



LAND NORTH OF BROOM ROAD, LAKENHEATH, SUFFOLK

ARCHAEOLOGICAL EVALUATION AND GEOARCHAEOLOGICAL INVESTIGATION



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AND
GEOARCHAEOLOGICAL INVESTIGATION**

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CONTENTS

	Abstract	Page 2
1.0	Introduction	Page 3
2.0	Site Description	Page 3
3.0	Planning Policies	Page 3
4.0	Archaeological Background	Page 4
5.0	Project Aims	Page 5
6.0	Project Objectives	Page 6
7.0	Fieldwork Methodology	Page 6
8.0	Description of Results - Evaluation	Page 7
9.0	Description of Results – Geoaarchaeology	Page 10
10.0	Deposit Model	Page 16
11.0	Discussion – Evaluation	Page 16
12.0	Discussion - Geoaarchaeology	Page 17
13.0	Conclusions	Page 18
14.0	Recommendations	Page 20
15.0	Project Archive & Deposition	Page 21
16.0	Acknowledgments	Page 21
	Bibliography	Page 22
Appendix 1	Deposit Tables and Feature Descriptions	Page 25
Appendix 2	Geoaarchaeological Field Work Report	Page 30
Appendix 3	Specialist Reports	Page 42
Appendix 4	Concordance of Finds	Page 44
Appendix 5	OASIS Sheet	Page 45
Figure 1	General Location Plan	1:5000
Figure 2	SHER 1km Monuments Search	1:10000
Figure 3	SHER 1Km Events & Listed Buildings Search	1:10000
Figure 4	Archaeological Feature Plan	1:100
Figure 5	Trench Plans & Sections	1:10
Figure 6	Trench Plans & Sections Continued	1:10
Figure 7	Trench Plans & Sections Continued	1:10



Abstract

In March 2014 Britannia Archaeology Ltd (BA) in conjunction with Quest (Quaternary Scientific) undertook an archaeological trial trench evaluation and geoarchaeological investigation on land north of Broom Road, Lakenheath, Suffolk (NGR 572400 282600), to inform considerations for a proposed planning application to develop the site for residential housing. This evaluation represents the first of two planned phases of evaluation, the second of which is to be undertaken as a condition of any approved planning permission.

Background research for the project indicated that the site had potential for rare Lower Palaeolithic deposits associated with the pre-Anglian Glaciation, Bytham River. Further study also showed potential for late post-medieval inhumations associated with a Church Yard marked on early maps and for 19th century gravel workings.

The evaluation yielded limited results although recent site activity in the form of ground reduction, farm building construction and subsequent demolition in the mid 20th and early 21st centuries was well represented.

The limited finds assemblage tentatively suggests more broader prehistoric activity which is backed up by know sites in the wider area recorded in the SHER. A post-medieval gunflint core also shows some limited activity predating the extensive modern disturbance noted across the centre and east of the site.

No finds or features associated with the Church Yard or gravel quarrying were identified.

The geoarchaeological investigation was more successful. The surface of the bedrock Chalk appears to form two erosional benches separated by a relatively steep bluff. The upper chalk bench was recorded beneath the summit of the hill. The lower chalk bench was recorded beneath the western flank of the hill. The western flank of the hill appears therefore to conceal a steep bedrock bluff about 3.0m in height.

In the deposits overlying the Chalk, three sediment types can be recognised: Gravelly sand, flint gravel and chalk gravel. The following sequence is postulated:

- 1. Fluvial erosion forming a higher bench.*
- 2. Fluvial deposition mainly of gravelly sand on the higher bench.*
- 3. Fluvial downcutting and lateral erosion forming a lower bench.*
- 4. Deposition of flint gravel on the lower bench*
- 5. Colluvial deposition of gravelly sand from the higher bench burying the flint gravel on the lower bench.*
- 6. Fluvial reworking of deposits on the lower bench and introduction of chalky gravel.*



1.0 INTRODUCTION

In March 2014 Britannia Archaeology Ltd (BA) in conjunction with Quest (Quaternary Scientific) undertook an archaeological trial trench evaluation and geoaerchaeological investigation on land north of Broom Road, Lakenheath, Suffolk (NGR 572400 282600) in response to a design brief issued by Suffolk County Council Archaeology Service Conservation Team (SCCAS/CT) (Brudenell, M. dated 27/02/2014). The work was commissioned to comply with a preplanning application reference DC/13/0347/OUT in advance of consideration of a formal planning application for residential development of the site.

The works comprised the excavation of ten trial trenches measuring 50.00 x 2.00m and ten geoaerchaeological sondages (Fig. 4). A second phase of evaluation will be implemented as a condition of an approved planning permission, if granted.

2.0 SITE DESCRIPTION

The site is located 940m east of the medieval core of the village of Lakenheath on the edge of the modern settlement, in the Forest Heath District of Suffolk. It lies north of Broom Road and is bounded to the west by residential development, to the north by houses fronting onto Maidscross Hill Road and to the east by a nature reserve on Maidscross Hill which is the site of a sandy warren described as an important remnant of the Brecks Heath (Natural England). The nature reserve falls within the Breckland SSSI, but the site itself does not.

The site is a roughly rectangular parcel of land covering 4.64ha at a height of between 22m and 32m AOD, sloping down in a west-south-westerly direction. It is split into seven distinct plots, two large in the north and south and five small along the western boundary. The southern area contains a pine tree plantation, the northern area is laid to dense scrub and undergrowth and the western plots comprise gardens, allotments and a small spinney of mixed trees.

The underlying bedrock comprises chalk described as Holywell Nodular Chalk Formation and New Pit Chalk Formation. This is also noted at the surface in the north-west corner of the site (Green, 2014). The superficial geology on the western half of the site is described as 'Head' (clay, silt, sand and gravel) and the eastern half is occupied by pre- Anglian Ingham Sand and Gravel Formation (Green, 2014).

3.0 PLANNING POLICIES

The archaeological investigation will be carried out in consultation with SCCAS/CT, following guidance laid down by the *National Planning and Policy Framework* (NPPF, DCLD 2012) which replaces *Planning Policy Statement 5: Planning for the Historic Environment* (PPS5, DCLG 2010). The relevant local planning policy is the *Forest Heath Local Plan (Policy 8.20, 1995)*.

3.1 *National Planning Policy Framework (NPPF, DCLG March 2012)*

The NPPF recognises that 'heritage assets' are an irreplaceable resource and planning authorities should conserve them in a manner appropriate to their significance when



considering development. It requires developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. The key areas for consideration are:

- The significance of the heritage asset and its setting in relation to the proposed development;
- The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance;
- Significance (of the heritage asset) can be harmed or lost through alteration or destruction, or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification;
- Local planning authorities should not permit loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred;
- Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.

3.2 *Forest Heath Local Plan, (Policy 8.20, 1995)*

Forest Heath's local plan development plan was adopted in 1995 and has undergone some revision since. A Core Strategy was released in 2010 and an updated assessment of their Heritage Policy is pending. The Council's position on heritage assets is summarised as follows:

- The District Council will seek provision to be made for the evaluation of archaeological sites of unknown importance and areas of high potential prior to the determination of development proposals. Where nationally or locally important sites, whether scheduled or not, and their settings, are effected by proposed development, there will be a presumption in favour of their preservation. On sites where there is no overriding case for preservation, development will not normally be permitted unless agreement has been reached to provide either for their preservation or for their recording and, where desirable, their excavation prior to development.

4.0 ARCHAEOLOGICAL BACKGROUND (Fig. 2-3)

The following archaeological background is summarised from a Desk-Based Assessment carried out by Britannia Archaeology (Adams, M. Jan 2014) and utilises data from the Suffolk Historic Environment Record (1km search centred on the site), Suffolk Record Office, an interim Geo-Archaeological report prepared by Quest (Green, C. 2014) and an AP and LiDAR assessment by Alison Deegan (2014).

There are 103 SHER entries within the 1km search radius of the site comprising 97 monuments/event records and six listed buildings.



The predominant potential for the site relates to lower Palaeolithic deposits associated with Bytham River which were discovered during the mid 19th century and subsequent excavations (LKH 032). At least seven handaxes and miscellaneous worked fragments were discovered during mid-19th century gravel quarrying which occupied over 60 acres on Maidscross Hill. Wymer (1985) also describes the quarry site briefly and suggests that a larger number of handaxes simply marked 'Lakenheath' in museum collections also come from the Maidscross Hill gravels (Green, 2014).

The gravels on Maidscross Hill date to a period when the local topography was considerably different. They were deposited by the Bytham River which wound its way across the Midlands and East Anglia and out into land now submerged by the North Sea.

Artefacts recovered from the Bytham river deposits at the Maidscross Hill site and other sites further east in Suffolk such as High Lodge, Warren Hill and Pakefield, show that the Bytham River was a major migration route for early hominids travelling into Britain. These form some of the earliest evidence for hominid occupation in Britain and as such are considered to be crucial, if not some of the most important, archaeological deposits so far discovered in the country (Rose, 2006).

There is therefore a high potential for lower Palaeolithic deposits of potentially national significance on the proposed site.

The wider area has also been a site of occupation activity since the Mesolithic period with significant settlement activity identified in the Roman, Saxon, medieval and post-medieval periods. The assessment site is situated at least 500m from the focus of much of this settlement activity, which tends to be found to the north-east and south-west, however a moderate potential for Bronze Age, Roman and medieval remains is still suggested.

The potential for all other periods is considered to be low and the historic maps show the site probably remained in agricultural use until the mid-19th century when quarrying first appears on the historic maps, evidence of this quarrying activity has also been identified by the aerial photography and LiDAR data.

Two cartographic sources suggest the presence of an 'Old Church Yard' in the north-eastern corner of the site in 1836 and later sources show extensive damage to the centre of the site from levelling and farm building construction. The potential for later post-medieval and modern remains is therefore high.

5.0 PROJECT AIMS

The broad aims laid out in the SCCAS/CT brief were to undertake a linear trenched evaluation with geo-archaeological sondages of the development area to enable the archaeological resource, both in quality and extent, to be accurately quantified (Brief, 3.1).



It also stated that the evaluation aimed to identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation, evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.

The aims of the geoarchaeological investigation were firstly to expose the full sediment sequence overlying the bedrock Chalk and secondly to identify any deposits that might have been the source of the Palaeolithic artefacts recovered historically from the Maidscross Hill locality (Green, 2014. This Report).

It also aimed to establish the potential for the survival of environmental evidence, and provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost (Brief, 3.2).

6.0 PROJECT OBJECTIVES

Research objectives for the project are in line with those laid out in *Research and Archaeology Revisited: a revised framework for the East of England*, East Anglian Archaeology Occasional Paper 24 (Medlycott, 2011).

In addition to the usual project objectives, the research potential of the Palaeolithic deposits will be assessed and further mitigation carefully considered.

7.0 FIELDWORK METHODOLOGY

A Leica Viva Smart Rover GS08 differential global positioning system (DGPS) was used to accurately set-out the evaluation trenches. These were located in suitable positions across the site to properly evaluate the potential archaeology and avoid areas of environmental sensitivity. The trenches and sondages were excavated using a 14 tonne 360° mechanical excavator fitted with a toothless ditching bucket under the control of a qualified professional archaeologist and geoarchaeologist (Fig. 4). Topsoil and subsoil layers were removed carefully down to the first archaeological horizon, thereafter all excavation was undertaken by hand. The geoarchaeological sondages were excavated once the trenches were cleared of more recent archaeology and recorded (Fig. 4).

Topographic survey, trench edges, section locations and archaeological and natural feature survey points were accurately recorded using the DGPS to produce a pre and post-excavation plan tied into the Ordnance Survey National Grid. The archaeology was preserved by record using pro-forma sheets, plan and section drawings and appropriate photographic records, as agreed in the Written Scheme of Investigation (Adams, 2013). All features, finds and samples were given unique context numbers assigned during the recording phases on site.



8.0 DESCRIPTION OF RESULTS – TRIAL TRENCH EVALUATION (Figs. 4-5)

Archaeological features and deposits are described below in trench order. Detailed information on all features and deposits can be found at Appendix 1.

The trenches were all excavated to a depth that exposed the full stratigraphic sequence down to the natural geological deposits.

This was observed to be at around the same depth (2.20 – 2.70m AOD) in all trenches although slight deformation of the natural due to excessive dumping of overburden was noted in trenches 1 to 4.

Evidence of substantial modern dumping was present in the east and south-east of the site (Fig. 3 & 5) with up to 2.00m of overburden (1001) sealing a buried topsoil (1002) dating to the 20th century. Modern truncation in Trenches 1 & 2 was also noted and dated to the same phase of activity as the dumping. An unusual brick surface, 1006, was present at the western end of Trench 4 and was probably associated with a garden feature from the rectory.

8.1 Trench 1 (Figs. 4-5)

Trench 1 was located in the south-west of the site on lower ground sloping down to the west. It was aligned north-north-west to south-south-east at 24.84m aOD at its northern end. A single natural feature was present and probably related to rooting or former tree growth.

No archaeological features or finds were present.

8.2 Trench 2 (Figs. 4-5)

Trench 2 was located in the western half of the site on lower ground sloping down to the west. It was aligned north-north-west to south-south-east at 26.17m aOD at its northern end.

It contained three large modern features associated with the demolition of farm out buildings, including a concrete circular slurry tank cap. The majority of the trench was taken up by this demolition activity.

No archaeological features or finds were present.



