SUFFOLK ARCHAEOLOGY

• A HISTORY OF EXPERTISE •

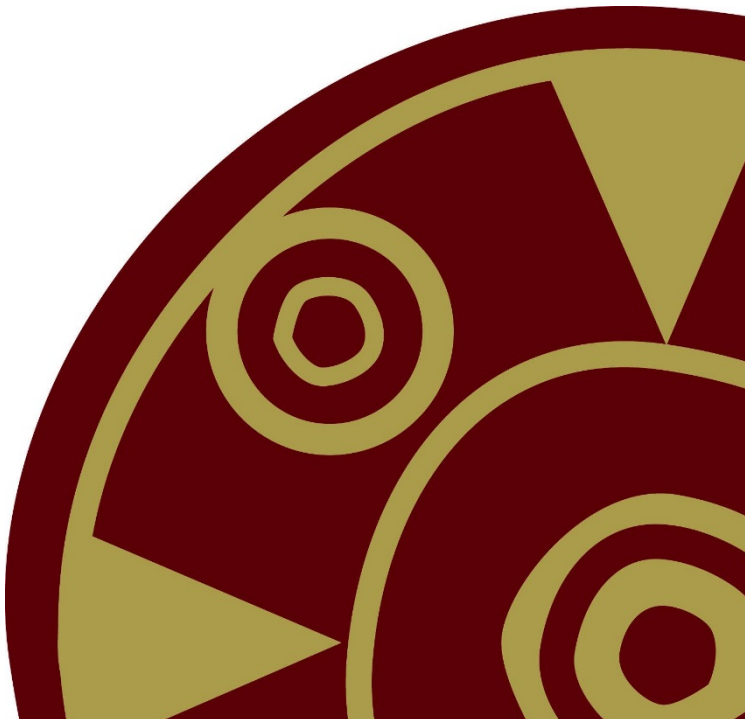
Houldsworth Valley Primary School

Newmarket, Suffolk

Client:
Concertus Design & Property Consultants Ltd

Date:
August 2016

NKT 063 / ESF24047
Archaeological Evaluation Report
SACIC Report No. 2016_064
Author: Martin Cuthbert BA (Hons) ACIfA



Houldsworth Valley Primary School, Newmarket, Suffolk NKT 063

Archaeological Evaluation Report

SACIC Report No. 2016_064

Author: Martin Cuthbert

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Illustrator: Gemma Bowen

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Report Date: August 2016

HER Information

Site Code/Event Number:	**NKT 063/ ESF 24047**
Site Name:	**Houldsworth Valley Primary School, Newmarket, Suffolk**
Report Number	**2016_064**
Planning Application No:	**Pre-Application**
Date of Fieldwork:	**16 August 2016**
Grid Reference:	**TL 6368 6336**
Oasis Reference:	**253326**
HER Search Reference:	**9191028**
Curatorial Officer:	**Rachael Abraham (Suffolk CC Archaeological Service)**
Project Officer:	**Martin Cuthbert BA (Hons) ACIfA**
Client/Funding Body:	**Concertus Design & Property Consultants**
Client Reference:	**n/a**

Digital report submitted to Archaeological Data Service:
http://ads.ahds.ac.uk/catalogue/library/greylit

Prepared By: Martin Cuthbert
Date: 25th August 2016
Approved By: John Craven
Position: Project Manager
Date:
Signed:

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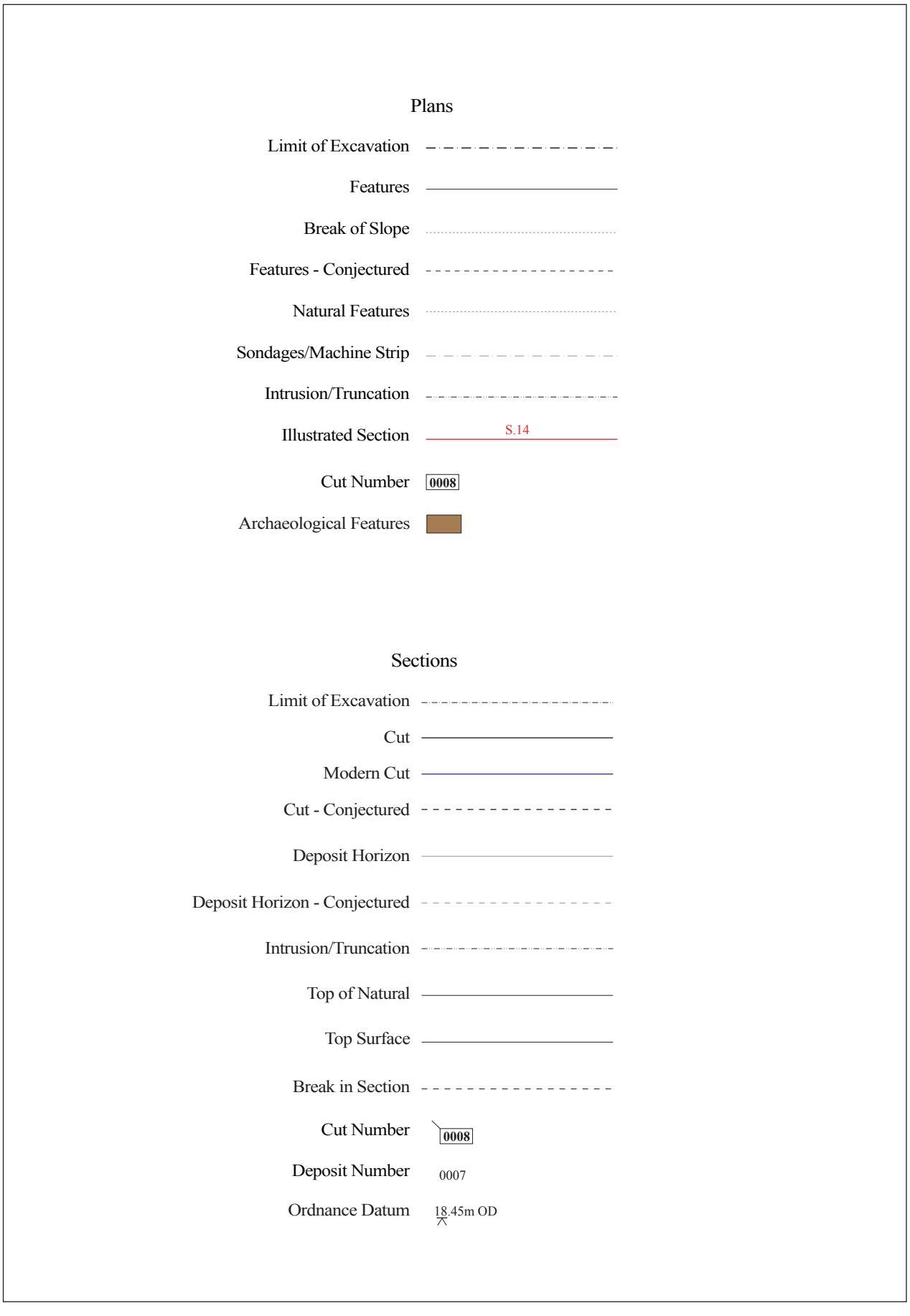
Summary

In August 2016 a trial trench evaluation was undertaken at Houldsworth Valley Primary School, Newmarket, Suffolk to inform proposals for the development of a new classroom block and courtyard. Four trenches were excavated within the footprint of the development. Trenches 1 and 2 were devoid of archaeological remains. Trench 3 contained a post-medieval ditch, that aligns with a field boundary shown on the 1880 Ordnance Survey, and a possible medieval posthole. Trench 4 contained a single post-medieval ditch. No other archaeological features were identified in either trench.

Drawing Conventions



1. Introduction

In August 2016 Suffolk Archaeology CIC (SACIC) carried out an archaeological evaluation at Houldsworth Valley Primary School, Newmarket, Suffolk. The project was commissioned by Concertus Design & Property Consultants and undertaken according to a Brief (dated 27/04/2016) produced by the Archaeological Advisor (AA) to the Local Planning Authority (LPA), Rachael Abraham of Suffolk County Council Archaeological Service/ Conservation Team (SCCAS/CT) and then addressed by a SACIC Written Scheme of Investigation (Craven, 2016, Appendix 1).

