SUFFOLK ARCHAEOLOGY

• A HISTORY OF EXPERTISE •

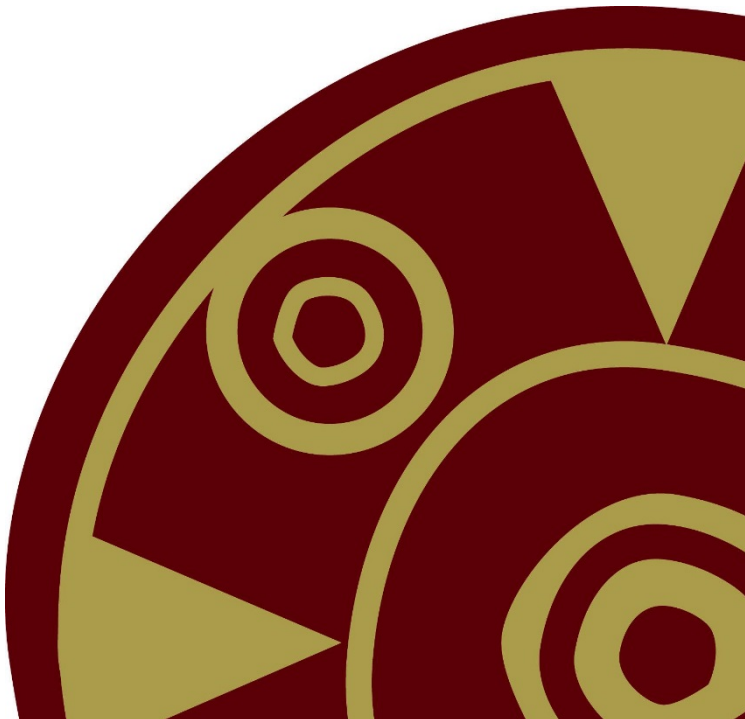
Primary Electrical Substation

Rougham, Suffolk

Client:
Taylor Wimpey East Anglia

Date:
January 2018

RGH 097
Archaeological Excavation Report
SACIC Report No. 2017/084
Author: Simon Cass



Primary Electrical Substation, Rougham
RGH 097

Archaeological Excavation Report

SACIC Report No. 2017/084

Author: Simon Cass

Contributions By: Sue Anderson, John Craven, Michael Green, Ioannis Smyrnaios and Anna West

Illustrator: Eleanor Cox

Editor: Richenda Goffin

Report Date: March 2018

HER Information

Site Code:	**RGH 097 / ESF 25787**
Site Name:	**Primary Electrical Substation**
Report Number	**2017/084**
Planning Application No:	**DC/16/2556/FUL**
Date of Fieldwork:	**11-21/09/2017**
Grid Reference:	**TL 8891 6411**
OASIS Reference:	**suffolka1-296959**
Curatorial Officer:	**Rachael Abraham**
Project Officer:	**Simon Cass**
Client/Funding Body:	**Taylor Wimpey East Anglia**

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

Prepared By:	Simon Cass
Date:	19/03/18
Approved By:	John Craven
Position:	Project Manger
Date:	25/01/19

Contents

List of Appendices

List of Figures

List of Tables

List of Plates

Summary

An archaeological excavation was carried out on land adjacent to the new Sybil Andrews School and Sports Centre off Skyliner Way to record archaeological deposits prior to the construction of a new electrical substation. A previous evaluation had revealed a cluster of Iron Age pits on the site and a large modern pit believed to relate to the former WW2 Rougham airfield. In addition, previous work at the adjacent school (RGH 066) and the new Eastern Relief Road (RGH 086) had indicated the presence of a large Iron Age enclosure ditch which was thought likely to pass through the site, although it was not identified in the evaluation trenches.

The excavation revealed a cremation debris pit with the partial remains of a juvenile, radiocarbon dated to the Middle Bronze Age, The presence of this pit is notable since no other cremation debris has been positively identified so far on the plateau and there is little evidence for contemporary Middle Bronze Age activity in the immediate vicinity.

A single ditch was identified on an approximately north-west/south-east orientation, which aligns with the known Iron Age boundary ditch system. Although the ditch itself was very shallow and disappeared within the site, it is possible that it represents one of the multiple redefinitions of the boundary seen to the south-east in the excavations for the Eastern Relief Road (RGH 086). A series of pits of varying size, containing evidence of domestic waste and probable hearth debris, were also identified and date to the middle Iron Age. Similar patterns of sparse scattered pitting has previously been seen across both the nearby excavations.

These results add to the picture of dispersed Iron Age occupation/settlement, previously seen in neighbouring fieldwork, which appears to extend across this plateau overlooking the Lark valley. The ditch seen in the latest site is another section of a boundary that can be traced for at least 800m and the pitting is similar to that seen on both the adjacent RGH 066 and RGH 086 excavations.

Drawing Conventions

Plans

Limit of Excavation

Features

Break of Slope

Features - Conjectured

Natural Features

Sondages/Machine Strip

Intrusion/Truncation

Illustrated Section S.14

Cut Number **0008**

Archaeological Feature

Sections

Limit of Excavation

Cut

Modern Cut

Cut - Uncertain

Deposit Horizon

Deposit Horizon - Uncertain

Intrusion/Truncation

Break in Section

Cut Number **0088**

Deposit Number 0089

Ordnance Datum S N 55.27

1. Introduction

An excavation to record archaeological assets, the presence of which had been previously demonstrated by a prior evaluation (Craven and Brooks, 2017) was undertaken in advance of the construction of a new electrical substation and associated tree planting at Rougham, Suffolk (Fig. 1) between the 11th and 21st September 2017 by Suffolk Archaeology CIC (SACIC). The work was required by a condition on planning application DC/16/2556/ FUL, in accordance with paragraph 141 of the National Planning Policy Framework.

The work required was detailed in a Brief (dated 05/07/2017), produced by the archaeological adviser to the Local Planning Authority (LPA), Rachael Abraham of Suffolk County Council Archaeological Service (SCCAS) and the project was carried out in accordance with an approved SACIC Written Scheme of Investigation (Appendix 7). The project was commissioned and funded by the developer Taylor Wimpey East Anglia.

Following fieldwork it was agreed with Rachael Abraham that the post-excavation assessment and analysis could be presented in a single full and final archive report, with a recommendation for incorporation of the site evidence into a future publication encompassing the more extensive works recently carried out by SACIC in the immediate area. An expanded summary of the site results is to be included in the annual fieldwork section of the Proceedings of the Suffolk Institute of Archaeology and History (PSIAH).

The site lies within what was, until very recently, open arable farmland on the eastern outskirts of modern Bury St Edmunds, on a level plateau *c.*3km east of the River Lark. The excavation comprised the northern half of the development site, the southern half having been identified during evaluation as significantly disturbed by modern activity (presumably related to the WW2 airfield surrounding the site), in an area of unmanaged field margin, at grid reference TL 8891 6411, adjacent to the newly constructed Eastern Relief Road and a new school complex (Sybil Andrews School).

2. Geology and topography

The site geology, as recorded by the British Geological Survey, consists to the west of superficial deposits of Cover Sand overlying bedrock deposits of Lewes Nodular Chalk, Seaford Chalk, Newhaven Chalk and Culver Chalk Formations, whilst to the east the same bedrock deposits are recorded beneath superficial deposits of Lowestoft Diamicton (BGS, 2017). On site, the geology presented itself as a mixture of patchy loose yellow and orange sand, with orange clayey-sand and small flints.

The excavation area was level, with a slight slope from north to south. Ground levels at the northern edge of the site were recorded at up to 62.94m above Ordnance Datum and up to 62.49m at the southern edge.

3. Archaeology and historical background

The site lies in an area of archaeological potential as defined in the County Historic Environment Record (HER) which has been seen in a series of prior archaeological investigations by SACIC (in part during its former role as the SCCAS Field Team). These investigations revealed dispersed areas of prehistoric, Roman and medieval activity (Fig. 2). The following summary is based upon SACIC's knowledge and experience of the immediate area, in lieu of an HER search.

Previous evaluation on former arable land *c*.600m to the west and northwest of the site, prior to recent housing and industrial development extending east from Bury St Edmunds (BRG 024, Finch 1999), highlighted several areas of archaeological potential which were later investigated in a series of targeted excavations (SCCAS unpublished). These included an area of Roman occupation (RGH 031, investigated by areas RGH 037 and RGH 038), low density prehistoric evidence at RGH 035 and RGH 039 and Early-Middle Iron Age deposits at RGH 036.

Three phases of evaluation and excavation in 2012 and 2015 on the Sybil Andrews High School site (RGH 066), 150m to the west, identified evidence of Early/Middle Iron Age occupation. The evaluations (Beverton 2012, Craven 2015) showed dispersed pits and ditches across the school site, with the subsequent excavation of three separate areas (Lichtenstein and Craven 2016) identifying the supposed outskirts of a small

farmstead represented by the remains of four smaller square or rectangular four-post structures (possible granaries), some pits, some external firepits (possible temporary hearths) and a substantial boundary ditch on the eastern side of the site.

This Iron Age boundary is suspected to extend well beyond RGH 066 to north-west and south-east. It clearly corresponds to a linear anomaly identified in a geophysical survey to the north of the school (Schofield 2014) and appears to align with a series of ditches and Iron Age occupation evidence seen to the south-east in evaluation trial trenching and excavation which was carried out in advance of the recent construction of the Eastern Relief Road (RGH 086, Lichtenstein 2015, Sommers 2017). This ditch can also be traced further to an enclosure identified by Archaeology South East on the northeast edge of Bury St Edmunds (Abraham *pers comm*).

Evaluation and excavation to the north of the existing airfield runway was also carried out in August/September 2016 (RGH 092, Douglas 2017) some 650m north of this site in advance of new borrow pits for the road scheme. Two broad phases of archaeological activity were identified at the site, primarily associated with prehistoric domestic activities characterised by the presence of Beaker assemblages and Middle Iron Age material with a cluster of pits dated to the Late Neolithic – Early Bronze Age, and another group of pits dated to the Middle Iron Age. A post-medieval ditch and several undated ditches were also present and the primary function of the site has been interpreted to be food preparation and production. Wheats, legumes and charred peas were cultivated and processed by the occupants of the site, probably on a small domestic level, and burnt animal bones were probably the remains of meat waste. There is also some evidence for stone tool production.

Two recent phases of large-scale evaluation to the south of the site (RGH 094, Boyer & Nichol 2017) have identified surface finds assemblage of worked flint indicating prehistoric activity together with sixteen large pits of prehistoric or post-medieval date and a series of small pits/hearths suggesting settlement activity. Of these one contained Iron Age pottery, another was radiocarbon dated to the Early – Middle Iron Age and a third to the Anglo-Saxon period. A number of post-medieval ditches were also identified.

The southeast corner of the present development site was excavated during the adjacent road scheme and two natural features were recorded, potentially tree throws

between 1.8-2.2m in diameter with irregular profiles and shapes in plan. Subsequent evaluation of the full site revealed a cluster of Iron Age pits towards the north-eastern corner and a large modern disturbance thought to cover much of the southern half (Craven and Brooks 2017). However the RGH 066 and 086 Iron Age ditch which was projected to run through the site, was not identified.

The site also lies within the centre of the former WW2 Rougham airfield (RGH 046), close to a secondary runway, as shown on an annotated map of the airfield (Appendix 6, Fig. 3).

Figure 1. Location of site, showing development area (red) and HER entries (green)

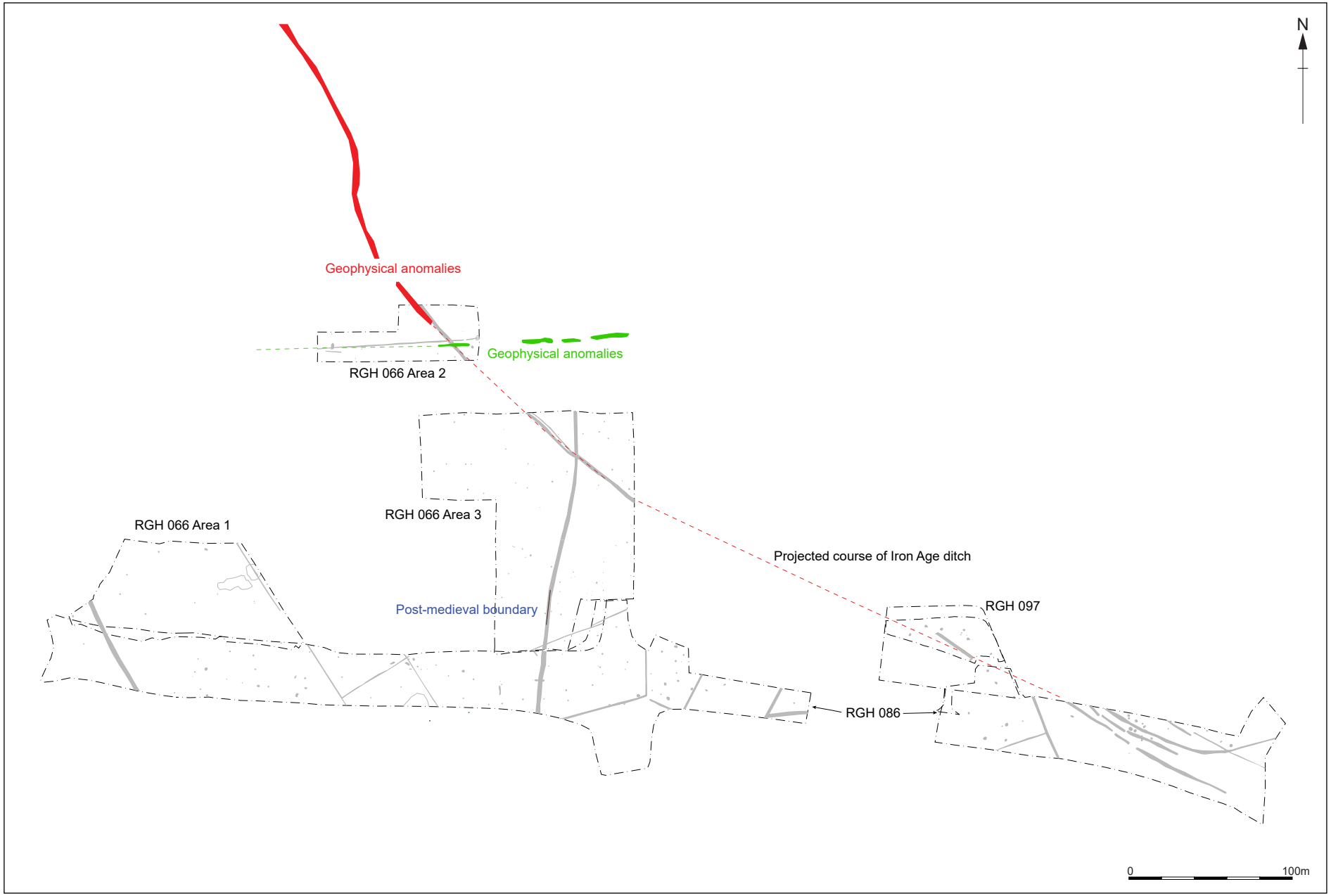


Figure 2. Present site (RGH 097) related to RGH 086 and RGH 066 excavations and geophysical anomaly (projected Iron Age ditch alignment).

4. Methodology

During the groundworks the topsoil and subsoil (where present) was stripped using a 360^0 tracked mechanical excavator (14 tonne) with a toothless bucket to the top of archaeological deposits or natural geological layers under the constant supervision of an experienced archaeologist and any archaeological contexts encountered were recorded using a sequence of numbers in the range 0021-0069.

All features were sample-excavated, with most discrete pits and postholes being 100% excavated, dependent on the need to establish stratigraphy, feature function and to retrieve dating and environmental evidence where appropriate.

All features were planned with a Leica GS14 GPS system at an accuracy level of <20mm, with individual excavated segments being hand-planned at a scale of 1:20. Features were drawn in section at 1:10 or 1:20 on sheets of gridded drawing film. Written records (context descriptions, etc.) were made on *pro forma* context sheets.

A digital photographic record was made, consisting of high-resolution JPEG images. Metal detecting was undertaken across all the features and spoil, as well as during the original topsoil strip, by an experienced detectorist.

Environmental samples were taken from appropriate features/deposits where encountered across the site.

Site data has been input into an MS Access database and recorded using the County HER code RGH 097 / ESF 25787. An OASIS form has been completed for the project (reference no. Suffolka1-296959 – Appendix 6) and a digital copy of the report submitted for inclusion on the Archaeology Data Service database (http://ads.ahds.ac.uk/catalogue/library/greylit). All fieldwork records have been combined with those from the initial evaluation phase and included in Appendix 1 as have the finds totals for Appendix 2.

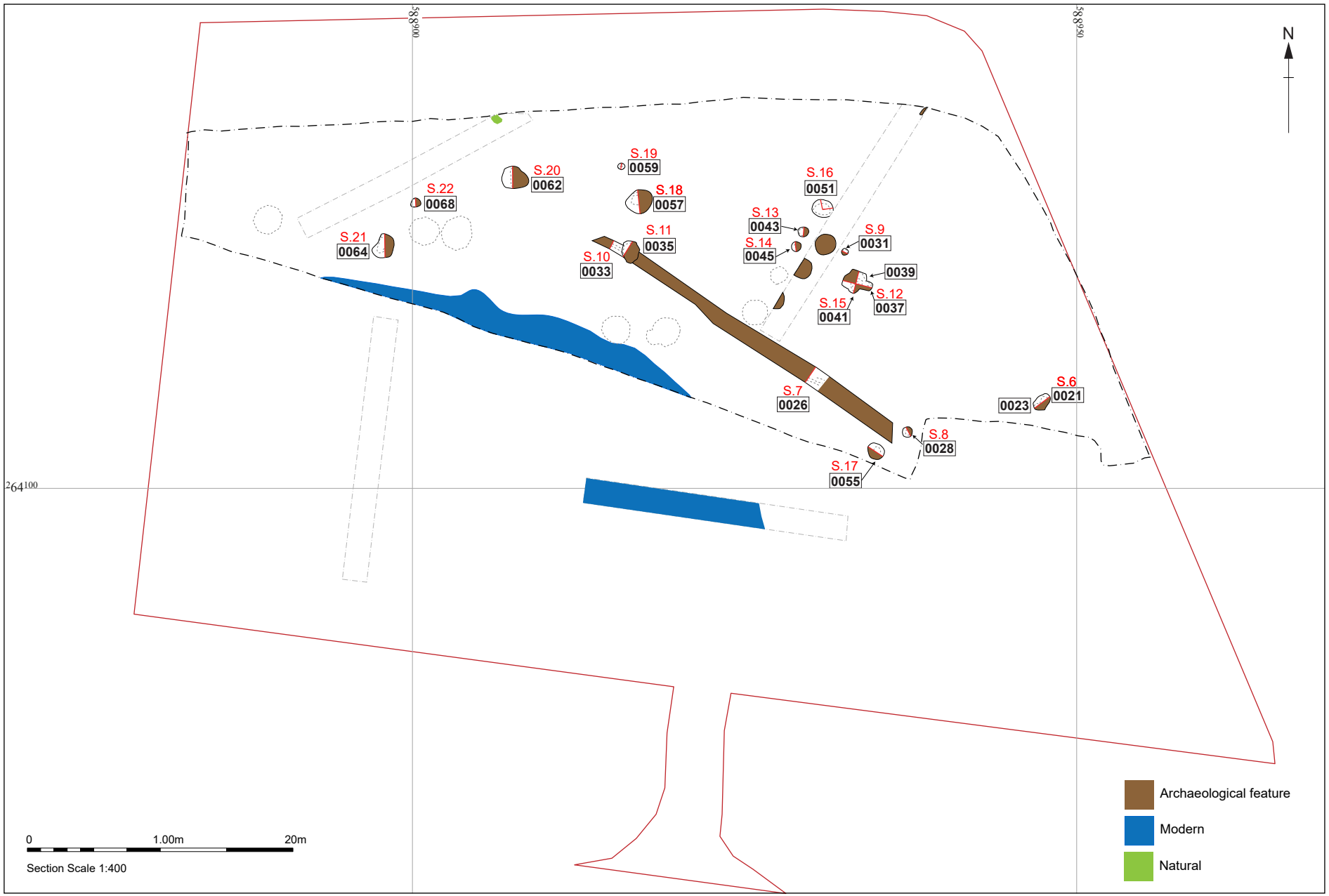


Figure 3. Excavation and evaluation (unnumbered) plan within the development area

5. Results

5.1. Introduction

The undisturbed natural geological surface and archaeological horizon was exposed at a depth of c.0.5m, under a 0.3m-0.4m modern topsoil and up to 0.2m of pale to mid brown loose sandy-silt subsoil (numbered in the evaluation as 0005/0018-0020).

