Land at Stalham Road, Hoveton
ENF127000

Archaeological Evaluation Report

SCCAS Report No. 2011/156

Client: Persimmon Homes

Author: J. A. Craven

September 2011

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Report Date: September 2011

HER Information

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Site Name:	**Land at Stalham Road, Hoveton**
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Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Team alone. Ultimately the need for further work will be determined by the Local Planning Authority and its Archaeological Advisors when a planning application is registered. Suffolk County Council's archaeological contracting services cannot accept responsibility for inconvenience caused to the clients should the Planning Authority take a different view to that expressed in the report.

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Summary

An archaeological evaluation carried out on land at Stalham Road, Hoveton, Norfolk identified slight evidence of a low-level scatter of prehistoric activity and confirmed the presence of several former field boundaries indicated in an earlier geophysical survey. At least one of these ditches was of post-medieval date, and corresponded to a boundary on the 19th century enclosure and tithe maps. There was no evidence to suggest that any belonged to a Roman field system previously identified in the nearby vicinity.

1. Introduction

An archaeological evaluation was carried out on land at Stalham Road, Hoveton, Norfolk (Fig. 1) to assess the potential of the site for archaeological deposits. This report was requested by James Albone (Norfolk County Council Historic Environment Service (NCC HES)), in accordance with *Planning Policy Statement 5: Planning for the Historic Environment*, to be submitted alongside a future planning application for the site's development so that a reasonable and informed planning decision could be made regarding the effect of development on potential heritage assets and an appropriate archaeological mitigation strategy be decided.

The evaluation was carried out to meet a Brief and Specification issued by James Albone. The work was funded by the client, Persimmon Homes.

2. Geology and topography

The site, an area of c.7.8ha, lies at a height of c.10m-12m AOD, on an area of relatively high ground with a slight north-facing slope. To the south and south-west of the site the land slopes down to the River Bure and Wroxham Broad.

The site consists of parts of two arable fields, separated by a low bank which is topped by sporadic mature oak trees. Two lines of overhead powercables cross the site.

The site geology consists of sands and gravels (Happisburgh Glacigenic Formation) over Crag Group bedrock (DiGMapGB-50, British Geological Survey, http://www.bgs.ac.uk).

3. Archaeology and historical background

A desk-based assessment (DBA) for the site (Shelley 2008) has previously examined the known archaeological and historical history of the site and immediate surrounding area.

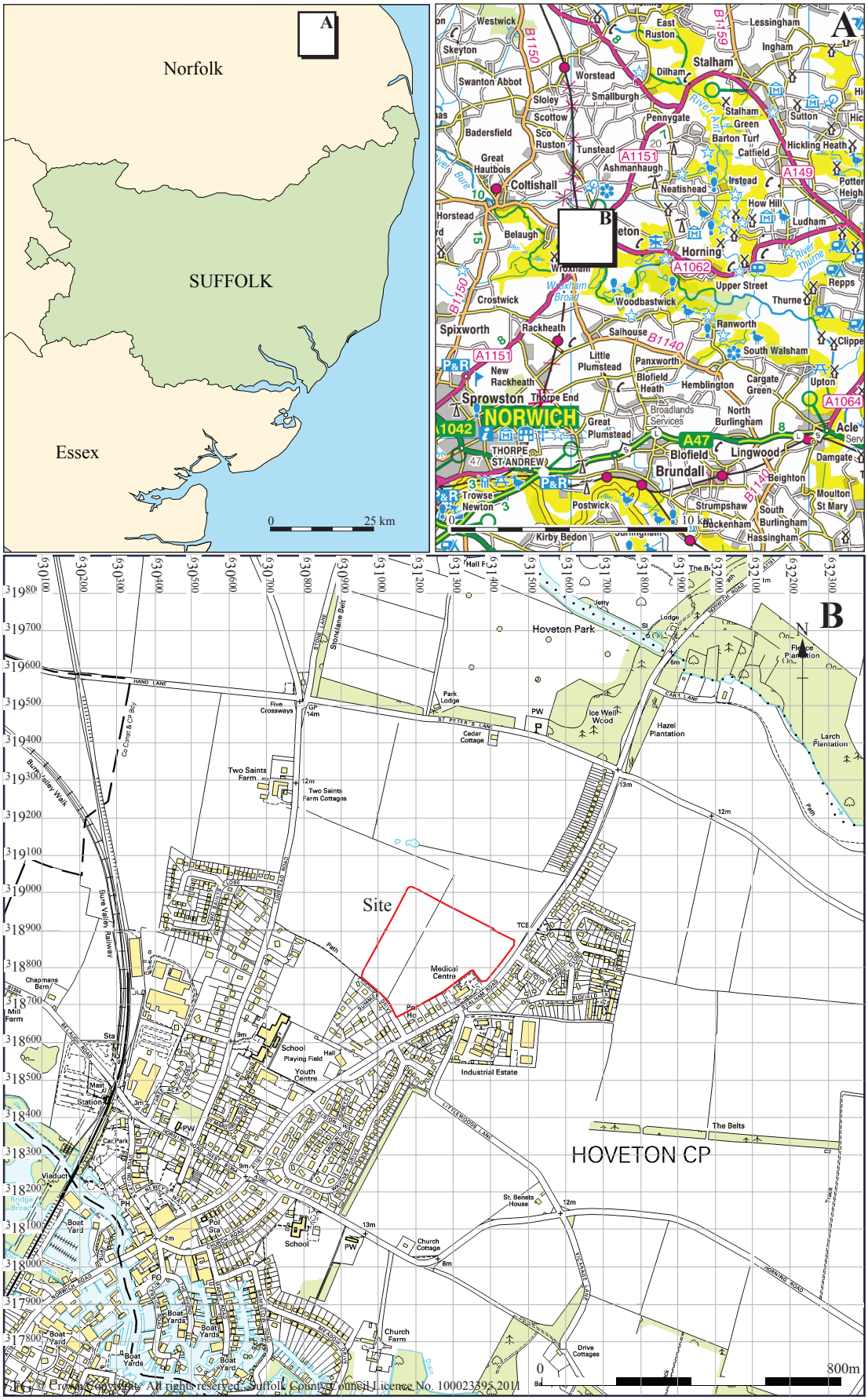

Figure 1. Location map, showing development area (red)

In summary the DBA includes details of a possible Roman field and trackway system (NHER 49175) which has been identified on aerial photography in fields immediately to the north and other undated cropmarks, marking former field systems and enclosures, are recorded to the east and west.

Medieval occupation appears to have been centered around the settlement of Hoveton St John, and the 11th-12th century St John's church, 600m to the south-west, or the medieval Hoveton Hall (NHER 8298) which was demolished in the 19th century and lay 900m to the north. Post-medieval occupation in the vicinity includes the later Hoveton Hall, and the adjacent St Peter's church (II* Listed Building 224394, dating from 1624) which lie to the north of the site.

The cartographic research part of the DBA report concluded that there was no evidence to suggest that the site had been anything other than agricultural land during the medieval and post-medieval periods, apart from a short period in the mid 20th century when the site was planted with trees. The site is shown to have changed very little on late 19th and 20th century Ordnance Survey maps, although housing development to the south and east has occurred. Earlier mapping, consisting of the 1841 tithe map and the 1828 enclosure map, showed some subdivision of the fields and on all the maps from 1828 to 1906 the former parish boundary between Hoveton St John and Hoveton St Peter is shown crossing the southern part of the site from west to east. The approximate positions of these former boundaries are shown in Figure 2 below.