This evaluation was required under the terms of the *National Planning Policy Framework* (NPPF), in order to inform proposals for the development of the site. The proposed development consists of the erection of a new classroom block and courtyard.

The site is located in the Forest Heath district of Suffolk, in the civil parish of Newmarket. It is situated 0.35km to the west of the town centre, centred on NGR TL 6368 6336 (Fig. 1). The site consists of a single L-shaped area, equating 0.2 hectares, bounded by the current school building to the north, west and east and to the south by the school playing field.

2. Geology and topography

The geology of Newmarket comprises Holywell Nodular and New Pit chalk formations overlain by clay-silt deposits (BGS online). The chalk geology within the evaluation trenches contained occasional silt-filled scars and interstices throughout. The site is flat and lies at an elevation of *c*.30m AOD.

3. Archaeology and historical background

The development area lies within an area of archaeological potential as defined in the Suffolk County Council Historic Environment Record (HER). The results of a search of the HER commissioned as part of the project (Ref No. 9191028) are included in the digital project archive.

An evaluation carried out by Oxford Archaeology East (NKT 043, Haskins 2012) to the south of the development area recorded prehistoric and medieval horizons. The

trenches nearest the development area contained a relatively concentrated collection of prehistoric postholes dated to the Early-Middle Bronze Age and Iron Age periods as well as two medieval postholes.

An evaluation carried out by the Suffolk County Council Archaeological Field Team (NKT 057, Beverton 2014), prior to construction of a school building directly to the west of the development site, recorded a single post-medieval ditch and two undated postholes that may represent a post-medieval field division or an earlier phase and continuation of the prehistoric horizon identified to the south.

The medieval core of Newmarket is located approximately 330m to the east of the site whilst Newmarket High Street, upon which medieval Newmarket is primarily arranged, continues south-west approximately 350m to the south of the development area. The north-eastern portion of the High Street is thought to be part of a collection of contiguous established trackways known as the Icknield Way which previously extended across East Anglia and south towards Wessex during the Anglo-Saxon period. A collection of 15th century manor and court rolls investigated by May (1975) suggest that the Icknield Way deviates from the High Street's alignment at 'le Ikenelseway' now named Palace Street and heads further south. The same rolls indicate that the land north-west of the intersection of Fitzroy Street and Black Bear Lane, which includes the development area, consisted of 'Common fields' (Fig. 4).

The 1821 enclosure map of Newmarket as well as the 1886 and 1902 Ordnance Survey maps show that the development area spanned two paddocks divided by a north-west to south-east boundary set at a right angle to Rowley Drive and leading to a stable at the north-west end of the paddock (Fig. 5). A later Ordnance Survey map (1926) indicates that the boundary was no longer present at this time.

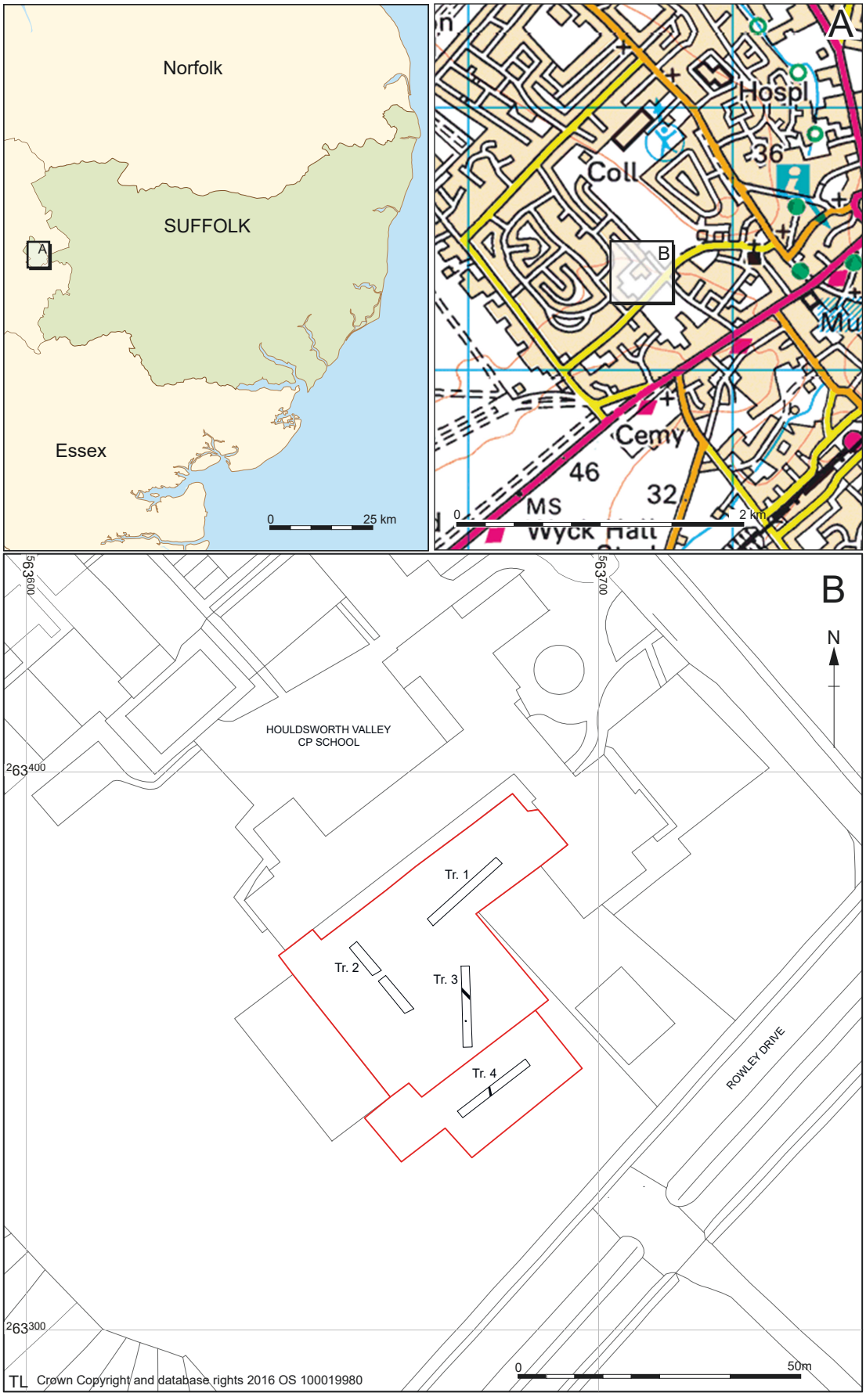


Figure 1. Location of site, showing trench positions and features

4. Methodology

Four trenches were excavated across the development area. The trenches were opened using a mechanical excavator fitted with a 1.5m wide toothless ditching bucket, working under archaeological supervision. Topsoil followed by the subsoil was removed, exposing the superficial geological layers of the site. Following excavation each trench was cleaned sufficiently to determine if archaeological remains were present. Basic trench information was recorded on pro-forma sheets and a photographic record was compiled. Measured profiles were drawn at a scale of 1:20 and all planning was carried out with a Leica RTK GNSS working with accuracy tolerances of sub 0.05m. The spoil heaps were visually scanned and metal detected for the presence of archaeological artefacts, but none were recovered.

The southwestern end of Trench 1 was moved two metres south of its proposed location and a section of Trench 2, six metres from the north-western end, was unexcavated, both due to the presence of an underground cable.

Site data has been added onto an MS Access database and recorded using the County HER code NKT 063. An OASIS form has been completed for the project (Reference no. suffolka1-253326 – Appendix 4) and a digital copy of the report submitted for inclusion on the Archaeology Data Service database (http://ads.ahds.ac.uk/catalogue/library/greylit). The archive is currently located at SACIC's office in Needham Market, but will be transferred to the main store of Suffolk County Council Archaeological Service at Bury St Edmunds, upon approval of the report.

5. Results

5.1 Introduction

The excavated trenches measured 15m long by 1.5m wide. The soil profile was consistent throughout the trenches and is characterised as a topsoil (0001) of loose, mid grey clay and silt, *c*.0.22-0.36m thick, overlying the subsoil (0002) of mid orangey-grey-brown sandy-clay-silt, 0.14m-0.26m thick. The natural strata comprised chalk with frequent silt-filled geological scars.