8.3 Trench 3 (Figs. 4-5)

Trench 3 was located in the centre of the site on ground previously levelled for construction of the farm out buildings. It was aligned east-north-east to west-south-west at 26.88m aOD at its western end.

Two modern features associated with demolition of the farm out buildings were present in the western end of the trench. Two natural features associated with tree throws and rooting were present in the centre.

A single unpatinated large flake flint core was present in the demolition topsoil 1002. It was made of very dark, almost black flint and has no cortex. Although it could be Neolithic, it is irregular and has relatively few flakes removed, which suggests rather that it is possibly post-medieval gunflint production waste (Pendleton. 2014 – this report).

No archaeological features were present.

8.4 Trench 4 (Figs. 4-5)

Trench 4 was located in the centre of the site, but outside of and just east of, the area of levelled ground associated with the farm outbuildings. It straddled an area of high and low ground and was aligned north to south at 28.86m at its northern end. The location altered slightly from the proposed plan to avoid a group of trees.

Two modern features associated with modern demolition were present in the south and centre of the trench. The southern modern feature was located in the lower area of ground and was substantial in size and depth, containing large amounts of building material, including breeze blocks and aluminium window frames.

No other archaeological finds or features were present.

8.5 Trench 5 (Figs. 4 & 6)

Trench 5 was located on higher ground in the east and centre of the site and was adjacent to the eastern boundary. It was aligned north-north-west to south-south-east at 31.23m aOD at its northern end, which was the highest recorded point during the evaluation.

It contained six natural features spread throughout the trench, all of which were associated with tree bowls/throws and extensive rooting. This area is known to have contained a plantation, visible on the second edition Ordnance Survey Map 1905.

A flint fragment (31.2mm x 14mm x 4mm) was recovered from the top of the natural sand 1001. It is a small pale grey struck blade/long flake with areas of limited edge retouch of one of its long edges. The flint blade/long flake is typologically typical of pieces of Mesolithic, Neolithic and Early Bronze Age date, although as a single struck flint it is not chronologically diagnostic enough to be conclusive about a specific date (Pendleton.



2014). It is likely that this flint fragment travelled down into the top of the natural geology via root action on animal burrowing.

No archaeological features were present.

8.6 Trench 6 (Figs. 4 & 6)

Trench 6 was located on higher ground in the eastern area of the site, adjacent to the eastern boundary and north of Trench 5. It was aligned north to south at 30.83m aOD and the location had to be altered slightly from the proposed plan to avoid environmental constraints.

It contained two modern features associated with demolition activity. Large concrete blocks adjacent to the trench suggest this demolition might be related to World War II listening towers rather than more recent farm buildings, however no conclusive evidence was observed or recovered. These towers are noted in the area and one observer post survives to the east of the site on Maidscross Hill.

No archaeological features or finds were present.

8.7 Trench 7 (Figs. 4 & 6)

Trench 7 was located on higher ground in the eastern half of the site between the centre and eastern boundary. It was aligned east-north-east to west-south-west at 31.20m aOD at its western end.

One large modern feature consistent with the demolition of farm outbuildings was present at the western end of the Trench. A natural feature associated with rooting was present in the centre. The mains water supply pipe serving Lakenheath crossed the trench in the western end and originated from the reservoir to the north-east.

No archaeological features or finds were present.

8.8 Trench 8 (Figs. 4 & 7)

Trench 8 was located in the centre of the site on higher ground north of Trench 4. It was aligned north-north-west to south-south-east at 29.56m aOD at its northern end.

No archaeological features or finds were present.



8.9 Trench 9 (Figs. 4 & 7)

Trench 9 was located in the north of the site on ground sloping down to the west. This area had also been partially levelled before the construction of farm outbuildings. It was aligned east-north-east to west-south-west at 28.40m aOD at its eastern end.

It contained a large modern feature associated with the demolition of a farm outbuilding at the eastern end.

No archaeological features or finds were present.

8.10 Trench 10 (Figs. 4 & 7)

Trench 10 was located in the north-west of the site on low ground sloping gently down to the west. It was aligned north-north-west to south-south-east at 27.84m aOD at its northern end.

A single small find number was assigned (SF1), to an object recovered by metal detector from the topsoil 1000. At first glance it appears to resemble a cut non-ferrous coin but under magnification the surfaces of the fragment appear irregular with one face having bubbled up, possibly through burning, whilst the other surface is uniformly rough. The fragment is not magnetic and may be a natural product such as iron panning. If it is a manufactured object which has been changed through heat, for example, it could perhaps be a copper alloy Roman coin, but this identification is tentative and less convincing than the view that the object is natural (Goffin. 2014. This Report).

No archaeological features were present.

9.0 DESCRIPTION OF RESULTS – GEOARCHAEOLOGICAL SONDAGES (Figs. 4)

The geoarchaeological sondages were monitored by Dr Chris Green at QUEST (Quaternary Sciences). The location of each is recorded at Figure 4. The following is a summary of Dr Green's results and the full report is at Appendix 2.

The geoarchaeological investigations at Maidscross Hill involved the mechanical excavation of ten sondages (S1-S10), using a 14 tonne 360° Doosan DX140LC tracked excavator (Figure 4). The sondages were located within shallow (mainly <1.0m) archaeological evaluation trenches (TR1 - TR10), ca. 50m in length which had been opened previously and exposed, almost everywhere, reddish brown or yellowish brown, slightly silty/clayey sand with scattered, mainly small (<30mm) flint, quartz and quartzite clasts. A sandy gravel of coarser chalk and flint clasts was patchily exposed on the floor of evaluation trenches TR1, TR2 and TR10.

The results of the lithostratigraphic descriptions are displayed in Tables 1 to 10 and are displayed in Figure 2.



Table 1: Lithostratigraphic description of Sondage S1 (Trench TR 1), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
24.32-24.00	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
24.00-23.32	Yellowish brown; slightly gravelly slightly silty sand with small (mainly <30mm) scattered clasts of sub-angular flint and occasional well-rounded quartz and quartzite; sharp uneven (pinnacled) contact with:
<23.32	Blocky, weathered bedrock Chalk

Table 2: Lithostratigraphic description of Sondage S2 (Trench TR 2), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
25.62-25.32	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
25.32-24.22	Yellowish brown; very slightly gravelly slightly silty sand with small (mainly <30mm) scattered clasts of sub-angular flint and occasional well-rounded quartz and quartzite; sharp contact with:
24.22-23.92	White; sandy gravel with clasts of sub-angular flint and well-rolled chalk (up to 80mm) and small (<30mm) clasts of well-rounded quartz and quartzite; sharp uneven (pinnacled) contact with:
<23.92	White, blocky, weathered bedrock Chalk

Table 3: Lithostratigraphic description of Sondage S3 (Trench TR 3), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
27.49-27.34	Dark reddish grey; sandy and stony soil with anthropogenic debris and clasts of sub-angular flint; uneven (in places completely missing), variable, but in places very sharp contact with:
27.34-26.59	Yellowish brown and reddish grey with patchy manganese staining (black); gravelly, unevenly bedded, slightly silty/clayey sand with many small (mainly <20mm) clasts mainly of flint and quartz with occasional hard sandstones/quartzites and cherts; sharp very uneven contact (up to 0.5m relief amplitude) with :
26.59-23.69	Yellowish brown; medium to coarse sandy gravel; crude sub-horizontal bedding with subsidiary beds, generally less than 0.3m thick, of gravelly



sand; *not bottomed*

Table 4: Lithostratigraphic description of Sondage S4 (Trench TR 4), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
28.63-28.23	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
28.23-23.83	Yellowish brown; slightly gravelly slightly silty sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; uneven bedding visible as colour variations defining thin (up to 0.3m) lenses of sediment; sharp contact with:
23.83-23.13	Yellowish brown; medium to coarse sandy gravel, mainly of sub-angular flint; very sharp contact with:
<23.13	White, blocky weathered bedrock Chalk

Table 5: Lithostratigraphic description of Sondage S5 (Trench TR 5), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
31.17-30.77	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
30.77-26.47	Yellowish brown; slightly gravelly slightly silty sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; uneven bedding visible as colour variations; <i>not bottomed</i>

Table 6: Lithostratigraphic description of Sondage S6 (Trench TR 6), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
30.74-30.32	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
30.32-26.24	Yellowish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; some colour banding (?bedding) in uppermost 1.0m; vary sharp contact with:
<26.24	White, rubbly weathered bedrock Chalk



Table 7: Lithostratigraphic description of Sondage S7 (Trench TR 7), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
30.82-30.42	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
30.42-26.32	Yellowish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; some colour banding (?bedding) in uppermost 1.0m; <i>not bottomed</i>

Table 8: Lithostratigraphic description of Sondage S8 (Trench TR 8), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
29.64-29.44	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
29.44-26.91	Yellowish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; crude bedding defining uneven and discontinuous bodies of sediment
26.91-26.59	Yellowish brown; medium to coarse sandy gravel, mainly of sub-angular flint; very sharp contact with:
<26.59	White, rubbly weathered bedrock chalk

Table 9: Lithostratigraphic description of Sondage S9 (Trench TR 9), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
27.59-27.29	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
27.29-24.26	Reddish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; some colour-banding (?bedding) in uppermost 1.5m; sharp contact with:
24.26-23.54	Yellowish brown; medium to coarse sandy gravel, mainly of sub-angular flint; very sharp contact with:
<23.54	White, rubbly weathered bedrock chalk

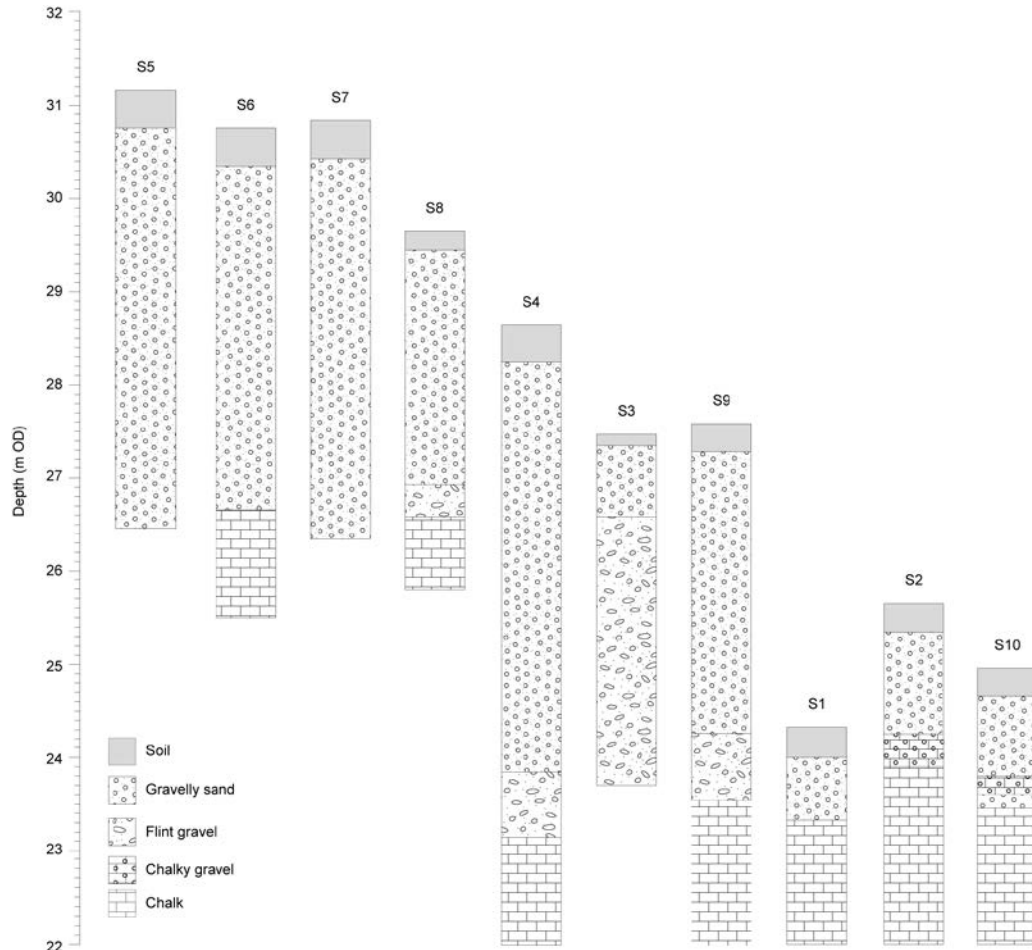


Table 10: Lithostratigraphic description of Sondage S10 (Trench TR 10), Madsdross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
24.95-24.65	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
24.65-23.80	Light yellowish brown to reddish brown; slightly gravelly sand with small clasts of sub-angular flint (mainly <30mm but some clusters of clasts up to 150mm) and well-rounded quartz with occasional hard sandstones/quartzites and cherts; sharp contact with:
23.80-23.60	Lens of white sandy gravel with clasts of sub-angular flint and well-rolled chalk (up to 80mm) and small (<30mm) clasts of well-rounded quartz; sharp contact with:
23.60-23.45	Light yellowish brown to reddish brown; slightly gravelly sand with small clasts of sub-angular flint (mainly <30mm but some clusters of clasts up to 150mm) and well-rounded quartz with occasional hard sandstones/quartzites and cherts; sharp pinnacled contact dipping down to the south with:
<23.45	White, rubbly weathered bedrock Chalk



Land North of Broom Road, Lakenheath, Suffolk
Archaeological Evaluation & Geoarchaeological Investigation



East-west transect of sequences across the Madscrip Hill site



10.0 DEPOSIT MODEL – TRIAL TRENCH EVALUATION (Fig. 4-5)

The deposit model varied slightly across the site. Trenches 1 and 10 (south-west and north-western areas) contained a topsoil (1000), that had been removed and replaced with a thin layer of demolition and soil (1002), in the centre and east of the site. Topsoil 1000 was consistent with a layer of accumulated material which formed over a long period. The demolition topsoil (1002), was the result of recent demolition activity associated with the destruction of the majority of the farm outbuildings on the land belonging to Grey Gables Farm.