The site's size and location therefore meant that it had high potential for archaeological deposits to exist which could be affected by the development. To assess this potential prior to consideration of a planning application James Albone of NCC HES first requested a geophysical survey of the site. Commissioned by SCCAS, a magnetic survey was carried out by ArchaeoPhysica Ltd in March 2011 (Roseveare 2011). This identified several linear anomalies thought to represent an earlier field system and a possible large buried earthwork or palaeochannel.

A program of trial trenching targeted on these anomalies, together with additional trenching in areas apparently devoid of archaeological features, was subsequently requested by NCC HES to confirm or disprove the results of the magnetic survey and assess the date, state of preservation and significance of any archaeological deposits.

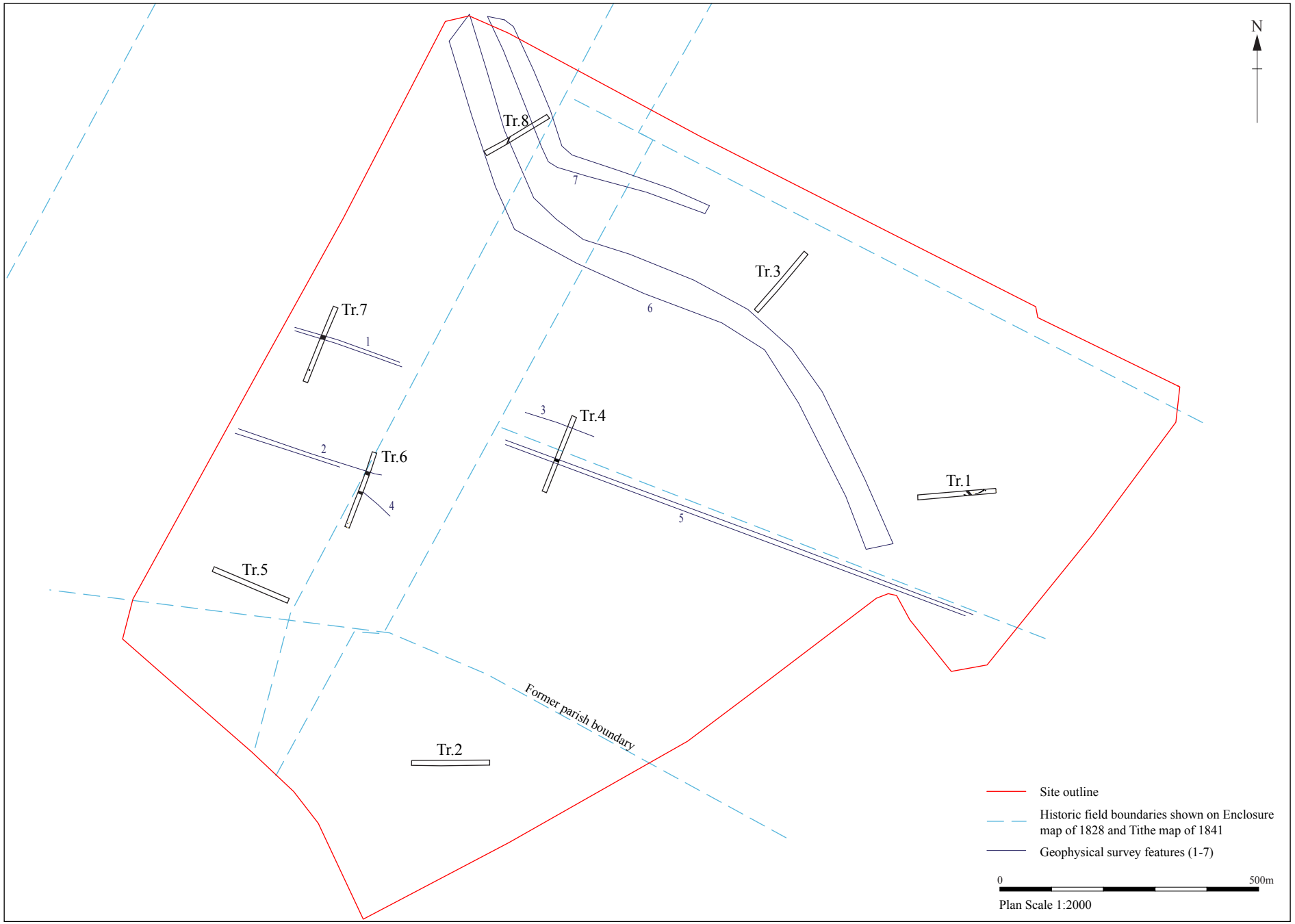

Figure 2. Trench layout

4. Methodology

Eight trenches, measuring 240m in total length, were excavated by a mechanical excavator equipped with a ditching bucket, under the supervision of an archaeologist, to the top of the undisturbed natural subsoil or archaeological levels (Fig. 2). The trenches were placed according to a plan specified in the Brief, and marked out using an RTK GPS.

Sites and spoilheaps were thoroughly surveyed by an experienced metal-detectorist both during the machining and subsequent hand-excavation of features.

Archaeological features were normally clearly visible following cleaning by hand. All features were investigated by hand, generally 50% of pits and 1m wide sections across ditches. Bulk soil samples were collected from selected contexts for environmental analysis.

The site was recorded using a single context continuous numbering system, contexts 0001-0028 and small finds 1001-1005. Trench outlines and section positions and levels were recorded using an RTK GPS. Individual feature plans, sections and levels were recorded at a scale of 1:20 or 1:50 onto A3 gridded permatrace sheets. Digital colour and black and white print photographs were taken of all stages of the fieldwork, and are included in the digital and physical archives.

Site data has been input onto an MS Access databases. Bulk finds have been washed, marked and quantified, with the resultant data also being entered onto databases.

An OASIS form has been initiated for the project (reference no. suffolkc1-105561) and a digital copy of the report has been submitted for inclusion on the Archaeology Data Service database (http://ads.ahds.ac.uk/catalogue/library/greylit).

The site archive is kept in the main store of Suffolk County Council Archaeological Service at Bury St Edmunds under Norfolk HER No ENF 127000.

5. Results

5.1 Introduction

The majority of the trenching showed a similar profile with a 0.3m thick modern ploughsoil overlying a layer, 0010, of mid brown sandy silt. The thickness of this layer varied slightly from 0.1m-0.3m across the site, apart from in Trench 03 where it reached 0.55m thick. Of the eight trenches five contained archaeological cut features. Full descriptions of each trench are given in Appendix 1 and context descriptions in Appendix 2.

Trench 01

Four possible features were identified in the trench, each cutting a layer of very soft and mixed pale/mid yellow/grey/brown sands with iron pan mottling, 0011, which was probably a slightly mixed horizon to the natural subsoil surface. All of the features were undated.

0001 was the best defined feature, being a c.1m wide ditch. Another narrow gully, 0004, was less distinct and may have been a natural feature. Pit 0006 and feature 0007 were even more dubious, again possibly being geological in nature or the result of natural disturbance.

Trench 04

This trench contained a single ditch, 0019, which was aligned east to west and contained prehistoric, medieval and post-medieval material.

Trench 06

This trench contained two undated ditches, 0014 and 0023, both aligned east to west and of similar dimensions, and a single small posthole, 0024.

