NAU Archaeology

Report № 1276

An Archaeological Field Survey with Trial Trench
at
Beetley Quarry Extension, Hoe, Norfolk

NHER 49982 HZE

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May 2007

BAU 1512

Contents

Location:	Hoe, Norfolk
District:	Broadland
Grid Ref:	TF 9923 1818
NHER No.:	49982 HZE
Date of fieldwork:	26th to 27th March 2007

Summary

NAU Archaeology undertook a field survey and trial trench evaluation at Beetley Quarry, Hoe, Norfolk in advance of a proposed extension to the existing quarry. The field survey produced six metal objects of post-medieval or modern date and two struck flints possibly dating to the later Neolithic period or Bronze Age. The trial trench was devoid of any archaeological features, deposits or artefacts, but a series of colluvium deposits was recorded.

1.0 Introduction

A programme of archaeological work was undertaken by NAU Archaeology in advance of aggregate extraction at Beetley Quarry, Hoe, Norfolk (Fig. 1). The work was commissioned by Mr S. Daw representing Barker Brothers Ltd, who funded the project. The work took place in response to a request from Norfolk Landscape Archaeology (NLA) to collect information for submission with a planning application in order to provide sufficient information for a recommendation to be made regarding the proposed extension to the quarry. The brief required a field survey by systematic fieldwalking and metal detecting to determine the extent, date and significance of artefactual evidence within the plough-soil. Due to the topography of the site (a hilltop sloping down to a valley floor) field survey was only required on the top of the hill (corresponding to the area above the 40m contour line). A trial trench was also stipulated to examine an area at the base of the slope (Fig. 2) in order to determine whether archaeological remains were likely to be present below colluvium deposits. The area of the field survey covered 2.3 hectares.

This archaeological programme was undertaken to fulfil a planning condition set by Broadland District Council and in accordance with a Project Design and Method Statement prepared by NAU Archaeology (Ref: BAU 1512) and a Brief issued by Norfolk Landscape Archaeology (NLA Ref: 31/1/2007/KH).

The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning and Policy Guidance 16 – Archaeology and Planning* (Department of the Environment 1990). The results will enable decisions to be made by the Local Planning Authority with regard to the treatment of any archaeological remains found.

The site archive is currently held by NAU Archaeology and on completion of the project will be deposited with Norfolk Museums and Archaeology Service, following the relevant policy on archiving standards.