The features exposed mainly consist of medium to large pits of Iron Age date, which can be divided into larger slightly irregular features (potentially including bioturbation features) and definite archaeological features with distinct deposits and cuts. The fill of one pit, a possible cremation, has been radiocarbon dated to the Middle Bronze Age.

A single linear ditch was observed, orientated approximately north-west/southeast and of mid-late Iron Age date. This ditch is believed to be a continuation of the prehistoric boundary system seen to the north-west within the school/sports centre (RGH 066) and beyond via geophysical survey (Schofield 2014) and under the road to the south-east (RGH 086).

The edge of a large modern disturbance, seen during the evaluation, encroached on the southern edge of the site. This is believed to date to the deconstruction of the old airfield hardstandings and outfield defences at the end of WWII.

A full context list, including features from both the evaluation and excavation is provided in Appendix 1. Detailed description of the evaluation features has not been replicated from the prior evaluation report, but they are considered included in the site discussion and conclusions later in this report.

5.2. Phase I. Middle Bronze Age

Pit 0059 was found to contain a small amount of very fragmentary cremated human remains (41.8g). This feature is possibly an example of a primary inhumation, with most of the cremated remains removed to elsewhere for secondary inhumation. The bone fragments were mainly found around the sides of the pit, with very little in the main body of the lower fill, which again could be indicative of the removal of the bulk of the cremation debris to another site for secondary burial. The cremation was, during

excavation, thought to be contemporary with other features assigned an Iron Age date. However a sample of the cremated bone submitted for radiocarbon dating has been given a calibrated date range of between 1223BC and 1394BC with a 95.4% probability (Appendix 5). A single small sherd of Iron Age pottery therefore appears to be intrusive.

Plate 1. Pit 0059, facing east (0.3m scale)

5.3. Phase II. Iron Age

5.3.1. Ditch 0026 / 0033

This ditch was 28m long, up to 1.4m wide and 0.2m deep, with a deeper channel (approximately 0.8m wide) on the south-western side and a shallow stepped profile to the north-eastern side. It entered the site along the southern edge and disappeared in the centre of the site within an area of modern disturbance. It is unclear if this was a true terminus or simply a shallowing out of the feature, with modern truncation (airfield construction and ploughing) removing the continuation of the ditch from this point. Two fragments of pottery (3g) recovered from segment 0033/deposit 0034 suggest a mid-late Iron Age date for this feature.

Plate 2. Ditch segment 0027, facing northwest (1m scale)

5.3.2. Pits

These features (0028, 0031, 0035, 0043, 0045, 0051, 0055, 0057, 0062 and 0068) all had defined shapes, usually circular or slightly ovoid with consistent sloping sides and frequently with charcoal-flecked fills. The majority of them also contained pottery fragments indicating a middle Iron Age date for this activity. The five undated features have been assigned a probable contemporary date based on their proximity and similarity to the dated features with very similar physical characteristics but are separated out on the phase plan (Fig. 4).

Datable pits

Pit 0031 was situated adjacent to one of the prior evaluation trenches (Trench 4 in the north-eastern corner of the site). Measuring 0.5m in diameter and 0.24m deep with steep concave sloped sides to a shallow concave base, it was filled with a dark greyish brown loose silty sand deposit containing two small fragments of middle Iron Age pottery (8g). An animal burrow was noted passing through the base of the feature though this did not appear to correlate with the position of the pottery recovered.

Plate 3. Pit 0031 facing south (0.3m scale)

Pit 0035 was up to 1.6m in diameter with steep sloped sides to a shallow concave/flattish base, cutting through the boundary ditch in the centre of the site. It was 0.3m deep and filled with a mid yellowish brown mottled soft/friable silty sand with occasional sub-rounded stones/pebbles. Pottery recovered from this feature indicates a potential late Iron Age date, though the single fragment is very small (3g).

Pit 0043 was 0.75m in diameter, with steep concave sloped sides to a shallow concave/flattish base and filled with a large amount (c.75%) of heat-altered stone (‘pot boilers’?). This material is usually indicative of domestic activity nearby and dateable pottery (10 sherds, 28g) confirmed this feature belongs to the middle Iron Age.

Plate 4. Pit 0043, facing east (0.3m scale)

Pit 0051 was the largest and most productive feature on the site, measuring 0.8m in diameter and up to 0.72m deep, with vertical/slightly undercut sides to a shallow concave/flattish base. The three distinct fills noted were a thin band of dark brown/black charcoal-rich hearth debris sealed by a thick deposit of dark greyish brown silty sand with frequent charcoal flecking which was in turn sealed by a lighter greyish brown loose sandy silt with less charcoal flecking, presumably representing the initial infilling, main period of use and then final abandonment/sealing up of the pit at the end of its use. A sample (5) taken from the middle fill of this pit contained charred cereal grains and chaff remains – potentially further indication that this feature is a domestic refuse pit. Pottery recovered from this pit confirmed its middle Iron Age date (33 sherds, 559g).

Plate 5. Pit 0051, facing south (1m scale)

Pit 0068 was a small circular pit with vertical sides to a very shallow concave base, filled with a mid greyish yellowish brown friable silty sand with occasional small sub-rounded/sub-angular flints and stones, interpreted as an accumulation deposit rather than intentional backfilling. Two fragments (5g) of pottery were recovered from the fill of this pit, believed to date to the middle Iron Age.

Plate 6. Pit 0068 facing east (0.3m scale)

Undated pits

Pit 0028 was an oval pit, 0.8m in diameter and 0.2m deep with a steep concave sloped profile to a shallow curved base. It was situated towards the south-eastern corner of the site. No dateable finds were recovered from this feature although quantities of heat-altered flint and stone similar to that seen in pit 0043 were recorded as being present.

Plate 7. Pit 0028, facing east (0.3m scale)

Pit 0045, adjacent to pit 0043, did not contain significant quantities of heat-altered stone or any dateable artefacts but it is believed to also date to the Iron Age, based on its location and similarity to the dated features nearby. It was 0.75m in diameter and 0.2m deep with a gently sloped southern side to a concave base with a steep convex stepped northern side.

Pit 0055 was 1.2m (north-south) by 1.3m (east-west), and up to 0.3m deep with a gentle concave sloped profile to a shallow concave base. While no finds were recovered from this feature its fill shared characteristics more in line with the dateable pits nearby than the more irregular possibly naturally occurring undated features so has been assigned

to this phase.

Pit 0057 was 1.8m (north-south) by 2.0m (east-west), and up to 0.6m deep with a moderately steep concave southern side to a shallow concave base with an undercut/slumped steep northern side. While no finds were recovered from this feature its fill shared characteristics more in line with the dateable pits nearby than the more irregular possibly naturally occurring undated features so has been assigned to this phase.

Pit 0062 was approximately 1.6m in diameter and 0.24m deep, circular with a shallow sloped profile to a flattish base, filled with a mid greyish brown silty sand. Although this pit did not produce any dateable artefacts, its fill was very similar to that in pit 0068 a short distance to the west rather than the undated irregular pits nearby, with a clear horizon with the underlying natural geological layers.

Plate 8. Pit 0062 facing east (1m scale)

5.3. Natural features

These features (0021, 0023, 0037/0039/0041 and 0064) can all be characterised as having somewhat irregular profiles and shapes in plan, with sandy silt fills with little cultural material (primarily occasional charcoal), none of which was dateable. They are thought to be natural features that have either acquired residual artefacts and charcoal contamination, or are contemporary with the prehistoric activity on the site and the cultural material within them perhaps being accidentally deposited at the time as stray waste. In general the features appear to have been filled with accumulation deposits rather than intentional deposits. Pits 0021/0023 are described below as exemplars (Pl. 9) with additional plates (Pl. 10 and 11) showing possible pits 0037/0039/0041 and 0064 respectively. Contexts 0047 and 0049 were issued to quadrants of features 0039 and 0041 respectively.

Pits 0021 and 0023 were shallow adjacent features with irregular, poorly mixed/patchy, fills and contained only heat altered flints and stone (Pl. 9). They formed a single disturbed area up to approximately 1.6m in diameter and 0.2m deep, with the edge of pit 0023 only visible after excavation as the fills were indistinguishable. While it is possible that they are the base of heavily disturbed and truncated features, they are currently believed to be natural features based on the lack of distinct edges/profiles and irregular shape in plan.

Plate 9. Pits 0021 and 0023, facing southeast (1m scale)

Plate 10. Possible pits 0037, 0039 and 0041, facing southwest (1m scale)

Plate 11. Pit 0064 facing east (1m scale)