Trench 07

This trench contained two features. The first was 0015, a small circular pit with a charcoal rich fill and the second was 0026, a broad, deep ditch, which was aligned east to west and contained earlier Neolithic pottery and prehistoric worked flint.

Trench 08

This trench contained a single narrow and undated ditch, 0017, which was aligned north to south.

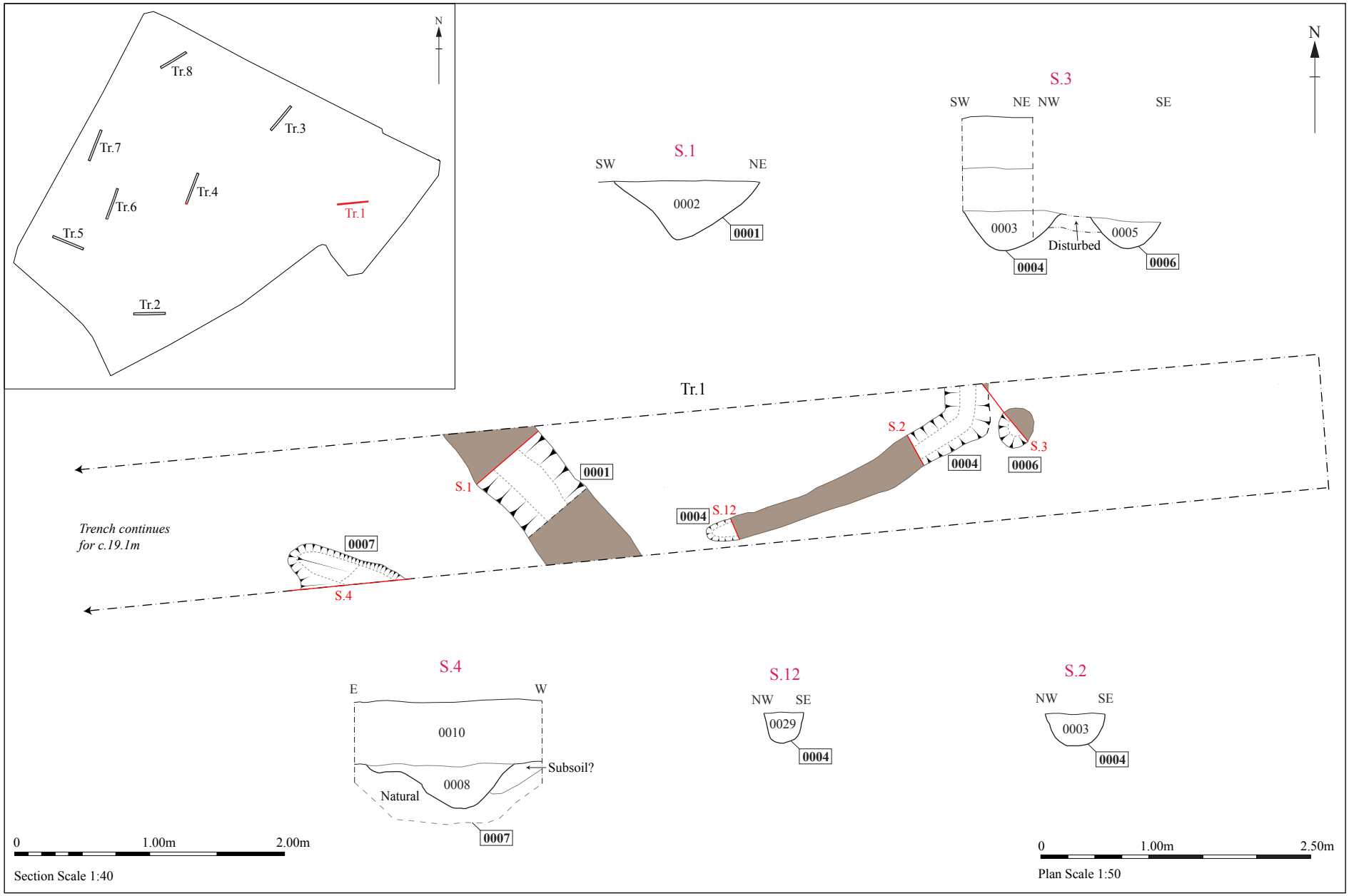

Figure 3. Plan of Trench 1 with sections

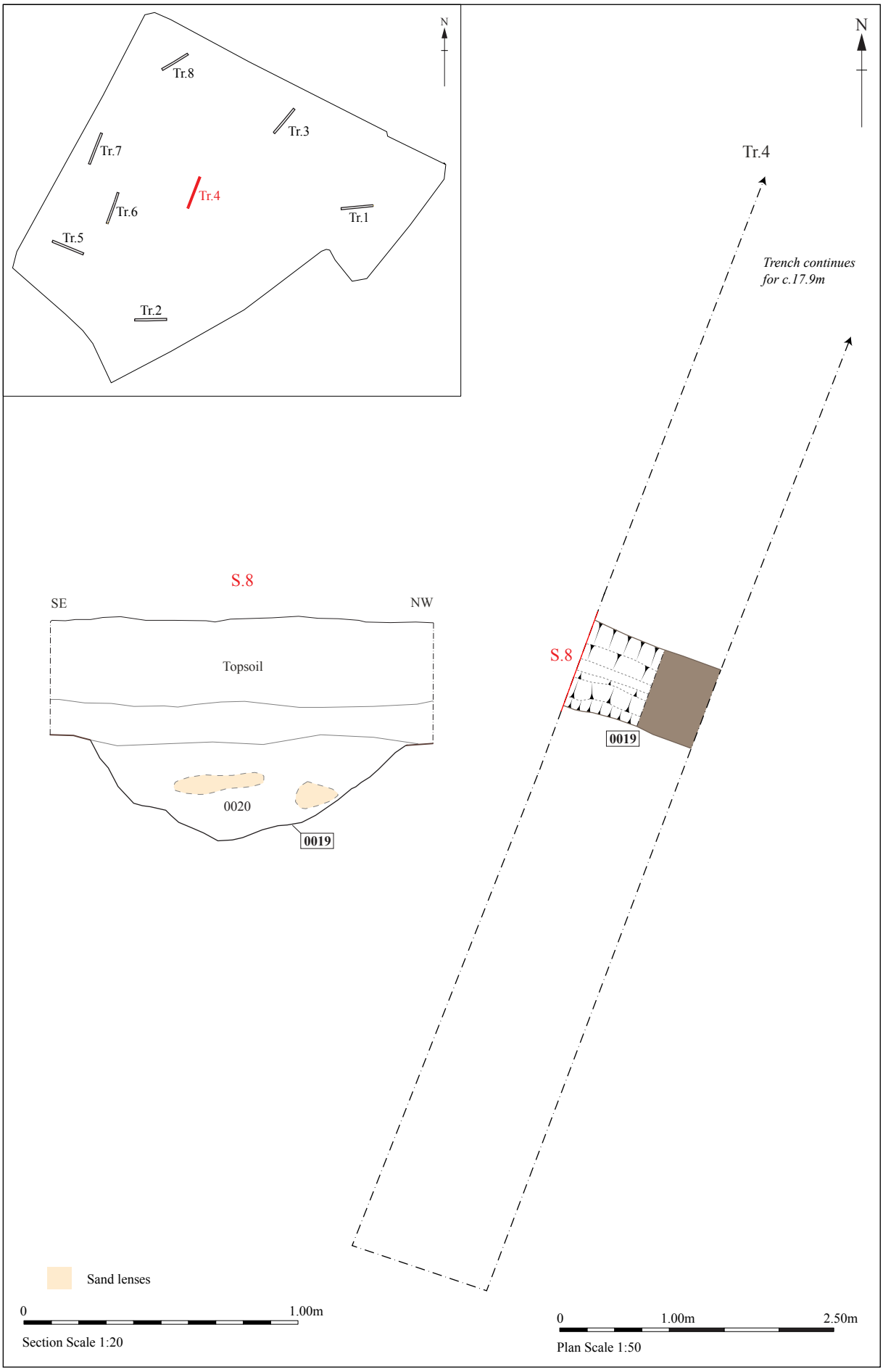

Figure 4. Plan of trench 4 with sections

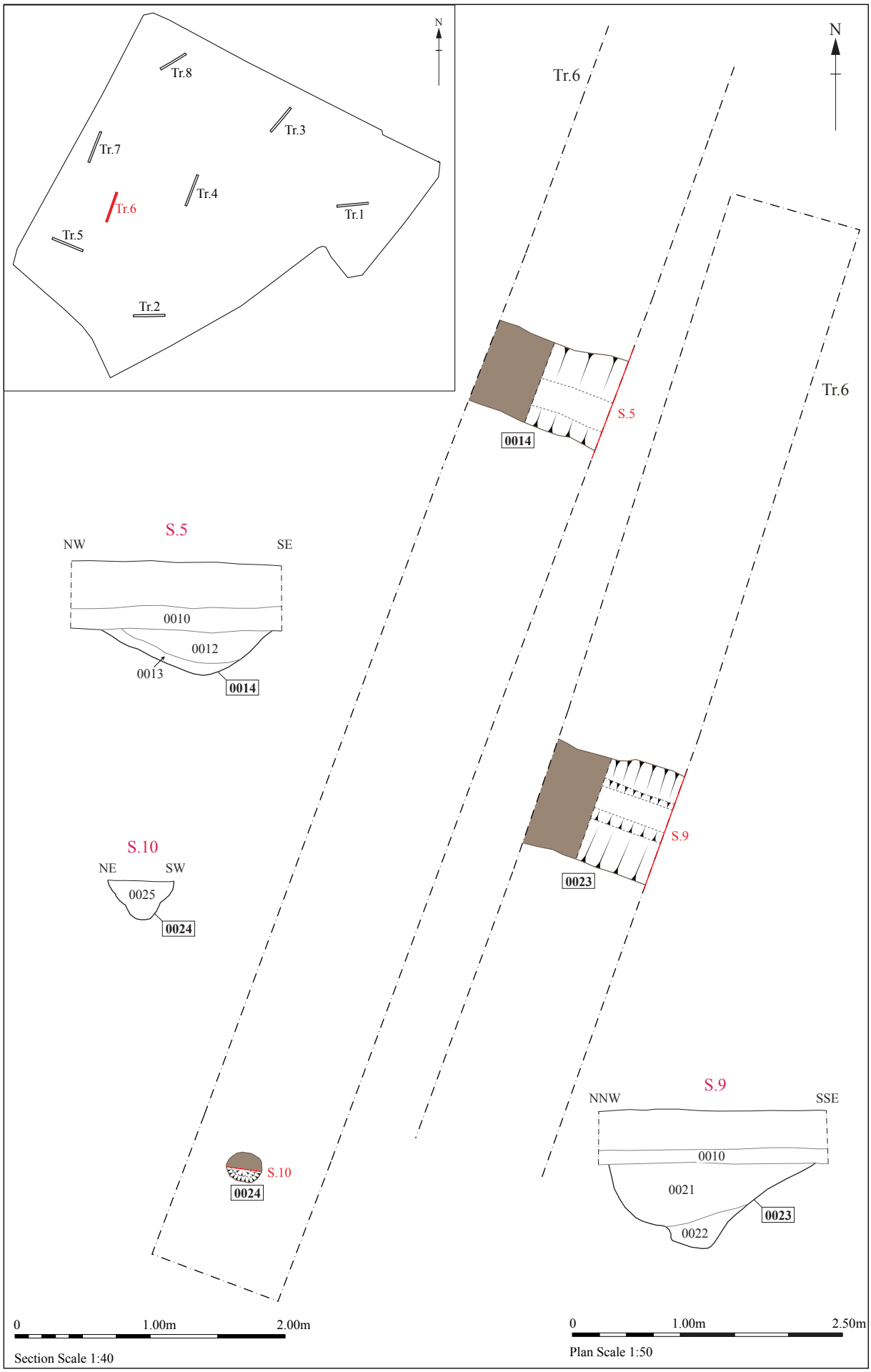

Figure 5. Plan of Trench 6 with sections

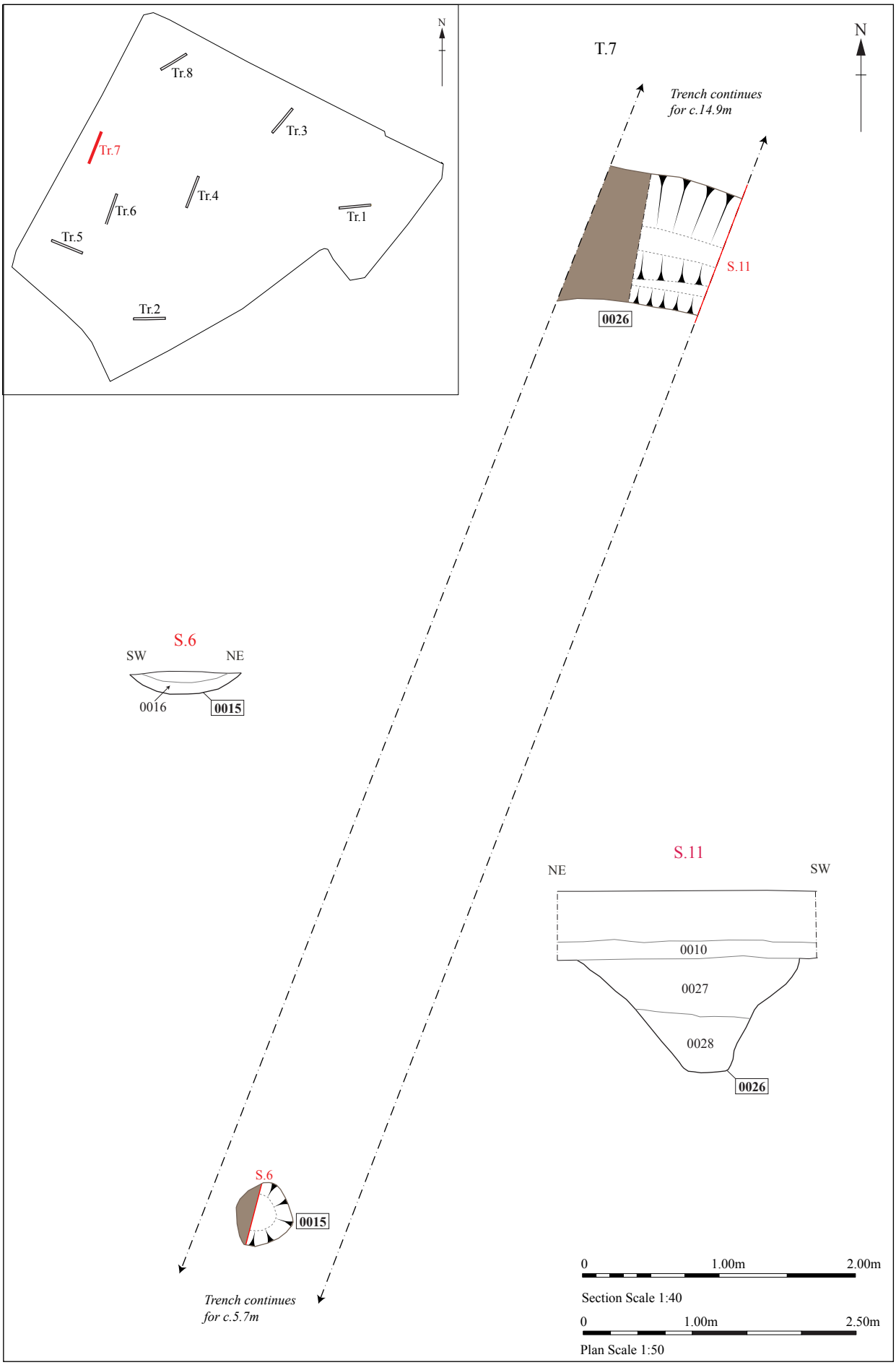

Figure 6. Plan of Trench 7 with sections

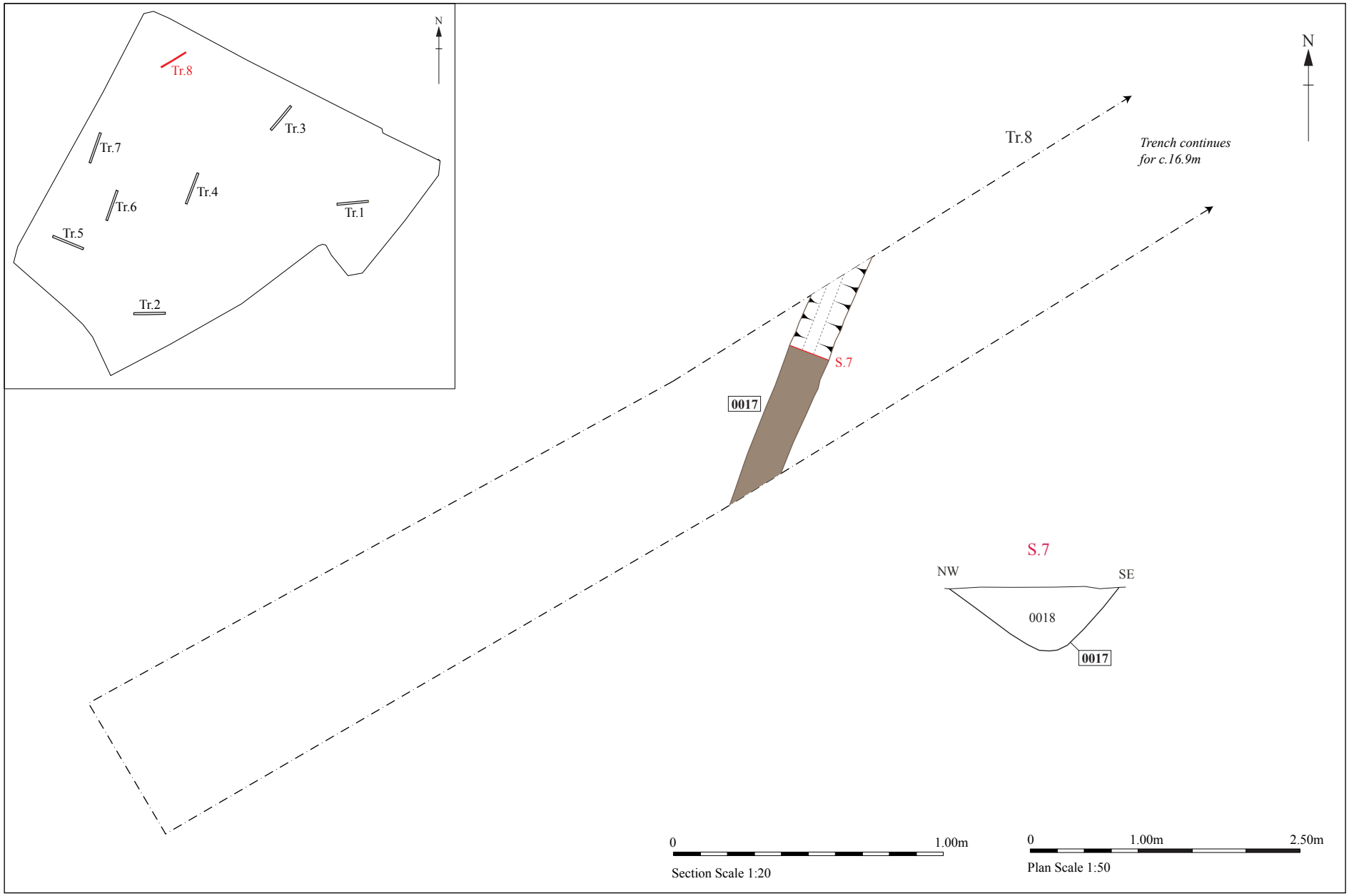

Figure 7. Plan of Trench 8 with section

6. Finds and environmental evidence

Andy Fawcett

6.1 Introduction

The archaeological evaluation yielded finds from four ditch fills (0020, 0021, 0022, 0028) and one post-hole (0025). Five bulk environmental samples were collected from contexts 0016, 0020, 0021, 0025 and 0027.