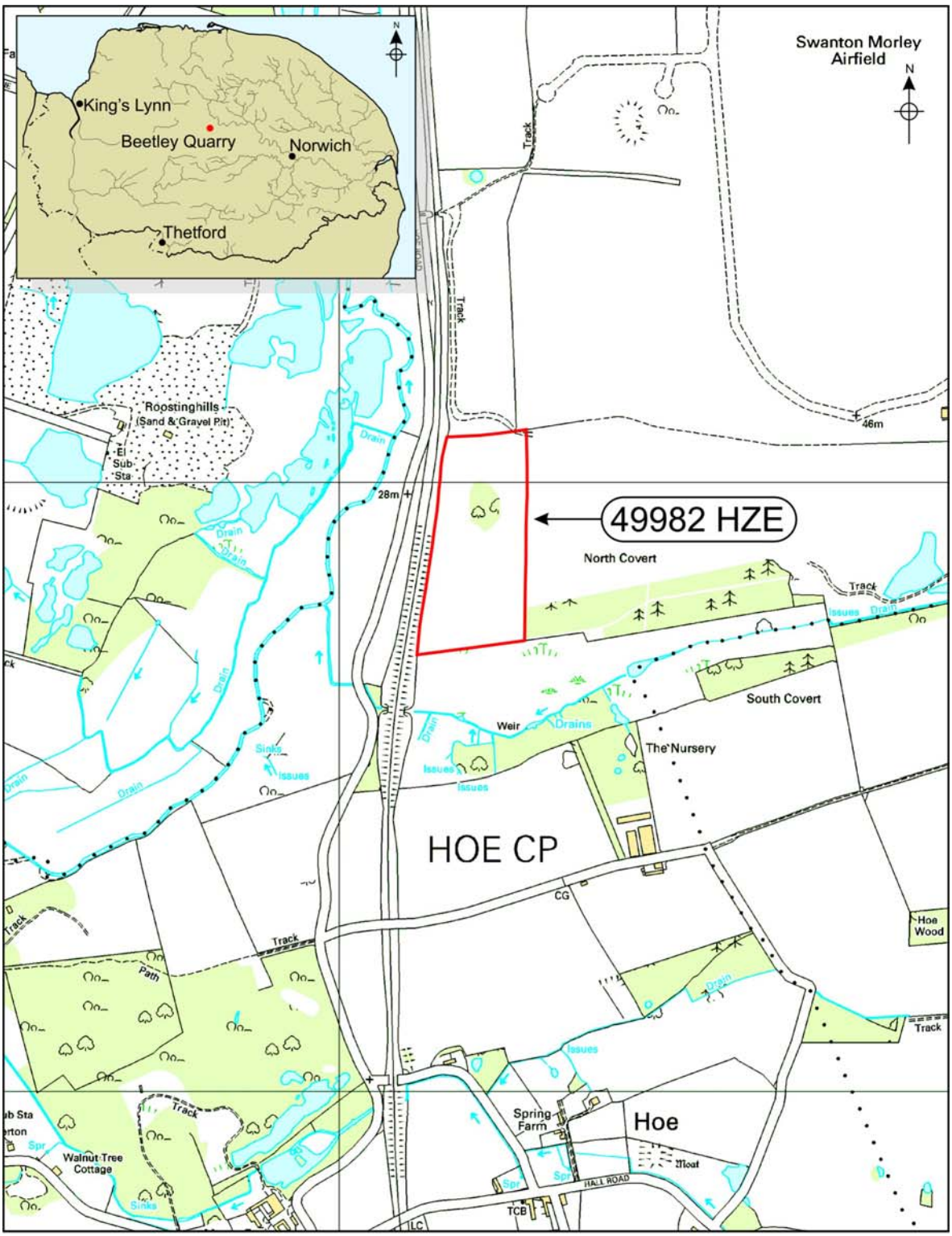

Figure 1. Site location. Scale 1:10,000

Local Authority No.100019340

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2.0 Geology and Topography

The site lies in central Norfolk (at TF 9923 1818) within the predominantly boulder-clay-covered area of mid-Norfolk close to the confluence of several small streams with the River Wensum. The site is situated on the western edge of a plateau overlooking the upper Wensum valley; the river here flows in a northerly direction. The ground is relatively flat to the north and east of the site but slopes away quite steeply to the west and south.

The site forms part of the Hungry Hills gravels, fragments of now-dissected trains of Middle Pleistocene outwash gravel, described by Straw (1973, 337–41). They consist of 'canon shot' cobbles with finer subangular flint gravels in an orange sand matrix from which erratics are virtually absent. They are marked by frequent and diverse periglacial formations.

The topsoil of the area of survey is mapped as a stagnogleyic argillic brown earth, while the soils of the surrounding boulder clays are predominantly stagnogleys (Soil Survey of England and Wales 1973). The site had been under pasture for some years before being ploughed for the purposes of the field survey (quarry manager pers. comm.). The highest part of the site lies at a height of approximately 45m OD. A temporary benchmark with a value of 36.97m OD was established on site and was derived from a spot height with a value of 28m OD located on Hoe Road, to the west of the site.

3.0 Archaeological and Historical Background

While little is known archaeologically about the proposed application site itself the surrounding environs have a wealth of archaeological sites and find spots dating from the Mesolithic to the present.

3.1 Prehistoric

In 2002, in an area situated approximately 700m to the north of the site, a strip and record excavation carried out by Hertfordshire Archaeological Trust (HAT) revealed the presence of two isolated pits dating to the late Bronze Age/Iron Age. In 1996 the Norfolk Archaeological Unit (NAU) carried out an archaeological evaluation followed by a subsequent watching brief and found a Bronze Age pit containing pottery. Prehistoric flint artefacts were found across the site (NHER 32147). Four hundred metres to the east of the site, a group of Mesolithic flints was found during 'unsystematic' fieldwalking (NHER 30709).

At Spong Hill (NHER 1012), which lies 1.85km to the north-west of the site, prehistoric occupation dating from the Mesolithic through to the late Iron Age has been archaeologically investigated. Ring-ditches are prevalent in the vicinity, including some possible examples on Swanton Morley Airfield, to the east of the site. Further probable evidence for prehistoric activity in this area is suggested by other sites listed in the Norfolk Heritage Environment Record, including collections of burnt flint which may indicate the presence of Bronze Age burnt mounds or pot boilers.