Trench 4 was different to all other trenches. The southern sample section contained topsoil 1004 which was the result of a build-up of dark humic material from leaf and pine needle litter from the plantation area to the south. It overlay subsoil 1003 which appears to have been a buried soil layer relating to topsoil 1000 found in Trenches 1 and 10.

In all other trenches, the Topsoil 1000 and Demolition Topsoil 1002 overlay the natural drift geology 1001.

11.0 DISCUSSION - TRIAL TRENCH EVALUATION

Despite the lack of archaeological features, the evaluation revealed two distinct phases of modern activity and a third broad phase dating from the prehistoric to the post-medieval periods. The most recent distinct phase comprised the extensive demolition of farm buildings in the centre and eastern areas of the site. This was most evident in Trenches 2, 3, 4, 6, 7 and 9. It is possible that the damage observed in the trenches on the eastern half of the site relates to less intrusive activity, but rather reflects the bulldozing of material from the central area with some limited disposal pits. This phase took place in the last 10 years.

The second phase relates to ground reduction and levelling in the centre of the site and the construction of the outbuildings associated with Grey Gables farm. The eastern half of this central area appears to have been reduced by at around 2m, leaving a distinctive ridge running north to south across the site. The Ordnance Survey maps consulted show that this phase occurred between 1966 and 1975. It is likely that all archaeological activity since the Mesolithic period has been removed in this area.

The small number of finds recovered from the topsoils (1000 and 1002) and the top of the natural geology (1001) give a general indication of prehistoric and post-medieval activity. The flint blade/flake fragment is indicative of general activity supported by prehistoric finds noted in the general area. The large flint core may point to activity associated with the gun flint industry which flourished in the area during the early to middle post-medieval period.



12.0 DISCUSSION – GEOARCHAEOLOGICAL SONDAGES

The following is summarised from Dr Green's report which is found in full at Appendix 2.

The surface of the bedrock Chalk at the Maidscross Hill site appears to form two erosional benches separated by a relatively steep bluff. The upper chalk bench was recorded beneath the summit of the hill in sondages S6 and S8. These sondages were put down from ground levels at, respectively 30.74m and 29.64m OD and the surface of the Chalk was recorded at respectively 26.24m and 26.59m OD. The lower chalk bench was recorded beneath the western flank of the hill in sondages S1, S2, S4, S9 and S10. These sondages were put down from ground levels between 28.63m (sondage S4) and 24.32m OD (sondage S1), but the Chalk surface occupied a much narrower height range between 23.92m OD (Sondage S2) and 23.13m OD (Sondage S4) (mean 23.57; n=5). The western flank of the hill appears therefore to conceal a steep bedrock bluff about 3.0m in height.

In the deposits overlying the Chalk, three sediment types can be recognised:

1. Gravelly Sand

This was exposed extensively in the evaluation trenches where it was seen to form the parent material of the present-day soil. In nine of the ten sondages it formed the bulk of the sediment recorded.

On the summit of Maidscross Hill overlying the upper chalk bench it was between 2.73m and 4.70m thick (Sondages S8 and S5 respectively) (mean 4.01m; n=4; n.b.in sondages S5 and S7, the Gravelly Sand was not bottomed). Over the lower chalk bench, in two of the sondages close to the concealed bluff, S4 and S9, large thicknesses of Gravelly Sand were present, respectively 4.80m and 3.33m thick. In the other sondage in this topographic situation, S3, the bulk of the sediment overlying the Chalk was Flint Gravel (see below). Further downslope, and further away from the concealed bluff, in sondages S1, S2 and S10 the Gravelly Sand was much thinner (mean 1.09m; n=3).

The position of the Gravelly Sand on the summit of Maidscross Hill, resting on an erosional bench, together with its ubiquitous gravel content, suggest that in this position it represents a fluvial deposit underlying a remnant of a fluvial terrace. Away from the summit of the hill, much, if not all of the Gravelly Sand may be in its present position as a result of colluvial processes, and its interpretation here is further complicated where the ground has been artificially levelled to accommodate the agricultural buildings that formerly occupied the site.

2. Flint Gravel

This was recorded immediately overlying the Chalk of the upper bench in sondage S8; and immediately overlying the Chalk of the lower bench in sondages S4 and S9. In all three of these sondages the Flint Gravel is less than a metre in thickness (mean 0.58m).



In sondage S3 although the Flint Gravel was not bottomed, a much greater thickness was recorded (2.90m).

If, as suggested above, the sediments occupying the summit of Maidscross Hill are river terrace deposits, the presence of gravel in sondage S8 is unsurprising. However, gravel as opposed to gravelly sand forms a minor element of the sediment sequence overlying the upper chalk bench. It is thin in sondage S8, completely absent in the sediment sequence recorded in sondage S6, and seems likely to be thin or absent beneath the Gravelly Sand recorded but not bottomed in sondages S5 and S7.

The origin of the Flint Gravel overlying the lower chalk bench is less obvious. It was recorded only in the sondages close to the concealed bluff and could be either a remnant of fluvial terrace deposits associated with the formation of the bench and bluff, or it could have been derived by colluvial processes from the higher bench, or it could include elements representing both these origins. There is at present insufficient evidence to decide conclusively between these alternatives.

3. Chalky gravel

This was recorded overlying the chalk of the lower bench, either directly (sondage S2) or as a lens within gravelly sand (sondage S10). It appears to be a fluvial deposit and is typical of chalk-rich gravels formed in rivers flowing over chalk bedrock. It occurs in the same height range as the Flint Gravel overlying the same lower chalk bench but closer to the concealed bluff. It seems unlikely however that these two gravels were laid down in the same depositional episode

13. CONCLUSIONS

The evaluation yielded limited results although recent site activity in the form of ground reduction, farm building construction and subsequent demolition in the mid 20th and early 21st centuries was well represented.

The limited finds assemblage tentatively suggests more broader prehistoric activity which is backed up by know sites in the wider area recorded in the SHER. A post-medieval gunflint core also shows some limited activity predating the extensive modern disturbance.

The site had potential for features associated with a post-medieval church yard marked on maps dating to 1836, however no evidence of inhumations, cremations or human remains of any sort were identified during the evaluation.

The site is also thought to have undergone extensive 19th century quarrying and no direct evidence of this was identified either.



It should be noted that the evaluation only covered around 2% of the site and significant areas to the south and west were not evaluated at this stage due to environmental constraints. The southern area is currently covered in a pine plantation and large depressions thought to be quarry pitting are evident in this area. The area to the west was briefly views in Trenches 1 and 10 where the stratigraphy was far better preserved than the majority of the site where extensive modern disturbance was revealed. Further evaluation of both the south and western sectors of the site may well encounter a more intact stratigraphic sequence predating the 20th century and is therefore more likely to preserve any archaeological remains.

With regard to the geoarchaeological investigation Dr. Green's conclusions are as follows.

Firstly the aims of the investigation were largely achieved:

- (1) To expose the full sediment sequence overlying the bedrock Chalk
- (2) To identify any deposits that might have been the source of the Palaeolithic artefacts recovered historically from the Maidscross Hill locality.

In seven of the ten sondages, the first objective was achieved and the level of the underlying bedrock Chalk was recorded. In the three remaining trenches (TR3, TR5 and TR7) the collapse of the sandy sediments exceeded the capacity of the excavator to remove the collapsed spoil within an excavation of reasonable size and the Chalk was not reached. The second objective was partially achieved as gravel deposits were observed in several of the excavations, although no artefacts were recovered. However, it can be noted that even if artefacts are present in these gravel deposits, they are all at depths below the ground surface that will not be disturbed by the proposed development of the site.

Secondly, the findings of the present investigation provide a much fuller record of the Maidscross Hill deposits than any of the previously published accounts. Two erosional benches have been identified cutting across the bedrock Chalk at *ca.* 26.4m OD and *ca.* 23.6m OD, separated by a steep bluff almost 3.0m in height. The deposits overlying the upper bench consist almost entirely of Gravelly Sand which appears to be fluvial in origin and to represent a remnant of fluvial deposits underlying a terrace at a level close to 31.0m OD. The Gravelly Sand seems likely to be a deposit different from the gravel previously described from Maidscross Hill as a source of Palaeolithic artefacts. It is probably significant that most of the gravel workings on Maidscross Hill lie on the eastern flank of the hill and at levels substantially below the summit level. Lewis (1993) recorded gravel here at *ca.*16m OD, and Ashton *et al* (2005) recorded '3m of laminated sands and silts and 4m of cross-bedded coarse, chalky gravel' to the south and east of the summit, resting on Chalk bedrock at 10.0m OD. This evidence suggests that a complex erosional and depositional record is preserved on the eastern flank of Maidscross Hill.

The present investigation extended part way down the western flank of Maidscross Hill and has shown that here too a complex erosional and depositional record is preserved



overlying, in the area of investigation, an erosional bench a c.23.6m OD. A substantial thickness of Flint Gravel (2.90m) was recorded at one locality overlying this lower bench, close to the bluff separating it from the upper bench. This might be the same gravel unit as the one mentioned by Ashton *et al* (2005). They record that a 'test pit just below the summit demonstrated 3m of sand and gravel' overlying a 'chalky diamicton' at 22.0m OD. However, they did not report the position of this test pit relative to the summit.

The present investigation also recorded substantial thicknesses of Gravelly Sand overlying the lower bench close to the concealed bluff, and indistinguishable from the Gravelly Sand overlying the upper bench. It seems possible that this material is largely of colluvial origin and derived from the higher level. However, also overlying the lower bench are lens-like bodies of chalk-rich gravel enclosed in gravelly sand. It seems possible that these apparently fluvial sediments represent a further episode of fluvial reworking at the level of the lower bench. The possibility that the chalky gravels are related in some way to the 'cross-bedded, coarse chalky gravel' recorded by Ashton *et al* (2005) on the eastern side of the hill requires further investigation.

In conclusion, the following possible developmental sequence is proposed for Maidscross Hill. This sequence is based on the evidence recorded during the present investigation on the west side of the hill. However, judging by the evidence recorded from previous investigations on the east side of the hill, it seems likely that a broadly similar developmental sequence has taken place in a separate river valley to the east of the hill.

1. Fluvial erosion forming the higher bench.
2. Fluvial deposition mainly of gravelly sand on the higher bench.
3. Fluvial downcutting and lateral erosion forming the lower bench.
4. Deposition of flint gravel on the lower bench
5. Colluvial deposition of gravelly sand from the higher bench burying the flint gravel on the lower bench.
6. Fluvial reworking of deposits on the lower bench and introduction of chalky gravel.

No attempt is made in this report to relate this local stratigraphy to a wider regional stratigraphic scheme, e.g. as proposed by Lewis (1999) for Central East Anglia.

14. RECOMMENDATIONS

The area evaluated during this work should be extended, as already proposed, with particular concern for the southern and western areas of the site.

It may be possible to reduce the number of proposed trenches in the centre of the site where the ground has been substantially reduced already and suffered significant further truncation from recent demolition activity. It might be useful to hold over any reduced percentage coverage saved in this area to further investigate areas of interest that might be identified in the subsequent phase of work.



The distribution and stratigraphy of the Quaternary deposits on Maidscross Hill are still incompletely understood. In particular, the location and stratigraphic position of the gravels that have yielded Palaeolithic artefacts in the past have not been established. It is important therefore to complete the archaeological and geoarchaeological investigations at the present site (Green. 2014). It is recommended therefore:

1. That the geoarchaeological investigation is extended into the southern (wooded) part of the site
2. That a watching brief is arranged to monitor all excavations undertaken at the site during all phases of the proposed building work.

15.0 PROJECT ARCHIVE AND DEPOSITION

A full archive will be prepared for all work undertaken in accordance with guidance from the *Selection, Retention and Dispersion of Archaeological Collections*, Archaeological Society for Museum Archaeologists, 1993. Deposition will be with the relevant museum or Cambridgeshire County Council Archaeology Store subject to agreement with the legal landowner where finds are concerned and in accordance with *Deposition of Archaeological Archives in the Cambridgeshire County Council Archaeology Store*, 2004.

The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. The material will be 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 Archaeological Archives Forum's *Archaeological Archives, A guide to best practice, compilation, transfer and curation* (Brown, 2007).