Context	Pottery		CBM		Worked flint		Burnt flint/stone		Miscellaneous	Spotdate
	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g		
0020	5	7	4	7	1	2	1	4	Slag 2 @ 4g	16th-18th C
0021							11	279		
0022							2	59		
0025					1	4				
0028	8	32			2	6				Earlier Neolithic
Total	**13**	**39**	**4**	**7**	**4**	**12**	**14**	**342**		

Table 1. Finds quantities

6.2 The Pottery

Prehistoric

With Edward Martin

In total eight sherds (32g) of flint-tempered (HMF) pottery were recorded in ditch fill 0028. The sherds all belong to the same carinated bowl form (although they do not all join), which displays a slightly everted and pointed rim. Similar form types can be seen in Healy's collection (1984, 80-81) and to a lesser extent at Hurst Fen (Clark 1960, 202-245). The fragments only display slight abrasion and the fabric, which is fairly soft with a patchy brown-black surface, is composed of common ill-sorted flint and naturally occurring red ironstone. The sherds are dated to the earlier Neolithic period. Also present within this fill is worked flint dated from the Neolithic to Early Bronze Age as well as to the later prehistoric period.

Medieval

Ditch fill 0020 contained three very small and very abraded (2g) medieval coarseware body sherds (MCW). All three sherds belong to the same vessel but do not join. The fabric is hard and sandy, being reduced on one half and oxidised on the other. The fabric is composed of ill-sorted quartz and is dated from the late 12th to 14th century. This fill also contained both post-medieval pottery and CBM as well as worked and burnt flint.

Post-medieval

Two abraded body sherds of Glazed red earthenware (GRE) are present within ditch fill 0020 (5g). They are dated from the 16th to 18th century and are also accompanied by post-medieval CBM.

6.3 Ceramic building materials (CBM)

Four small and very abraded fragments of CBM (7g) were noted in ditch fill 0020. All of the fabrics are fully oxidised and contain ferrous inclusions (msfe). Due to their size and worn condition no measurements, such as depth, are possible. The fragments are most likely late medieval to post-medieval and pottery dated to this period is also present within the context.