3.2 Roman

Roman activity in the area is indicated by the Roman settlement at Billingford, which lies to the north-east of the site, and a Roman Road which runs to the north. Roman coins have been found in fields to the north of the site. Roman enclosures and field boundaries, as well as an early Roman kiln, have been excavated on Spong Hill. The archaeological investigation carried out by HAT in 2002 produced evidence of Romano-British field systems/enclosures. Five pits and a post-hole containing Roman pottery and two large well-preserved pottery kilns, also Roman, were also recorded by HAT.

3.3 Anglo-Saxon

A very large Anglo-Saxon cemetery has been excavated at Spong Hill (NHER 1012). Over 2300 cremations and 57 inhumations were discovered. Evidence for settlement was also present in the form of sunken-featured buildings and post-built buildings. Another Anglo-Saxon settlement has been investigated at Billingford, where evidence for iron smelting was also found. In 2002 NAU carried out a programme of archaeological field survey and trial trenching some 700m to the north of the Beetley quarry site (NHER 37159, Trimble and Underdown 2002), discovering a total of six urned cremations along with several undated ditches which may have enclosed the cemetery. A possible Saxon timber building was also identified, along with a pit which also dated to the Anglo-Saxon period.

3.4 Medieval

Evidence for medieval activity in the area is provided by moated manorial sites at Beetley, Spong Hill, Hoe and Worthing.

3.4 Modern

By far the largest topographical feature in the vicinity of the site is Swanton Morley Airfield (NHER 2830). Built in 1940 as a grass airfield, much of it survives, including the tarmac perimeter track and dispersal areas. Many of the fortifications, including pillboxes (e.g. NHER 28694), hydraulic gun emplacements and spigot mortar bases, also survive, as do a number of brick-built structures which probably served as ammunition stores and observation posts.

4.0 Methodology

The objective of this evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

The Brief required that a systematic field survey comprising fieldwalking and metal detecting should be undertaken and a trial trench subsequently excavated in order to examine an area at the base of the slope to determine whether archaeological remains were likely to be present below colluvium deposits. Aerial photographs and historic maps were scrutinised, but no features of archaeological interest were apparent in the proposed development area and no significant changes in land use were identified.

5.0 Field Survey

A field survey was carried out in the area of the field above the 40m contour, (Fig. 2). This consisted of fieldwalking and metal detecting in accordance with guidelines set out in the documents *Standard and Guidance for Archaeological Field Evaluations* (Institute of Field Archaeologists 2001) and *Standards For Field Archaeology in the East of England* (Gurney 2003).

The portion of the field to be surveyed was ploughed one week prior to commencement of the work to allow it to weather. The field survey was undertaken using transects set at 20m intervals. A single pass of each transect was carried out by fieldwalkers and metal detectorists, and both observed or scanned a strip 2m wide along each transect, thereby examining a 10% sample of the survey area. The metal detector survey was carried out using a Minelab Explorer II. The location of each find made was recorded using an etrex 12-channel GPS instrument, giving a unique number and grid reference for each artefact found. The GPS Location Numbers for each artefact recovered are shown on Figure 3 and listed in Appendix 3.

4.1 The Trial Trench

Plate 1. Trial trench, looking east

A single trench measuring 30m by 1.80m was excavated under constant archaeological supervision using a hydraulic 360˚ excavator with a toothless ditching bucket. The location of the trench was agreed in advance with NLA and was positioned in such a way as to examine an area which spanned the point at which the base of the slope gave way to the relatively level valley floor (Figs 3 and 4). This was done in order to record the depth and nature of any colluvium deposits which may have accumulated and to recover any cultural material which may be present.

Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds, other than those which were obviously modern, were retained for inspection.

All archaeological features and deposits were recorded using NAU Archaeology *pro forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

Site conditions were good and the weather was dry and warm. The staff at the quarry were very helpful in all respects.

6.0 Results

5.1 The Field Survey (Fig. 3)

The results of the field survey are summarised below by artefact class. It is worth noting that the limited number of finds recovered during this project all came from the ploughsoil ([08]).

5.1.1 Worked flint

Two struck flints were recovered from the plough soil during fieldwalking. Their presence indicates no more than slight 'background noise'; there was no evidence of concentrations of material of a sort which would have indicated the existence of a site.

5.1.2 Metalwork

All metalwork recovered was post-medieval or modern in date. Finds included a Victorian farthing of 1865, an unidentified copper alloy artefact, three iron nails and an iron screw.

