was a firm, mid grey brown silty coarse sand with frequent large and medium sub rounded flint. It contained no finds. Its upper fill, L1007, was a firm, mid grey brown silty sand with moderate sub angular and sub rounded flint. It contained no finds,

Pit F1008 was sub-circular in plan (1.80+ x 1.73+ x 0.93m). It had steep sides and a flattish base. Its basal fill, L1009, was a friable, mid yellow brown sandy gravel with small subrounded stones. It contained a fragment of a stone grinding wheel (1460g) possibly associated with grinding knives. Its principal fill, L1010, was a friable, mid grey brown silty sand with occasional small subrounded flints. It contained no finds.

Ditch F1011 was linear in plan (1.60+ x 1.90 x 0.93m). It had steep irregular sides and a flattish base. Its fills are tabulated:

Layer	Description	Finds
L1017 Upper	Firm, mid grey brown silty sand with occasional small sub angular flints	-
L1016	Firm, mottled mid grey brown and pale yellow brown silty sand with occasional sub-angular flints	-
L1015	Firm, mid grey brown silty sand with occasional small and medium sub-rounded flints	-
L1014	Friable, very pale yellow brown silty sand	-
L1013	Friable, mid grey brown silty sand with occasional small and medium sub-rounded flints	Fe fragment. Post-medieval / modern
L1012 Basal	Friable, dark grey brown silty sand with frequent large and medium sub-rounded flints	-

Trench 2 Fig. 3

Sample section 2A 0.00 = 28.17m AOD		
0.00-0.32m	L1000	Topsoil. As above
0.32m+	L1002	Natural. As above.

Sample section 2B 0.00 = 28.24m AOD		
0.00-0.30m	L1000	Topsoil. As above
0.30-0.39m	L1001	Subsoil. Friable, mid grey brown silty sand with occasional small sub rounded flints
0.39m+	L1002	Natural. As above

Description: Trench 2 contained no archaeological features or finds.

7 CONFIDENCE RATING

7.1 It is not felt that any factors restricted the identification of archaeological features or finds.

8 DEPOSIT MODEL

8.1 Uppermost Topsoil L1000 was a friable, dark grey brown silty sand with occasional sub-rounded flints (0.19 – 0.39m thick).

8.3 At the base of the sequence the natural, L1002, was a friable, mid yellow brown sandy gravel with frequent small sub rounded flints (0.19 – 0.39m below the present day ground surface).

9 DISCUSSION

9.1 The recorded features are tabulated:

Trench	Context	Description	Spot Date
1	F1004	Pit	A struck flint possibly of Neolithic date
	F1008	Pit	Fragment of a stone grinding wheel
	F1011	Ditch	Fe fragment. Post-medieval / modern

9.2 Only the southernmost trench, Trench 1 revealed archaeological features and it contained Pits F1004 and F1008, and Ditch F1011. Pit F1004 contained a struck flint flake with heavily rolled edges, possibly of Neolithic date; Pit F1008 contained a fragment of a sandstone grinding wheel with a relatively narrow diameter, possibly associated with grinding knives; and Ditch F1011 contained a post-medieval / modern fe. fragment. The preservation of the struck flint flake suggests it may be residual (Struck Flint report) and because of its technology the worked stone fragment is likely of post-medieval date. The profile of Ditch F1011 and the tip lines of its fill were similar to the cut of a mechanical excavator and the feature may represent a disturbance associated with the construction of the swimming pool.

9.3 The features contained sparse finds, and even the removal of the second halves of the features did not enhance the finds compliment.

9.4 The site had the potential for multi-period remains but in the event three features with sparse finds were revealed.

DEPOSITION OF THE ARCHIVE

Archive records, with an inventory, will be deposited with any donated finds from the site at Suffolk County Archaeological Store. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency.

ACKNOWLEDGEMENTS

Archaeological Solutions would like to thank Mr Terry Griffin, Ms Vicky Griffon and Ms Lucy Bolton for funding the works and for all their assistance. AS would also like to acknowledge the assistance of Mr Craig Farrow of TAB Architecture.

AS would like to acknowledge the input and advice of Ms Rachael Abraham Archaeological Officer, Suffolk County Council.

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Web resources

www.old-maps.co.uk

APPENDIX 1 CONCORDANCE OF FINDS

Feature	Context	Segment	Trench	Description	Spot Date (Pot Only)	Pot Qty	Pottery (g)	CBM (g)	A. Bone (g)	Other Material	Other Qty	Other (g)
1004	1005		1	Fill of Pit						S. Flint	1	6
1008	1009		1	Fill of Pit						Worked Stone	1	1460
1011	1012		1	Fill of Ditch						Fe Staple	1	103

APPENDIX 2 SPECIALIST REPORTS

The Struck Flint

Andrew Peachey

A single flake (6g) of struck flint was recovered from Pit F1004 (L1005), in an un-patinated but heavily rolled condition. The flake is narrow with blade-like dorsal scars, and is comprised of very high quality near black raw flint. Based on these limited traits the flake has origins in the Neolithic period, probably the early Neolithic, but is likely residual/re-deposited

The Worked Stone

Andrew Peachey

L1009 contained a single fragment (1460g) of worked stone in a well-preserved, un-abraded condition. It comprises fine-grained yellow sandstone that has been manufactured into a circular grinding stone (diameter 200mm; 125mm thick) with the smooth grinding surface around the convex circumference. The upper and lower edges are slightly beveled, while the upper and lower faces remain slightly rough and un-worked. No evidence for the 'eye' or central perforation remains. It is highly likely that this formed a component of a grinding machine, such as those used to sharpen knives and other agricultural/industrial tools in the post-medieval period; and although similar pedal or crank-driven wheels were utilized in the medieval period, they tended to require stones of a wider diameter.

APPENDIX 3

SPECIFICATION

**PROPOSED NEW HOUSE, QUICKTHORNS, WINDMILL HILL, EXNING,
SUFFOLK CB8 7PB**

**WRITTEN SCHEME OF INVESTIGATION FOR
ARCHAEOLOGICAL EVALUATION**

22nd August 2017

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ARCHAEOLOGICAL SOLUTIONS LTD

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

**PI House, r/o 23 Clifton Road, Shefford SG17 5AF
Tel 01462 850483**

**e-mail info@ascontracts.co.uk
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**PROPOSED NEW HOUSE, QUICKTHORNS, WINDMILL HILL,
EXNING, SUFFOLK CB8 7PB
ARCHAEOLOGICAL TRIAL TRENCH EVALUATION**

1 INTRODUCTION

1.1 This specification has been prepared in response to a brief (to be) issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (Rachael Abraham, dated 17th August 2017). It provides for an archaeological trial trench evaluation to be carried out in advance of the proposed construction of a new dwelling on land at Quickthorns, Windmill Hill, Exning, Suffolk (NGR TL 627 658), in order to provide further information for the initial requirement of a planning condition on Forest Heath Council Planning Approval DC/17/0988/FUL, imposed on approval requiring a programme of archaeological work. The evaluation is required by the LPA, based on advice from SCC AS-CT.

1.2 It is understood that the programme of archaeological investigation should comprise an archaeological field evaluation, to comply with the planning requirement of the local planning authority (on advice from SCC AS-CT). This WSI for archaeological evaluation has been prepared for the approval of SCC AS-CT. Further archaeological works may be required by SCC AS-CT following the evaluation, should remains be present, for which an additional brief and WSI would be required.

2 COMPLIANCE

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

**3 SITE & DEVELOPMENT DESCRIPTION
ARCHAEOLOGICAL BACKGROUND**

3.1 It is proposed to erect a new detached dwelling on existing garden land to the immediate south of the existing dwelling at Quickthorns, on the southern side of Windmill Hill at Exning. The site overall extends to some 0.27ha and is garden land, with an existing swimming pool across its southern part.