6.4 Worked flint

Identified by Colin Pendleton

Three contexts contained worked flint, ditch fills 0020, 0028 and post-hole 0025. Fill 0020 contained an unpatinated primary squat flake, which is not closely datable but may be later prehistoric. Context 0025 also contained an unpatinated primary squat flake. The flint, which has had two small flakes removed from the dorsal face, also dates to the later prehistoric period. Finally fill 0028 contained two flints. The first of these is an unpatinated long flake with slight edge retouch. It also has parallel flake scars on the dorsal face and cortex forms the distal end. It is probably dated from the Neolithic to Early Bronze Age. The second flint is dated to the later prehistoric period. It is a snapped flake which displays a hinge fracture. Pottery within the same fill is dated to the earlier Neolithic period.

6.5 Burnt flint/stone

Burnt flint/stone was recovered from three ditch fills, 0020, 0021 and 0022 (14 fragments @ 342g). All of the pieces are coloured white/grey and were probably utilised in the preparation and cooking of food. Only in ditch fill 0020 was a single fragment accompanied by worked flint. This is dated to the later prehistoric period, but medieval and post-medieval finds were also present within the context.

6.6 Slag

Two pieces of non-magnetic fuel slag were recorded in ditch fill 0020. Also present in this context are medieval and post-medieval finds as well as worked and burnt flint.

6.7 Small finds

Identified by Andrew Brown

A total of five small finds was retrieved from the spoil heaps of Trenches 1, 4, 6 and 7. A catalogue of these finds can be seen below, while a comprehensive listing forms part of the site archive.

Roman

1. A possible copper alloy coin fragment that may be dated to the Roman period. The fragment is completely covered by corrosion products and may have been deliberately cut into four pieces. SF1001 (Spoil heap Tr.1).

Post-medieval

2. A possible copper alloy token. The fragment is very thin and completely corroded with no legible detail. SF1003 (Spoil heap Tr.6).

3. A copper alloy coat hook which has a faceted hexagonal ball on the tip. Although it is more likely dated to the post-medieval period, a modern date cannot be ruled out entirely. SF1004 (Spoil heap Tr.6).

4. A very worn and slightly bent silver penny of Charles I. None of the lettering can be deciphered. The coin is dated 1625-49. SF1005 (Spoil heap Tr.7).

Unknown

5. An amorphous piece of copper alloy waste which is flat on one side and irregularly raised on the other. It is probably a fragment of metal working debris. SF1002 (Spoil heap Tr.4).

Only the silver penny of Charles I (1625-49) from Trench 7 can be dated with any accuracy. No other finds were retrieved from this trench.

6.8 Environmental sampling

Five bulk environmental samples were collected and have been processed and assessed (Appendix 3).

The assemblage largely consisted of charred plant remains and cereal grains, the former appearing to be general background waste. No evidence for plant food storage or on-site processing was identified and no further work is recommended.

6.9 Discussion of material evidence

The majority of finds are located in ditch fill 0020 within Trench 3. Although of a mixed date, most are post-medieval with some very small fragments of medieval pottery and prehistoric flintwork. Of particular interest are the earlier Neolithic sherds in ditch fill 0028 (Trench 6). A variety of Neolithic flints have already been recorded elsewehere in the parish (NHER 8412, 24236, 24351, 24352, 25109 and 32285). An arrowhead (NHER29148) was found in a garden to the south-east of this evaluation and a polished axe to the east (Shelley 2008, 13).

7. Discussion

The results of the evaluation generally confirmed the earlier geophysical survey which suggested the presence of a series of linear ditches partially crossing the site.

Geophysics anomaly	Trench	Feature
01	07	Ditch 0026.
02	06	Ditch 0023.
03	04	Not identified.
04	06	Ditch 0014.
05	04	Ditch 0019
06	03 and 08	Suggested natural channel - not identified.
07	03 and 08	Suggested natural channel - not identified.
08	-	Modern anomalies, not investigated.
09	-	Modern anomalies, not investigated.

Table 2. Geophysical anomalies and evaluation features

Of the four ditches 0026 was the most substantial and may be of the earliest date, as it contained solely prehistoric material, but is perhaps more likely to be contemporary with other features . Ditch 0019 was of post-medieval date, and also clearly corresponded with a boundary shown on the 19th century enclosure and tithe maps. Ditches 0014 and 0023 although undated, were similar in appearance and alignment to 0019 and may therefore have been excavated at a similar time but infilled prior to 1828.

The metal-detected small finds similarly indicate low-level post-medieval activity, with most of the objects probably deriving from casual loss or manuring practices. A single Roman coin may have arrived in a similar fashion and by itself does not indicate any defined phase of Roman activity.

Apart from three indistinct, undated possible features in Trench 01, four definite features not seen in the geophysical results were identified; ditch 0001 In Trench 01, posthole 0024 in Trench 06, pit 0015 in Trench 07 and ditch 0017 in Trench 08. Of these only 0024 was datable, containing a single later prehistoric worked flint, although the general appearance of pit 0015 also suggests a general prehistoric date for the feature.

Trenches 03 and 08, whilst being placed across anomalies 6 and 7 in the geophysical survey, did not identify any evidence of a natural channel. The slight anomaly detected may be due to a slightly deeper depth and siltier composition of the natural subsoil.

8. Conclusions and recommendations for further work

The evaluation trenching identified slight evidence of a low-level scatter of prehistoric activity and confirmed the presence of several former field boundaries, at least one of which was of post-medieval date. There was no evidence to suggest that any of these belonged to a wider Roman field system. There was also no evidence to support the suggestion for a palaeo-channel crossing the northern part of the site. Preservation of archaeological deposits was generally good, with features being protected from modern plough damage by an intermediate subsoil layer. As the deposits lie at a depth ranging from 0.4m-0.8m however they are vulnerable to disturbance from any future development.

The trenching has demonstrated that the geophysical survey successfully identified the larger, or more recent, features. However several smaller features, such as pit 0015, or those of a possibly relatively early date where fills have become less distinguishable from natural strata, such as 0001, were not identified. This indicates that other smaller features may exist across the site, albeit probably at a low or very-low density.

Of particular note is the lack of any anomaly corresponding to the former parish boundary in the southern part of the site but, with no trenching placed across the boundary, the physical presence or absence of a boundary marker was not verified.

In conclusion the results of the geophysical survey and evaluation trenching suggest that the site is only of low archaeological potential. There are no deposits which warrant preservation *in situ* and the proposed development will have only a minimal impact upon archaeological heritage assets.

9. Archive deposition

Paper and photographic archive: SCCAS store, Bury St Edmunds, Suffolk.

Digital archive: SCCAS server. R:\Environmental Protection\Conservation\Archaeology\ Archive\Norfolk\ENF 12700 Stalham Rd, Hoveton

Finds and environmental archive: SCCAS store, Bury St Edmunds, Suffolk

10. Acknowledgements

The evaluation was directed by John Craven and carried out by a number of archaeological staff (Robert Brooks, Roy Damant, John Sims, and Adam Yates) all from Suffolk County Council Archaeological Service, Field Team.

