

IP8 Access Road, Scrivener Drive
Pinewood, Suffolk
HER ref. PIN 003

Archaeological Excavation Report

SCCAS Report No. 2014/030

Client: Ipswich Borough Council

Author: M. Sommers

September 2014

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Report Date: September 2014

HER Information

Report Number: 2014/030

Site Name: IP8 Access Road, Scrivener Drive
Pinewood, Suffolk

Planning Application No: B/13/01011/FUL

Date of Fieldwork: 24th February to 27th February 2014

Grid Reference: TM 1288 4281

Client/Funding Body: Ipswich Borough Council

Curatorial Officer: Dr. Jess Tipper

Project Officer: M. Sommers

Oasis Reference: suffolkc1-172862

Site Code: PIN 003

Digital report submitted to Archaeological Data Service:

<http://ads.ahds.ac.uk/catalogue/library/greylit>

Disclaimer

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

Prepared By: M. Sommers
Date: 9th September 2014

Approved By: Dr Rhodri Gardner
Position: Contracts Manger
Date: 9th September 2014
Signed:

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

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Summary

An archaeological excavation was carried out in advance of the construction of an access road off Scrivener Drive in the parish of Pinewood. A total area of 1140m² was mechanically stripped under archaeological supervision revealing three ditch type features. Two of these contained clearly modern material and were aligned with existing boundaries. The third ditch contained a spread of charcoal associated with a compact deposit of tile in the upper fill. This may have been the remains of a small oven built in the partially filled ditch although it is more likely to just be a dump of material from an oven. The tile from this feature has been identified as Roman and a radiocarbon analysis of the charcoal gave a date range of 130 and 323 calAD (at 2 σ). The site is located c. 100m to the southwest of a group of Middle Bronze Age cremation burials but no features that could be positively dated to this period were identified. (Suffolk County Council Archaeological Service for Ipswich Borough Council).

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 
- Archaeological Features 

Sections

- Limit of Excavation 
- Cut 
- Modern Cut 
- Cut - Conjectured 
- Deposit Horizon 
- Deposit Horizon - Conjectured 
- Intrusion/Truncation 
- Top of Natural 
- Top Surface 
- Break in Section 
- Cut Number 
- Deposit Number 0007
- Ordnance Datum $\frac{18.45\text{m OD}}{\times}$

1. Introduction

A new access road is planned for an area of land to the northwest of Scrivener Drive, Pinewood, Ipswich. Planning consent has been granted (B/13/01011/FUL) but with an attached condition calling for an agreed programme of archaeological works to be in place prior to the commencement of groundwork in order to mitigate against the potential loss of any archaeological evidence that may be present. To detail the archaeological work to be undertaken a Written Scheme of Investigation (WSI) was produced by the Suffolk County Council Archaeological Service Field Team (SCCAS/FT), outlining the methods to be employed (Appendix 1); this document was approved by Dr Jess Tipper of the Suffolk County Council Conservation Team.

The archaeological mitigation strategy, as outlined in the WSI, consisted of a controlled topsoil strip of the entire footprint of the proposed road using a suitable mechanical excavator operated under archaeological supervision. This was to be followed by hand excavation and recording of any significant archaeological features that may be encountered.

The archaeological work was undertaken by Suffolk County Council Archaeological Service's Field Team who were commissioned and funded by the developer, Ipswich Borough Council.

The National Grid Reference for the approximate centre of the excavation area is TM 1288 4281. Figure 1 shows a location plan of the site.

2. Geology and topography

The site is situated on a raised, level plateau at a height of 40m OD, which forms part of a ridge between two river valleys that runs approximately northwest to southeast. The larger, northeastern valley is drained by the River Gipping, the lower reaches of which are known as the River Orwell, whilst the southwestern valley contains Belstead Brook, which runs in a channel some 950m to the south and southwest of the site.