3.2 The Suffolk Historic Environment Record (HER) notes that the site is an area of strong archaeological potential, where known multi-period activity has been recorded. The site lies adjacent one where prehistoric and Roman features have been found (HER EXG099), and to the west of the site a large Iron Age enclosure (HER EXG082) and early Saxon cemetery and other inhumation burials have been

recorded (HER EXG005 & 028). During an excavation at No. 7 The Highlands a substantial ditch was investigated, probably associated with a large hilltop enclosure. Regionally important Late Bronze Age/Early Iron Age activity was uncovered; similar to material from excavations in nearby Landwade to the north. It is speculated that the ditch enclosed a settlement on the high ground of Windmill Hill to the north-west. Of significance is the pottery assemblage found in the upper fills, one of the largest known in Suffolk, with fragments of nearly 800 separate vessels and a date range of 800-600/550 BC (HER EXG 082). Between 1894 and 1911 an Early Saxon cemetery containing inhumations with grave goods was excavated on Windmill Hill, with the majority of burials centred on the 6th century (EXG 005). Two Early Saxon inhumations were also found on Windmill Hill during digging of house footings at The Highlands (EXG 028). One was a warrior burial with iron spear and shield boss, the other was unaccompanied, and these indicate either two cemeteries in close proximity or a single large cemetery.

3.3 Exning was an important centre in Middle Saxon times and the location of a postulated royal palace. In the 13th century merchants from Exning set up a new market on the Cambridge to Bury St. Edmunds Road which became the town of Newmarket and Exning was largely surpassed.

3.4 The site thus has a potential for archaeological remains associated with known local multi-period activity.

3.5 The proposed works will cause significant ground disturbance that has the potential to damage any archaeological deposits that exist. The archaeological and historical background of the site will be discussed in the project report and the HER will be searched /consulted prior to start (and a site code and event number obtained).

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

4.1 The principal objectives for the evaluation include:

- To establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*
- To identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.

- To evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits, along with the potential for the survival of environmental evidence
- To provide sufficient information to construct an archaeological conservation strategy dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

4.2 *Research Design*

4.2.1 The regional research frameworks are set out in Glazebrook (1997 and Brown & Glazebrook (2000) and updated by Medlycott and Brown (2008) and Medlycott (2011). Inter-relationships between settlements and greater understanding of patterns of burial practice are important areas of research for the Bronze Age (Medlycott & Brown 2008). Medlycott (2011, 21) identifies artefact studies as of particular importance for the study of the Bronze Age in the region; the typological identification of later Bronze Age pottery linked to close radiocarbon dating, the further study of Bronze Age flintworking and the significance of hoarding and other depositional practices are all identified as being key research subjects. Artefact studies can contribute to the refinement of chronologies for the period and to an assessment of the reasons behind the marked divide in research results between the northern and southern parts of the region, which are identified by Medlycott (2011, 21) as important research areas. Like the Neolithic, sedimentological, palynological and macrofossil analyses of sediment sequences are considered to be important areas of research as are the effects of colluviation and the possibility that colluvial deposits mask some significant sites (Medlycott 2011, 21).

4.2.2 Research topics for the Iron Age set out by Bryant (in Brown & Glazebrook 2000, 14-18) include further research into chronologies, precise dating and ceramic assemblages, further research into the development of the agrarian economy (particularly with regard to field systems), research into settlement chronology and dynamics, research into processes of economic and social change during the late Iron Age and Romano-British transition (particularly with regard to the development of Aylesford/Swarling and Roman culture, and also regional differences and tribal polities in the late Iron Age and further research into *oppida* and ritual sites), further analysis of development of social organisation and settlement form/function in the early and middle Iron Age, further research into artefact production and distribution and the Bronze Age/Iron Age transition. Medlycott & Brown (2008) and Medlycott (2011, 29-32) build on these themes, paying particular attention to chronological and spatial development and variation and adding subjects as the Bronze Age/Iron Age transition and manufacturing and industry.

4.2.3 Medlycott (2011, 47) identifies regional variation and tribal distinctions as underlying themes for research in the Roman period. Research topics for the Roman period previously set out by Going & Plouviez (in Brown & Glazebrook 2000, 19-22) include analysis of early and late Roman military developments, further analysis of large and small towns, evidence of food consumption and production, further research into agricultural production, landscape research (in particular further evidence for potential woodland succession/regression and issues of relict landscapes, as well as further research into the road network and bridging points), further research into rural settlements and coastal issues. Medlycott (2011, 47-48) states that these research areas remain valid and presents updated consideration of them. To these themes Medlycott & Brown (2008) and Medlycott (2011, 47-48) add rural settlements and landscapes, the process of Romanisation in the region, the evidence for the Imperial Fen Estate, and the Roman/Saxon transition.

4.2.4 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.

4.2.5 Medlycott (2011, 57) states that the 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).

4.2.6 As set out above, the principal research objectives will be to identify any evidence of prehistoric, Roman and Saxon activity which is known from Windmill Hill.

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

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

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

5 SPECIFICATION TRENCHED EVALUATION

5.1 Details of Senior Project Staff

5.1.1 AS has developed a professional and well-qualified team who have undertaken numerous archaeological projects (both desk-based and field evaluations) on all types of developments, including commercial, residential, road schemes and golf courses. AS is a Registered Organisation of the ClfA.

5.1.2 Profiles of key project staff are provided (Appendix 3).

A Method Statement is presented
Trial Trench Evaluation Appendix 1

5.1.3 The evaluation will conform with the guidelines set down in the brief and the Chartered Institute for Archaeologists *Standard and Guidance for Archaeological Evaluations (revised 2014)* and *Standard and Guidelines for Historic Environment Desk-based Assessment (revised 2014)*. It will also adhere to the document *Standards for Field Archaeology in the East of England* (Gurney 2003) and the requirements of the SCC document *Requirements for a Trenched Evaluation 2017*.

5.1.4 SCC AS-CT require a programme of archaeological trial trenching and stipulate that 15m of trenching at 1.8m width should be

excavated to target the new dwelling footprint, avoiding the existing swimming pool footprint. One trench of 10m x 1.8m is proposed across the house plot, avoiding the existing pool footprint, and one trench of 5m x 1.8m across the proposed garage. A trench plan is appended. AS is happy to review the scale/location of the trenches following comment from the client and/or SCC AS-CT.

5.1.5 The environmental strategy will adhere to the guidelines issued by English Heritage (now Historic England) (*Environmental Archaeology; A guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines, rev 2011). An environmentalist will be invited to visit the site if remains of interest are found. Dr Rob Scaife/Dr John Summers will be the Environmental Coordinator for the project. The specialist will make his/her results known to the regional science advisor who coordinates environmental archaeology in the region on behalf of Historic England.

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

Trial Excavation

Processing, Cataloguing and Conservation of Finds

Preparation of Report and Archive

c.5-10 Days

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

5.1.7 In advance of the field work AS will liaise with the Suffolk Archaeological Archive to fulfil their requirements for the long term deposition of the project archive. These will encompass: their collection policy, and their financial and technical requirements for long term storage. The resources include provision for the long term-deposition of the project archive.

5.1.8 Details of staff and specialist contractors are provided (Appendix 2). The project will be managed by Claire Halpin MCIFA /Jon Murray MCIFA.

5.1.9 AS is a member of FAME formerly the Standing Conference of Archaeological Unit Managers (SCAUM) and operates under the 'Health & Safety in Field Archaeology Manual'. A risk assessment and management strategy will be completed prior to the start of works on site.

5.1.10 AS is a member of the Council for British Archaeology and is insured under their policy for members.

6 SERVICES

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

7 SECURITY

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

8 REINSTATEMENT

8.1 No provision has been made for reinstatement, excepting simple backfilling following approval by SCC AS-CT.

9 REPORT REQUIREMENTS

9.1 The report will include (as a minimum):

- a) the archaeological background
- b) a consideration of the aims and methods adopted in the course of the recording
- c) a detailed account of the nature, location, extent, date, significance and quality of any archaeological evidence recorded.
- d) Excavation methodology and detailed results including a suitable conclusion and discussion
- e) plans and sections of any recorded features and deposits
- f) discussion and interpretation of the evidence. An assessment of the projects significance in a regional and local context and appendices.
- g) All specialist reports or assessments
- h) A concise non-technical summary of the project results
- i) A HER summary sheet
- j) An OASIS summary sheet

9.2 Draft hard and digital PDF copies of the report will be submitted to SCC AS-CT for approval. If any revisions are required, final hard and digital PDF copies will be supplied to SCC AS-CT for deposition with the HER.