16.0 ACKNOWLEDGEMENTS

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www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england

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APPENDIX 1 DEPOSIT TABLES AND FEATURE DESCRIPTIONS

TRENCH 1

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
1	NNW-SSE	24.84m	DP. 1
Sample Section No	Location	Facing	
1A	N Side	WSW Facing	
Context No	Depth	Deposit Description	
1000	0.00 - 0.55m	Topsoil. Mid grey brown, loose sandy silt with occasional stones.	
1001	0.55m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
1	NNW-SSE	24.24m	
Sample Section No	Location	Facing	
1B	S Side	WSW Facing	
Context No	Depth	Deposit Description	
1000	0.00 - 0.39m	Topsoil. Mid grey brown, loose sandy silt with occasional stones.	
1001	1.39m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

TRENCH 2

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
2	NNW-SSE	26.17m	DP. 2
Sample Section No	Location	Facing	
2A	N Side	WSW Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.64m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.64m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
2	NNW-SSE	25.53m	
Sample Section No	Location	Facing	
2B	S Side	WSW Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.52m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.52m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	



TRENCH 3

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
3	WSW-ENE	26.88m	DP. 3
Sample Section No	Location	Facing	
3A	W Side	SSW Facing	
Context No	Depth	Deposit Description	
1000	0.00 - 0.22m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.22m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
3	WSW-ENE	27.62m	
Sample Section No	Location	Facing	
3B	E Side	SSW Facing	
Context No	Depth	Deposit Description	
1000	0.00 - 0.14m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.14m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

TRENCH 4

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
4	N-S	29.92m	DP. 4
Sample Section No	Location	Facing	
4A	N Side	E Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.25m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.25m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
4	N-S	28.86m	
Sample Section No	Location	Facing	
4B	S Side	E Facing	
Context No	Depth	Deposit Description	
1004	0.00 - 0.13m	Humic Topsoil. Dark grey brown, loose humic sandy silt with occasional stones.	
1003	0.13 - 0.35m	Subsoil. Mid grey brown, friable silty sand with occasional flint gravel.	
1001	0.35m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	



TRENCH 5

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
5	NNW-SSE	31.23m	DP. 8
Sample Section No	Location	Facing	
5A	N Side	WSW Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.34m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.34m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
5	NNW-SSE	31.14m	
Sample Section No	Location	Facing	
5B	S Side	WSW Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.25m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.25m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

TRENCH 6

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
6	N-S	30.83m	DP. 9
Sample Section No	Location	Facing	
6A	N Side	W Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.24m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.24m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
6	N-S	30.84m	
Sample Section No	Location	Facing	
6B	S Side	W Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.47m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.47m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	



TRENCH 7

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
7	WSW-ENE	31.20m	DP. 10
Sample Section No	Location	Facing	
7A	E Side	S Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.19m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.19m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
7	WSW-ENE	29.79m	
Sample Section No	Location	Facing	
7B	W Side	S Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.31m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.31m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

TRENCH 8

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
8	NNW-SSE	29.56m	DP. 16
Sample Section No	Location	Facing	
8A	N Side	WSW Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.26m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.26m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
8	NNW-SSE	30.56m	
Sample Section No	Location	Facing	
8B	S Side	WSW Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.08m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.08m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	



TRENCH 9

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
9	WSW-ENE	27.46m	DP. 17
Sample Section No	Location	Facing	
9A	E Side	S Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.12m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.12m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
9	WSW-ENE	26.71m	
Sample Section No	Location	Facing	
9B	W Side	S Facing	
Context No	Depth	Deposit Description	
1002	0.00 - 0.14m	Demolition Topsoil. Mid grey brown, loose sandy silt with frequent modern demolition material.	
1001	0.14m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

TRENCH 10

Deposit Tables

Trench No	Orientation	Height AOD	Shot No
10	NNW-SSE	24.84m	DP. 18
Sample Section No	Location	Facing	
10A	N Side	WSW Facing	
Context No	Depth	Deposit Description	
1000	0.00 - 0.37m	Topsoil. Mid grey brown, loose sandy silt with occasional stones.	
1001	0.37m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	

Trench No	Orientation	Height AOD	Shot No
10	NNW-SSE	25.02m	
Sample Section No	Location	Facing	
10B	S Side	WSW Facing	
Context No	Depth	Deposit Description	
1000	0.00 - 0.24m	Topsoil. Mid grey brown, loose sandy silt with occasional stones.	
1001	0.24m+	Natural. Light orange yellow, loose sand and sandy gravel with moderate flint gravel & stones.	



APPENDIX 2 GEOARCHAEOLOGY FIELD WORK REPORT

MAIDSCROSS HILL, LAKENHEATH, SUFFOLK: FIELDWORK REPORT

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INTRODUCTION & SITE CONTEXT

This report summarises the findings arising out of the geoarchaeological fieldwork undertaken by Quaternary Scientific (QUEST), University of Reading in advance of proposed development at Maidscross Hill, Lakenheath, Suffolk (NGR: TL 724 826; SMR SMR No. LKH 036 – MSF9471 Maidscross Hill; The Broom; The Old Churchyard).

The site occupies part of the western half of the summit of Maidscross Hill on the eastern edge of the village of Lakenheath, on the eastern margin of the East Anglian Fens. The site lies just to the west of the Maidscross Hill Site of Scientific Interest (SSSI), designated on the basis of its ecological significance and also to the west of the location generally recorded as the site of archaeological interest, which is at TL 7263 8256 in the Suffolk SMR and is similarly recorded by both Roe (1968) and Wymer (1985). The summit of the hill, towards the eastern edge of the site, is at a level of c.31m OD with the ground falling away gently and fairly uniformly at first, to east and west. The British Geological Survey (BGS online) shows bedrock Chalk at the surface in the NW corner of the site, with the rest of the western half of the site occupied by 'Head' (clay, silt, sand and gravel). The eastern half is mapped as occupied by the pre-Anglian Ingham Sand and Gravel Formation. Satellite imagery (www.maps.google.com), aerial photographic and Lidar imagery (Deegan 2014) indicate disturbance of the ground surface across most of the northern half of the site, where extensive areas of bare ground are currently present. Visible disturbance in the northern half of the site probably relates in part at least to former shallow gravel workings, which may also extend into the wooded southern half. Gravel workings, including the remains of more substantial pits, extend south-eastward into the SSSI and across the location recorded in the Suffolk SMR as having Palaeolithic archaeological interest.

In the mid 19th century gravel diggings already occupied over 60 acres on Maidscross Hill and Palaeolithic artefacts were first recorded there by Flower (1869). Roe (1968) records only 7 handaxes from the site and two 'miscellaneous worked fragments'. Wymer (1985) also describes the site briefly and suggests that a larger number of handaxes simply marked 'Lakenheath' in museum collections also come from the Maidscross Hill gravels.

Gravels on Maidscross Hill were regarded by Rose (1987, 1989) as having been deposited by the pre-Anglian Bytham River, and were subsequently examined by Lewis (1993) who originally assigned them to two stratigraphic units – at higher levels his Maidscross Hill Sand & Gravel and at lower levels his Lakenheath Sand & Gravel. Subsequently however Lewis (1999) recognised only one stratigraphic unit – the Lakenheath Member, described as occupying the summit of Maidscross Hill and comprising '3m of quartzite and quartz-rich, fluvial sands and gravels.

Flower (1869) described the gravel on Maidscross Hill as 8-10 feet (2.4-3.0m) thick overlying Chalk. The deposits were re-examined by Lewis (1993) in two hand-dug trial pits on the eastern flank of Maidscross Hill, to the south and east of the present site. Lewis recorded gravel in both trial pits. (1) In the higher pit between 28m and 29m OD,



his Madsdross Hill Sand & Gravel, beneath 1.2m of 'fine coversands'; and (2) in a second pit further downslope at about 16m OD, his Lakenheath Sand & Gravel. The bedrock Chalk was not seen in either pit.

There are no BGS archive boreholes within the site or on adjoining land at or near the same elevation OD. However, two test pits put down on the summit of the hill (Ashton & Lewis 2005) exposed sand and gravel at levels between 26m and 30m OD, without encountering bedrock Chalk. A third test pit 'just below the summit' exposed '... 3m of sand and gravel, overlying c.1m of probably non-glaciogenic chalky diamicton on disturbed Chalk at the base at 21m OD.' No archaeological material was recovered from any of these test pits, and no organic remains have ever been recorded from the gravels on Madsdross Hill.

Similar sand and gravel deposits are present at Warren Hill (TL 744 743), about 8km to the south of the Madsdross Hill site. They were described by Wymer *et al* (1991) and Bridgland *et al* (1995) and were considered by Lewis (1993) to represent a further occurrence of his Lakenheath Sand & Gravel. At Warren Hill c.6.5m of sand and gravel is preserved at levels between 13.6m and 20.1m OD. This sand and gravel overlies sands and silts which were recorded by Wymer *et al* (1991) down to levels below 9.0m OD without reaching bedrock Chalk.

The Warren Hill site has been a rich source of Palaeolithic artefacts (>2,000), which have been described by Roe (1968, 1981); Wymer (1985) and Hardaker (2012).

Also to the south of Lakenheath and close to Warren Hill is the important Palaeolithic site of High Lodge (TL 739 754) (comprehensively described by Ashton *et al* 1992). Here fine-grained glacially disturbed Bytham River sediments (sands and silts) are present at levels between 19m and 30m OD and in addition to Palaeolithic artefacts have yielded pollen and a few faunal remains, including the pre-Anglian rhinoceros *Dicerorhinus etruscus*.

GEOARCHAEOLOGICAL FIELD INVESTIGATIONS

The geoarchaeological investigations at Madsdross Hill involved the mechanical excavation of ten sondages (S1-S10), using a 14 tonne 360° Doosan DX140LC tracked excavator (Figure 1). The sondages were located within shallow (mainly <1.0m) archaeological evaluation trenches (TR1 - TR10), ca. 40m in length which had been opened previously and exposed, almost everywhere, reddish brown or yellowish brown, slightly silty/clayey sand with scattered, mainly small (<30mm) flint, quartz and quartzite clasts. A sandy gravel of coarser chalk and flint clasts was patchily exposed on the floor of evaluation trenches TR1, TR2 and TR10.

The aims of the investigation were firstly to expose the full sediment sequence overlying the bedrock Chalk and secondly to identify any deposits that might have been the source of the Palaeolithic artefacts recovered historically from the Madsdross Hill locality.

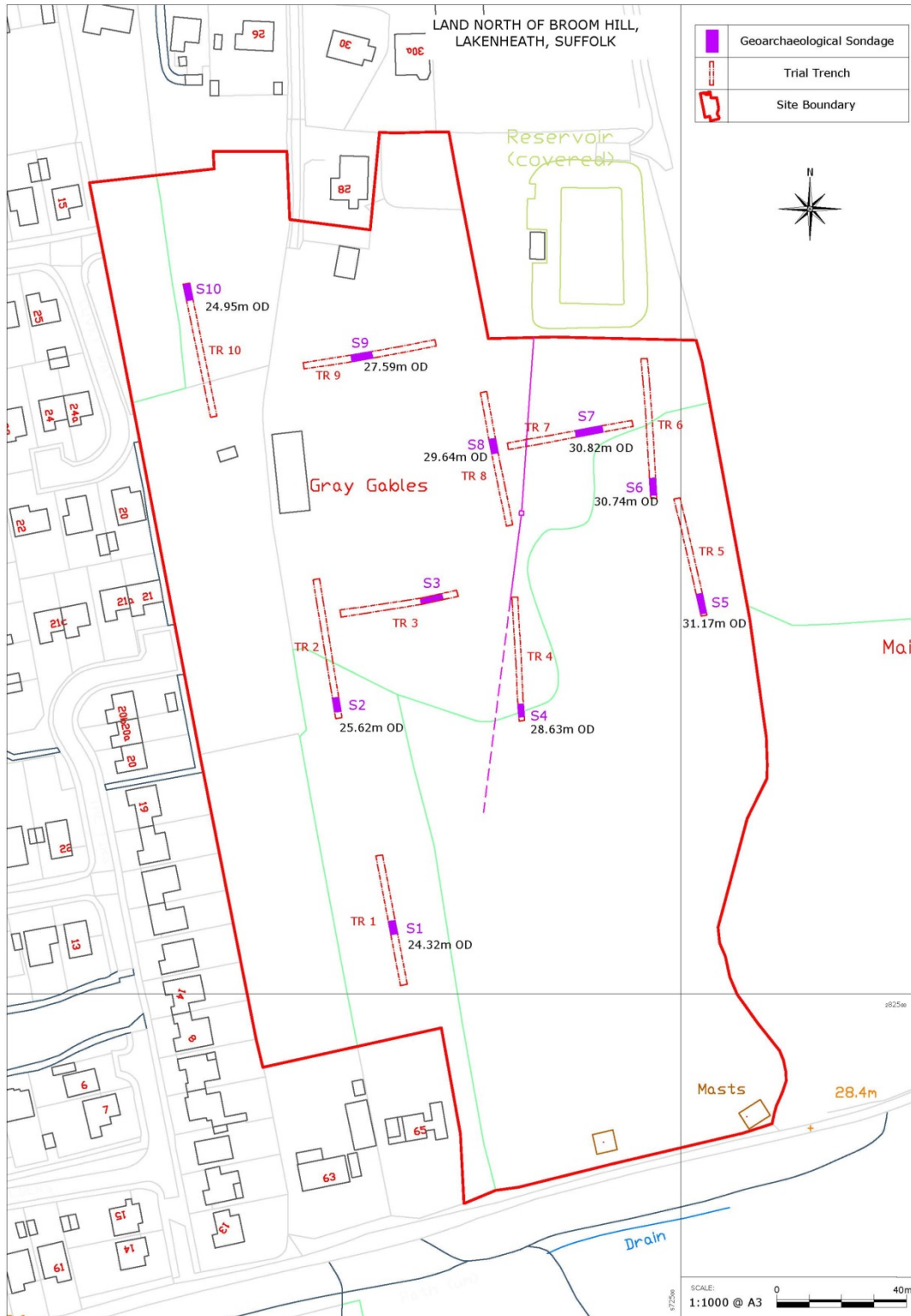


Figure 1: Trench (Tr1-Tr10) and Sondage (S1-S10) locations across the Mads Cross Hill Site, Lakenheath, Suffolk. The height of the ground surface next to each sondage is also indicated (m OD).