At the interface between the topsoil and subsoil fragments of post-medieval pottery and clay pipe stems were noted but not retained.

The interface between the subsoil and natural chalk was mixed with larger quantities of chalk pebble inclusions. The identified features appeared to be cut through this mixed interface although this was only clearly visible in sections coinciding with the trench edge and was not apparent whilst machining.

Trenches 3 & 4 contained archaeological features, and are discussed below. Trenches 1 and 2 were devoid of archaeological remains. A full breakdown of context descriptions and dimensions are present in Appendix 2 of this report, whilst plans and sections are displayed on Figures 2 & 3.

5.2 Trench results

Trench 3

Ditch 0003

Ditch 0003 was located 3.6m from the northern end of the trench, orientated NW-SE (Pl. 1; Fig. 2). The ditch measured 0.54m wide with a steep-sided profile (0.27m deep) breaking to a flat base. The ditch contained a single fill, 0004, of mid orange-brown silt with occasional stone inclusions. Occasional fragments of coke and two small pieces of post medieval ceramic building material (CBM) were recovered from the ditch.

Plate 1. Northwest-facing section through ditch 0003, 0.5m scale.

Posthole 0005

Posthole 0005 was located 4.6m from the southern end of the trench (Pl. 2; Fig. 3). The posthole was circular in plan with a steep-sided profile leading to a flat base. The

posthole measured 0.38m x 0.34m and 0.25m deep and contained two distinct fills. Fill 0006 consisted of mid-grey silt with frequent chalk inclusions and once represented packing around the post. Fill 0007 comprised a dark grey silt and represents the backfill after the post was removed or is the remnant of the post rotting *in situ*. A single fragment of abraded 13th -15th century roof tile was recovered from fill 0007.

No others archaeological features were identified within Trench 3.

Plate 2. Northwest-facing section through posthole 0005, 0.5m scale.

Trench 4

Ditch 0009

Ditch 0009 was located 7.8m from the north-eastern end of the trench, orientated N-S (Pl. 3; Fig. 3). The ditch measured 0.50m wide with a gradual sided profile (0.10m deep) breaking to a gradual concave base. The ditch contained a single fill, 0004, of mid orange-brown silt with occasional stone inclusions. Occasional fragments of coke and a

single fragment of post-medieval clay pipe stem were recovered from the ditch.

No others archaeological features were identified within Trench 4.

Plate 3. South-facing section through ditch 0009 within Trench 4, 0.5m scale.