5.2 The Trial Trench (Plate 1)

The trial trench was machine excavated from east to west (downslope) to a depth at which a natural deposit of the sand and gravels described in Section 2 was encountered along the full length of the trench. At the eastern end of the trench (upslope), natural was found to be at a height of 37.86m OD, and at the western end (downslope), natural lay at an elevation of 33.88m OD; this represents a decrease in elevation of 3.98m along the course of the trench. Some variation in the depth of deposits overlying natural was observed. At the eastern (upslope) end of the trench overlying deposits totalled 0.62m in depth, while at the western (downslope) end they were 0.52m deep and, centrally, at the point where the trench began to level off, a depth of 0.86m was recorded.

No features of archaeological interest were observed either in the base of the trench or in the sections, nor were any artefacts recovered during the monitoring of the excavation of the trench or during metal detecting of the spoil. Examination of the sections revealed a series of colluvium deposits consisting of varying sizes and concentrations of sub-rounded flints in sandy and sandy loam matrices. The relatively chaotic nature of the processes involved in the deposition of such material sometimes leads to difficulty in confidently isolating the different layers. This was attempted, however, and the result is illustrated in Figure 5.

Generally speaking, the basal colluvium deposits ([04], [05] and [07]) contained flint pebbles and cobbles of a much greater average diameter (0.08m to 0.20m) than the pebbles present in the upper deposits ([02], [03] and [06]). To some extent this could be due to sorting of the stones by periodic flood events (the larger stones being less easily moved, resulting in their being covered by smaller-sized examples). Another possibility is that the larger stones derive from early weathering of the underlying natural soon after the gravels were deposited by glacial processes and before any substantial topsoil had formed. It was also noticeable that the lower deposits possessed a higher sand to silt ratio than the upper layers. One reason for this may be that the upper layers are more recently deposited and therefore still retain at least some of their original silt content, whereas the lower 'older' deposits have been 'leached' of their silt content to a greater degree. Owing to the absence of archaeological features either sealed by or cutting the colluvium, and the fact that no datable artefacts were recovered from it, it was not possible to ascertain any date for the deposit. The colluvium deposits were sealed by a mid-grey gritty silt loam, containing a moderate amount of small flint pebbles, with an average depth of around 0.30m.

7.0 The Finds

Introduction

The finds from the site are presented in tabular form with basic quantitative information in Appendix 2a: Finds by Context.

In addition to this summary, more detailed information on specific finds categories are included in separate reports below.

6.1 Flint

By Sarah Bates

Two piece of struck flint were recovered during fieldwalking at the site. One small bifacially flaked piece had been repeatedly struck, mainly on one face. It is probably a small core. There is also a very small spall.

The core represents activity in the vicinity of the site during the prehistoric period. It is not closely datable; but the core probably dates to the later Neolithic period or Bronze Age.

Context	Category	Type	Quantity
[08]	flake	Spall	1
	core	multi platform flake core	1

Table 1: Flint by context

6.2 Metalwork

Six metal objects were recovered during the field survey and are listed in Appendices 2a and 3. All were either post-medieval or modern in date and represent casual losses or discarded material. No metal objects recovered during the field survey were allocated small find numbers.