LITHOSTRATIGRAPHIC DESCRIPTIONS

The results of the lithostratigraphic descriptions are displayed in Tables 1 to 10 and are displayed in Figure 2.

Table 1: Lithostratigraphic description of Sondage S1 (Trench TR 1), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
24.32-24.00	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
24.00-23.32	Yellowish brown; slightly gravelly slightly silty sand with small (mainly <30mm) scattered clasts of sub-angular flint and occasional well-rounded quartz and quartzite; sharp uneven (pinnacled) contact with:
<23.32	Blocky, weathered bedrock Chalk

Table 2: Lithostratigraphic description of Sondage S2 (Trench TR 2), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
25.62-25.32	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
25.32-24.22	Yellowish brown; very slightly gravelly slightly silty sand with small (mainly <30mm) scattered clasts of sub-angular flint and occasional well-rounded quartz and quartzite; sharp contact with:
24.22-23.92	White; sandy gravel with clasts of sub-angular flint and well-rolled chalk (up to 80mm) and small (<30mm) clasts of well-rounded quartz and quartzite; sharp uneven (pinnacled) contact with:
<23.92	White, blocky, weathered bedrock Chalk

Table 3: Lithostratigraphic description of Sondage S3 (Trench TR 3), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
27.49-27.34	Dark reddish grey; sandy and stony soil with anthropogenic debris and clasts of sub-angular flint; uneven (in places completely missing), variable, but in places very sharp contact with:
27.34-26.59	Yellowish brown and reddish grey with patchy manganese staining (black); gravelly, unevenly bedded, slightly silty/clayey sand with many small (mainly <20mm) clasts mainly of flint and quartz with occasional hard sandstones/quartzites and cherts; sharp very uneven contact (up to 0.5m relief amplitude) with :
26.59 23.69	Yellowish brown; medium to coarse sandy gravel; crude sub-horizontal bedding with subsidiary beds, generally less than 0.3m thick, of gravelly sand; <i>not bottomed</i>



Table 4: Lithostratigraphic description of Sondage S4 (Trench TR 4), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
28.63-28.23	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
28.23-23.83	Yellowish brown; slightly gravelly slightly silty sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; uneven bedding visible as colour variations defining thin (up to 0.3m) lenses of sediment; sharp contact with:
23.83-23.13	Yellowish brown; medium to coarse sandy gravel, mainly of sub-angular flint; very sharp contact with:
<23.13	White, blocky weathered bedrock Chalk

Table 5: Lithostratigraphic description of Sondage S5 (Trench TR 5), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
31.17-30.77	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
30.77-26.47	Yellowish brown; slightly gravelly slightly silty sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; uneven bedding visible as colour variations; <i>not bottomed</i>

Table 6: Lithostratigraphic description of Sondage S6 (Trench TR 6), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
30.74-30.32	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
30.32-26.24	Yellowish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; some colour banding (?bedding) in uppermost 1.0m; vary sharp contact with:
<26.24	White, rubbly weathered bedrock Chalk

Table 7: Lithostratigraphic description of Sondage S7 (Trench TR 7), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
30.82-30.42	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts,



	mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
30.42-26.32	Yellowish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; some colour banding (?bedding) in uppermost 1.0m; <i>not bottomed</i>

Table 8: Lithostratigraphic description of Sondage S8 (Trench TR 8), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
29.64-29.44	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
29.44-26.91	Yellowish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; crude bedding defining uneven and discontinuous bodies of sediment
26.91-26.59	Yellowish brown; medium to coarse sandy gravel, mainly of sub-angular flint; very sharp contact with:
<26.59	White, rubbly weathered bedrock chalk

Table 9: Lithostratigraphic description of Sondage S9 (Trench TR 9), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
27.59-27.29	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
27.29-24.26	Reddish brown; gritty, slightly gravelly sand with small (mainly <30mm) clasts of sub-angular flint and well-rounded quartz with occasional hard sandstones/quartzites and cherts; some colour-banding (?bedding) in uppermost 1.5m; sharp contact with:
24.26-23.54	Yellowish brown; medium to coarse sandy gravel, mainly of sub-angular flint; very sharp contact with:
<23.54	White, rubbly weathered bedrock chalk

Table 10: Lithostratigraphic description of Sondage S10 (Trench TR 10), Maidscross Hill Site, Lakenheath, Suffolk

Depth (m OD)	Description
24.95-24.65	Dark reddish grey; sandy soil with many roots and small (<30mm) clasts, mainly of sub-angular flint and well-rounded quartz and quartzite; well-marked but uneven transition to:
24.65-23.80	Light yellowish brown to reddish brown; slightly gravelly sand with small clasts of sub-angular flint (mainly <30mm but some clusters of clasts up



	to 150mm) and well-rounded quartz with occasional hard sandstones/quartzites and cherts; sharp contact with:
23.80-23.60	Lens of white sandy gravel with clasts of sub-angular flint and well-rolled chalk (up to 80mm) and small (<30mm) clasts of well-rounded quartz; sharp contact with:
23.60-23.45	Light yellowish brown to reddish brown; slightly gravelly sand with small clasts of sub-angular flint (mainly <30mm but some clusters of clasts up to 150mm) and well-rounded quartz with occasional hard sandstones/quartzites and cherts; sharp pinnacled contact dipping down to the south with:
<23.45	White, rubbly weathered bedrock Chalk



Land North of Broom Road, Lakenheath, Suffolk
Archaeological Evaluation & Geoarchaeological Investigation

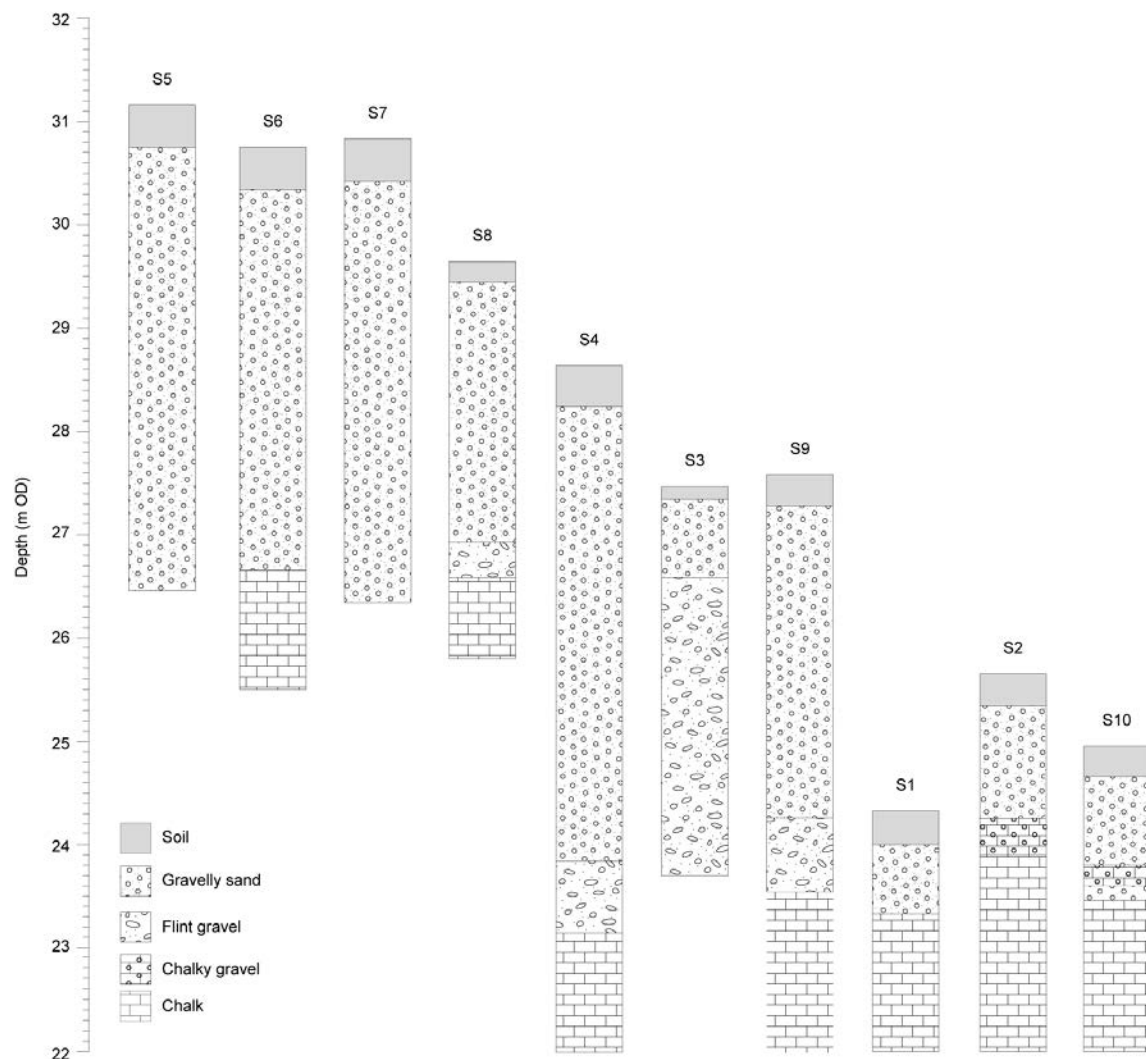


Figure 2: East-west transect of sequences across the Maidscross Hill site



INTERPRETATION AND DISCUSSION OF THE FIELD EVIDENCE

The surface of the bedrock Chalk at the Maidscross Hill site appears to form two erosional benches separated by a relatively steep bluff. The upper chalk bench was recorded beneath the summit of the hill in sondages S6 and S8. These sondages were put down from ground levels at, respectively 30.74m and 29.64m OD and the surface of the Chalk was recorded at respectively 26.24m and 26.59m OD. The lower chalk bench was recorded beneath the western flank of the hill in sondages S1, S2, S4, S9 and S10. These sondages were put down from ground levels between 28.63m (sondage S4) and 24.32m OD (sondage S1), but the Chalk surface occupied a much narrower height range between 23.92m OD (Sondage S2) and 23.13m OD (Sondage S4) (mean 23.57; n=5). The western flank of the hill appears therefore to conceal a steep bedrock bluff about 3.0m in height.

In the deposits overlying the Chalk, three sediment types can be recognised:

4. Gravelly Sand

This was exposed extensively in the evaluation trenches where it was seen to form the parent material of the present-day soil. In nine of the ten sondages it formed the bulk of the sediment recorded.

On the summit of Maidscross Hill overlying the upper chalk bench it was between 2.73m and 4.70m thick (Sondages S8 and S5 respectively) (mean 4.01m; n=4; n.b.in sondages S5 and S7, the Gravelly Sand was not bottomed). Over the lower chalk bench, in two of the sondages close to the concealed bluff, S4 and S9, large thicknesses of Gravelly Sand were present, respectively 4.80m and 3.33m thick. In the other sondage in this topographic situation, S3, the bulk of the sediment overlying the Chalk was Flint Gravel (see below). Further downslope, and further away from the concealed bluff, in sondages S1, S2 and S10 the Gravelly Sand was much thinner (mean 1.09m; n=3).

The position of the Gravelly Sand on the summit of Maidscross Hill, resting on an erosional bench, together with its ubiquitous gravel content, suggest that in this position it represents a fluvial deposit underlying a remnant of a fluvial terrace. Away from the summit of the hill, much, if not all of the Gravelly Sand may be in its present position as a result of colluvial processes, and its interpretation here is further complicated where the ground has been artificially levelled to accommodate the agricultural buildings that formerly occupied the site.

5. Flint Gravel

This was recorded immediately overlying the Chalk of the upper bench in sondage S8; and immediately overlying the Chalk of the lower bench in sondages S4 and S9. In all three of these sondages the Flint Gravel is less than a metre in thickness (mean 0.58m). In sondage S3 although the Flint Gravel was not bottomed, a much greater thickness was recorded (2.90m).

If, as suggested above, the sediments occupying the summit of Maidscross Hill are river terrace deposits, the presence of gravel in sondage S8 is unsurprising. However, gravel as opposed to gravelly sand forms a minor element of the sediment sequence overlying the upper chalk bench. It is thin in sondage S8, completely absent in the sediment sequence recorded in sondage S6, and seems likely to be thin or absent beneath the Gravelly Sand recorded but not bottomed in sondages S5 and S7.

The origin of the Flint Gravel overlying the lower chalk bench is less obvious. It was recorded only in the sondages close to the concealed bluff and could be either a remnant of fluvial terrace deposits associated with the formation of the bench and bluff, or it could have been derived by colluvial processes from the higher bench, or it could include



elements representing both these origins. There is at present insufficient evidence to decide conclusively between these alternatives.

6. Chalky gravel

This was recorded overlying the chalk of the lower bench, either directly (sondage S2) or as a lens within gravelly sand (sondage S10). It appears to be a fluvial deposit and is typical of chalk-rich gravels formed in rivers flowing over chalk bedrock. It occurs in the same height range as the Flint Gravel overlying the same lower chalk bench but closer to the concealed bluff. It seems unlikely however that these two gravels were laid down in the same depositional episode.