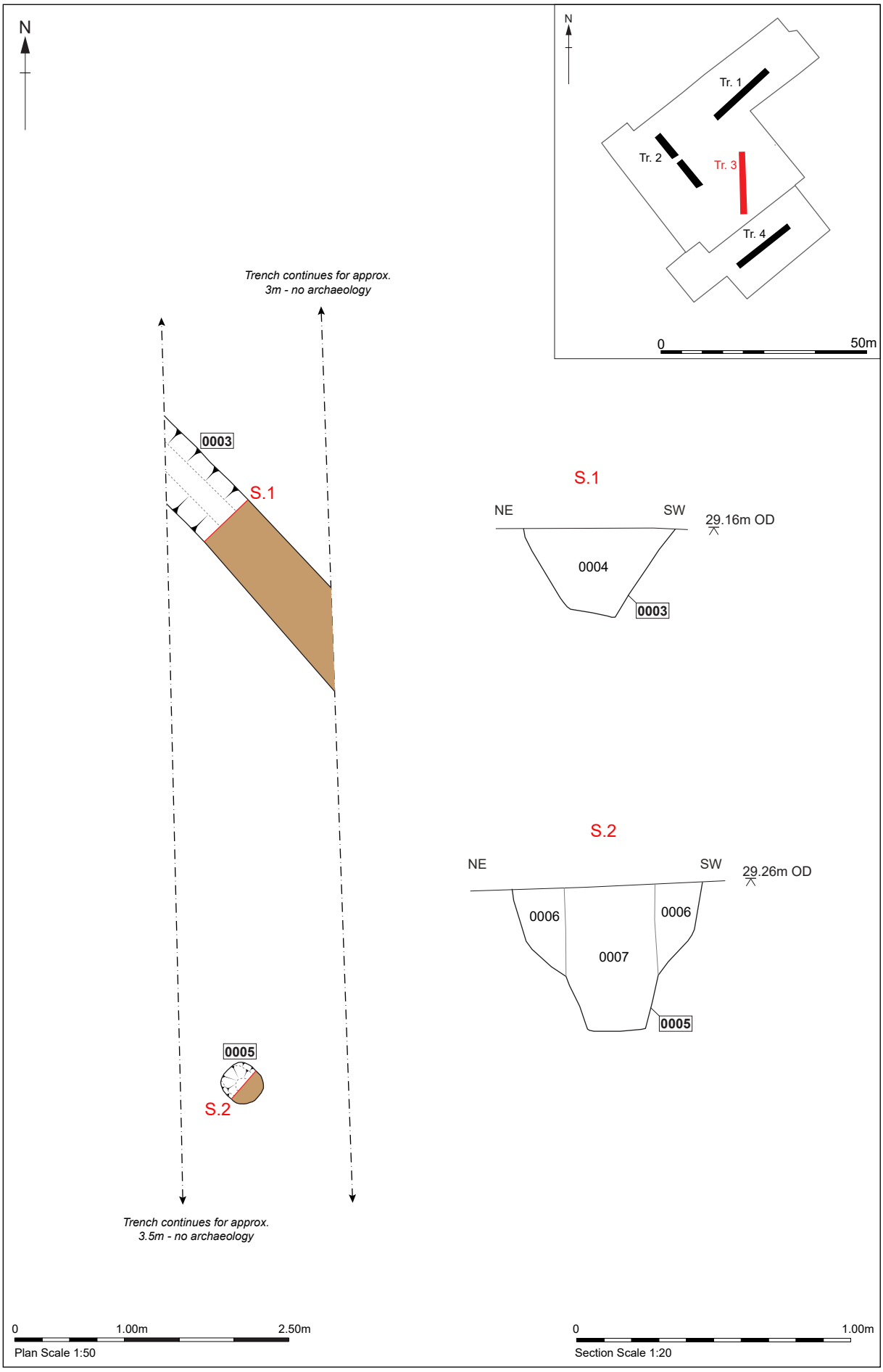


Figure 3. Trench 3, plan and sections

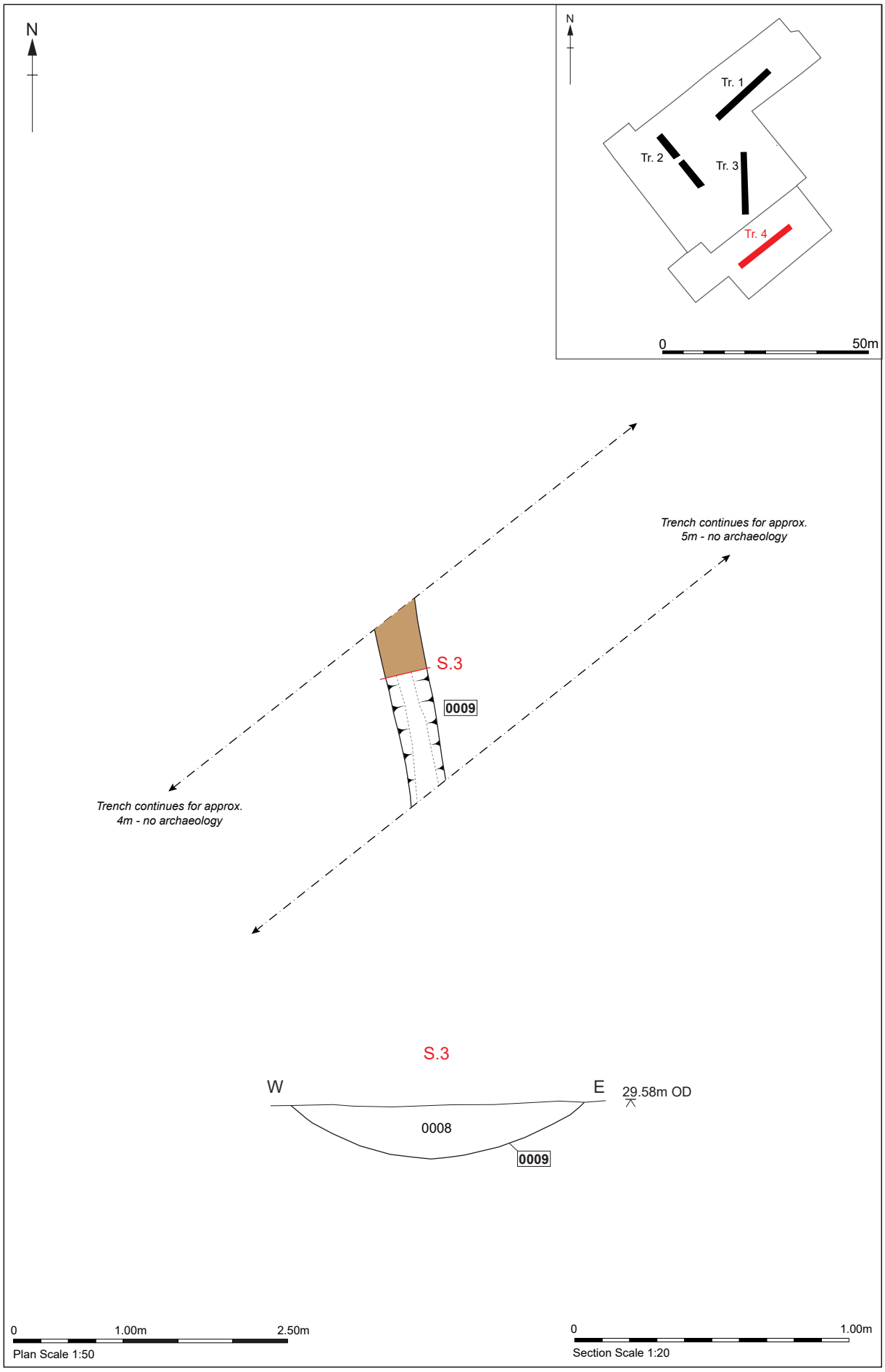


Figure 3. Trench 4, plan and section

6. Finds and environmental evidence

Richenda Goffin

6.1 Introduction

Only very small quantities of artefactual material were recovered from the evaluation. These are listed below.

Context	CBM		Clay Pipe		Stone		Overall date
	No	Wt/g	No	Wt/g	No	Wt/g	
0004	2	3					Pmed
0007	1	14			1	2	Med
0008			1	6			17th-19th century
Total	**3**	**17**	**1**	**6**	**1**	**2**	

Table 1. Finds quantities

6.2 The Ceramic Building Material

A very small piece of abraded ceramic building material in an orange medium sandy fabric with ferrous inclusions from fill 0004 of ditch 0003 (Trench 3) is post-medieval. It is accompanied by a small sliver of a lighter orange finer fabric, which is also a similar date.

A single abraded fragment of medieval roofing tile was recovered from the fill 0007 of posthole 0005, also Trench 3, dating to the 13th-15th century. It has a dense grey inner core with oxidised external margins, and contains sparse rounded and sub-rectangular voids, some which are from calcareous material.

6.3 Clay tobacco pipe

A fragment of a tobacco pipe was found in fill 0008 of ditch 0009 (Trench 4). It is part of the stem, approaching the junction with the pipe bowl. No diagnostic features have survived, so the pipe can only be broadly dated to the 17th-19th century.

6.4 Stone

A small sliver of a fragment of burnt stone from the fill 0007 of posthole 0005 cannot be dated (Trench 3).

6.5 Discussion of material evidence

Very few finds were recovered from two trenches of the evaluation. A small amount of medieval roofing tile is the earliest datable find, with the remainder of the artefacts being post-medieval in date.

7. Discussion

Ditch 0003 contained a two small pieces of post-medieval CBM and fragments of coke. The ditch was orientated NW-SE and is on the same alignment and located in close proximity to a field boundary shown on the 1886 Ordnance Survey (Fig. 5).

Posthole 0005 contained an abraded fragment of 13th-15th century roof tile. No other medieval finds were recovered from the site and no other postholes were noted in the trench.

Shallow ditch 0009 contained a single fragment of post-medieval clay pipe stem and fragments of coke. The ditch does not align with any documented mapping evidence although the boundary may have been too insignificant to have been recorded.

Both ditches, 0003 and 0009, were observed in the trench section to cut through the mixed interface deposit identified at the base of the subsoil and above the natural chalk. The relationship of posthole 0005 with this mixed interface layer is uncertain.

An evaluation trench excavated directly to the west of the site (Beverton, 2014) identified a NE-SW orientated ditch. If the ditch continued on the same alignment it was likely to be revealed within Trench 2 of the current trenching, however no archaeological features were identified within Trench 2.

Evaluation trenches on ‘land to the rear of the High Street’ (Haskins 2012) identified a collection of prehistoric postholes approximately 75m to the south. There is no evidence to suggest that the prehistoric activity to the south of the site continues into the development area.

8. Conclusions and recommendations for further work

The evaluation has successfully defined the character and significance of the heritage assets of the historic periods which are present at the development site. The heritage assets are sparse and comprised a posthole of possible medieval date and two post-medieval ditches, one of which aligns with a boundary identified on the 1886 OS mapping.

The heritage assets of the historic periods are of local significance and there is a low-medium potential for the presence of similar features across the development site.

The evaluation took place in dry weather conditions. Full co-operation was received from the contractors and a high degree of confidence is attached to the results of the evaluation. The final decision on further work rests with SCCAS/CT.

9. Archive deposition

The project archive consisting of all paper and digital records will be deposited within the Suffolk County Environment Record and ownership transferred within 6 months of completion of fieldwork. Until deposition, the archive will be held by SACIC.

10. Acknowledgements

The fieldwork was carried out by Martin Cuthbert BA (Hons) ACI*f*A and Romy McIntosh and directed by Martin Cuthbert. Project management was undertaken by John Craven BA (Hons) who also provided advice during the production of the report.

Post-excavation management was provided by Richenda Goffin BA (Hons) PG Dip MCI*f*A. Finds processing and analysis was undertaken by Jonathan van Jennians. The specialists finds report was produced by Richenda Goffin.

The report illustrations were created by Gemma Bowen and the report was edited by Richenda Goffin.

11. Bibliography

Abraham, R., 2016, *Brief for an Archaeological Evaluation at Houldsworth Valley Primary School, Newmarket, Suffolk* SCCAS/CT .

Beverton, A., 2014 *Houldsworth Valley Primary School, Newmarket, Suffolk - Archaeological Evaluation Report*, SCCAS Grey Literature Report No. 2014/023.

Craven, J., 2016 *Houldsworth Valley Primary School, Newmarket, Suffolk - Written Scheme of Investigation and Risk Assessment for Trenched Evaluation,* Suffolk Archaeology CIC.

Haskins, A., 2012 *Archaeological Evaluation of land to the rear of the High Street, Newmarket, Suffolk* Oxford Archaeology East Grey Literature Report No. 1407, Archaeology Data Service.

May, P, 1975, '*Newmarket 500 years ago*' in Proceedings of the Suffolk Institute of Archaeology and History, Vol XXXIII, part 3, 253-274.