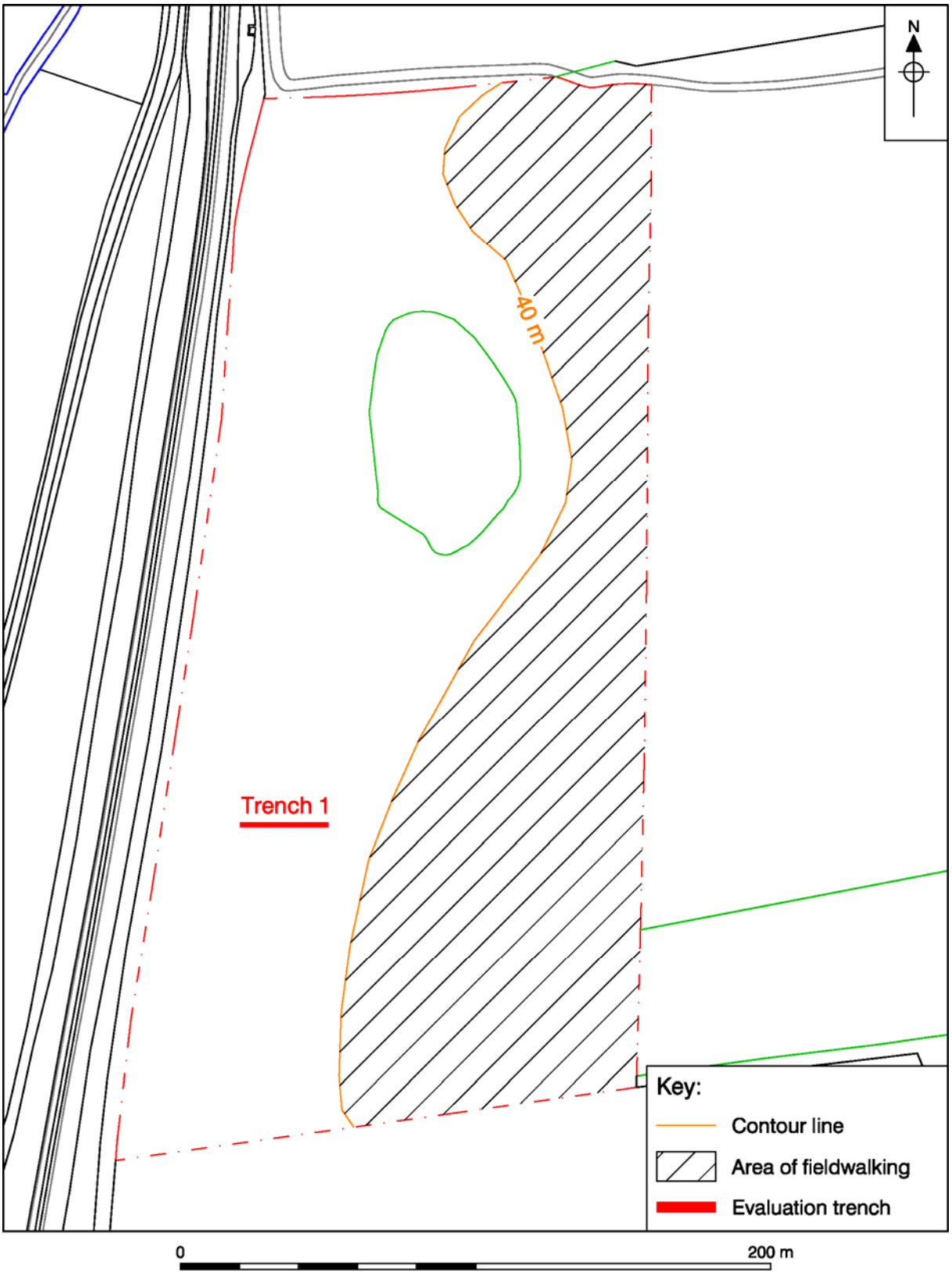

Figure 2. Trial trench and field survey location. Scale 1:2000

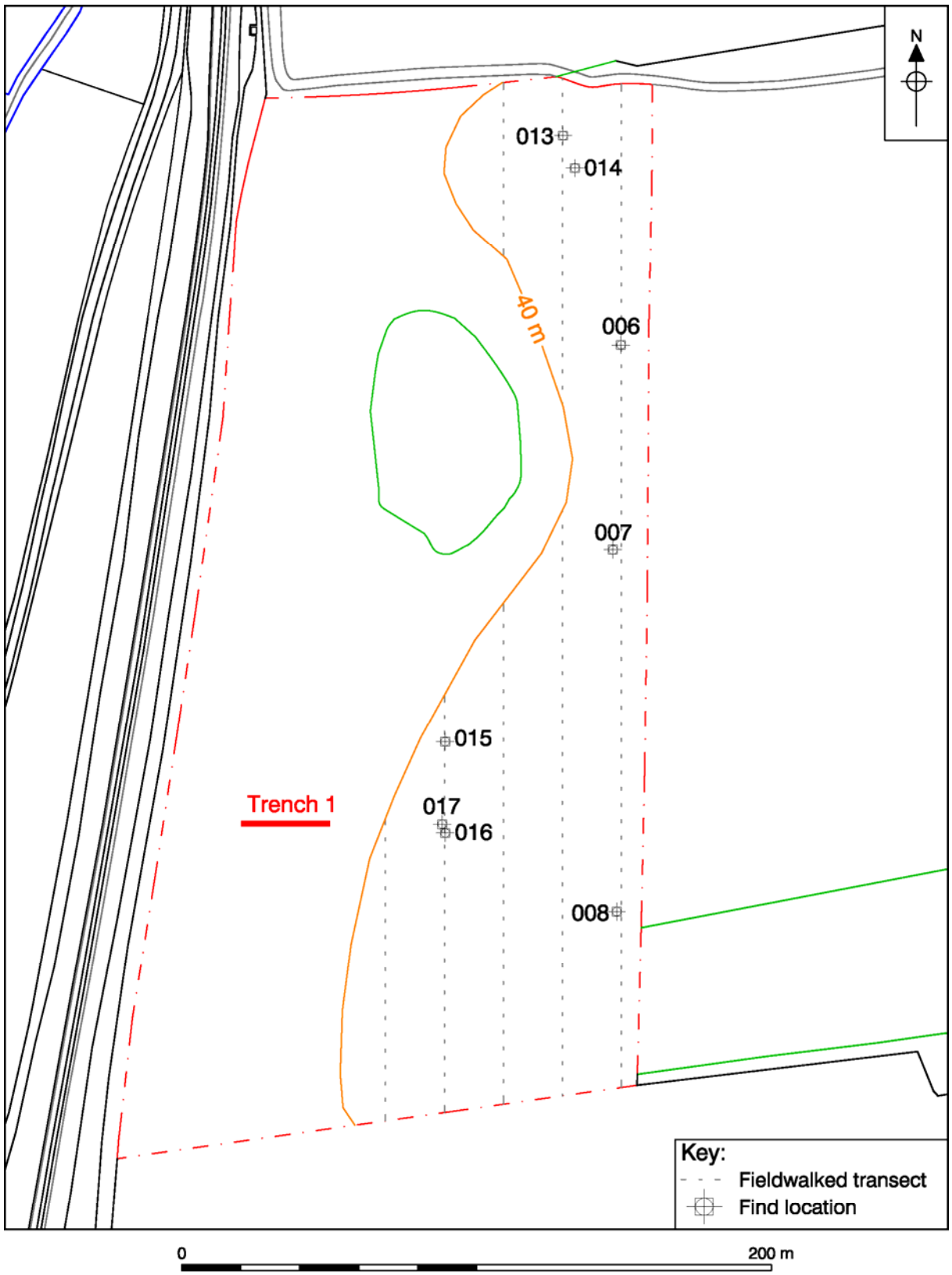

Figure 3. Field survey results. Scale 1:2000

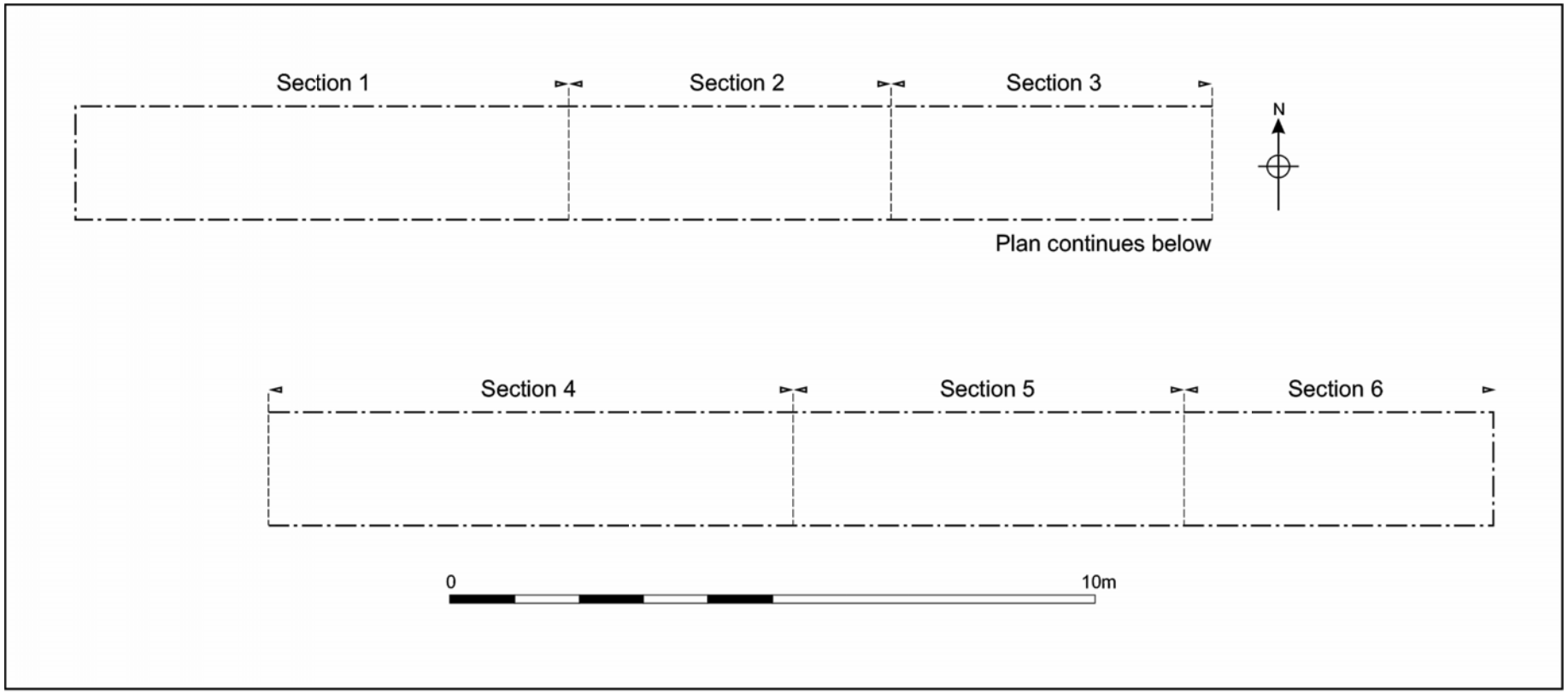

Figure 4. Plan of trial trench. Scale 1:100

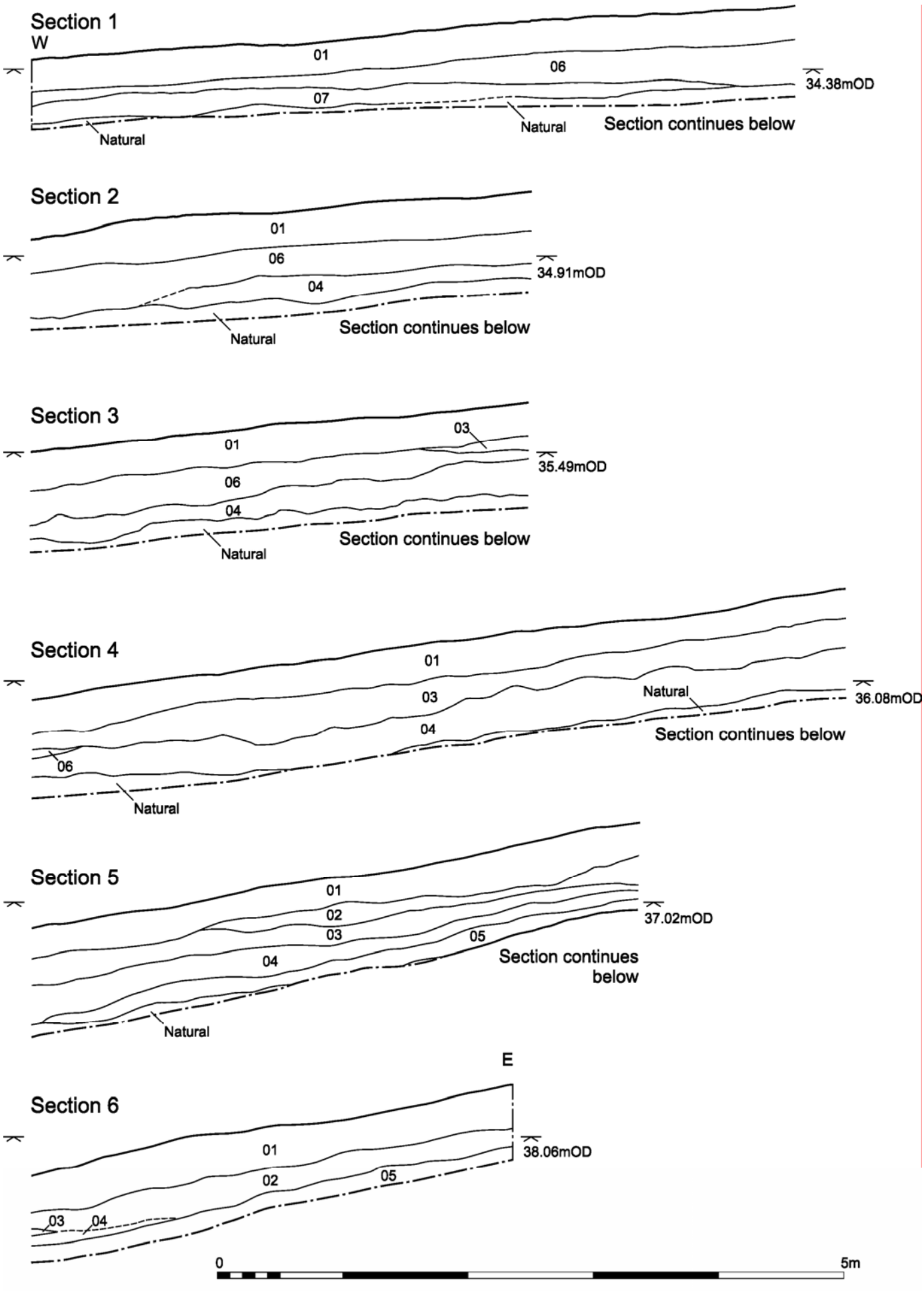

Figure 5. Sections 1 – 6. Scale 1:40

8.0 Conclusions

Although a wealth of archaeological sites and find spots are present in the vicinity of the site no features or artefacts of archaeological significance were observed or recovered either during the field survey or within the trial trench. The finds that were recovered from the site were all discovered during the field survey. A similar field survey was carried out in the vicinity in 2002 (NHER 37159, Trimble and Underdown 2002); it was located approximately 700m to the north of the site under examination here and covered an area of 10ha. That survey produced a