CONCLUSIONS

With regard to the outcome of the geoaerchaeological investigation of the Maidscross Hill site, firstly the aims of the investigation were largely achieved.

(1) To expose the full sediment sequence overlying the bedrock Chalk

(2) To identify any deposits that might have been the source of the Palaeolithic artefacts recovered historically from the Maidscross Hill locality.

In seven of the ten sondages, the first objective was achieved and the level of the underlying bedrock Chalk was recorded. In the three remaining trenches (TR3, TR5 and TR7) the collapse of the sandy sediments exceeded the capacity of the excavator to remove the collapsed spoil within an excavation of reasonable size and the Chalk was not reached. The second objective was partially achieved as gravel deposits were observed in several of the excavations, although no artefacts were recovered. However, it can be noted that even if artefacts are present in these gravel deposits, they are all at depths below the ground surface that will not be disturbed by the proposed development of the site.

Secondly, the findings of the present investigation provide a much fuller record of the Maidscross Hill deposits than any of the previously published accounts. Two erosional benches have been identified cutting across the bedrock Chalk at *ca.* 26.4m OD and *ca.* 23.6m OD, separated by a steep bluff almost 3.0m in height. The deposits overlying the upper bench consist almost entirely of Gravelly Sand which appears to be fluvial in origin and to represent a remnant of fluvial deposits underlying a terrace at a level close to 31.0m OD. The Gravelly Sand seems likely to be a deposit different from the gravel previously described from Maidscross Hill as a source of Palaeolithic artefacts. It is probably significant that most of the gravel workings on Maidscross Hill lie on the eastern flank of the hill and at levels substantially below the summit level. Lewis (1993) recorded gravel here at *ca.* 16m OD, and Ashton *et al* (2005) recorded '3m of laminated sands and silts and 4m of cross-bedded coarse, chalky gravel' to the south and east of the summit, resting on Chalk bedrock at 10.0m OD. This evidence suggests that a complex erosional and depositional record is preserved on the eastern flank of Maidscross Hill.

The present investigation extended part way down the western flank of Maidscross Hill and has shown that here too a complex erosional and depositional record is preserved overlying, in the area of investigation, an erosional bench a *c.* 23.6m OD. A substantial thickness of Flint Gravel (2.90m) was recorded at one locality overlying this lower bench, close to the bluff separating it from the upper bench. This might be the same gravel unit as the one mentioned by Ashton *et al* (2005). They record that a 'test pit just below the summit demonstrated 3m of sand and gravel' overlying a 'chalky diamicton' at 22.0m OD. However, they did not report the position of this test pit relative to the summit.



The present investigation also recorded substantial thicknesses of Gravelly Sand overlying the lower bench close to the concealed bluff, and indistinguishable from the Gravelly Sand overlying the upper bench. It seems possible that this material is largely of colluvial origin and derived from the higher level. However, also overlying the lower bench are lens-like bodies of chalk-rich gravel enclosed in gravelly sand. It seems possible that these apparently fluvial sediments represent a further episode of fluvial reworking at the level of the lower bench. The possibility that the chalky gravels are related in some way to the 'cross-bedded, coarse chalky gravel' recorded by Ashton *et al* (2005) on the eastern side of the hill requires further investigation.

In conclusion, the following possible developmental sequence is proposed for Maidscross Hill. This sequence is based on the evidence recorded during the present investigation on the west side of the hill. However, judging by the evidence recorded from previous investigations on the east side of the hill, it seems likely that a broadly similar developmental sequence has taken place in a separate river valley to the east of the hill.

1. Fluvial erosion forming the higher bench.
2. Fluvial deposition mainly of gravelly sand on the higher bench.
3. Fluvial downcutting and lateral erosion forming the lower bench.
4. Deposition of flint gravel on the lower bench
5. Colluvial deposition of gravelly sand from the higher bench burying the flint gravel on the lower bench.
6. Fluvial reworking of deposits on the lower bench and introduction of chalky gravel.

No attempt is made in this report to relate this local stratigraphy to a wider regional stratigraphic scheme, e.g. as proposed by Lewis (1999) for Central East Anglia.

RECOMMENDATIONS

The distribution and stratigraphy of the Quaternary deposits on Maidscross Hill are still incompletely understood. In particular, the location and stratigraphic position of the gravels that have yielded Palaeolithic artefacts in the past have not been established. It is important therefore to complete the archaeological and ge archaeological investigations at the present site. It is recommended therefore:

1. That the planned scheme of evaluation trenches is completed
2. That the ge archaeological investigation is extended into the southern (wooded) part of the site
3. That a watching brief is arranged to monitor all excavations undertaken at the site during all phases of the proposed building work.



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APPENDIX 3 SPECIALIST REPORTS

1. The Struck Flint

Identified and described by Dr. Colin Pendleton

Two fragments of struck flint were recovered from the trial trenches (261g).

An unpatinated large flake core with some edge battering and occasional incipient cones of percussion was found in the demolition topsoil 1002. The core is made of very dark, almost black flint and has no cortex. Although it could be Neolithic, it is irregular and has relatively few flakes removed, which suggests rather that it is possibly post-medieval gunflint production waste. Lakenheath is very close to the main gunflint production centres at Brandon and Icklingham and other gunflint production flint remains have been found elsewhere in the Lakenheath area.

A second flint fragment was recovered from 1007, a number assigned to a natural deposit. It is a small pale grey struck blade/long flake with striking platform, bulb of percussion and terminal hinge fracture. The main dorsal flake scar has areas of limited edge retouch of one of its long edges. The opposite long edge of the dorsal face is formed by an earlier lightly stained (pale brown) flake scar (possibly natural) which has a small area of secondary retouch, which has removed the stained surface to expose the grey flint. Length 31.2mm, width 14mm, thickness 4mm.

The flint blade/long flake is typologically typical of pieces of Mesolithic, Neolithic and Early Bronze Age date, although as a single struck flint it is not chronologically diagnostic enough to be conclusive about a specific date.

2. The Small Finds

Richenda Goffin, based on comments from Andrew Brown and Gemma Stewart

A single small find number was assigned (SF1), to an object from the topsoil. At first glance it appears to resemble a cut non-ferrous coin but under magnification the surfaces of the fragment appear irregular with one face having bubbled up, possibly through burning, whilst the other surface is uniformly rough. The fragment is not magnetic and may be a natural product such as iron panning. If it is a manufactured object which has been changed through heat, for example, it could perhaps be a copper alloy Roman coin, but this identification is tentative and less convincing than the view that the object is natural.

3. The Potential And Significance Of The Finds Data

Only a small quantity of struck flint was identified. Both fragments have been fully catalogued and their significance is considered below.

The small flint blade/long flake was found on the surface of a much earlier deposit (context 0007), which potentially could contain worked lithics associated with the Lower Palaeolithic (pre-Anglian glaciation) Bytham River. Despite this, it seems likely this piece of struck flint probably derived from the overlying layer/s as a result of animal or root action (many of which were reported to have been observed - it was the site of a plantation in the 19th century) and therefore post-dates the Palaeolithic.



The flint core from demolition topsoil 1002 is most likely to date to the post-medieval period and reflects the relative proximity of the site to the gunflint manufacturing sites in the area.

It is likely that the single small find is not a coin but represents a natural product such as iron-pan.



APPENDIX 4 CONCORDANCE OF FINDS

FEATURE CONTEXT	FEATURE TYPE	LAYER/FILL CONTEXT	LAYER/FILL DESCRIPTION	SPOT DATE	POTTERY /g(sherds)	CBM /g(number)	ANIMAL BONE /g(number)	HUMAN BONE /g(number)	STRUCK FLINT /g(number)	BURNT FLINT /g(number)
		1000	Topsoil (TR 1 & 10)	PostMed - Mod						SF1 1/4 Coin >1(1)
		1001	Natural	Lower Palaeolithic					3(1)	
		1002	Demolition Topsoil	Mod						Flint Core 258(1)



APPENDIX 5 OASIS SHEET (Copied from OASIS page)

OASIS ID: britanni1-173699

Project details

Project name	Land North of Broom Road, Lakenheath, Suffolk - Evaluation and Geoarchaeology
Short description of the project	Trial trench evaluation and geoarchaeological sondages
Project dates	Start: 17-03-2014 End: 29-03-2014
Previous/future work	Yes / Yes
Any associated project reference codes	LKH 366 - HER event no.
Any associated project reference codes	P1052 - Contracting Unit No.
Type of project	Field evaluation
Site status	Area of Archaeological Importance (AAI)
Current Land use	Grassland Heathland 3 - Disturbed
Monument type	FLINT TOOLS Lower Palaeolithic
Monument type	CEMETERY Post Medieval
Significant Finds	FLINT CORE Uncertain
Significant Finds	FLINT FLAKE Neolithic
Methods & techniques	""Sample Trenches"" , ""Test Pits""
Development type	Rural residential
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Pre-application

Project location

Country	England
Site location	SUFFOLK FOREST HEATH LAKENHEATH LKH 366, Land North of Broom Road
Postcode	IP27 9EX
Study area	4.60 Hectares
Site coordinates	TL 72400 82600 52.4137620234 0.535163776899 52 24 49 N 000 32 06 E Point
Height OD / Depth	Min: 24.00m Max: 30.00m

Project creators

Name of Organisation	Britannia Archaeology Ltd
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Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Matthew Adams
Project director/manager	Matthew Adams
Project supervisor	Matthew Adams
Type of sponsor/funding body	Landowner
Name of sponsor/funding body	Landowners c/o Mr Andrew Ellis

Project archives

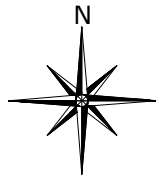
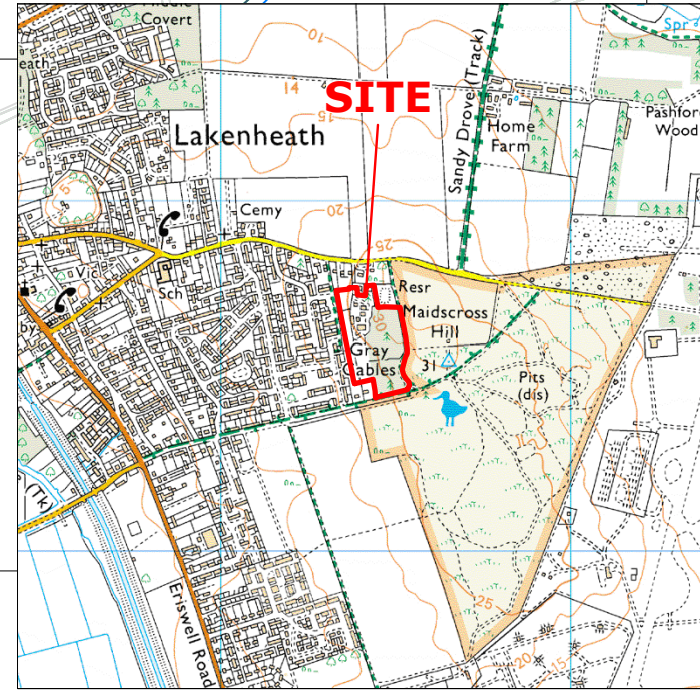
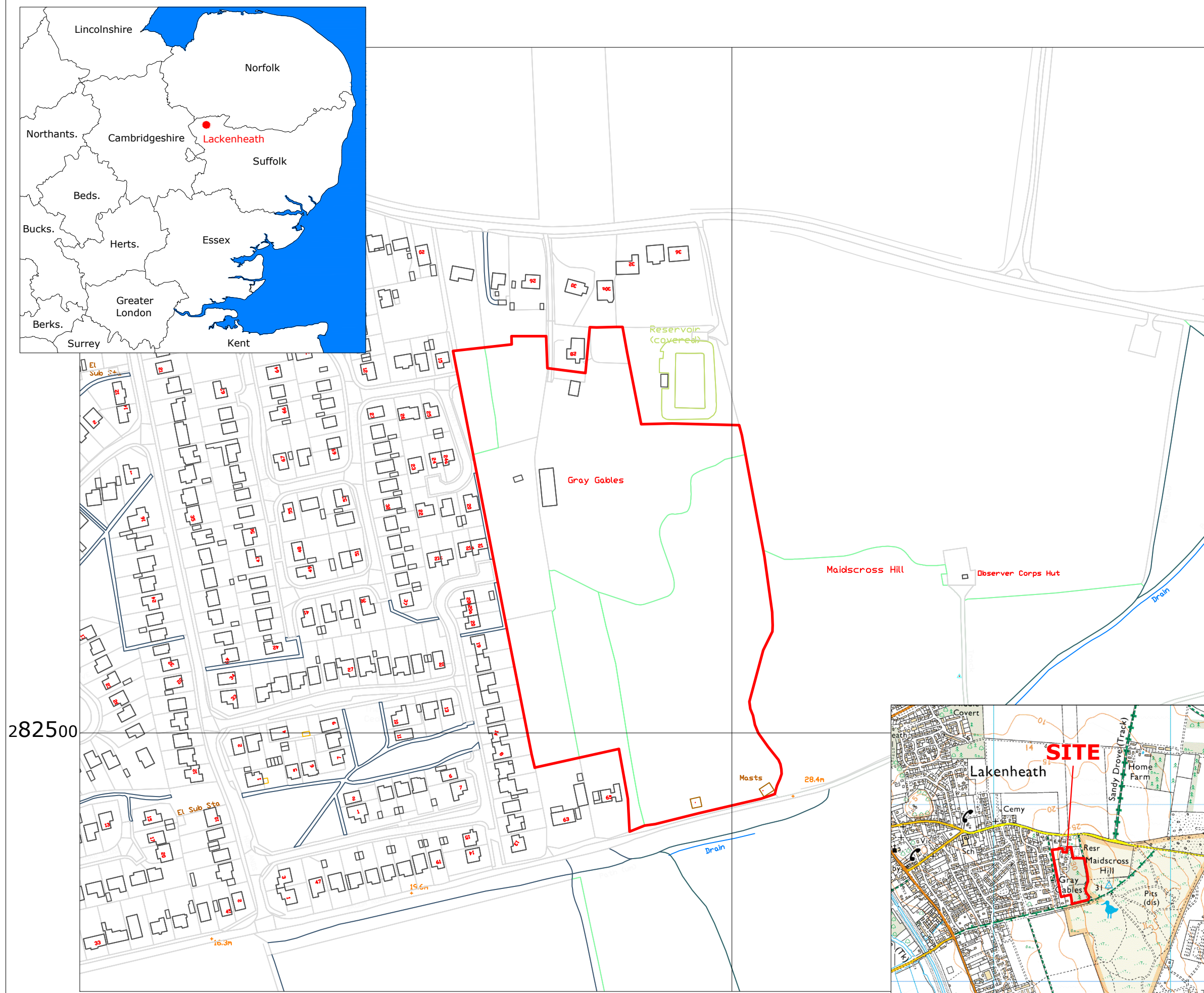
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Physical Archive ID	LKH 366
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Digital Contents	"none"
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Paper Archive recipient	Suffolk HER
Paper Archive ID	LKH 366
Paper Contents	"none"
Paper Media available	"Context sheet","Drawing","Map","Microfilm","Plan","Report","Section","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Land North of Broom Road, Lakenheath, Suffolk - Archaeological Evaluation and Geoarchaeological Investigation
Author(s)/Editor(s)	Adams, M. and Green, C.
Other bibliographic details	R1055
Date	2014
Issuer or publisher	Britannia Arcaheology Ltd
Place of issue or publication	Stowmarket