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

9.4 A summary report will be submitted suitable for inclusion in the annual roundups of *Proceedings of the Suffolk Institute of Archaeology and History*, dependent on the results of the project.

10 ARCHIVE

10.1 The requirements for archive storage will be agreed with the Suffolk Archaeological Archives. A site code and event number will be obtained from SCC AS-CT prior to start.

10.2 The archive will be deposited within six months of the conclusion of the fieldwork. It will be prepared in accordance with the UK Institute for Conservation's *Conservation Guideline No.2* and according to the document *Deposition of Archaeological Archives in Suffolk* (SCC AS Conservation Team, 2017). A unique event number and monument number will be obtained from the County HER Officer.

10.3 The full archive of finds and records will be made secure at all stages of the project, both on and off site. Arrangements will be made at the earliest opportunity for the archive to be accessed into the collections of Suffolk Archaeological Archives; 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 Suffolk Archaeological Archives. The archive will be adequately catalogued, labelled and packaged for transfer and storage in accordance with the guidelines set out in the United Kingdom Institute for Conservation's *Conservation Guidelines No.2* and the other relevant reference documents.

10.4 Archive records, with inventory, are to be deposited, as well as any donated finds from the site, at the Suffolk Archaeological Archives and in accordance with their requirements. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data. A unique event number for the report and monument number for any finds will be obtained from the HER.

11 MONITORING

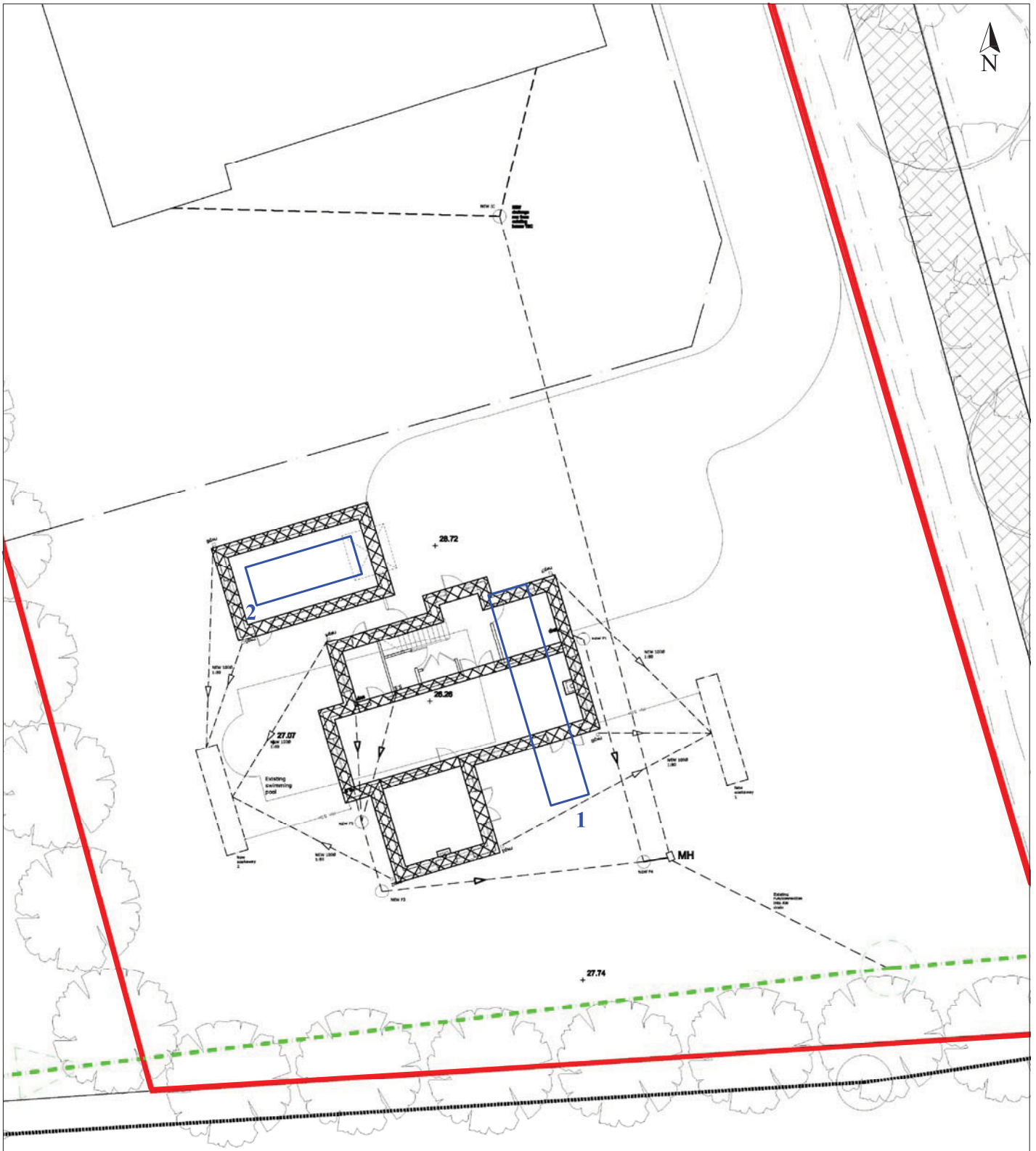
11.1 It is understood that SCCAS-CT will monitor the project on behalf of the local planning authority.

11.2 **Notification** Archaeological Solutions will give SCCAS-CT notification prior to the commencement of the project on site

11.3 **Monitoring** SCCAS-CT will be responsible for monitoring progress and standards throughout the project, both on site and during

the post-survey/report stages, to ensure compliance with the planning requirement, the approved WSI and any subsequent Brief and approved WSI for further fieldwork, analyses and publication.

11.4 Any variations to the WSI will be agreed in advance with SCCAS-CT prior to them being carried out.



<i>Archaeological Solutions Ltd</i>
Proposed trench location plan
Scale 1:250 at A4
Quickthorns, Exning, Suffolk (P7322)

APPENDIX 1 METHOD STATEMENT

Method Statement for the recording of archaeological remains

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

1 Mechanical Excavation

1.1 A mechanical excavator fitted with a wide toothless bucket will be used to remove the topsoil/overburden. The machine will be powerful enough for a clean job of work and be able to mound spoil neatly, at a safe distance from the trench edges.

1.2 The mechanical stripping will be controlled, and the mechanical excavator will only operate under the full-time supervision of an experienced archaeologist.

2 Site Location Plan

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

3 Manual Cleaning & Base Planning of Archaeological Features

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

4 Full Excavation

If deep, 'urban' type deposits are encountered, or significant deposits of made ground are encountered (which is unlikely on this site) the upper levels of the test pits will be stepped as necessary, within layers of later post-medieval/modern date only, in order to ensure safe working practices. The trenches will be no less than 1.6m wide at base.

Excavation of Stratified Sequences

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

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

Excavation of Buildings

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

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

Full Excavation

Industrial remains and intrinsically interesting features e.g. hearths, burials will clearly merit full excavation, though will be excavated sufficient to characterise such deposits within the context of an evaluation. Discrete features associated with possible structures and/or settlement will be fully excavated, again sufficient to characterise them for the purposes of an evaluation. Otherwise discrete features (eg pits) will be half-sectioned.

Ditches

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

Buried Soils

If buried soils are encountered, the surfaces will be cleaned and examined for features/finds, which will be investigated/recorded before any further excavation takes place.

5 Written Record

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

5.2 The site will be recorded using AS.'s excavation manual which is directly comparable to those used by other professional archaeological organisations, including English Heritage's own Central Archaeological Service.

6 Photographic Record

6.1 An adequate photographic record of the investigations will be made. It will include black and white prints and colour transparencies (on 35mm) illustrating in both detail and general context the principal features and finds discovered. Digital images will also be taken (Nikon Coolpix L29 16.1 megapixel cameras). It will also include 'working and promotional shots' to illustrate more generally the nature of the archaeological operations. The black and white negatives and contacts will be filed, and the colour transparencies will be mounted using appropriate cases. All photographs will be listed and indexed.