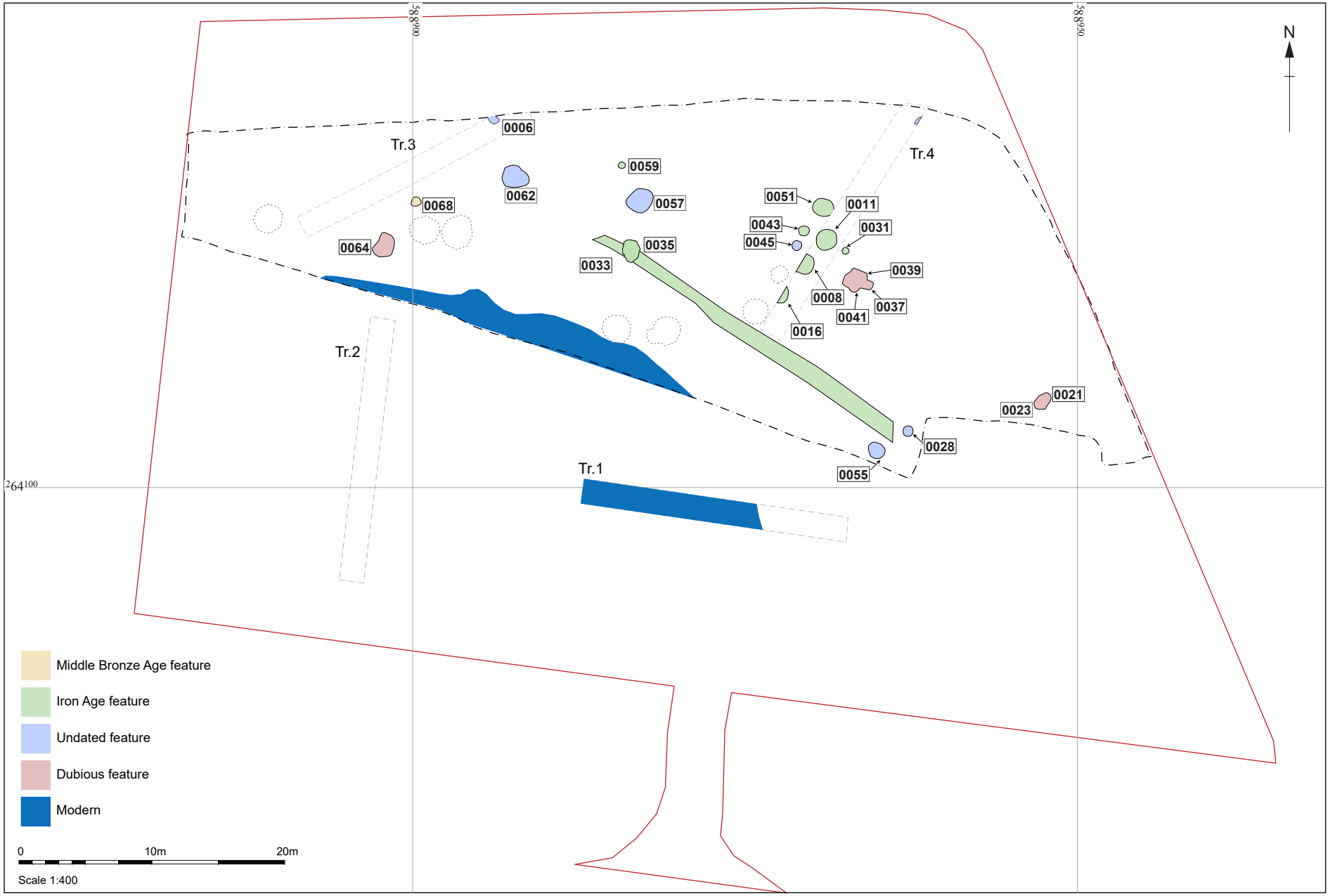


Figure 4. Phased site plan

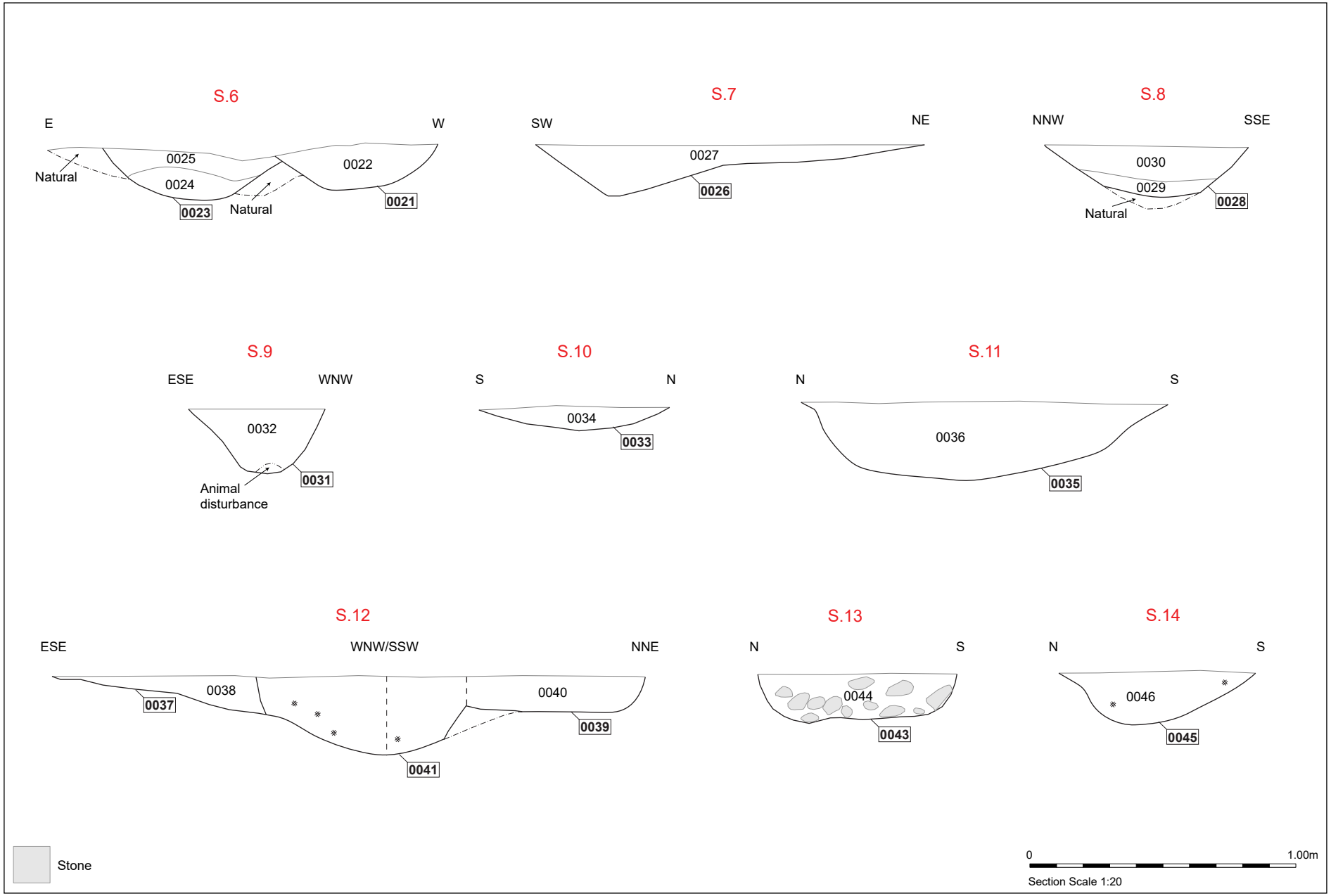


Figure 5. Recorded sections 6 – 15 through excavated features

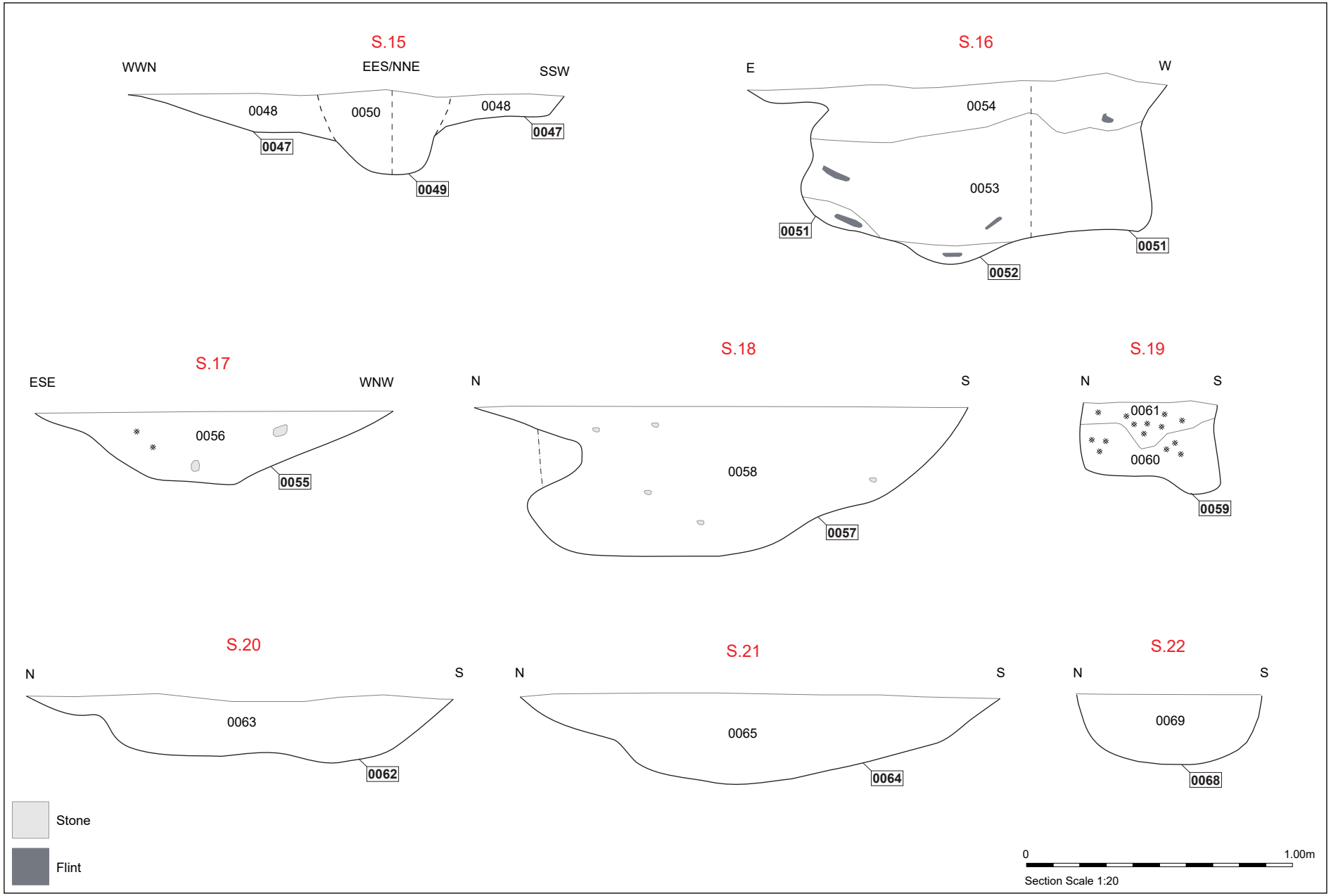


Figure 6. Recorded sections 16 – 22 through excavated features

6. Finds and environmental evidence

Ioannis Smyrnaios (unless stated differently)

6.1. Introduction

The bulk finds from the evaluation and excavation of the site are presented in Table 1. These are discussed further below, together with the bulk finds from each material category. A full catalogue of all bulk finds by context is presented in Appendix 2.

	Hand-collected onsite		Retrieved from samples	
Finds Type	**No**	**Wt (g)**	**No**	**Wt (g)**
Pottery	105	793	30	133
CBM	1	6		
Fired clay	9	56	47	27
Heat-altered stone	280	41792	15	888
Worked flint	29	463	18	47
Heat-altered flint	26	1256	155	352

Table 1. Bulk finds quantities

6.2. The Pottery

6.2.1. Introduction

The evaluation and excavation of the site produced a total of 135 sherds weighing 926 grams. The material derived from sixteen contexts including six samples. All the pottery was identified as prehistoric, with the majority dating between the Middle and Late Iron Age.

6.2.2. Methodology

The pottery from the site was quantified by fabrics, which were identified through hand specimen examination under a x10 binocular microscope. Prehistoric fabrics were recorded according to simplified abbreviations of the *Guidelines for Analysis and Publication of the Prehistoric Ceramic Research Group* (2010). Prehistoric vessel forms were identified with reference to the typologies by Brudenell & Hogan (2014) and Brudenell (2014). Minimum numbers of vessels (ENVs) were estimated based on rim and base sherds that could relate to distinct pots. For a better quantification of the material, estimated vessel equivalents (EVEs) were introduced alongside with minimum numbers of estimated vessels (ENVs) when this was possible. The total assemblage

from the site, including pottery from samples, is presented by context order in Appendix 3.

6.2.3. Fabrics and chronology

The pottery from the site consists of nine fabrics, which are presented in Table 2. According to the quantification, the most prevailing fabric is dense sandy, medium to hard, with few elongated voids from burnt organic remains and sparse fine to medium flint. Q(VF) dates primarily to the Middle Iron Age; however, it is possible that it continues even after the late 2nd century BC. This fabric is not entirely different by comparison with fabric QV as both contain moderate quantities of fine organic tempers; therefore, it is likely that both fabrics are contemporary. Other variants of QV with finer and more micaceous pastes (QVM), or variants with common fine grog inclusions, are associated with Late Iron Age fabrication practices. The only fabric that could be associated with both Iron Age and earlier Bronze Age fabrication practices is QCV; however, a large rim sherd from pit fill 0053 derives from a typical Middle Iron Age form, a slack-shouldered jar (Brudenell 2014, 193) with scratched decoration and nailmarks running along the edge of its rim. In general, the most representative period of the ceramic assemblage should be placed between the 5th and the 1st centuries BC. Fabrics of that period, and more specifically Q(VF), QV, QCV, QVM and QGV, form 80% of the total assemblage by sherd count or 94.2% by weight.

Fabrics with common flint (F) dating to the Late Bronze Age and Early Iron Age are primarily represented by small fragments, and therefore, their date must be treated with caution. The absence of large and coarse flint particles in such fabrics is likely to suggest that an Early Iron Age date is more likely, even though such fabrics could date later.

Finally, three of the softest sandy fabrics encountered in the assemblage are most likely to date to the Bronze Age: QGF QSF and QC. A single sherd in a grog-tempered fabric (QGF) with distinct combing decoration is the earliest sherd and could derive from a decorated Beaker. Fabrics QSF and QC are represented by small fragments without diagnostic features and their dates must be treated with caution.

Fabric	Fabric description	Fabric date	No	No %	Wt/g	Wt/g %
QGF	Soft sandy fabric with grog and sparse flint	EBA	1	0.7	3	0.3
QSF	Dense yet soft sandy fabric with moderate large grains of fine rounded quartz sand, and few rounded to sub-rounded grains of medium flint	BA	2	1.5	3	0.3
QC	Soft and light sandy fabric with chalk and irregular voids from burnt chalk	BA?	2	1.5	5	0.5
F	Dense and hard sandy fabric with common fine small-sized flint	LBA-EIA	22	16.3	43	4.6
Q(VF)	Dense medium to hard sandy fabric with few elongated voids from burnt organic remains and sparse fine to medium flint	mainly MIA	78	57.8	679	73.3
QV	Medium fine sandy fabric with moderate medium to small-sized organic temper	MIA-LIA	17	12.6	111	12.0
QCV	Soft and light sandy fabric with, moderately tempered with straw and other coarse organic inclusions	MIA-LIA	10	7.4	73	7.9
QVM	Dense sandy and micaceous fabric with sparse fine organic temper, often with clay pellets	LIA?	2	1.5	6	0.6
QGV	Dense sandy fabric with common fine grog and elongated voids from burnt organic tempers	LIA	1	0.7	3	0.3
	Totals		**135**	**100.0**	**926**	**100.0**

Table 2. Quantification of pottery by fabrics and chronological periods

6.2.4. Typologies and vessels function

The prehistoric assemblage from RGH097 was represented by a minimum of twelve vessels (ENVs), which relate to 0.45 EVEs. These vessels have an average rim diameter of 11.9 cm and they can be regarded as medium to small-sized domestic types of pottery. The assemblage contains few sherds with diagnostic features that can be tied down to distinct typologies.

During the evaluation of the site, pit fill 0009 produced a sherd with combed decoration, which could have come from an Early Bronze Age Beaker. The sherd was probably residual as the same feature produced primarily Iron Age fabrics and a rim fragment from a bulbous jar, which is most likely to be associated with the final phases of the Middle Iron Age. The upper fill 0015 of pit 0011 produced a rim from a Form A slack-shouldered jar, also associated with the later phases of the Middle Iron Age, if not with the Late Iron Age.

During the excavation of the site, pit fill 0053 produced two rim sherds from typically Middle Iron Age jars of Forms A and E, similar to types recovered at Capel St Mary (Brudenell 2014) and Ipswich (Brudenell & Hogan 2014). Rim sherds from possible jars derived from pit fills 0044 and 0054, while the unstratified deposit 0066 produced a rim

sherd from a possible jar with rolled-out rim and a rim fragment from a possible bowl. Despite its small size, the assemblage clearly suggests domestic activities in the vicinity, taking place during the Middle and Late Iron Age.

6.2.5. Distribution of pottery by feature type

Table 3 presents the distribution of prehistoric pottery by feature type. According to the table, most of the assemblage derived from pit fills. A relatively large number of small fragments derived from unstratified deposits; however, such pottery represents a small percentage in relation to the total weight of the prehistoric assemblage.

Feature type	No	% No	Wt/g	% Wt/g
Pit	90	66.7	861	93.0
Ditch	2	1.5	3	0.3
Subsoil	12	8.9	9	1.0
Other unstratified	31	23.0	53	5.7
Totals	**135**	**100.0**	**926**	**100.0**

Table 3. Distribution of prehistoric pottery by feature type

6.2.6. Discussion

The pottery from RGH 097 dates primarily to the Middle Iron Age and relates to domestic types such as jars and possibly bowls. No Roman or post-Roman pottery was recovered during the excavation.

The dominance of ceramic fabrics from the Middle Iron Age has also been noted across other sites in the vicinity. More specifically, an excavation at Land East of Moreton Hall, Rushbrooke with Rougham (RGH 066), produced large quantities of pottery dating between the 5th and 3rd centuries BC (Doherty 2016). The same site did not produce any Roman pottery as with the current site, but it produced quantities of ENEO and LNE-EBA pottery, which were uncommon at RGH 097.

During a recent excavation at the Bury St. Edmunds Eastern Relief Road, Rushbrooke with Rougham (RGH 086), almost three quarters of the total ceramic assemblage was prehistoric. Out of the total prehistoric pottery from RGH 086, almost 80% of its weight belonged to Middle Iron Age fabrics, associated with the later phases of this period, followed by a variety of Late Iron Age fabrics (Smyrnaios 2017a). These quantities are

certainly similar to those produced at the current excavation at RGH 097. By contrast to the current site, RGH 086 produced small quantities of LIA/Roman, Early and Late Anglo-Saxon, and early to high medieval pottery.

Another recent excavation close to the present site, at Highfield Farm Borrow Pit (RGH 092), produced mixed assemblages dating to the LNE-EBA and broader Iron Age. The material from RGH 092 was problematic as the earlier prehistoric pottery was represented by a few large heavy fragments, while the Iron Age assemblage consisted of large quantities of small and relatively light fragments. Again, almost 56% of the RGH 092 assemblage by sherd count, or almost 25% by weight, dated to the Middle and Late Iron Age (Smyrnaios 2017b) as with the present site.

The recovery of earlier prehistoric fabrics at RGH 066 (Doherty 2016) and the presence of rich and elaborately decorated Beaker assemblages at RGH 092 (Smyrnaios 2017b) suggest that earlier Neolithic and Bronze Age activity was not uncommon in the vicinity. The present excavation at RGH 097 produced a single decorated sherd, possibly coming from an Early Bronze Age Beaker; however, this find is probably residual and if any Bronze Age activity occurred in the area of RGH 097, its material evidence was probably destroyed during the Middle Iron Age.

6.3. Fired clay

The site produced a total of fifty-six fragments of fired clay weighing 83 grams. The material derived from four contexts including one sample, and is presented in Table 4 below.

According to the quantification fine sandy fabrics with flint (fsf) and coarse fabrics with chalk are represented by equal pieces; however, the former are heavier, weighing 61 grams in total. The assemblage also includes rare fabrics such as medium sandy (ms) and coarse sandy with voids, quartzite pebbles and flint.

Ctxt	Samp	Fabric	Type	No	Wt/g	Surface	Impressions	Comments
0034		ms		1	1			
0034		fsf		1	36			no specific shape
0052		csc		1	1	flat on both sides		could also be pottery
0053	5	fsf		22	16	tiny chips without any surfaces		could also be fragmented pottery
0053	5	csc		25	11	tiny chips without any surfaces		highly abraded
0053		fsf		4	9			small pieces
0054		csc		1	4			highly abraded
0054		csvqzf		1	5	one flat and smoothed surface		

Table 4. Quantification of fired clay.

Key: ms=medium sandy; fsf=fine sandy with flint; csc coarse sandy with chalk; csvqzf=coarse sandy with voids, quartzite and flint

The fired clay assemblage is small. Most of its pieces are tiny and could possibly be abraded fragments of pottery. More specifically, the pieces made from fabric csc recovered from pit fills 0053 and 0054, resemble with the MIA-LIA pottery fabric QVC found in the same context. Furthermore, the fired clay pieces made from fabric fsf recovered from pit fill 0053, could come from abraded pottery made from fabric Q(VF) from the same fill, dating to the MIA.

In general, the condition of the fired clay is poor and little information can be extracted. It is more than likely that all pieces come from pottery that degraded rapidly after deposition. Even a relatively large piece from pit fill 0054, made from fabric csvgzf, could come from a Bronze Age ceramic vessel.

6.5. Ceramic Building Material

The site produced a single small fragment of CBM weighing 6 grams. The piece derived from pit fill 0064, which contained no pottery or other datable find. The CBM fragment is heavily worn and cannot be assigned to a particular form. It is made in a fine sandy ferrous fabric (fsfe). Based on its fabric, the fragment is most likely to date to the late medieval to post-medieval period.

6.6. Worked flint

Michael Green

6.6.1. Methodology

Each piece of flint was examined and recorded in Table 5 below. The material was classified by type with numbers of pieces, corticated and patinated pieces being recorded. The condition of the flint is noted in the discussion.

6.6.2. Introduction

A total of forty-seven struck flints was recovered during the evaluation and excavation, recovered from fourteen separate contexts. The flint was mainly struck from a dark blue black glassy flint with some pieces struck from of light grey. A few pieces showed signs of recent edge damage, mostly from pit fill 0065.

Context Number	Type	Patination	Cortex %	Number	Weight (g)
0001	Blade (small)	Moderate	0	1	1
0009	Flake	None	0	1	2
0009 (sample 3)	Flake	None	0-50	3	13
0012 (sample 2)	Chip	None	0-50	3	1
0015 (sample 1)	Shatter	Light	5	1	14
0017	Flake	None	5	1	9
0020	Core	None-light	45	1	95
0024	Natural fracture (discarded)	Heavy	50	3	92
0024	Flake	Heavy	0	1	22
0032	Flake	None	0-50	3	23
0044	Chip	None	5-50	2	1
0046	Shatter	None	20	1	42
0046	Flake	None	30	2	16
0053	Flake	None	5-25	2	17
0053 (sample 5)	Shatter	None	40	1	16
0053 (sample 5)	Bladelet	None	0-50	5	1
0053 (sample 5)	Chip	None	0-50	3	<1
0054	Thermal fracture	None	50	1	6
0060 (sample 6)	Chip	None	0	2	1
0065	Shatter	None-light	0-10	3	74
0065	Crude flake	None-light	0-50	4	16
0065	Chip	None	0	1	<1
0065	Natural fracture (discarded)	Heavy	50	2	46
	Totals			**42 (5 discarded)**	**510 (138 discarded)**

Table 5. Flint summarised by type

6.6.3. Discussion

Trench 1. Topsoil 0001

A single small patinated blade was present within the topsoil of this trench. It shows signs of soft hammer striking and some edge damage is noted. It is not closely datable but is most likely to be later prehistoric in date.

Trench 4. Pit 0008, fill 0009

Four flakes in total came from this fill, three coming from Sample 3. All the flakes show no signs of patination and are struck crudely using hard hammer techniques. No core preparation is present before striking. They are most likely to date to the Iron Age period due to the knapping techniques used and due to the lack of patination and edge damage.

Trench 4. Pit 0011, fills 0012 and 0015

Three small chips were recovered from Sample 2, from pit fill 0012. All three chips are small and unpatinated, and are not closely datable. Sample 1 from pit fill 0015 contained a single piece of angular shatter. It is also not closely datable but is most likely to date from the later prehistoric periods.

Trench 4. Pit 0016, fill 0017

A single flake was recovered from pit fill 0017. It is relatively large and shows signs of hard hammer striking due to its heavily splintered bulb and lateral side. This flake is most likely to date to the Iron Age period due to the lack of patination and knapping techniques used. It also is likely to be contemporary with the date of the feature due to the lack of edge damage and patination.

Trench 4. Subsoil 0020

A single core was recovered from the subsoil in Trench 4. It is a small multiplatform core, struck from three distinct planforms. A single face shows signs on multiple stepped fractures showing that a hard hammer was most likely used to remove the flakes. This core is likely to date to the late Bronze Age to early Iron Age periods due to the knapping techniques used.

Pit 0023, fill 0024

A single thick heavily patinated flake was found within this fill. It shows signs of frost fracture, rolling and is heavily edge-damaged. It is not closely datable but due to the

damage seen, it is most likely residual within this feature.

Pit 0031, fill 0032

Three flakes were recovered from this pit: one large primary flake, one small primary flake and one small secondary flake. All three flakes have pronounced bulbs and repercussion lines suggesting hard hammer strikes, and bulb splintering is also visible. No edge damage or patination is present making them likely to date this feature. Due to the knapping techniques seen they are most likely to date to the Iron Age periods.

Pit 0043, fill 0044

Two small chips were recovered from Sample 4 of this fill. They show no signs of patination and are very angular and small. They are not closely datable.

Pit 0045, fill 0046

A single piece of angular shatter and two squat flakes were found within this fill. No patination or edge damage was noted and they are most likely to date to the late Bronze Age to Iron Age periods.

Pit 0051, fills 0053 and 0054

Two flakes (one large secondary and one small secondary) were found within pit fill 0053 and an additional single piece of shatter, five bladelets and three chips were recovered from Sample 5 of the same fill. A single piece of heat-shattered flint was found in pit fill 0054. This assemblage shows some signs of core preparation and the techniques used for flake removal differ from the rest of the struck flint from the site. Some pieces are slightly patinated and small amounts of edge damage can be seen on some pieces. The general assemblage is most likely to be the earliest from this site, probably dating from the Bronze Age period, but the edge damage may point to this material being residual within this feature.

Pit 0059, fill 0060

Two small chips were recovered from Sample 6 of this fill. They show no signs of patination and are very angular and small. They are not closely datable.