Description	Thermal bound A4 report with A3 figures
URL	http://www.britannia-archaeology.com
Entered by	Matt Adams (matt@britannia-archaeology.com)
Entered on	23 June 2014



	Site Boundary
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NGR: 572430 282610 PROJECT NUMBER: 1052

PROJECT: LAND NORTH OF BROOM HILL, LAKENHEATH, SUFFOLK

CLIENT: ELLIS DRAFTING SERVICES

DESCRIPTION: GENERAL LOCATION PLAN

BRITANNIA ARCHAEOLOGY LTD



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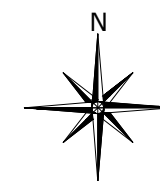
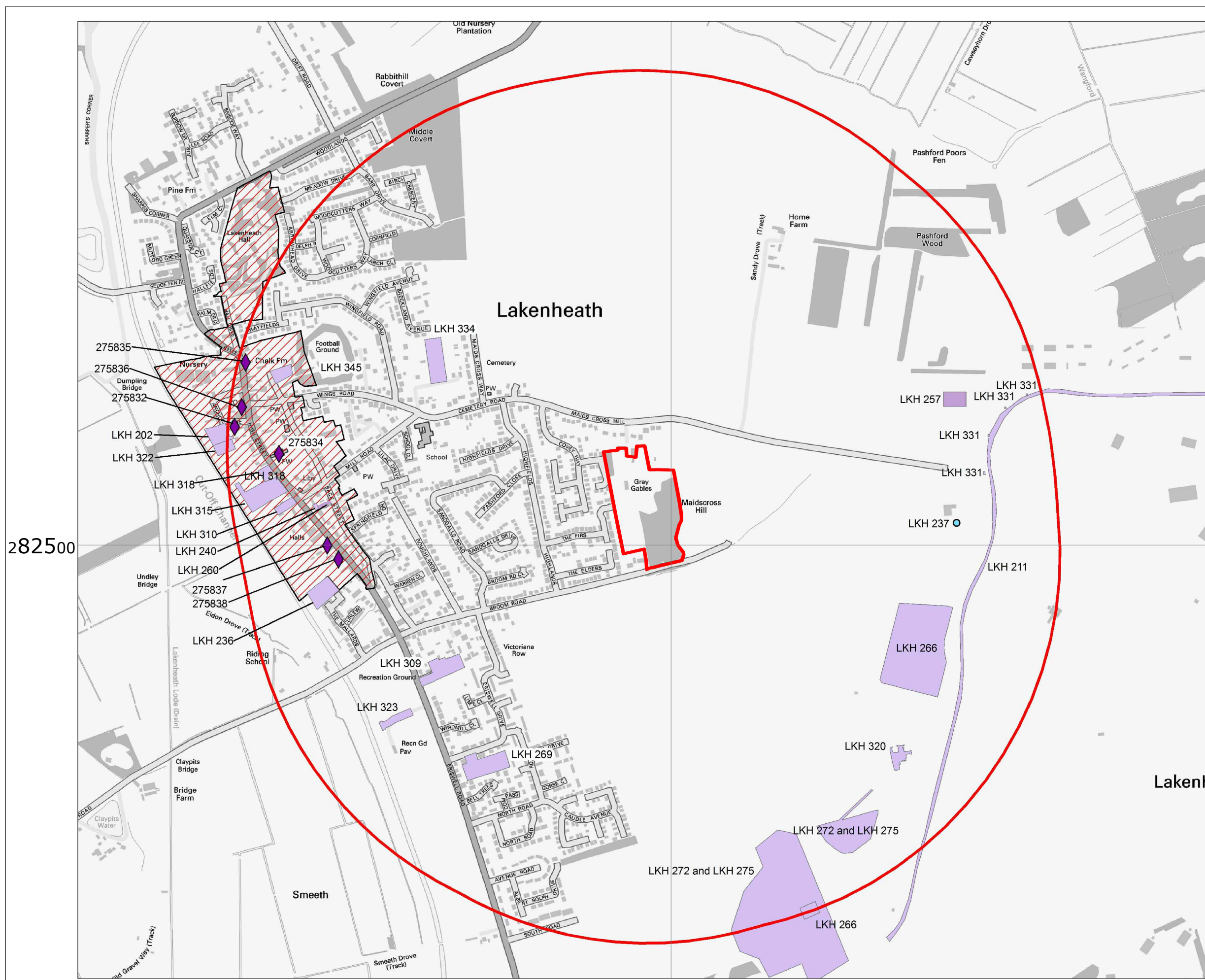
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DATE: APR 2014	AUTHOR: MCA	FIGURE: 01
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	HER Search Area
	Conservation Area
	Archaeology Event Point
	Archaeological Event
	Listed Building
	Site Boundary

NGR: 572430 282610 PROJECT NUMBER: 1052

PROJECT: LAND NORTH OF BROOM HILL, LAKENHEATH, SUFFOLK

CLIENT: ELLIS DRAFTING SERVICES

DESCRIPTION: HER DATA - ARCHAEOLOGICAL EVENTS & LISTED BUILDINGS

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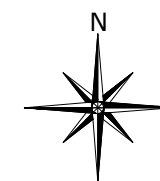
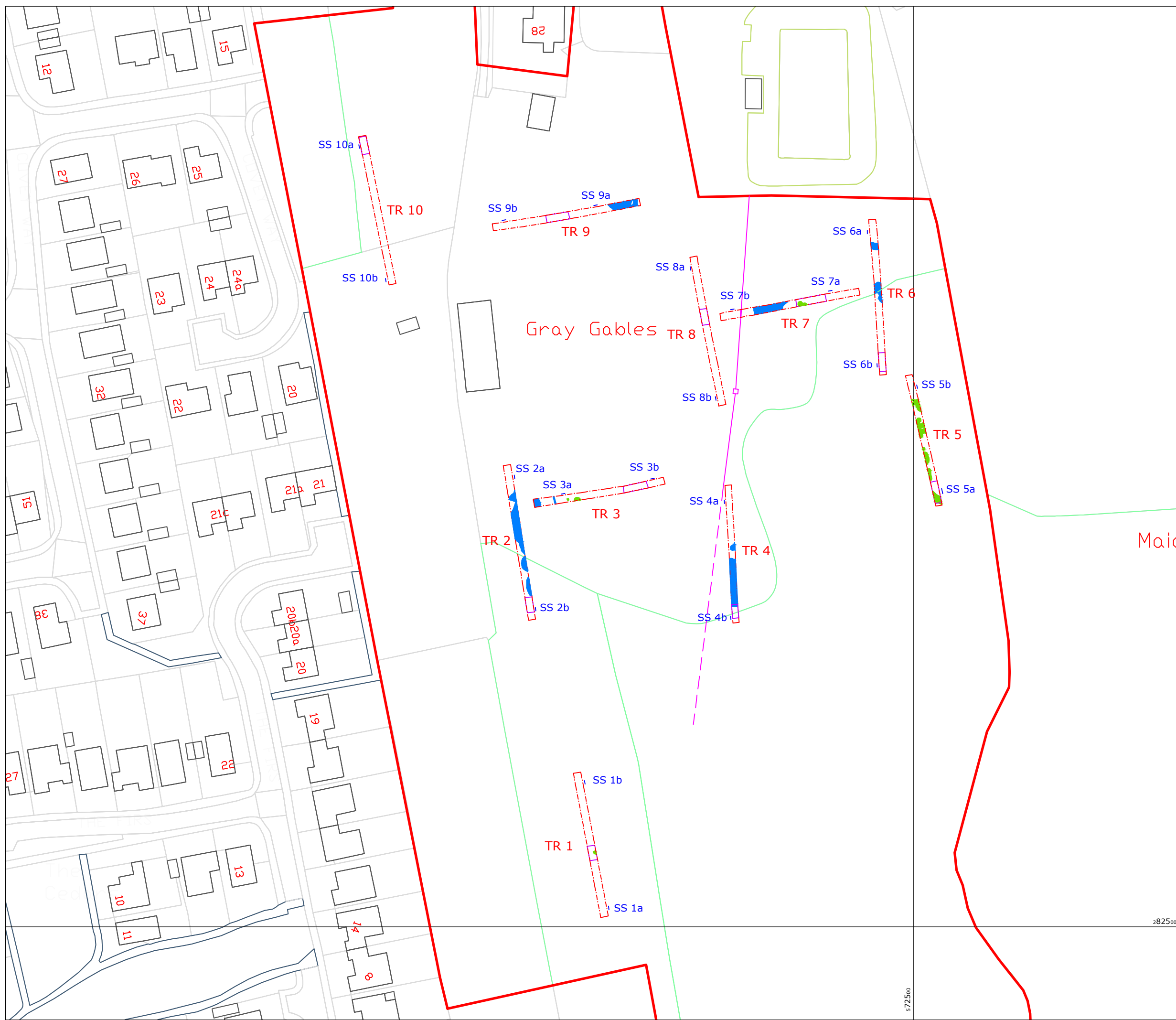
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282500

572500



	Sample Section
	Services (Mains Water)
	Geoarchaeological Sondage
	Trial Trench
	Archaeological Feature
	Natural Feature
	Modern Feature/Demolition
	Site Boundary

NGR: 572430 282610 PROJECT NUMBER: 1052

PROJECT: LAND NORTH OF BROOM HILL, LAKENHEATH, SUFFOLK

CLIENT: ELLIS DRAFTING SERVICES

DESCRIPTION: TRENCH & FEATURE PLAN

BRITANNIA ARCHAEOLOGY LTD



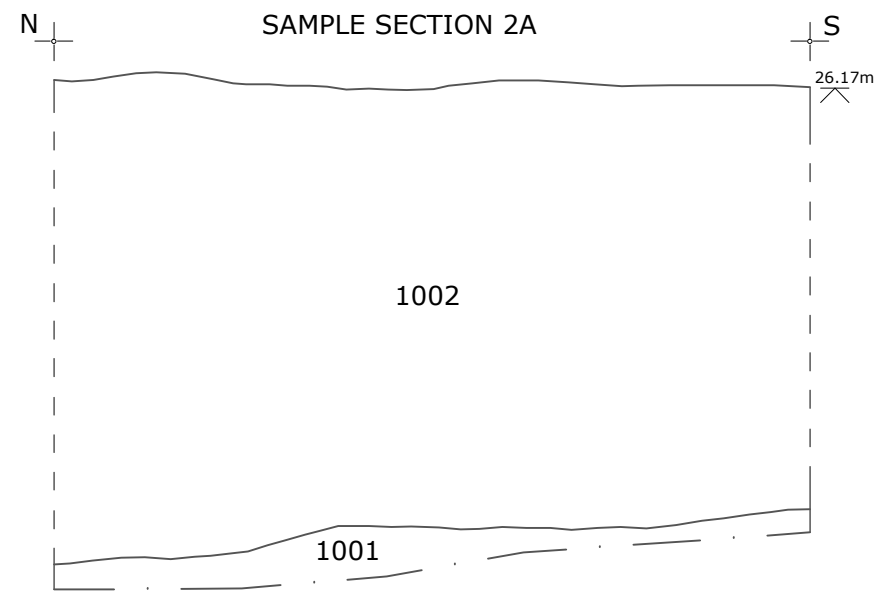
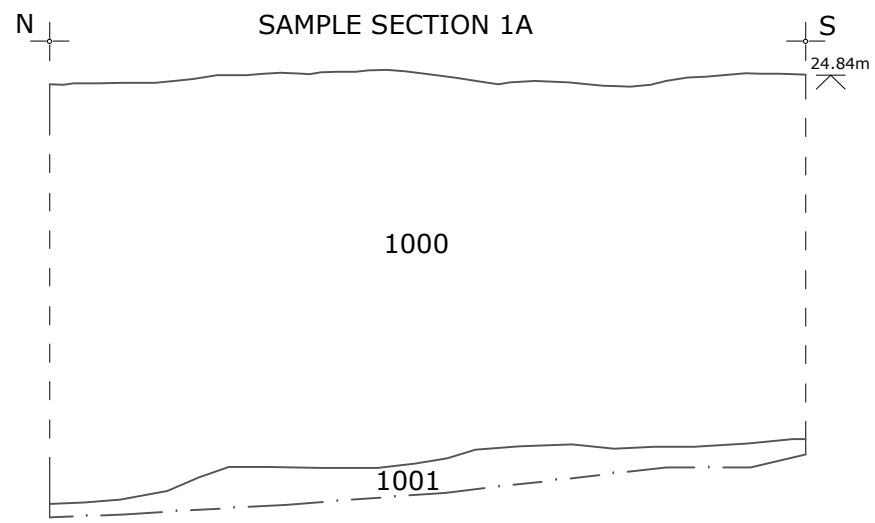
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DATE: APR 2014 AUTHOR: MCA FIGURE: 04