Websites

British Geological Survey

Appendix 1. Written Scheme of Investigation

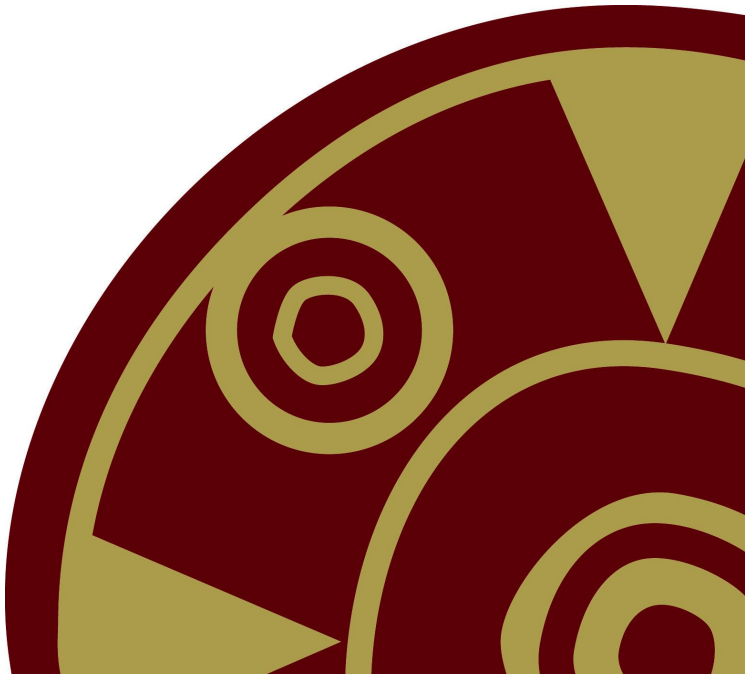
SUFFOLK ARCHAEOLOGY
• A HISTORY OF EXPERTISE •

Houldsworth Valley Primary School
Newmarket, Suffolk

Client:
Concertus Design & Property Consultants Ltd

Date:
May 2016

NKT 063 / ESF24047
Written Scheme of Investigation and Risk Assessment – Archaeological Evaluation
Author: John Craven



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Project details

Planning Application No:	Pre-planning
Curatorial Officer:	Rachael Abraham (Suffolk CC Archaeological Service)
Grid Reference:	TL 636 633
Area:	*c.*0.2ha
HER Event No/Site Code:	ESF24047 / NKT 063
Oasis Reference:	253326
Project Start date	July/August 2016
Project Duration:	c. 2 days
Client/Funding Body:	Concertus Design & Property Consultants Ltd
SACIC Project Manager	John Craven
SACIC Project Officer:	TBC
SACIC Job Code:	NKTHOU001

1. Introduction

- A program of archaeological evaluation is required to assess the site of proposed development at Houldsworth Valley Primary School, Newmarket, Suffolk (Fig. 1) for heritage assets, prior to consideration of a future planning application, in accordance with paragraph 141 of the National Planning Policy Framework. The proposed development will involve significant ground disturbance and this could have a detrimental impact upon any archaeological deposits that exist.
- The work required is detailed in a Brief (dated 27/04/2016), produced by the archaeological adviser to the Local Planning Authority (LPA), Rachael Abraham of Suffolk County Council Archaeological Service (SCCAS).
- Suffolk Archaeology (SACIC) has been contracted to carry out the project. This document details how the requirements of the Brief and general SCCAS guidelines (SCCAS 2011) will be met, and has been submitted to SCCAS for approval on behalf of the LPA. It provides the basis for measurable standards and will be adhered to in full, unless otherwise agreed with SCCAS.
- The developments proposals comprise of a new classroom block and courtyard within the school grounds which lies to the west of Newmarket town centre.

2. Archaeological and historical background

- The condition has been placed as, according to the Brief, the site *'lies in an area of archaeological potential, as recorded by information held in the County Historic Environment Record (HER). Archaeological evaluation on land on the opposite side of Rowley Drive - c. 70m to the southeast - identified a group of Prehistoric and medieval features indicative of settlement in the area (Oxford Archaeology East Report 1407; HER no. NKT 043). In February 2014 an archaeological evaluation for another classroom block at this site located two undated postholes from a building not recorded on the historic maps (SCC Archaeology Service Report 2014/023; NKT 057). These are potentially early, and may relate to the prehistoric settlement site on the opposite side of Rowley Drive.'*

Figure 1. Location map

3. Project Objectives

- The aim of the evaluation is to accurately quantify the quality and extent of the sites archaeological resource so that an assessment of the developments impact upon heritage assets can be made.
- The evaluation will:
  - Establish whether any archaeological deposits exist in the application area, with particular regard to any which are of sufficient importance to merit preservation *in situ.*
  - Identify the date, approximate form and function of any archaeological deposits within the application area.
  - Establish the extent, depth and quality of preservation of any archaeological deposits within the application area.
  - Evaluate the likely impact of past land uses and whether masking alluvial or colluvial deposits are present.
  - Establish the potential for the survival of environmental evidence.
  - Assess the potential of the site to address research aims defined in the Regional Research Framework for the Eastern Counties (Brown and Glazebrook 2000, Medlycott 2011).
  - Provide sufficient information for SCCAS to construct an archaeological conservation strategy dealing with preservation or the further recording of archaeological deposits.
  - Provide sufficient information for the client to establish time and cost implications for the development regarding the application areas heritage assets.

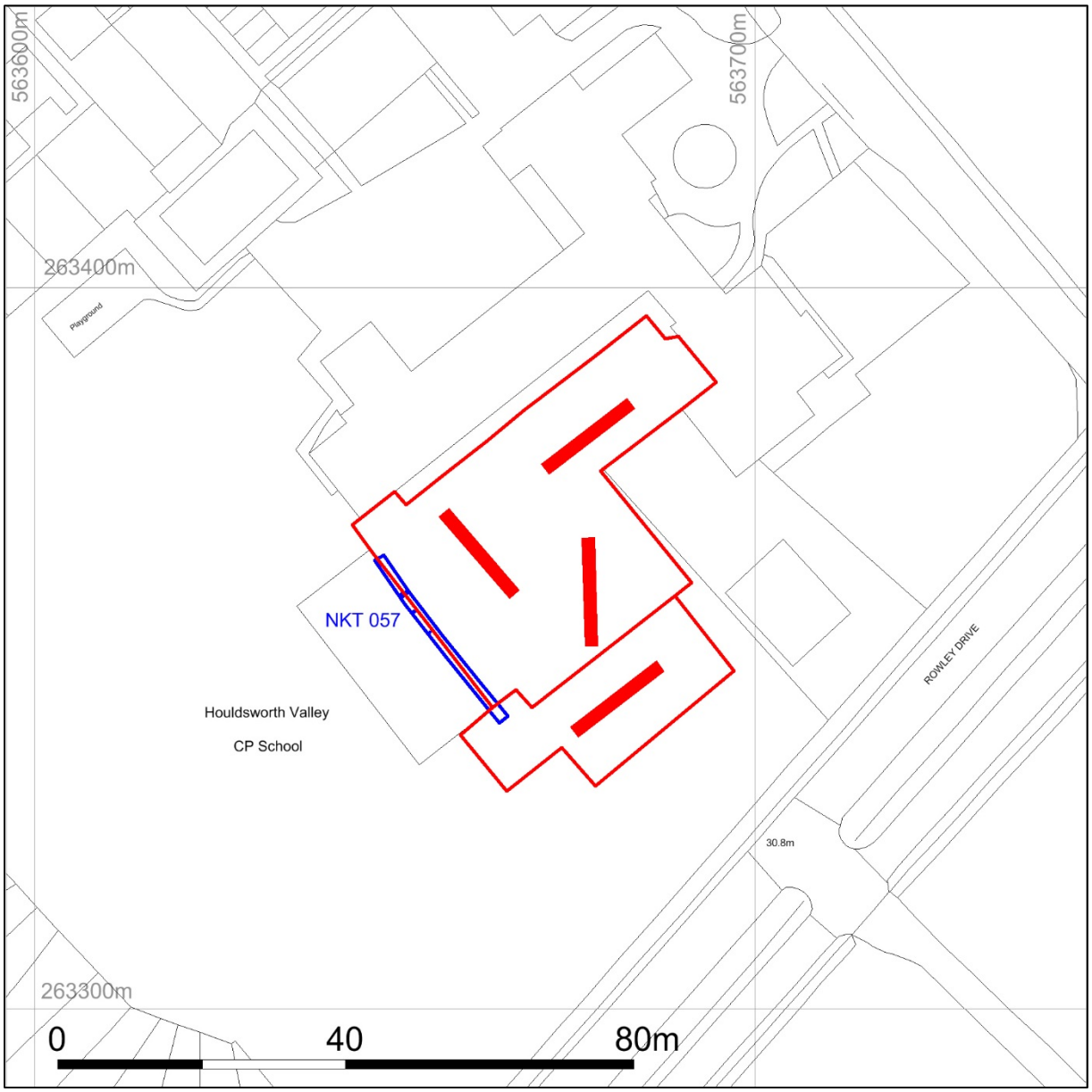

Figure 2. Proposed trench plan

4. Archaeological method statement

4.1. Management

- The project will be managed by SACIC Project Officer John Craven in accordance with the principles of *Management of Research in the Historic Environment* (MoRPHE, Historic England 2015).
- SCCAS will be given five days notice of the commencement of the fieldwork and arrangements made for SCCAS visits to enable the works to be monitored effectively.
- Full details of project staff, including sub-contractors and specialists are given in section 6 below.