Pit 0064, fill 0065

Three shatter pieces, four crude flakes and a single small chip were recovered from this fill. The platforms used for flake removal are very dubious and a large amount of rolling and hinge fractures can be seen. They could date to the Iron Age but are most likely to

have been created by accidental strikes using metal implements to excavate a medieval or later feature.

6.6.4. Conclusion

Small quantities of struck flint were recovered from this evaluation and excavation. Most of the flint is most likely to date from the later prehistoric periods, from the Late Bronze Age to the Iron Age. Topsoil recovered flint shows signs of edge damage but most of the struck flint shows little edge damage, suggesting that it has not moved far from its initial deposition area. The two features of note are pit 0051, which contained the only struck flint that probably dates to the Bronze Age, and pit 0064, which contained struck flint that has most likely been accidently struck in the medieval or later periods. In general, the small amounts of struck flint recovered from most features suggest that flint was not commonly used in the periods noted in this area and only small scale periodic knapping was taking place for crude sharp cutting edges. Quantification and full analysis of the struck flint has been covered within this report and no further work or illustration is suggested on this finds group.

6.7. Burnt flint and heat-altered stone

The evaluation and excavation of the site produced 181 pieces of burnt flint weighing 1,608 grams and 295 pieces of heat-altered sandstone/quartzite weighing 41080 grams. The material derived from twelve contexts including five samples and is presented in Table 6.

Ctxt	Samp.	Burnt Flint No	Burnt flint Wt/g	H.A. SS/QZ No	H.A. SS/QZ Wt/t	Comments
0009		1	4			
0012	2	6	13			
0015	1	2	5			
0017				2	56	Lightly heat-altered
0022		4	112	24	1093	
0024		3	33	12	209	
0025		2	39	17	161	
0044		9	875	224	38625	
0044	4	16	152	15	888	
0053		4	138	1	48	
0053	5	121	165			tiny fragments
0054		3	55			
0060	6	10	17			

Table 6. Quantification of burnt flint and stone

The majority of the material derived from pit fill 0044. This fill contained primarily MIA pottery, mixed with few sherds dating to the LBA-EIA and broader Bronze Age. The presence of burnt flint and heat-altered stones in such contexts is most likely to be associated with prehistoric domestic activities.

6.8. Burnt bone

Sue Anderson

6.8.1. Introduction

A small quantity of cremated bone was recovered from pit fill 0060 (?burial 0059), and calcined bone fragments were also collected from fill 0053 in pit 0051. The cremation burial has been radiocarbon dated to the Middle Bronze Age period (Appendix 5). The calcined bone was recovered from a pit which contained Middle/Late Iron Age finds. Fragments from pit fill 0060 were abraded, whilst those from pit fill 0053 were not. The material is presented in Appendix 4.

6.8.2. Methodology

Bone was collected as two bulk Samples 5 and 6, and processed via flotation. The quantity from Sample 5 was too small for sieving into fractions, but the cremated bone from Sample 6 was sieved into >10 mm, >4 mm, >2 mm and <2 mm fractions. The bone was sorted into five categories: skull, axial, upper limb, lower limb, and unidentified. All fragment groups were weighed to the nearest tenth of a gram. Measurements of maximum skull and long bone fragment sizes were also recorded. Observations were made, where possible, concerning bone colour, age, sex, dental remains and pathology. Identifiable fragments were noted. Methods used follow the Workshop of European Anthropologists (WEA 1980) and McKinley (1994 and 2004).

6.8.3. ?Burial 0059

Table 7 shows the bone weights and percentages of identified bone from pit fill 0060 (Sample 6), and the proportions of bone identified from the four areas of the skeleton (skull, axial, upper limb, lower limb). Only 6.2% of the total weight was identified.

Area	Total no.	Total wt/g	% identified	% expected*
Skull	60	4.9	79.0	18.2
Axial	0	0	-	20.6
Upper limb	0	0	-	23.1
Lower limb	5	1.3	21.0	38.1
Total identified	**65**	**6.2**	**100.0**	
Unidentified		35.6		
Total		**41.8**		

Table 7. Percentages of identified fragments out of total identified to area of skeleton

* Based on McKinley (1994, 6)

This small quantity of bone included sixty fragments of cranial vault and five joining fragments of lower limb (probably femur). Much of the unidentified material appeared to be long bone shaft fragments. The bone was white and fully calcined. All fragments were small, with no pieces of burnt bone in the 10 mm fraction. The largest long bone fragment measured 13 mm long and the largest piece of skull was 14 mm across. Most fragments of skull were relatively thin and the few sutural parts were unfused, but some of the long bone cortices were relatively thick, perhaps indicating an older child or sub-adult.

In addition to the cremated bone in Sample 6, there were six pieces of unburnt, possibly worked, animal bone.

6.8.4. Pit 0051

Fragments of bone weighing a total of 1.2 grams recovered from pit fill 0053 included at least one piece which appeared to be of animal origin. Some small fragments of convex joints may be pieces of animal phalanges or other foot/wrist/ankle bones.

6.9. Plant macrofossils and other remains

Anna West

6.9.1. Introduction and methods

A total of six bulk samples were taken from pit fills during this excavation. The samples were all processed in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of the archaeological investigations.

The samples were processed using manual water flotation/washover and the flots were collected in a 300 µm mesh sieve. The dried flots were scanned using a binocular microscope at x10 magnification and the presence of any plant remains or artefacts are noted on Table 7. Identification of plant remains is with reference to the *New Flora of the British Isles* (Stace 1997).

The non-floating residues were collected in a 1 mm mesh and sorted when dry. All artefacts/ecofacts were retained for inclusion in the finds total. The non-floating residues were also scanned with a magnet, in order to retrieve any ferrous material that may had been present.

6.9.2. Quantification

For the purpose of this of this report, items such as seeds, cereal grains and small animal bones have been scanned and recorded quantitatively according to the following categories:

= 1-10, ## = 11-50, ### = 51+ specimens

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance:

\+ = *rare,* ++ = *moderate,* +++ = *abundant*

6.9.3. Results

SS no	Context no	Feature/ cut no	Feature type	Approx. date of deposit	Flot contents
1	0015	0011	Pit	MIA-LIA	charred cereal grains #, charred nutshell #, charred seeds #, charcoal +++, uncharred seeds #, rootlets +, insect remains #
2	0012	0011	Pit	MIA-LIA	charred cereal grains #, charred seeds #, charcoal +, uncharred seeds ##, rootlets +
3	0009	0008	Pit	MIA-LIA	charred cereal grains #, chaff #, charred nutshell #, charcoal +, un-charred seeds #, rootlets +, insect remains #
4	0044	0043	Pit	LBA-MIA	charcoal ++, uncharred seeds ##, rootlets +
5	0053	0051	Pit	BA-MIA	charred cereal grains ##, chaff #, charred seeds ##, charcoal ++, uncharred seeds ++, rootlets ++
6	0060	0059	Pit	LBA-EIA	charred cereal grains #, charred seeds #, charcoal ++, burnt bone #, uncharred seeds #, rootlets ++

Table 8. Plant macrofossils and other remains

6.9.4. Discussion

The preservation of the material was through charring and was generally poor; the flots were relatively small in size, ranging between 100 ml and 10 ml. Wood charcoal made up the majority of this volume and was generally highly fragmented, making it unsuitable for species identification or radiocarbon dating.

Five of the samples contained charred cereal grains in low numbers. These were highly puffed and fragmented, making positive identification difficult to impossible. Within Sample 1, from the upper fill of pit 0011, a few of the grains could possibly be identified as wheat (*Triticum* sp.) and within Sample 2, from the basal fill of pit 0011, a small number appeared to be barley (*Hordeum* sp.). Sample 5, from pit fill 0053, contained the highest density of cereal remains. Small numbers of what appear to be emmer wheat (*Triticum dicoccum* Schübl) grains were observed within this flot, along with a higher number of caryopsis fragments, which were indeterminate. A single grain, again most likely emmer, was also recovered from Sample 6, from pit fill 0060.

Chaff remains were sparse. A single Barley rachis fragment was recovered from Sample 3, from pit fill 0009; an emmer glume base and two hulled wheat spikelet forks

were recovered from Sample 5, again mostly likely emmer. These remains were sparse and abraded, making positive identification difficult. Although rare, the presence of chaff suggests the later stages of cereal processing may have been taking place in the area.

Charred hazel (*Corylus* sp.) nutshell fragments were recovered in small numbers from Sample 1 and Sample 3. These may represent either gathered food or material incorporated within collected fuel. Either way, they suggest the utilisation of resources within the surrounding landscape.

Charred weed seeds, such as grass family (Poaceae) and cleavers (*Galium aparine* L.) were rare within the samples, only being present as single specimens within Samples 1 and 2, both from pit 0011, and Samples 5 and 6, from pits 0051 and 0059 respectively. Knotgrasses (*Polygonum* sp.) such as black bindweed (*Fallopia convolvulus* L.) were more frequent within Sample 5, from pit fill 0053. As with some of the cereal remains, the fragmented and distorted nature of these specimens made positive identification difficult to impossible. On the whole, charred weed seeds were rare and may again indicate the later stages of cereal processing when contaminating seeds were removed from the grain by hand or through sieving.

Uncharred seeds of spear thistle (*Cirisum vulgare* Savi), rush skeletonweed (*Chondrilla juncea* L.) (Cappers *et al,* 2006), black-bindweed (*Fallopia convolvulus* L.), campions (*Silene* sp.), fumitories (*Fumaria* L.) and goosefoots (*Chenopodium* sp.) were all present in low numbers or as single specimens; the most common seeds in all the samples were of elder (*Sambucus* sp.). Although these are common weeds of rough or cultivated ground, none of them were charred or mineral replaced and it is likely therefore, that they form part of the background soil seedbank and are intrusive within the archaeological deposits sampled.

6.9.5. Conclusions

On the whole, the samples were poor in terms of identifiable material. The cereal grains present have been exposed to heat, possibly during the later stages of processing. Emmer was the principal wheat grown during British prehistory, and a growing number of archaeobotanical studies are showing that it may have in fact remained in cultivation into the Iron Age in lowland Britain, rather than being replaced by spelt wheat (*Tricticum*

spelta L.) as previously believed (Pelling 2012). However, the presence of residual Late Bronze Age pottery within the contexts sampled, as well as dense quantities of rootlets within the flots, may suggest an element of contamination within the contexts and the cereals recorded here may well be residual within later features. Although the cereal remains are sparse, they are, however, evidence that agricultural and domestic activities were taking place within the vicinity.

No further analytical work can be carried out on these samples as the material present is too sparse to justify quantification at less than 100+ specimens. The flots recovered from these samples should be retained as part of the site archive.

6.10. Discussion of material evidence

Ioannis Smyrnaios

Apart from a few residual pottery sherds, pieces of flint and the radiocarbon date for the fill of cremation pit 0059, which indicate a low level phase of activity in the Bronze Age, the material evidence from the site suggests activities dating primarily to the Middle and Late Iron Age. Little pottery from the site bears diagnostic features, suggesting the presence of jars, and therefore, possible domestic activities. In general, the pottery from the site matches the dates and typologies of previously excavated assemblages from the vicinity, and more specifically those from RGH 066 (Doherty 2016) and RGH 086 (Smyrnaios 2017a). By contrast, the pottery from RGH 092 was associated primarily with LNE-EBA features (Smyrnaios 2017b). No further work is recommended for the pottery assemblage from this site and none is of sufficient interest to merit individual illustration.

The small amounts of struck flint recovered from the site suggest small-scale periodic knapping to produce crude sharp cutting edges. Such knapping techniques are most likely to date to the later Bronze Age and Iron Age, although it is highly likely that most of this struck flint is contemporary with the pottery, dating between the 5th and 2nd centuries BC. Pit fill 0053, which produced large quantities of Middle to Late Iron Age pottery, contained the earliest flint assemblage from the site. This flint is most likely to date to the Bronze Age and could possibly be contemporary with a few earlier sherds from the same context; still, all this material is most likely to be residual. In general, the

flint from RGH 097 is in most cases contemporary with that from other sites in the vicinity. Despite the presence of few Neolithic arrowheads and bladelets, and some Bronze Age flakes coming from RGH 066, the majority of the flint from this site dated to the later Bronze Age and Iron Age (Green 2016). Similar dates were suggested by the flint assemblage coming from RGH 086 (Bates 2017). By contrast, the majority of the flint from RGH 092 consisted of neatly produced scrapers, spalls and retouched blade-types, most of which associated with pit fills containing contemporary LNE-EBA Beaker pottery.

During the current excavation, pit fill 0065 produced a single piece of CBM, which dates to the late medieval and post-medieval periods. The same fill produced flint which could date to the Iron Age; however, the presence of accidental strikes on the flint is likely to suggest that this was damaged during later periods, and the damage could be contemporary with the CBM. The presence of later CBM is not uncommon in the area. Small quantities of post-medieval bricks or tiles were recorded at RGH 066 (Goffin 2016), while RGH 086 produced small quantities of mixed post-medieval and Roman CBM (Smyrnaios 2017c).

RGH 097 produced small quantities of fired clay and burnt flint. Due to their poor condition, such finds could not offer any useful information other than to confirm the presence of domestic activities in the area.

Calcined animal bone assemblages from RGH 066 suggest the presence of medium-sized mammals in the vicinity (e.g. pigs, sheep/goats, or small deer), while rabbits could have been intrusive in most of the features (Lichtenstein 2016). Other bone assemblages from RGH 086 suggest the presence of sheep/goats and pigs/boars, which were most likely bred and consumed locally, while equids were used as traction animals. RGH 086 also produced small assemblages of dogs and cats, perhaps used for pest control, while the presence of herpetofauna was recorded in medieval features (Curl 2017). By contrast, two soil samples from RGH 097 suggest the presence of both calcined animal bone and human cremated bone. Pit fill 0060 produced a small quantity of human cremated remains, and more specifically parts from the skull and lower limbs of a possible juvenile. This human bone was mixed together with small fragments of unburnt and possibly worked animal bone and has been radiocarbon dated to the

Middle Bronze Age. Small fragments of burnt bone from pit fill 0053 could be from animals, though species identification is impossible.

The plant macrofossils from RGH 097 offer little in terms of identifiable material, but the sparse evidence of cereal remains suggests that the later stages of cereal processing may have taken place in the vicinity. Cereal grains included wheat, barley and possibly emmer, which raises some interesting questions in relation to the dating of pit 0051. Emmer is an early prehistoric cereal, the cultivation of which is now thought to have continued well into the Iron Age. The charred emmer grains found in pit 0051 could be contemporary with the pottery dating to the MIA-LIA, or they could be residual together with some Bronze Age sherds recorded from the same context. Of course, contamination of the feature is also likely due to the dense quantity of rootlet remains in the sample. The presence of charred cereals and possibly legumes has already been recorded at RGH 066 (West 2016) and RGH 092 (West 2017a), where the material from the later prehistoric features was recovered in better condition compared to that from the present site. By contrast to the present site, and both RGH 066 and RGH 092, the later prehistoric features from RGH 086 contained primarily hazel nutshells, while the majority of charred cereal grains derived from Roman and medieval features (West 2017b). In general, cereal grain processing appears to have taken place in the vicinity, and together with the exploitation of protein-rich mammal resources, such activities characterised the diet of later prehistoric populations.

The poor condition of several assemblages, and the lack of earlier prehistoric or Roman finds from this site, probably show that RGH 097 cannot be studied on its own. Due to its similarities with other sites in the vicinity, such as RGH 066, 086 and perhaps 092, the assemblages from all sites need to be discussed together in the future. A volume combining information from all sites is likely to present the differences and similarities across these assemblages, and offer a better understanding in relation to the activities taking place in the area through time.

7. Discussion

John Craven

The programs of evaluation and excavation fieldwork have again demonstrated the presence of an archaeological horizon surviving beneath modern ploughsoils and thin subsoil deposits in the area, albeit evidently truncated and at times affected by modern disturbance associated with the former WW2 airfield. The archaeological deposits are primarily dated to the Middle/Late Iron Age and add to the previously identified evidence for a widespread phase of Iron Age activity on the Rougham plateau, lying between a short-lived Early/Middle Iron Age settlement (RGH 066 Area 3: Lichtenstein and Craven, 2016) and a Middle/Late Iron Age site consisting of pits and series of parallel ditches (RGH 086 Area 2: Sommers 2017). Additional Iron Age activity, consisting of scattered pitting, is known from RGH 092, some 650m to the north-east (Douglas, 2017).

The presence of a possible primary cremation burial site or pyre debris pit dating to the Middle Iron Age is significant in that no similar features in terms of date or type have previously been identified across RGH 066 and RGH 086 and it indicates the potential for further funerary remains to exist in the vicinity.

The excavation has confirmed that the Iron Age boundary previously identified to the northwest by excavation (RGH 066) and geophysics survey (Schofield 2014), continues across the site towards RGH 086 where it is presumed to relate to one of the series of parallel ditches. It is unclear whether the termination of the ditch in the centre of the site is indicative of a genuine break in the boundary or a result of truncation although a distinct break in the positive geophysical anomaly has previously been noted. The ditch yielded very little in terms of finds material, in contrast to the results at RGH 066, which may suggest that the site is lying further away from the focus of the RGH 066 Early/Middle Iron Age settlement. If so this may also explain the absence of any further contemporary structures, although this may be due to truncation or to chance bearing in mind the small nature of the site and the widespread distribution of the RGH 066 structures.

As with RGH 066 there is no evidence to suggest that the Early/Middle Iron Age settlement was enclosed or associated with any surrounding field system, other than the

significant boundary ditch that passes through the site. As previously noted this is typical of earlier Iron Age settlements in Suffolk which are often small, unenclosed farmsteads containing a handful of domestic buildings and associated storage structures. As a result the full nature and extent of the Early/Middle Iron Age settlement is still not clearly defined.

The excavation also revealed a series of pits of varying size, including evidence of domestic waste and probable hearth debris, dating to the middle Iron Age. This pattern of sparse scattered pitting has previously been seen across the larger sites of both RGH 066 and RGH 086 and is a common feature across Iron Age landscapes. The borrow pit site to the northeast (RGH 092) also had a scatter of Middle Iron Age pits/postholes with no apparent alignments, or related linear features.

8. Conclusions and recommendations for further work

John Craven

The principal aim of the excavation was to ‘preserve by record’ all archaeological deposits within the defined excavation area, prior to its development, via the creation of full site archive and accompanying archive report. This has been achieved in full and incorporates the results of the earlier evaluation. The combined projects have identified an isolated Bronze Age cremation and further evidence of dispersed Iron Age occupation, to add that known elsewhere in the immediate vicinity. It has demonstrated that future development in the area, even relatively small scale infrastructure interventions, is likely to uncover further evidence of this Iron Age activity.