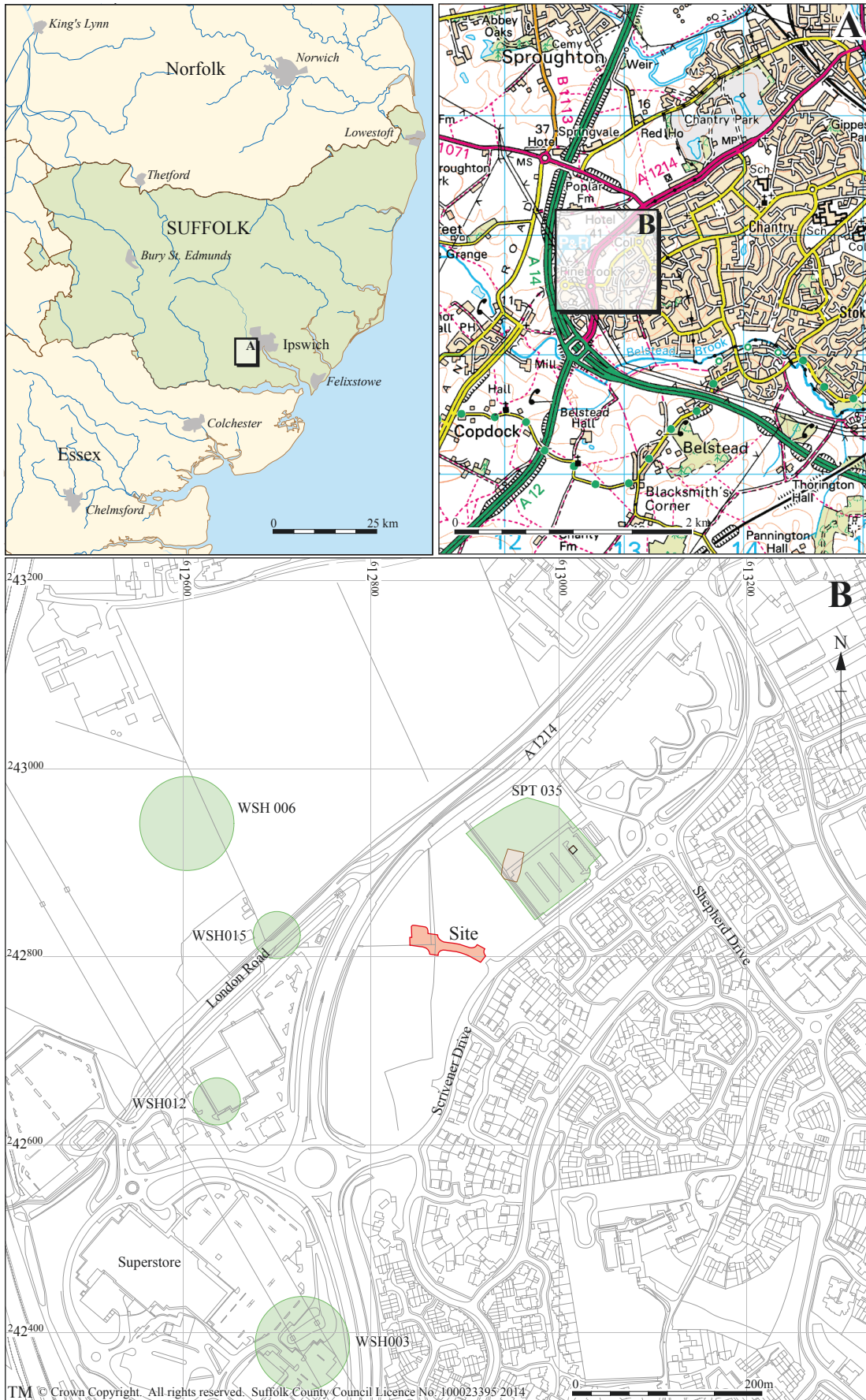


Figure 1. Location plan, showing development area (red), HER entries (green) and approximate area of cremation burials (brown)

The British Geological Survey records that the superficial geology in this area consists of the Lowestoft Formation, a chalky till with outwash sands and gravels, silts and clays with an occasional erratic (BGS, 2014). The uppermost 2m of this deposit tend to have been weathered to a yellowish brown, largely decalcified, stony silty clay.