7 Drawn Record

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

8 Recovery of Finds

GENERAL

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

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

A metal detector will be used to enhance finds recovery. The metal detector survey will be conducted prior to and on conclusion of the topsoil stripping, and thereafter during the course of the excavation. The spoil tips will also be surveyed. The detector will not be set to discriminate against iron. Metal finds locations will be recorded by GPS. Regular metal detector surveys of the excavation area and spoil tips will reduce the loss of finds to unscrupulous users of metal detectors (treasure hunters). All non-archaeological staff working on the site should be informed that the use of metal detectors is forbidden.

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

WORKED FLINT

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

POTTERY

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

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

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

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

HUMAN BONE

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

ANIMAL BONE

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

ENVIRONMENTAL SAMPLING

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

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

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

The study of environmental archaeology seeks to understand the local and near-local environment of the site in relation to phases of human

activity and as such is an important and integral part of any archaeological study.

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

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

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

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

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

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

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

The nature of the environmental evidence

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

a) Faunal remains: These comprise bones of macro and microfauna, birds, molluscs and insects.

a.i) Bones: The study of the animal bone remains, in particular domestic mammals, domestic birds and marine fish will enhance understanding of the development of the settlement in terms of the local economy and also its wider influence through trade. The study of the small animal bones will provide insight into the immediate habitat of any settlement.

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

Domestic mammalian stock, domestic birds and harvest fish

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

Small animal bones

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

a.ii) Molluscs: Freshwater and terrestrial molluscs may be present in ditch and pit contexts which are encountered. Sampling and examination of molluscan assemblages if found will provide information on the local site environment including environment of deposition.

a.iii) Insects: If suitable waterlogged contexts (pit, pond and ditch fills) are encountered (which can potentially be expected to be encountered on the project), sampling and assessment will be carried out in conjunction with the analysis of waterlogged plant remains (primarily seeds) and molluscs. Insect data may provide information on local site environment (cleanliness etc.) as well as proxies for climate and vegetation communities.

b) Botanical remains: Sampling for seeds, wood, pollen and seeds are the essential elements which will be considered. The former are most likely to be charred but possibly also waterlogged should any wells/ponds be encountered.

b.i) Pollen analysis: Sampling and analysis of the primary fills and any stabilisation horizons in ditch and pit contexts which may provide information on the immediate vegetation environment including aspects of agriculture, food and subsistence. These data will be integrated with seed analysis.

b.ii) Seeds: It is anticipated that evidence of cultivated crops, crop processing debris and associated weed floras will be present in ditches and pits. If waterlogged features/sediments are encountered (for example, wells/ponds) these will be sampled in relation to other

environmental elements where appropriate (particularly pollen, molluscs and possibly insects).

c) Soils and Sediments: Characterisation of the range of sediments, soils and the archaeological deposits are regarded as crucial to and an integral part of all other aspects of environmental sampling. This is to afford primary information on the nature and possible origins of the material sampled. It is anticipated that a range of 'on-site' descriptions will be made and subsequent detailed description and analysis of the principal monolith and bulk samples obtained for other aspects of the environmental investigation. Where considered necessary, laboratory analyses such as loss on ignition and particle size may also be undertaken. A geoarchaeologist will be invited to visit the site as necessary to advise on sampling.

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

Sampling strategies

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

a) Soil and Sediments: Samples taken will be examined in detail in the laboratory. An overall assessment of potential will be carried out. Analysis of particle size and loss on ignition, if required would be undertaken as part of full analysis if assessment demonstrates that such studies would be of value.

b) Pollen Analysis: Contexts which require sampling may include stabilisation horizons and the primary fills of the pits and ditches, and possibly organic well/pond fills. It is anticipated that in some cases this will be carried out in conjunction with sampling for other environmental elements, such as plant macrofossils, where these are also felt to be of potential.

c) Plant Macrofossils: Principal contexts will be sampled directly from the excavation for seeds and associated plant remains. It is anticipated that primarily charred remains will be recovered, although provision for any waterlogged sequences will also be made (see below). Sampling for the former will, where possible (that is, avoiding contamination) comprise samples of an average of 40-60 litres which will be floated in the AS facilities for extraction of charred plant remains. Both the flot and residues will be kept for assessment of potential and stored for any subsequent detailed analysis. The residues will also be examined for artifactual remains and also for any faunal remains present (cf. molluscs). Where pit, ditch, well or pond

sediments are found to contain waterlogged sediments, principal contexts will be sampled for seeds and insect remains. Standard 5 litre+ samples will be taken which may be sub-sampled in the laboratory for seed remains if the material is found to be especially rich. The full sample will provide sufficient material for insect assessment and analysis.

d) Bones: Predicting exactly how much of what will be yielded by the excavation is clearly very difficult prior to excavation and it is proposed that in order to efficiently target animal bone recovery there should be a system of direct feedback from the archaeozoologist to the site staff during the excavation, allowing fine tuning of the excavation strategy to concentrate on the recovery of animal bones from features which have the highest potential. This will also allow the faunal remains to materially add to the interpretation as the excavation proceeds. Liaison with other environmental specialists will need to take place in order to produce a complete interdisciplinary study during this phase of activity. In addition, this feedback will aid effective targeting of the post-excavation analysis.

e) Insects: If contexts having potential for insect preservation are found, samples will be taken in conjunction with waterlogged plant macrofossils. Samples of 5 litres will suffice for analysis and will be sampled adjacent to waterlogged seed samples and pollen; or where insufficient context material is available provision will be made for exchange of material between specialists.

f) Molluscs: Terrestrial and freshwater molluscs. Samples will be taken from a column from suitable ditches. Pits may be sampled, based on the advice of the Environmental Consultant and / or Historic England Regional Advisor. Provision will also be made for molluscs obtained from other sampling aspects (seeds) to be examined and/or kept for future requirements.

g) Archiving: Environmental remains obtained should be stored in conditions appropriate for analysis in the short to medium term, that is giving the ability for full analysis at a later date without any degradation of samples being analysed. The results will be maintained as an archive at AS and supplied to the HE regional 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/Dr John Summers will visit to advise on sampling as required, and AS will take monolith samples as necessary for the recovery of palaeoenvironmental information and dating evidence.

Scientific/Absolute Dating

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

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

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

FINDS PROCESSING

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

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

APPENDIX 2

ARCHAEOLOGICAL SOLUTIONS LIMITED: PROFILES OF STAFF & SPECIALISTS

DIRECTOR

Claire Halpin BA MCIfA

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 MCIfA

Qualifications: Member of the CfA

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 A14 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 (ACCOUNTS)

Rose Flowers

Experience: Rose has a very wide range of book-keeping skills developed over many years of employment with a range of companies, principally Rosier Distribution Ltd, Harlow (now part of Securicor) where she managed eight

accounts staff. She has a good working knowledge of both accounting software and Microsoft Office.

OFFICE ADMINISTRATOR

Sarah Powell

Experience: Sarah is an experienced and efficient administrative assistant with more than ten years' experience of working in a variety of office environments. She is IT literate and proficient in the use of Microsoft Word, particularly Microsoft Excel. She has completed NVQ 2 & 3 in Administration and Office Skills. She recently attended and completed a course in Microsoft Excel – Advanced Level.

OFFICE MANAGER (LOGISTICS)

Jennifer O'Toole

Experience: Jennifer's professional career has included a variety of roles such as Operations Director with The Logistics Network Ltd, Tutor/Trainer & Deputy Manager with Avanta TNG and Training and Assessment Consultant with PDM Training and Consultancy Ltd. Jennifer's career history emphasises her organisational and interpersonal skills, especially her ability to efficiently liaise with and manage individuals on various levels, and provide a range of supportive/ administrative services. Jennifer holds professional qualifications in a number of subjects including recruitment practice, customer service, workplace competence and health and safety. In her role with Archaeological Solutions Ltd, Jennifer has assisted in the delivery of the company's services on a variety of projects as well as co-ordinating recruitment and providing a range of complex administrative support.