As an individual project this site does not warrant publication, other than the standard inclusion of a summary in the annual fieldwork section of the Proceedings of the Suffolk Institute of Archaeology and History. Although it helps to broaden the current state of knowledge of the Iron Age period in the area it is only a small part of a broader Iron Age landscape and on its own the evidence is incomplete and very limited in potential.

However the site is only a small part of a range of archaeological investigations that have taken place in the immediate vicinity over the last few years and the analysis of the excavation results suggests that, if published in conjunction with RGH 086 and possibly RGH 092, the site has some research value regarding Iron Age rural settlement in the context of the Regional Research Framework for the Eastern Counties (Brown and Glazebrook 2000, Medlycott 2011 29-32).

Therefore it is recommended that this archive report should be summarised and integrated into any future publication text for the RGH 086 project. Specific questions and general research themes that could be addressed by the combined evidence across these various sites will be fully established in the forthcoming post-excavation assessments for RGH 086 (Sommers 2017) and RGH 092 (Douglas 2017) but are expected to include:

- Establishing an overall phasing for the Iron Age occupation in the vicinity.
- Comparison of vessel forms and fabrics etc. in the Middle Iron Age assemblages across the various sites.

- Clarifying if the current differences in dating between the two neighbouring sites (RGH 066 and RGH 086) are indicative of distinct separate areas of settlement in the Early/Middle and Middle/Late Iron Age periods to northeast and southwest respectively, or of a broader dispersed and long-lived phase of settlement perhaps gradually shifting to the south-west.
- Developing the dating and chronology for the Iron Age period through regional pottery sequences and in understanding better the development and nature of the agrarian economy and settlement form and function.

Financial provision is in place to complete the tasks listed below which will allow integration of the site results into a future publication for RGH 086 etc.

Task	Description	Personnel
01	Production of stratigraphic site summary for inclusion in publication text	Simon Cass
02	Integration of site data into publication text figures as appropriate (location plan, combined/individual site and phase plans etc.)	Simon Cass/Ryan Wilson
03	Production/integration of finds analysis into publication text.	
04	Incorporation of site results into period based interpretation/discussion	Simon Cass/Mark Sommers
05	Proof reading	Richenda Goffin

Table 9. Publication task list

9. Archive deposition

A full quantification of the fieldwork records (digital and physical) and finds material to be archived is presented below (Table 10).

Type	Stage	Material	Quantity	Format
Site records	Evaluation	Context register sheets	1	A4 paper
		Context sheets (numbered 0001–0017)	9	A4 paper
		Trench recording sheets	4	A4 paper
		Small finds register	1	A4 paper
		Digital image register	1	A4 paper
		Environmental sample sheets	1	A4 paper
		Plan/section drawing sheets	2	290 x 320mm drawing film
		Digital images	24	3008 x 2000 pixel JPGs
		Digital survey (raw) files	1	dxf
		Evaluation report (SCCAS report no. 2017/073)	1	A4 wire-bound
	Excavation	Context register sheets	1	A4 paper
		Context sheets (numbered 0021-0069)	50	A4 paper
		Plan register sheets	1	A4 paper
		Section register sheets	1	A4 paper
		Digital image register	1	A4 paper
		Environmental sample sheets	1	A4 paper
		Plan and section drawing sheets	3	290 x 320mm drawing film
		Digital images	37	4600 x 3450 pixel JPGs
		Digital survey (raw) files	3	dxf
		Excavation report (SCCAS report no. 2017/084)	1	A4 wire-bound
Finds	Evaluation/Excavation	All finds except heat altered stone	1	Standard Finds Box
		Heat altered stone (0022-0046, except 0044)	1	Standard Finds Box
		Heat altered stone (0044) TO BE DISCARDED	8	Standard Finds Boxes

Table 10. Quantification of the archive

The site archives (both paper, digital and artefacts) are stored with Suffolk Archaeology CIC in Needham Market until the completion of the project at which time they will be archived with the County Council Archaeological Service currently based in Bury St Edmunds. Eight boxes of heat altered stone from context 0044 are to be discarded.

SACIC will retain copyright over the documentary archive and reports but will grant SCCAS a perpetual, royalty free, licence to utilise the documentary archive under current copyright legislation for purposes relating to its business, including reproduction or publication, provided that acknowledgement is made of Suffolk Archaeology CIC as author and owner of Copyright.

10. Acknowledgements

The fieldwork was carried out by James Sinclair and Tamara Irish and directed by Simon Cass with project management by John Craven who also provided advice during the production of the report.

Post-excavation management was provided by Richenda Goffin. Finds processing and analysis was undertaken by Jonathan van Jennians and Ruth Beveridge. The finds report was produced by Ioannis Smyrnaios and additional specialist reports were provided by Sue Anderson, Michael Green and Anna West.

The report was produced by Simon Cass. Illustrations were created by Eleanor Cox and the report was edited by Richenda Goffin and John Craven.

11. Bibliography

Bates, S., 2017a, 'Worked flint', in Sommers, M. (ed.), *Bury St. Edmunds Eastern Relief Road Rushbrooke with Rougham, RGH 086, Suffolk*, Post-Excavation Assessment Report SACIC Report No. 2017/074, 52-60.

Bates, S., 2017b, 'Worked flint', in Douglas, C. (ed.), *Highfield Farm Borrow Pit, Rougham, RGH 092*, Excavation Report SACIC Report No. 2017/063, 35-42.

Beverton, 2012., *Land to the East of Lady Miriam Way, Moreton Hall, Rougham, RGH 066.* SCCAS Report No. 2012/164.

Boyer, P. & Nichol, M., 2017, *Suffolk Business Park (Phase 2), Bury St Edmunds, Suffolk: Archaeological Evaluation.* Cotswold Archaeology Report: 17437.

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.

Brudenell, M., and Hogan, S., 2014, 'Refining Suffolk's Later Prehistoric ceramic sequence: Iron Age pottery and settlement remains at Morland Road, Ipswich', *Proceedings of the Suffolk Institute of Archaeology and History*, 43 (2), 207-18.

Brudenell, M., 2014, 'Later Prehistoric pottery', in Tabor, J., 'Later Prehistoric settlement at Days Road, Capel St Mary', *Proceedings of the Suffolk Institute of Archaeology and History*, 43 (2), 186-95.

Cappers, R.T.J., Bekker, R.M. & Jans, J.E.A., 2006, *Digital Seed Atlas of the Netherlands*, second edition (Groningen Institute of Archaeology, Burkhuis).

Craven, J. A., 2015*, Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066*. SACIC Report No. 2015/046.

Craven, J. A. and Brooks, R., 2017*, Primary Electrical Substation, Rougham, RGH 097*. SACIC Report No. 2017/073.

Curl, J., 2017, 'Animal bone', in Sommers, M. (ed.), *Bury St. Edmunds Eastern Relief Road Rushbrooke with Rougham, RGH 086, Suffolk*, Post-Excavation Assessment Report SACIC Report No. 2017/074, 69-73.

Doherty, A., 2016, 'Prehistoric and Roman pottery', in Lichtenstein L. & Craven J.A. (eds.), *Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066*, Archaeological Excavation Report SACIC Report No. 2015/078, 46-50.

Douglas, C., 2017, *Highfield Farm Borrow Pit, Rougham, Suffolk RGH 092, Archaeological Excavation Report*, SACIC Report No. 2017/063- in prep.

Ferembach *et al*., 1980, 'Recommendations for age and sex diagnoses of skeletons', *J. Hum. Evol.* 9, 517–49.

Finch, E., 1999*, Moreton Hall East, Great Barton, Bury St. Edmunds BRG 024, Archaeological Evaluation report*, SCCAS Report no. 99/64.

Goffin, R., 2016, 'CBM', in Lichtenstein L. & Craven J.A. (eds.), *Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066*, Archaeological Excavation Report SACIC Report No. 2015/078, 51.

Green, M., 2016, 'Struck flint', in Lichtenstein L. & Craven J.A. (eds.), *Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066*, Archaeological Excavation Report SACIC Report No. 2015/078, 52-9.

Jacomet, S., *et al*., 2006, *Identification of Cereal Remains from Archaeological Sites*,

second edition (Basel, Archaeobotany Lab IPAS).

Lichtenstein, L., 2015, *Bury St Edmunds Eastern Relief Road, Bury St Edmunds, Suffolk, RGH 086.* SACIC Report No. 2015/055.

Lichtenstein L. & Craven J.A, 2016, *Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066*, Archaeological Excavation Report SACIC Report No. 2015/078.

Lichtenstein, L., 2016, 'Animal bone', in Lichtenstein L. & Craven J.A. (eds.), *Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066*, Archaeological Excavation Report SACIC Report No. 2015/078, 62.

McKinley, J.I., 1994, *The Anglo-Saxon Cemetery at Spong Hill, North Elmham Part VIII: the cremations*, E. Anglian Archaeol. 69.

McKinley, J.I., 2004, 'Compiling a skeletal inventory: cremated human bone', in Brickley, M. & McKinley, J.I. (eds), *Guidelines to the Standards for Recording Human Remains*, IFA Paper No.7 (Reading, IFA and BABAO).

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

P.C.R.G., 2010, *The study of Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication*, Prehistoric Ceramics Research Group Occasional Papers 1 & 2, 3rd edition.

Pelling, R., 2012, 'Supplement to publication of charred plant remains', in *Dowd's Farm Hedge End, Hampshire*, Wessex Archaeology Report, forthcoming.

Schofield, T., 2014, *Land at Moreton Hall, Bury St Edmunds, Suffolk.* Britannia Archaeology Ltd Report No. 1070.

Smyrnaios, I., 2017a, 'The pottery', in Sommers, M. (ed.), *Bury St. Edmunds Eastern Relief Road Rushbrooke with Rougham, RGH 086, Suffolk*, Post-Excavation Assessment Report SACIC Report No. 2017/074, 38-47.

Smyrnaios, I., 2017b, 'The pottery', in Douglas, C. (ed.), *Highfield Farm Borrow Pit, Rougham, RGH 092*, Excavation Report SACIC Report No. 2017/063, 26-35.

Smyrnaios, 2017c., 'CBM', in Sommers, M. (ed.), *Bury St. Edmunds Eastern Relief Road Rushbrooke with Rougham, RGH 086, Suffolk*, Post-Excavation Assessment Report SACIC Report No. 2017/074, 48-9.

Sommers, M., 2017, *Bury St. Edmunds Eastern Relief Road Rushbrooke with Rougham, RGH 086, Suffolk*, Post-Excavation Assessment Report SACIC Report No. 2017/074 – in prep.

Stace, C., 1997, *New Flora of the British Isles*, second edition, Cambridge University Press, Cambridge.

West, A., 2016, 'Plant macrofossils and other remains', in Lichtenstein L., & Craven J.A. (eds.), *Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066*, Archaeological Excavation Report SACIC Report No. 2015/078, 62-5.

West, A., 2017a, 'Plant macrofossils', in Douglas, C. (ed.), *Highfield Farm Borrow Pit, Rougham, RGH 092*, Excavation Report SACIC Report No. 2017/063, 48-52.

West, A., 2017b, 'Plant macrofossils', in Sommers, M. (ed.), *Bury St. Edmunds Eastern Relief Road Rushbrooke with Rougham, RGH 086, Suffolk*, Post-Excavation Assessment Report SACIC Report No. 2017/074, 74-78.

RGH 097

Appendix 1. Context List

Context No	Feature No	Trench No	Feature Type	Category	Description	Interpretation	Length (m)	Width (m)	Depth (m)
0001		1	Topsoil	Layer	Topsoil for Trench 1.				0.3-0.35
0002		2	Topsoil	Layer	Topsoil for Trench 2.				0.34
0003		3	Topsoil	Layer	Topsoil for Trench 3.				0.4
0004		4	Topsoil	Layer	Topsoil for Trench 4.				0.4
0005		1	Subsoil	Layer	Subsoil for Trench 1.				0.14
0006	0006	3	Pit	Cut	Pit only partially exposed, but has curving shape in plan, with steep concave sides and a concave base.	Possible pit, with single fill, most likely naturally derived. Reasonably well-defined cut, despite some root disturbance.	0.62	>0.33	0.18
0007	0006	3	Pit	Fill	Single fill of pale greyosh-brown moderately loose sandy-silt, with rare small to medium flints and heavily disturbed by roots.				0.18
0008	0008	4	Pit	Cut	Pit only partially exposed, but has curving shape in plan, and may be sub-oval. Se side = concave, with a flat base.	Pit cut, probably filled naturally [this is possibly unlikely given the mixed and sometimes clayey fill and the similarity to fills of pit 0015, which are definitely not naturally derived].	1.4	>1	0.48
0009	0008	4	Pit	Fill	Single fill of loose, mottled brown silty-sand, with occasional small and medium flints (rounded and sub-angular), rare roots and flecks of charcoal.	Pit cut, probably filled naturally [this is possibly unlikely given the mixed and sometimes clayey fill and the similarity to fills of pit 0015, which are definitely not naturally derived].			0.48
0010		4	Charcoal	Layer	Very irregular deposit in plan and section of orange-grey sand and occasional small flints. Unclear relationship with subsoil 0020 - located in area highly disturbed by tree roots at north-east end of trench. Photo'd and drawn in section, but not in plan as was not clear. Only recorded as may relate to Iron Age ditch boundary, but unlikely.	Deliberate charcoal dump (there was no in-situ burning), but no clear cut to relate it to/assign function. [Possibly just a part of the subsoil, which seems to seal features and therefore may be a relatively newer, mixed deposit].			c.0.23?
0011	0011	4	Pit	Cut	Sub-circular cut in plan, with a flat base and concave sides of about 75° on NW side and 50° on SE side.	Pit that may have been used for disposal/dumping or ash/charcoal.	1.62	1.6	0.42
0012	0011	4	Pit	Fill	Basal fill of very dark grey, slightly compacted charcoal-rich silt.	Bumping of ash.		0.7	0.16
0013	0011	4	Pit	Fill	Second fill of light brownish-grey, loose, silty-sand with occasional flecks of charcoal and small flints.	Possibly natural silting between events of intentional deposition.		1.1	0.16
0014	0011	4	Pit	Fill	Third fill of mid yellowish-brown loose silty-sand, with occasional flecks of charcoal and small flints. Also some flecks of possible CBM [fired clay?].	Possibly natural silting between events of intentional deposition.		1.38	0.12
0015	0011	4	Pit	Fill	Upper fill of light brownish-grey loose and fine silty-sand with frequent charcoal and moderate small flints. Moderately clear horizon, slkightly mixed with natural sand in places.	Possible dumping event of ash.		1.42	0.14

Context No	Feature No	Trench No	Feature Type	Category	Description	Interpretation	Length (m)	Width (m)	Depth (m)
0016	0016	4	Pit	Cut	Cut not fully exposed in plan. Possibly oval in plan, with curving edge. Sharp break of slope both on top and base [c.80° straight-concave sides] and a concave base.		1.4	>0.5	0.26
0017	0016	4	Pit	Fill	Single fill of moderately loose, mottled brown silty-sand, with occasional small flints and a piece of heat-altered stone.	Possibly naturally-derived material.	1.4	>0.5	0.26
0018		2	Subsoil	Layer	Subsoil from Trench 2.				0.2
0019		3	Subsoil	Layer	Subsoil from Trench 3.				0.12
0020		4	Subsoil	Layer	Subsoil from Trench 4.				0.12
0021	0021		Pit	Cut	Small circular pit with moderately steep concave sides to a gentle concave sloped base.	Small pit, interpreted as a probable naturally occuring feature with residual inclusions after excavation.	1.2	0.85	0.14
0022	0021		Pit	Fill	Mottled dark greyish brown with charcoal patches throughout. The deposit consists of quite firm silty sand with sub-angular and sub-rounded stone inclusions. The horizon of this fill is quite clear although has been affected by bioturbation.	Single fill of small pit, contained heat-altered stone and charcoal flecks.	1.2	0.85	0.14
0023	0023		Pit	Cut	Circular pit with two fills, with a gentle/shallow sloping profile to a slightly irregular concave base, cut by pit 0021 to the north.	Possibly small dump pit for hearth debris due to the contents of its fills - heat altered stone and frequent charcoal flecks/lumps. Irregular shape and heavily bioturbated fills suggest more likely to be remains of a natural hollow/tree root ball with intrusive artefacts).	1.0	0.66	0.25
0024	0023		Pit	Fill	Light greyish brown firm silty sandy basal fill with sub-angular and sub-rounded stone inclusiosn. Both upper and lower horizons very affected by bioturbation but still visible.	Basal fill of pit 0023, the lack of charcoal inclusions suggests this was natural infilling before the hearth debris dumping occurred, though heat-altered stone was still present in this fill.		0.46	0.1m
0025	0023		Pit	Fill	Dark greyish brown firm silty sand fill of pit 0023 with sub-angular and sub-rounded pebble inclusions and patches of charcoal throughout. The interface with deposit 0024 below is slightly obscured by bioturbation but still quite visible. It is very similar to deposit 0022 in Pit 0021 adjacent to the north.	Charcoal and heat-altered stone inclusions suggest that this deposit is the remains of hearth debris/a small domestic fire. Interpreted after excavation as a probable naturally occuring feature (tree roots or similar).		0.66	<0.1
0026	0026		Ditch	Cut	Linear dithc feature, orientated approximately ENE/WSW at this point, with gently sloped northern side with a step to a sharp sloped edge before reaching a narrow concave base with a moderately steep sloped southern side with no step present.	Linear ditch, believed to be part of a large prehistoric boundary ditch alignment seen on sites to the southeast and northwest.	1.1	1.45	0.22
0027	0026		Ditch	Fill	Mid yellowish brown friable silty sna dwith occasional small/medium sub-rounded flints and pebbles. Bioturbation evident throughout.	Single fill of ditch 0026.	1.1	1.45	0.22
0028	0028		Pit	Cut	Circular pit with a concave profile with some small irregularities to a shallow curved base, 0.78m in diameter.	Probable fire debris pit, with a secondary fill of natural silting after a primary charcoal rich fill.	0.78	0.78	0.20
0029	0028		Pit	Fill	Basal fill of pit 0028, a very dark greyish brown loose slightly sandy and very charcoally silt with occasional large heat-altered stones within the fill.	Basal fill of pit 0028, probably fire/hearth waste dumped into the pit.	0.52	0.78	0.06