4.2. Project preparation

- An event number and site code has been obtained from the Suffolk HER Officer and will be included on all future project documentation.
- An OASIS online record has been initiated and key fields in details, location and creator forms have been completed.
- An HER search will be requested from the Suffolk HER Officer and will be used to inform fieldwork and the subsequent report. The reference number will be included in the report.
- A pre-site inspection and Risk Assessment for the project has been completed.

4.3. Fieldwork

- Fieldwork standards will be guided by 'Standards for Field Archaeology in the East of England', EAA Occasional Papers 14, and the Chartered Institute For Archaeology's (CIFA) paper 'Standard and Guidance for archaeological field evaluation', 2014.
- The archaeological fieldwork will be carried out by members of SACIC led by a Project Officer. The fieldwork team will be drawn from a pool of suitable staff at

SACIC and will include an experienced metal detectorist/excavator.

- The project Brief requires 5% of the 0.2ha application area to be evaluated, with trenches positioned to samples all areas of the site. This amounts to 55m of 1.8m wide trenches, or 100sqm, and a proposed plan of 60m of trenching is included above (Fig. 2). If necessary minor modifications to the trench plan may be made onsite to respect any previously unknown buried services, areas of disturbance/contamination or other obstacles.
- The trench locations will be marked out using an RTK GPS system.
- The trenches will be excavated using a machine equipped with a back-acting arm and toothless ditching bucket (measuring at least 1.6m wide), under the supervision of an archaeologist. This will involve the removal of an estimated 0.3m-0.5m of ploughsoil until the first visible archaeological surface or subsoil surface is reached.
- Spoilheaps will be created adjacent to each trench and topsoil and subsoil will be kept separate if required. Spoilheaps will be examined and metal-detected for archaeological material.
- The trench sides, base and archaeological surfaces will be cleaned by hand as necessary to identify archaeological deposits and artefacts and allow decisions to be made on the method of further investigation by the Project Officer. Further use of the machine, i.e. to investigate thick sequences of deposits by excavation of test pits etc, may be undertaken as necessary after consultation with SCCAS.
- There will be a presumption that a minimum of disturbance will be caused whilst achieving adequate evaluation of the site, i.e. establishing the period, depth and nature of archaeological deposits. Typically 50% of discrete features such as pits and 1m slots across linear features will be sampled by hand excavation, although in some instances 100% may be removed, with the aim of establishing date and function. All identified features will be investigated by excavation unless otherwise agreed with SCCAS. Significant archaeological features such as solid or bonded structural remains, building slots or postholes will be preserved intact if possible.
- Sieving of deposits using a 10mm mesh will be undertaken if they clearly appear to be occupation deposits or structurally related. Other deposits may be sieved at the judgement of the excavation team or if directed by SCCAS.

- Any fabricated surface (floors, yards etc) will be fully exposed and cleaned.
- Metal detector searches will take place throughout the excavation by an experienced SACIC metal-detectorist.
- The depth and nature of colluvial or other masking deposits across the site will be recorded.
- An overall site plan showing trench locations, feature positions, sections and levels will be made using an RTK GPS or Total Station Theodolite. Individual detailed trench or feature plans etc will be recorded by hand at 1:10, 1:20 or 1:50 as appropriate to complexity. All excavated sections will be recorded at a scale of 1:10 or 1:20, also as appropriate to complexity. All such drawings will be in pencil on A3 pro forma gridded permatrace sheets. All levels will refer to Ordnance Datum. Section and plan drawing registers will be maintained.
- All trenches, archaeological features and deposits will be recorded using standard pro forma SACIC registers and recording sheets and numbering systems. Record keeping will be consistent with the requirements of the Suffolk HER and will be compatible with its archive.
- A photographic record, consisting of high resolution digital images, will be made throughout the evaluation. A number board displaying site code and, if appropriate, context number and a metric scale will be clearly visible in all photographs. A photographic register will be maintained.
- All pre-modern finds will be kept and no discard policy will be considered until all the finds have been processed and assessed. Finds on site will be treated following appropriate guidelines (Watkinson & Neal 2001) and a conservator will be available for on-site consultation as required.
- All finds will be brought back to the SACIC finds department at the end of each day for processing, quantifying, packing and, where necessary, preliminary conservation. Finds will be processed and receive an initial assessment during the fieldwork phase and this information will be fed back to site to inform the on-site evaluation methodology.
- Environmental sampling of archaeological contexts will, where possible, be carried out to assess the site for palaeoenvironmental remains and will follow appropriate guidance (Campbell *et al* 2011). In order to obtain palaeoenvironmental evidence,

bulk soil samples (of at least 40 litres each, or 100% of the context) will be taken using a combination of judgement and systematic sampling from selected archaeological features or natural environmental deposits, particularly those which are both datable and interpretable. All environmental samples will be retained until an appropriate specialist has assessed their potential for palaeoenvironmental remains. Decisions will be made on the need for further analysis following these assessments.

- If necessary, for example if waterlogged peat deposits are encountered, then advice will be sought from the Historic England Science Advisor for the East of England on the need for specialist environmental techniques such as coring or column sampling.
- If human remains are encountered guidelines from the Ministry of Justice will be followed and the Coroner informed. Human remains will be treated at all stages with care and respect, and will be dealt with in accordance with the law and the provisons of Section 25 of the Burial Act 1857. The evaluation will attempt to establish the extent, depth and date of burials whilst leaving remains *in situ.* If human remains are to be lifted, for instance if analysis is required to fully evaluate the site, then a Ministry of Justice license for their removal will be obtained in advance. In such cases appropriate guidance (McKinley & Roberts 1993, Brickley & McKinley 2004) will be followed and, on completion of full recording and analysis, the remains, where appropriate, will be reburied or kept as part of the project archive.
- In the event of unexpected or significant deposits being encountered on site, the client and SCCAS will be informed. Such circumstances may necessitate changes to the Brief and hence evaluation methodology, in which case a new archaeological quotation will have to be agreed with the client, to allow for the recording of said unexpected deposits. If an evaluation is aborted, i.e. because unexpected deposits have made development unviable, then all exposed archaeological features will be recorded as usual prior to backfilling and a report produced.
- Trenches will not be backfilled without the prior approval of SCCAS. Trenches will be backfilled, subsoil first then topsoil, and compacted to ground-level, unless

otherwise specified by the client. Original ground surfaces will not be reinstated but will be left as neat as practicable.

4.4. Post-excavation

- The post-excavation finds work will be managed by the SACIC Finds Team Manager, Richenda Goffin, with the overall post-excavation managed by John Craven. Specialist finds staff, whether internal SACIC personnel or external specialists, are experienced in local and regional types and periods for their field.
- All finds will be processed and marked (HER site code and context number) following ICON guidelines and the requirements of the Suffolk HER. For the duration of the project all finds will be stored according to their material requirements in the SACIC store at needham Market, Suffolk. Metal finds will be stored in accordance with ICON guidelines, *initially recorded and assessed for significance* before dispatch to a conservation laboratory within 4 weeks of the end of the evaluation. All pre-modern silver, copper alloy and ferrous metal artefacts and coins will be x-rayed if necessary for identification. Sensitive finds will be conserved if necessary and deposited in bags/boxes suitable for long term storage to ICON standards. All coins will be identified to a standard acceptable to normal numismatic research.
- All on-site derived site data will be entered onto a digital (Microsoft Access) SACIC database.
- Bulk finds will be fully quantified and the subsequent data will be added to the digital site database. Finds quantification will fully cover weights and numbers of finds by context and will include a clear statement for specialists on the degree of apparent residuality observed.
- Assessment reports for all categories of collected bulk finds will be prepared in-house or commissioned as necessary and will meet appropriate regional or national standards. Specialist reports will include sufficient detail and tabulation by context of data to allow assessment of potential for analysis and will include non-technical summaries.
- Representative portions of bulk soil samples from archaeological features will be processed by wet sieving and flotation in-house in order to recover any

environmental material which will be assessed by external specialists. The assessment will include a clear statement of potential for further analysis either on the remaining sample material or in future fieldwork.