SENIOR PROJECTS MANAGER

Jon Murray BA MCIfA

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

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

supporting applications for Scheduled Monument Consent/Listed Building Consent

PROJECT OFFICER
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).

PROJECT OFFICER
Vincent Monahan BA

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

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

SUPERVISOR
Kerrie Bull BSc

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

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

SUPERVISOR
Thomas Muir BA MSc

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

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

Experience: Thomas is an affiliate member of the Chartered Institute for Archaeologists. Throughout his higher education, Thomas volunteered on research excavations at sites including Port Sec Sud, Bourges (France; 2008), the Hill of Barra (the Hillforts of Strathdon Project; 2010) and Prastio Mesorotsos, Cyprus (2010-2012). In 2013 Thomas returned to Prastio

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

SUPERVISOR

Katie Lee-Smith BA MA

Qualifications: Durham University (2010 - 2013) BA Archaeology
Leiden University (2014 - 2015) MA Archaeology and Museum Studies

Experience: Katie has a good academic record, including a sound background in British archaeology, and from 2008 has engaged in a number of work experience roles, including fieldwork with the *Ambel Project* (Spain), outreach work with Suffolk Archaeology and an internship at the British Museum. She also has a practical understanding of geographical information systems, CAD and photographic and other software. Prior to joining Archaeological Solutions Ltd, Katie held the role of Assistant Supervisor with Oxford Archaeology, a company she originally joined as a graduate trainee following her undergraduate degree. In this role she gained a broad experience of professional fieldwork, including detailed recording/interpretation, finds and environmental processing, and project supervisory roles. In 2016, Katie also spent a short period as a research assistant at Leiden University. Katie holds a CSCS accreditation.

SUPERVISOR

Freya Townley BA (Hons) MSc

Qualifications: University of Warwick (2012 - 2015) BA Ancient History and Classical Archaeology
University of the Highlands and Islands (2015 - 2016) MSc Archaeological Practice

Experience: Freya has an excellent academic record, culminating in a Masters in Archaeological Practice at the University of the Highlands and Islands. This course provided a good grounding in fieldwork techniques including geophysical prospection and excavation. In addition to her academic achievements, Freya has gained practical experience as a volunteer with various projects/ organisations including Skylarks Experimental Archaeology (Nottinghamshire) and Tankerness House Museum (Orkney). In 2016, Freya worked as an intern at the Highland Council Historic Environment Record (HER) and before joining Archaeological Solutions Ltd, worked in a voluntary capacity at South Yorkshire HER. She has also completed the ClfA training course *Professionalism in Archaeology* and holds a CSCS accreditation.

SUPERVISOR

Niomi Edwards BSc (Hons) MSc

Qualifications: Bridgend College (2010 - 2012) BTEC National Diploma in Applied Science (Forensics)
Bournemouth University (2012 - 2015) BSc Archaeology, Anthropology and Forensic Science
Bournemouth University (2015 - 2016) MSc Forensic Anthropology

Experience: Niomi's higher education has provided her with a solid foundation in archaeological theory and practice. With Bournemouth

University she undertook 16 weeks of archaeological fieldwork training as part of the Professional Archaeological Studies and Training Project, and also participated in the simulated excavation of a mass grave. Professionally, Niomi has worked as a trainee with Cotswold Archaeology, where she furthered her practical knowledge of fieldwork skills on a number of commercial projects. Niomi holds a CSCS accreditation.

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 PCIFA

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

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

University of Bradford, Dip Professional Archaeological Studies (2002)

Experience: Andrew has carried out geophysical surveys for GeoQuest Associates on sites throughout the UK and has worked as a site assistant with BUFAU. During 2001 he worked as a researcher for the Yorkshire Dales Hunter-Gatherer Research Project, a University of Bradford and Michigan State University joint research programme, and has carried out voluntary work with the curatorial staff at Beamish Museum in County Durham. Andrew is a member of the Society of Antiquaries of Newcastle-upon-Tyne and a Practitioner Member of the Institute for Archaeologists. Since joining AS in early Summer 2005, as a Project Officer writing desk-based assessments, Andrew has gained considerable experience in post-excavation work. His principal role with AS is conducting post-excavation research and authoring site reports for publication. Significant post-excavation projects Andrew has been responsible for include the Ingham Quarry Extension, Fornham St. Genevieve, Suffolk – a site with large Iron Age pit clusters arranged around a possible wetland area; the late Bronze Age to early Iron Age enclosure and early Saxon cremation cemetery at the Chalet Site, Heybridge, Essex; and, Church Street, St Neots, Cambridgeshire, an excavation which identified the continuation of the Saxon settlement previously investigated by Peter Addyman in the 1960s. Andrew also writes and co-ordinates

Environmental Impact Assessments and has worked on a variety of such projects across southern and eastern England. In addition to his research responsibilities Andrew undertakes outreach and publicity work and carries out some fieldwork.

PROJECT OFFICER (POST-EXCAVATION)

Antony Mustchin BSc MSc DipPAS

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

University of Bradford MSc Biological Archaeology (2004-2005)

University of Bradford Diploma in Professional Archaeological Studies (2003)

Experience: Antony has over 14 years' experience in field archaeology, gained during his higher education and in the professional sector. Commercially in the UK, Antony has worked for Archaeology South East (2003), York Archaeological Trust (2004) and Special Archaeological Services (2003). He has also undertaken a six-month professional placement as Assistant SMR Officer/ Development Control Officer with Kent County Council (2001-2002). Antony's academic interests have led to his gaining considerable research excavation experience across the North Atlantic region. He has worked for projects and organisations including the Old Scatness & Jarlshof Environs Project, Shetland (2000-2003), the Viking Unst Project, Shetland (2006-2007), the Heart of the Atlantic Project Føroys Fornminnisavn, 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 MCIfA

Qualifications: University of Reading BA Hons, Archaeology and History (1998-2001)

Experience: Andrew joined AS (formerly HAT) in 2002 as a pottery researcher, and rapidly expanded into researching CBM and lithics. Andrew specialises in prehistoric and Roman pottery and has worked on numerous substantial assemblages, principally from across East Anglia but also from southern England. Recent projects have included a Neolithic site at Coxford, Norfolk, an early Bronze Age domestic site at Shropham, Norfolk, late Bronze Age material from Panshanger, Hertfordshire, middle Iron Age pit clusters at Ingham, Suffolk and an Iron Age and early Roman riverside site at Dernford, Cambridgeshire. Andrew has worked on important Roman kiln assemblages, including a Nar Valley ware production site at East Winch Norfolk, a face-pot producing kiln at Hadham, Hertfordshire and is currently researching early

Roman Horningsea ware kilns at Waterbeach, Cambridgeshire. Andrew is an enthusiastic member of the Study Group for Roman Pottery, and also undertakes pottery and lithics analysis as an 'external' specialist for a range of archaeological units and local societies in the south of England.

POTTERY RESEARCHER

Peter Thompson MA

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

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

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

PROJECT OFFICER (OSTEOARCHAEOLOGY)

Dr Julia Cussans

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

University of Bradford, BSc (Hons) Bioarchaeology (1997-2001)

University of Bradford, Dip. Professional Archaeological Studies (2001)

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

ENVIRONMENTAL ARCHAEOLOGIST

Dr John Summers

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

2005-2006: MSc Biological Archaeology (University of Bradford)

2001-2005: BSc Hons. Bioarchaeology (University of Bradford)

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

SENIOR GRAPHICS OFFICER

Kathren Henry

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

GRAPHICS OFFICER

Thomas Light

Qualifications: University of Kent (2009-2012) BA Classical and Archaeological Studies

University of Kent (2012-2013) MA Roman History and Archaeology

Experience: Since completing his higher education, Thomas has gained good practical experience in the archaeological and heritage sector, working in a voluntary capacity for Guilford Institute Library and Archive, and Surrey County Archaeological Unit. Before becoming a graphics officer, Thomas held the position of Site Assistant and has excavated on a variety of commercial projects. In his current capacity Thomas has produced extensive illustrative material, including figures and plates for nationally and internationally distributed journal publications.