The post-excavation was managed by Richenda Goffin. Finds processing was carried out by Jonathan Van Jennians and the processing of environmental samples by Anna West. The production of digital site plans and sections was managed by Crane Begg and carried out by Gemma Adams. The specialist finds report was produced by Andy Fawcett, with specialist identification and advice being provided by Andrew Brown, Edward Martin and Colin Pendleton. The report was checked by Richenda Goffin.

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Roseveare, M.J., 2011, *Land at Stalham Road, Hoveton, Norfolk. Geophysical Survey Report.* ArchaeoPhysica Ltd report, unpublished.

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Appendix 1. Trench list

Trench Number	Length	Orientation	Geology	Topsoil Depth	Depth to Natural	Description	Archaeological contexts	Comments
01	30	E-W	Soft mottled pale/mid yellow sands.	0.3m	0.7m	Topsoil over layer of mid brown silt/sands 0010 (0.2m thick). Slight slope down to east. Irregular patchy natural subsoil.	0001 - ditch 0004 - small ditch? 0006 - small pit? 0007 - pit?	0011 has very diffuse horizon with underlying subsoil. Maybe overmachined intact upper subsoil deposit. Features cut layer 0011.
02	30	E-W	Mix of orange/brown pale/mid silt/sands and occasional gravel	0.3m	0.5m	Topsoil over layer of mid brown silt/sand loam 0010. Level and flat undisturbed natural subsoil. Patchy areas of natural mid grey/brown silt.	None.	
03	30	NE-SW	Mid orange sandy silt and occasional gravel mixed with mid grey/brown patches of silt	0.35m	0.5-0.7m	Slight slope down to north. Irregular patchy subsoil, deepest through centre. Topsoil over 0.35-0.55m of mid brown sandy silt 0010.	None.	No sign of a natural 'channel' although deeper part of trench had particularly silty subsoil.
04	30	SW-NE	Mid orange silt/sand with gravel and occasional patches	0.3m	0.45m	Topsoil over layer 0010 - mid brown silt/sand. Flat and level, uniform profile.	0019 ditch.	
05	30	NW-SE	Mixed mid orange/brown sandy silt and gravel.	0.3m	0.5m	Topsoil over mid orange/brown silt/sand and gravel layer 0010.		1 natural silt/hollow near north-east end was 50% excavated but not recorded.
06	30	NE-SW	Mid orange silt/sand and gravel	0.3m	0.4m	Topsoil over 0.1m of layer 0010 - mid brown silt/sand. Band of very dry subsoil running across the north-east end of the trench - caused by above agricultural practices?	0014 - ditch 0023 - ditch 0024 - posthole	Features sealed by layer 0010.
07	30	NE-SW	Mid orange brown silt/sand and gravel.	0.35m	0.45m	Topsoil over 0.1m of layer 0010 - mid brown silt/sand.	0015 pit. 0026 ditch.	Features sealed by 0010.
08	30	E-W	Mid orange sandy silt and gravel.	0.35	0.6m	Topsoil over layer 0010, c. 0.25m thick mid brown sandy silt. Shallow slope down to east.	0017 ditch.	No sign of 'channel' although, as in Trench 03, some large areas of pale/mid orange/brown/yellow silt in subsoil surface. Trench position shifted north to avoid overhead cables.

Appendix 2. Context List

Context Number	Trench	Feature Type	Category	Description	Length	Width	Depth
0001	01	Ditch	Cut	Linear ditch, aligned north-west to south-east. South-west side slightly convex, North-east side concave with gradual breaks. Irregular base.		1.08m	0.44m
0002	01	Ditch	Fill	Loose, mixed dark orange, pale yellow, mid brown/grey sands and silty sand. Common small and medium rounded stones near top of fill.		1.08m	0.4m
0003	01	Ditch?	Fill	Firm mid orange/brown silty sand with occasional small and round flints and charcoal flecks.			0.3m
0004	01	Ditch?	Cut	Small possible ditch, aligned north-south and turning west at the north end of the trench. 'U' shaped profile, very steep slightly concave sides and a concave base. Very disturbed at north and south ends.		0.6m	0.24m
0005	01	Pit?	Fill	Firm mid/pale orange/brown silty sand with occasional small angular flints.			0.2m
0006	01	Pit?	Cut	Sub circular in plan, with concave sides and base. Very disturbed and unclear.		0.52m	0.2m
0007	01	Pit	Cut	Possible linear pit or gully terminus, aligned south-east to north-west and extending under trench edge. Concave sides and base.		0.35m approx	0.32m
0008	01	Pit	Fill	Mid/dark grey/brown silty sand with occasional small angular stone and flints and occasional flecks of charcoal. Mixed fill with diffuse edges.		0.35m	0.32m
0009	01	Ditch?	Fill	Firm dark red/brown silty sand with frequent charcoal. Very disturbed by roots and burrows.			0.22m
0010		Subsoil	Layer	Mid brown sandy silt. Seen throughout trenching under topsoil, normally sealing subsoil surface and features. Variable thickness 0.1-0.5m.			0.1-0.5m
0011	01	deposit	Layer	Mixed pale/mid yellow/grey/brown sands and iron pan mottling. Under 0010. 0.2m thick			0.2m
0012	06	Ditch	Fill	Firm mid orange/brown silty sandy clay with occasional small angular and rounded flints.			0.22m
0013	06	Ditch	Fill	Firm pale orange/brown clayey silt with moderate small angular and rounded flints.			0.08m
0014	06	Ditch	Cut	East-west aligned ditch, slightly concave sides and relatively narrow concave base.		1.24m	0.32m
0015	07	Pit	Cut	Circular pit with gradual concave sloping sides and a concave base.		0.85m	0.18m
0016	07	Pit	Fill	Dark grey/brown sand/silt/clay with abundant charcoal and common flints. Diffuse edges.		0.85m	0.18m
0017	08	Ditch	Cut	Narrow ditch. Moderate straight sloping sides and narrow flat base. Quite hard to see in plan but relatively clear and defined cut.			
0018	08	Ditch	Fill	Mid brown sandy silt.			
0019	04	Ditch	Cut	Linear ditch, aligned north-east to south-west. Moderate sloping concave sides and slightly irregular/concave base.		1.15m	0.4m
0020	04	Ditch	Fill	Pale-mid orange/grey sandy silt with lenses of yellow/orange sand. Frequent small rounded/sub angular flints and common charcoal flecks.		1.15m	0.4m
0021	06	Ditch	Fill	Mid white/brown clayey sandy silt with moderate small rounded flints.			0.46m
0022	06	Ditch	Fill	Pale white/brown silty clay with with orange patches.			0.24m
0023	06	Ditch	Cut	Linear ditch aligned east to west. 'Ankle breaker' profile. Western edge steep and concave, eastern edge more shallow and convex. Both lead to stepped sub-squared base.		1.52m	0.64m
0024	06	Posthole	Cut	Circular posthole, steep, concave sides and concave base.	0.46m	0.42m	0.32m
0025	06	Posthole	Fill	Mid grey silty sand at top becoming more pale grey and orange towards base. Occasional small flints and charcoal flecks throughout.	0.46m	0.42m	0.32m
0026	07	Ditch	Cut	Broad, deep ditch, corresponding to one on geophysical survey. Moderate - steep sides with a narrow flat base.		1.7m	0.8m
0027	07	Ditch	Fill	Upper fill of ditch 0026. Pale/mid brown sandy silt. Compact with occasional flints.		1.7m	0.4m
0028	07	Ditch	Fill	Basal fill of ditch 0026, slightly slumping down to south. Pale brown sandy silt, pale grey mottling and occasional flints.		0.9m	0.4m

Appendix 3. Plant macrofossils and other remains

ASSESSMENT OF ENVIRONMENTAL SAMPLES TAKEN DURING AN EXCAVATION AT STALHAM RD, HOVETON, NORFOLK (ENF127000)

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All comments in this report are provisional and should not be considered as the author's final opinion until stratigraphic analysis is complete, other specialist assessments have been written and any further processing or analysis carried out. The author would like to be consulted before any part of this report is used in any situation other than its place in the assessment archive and updated project design.