- All hand drawn site plans and sections will be scanned.
- All raw data from GPS or TST surveys will be uploaded to the project folder, suitably labelled and kept as part of the project archive.
- Selected plan drawings will then be digitised as appropriate for combination with the results of digital site survey to produce a full site plan, compatible with MapInfo GIS software.
- All hand-drawn sections will be digitised using autocad software.

4.5. Report

- A full written report on the fieldwork will be produced, consistent with the principles of MoRPHE (Historic England 2015), to a scale commensurate with the archaeological results. The report will contain a description of the project background, location plans, evaluation methodology, a period by period description of results, finds assessments and a full inventory of finds and contexts. The report will also include scale plans, sections drawings, illustrations and photographic plates as required.
- The objective account of the archaeological evidence will be clearly separated from an interpretation of the results, which will include a discussion of the results in relation to relevant known sites in the region that are recorded in the Suffolk HER and other readily available documentary or cartographic sources.
- The report will include a statement as to the value, significance and potential of the site and its significance in the context of the Regional Research Framework for the East of England (Brown and Glazebrook, 2000, Medlycott 2011). This will include an assessment of potential research aims that could be addressed by the site evidence.
- The report will contain sufficient information to stand as an archive report should further work not be required.

- The report may include SACIC's opinion as to the necessity for further archaeological work to mitigate the impact of the sites development. The final decision as to whether any recommendations for further work will be made however lies solely with SCCAS and the LPA.
- The report will include a summary in the established format for inclusion in the annual *'Archaeology in Suffolk'* section of the Proceedings of the Suffolk Institute of Archaeology and History.
- A copy of this Written Scheme of investigation will be included as an appendix in the report.
- The report will include a copy of the completed project OASIS form as an appendix.
- An unbound draft copy of the report will be submitted to SCCAS for approval within 4 weeks of completion of fieldwork.

4.6. Project archive

- On approval of the report a printed and bound copy will be lodged with the Suffolk HER. A digital .pdf file will also be supplied, together with a digital and fully georeferenced vector plan showing the application area and trench locations, compatible with MapInfo software.
- The online OASIS form for the project will be completed and a .pdf version of the report uploaded to the OASIS website for online publication by the Archaeological Data Service. A paper copy of the form will be included in the project archive.
- A second bound copy of the report will be included with the project archive.
- A digital .pdf copy of the approved report will be supplied to the client, together with our final invoice for outstanding fees. Printed and bound copies will be supplied to the client on request.
- The project archive, consisting of the complete artefactual assemblage, and all paper and digital records, will be deposited in the SCCAS Archaeological Store at Bury St Edmunds within 6 months of completion of fieldwork. The project archive will be consistent with MoRPHE (Historic England 2015) and ICON guidelines. The project archive will also meet the requirements of SCCAS (SCCAS 2014).

- The project costing includes a sum to meet SCCAS archive charges. A form transferring ownership of the archive to SCCAS will be completed and included in the project archive.
- If the client, on completion of the project, does not agree to deposit the archive with, and transfer to, SCCAS, they will be expected to either nominate another suitable depository approved by SCCAS or provide as necessary for additional recording of the finds archive (such as photography and illustration) and analysis. A duplicate copy of the written archive in such circumstances would be deposited with the Suffolk HER.
- Exceptions from the deposition of the archive described above include:
    - Objects that qualify as Treasure, as detailed by the Treasure Act 1996. The client will be informed as soon as possible of any such objects are discovered/identfied and the find will be reported to SCCAS and the Suffolk Finds Liaison Officer and hence the Coroner within 14 days of discovery or identification. Treasure objects will immediately be moved to secure storage at SCCAS and appropriate security measures will be taken on site if required. Any material which is eventually declared as Treasure by a Coroners Inquest will, if not acquired by a museum, be returned to the client and/or landowner. Employees of SCCAS, or volunteers etc present on site, will not eligible for any share of a treasure reward.
    - Other items of monetary value in which the landowner or client has expressed an interest. In these circumstances individual arrangements as to the curation and ownership of specific items will be negotiated.
    - Human skeletal remains. The client/landowner by law will have no claim to ownership of human remains and any such will be stored by SCCAS, in accordance with a Ministry of Justice licence, until a decision is reached upon their long term future, i.e. reburial or permanent storage.

Bibliography

Brickley, M., and McKinley, J. I., 2004, *Guidelines to the Standards for Recording Human Remains*. IFA Professional Practice Paper No 7.

Brown, N and Glazebrook, J. (Eds), 2000, *Research and Archaeology: a Framework for the Eastern Counties, 2. Research Agenda and Strategy.* East Anglian Archaeology Occasional Paper No. 8.

Campbell. G, Moffett. L and Straker V., 2011, *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition).* Portsmouth: English Heritage.

Historic England, 2015, *Management of Research in the Historic Environment (MoRPHE)*.

Gurney, D., 2003*, Standards for Field Archaeology in the East of England.* East Anglian Archaeology Occasional Paper No 14.

Chartered Institute for Archaeologists, 2014, *Standard and Guidance for archaeological field evaluation.*

McKinley, J., I and Roberts, C., 1993, *Excavation and post-excavation treatment of cremated and inhumed human remains.* IFA Technical Paper No 13.

Medlycott, M. (Ed), 2011, *Research and Archaeology Revisited: A revised framework for the East of England.* EAA Occasional Paper 24.

SCCAS, 2014, *Deposition of Archaeological Archives in Suffolk.*

SCCAS, 2011, *Requirements for Trenched Archaeological Evaluation 2011, ver 1.2.*

Watkinson, D. and Neal, V., 2001, *First Aid for Finds.* Third Edition, revised. Rescue/UKIC Archaeology Section, London.

Appendix 2. Context List

Context No	Feature No	Feature Type	Description/Interpretation	Finds	Overall Date	Env. Sample	Trench
0001	0001	Layer	topsoil across whole site, loose mid grey brown silt with stone inclusions. Post-medieval pottery, animal bone and clay pipe stems at the horizon with the subsoil (not retained)	No		No	
			Topsoil				
0002	0002	Layer	subsoil of loose mid brown orange silt woth occasional chalk inclusions and cbm. Merged horizon with natural chalk layer	No		No	
			subsoil				
0003	0003	Ditch Cut	linear NW-SE orientated ditch steep sided with a sharp break to a flat base.	No		No	3
			cut of ditch				
0004	0003	Ditch Fill	mid orange brown silt with moderate chalk and stone inclusions. Similar to subsoil	Yes		No	3
			fill of ditch 0003				
0005	0005	Posthole Cut	circular in plan with a steep sided profile with a gradual break of slope to a flat base	No		No	3
			cut of posthole				
0006	0005	Posthole Fill	loose mid grey silt with frequent chalk inclusions.0.38	No		No	3
			redposited natural as packing for post				
0007	0005	Posthole Fill	loose dark grey silt with occasional stone inclusions	Yes		No	3
			fill of post pipe. Post rotting in situ or removed				
0008	0009	Ditch Fill	firm to omdertae compacted ligh brown orange silty clay with occasional chalk nodules	Yes		No	4
			fill of ditch 0009				
0009	0009	Ditch Cut	linear N-S alligned ditch with a shallow bowl shape section with gradual sloping sides with a gradual break of slope to a concave base	No		No	4
			shallow post medieval drainage ditch				
0010		Layer	chalk natural	No		No	
			chalk natural				