3. Archaeology and historical background

No archaeological sites or findspots were recorded on the County Historic Environment Record (HER) within the development area itself although it does lie within an area of significant archaeological interest. This is primarily due to the presence of a group of Middle Bronze Age cremations that were excavated on a site 100m to the northeast (HER ref. SPT 035, locations marked in Figure 1).

A small number of other sites are also recorded on the HER in the vicinity. These comprise a scatter of Roman pottery on a site 450m to the southwest (HER ref. WSH 003); a thin scatter of Roman pottery and a ditch containing Early Anglo-Saxon pottery 260m to the southwest (HER ref. WSH 012); the documented site of a medieval church 250m to the northwest (HER ref. WSH 006); and a site of a post-medieval milestone 140m to the west (HER ref. WSH 015).

4. Methodology

The first stage of the excavation was the mechanical stripping of the topsoil and part of the weathered surface of the underlying natural subsoil. This left a cleanly cut surface to the natural subsoil in which features could be identified. The stripping was carried out using a 13 tonne, tracked mechanical excavator fitted with a 1.8m wide toothless bucket. It was undertaken over an area total 1140m² and was designed to encompass the full extent of the proposed road.

The topsoil was removed fairly rapidly whilst the weathered surface of the natural subsoil was carefully removed in small spits to maximise the chances of identifying any cremation burials that may have been present. Archaeological features were identified although some of these were clearly modern intrusions and were not subjected to any further investigation. Features thought to be of archaeological significance were

sampled through the hand excavation of sections across their fill to reveal their profile and depth of the feature cut, to obtain dating evidence in the form of artefacts, and to investigate the makeup of the fill.

Unique context numbers were allocated to the feature cuts and fills. The revealed sections were then recorded at a scale of 1:20 on plastic drafting film. A photographic record was made using a digital camera and a surface plan of the site was drawn. These drawings have been digitised and the data used to create the plans and sections presented in this report.

5. Results

The surface of natural subsoil was located at a depth of 0.35m below an overburden of dark, organic rich, topsoil. At the interface the natural subsoil consisted of a pale orange silt becoming a stiff orange clay with broken flint and small chalk nodules at a depth of c. 0.15m. Frequent plough lines were visible across the majority of the stripped area.

Within the stripped area a small number of features were identified (Fig. 2). The two linear features marked in Figure 2 towards the western end of the stripped area (0006 and 0007; plate 1) contained obviously modern debris (i.e. glass bottles, a broken spanner, building material) indicating they had been recently backfilled. Both were located along the line of existing boundaries that were marked by hedgerows prior to the soil strip. Other than recording their locations they were not subjected to any further investigation.

A possible oven was recorded within the limits of a ditch (0004). It consisted of a roughly rectangular feature, 0003, measuring 2.34m by 1.05m, with sloping sides down to a flat base (plate 2). The cut was lined with a layer of charcoal up to 0.05m thick (0002). Close to one corner was a dense deposit of tile that was initially thought to be part of a structure although upon excavation it was found to be a jumbled mass with no obvious function (plate 3). Two bulk samples were taken from this; Sample 1 from the fill (0001) and Sample 2 from the charcoal layer (0002). Figure 3 shows a plan and sections of the possible oven as excavated.