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

Lauren Wilson

Qualifications: University of Chester (2010-2013) BA (Hons) Archaeology
University of York (2013-2014) MA Archaeology of

Buildings

Experience: Throughout her higher education, Lauren has gained extensive practical archaeological experience, including small finds processing and cataloguing at Norton Priory, Runcorn and assisting in the excavation of a Roman villa as part of the *Santa Marta Project*, Tuscany. Lauren also participated in a training excavation at Grovesnor Park, Chester, centred on a Roman road and 16th century chapel. As part of her Masters dissertation, Lauren worked with the Historic Property Manager of Middleham Castle, North Yorkshire, gaining a good practical knowledge of public outreach and events planning. Since joining Archaeological Solutions Ltd, Lauren has contributed to complex historic buildings recording projects at Landens Farm, Horley (Surrey) and the Ostrich Inn, Colnbrook (Berkshire). She also conducts background research and contributes to archaeological report writing.

ARCHIVES ADMINISTRATOR

Claire Wootton

Experience: Throughout her professional career, Claire has gained extensive administrative experience. Her past roles include Administrative Officer with the Court Service (Royal Courts of Justice; 1988-1997) and Discovery Centre Administrator at St Edmundsbury Cathedral (2012-2015). Claire's Advanced Level qualifications include History, English and Law. Since joining Archaeological Solutions Ltd, Claire has gained a thorough experience of archives administration through a programme of work-based training on numerous projects.

ARCHIVES ADMINISTRATOR

Karen Cleary

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

ARCHAEOLOGICAL SOLUTIONS: PRINCIPAL SPECIALISTS

GEOPHYSICAL SURVEYS	David Bescoby Dr John Summers Air Photo Services
AIR PHOTOGRAPHIC ASSESSMENTS	
PHOTOGRAPHIC SURVEYS	Ms K Henry
PREHISTORIC POTTERY	Mr A Peachey
ROMAN POTTERY	Mr A Peachey
SAXON & MEDIEVAL POTTERY	Mr P Thompson
POST-MEDIEVAL POTTERY	Mr P Thompson
FLINT	Mr A Peachey
GLASS	H Cool
COINS	British Museum, Dept of Coins & Medals
METALWORK & LEATHER	Ms Q Mould, Ms N Crummy
SLAG	Mr A Newton
ANIMAL BONE	Dr J Cussans
HUMAN BONE:	Ms S Anderson
ENVIRONMENTAL CO-ORDINATOR	Dr J Summers
POLLEN AND SEEDS:	Dr R Scaife
CHARCOAL/WOOD	Dr J Summers
SOIL MICROMORPHOLOGY	Dr R MacPhail, Dr C French
CARBON-14 DATING:	Historic England Ancient Monuments Laboratory (for advice). University of Leicester
CONSERVATION	

APPENDIX 4

OASIS DATA COLLECTION FORM

OASIS DATA COLLECTION FORM: England

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

Printable version

OASIS ID: archaeol7-306514

Project details

Project name	Quickthorns, Windmill Hill, Exning
Short description of the project	In January 2018 Archaeological Solutions (AS) carried out an archaeological evaluation on land at Quickthorns, Windmill Hill, Exning, Suffolk (NGR TL 627 658; Figs. 1 - 2). The evaluation was undertaken in compliance with the initial requirements of a planning condition attached to planning approval for the proposed construction of a dwelling (Forest Heath Council Planning Approval DC/17/0988/FUL). It was required based on the advice of Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) Only the southernmost trench, Trench 1 revealed archaeological features and it contained Pits F1004 and F1008, and Ditch F1011. Pit F1004 contained a struck flint flake with heavily rolled edges, possibly of Neolithic date; Pit F1008 contained a fragment of a sandstone grinding wheel with a relatively narrow diameter, possibly associated with grinding knives; and Ditch F1011 contained a post-medieval / modern fe. fragment. The preservation of the struck flint flake suggests it may be residual (Struck Flint report) and because of its technology the worked stone fragment is likely of post-medieval date. The profile of Ditch F1011 and the tip lines of its fill were similar to the cut of a mechanical excavator and the feature may represent a disturbance associated with the previous construction of the swimming pool.
Project dates	Start: 01-01-2018 End: 31-01-2018
Previous/future work	No / Not known
Any associated project reference codes	P7322 - Contracting Unit No.
Any associated project reference codes	EXG113 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Other 5 - Garden
Monument type	PIT Neolithic
Monument type	DITCH Post Medieval
Significant Finds	STRUCK FLINT Neolithic
Methods & techniques	"Sample Trenches","Targeted Trenches"
Development type	Rural residential
Prompt	Planning condition

Position in the planning process Pre-application

Project location

Country England
 Site location SUFFOLK FOREST HEATH EXNING Quickthorns, Windmill Hill, Exning
 Postcode CB8 7PB
 Study area 2420 Square metres
 Site coordinates TL 6276 6591 52.26679346243 0.385457542101 52 16 00 N 000 23 07 E Point
 Height OD / Depth Min: 25m Max: 30m

Project creators

Name of Organisation Archaeological Solutions Ltd
 Project brief originator Suffolk County Council Archaeological Service Conservation Team
 Project design originator Jon Murray
 Project director/manager Jon Murray
 Project supervisor Archaeological Solutions Ltd

Project archives

Physical Archive recipient Suffolk County Archaeological Store
 Physical Contents "Worked stone/lithics"
 Digital Archive recipient Suffolk County Archaeological Store
 Digital Contents "Survey"
 Digital Media available "Images raster / digital photography","Survey","Text"
 Paper Archive recipient Suffolk County Archaeological Store
 Paper Contents "Survey"
 Paper Media available "Drawing","Photograph","Plan","Report","Survey "

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
 Title Quickthorns, Windmill Hill, Exning
 Author(s)/Editor(s) Muir, T
 Other bibliographic details Archaeological Solutions Report No. 5512
 Date 2018
 Issuer or publisher Archaeological Solutions Ltd

Place of issue or publication Bury St Edmunds

Entered by Sarah Powell (info@ascontracts.co.uk)

Entered on 1 February 2018

OASIS:

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

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

PHOTOGRAPHIC INDEX



1
Trench 1 looking south



2
Trench 2 looking west



3
Pit 1004 in Trench 1



4
Pit 1008 in Trench 1



5
Ditch 1011 in Trench 1

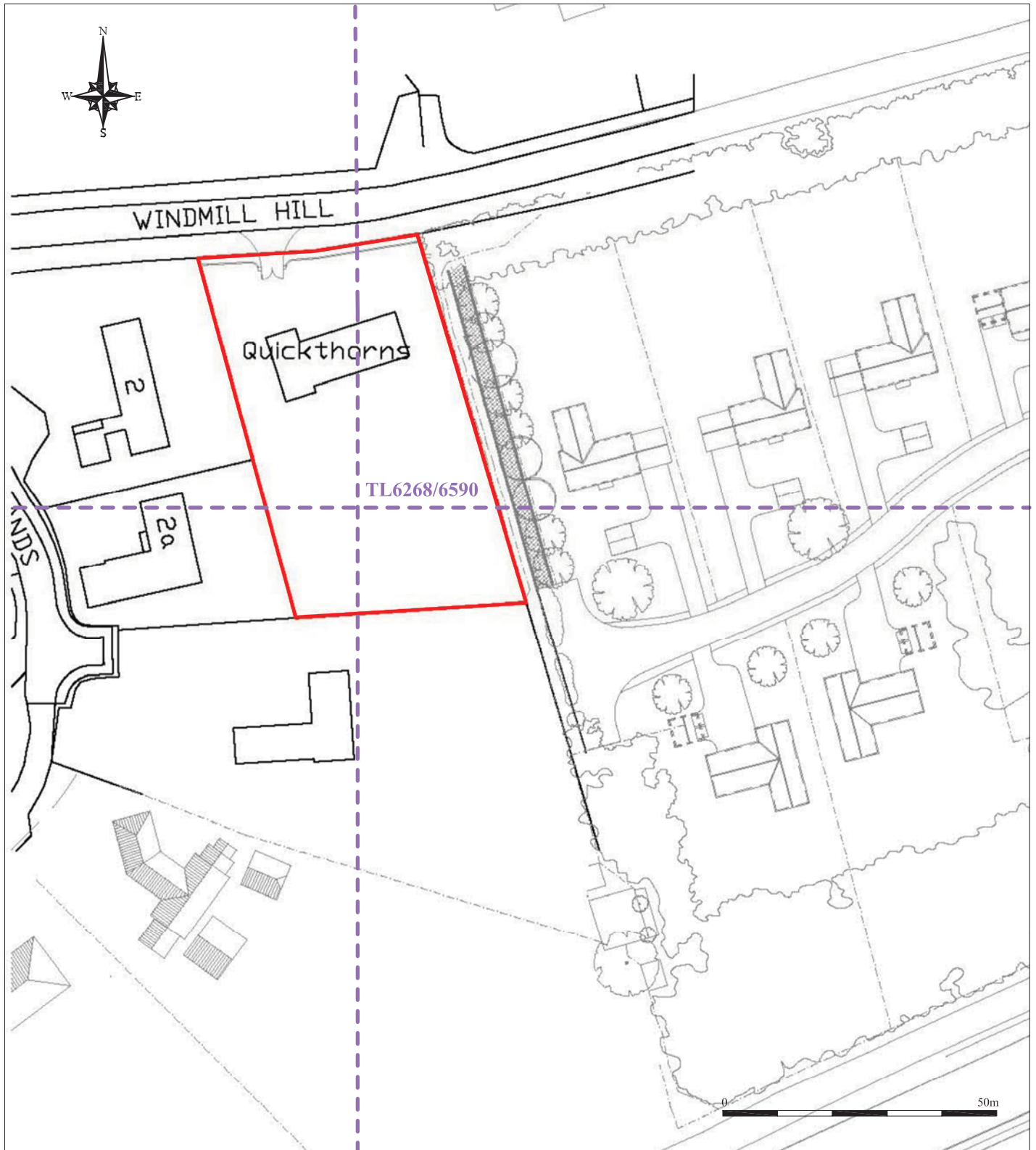


5
Sample section 2A in Trench 2

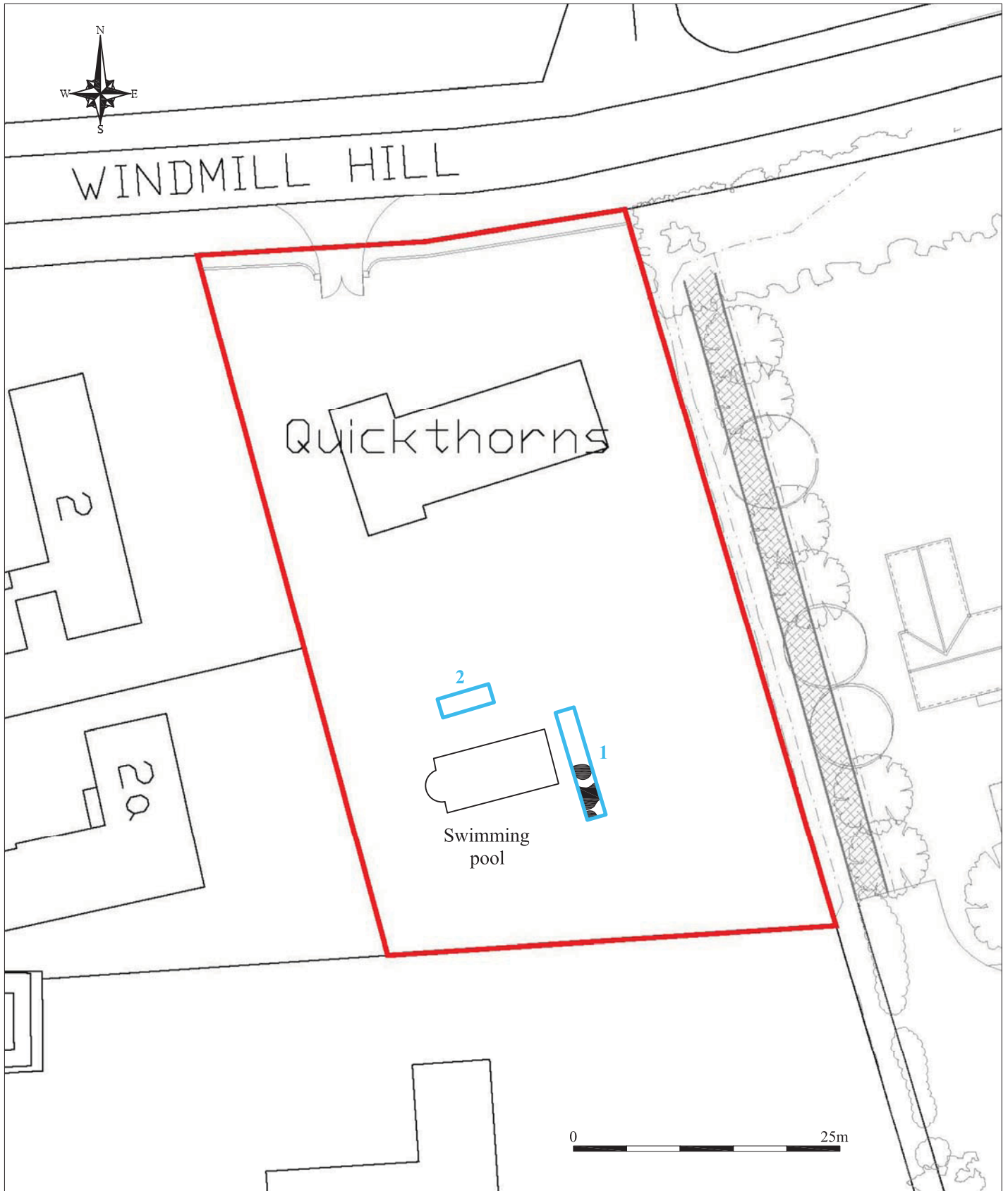


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Archaeological Solutions Ltd
Fig. 1 Site location plan
 Scale 1:25,000 at A4
 Quickthorns, Windmill Hill, Exning, Suffolk (P7322)