total of twenty-nine struck flints (representing a background scatter), nine metal objects (all of which were post-medieval in date) and two highly abraded sherds of pottery. Bearing in mind that the 2002 survey area was more than four times the size of the one investigated here, the results from 2002 are comparable to those achieved here.

These results suggest that there has been no significant cultural activity on the site, other than its present use as farmland.

Recommendations for future work based upon this report will be made by Norfolk Landscape Archaeology.

Acknowledgements

The author would like to thank Lucy Talbot (finds processing and analysis) and Sarah Bates (flint specialist), both of NAU Archaeology, and Jan Allen (NHER information) of Norfolk Landscape Archaeology. The report was illustrated by Sandrine Whitmore and David Dobson, edited by Sarah Harrison and produced by David Dobson and Mike Feather.

Bibliography

Gurney, D.	2003	*Standards For Field Archaeology in the East of England*, East Anglian Archaeology Occasional Paper 14
Institute of Field Archaeologists	2001	*Standard and Guidance for Archaeological Field Evaluations*
Soil Survey of England and Wales	1973	*Soils of Norfolk 1:100,000* (Rothamsted: Soil Survey of England and Wales)
Straw, A..	1973	'The glacial geomorphology of central and north Norfolk', *East Midland Geographer* 5(40), 333–54
Trimble, G. and Underdown, S.	2002	*Report on an Archaeological Evaluation on Land Adjoining Swanton Morley Airfield, Beetley, Norfolk* NAU Archaeology Report 770 (unpublished)

Appendix 1: Context Summary

Context	Category	Description	Period
01	Deposit	Topsoil	—
02	Deposit	Colluvium	—
03	Deposit	Colluvium	—
04	Deposit	Colluvium	—
05	Deposit	Colluvium	—
06	Deposit	Colluvium	—
07	Deposit	Colluvium	—
08	Deposit	Field survey ploughsoil	—

Appendix 2a: Finds by Context

Context	Material	Quantity	Weight (kg)	Period