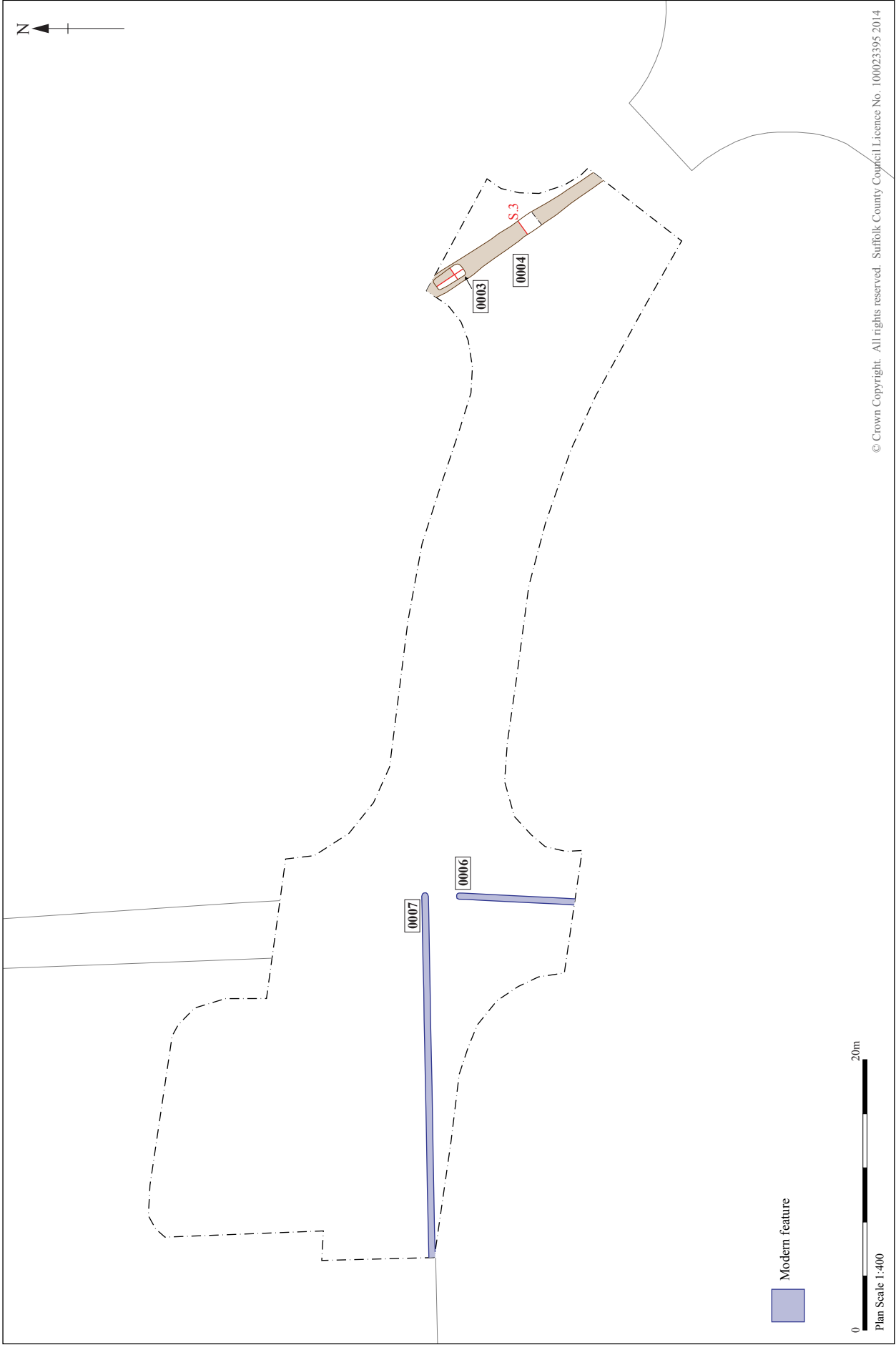


Figure 2. Excavation plan