Context No	Feature No	Trench No	Feature Type	Category	Description	Interpretation	Length (m)	Width (m)	Depth (m)
0030	0028		Pit	Fill	Upper fill of pit 0028. this deposit is a dark greyish brown moderately firm sandy silt with frequent charcoal flecks and large sub-angular pebbles with a clear horizon.	Upper fill of pit 0028, potentially natural infilling of the pit after dumping fill 0029.	0.78	0.78	0.14
0031	0031		Pit	Cut	Circular pit with steep sloped sides to a shallow flattish base, disturbed by an animla burrow/nest at the base of the feature.	Pit.	0.61	0.52	0.24
0032	0031		Pit	Fill	Dark greyish brown loose sandy silt with frequent charcoal flecks and occasional charcoal chunks, especially towards the base of the pit, as well as infrequent meduim/large sub-angular stones. A small animal burrow/nest was found at the base of the feature, possibly introducing contaminants.	Single fill of pit 0031, with flint and pottery found.	0.61	0.52	0.24
0033	0033		Ditch	Cut	Linear ditch, aligned approximately NW/SE at this point, with a very shallow dished profile. The south-eastern end of this excavated segment was truncated by pit 0035 (relationship visible on the surface).	Linear boundary ditch. Same feature as 0026 to the southeast which dissapears into an area of modern disturbance just to the north of this segment and was not visible past that.	1.25	0.8	0.1
0034	0033		Ditch	Fill	Mid yellowish brown soft friable silty sand with very occasional sub-angular stones. Single fill of ditch 0033.	Fill of shallow boundary ditch 0033. Truncated to the southern end of the segment by pit 0035.	1.25	0.8	0.1
0035	0035		Pit	Cut	Ovoid pit, aligned approximately north-south which cut through ditch 0033 with steep sloped sides to a shallow concave/flattish base.	Pit. Truncates ditch 0033 (relationship visible on surface)	1.6	1.25	0.3
0036	0035		Pit	Fill	Mid yellowish brown mottled soft/friable silty sand with occasional sub-rounded stones/pebbles. Single fill of pit 0035.	Fill of pit 0035.	1.6	1.25	0.3
0037	0037		Pit	Cut	Oval shaped pit with a single fill (0038). The profile is truncated by pit 0041 but appears to have gradual sloped (slightly irregular) edges to a flattish slightly disturbed base.	Pit with a single fill, truncated by pit 0041.	0.6	>0.38	0.14
0038	0037		Pit	Fill	Dark mottled orangey brown slightly clayey sandy silt with occasional large sub-angular pebbbles and pale orange clay chunks found within the deposit. Single fill of pit 0037.	Fill of pit 0037, truncated by pit 0041.	0.6	>0.38	0.14
0039	0039		Pit	Cut	Oval shaped pit with a single fill. Pit has a relationship with pit 0041 (probably truncating this pit) but it is difficult to see in section. The base is generally flat, with a few irregularities and the profile is disturbed on one side by the relationship but where visible appears to be nearly vertical in section	Pit with single fill, relationsihp with pit 0041 unclear but thought to be cut by pit 0041.	>0.62	>0.7	0.14
0040	0039		Pit	Fill	Dark mottled orangey brown slightly clayey sandy silt with frequent large sub-angular pebble inclusions. Single fill of pit 0039.	Single fill of pit 0039.	>0.62	>0.7	0.14
0041	0041		Pit	Cut	Oval shaped pit with a single fill with relatively steep sloped sides to a shallow concave base. This pit truncates pit 0037 and is believe to truncate pit 0039 (although that relationship is not as clear in the section).	Pit, truncating pits 0037 and 0039 (probably).	>0.66	>0.34	0.3
0042	0041		Pit	Fill	Dark orangey brown slightly sandy clayey silt with frequent sub-angular pebbles and rare charcoal fleck inclusions. Single fill of pit 0041.	Single fill of pit 0041.	>0.66	>0.34	0.3
0043	0043		Pit	Cut	Circular pit with very steep/near vertical sloped sides to a very shallow dished base. Contains a large quantitity of heat-altered stones (pot-boilers?).	Possible hearth debris/pot boiler waste pit. Fully excavated after recording for finds recovery.	0.8	0.75	0.16

Context No	Feature No	Trench No	Feature Type	Category	Description	Interpretation	Length (m)	Width (m)	Depth (m)
0044	0043		Pit	Fill	Dark greyish brown friable silty sand with more than 50% heat-altered stones (50-80mm diam), and frequent charcoal fragments, lumps and flecks.	Proabble hearth debris/pot-boiler waste pit.	0.8	0.75	0.16
0045	0045		Pit	Cut	Circular pit with moderately steep sloped sides to a concave base.	Small pit, close by to pit 0043, fully excavated after recording to maximise recovery of artefacts.	0.8	0.75	0.2
0046	0045		Pit	Fill	Dark greyish brown friable silty sand with occasional small/medium flints and stones. Single fill of pit 0045.	Single fill of pit 0045.	0.8	0.75	0.2
0047	0047		Pit	Cut	Additional number issued for second quadrant of feature 0039.	Pit 0047 is the same feature as 0039, but an additional quadrant.			
0048	0047		Pit	Fill	Same deposit as 0040. Single fill of pit 0047 in opposite quadrant to 0039/0040.	Single fill of pit 0047.			
0049	0049		Pit	Cut	Same feature as pit 0041 (opposite quadrants). In the other slot this feature is seen to cut pit 0037/0047.	Pit with single fill.			
0050	0049		Pit	Fill	Same deposit as 0042 in opposite quadrant. A large piece of natural wood (tree root?) was found in this segment.	Fill of pit 0049.			
0051	0051		Pit	Cut	Cut of medium sized circular pit with slightly undercut sides to a flat base. Fully excavated after recording.	Likely prehistoric refuse pit - organic-rich fills with possible pot-boilers and pottery sherds suggest a domestic origin for the deposits within this feature.	1.5	1.4	0.72
0052	0051		Pit	Fill	Dark grey/blackish brown moderately firm silty sand with occasional clayey inclusions and charcoal flecks interpretted as a slump fill at the base of pit 0051.	Likely slump fill in the base of pit 0051.	1.5	1.4	0.1
0053	0051		Pit	Fill	Dark greyish brown loose silty sand with clay lumps and charcoal fleck inlusions. Middle fill of pit 0051.	Main dump fill within Pit 0051. Organic-rich deposit with charcoal flecking.	1.5	1.4	0.5
0054	0051		Pit	Fill	Mid/light greyish brown loose sandy silt with charcoal flecks and sub-angular/sub-rounded stone inclusions. Horizon with 0053 below slightly mottled.	Upper fill of pit 0051, contained heat-altered stones.	1.5	1.4	0.2
0055	0055		Pit	Cut	Circular pit with a slightly irregular irregular profile, moderatley steep and slightly undulating on the ESE side and more regular and gradual on the WNW side with a flat base. Fully excavated after recording.	Pit.	1.34	1.18	0.28
0056	0055		Pit	Fill	Dark mottled greyish brown friable slightly sandy clayey silt with frequent large sub-angular to angular pebbles and occasional charcoal flecks.	Fill of pit 0055.	1.34	1.18	0.28
0057	0057		Pit	Cut	Large circular pit with steep sloped concave sides (possibly undercut/slumped northern edge) to a concave base.	Large undated pit feature. Distinct from other large natural features nearby (tree roots) but no artefacts found. No thought to relate to WW2 airfield activity.	1.9	2.1	0.6
0058	0057		Pit	Fill	Mid yellowish/greyish brown friable silty sand with very occasional sub-angular flints and stones. Single fill of pit 0057.	Single fill of pit 0057, no finds.	1.9	2.1	0.6

Context No	Feature No	Trench No	Feature Type	Category	Description	Interpretation	Length (m)	Width (m)	Depth (m)
0059	0059		Pit	Cut	Small circular pit with steep/near vertical sloped sides and an undulating base in close proximity to larger pits 0057 and 0035 but no physical realtionship to either.	Basal fill almost entirely charcoal and ashy so this feature was interpreted as a hearth debris pit however excavation of the remaining feature after recording identified fragments of burnt bone, possibly suggesting raising the possiblity this was a cremation pyre debris pit.	0.53	0.53	0.34
0060	0059		Pit	Fill	Dark grey/black firm silty sand with very frequent charcoal and ashy inclusions with a mottled interface with upper fill 0061.	Fire debris deposit - possibly from a domestic hearth or a cremation pyre. Bone fragments included in sample not as bulk finds.	0.53	0.53	0.25
0061	0059		Pit	Fill	Mottled mid/dark greyish lbrown oose silty sand with charcoal flecks and rare sub-angular/sub-rounded pebble inclusions. Horizons disturbed by biooturbation. Top fill of pit 0059.	Upper fill of pit 0051, probably also contaiing hearth/pyre material.	0.53	0.53	0.18
0062	0062		Pit	Cut	Circular pit with gradual sloped sides to a shallow concave base.	Pit.	1.66	1.66	0.24
0063	0063		Pit	Fill	Mottled mid/light greyish brownloose silty sand with rare sub-angular/sub-rounded pebbles and charcoal fleck inclusions. Deposit is very bioturbated and interface with natural is slightly obscured.	Possible dump fill within pit 0062.	1.66	1.66	0.24
0064	0064		Pit	Cut	Irregular ovoid shaped pit with slighlty undulating sides to an irregular flattish base.	Pit.	1.8	1.56	0.35
0065	0064		Pit	Fill	Dark greyish brown slightly clayey loose sandy silt with frequent large angular pebbles and occasional charcoal flecks. Single fill of pit 0064.	Single fill of pit 0064.	1.8	1.56	0.35
0066	0066			Other	Pottery scatter in a natural hollow/bioturbated area. No discernable feture remaining but occasional patches of darkblackish brown silty sand over a c. 0.6-0.8m area where the pottery was found suggests a feature was once there.	Unstratified pottery scatter - possibly remains of a now-destroyed feature.			
0067	0067			Other	Pottery scatter in possible tree throw/disturbed area. Malinly a light greyish brown silty sand soil but occasional small patches of dark greyish brown silty sand throughout.	Unstratified pottery scatter.			
0068	0068		Pit	Cut	Small circular pit with vertical sides to a very shallow concave base.	Pit.	0.7	0.8	0.25
0069	0068		Pit	Fill	Mid greyish yellowish brown firable silty sand with occasional small sub-rounded/sub-angular flints and stones. Single fill of pit 0068.	Fill of pit 0068.	0.7	0.8	0.25

Appendix 2. Bulk finds catalogue

Ctxt	Pottery		CBM		Fired Clay		Worked Flint		Heat-altered Flint		Stone		Heat-altered Stone		Spotdate	Samples	Sample Finds
	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g			
0001							1	1									
0009	4	38					1	2	1	4					Pre	3	Pottery, Worked Flint, Heat-altered Flint
0012	4	66													Pre	2	Pottery, Worked Flint, Heat-altered Flint
0015	3	22													Pre	1	Pottery, Worked Flint, Heat-altered Flint
0017	1	2					1	9					2	56	Pre		
0020	12	9					1	95							Pre		
0022									4	112			24	1093			
0024							1	22	3	33			12	209			
0025									2	39			17	1761			
0032	2	8					3	23							Pre		
0034	2	3			2	38									Pre		
0036	1	3															
0044	10	28							9	875			224	38625	Pre	4	Pottery, Worked Flint, Heat-altered Flint, Heat-altered Stone
0046							3	58					1	48			
0052	2	121			1	2									Pre		
0053	23	327			4	9	2	17	4	138					Pre	5	Pottery, Fired Clay, Worked Flint, Heat-altered Flint, Heat-altered Stone, Animal Bone
0054	8	111			2	9	1	6	3	55					Pre		
0060																6	Pottery, Worked Flint, Heat-altered Flint, Cremated Human Bone
0065			1	6			8	91									
0066	29	46													Pre		
0067	3	11													Pre		
0069	2	5													Pre		

Appendix 3. Prehistoric pottery

Ctxt	Ceramic Period	Fabric	Form	Decoration	Sherd type	No	Wt/g	ENV	EVE	Rim diam. (cm)	State	Comments	Fabric date	Pottery date
0009	Preh	Q(VF)			p	4	38						MIA	
0009	Preh	Q(VF)			p	2	11						MIA	
0009	Preh	Q(VF)	Bulbous jar		r	1	24	1	0.05	13			MIA	later MIA to LIA
0009	Preh	QGF	Beaker?	combing	p	1	3						EBA	
0012	Preh	Q(VF)			p	4	66						MIA	
0012	Preh	Q(VF)			p	1	1				tiny chip		MIA	unclear
0015	Preh	Q(VF)			p	2	18						MIA	
0015	Preh	Q(VF)			r	1	4	1	0.06	14	small rim fragment	fabric contains quartzite pebbles	MIA	
0015	Preh	Q(VF)	Jar Form A		r	1	14	1	0.05	14			MIA	later MIA to LIA
0015	Preh	F			p	1	2						LBA-EIA	EIA
0015	Preh	Q(VF)			p	6	31						MIA	
0017	Preh	Q(VF)			r?	1	1	1	0.09	8	chip from circumference	small fragment; could also be from a base; fabric contains quartzite pebbles	MIA	
0020	Preh	F			p	12	9				small chips		LBA-EIA	EIA
0032	Preh	Q(VF)			p	2	8						MIA	
0034	Preh	Q(VF)			p	1	1				tiny chip		MIA	
0034	Preh	QVM			p	1	2				small chip		MIA-LIA	LIA?
0036	Preh	QGV			p	1	3						LIA	
0044	Preh	F			p	7	17						LBA-EIA	
0044	Preh	Q(VF)			p	1	3						MIA	
0044	Preh	Q(VF)			p	1	4						MIA	MIA or earlier
0044	Preh	QSF			p	1	2						BA	
0044	Preh	Q(VF)			p	9	8				tiny chips		MIA	
0044	Preh	Q(VF)	jar?		r	1	5	1				unclear rim diameter	MIA	

Ctxt	Ceramic Period	Fabric	Form	Decoration	Sherd type	No	Wt/g	ENV	EVE	Rim diam. (cm)	State	Comments	Fabric date	Pottery date
0052	Preh	Q(VF)			b+p	2	122	1				45% of flat base, 9cm diam.	MIA	
0053	Preh	QCV	Jar Form A	vertical scratching, nailmark along rim	r+b+p	6	60	1			tiny part or rim survives	broken base	MIA-LIA	MIA
0053	Preh	Q(VF)			p	1	19					fabric contains quartzite pebbles	MIA	
0053	Preh	QV			p	1	3						MIA-LIA	
0053	Preh	QVM			p	1	4						MIA-LIA	LIA?
0053	Preh	Q(VF)			p	6	42						MIA	
0053	Preh	F			p	1	14						LBA-EIA	EIA
0053	Preh	QSF			a	1	1						BA	
0053	Preh	Q(VF)			p	1	3						MIA	MIA or earlier
0053	Preh	QV		smoothed	p	1	18						MIA-LIA	
0053	Preh	QV		black burnished	p	1	36					fabric contains flint impurities	MIA-LIA	
0053	Preh	Q(VF)	Jar Form E		r+b+p	3	127	1	0.04	14		28% of flat base, 8cm diam; fabric contains quartzite	MIA	
0053	Preh	QCV		vertical scratching	p	1	4						MIA-LIA	
0053	Preh	Q(VF)			p	2	11						MIA	
0053	Preh	QV		black burnished	p	1	13						MIA-LIA	
0053	Preh	QC			p	2	5					ceramic vessel	BA?	
0054	Preh	QCV			p	3	9						MIA-LIA	
0054	Preh	Q(VF)			p	4	33						MIA	
0054	Preh	Q(VF)	jar?		b	1	68	1				40% of stepped base, 8cm diam.	MIA	
0060	Preh	F			p	1	1				tiny chip		LBA-EIA	unclear
0066	Preh	Q(VF)			p	16	7				small chips		MIA	unclear
0066	Preh	QV			b?+p	5	9						MIA-LIA	
0066	Preh	QV	bowl?		r	1	3	1	0.08	8			MIA-LIA	
0066	Preh	QV		fingermark along rim	r	1	4	1				unclear rim diameter	MIA-LIA	
0066	Preh	QV	jar?	rim folded out	r+b?+p	5	21	1	0.08	12		plant impression under base	MIA-LIA	

Ctxt	Ceramic Period	Fabric	Form	Decoration	Sherd type	No	Wt/g	ENV	EVE	Rim diam. (cm)	State	Comments	Fabric date	Pottery date
0067	Preh	Q(VF)			p	1	3						MIA	
0067	Preh	Q(VF)			p	2	6					fabric contains quartzite pebbles	MIA	
0069	Preh	Q(VF)			p	1	1						MIA	
0069	Preh	QV			a	1	4					angular sherd, possibly shoulder	MIA-LIA	

Appendix 4. Burnt bone

Burial	Samp	Frac	Skull			Lower limb			Unident	Totals	max skull (mm)	max l.b. (mm)	Colour	Notes	Age	Sex	C14 sample
			No.	Wt/g	Ave. wt	No.	Wt/g	Ave. wt	Wt/g	Wt/g							
0060	6	>10mm								0				1 frag unburnt (0.9g) - worked?			
		>4mm	30	3.5	0.1	5	1.3	0.26	10.1	14.9	14	13		cran vault frags, mostly quite thin; lower limb= femur shaft? Other frags all l.b. 2 frags unburnt (0.3g) worked?	Juv?		1.3g lower limb
		>2mm	30	1.4	0.0				21.6	23.0				cran vault frags; 3 pieces (0.1g) unburnt ?worked			
		<2mm							3.9	3.9				total res wt 387.1g, c.1% bone			
Totals			**60**	**4.9**	**0.1**	**5**	**1.3**	**0.26**	**35.6**	**41.8**							
%				**79.0**			**21.0**		**total ID**	**6.2**							
0053	5								1.2	1.2				species uncertain, may all be animal - at least 1 frag prob is			

Scottish Universities Environmental Research Centre
Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

Appendix 5.