[08]	Unidentified copper alloy object	1	—	Modern
	Flint – worked	1	—	Prehistoric
	Flint – worked	1	—	?Late Neolithic or Bronze Age
	Iron nail	1	—	Post-medieval
	Copper alloy coin	1	—	Post-medieval
	Iron nail	1	—	Post-medieval
	Iron screw	1	—	Post-medieval
	Iron nail	1	—	Post-medieval

Appendix 2b: NHER finds summary table

Period	Material	Quantity
Unknown	Iron nail	2
Prehistoric (500000 BC to AD 42)	Struck flint	2
Post-medieval (AD 1540 to 1900)	Coin	1
Modern (AD 1900 to 2050)	Iron nail	1
Modern (AD 1900 to 2050)	Screw	1

Appendix 3: Field Survey Finds By GPS Location Number

GPS Location Number	Material	Quantity	Weight (kg)	Period
006	Copper alloy – unidentified artefact	1	—	Modern
007	Flint – worked	1	—	Prehistoric
008	Flint – worked	1	—	Prehistoric
013	Iron nail	1	—	Modern
014	Copper alloy coin – Victorian farthing 1865	1	—	Post-medieval
015	Iron nail	1	—	Undated
016	Iron screw	1	—	Modern
017	Iron nail	1	—	Undated