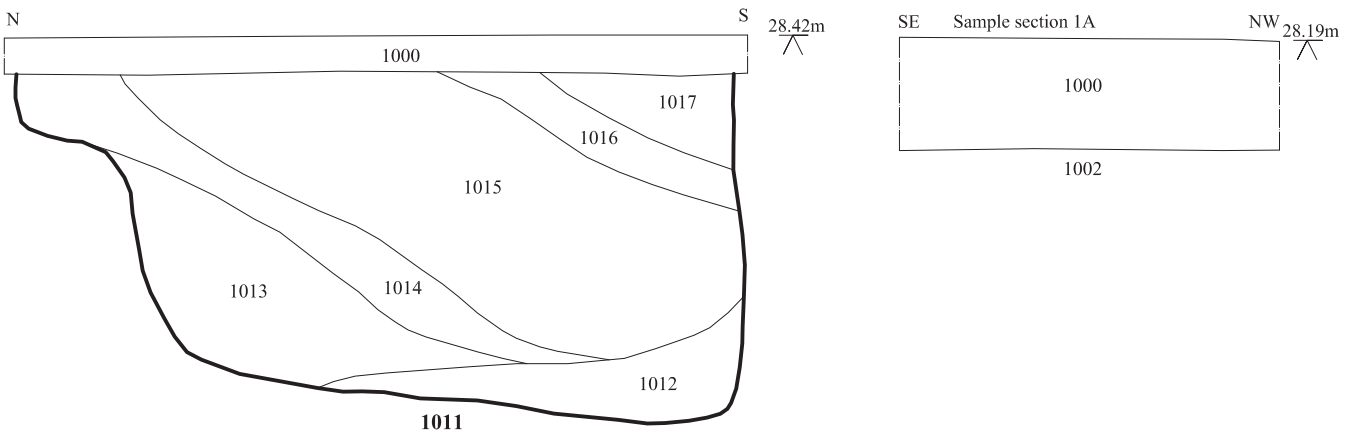
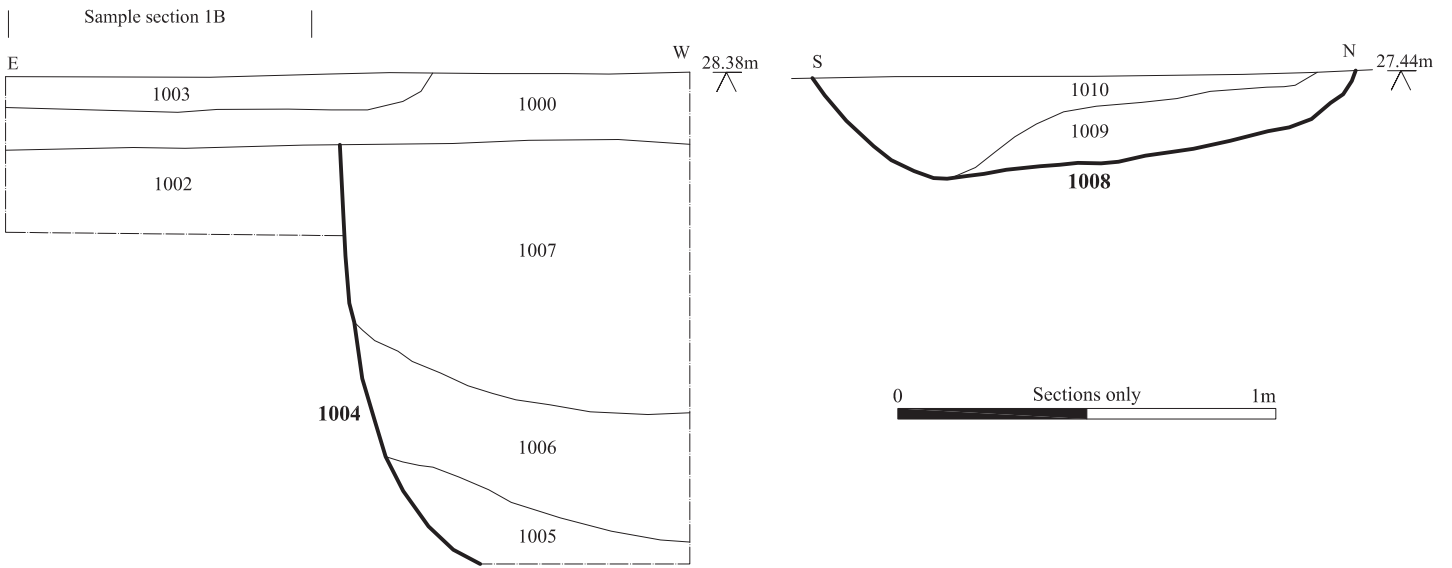
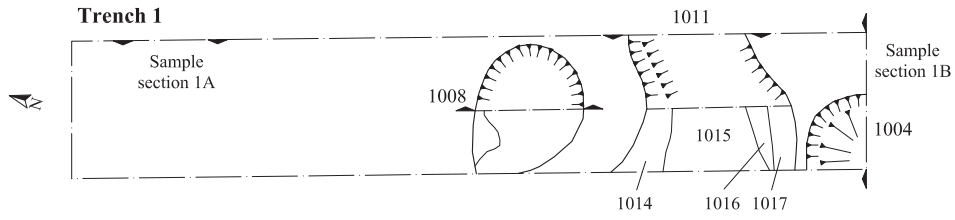


Archaeological Solutions Ltd
Fig. 2 Detailed site location plan
Scale 1:1000 at A4
Quickthorns, Windmill Hill, Exning, Suffolk (P7322)



Archaeological Solutions Ltd
Fig. 3 Trench location plan
Scale 1:500 at A4
Quickthorns, Windmill Hill, Exning, Suffolk (P7322)

0 Plan only 5m

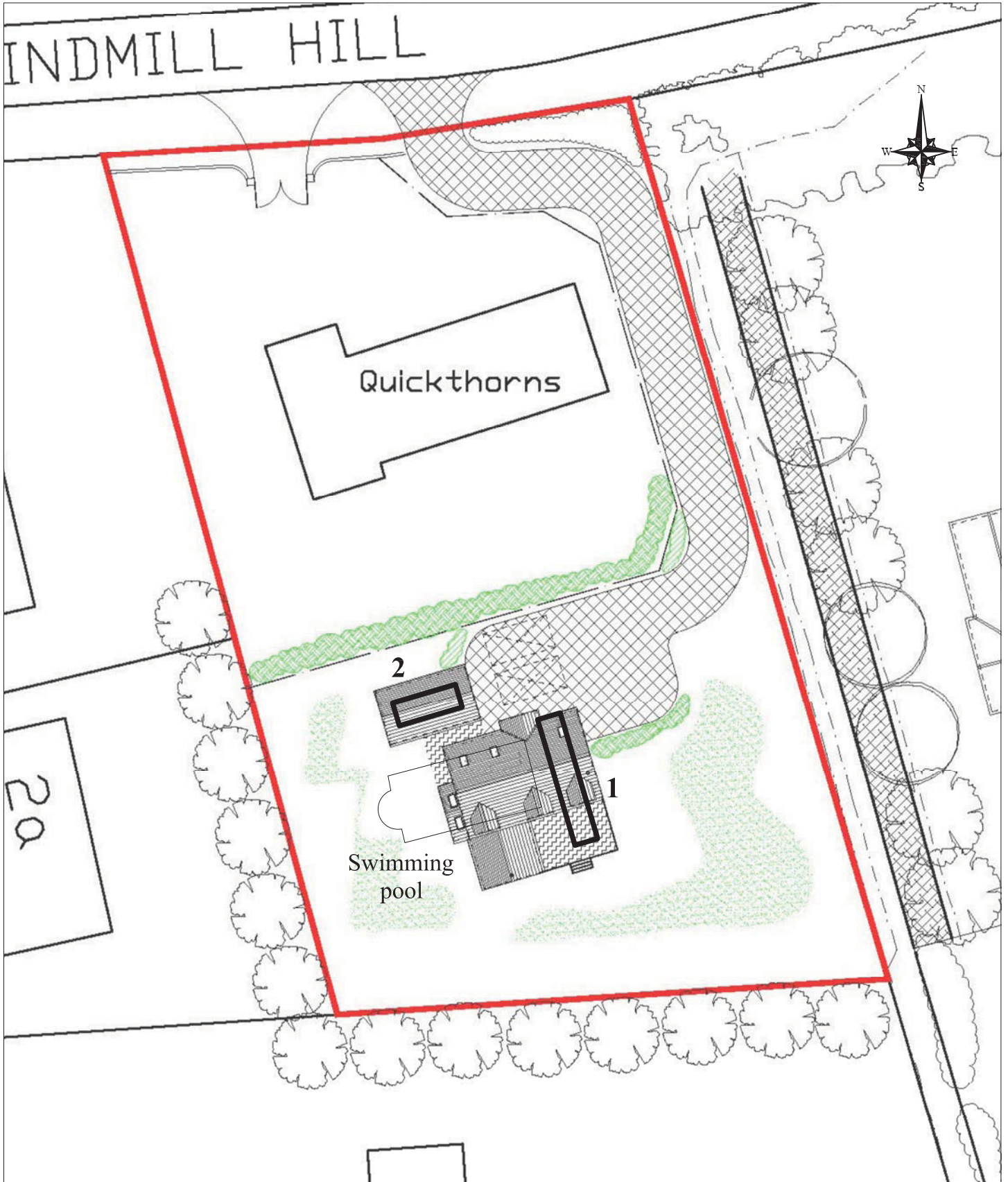


Archaeological Solutions Ltd

Fig. 4 Trench plan & sections

Scale Plan 1:100, sections 1:20 at A4

Quickthorns, Windmill Hill, Exning, Suffolk (P7322)



Archaeological Solutions Ltd
Fig. 5 Proposed development plan
Scale 1:400 at A4
Quickthorns, Exning, Cambridgeshire (P7322)