RADIOCARBON DATING CERTIFICATE
18 September 2019

Laboratory Code	SUERC-88675 (GU52611)
Submitter	Anna West Cotswold Archaeology Ltd Unit 5, Plot 11, Maitland Road Lion Barn Industrial Estate Needham Market Suffolk IP6 8NZ
Site Reference	RGH 097
Context Reference	0060
Sample Reference	<6>
Material	Cremated Bone : Human
$\delta^{13}C$ relative to VPDB	-24.8 ‰
Radiocarbon Age BP	3043 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

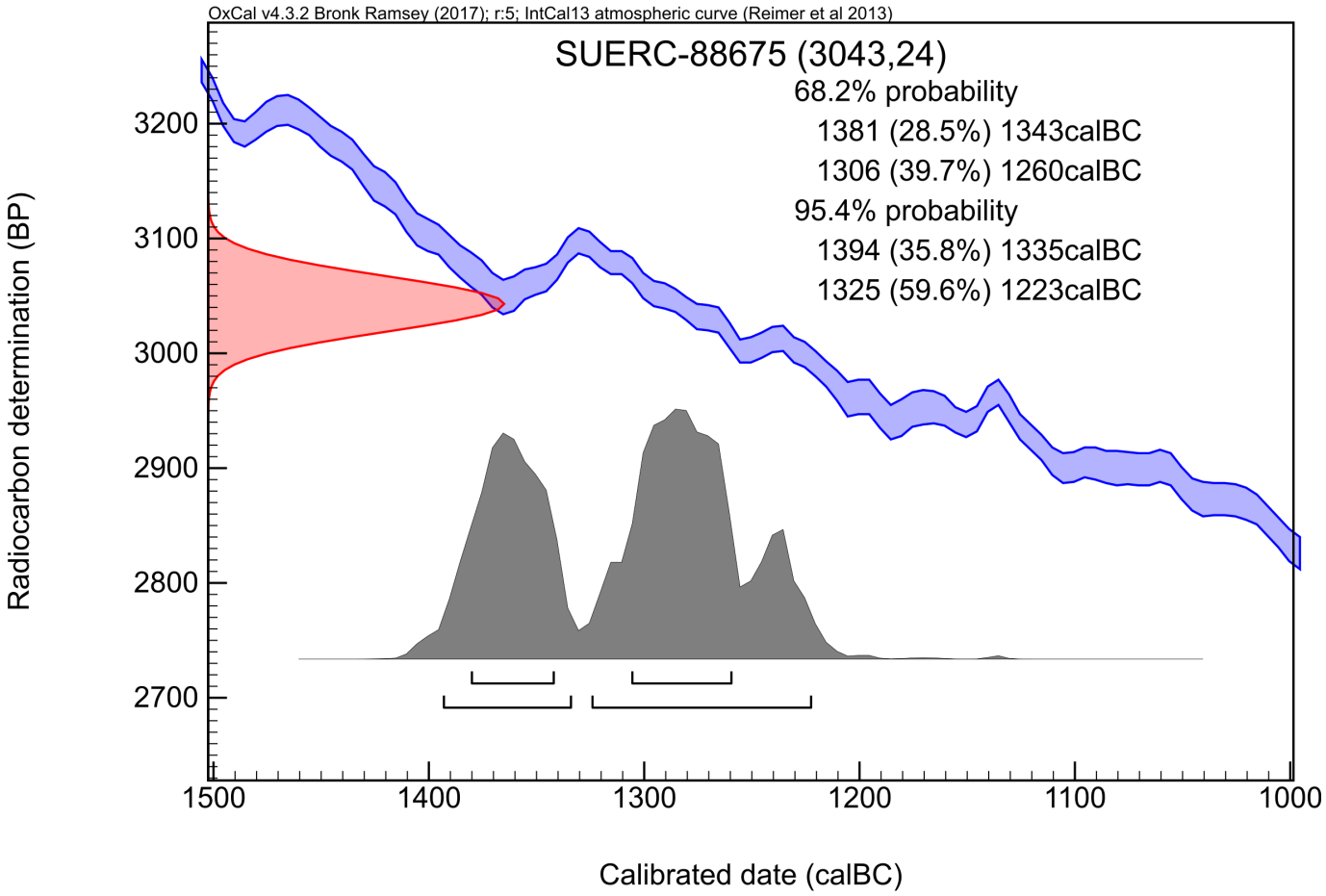
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

Appendix 6. OASIS report

OASIS ID: suffolka1-296959

Project details	
Project name	Primary Electrical Substation, Rougham
Short description of the project	An archaeological excavation was carried out on land adjacent to the new Sybil Andrews School and Sports Centre off Skyliner Way to record archaeological deposits prior to the construction of a new electrical substation. A previous evaluation had revealed a cluster of Iron Age pits on the site and a large modern pit believed to relate to the former WW2 Rougham airfield. In addition, previous work at the adjacent school (RGH 066) and the new Eastern Relief Road (RGH 086) had indicated the presence of a large Iron Age enclosure ditch which was thought likely to pass through the site, although it was not identified in the evaluation trenches. The excavation revealed a cremation debris pit with the partial remains of a juvenile, radiocarbon dated to the Middle Bronze Age, The presence of this pit is notable since no other cremation debris has been positively identified so far on the plateau and there is little evidence for contemporary Middle Bronze Age activity in the immediate vicinity. A single ditch was identified on an approximately north-west/south-east orientation, which aligns with the known Iron Age boundary ditch system. Although the ditch itself was very shallow and disappeared within the site, it is possible that it represents one of the multiple redefinitions of the boundary seen to the south-east in the excavations for the Eastern Relief Road (RGH 086). A series of pits of varying size, containing evidence of domestic waste and probable hearth debris, were also identified and date to the middle Iron Age. Similar patterns of sparse scattered pitting has previously been seen across both the nearby excavations. These results add to the picture of dispersed Iron Age occupation/settlement, previously seen in neighbouring fieldwork, which appears to extend across this plateau overlooking the Lark valley. The ditch seen in the latest site is another section of a boundary that can be traced for at least 800m and the pitting is similar to that seen on both the adjacent RGH 066 and RGH 086 excavations.
Project dates	Start: 11-09-2017 End: 21-09-2017
Previous/future work	Yes / No
Any associated project reference codes	suffolkc1-293299 - OASIS form ID
Any associated project reference codes	ESF 25787 - HER event no.
Any associated project reference codes	RGH 097 - HER event no.
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m
Monument type	PIT Middle Iron Age
Monument type	DITCH Middle Iron Age
Significant Finds	POTTERY Middle Iron Age
Significant Finds	CREMATED BONE Middle Iron Age
Investigation type	"""Open-area excavation"""
Prompt	Direction from Local Planning Authority - PPS

Project location	
Country	England
Site location	SUFFOLK ST EDMUNDSBURY RUSHBROOKE WITH ROUGHAM Primary Electrical Substation, Rougham
Postcode	IP30 9NH
Study area	1800 Square metres
Site coordinates	TL 8891 6411 52.242236209348 0.767261683745 52 14 32 N 000 46 02 E Point
Height OD / Depth	Min: 62.29m Max: 62.86m
Project creators	
Name of Organisation	Suffolk Archaeology CIC
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Rachael Abraham
Project director/manager	John Craven
Project supervisor	Simon Cass
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Taylor Wimpey East Anglia
Project archives	
Physical Archive recipient	Suffolk HER
Physical Contents	''Ceramics'',''Environmental'',''other''
Digital Archive recipient	Suffolk HER
Digital Contents	''Ceramics'',''Environmental'',''Stratigraphic'',''Survey''
Digital Media available	''Database'',''GIS'',''Images raster / digital photography'',''Survey'',''Text''
Paper Archive recipient	Suffolk HER
Paper Contents	''Ceramics'',''Environmental'',''Stratigraphic'',''Survey''
Paper Media available	''Context sheet'',''Photograph'',''Plan'',''Report'',''Section'',''Survey ''
Project bibliography	
Publication type	Grey literature (unpublished document/manuscript)
Title	Primary Electrical Substation, Rougham, Suffolk Archaeological Evaluation Report
Author(s)/Editor(s)	Cass, S.
Other bibliographic details	2017/084
Date	2018
Issuer or publisher	SACIC
Place of issue or publication	Needham Market
Description	A short report in house style, 83 sides A4, wire comb-bound and card covered.

Appendix 7. Written scheme of investigation

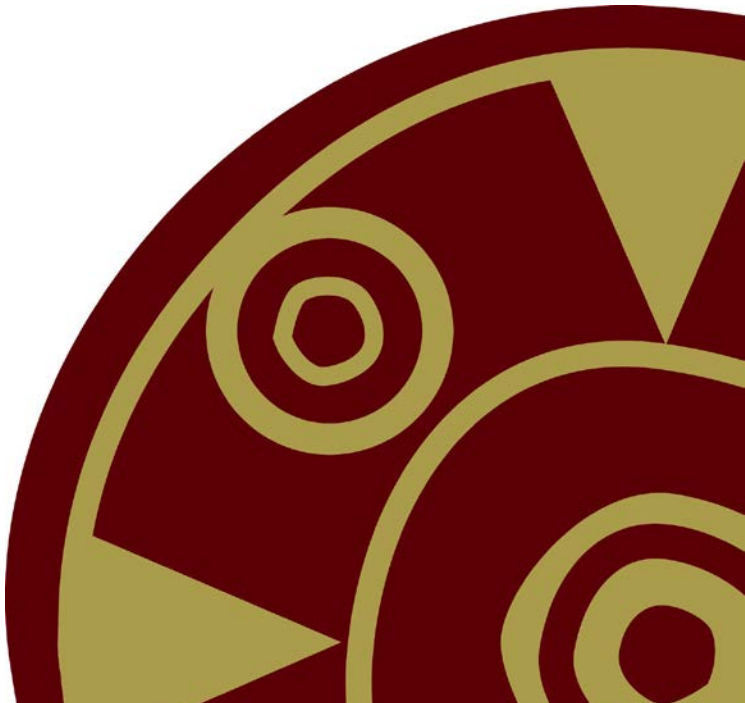
SUFFOLK ARCHAEOLOGY
• A HISTORY OF EXPERTISE •

Primary Electrical Substation,
Rougham Tower Avenue, Rougham, Suffolk

Client:
Taylor Wimpey East Anglia

Date:
August 2017

RGH 097
Written Scheme of Investigation and Risk Assessment – 'Strip and Map' Archaeological Excavation
Author: John Craven



Contents

List of Figures

Project details

Planning Application No:	DC/16/2556/FUL
Curatorial Officer:	Rachael Abraham (Suffolk CC Archaeological Service)
Grid Reference:	TL 8892 6411
Area:	c.0.4ha
HER Event No/Site Code:	RGH 097
OASIS Reference:	TBC
Project Start date	11th September 2017
Project Duration:	c. 2 weeks
Client/Funding Body:	Taylor Wimpey East Anglia
Client Agent	Duncan Hawkins (CgMs)
SACIC Project Manager	John Craven
SACIC Project Officer:	TBC
SACIC Job Code:	RGHTWS002

1. Introduction

- A program of archaeological ‘Strip and Map’ excavation is required to record any archaeological deposits on the proposed electrical substation on land at Rougham Tower Avenue, Rougham (Fig. 1). The work is required by a condition on planning application DC/16/2556/FUL, in accordance with paragraph 141 of the National Planning Policy Framework.
- The nature and extent of work required has been discussed with Rachael Abraham of Suffolk County Council Archaeological Service (SCCAS), the archaeological adviser to the Local Planning Authority (LPA), immediately following a phase of archaeological trial trench evaluation fieldwork (Brooks in prep). Although no formal SCCAS Brief has been produced Rachael Abraham has indicated that the site requires ‘strip and map’ excavation to record the archaeological deposits present on site.
- Suffolk Archaeology CIC (SACIC) has been contracted to carry out the project. This document outlines an excavation of the northern part of the site and details how the project will fulfill the typical requirements of an SCCAS excavation Brief and general SCCAS guidelines (SCCAS 2017), 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.
- It should be noted that, following the excavation fieldwork, the assessment report will establish the further analysis required to publish the site in an updated project design (UPD). If approved by SCCAS the work outlined in the UPD will need to be completed to allow final discharge of planning conditions. The client is advised to consult with SCCAS as to their obligations following receipt of the excavation assessment report.
- The project will continue to adhere to the Risk Assessment and Method Statement (RAMS, Caruth 2017) recently issued for the evaluation phase of works.

2. The Site

- The site lies within what was, until very recently, open arable farmland on the eastern outskirts of modern Bury St Edmunds, at 65m above Ordnance Datum on a level plateau *c.*3km east of the River Lark.
- The proposed development, which lies immediately to the north of the newly constructed Eastern Relief Road and 150m east of the new High School, is for a new electrical substation. The construction of buildings and associated infrastructure and landscaping will involve considerable ground disturbance which could affect archaeological deposits.
- The site geology consists of superficial deposits of Cover Sand which in turn overlie chalk bedrock of the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation (British Geological Survey website).

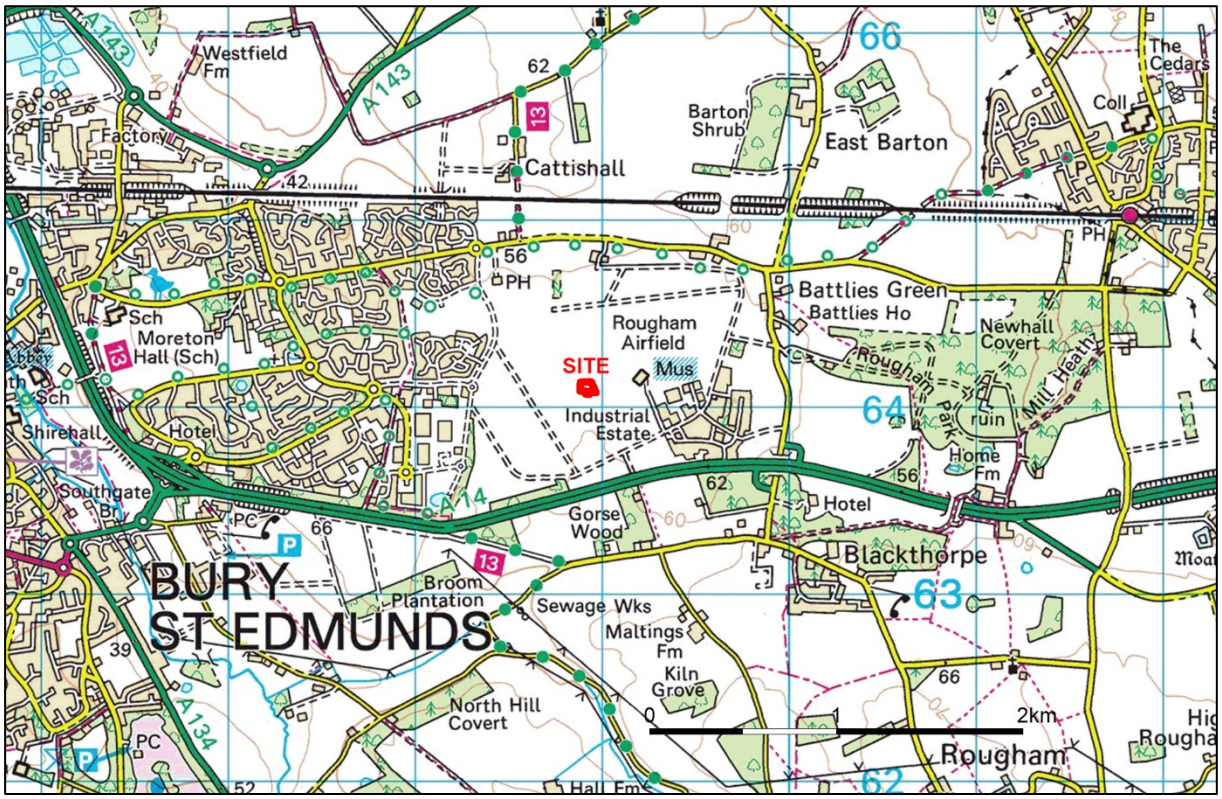


Figure 1. Location map

3. Archaeological and historical background

- The condition was originally placed as the site lies in an area of archaeological potential as defined in the County Historic Environment Record (HER) and seen in a series of prior archaeological investigations by SACIC (in part during its former role as the SCCAS Field Team). These investigations (Fig. 2) have revealed dispersed areas of prehistoric, Roman and medieval activity and the following summary is based upon SACIC's knowledge and experience of the immediate area, in lieu of a HER search.
- Previous evaluation on former arable land c.600m to the west and northwest of the site, prior to recent housing and industrial development extending east from Bury St Edmunds (BRG 024, Finch 1999), highlighted several areas of archaeological potential which were later investigation in a series of targeted excavations (unpublished). These included an area of Roman occupation (RGH 031, investigated by areas RGH 037 and RGH 038), low density prehistoric evidence at RGH 035 and RGH 039 and Early-Mid Iron Age deposits at RGH 036.
- Three phases of evaluation and excavation in 2012 and 2015 on the Moreton Hall High School site (RGH 066), 150m to the west, identified evidence of Early/Middle Iron Age occupation. The evaluations (Beverton 2012, Craven 2015) showed dispersed pits and ditches across the school site, with the subsequent excavation of three separate areas (Lichtenstein 2016) identifying the supposed outskirts of a small farmstead represented by the remains of four smaller square or rectangular four-post structures (possible granaries), some pits, some external firepits (possible temporary hearths) and a substantial boundary ditch on the eastern side of the site.
- This Iron Age boundary is suspected to extend well beyond RGH 066 to north-west as it clearly corresponds to a linear anomaly identified in a geophysical survey to the north of the school (Schofield 2014). It was also considered probable that it continued to the south-east and corresponded to a series of ditches identified in evaluation trial trenching and excavation in advance of the recent construction of the proposed Eastern Relief Road (RGH 086, Lichtenstein 2015 and Sommers in prep).

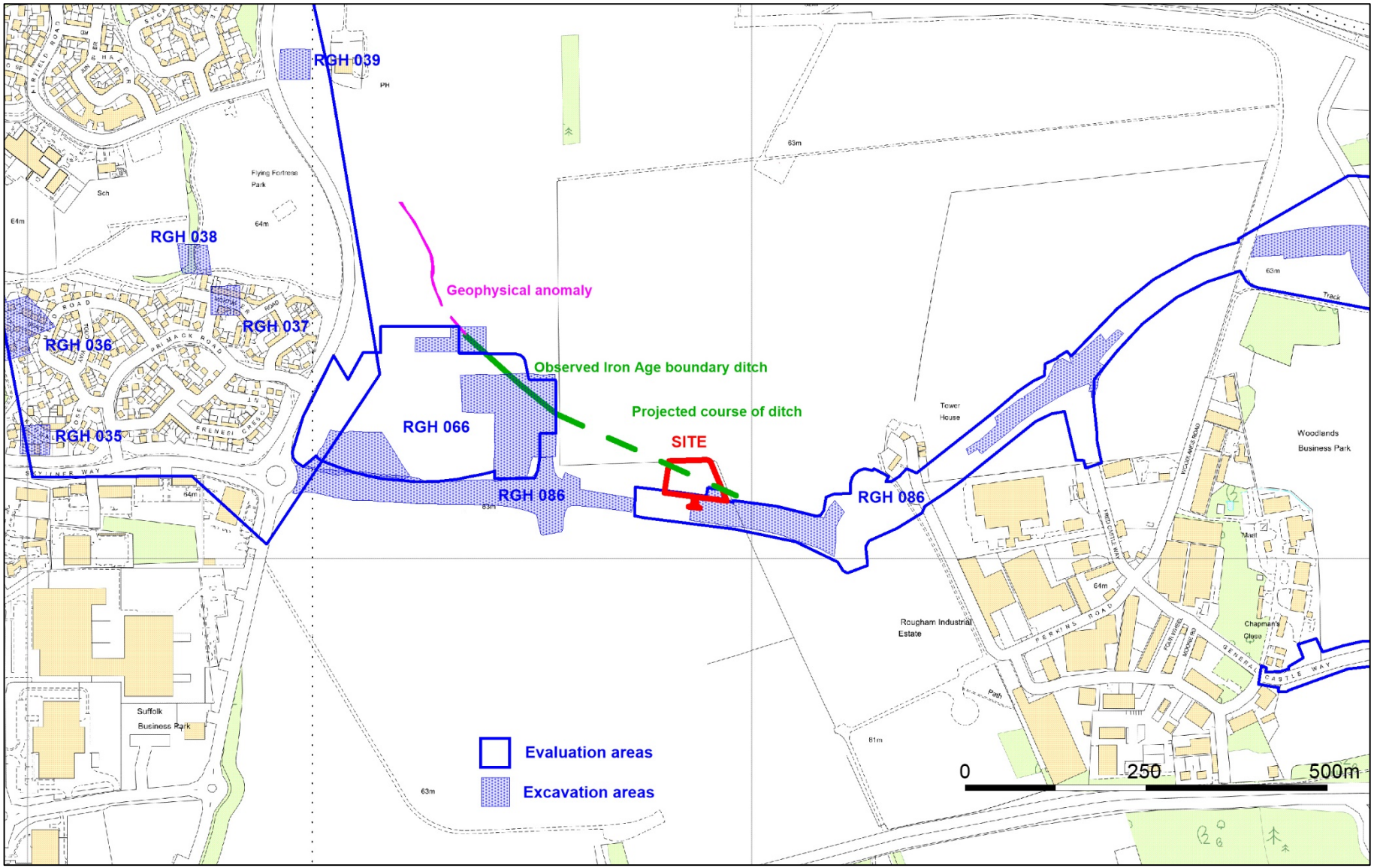


Figure 2. Site in relation to previous fieldwork investigations

- This suggested that the Iron Age boundary would cross through the substation site and, as the RGH 086 excavation area was another focus for evidence of Iron Age occupation with sizeable quantities of Iron Age pottery and other material, it seemed likely that it would contain further evidence of this phase of settlement. SCCAS therefore requested that the site be subjected to a trial trench evaluation, which was carried out by SACIC in August 2017.
- The evaluation (Brooks in prep) identified four pits, three of which were Iron Age and clustered in Trench 04 in the north-east part of the site. Although Trench 04, and possibly Trench 03, were placed across the projected Iron Age boundary there was no sign of any linear features. This suggests that either there is no direct link between the RGH 066 and 086 boundaries or that the boundary is somewhat curvilinear and perhaps passes by to the north. A large modern pit was also recorded in Trench 01 to the south.
- The site also lies within the centre of the former WW2 Rougham airfield (RGH 046), close to a secondary runway, as shown on an annotated map of the airfield (Fig. 3) acquired from the Rougham Tower Association website in 2015 (http://www.rougham.org – now defunct). The large modern pit identified in evaluation Trench 01 may be associated with activity concerning the airfields operation or closure.