1. INTRODUCTION – AIMS AND OBJECTIVES

Five samples were presented for assessment. The samples were taken from a pit, ditches, and a post hole. Two features were provisionally dated. These were sample 3 (context 0027, cut 0026) that was given a possible prehistoric date and sample 2 (context 0020 , cut 00190) provisionally dated as Post-Medieval.

This report will assess the type and quality of preservation of organic (mainly botanical) remains and any inorganic materials in these samples and consider their potential and significance for further analysis. It will also suggest items suitable for radio-carbon dating.

2. SAMPLING AND PROCESSING METHODS

Sampling, flotation and residue sorting was carried out by the client. Processing was carried out using a flotation tank with a 300 micron mesh sieve (*pers.comm.* Anna West). Each sample was completely processed.

Once with the author the flots were scanned under a low powered stereo-microscope with a magnification range of 10 to 40x. The whole flots were examined. The abundance, diversity and state of preservation of eco- and artefacts in each sample were recorded. A magnet was passed across each flot to record the presence or absence of magnetised material or hammerscale. All data was recorded onto paper record sheets for tabulation. These sheets are kept with the author's archive and copies available on request.

Identifications were made using modern reference material (author's own and the Northern European Seed Reference Collection at the Institute of Archaeology, University College London) and reference manuals (such as Beijerinck 1947; Cappers *et al.* 2006; Charles 1984; Fuller 2007; Hillman 1976; Jacomet 2006).Nomenclature for plants is taken from Stace (Stace 2010). Latin names are given once and the common names used thereafter. Due to the low number of non-charcoal charred plant remains these were counted. Spheriodal hammerscale was counted. Most uncharred plant remains, fauna and magnetic fragments were given estimated levels of abundance.

3. RESULTS

3.1. Quality and Type of Preservation of the Plant Macrofossils

Charred and uncharred (not waterlogged and unmineralised) plant remains were recorded. Charring occurs when plant material is heated under reducing conditions where oxygen is largely excluded (Boardman and Jones 1990, 2; Campbell *et al.* 2011, 17). These conditions can occur in a charcoal clamp, the centre of a bonfire or pit or in an oven or when a building burns down with the roof excluding the oxygen from the fire (Reynolds, 1979, 57). Charring leaves a carbon skeleton resistant to biological and chemical decay (Campbell *et al*. 2011, 12).

3.2. Sample Contents

Charred wood/charcoal fragments were present in every sample. Identifiable fragments were found in samples 1, 3 and 4. Two poorly preserved cereal grains were found in sample 4. One was indeterminate and the other resembled bread/rivet (*Triticum aestivum/turgidum*) wheat. Fat hen (*Chenopodium album* L.) seeds were the most frequent uncharred seed. These were all found in sample 2. This sample also contained one uncharred grass awn fragments and one partly soot blackened rachis fragments. Low numbers of uncharred seeds of plants of waste and grassland were found in samples 3. 4. and 5. . No uncharred seeds were found in sample 1. The presence of uncharred rootlets in each sample and the well-preserved nature of these seeds suggest that the seeds and the two chaff fragments are intrusive. Faunal action was not apparent as faunal remains were absent from the flots.

Spherical hammerscale fragments were found in samples 2 and 3. These are formed when droplets of hot slag are expelled during welding and primary smithing (Starley 1995). Magnetic fragments were recovered from the residues of all samples. Fragments of coal were present in the flot of sample 2.

3.5. Biases in Recovery, Residuality, Contamination

The evidence for bioturbation has already been mentioned here. No other observations were supplied regarding residuality or contamination.

3.6. Significance and Potential of the Samples and Recommendation for Further Work

The most useful plant remains recovered in these samples are the fragments of identifiable wood charcoal. The cereal grains have been counted and identified as best as is possible. It is unlikely that they can provide any more information than that given in this assessment. No further work is recommended on the plant remains unless it is the identification of wood charcoal for radiocarbon dating. There is no evidence for cess disposal or large numbers of plant remains that could indicate plant food/craft waste. These plant remains appear to be general background waste entering the features incidentally during backfilling.

3.7. Recommendations for Radio-carbon Dating

The identifiable charcoal in samples 1, 3, and 4 may contain species suitable for radiocarbon dating. It may not be wise to date the cereal grains as they could have enter the features sampled as backfill and be from a period unrelated to the use of the feature.

3.8. Concluding Summary and Key Points

Five samples were presented for assessment. The samples were taken from a pit, ditches and a posthole. Two features were provisionally dated. These were sample 3 (context 0027, cut 0026) that was given a possible prehistoric date and sample 2 (context 0020 , cut 0019) provisionally dated as Post-Medieval.

The charred plant remains consisted of charcoal and two cereal grains. There is no evidence for plant food storage or on-site processing. The charred plant remains appear to be general background waste entering the features with backfill.

3.9. Acknowledgements

The author wishes to thank Anna West (Suffolk County Council Archaeological Service) for providing her with background information.

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Table 1: Sample contents

Spotdate	**undated**	**?Post-medieval**	**?Prehistoric**	**undated**	**undated**
Sample No.	**1**	**2**	**3**	**4**	**5**
Context No.	**16**	**20**	**27**	**21**	**25**
Cut No.	**15**	**19**	**26**	**23**	**24**
Feature type	**Pit**	**Ditch**	**ditch**	**Ditch**	**posthole**
Charred Plant Remains					
cf. *Triticum aestivum* L. (distorted grain)	-	-	-	1	-
?Indeterminate cereal (grain)	-	-	-	1	-
wood fragments (>4mm^2)	+++++	-	+	+	-
wood fragments (<4mm^2)	+++++	+++++	+++++	+++++	++
Uncharred Plant Remains					
cf *Fumaria* sp.	-	-	-	-	+
Trifolium sp.	-	-	-	-	+
cf. *Raphanus raphanistrum* L. (capsule)	-	-	+	+	-
Polygonum aviculare L.	-	-	+	-	-
Chenopodium album L. (seed)	-	+++	-	-	-
Atriplex/*Chenopodium* sp.	-	+	+	+	+
Poaceae (partly soot-blackened rachis)	-	1	-	-	-
Poaceae (awn fragments)	-	1	-	-	-
Uncharred root/rhizome fragments	+++++	+++++	++	+++++	++
Percentage of feature sampled	**50%**	**50%**	**?**	**?**	**50%**
Sample volume (litres)	**30L**	**30L**	**30L**	**40L**	**20L**
Volume processed (litres)	**30L**	**30L**	**30L**	**40L**	**20L**
Volume of flot(litres)	**0.1L**	**0.05L**	**0.025L**	**0.080L**	**0.020L**
Other remains					
Magnetic Material	++	+++	++	++	+
Spheriodal hammerscale	-	1	1	-	-
?coal	-	++	-	-	+

Key - + =1-10, ++=11-50,+++=51-150,++++=151-250,+++++=>250

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