Appendix 3. Additional Figures

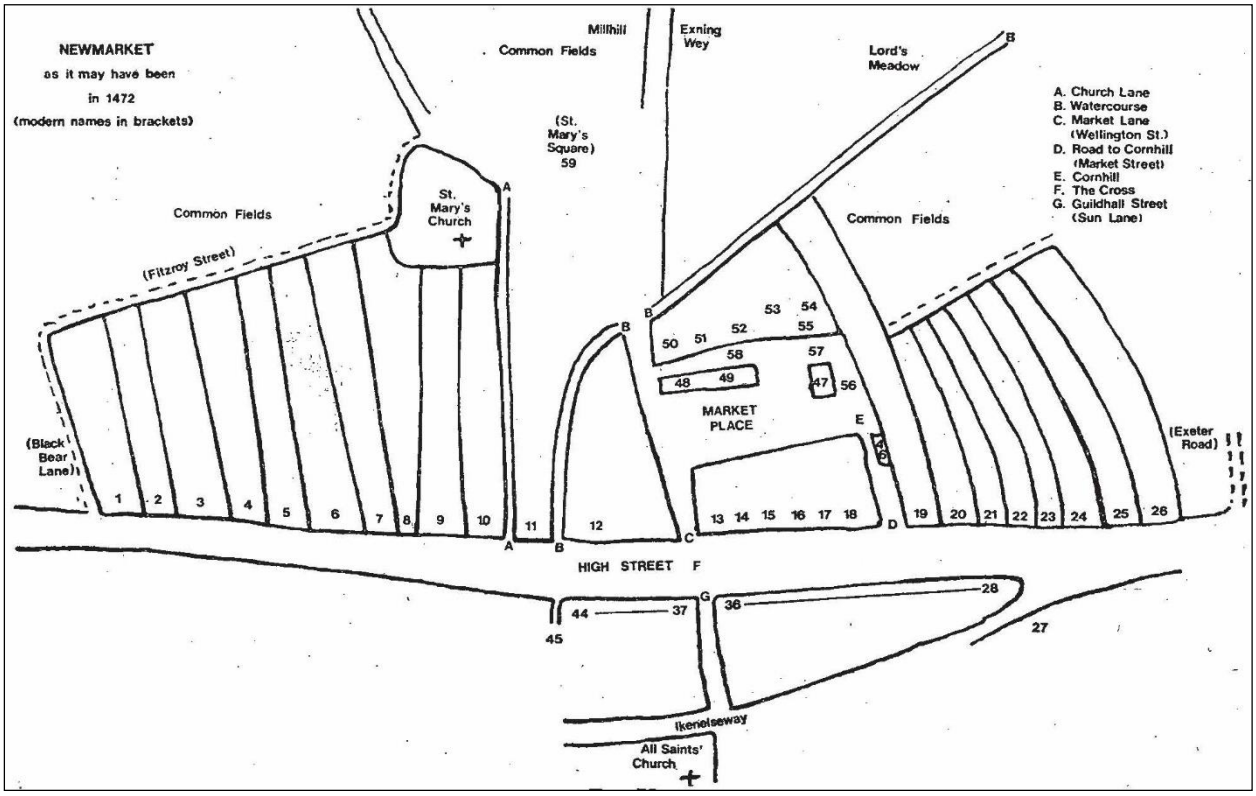

Figure 4. Interpretation of Newmarket from 15th century manor and court rolls (May 1975).

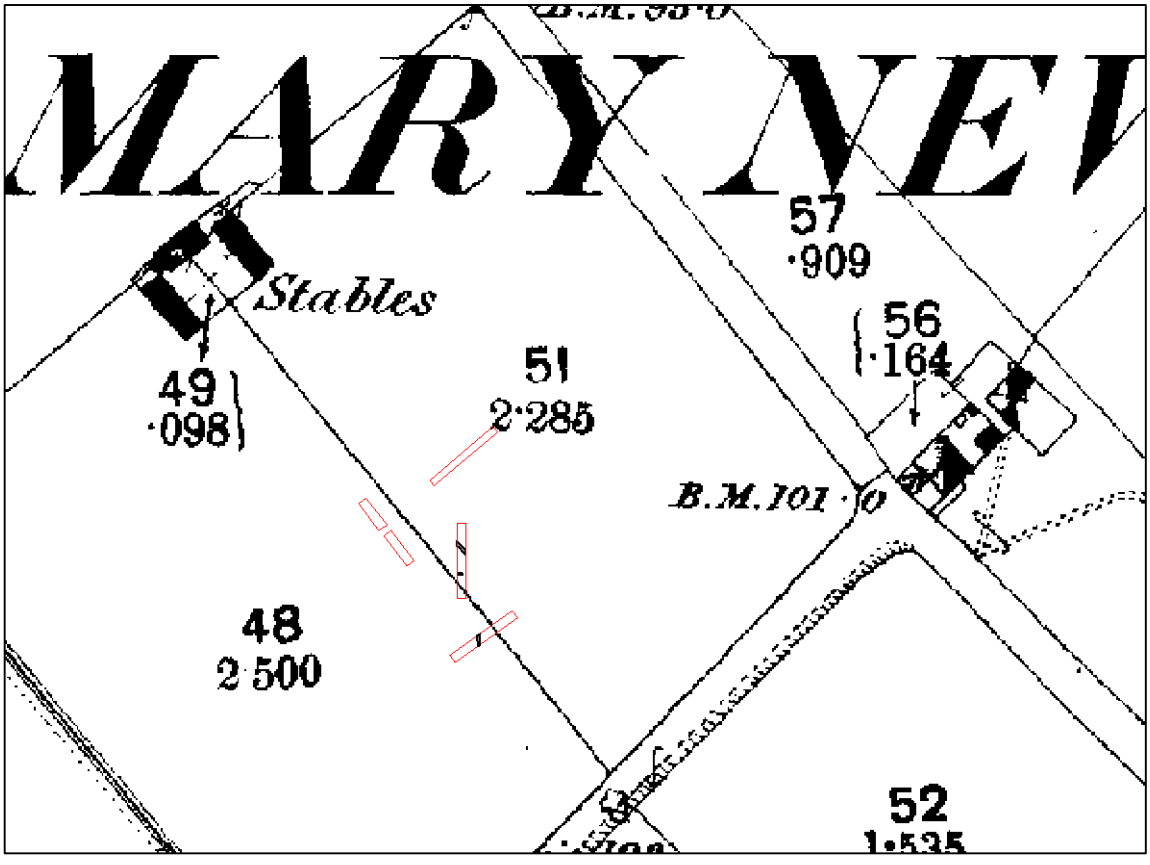

Figure 5. 1886 O.S map with evaluation trench (red) and features (grey).

Appendix 4. Oasis Form

OASIS DATA COLLECTION FORM: England

OASIS ID: suffolka1-253326

Project details

Project name	Houldsworth Valley Primary School
Project dates	Start: 15-08-2016 End: 16-08-2016
Previous/future work	Yes / Not known
Any associated project reference codes	2016_064 - Contracting Unit No.
Any associated project reference codes	ESF 24047 - HER event no.
Any associated project reference codes	NKT 063 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Community Service 1 - Community Buildings
Monument type	POSTHOLE Medieval
Monument type	DITCH Post Medieval
Monument type	DITCH Post Medieval
Significant Finds	CBM Medieval
Significant Finds	CLAY PIPE Post Medieval
Significant Finds	CBM Post Medieval
Methods & techniques	"'Sample Trenches"'
Development type	Urban commercial (e.g. offices, shops, banks, etc.)
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Pre-application

Project location

Country	England
Site location	SUFFOLK FOREST HEATH NEWMARKET Houldsworth Valley Primary School
Postcode	CB8 0PU
Study area	0.2 Hectares

Site coordinates	TL 6368 6336 52.243611762487 0.397692300633 52 14 37 N 000 23 51 E Point
Height OD / Depth	Min: 30m Max: 30m

Project creators

Name of Organisation	Suffolk Archaeology CIC
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Suffolk Archaeology CIC
Project director/manager	John Craven
Project supervisor	Martin Cuthbert
Type of sponsor/funding body	Consultants/architects
Name of sponsor/funding body	Concertus Design & Property Consultants

Project archives

Physical Archive recipient	Suffolk HER
Physical Contents	"Ceramics"
Digital Archive recipient	Suffolk HER
Digital Media available	"Images raster / digital photography","Survey","Text"
Paper Archive recipient	Suffolk HER
Paper Media available	"Context sheet","Drawing","Photograph","Plan","Report","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Houldsworth Valley Primary School Newmarket, Suffolk - Archaeological Evaluation Report
Author(s)/Editor(s)	Cuthbert, M.
Date	2016
Issuer or publisher	Suffolk Archaeology CIC
Place of issue or publication	Needham Market

Entered by	martin (martin.cuthbert@suffolkarchaeology.co.uk)
Entered on	24 August 2016

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