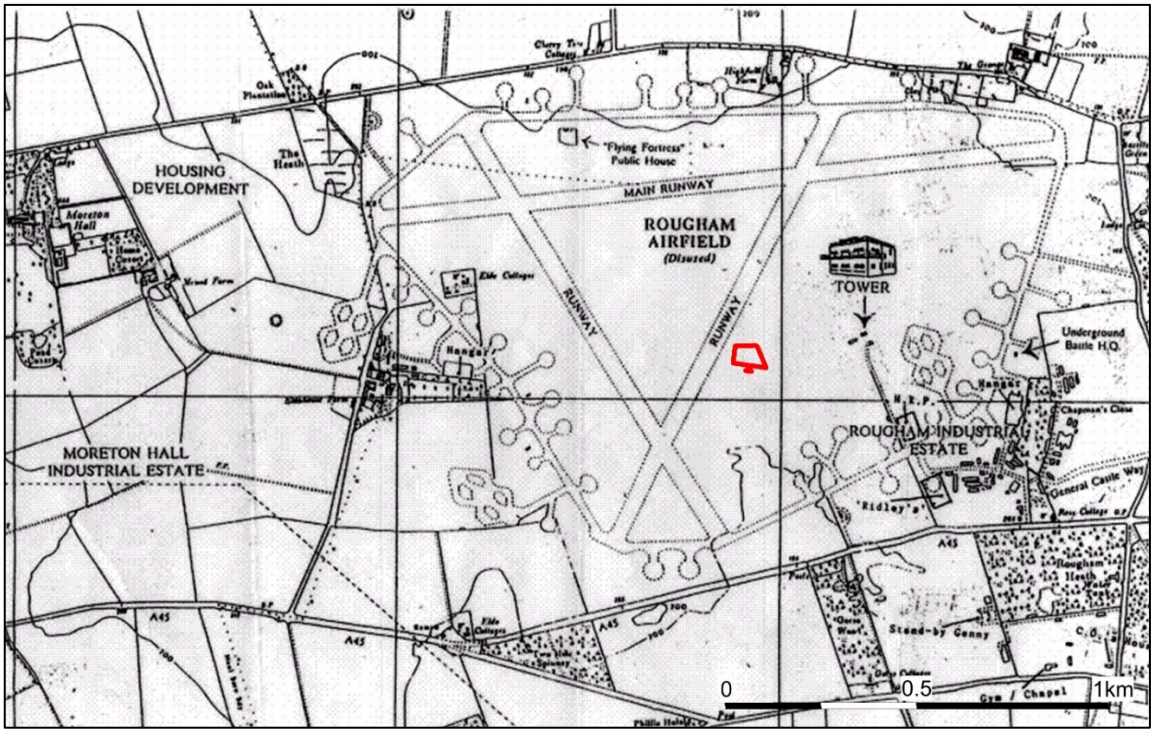


Figure 3. Site in relation to Rougham airfield (taken in 2015 from http://www.rougham.org)

4. Project Objectives

- The aim of the project is to ‘preserve by record’ all archaeological deposits within the defined excavation area, prior to its development, via the creation of a full site archive and accompanying archive report and publication text.

- The project will:

  - Excavate and record all archaeological deposits present on the site.
  - Produce a full site archive.
  - Produce a post-excavation assessment report that presents the results of excavation fieldwork and assesses its research potential (see below).
  - Provide an updated project design, timetable and costing, for completing further analysis of the site archive and preparing an archive report and publication text.
  - Produce a final site archive report.
  - Publish the site, if appropriate, in a recognised archaeological journal or monograph.
  - Deposit the project archive in a suitable store.

- The project will likely have potential to address research aims concerning Iron Age rural occupation as defined in the Regional Research Framework for the Eastern Counties (Brown and Glazebrook 2000, Medlycott 2011 p29-32). Analysis of the site archive may be able to contribute towards topics such as developing the dating and chronology for the period through regional pottery sequences and in understanding better the development and nature of the agrarian economy and settlement form and function.

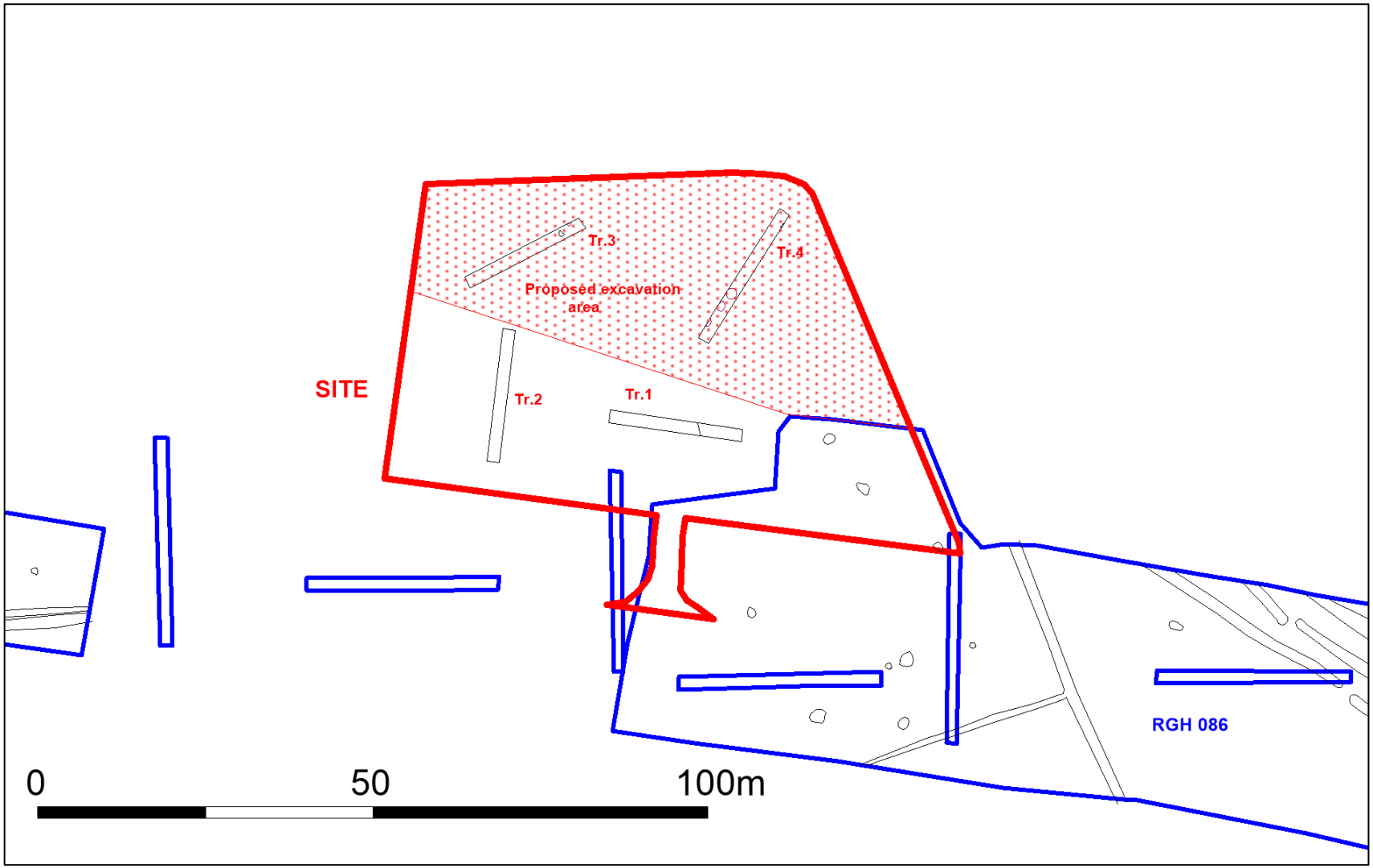


Figure 4. Excavation area plan

5. Archaeological method statement

5.1. Management

- The project will be managed by SACIC Project Manager John Craven in accordance with the following local, regional and national standards and guidance:
    - o *Management of Research in the Historic Environment* (MoRPHE, Historic England 2015).
    - o *Standards for Field Archaeology in the East of England (*EAA Occasional Papers 14).
    - o *Standard and Guidance for archaeological field excavation* (Chartered Institute for Archaeologists, 2014).
    - o *Requirements for Archaeological Excavation* (SCCAS, updated March 2017).
- 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.

5.2. Project preparation

- A new event number will be obtained from the SCCAS HER Officer and will be included on all future project documentation. The project will continue to use site code RGH 097.
- An OASIS online record will be initiated, and key fields in details, location and creator forms completed, prior to the project start.
- A pre-site inspection and Risk Assessment for the project has been completed.

5.3. Fieldwork

- The archaeological fieldwork will be carried out by members of SACIC led by a Project Officer (TBC). The fieldwork team will be drawn from a pool of suitable

staff at SACIC and will include an experienced metal detectorist/excavator.

- An excavation area of c.1800sqm across the northern part of the site is proposed, encompassing evaluation trenches 03 and 04 and excluding the area of the large modern pit (Fig. 4).
- The excavation location will be marked out using an RTK GPS system. If necessary minor modifications to the excavation plan may be made onsite to respect any previously unknown buried services, areas of disturbance/contamination or other obstacles.
- The site will be excavated using a machine equipped with a back-acting arm and toothless ditching bucket (measuring at least 1.8m wide), under the supervision of an archaeologist. This will involve the removal of an estimated 0.3m-0.5m of topsoil or modern deposits and subsoils until the first visible archaeological surface or natural surface is reached.
- Metal detector searches (non-discriminating against iron) will take place throughout the machine excavation, and subsequent hand-excavation phase, by an experienced SACIC metal-detectorist.
- Spoilheaps will be created adjacent to the south of the site and topsoil and subsoil will be kept separate if required. Spoilheaps will be examined and metal-detected for archaeological material.
- The excavation area will, following the initial site strip, be hand-cleaned to a degree sufficient to allow the creation of a digital base plan.
- The excavation of all archaeological deposits will be by hand, including stratified layers, unless it can be demonstrated to the satisfaction of SCCAS that no information will be lost by using a machine. All features will be excavated by hand unless otherwise agreed with SCCAS. Typically 50% of discrete features such as pits and a minimum of 10% of linear features (in 1m slots) will be sampled by hand excavation, but this will be increased if needed to allow informed interpretation of their date and function. Significant archaeological features such as solid or bonded structural remains, ovens and hearths, building slots or postholes will be examined in section then 100% excavated. Occupation levels and building fills will be sieved using a 10mm mesh.
- 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.

Sampling

- The evaluation results demonstrated that archaeological contexts have potential for environmental deposits relating to Iron Age occupation history of the site. The proposed excavation sampling strategy will aim to recover further environmental evidence to help meet the overall project research aims which concentrate on the sites evidence for rural Iron Age occupation and to model the landscape and its transformation brought about by such occupation or natural events.
- The evaluation has indicated that it is unlikely that there will be any waterlogged deposits, or natural environmental evidence such as palaeochannels, alluvial or colluvial sequences. If necessary, for example if waterlogged 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.
- Sampling will be carried out of sealed and dated archaeological contexts, including any defined occupation layers, 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. Larger contexts will be scatter sampled to best obtain a representative sample.
- All samples will be processed in full using manual water flotation/washover, with flots being collected in a 300 micron mesh sieve and dried. Non-floating residues will be collected in a 1mm mesh and sorted when dry.
- Flots will be assessed by an appropriate specialist. Decisions will be made on the need for further analysis following these assessments.

Site recording

- An overall site plan showing 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.
- The site, and all 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 excavation. 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 excavation methodology.
- If human remains are encountered guidelines from the Ministry of Justice will be followed. 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 excavation 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 the excavation is aborted, i.e. because unexpected deposits have made the development unviable or led to other mitigation measures such as project redesign, then all exposed archaeological features will be recorded as usual prior to completion of fieldwork and a PXA report produced.
- Fieldwork will not end without the prior approval of SCCAS. On completion the site will be handed over to the client, to either backfill or begin development.

Outreach

- Due to the small size and likely short duration of the project outreach activities such as an open day or tours for the general public, local schools, councillors, societies etc, are unlikely to be viable. If warranted, and the site is not deemed too archaeologically sensitive, a press release will be issued to local media and information boards will placed on the site perimeter during the fieldwork stage of investigation.
- Updates as to the progress of the project both during and after excavation fieldwork may be made publically available via the SACIC website. This may include short statements as to the nature of any archaeological discoveries accompanied by photographs or videos. Suffolk Archaeology also has a Facebook page (www.facebook.com/SuffolkArchCIC) and Twitter account (@SuffolkArchCIC) on which updates can be issued.
- SACIC staff are also available for talks and lectures to local groups and societies on request, and the project results could be incorporated into such presentations at a later date.
- SACIC also has a dedicated Outreach Officer who can provide activities for KS 2

and 3 classes, or other classes/ages upon discussion.

5.4. Post-excavation assessment

- 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 stores 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 excavation. 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.

- 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.
- Selected hand-drawn sections will be digitised using autocad software.

PXA Report

- A full post-excavation assessment report (PXA) will be produced, consistent with the principles of Management of Research in the Historic Environment (MoRPHE, Historic England 2015). If the fieldwork results do not warrant such an assessment and publication SCCAS will be asked to approve the production of a full grey literature archive report.
- The PXA report will include a suitable level of documentary research to set the results in their geographical, topographical, archaeological and historical context.
- The PXA report will contain a description of the project background, location plans, excavation 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 PXA will present a clear and concise assessment of the archaeological value and significance of the results, and identify the site's research potential 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 PXA will include an Updated Project Design, with a timetable, for completing further analysis, the production of a full archive report and publication text, and the final deposition of the site archive.
- 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 6 months of completion of fieldwork.

5.5. Final analysis, archive report and publication

- The PXA report will establish the work required to complete a full archive report and the nature and scope of a suitable publication text, and will state the most appropriate journal for its submission. The small nature of the site suggests that the most likely outcome will be the incorporation of the results into a probable publication submission to the Proceedings of the Suffolk Institute of Archaeology and History for the adjacent RGH 086 project (Sommers in prep).

5.6. Project archive

- On completion and approval of each stage (the PXA report, archive report and publication text) a printed hard copy will be lodged with the Suffolk HER.
- PXA and archive reports will be uploaded to the OASIS website for online publication by the Archaeological Data Service. A digital and fully georeferenced vector plan showing the excavation area, compatible with MapInfo software, will also be uploaded.
- A second bound copy of the report will be included with the project archive.
- A digital .pdf copy of each approved report will be supplied to the client. 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 2017).

- 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/identified 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 discussed with the client and SCCAS. The client is aware that additional requirements may be made by SCCAS, such as for additional detailed recording and analysis, for items not submitted to the archive.
  - Human skeletal remains. The client/landowner by law will have no claim to ownership of human remains and any such will be stored by SACIC, 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

Beverton, 2012., *Land to the East of Lady Miriam Way, Moreton Hall, Rougham, RGH 066.* SCCAS Report No. 2012/164.

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

Brooks, R., in prep, *RGH 097, Primary Electrical Substation, Rougham, Suffolk. Archaeological evaluation report.* SACIC Report No. 2017/073.

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.

Caruth, J., 2017, *Primary Electrical Substation, Rougham Tower Avenue, Rougham, Suffolk, Risk Assessment and Method Statement (RAMS)*. SACIC.

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

Craven, J. A., 2015, *Land East of Moreton Hall, Rushbrooke with Rougham, RGH 066.* SACIC Report No. 2015/046.

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

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

Lichenstein, L., 2015, *Bury St Edmunds Eastern Relief Road, Bury St Edmunds, Suffolk, RGH 086.* SACIC Report No. 2015/055.

Lichenstein, L., 2016, *Land East of Moreton Hall, Rushbrooke with Rougham, Suffolk, RGH 066.* SACIC Report No. 2015/078.

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, 2017, *Archaeological Archives in Suffolk.*

SCCAS, 2017, *Requirements for Archaeological Excavation (revised March 2017).*

Schofield, T., 2014, *Land at Moreton Hall, Bury St Edmunds, Suffolk.* Britannia Archaeology Ltd Report No. 1070.

Sommers, M., in prep, *Bury St Edmunds Eastern Relief Road, Bury St Edmunds, Suffolk, RGH 086.* SACIC Excavation Assessment report in prep.

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

Websites

British Geological Survey

http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Suffolk Archaeology CIC
Unit 5 | Plot 11 | Maitland Road | Lion Barn Industrial Estate
Needham Market | Suffolk | IP6 8NZ

Rhodri.Gardner@suffolkarchaeology.co.uk
01449 900120

www.suffolkarchaeology.co.uk

www.facebook.com/SuffolkArchCIC

www.twitter.com/suffolkarchcic