DP5: Trench 1 - View S



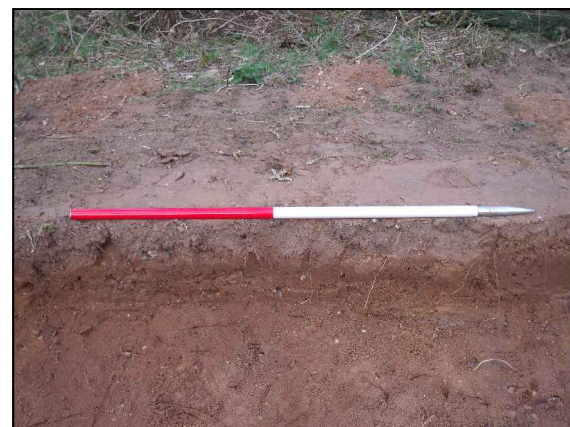
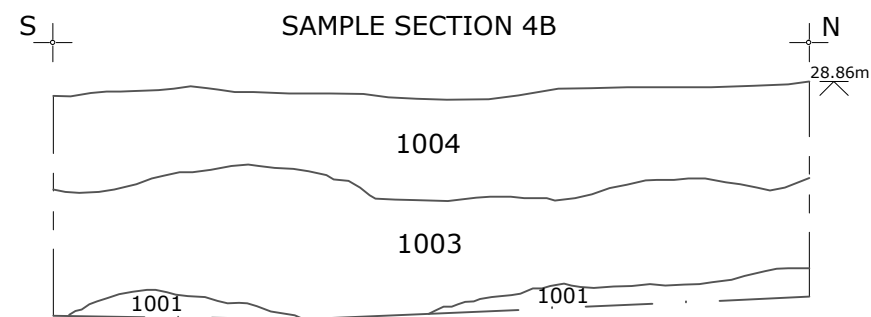
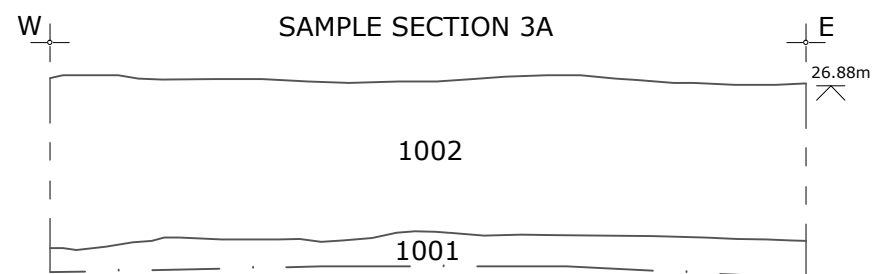
DP1: Sample Section 1A - View E



DP2: Sample Section 2A - View E



DP6: Trench 2 - View S



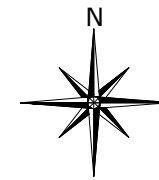
DP3: Sample Section 3A - View N



DP4: Sample Section 4B - View W



DP7: Trench 3 - View E



NGR: 572430 282610 PROJECT NUMBER: 1052

PROJECT: LAND NORTH OF BROOM HILL, LAKENHEATH, SUFFOLK

CLIENT: ELLIS DRAFTING SERVICES

DESCRIPTION: SECTIONS & PHOTOGRAPHS

BRITANNIA ARCHAEOLOGY LTD



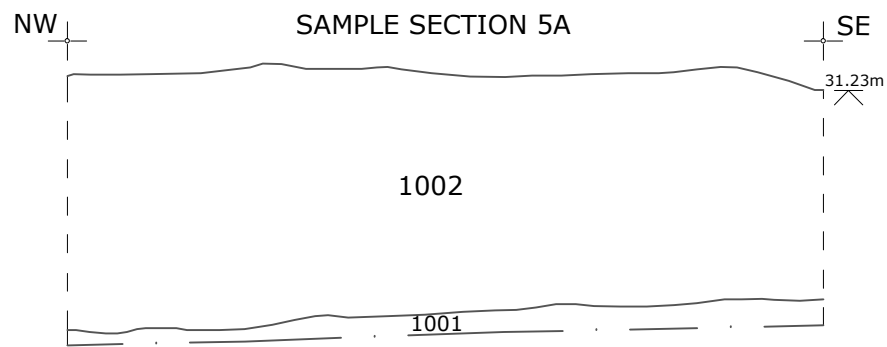
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DATE: APR 2014 AUTHOR: MCA FIGURE: 05



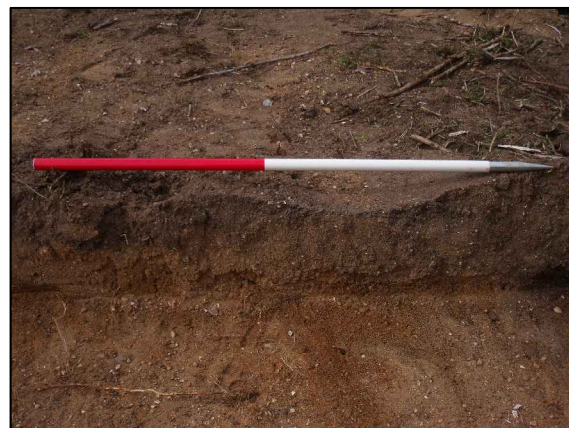
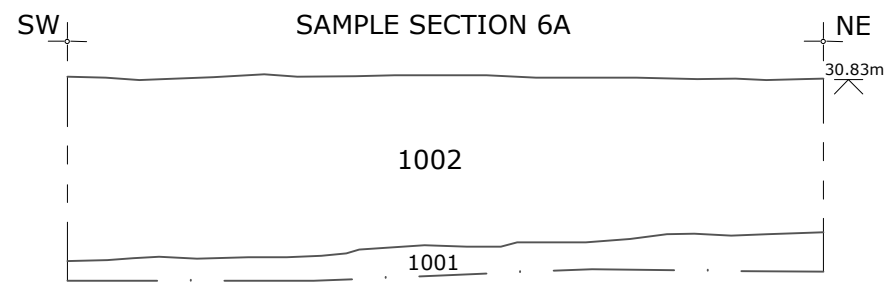
DP8: Sample Section 5A - View NE



DP11: Trench 5 - View S



DP13: Trench 7 - View S



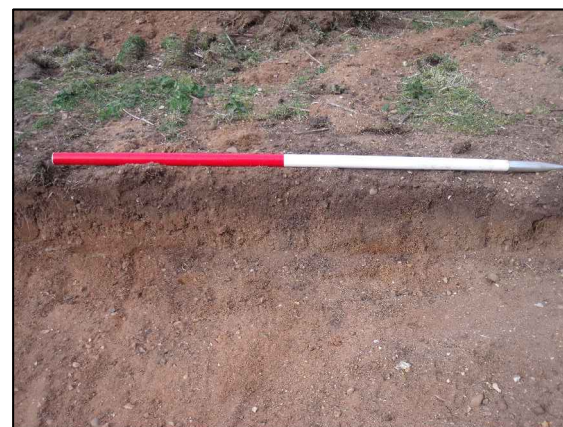
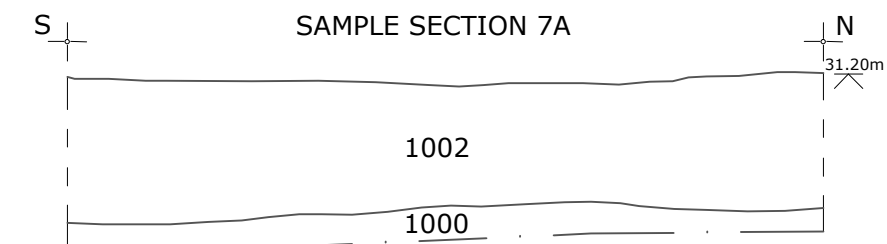
DP9: Sample Section 6A - View NW



DP12: Trench 6 - View E



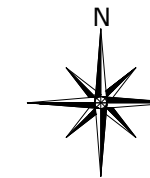
DP14: Trench 8 - View S



DP10: Sample Section 7A - View W



DP15: Trench 9 - View E



NGR: 572430 282610 PROJECT NUMBER: 1052

PROJECT: LAND NORTH OF BROOM HILL, LAKENHEATH, SUFFOLK

CLIENT: ELLIS DRAFTING SERVICES

DESCRIPTION: SECTIONS & PHOTOGRAPHS CONT'D

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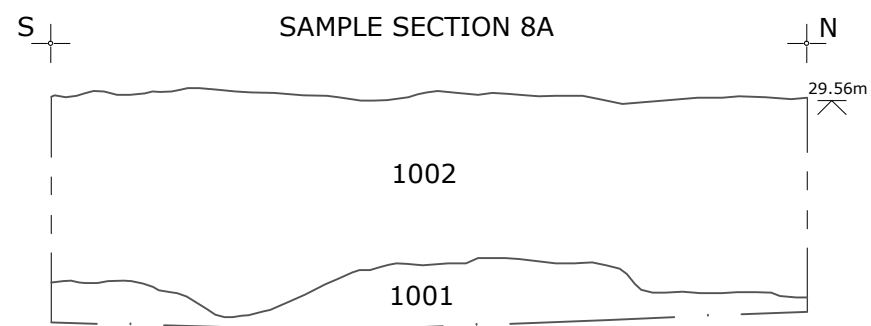
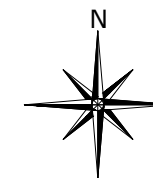
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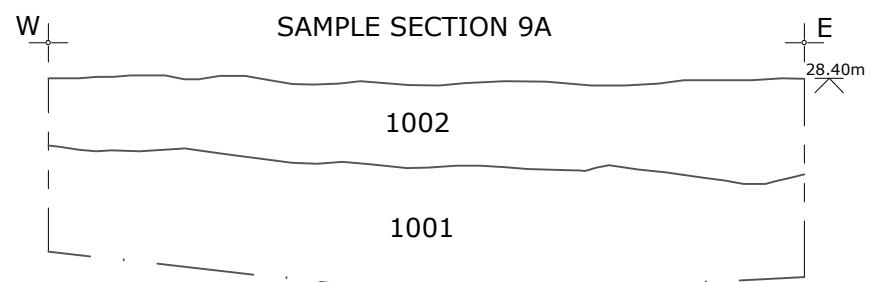
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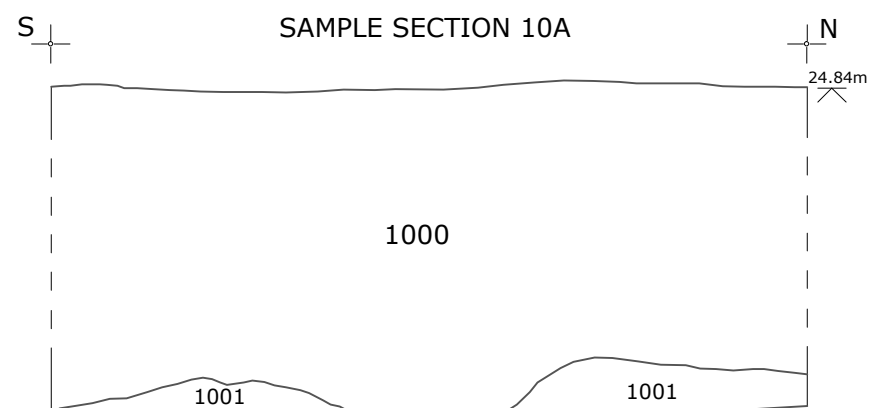
DATE: APR 2014 AUTHOR: MCA FIGURE: 06



DP16: Sample Section 8A - View W



DP17: Sample Section 9A - View N



DP18: Sample Section 10A - View W



DP19: Trench 10 - View S

NGR: 572430 282610	PROJECT NUMBER: 1052
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PROJECT:
LAND NORTH OF BROOM HILL,
LAKENHEATH, SUFFOLK

CLIENT:
ELLIS DRAFTING SERVICES

DESCRIPTION:
SECTIONS & PHOTOGRAPHS
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