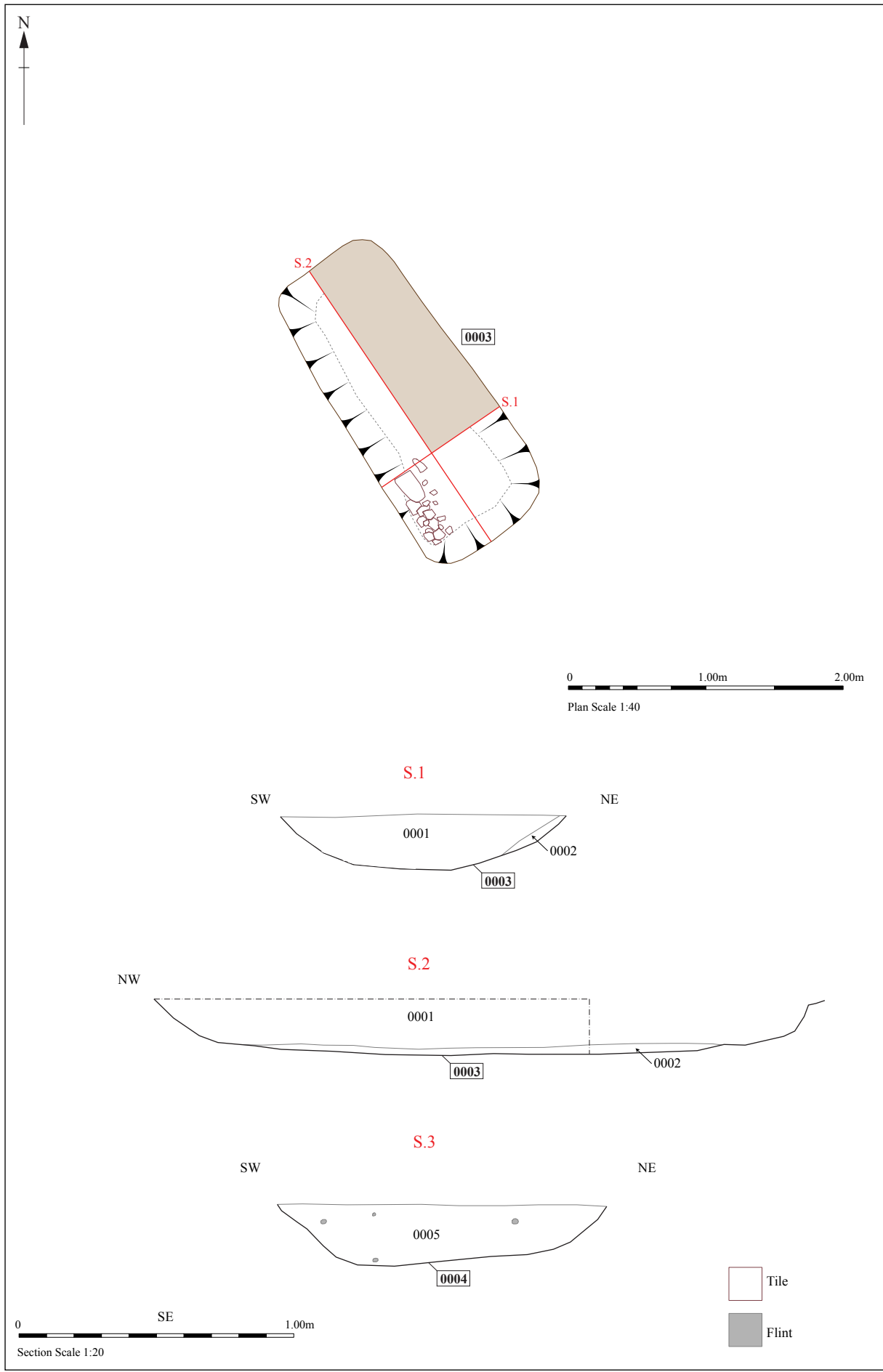


Figure 3. Plan of possible oven and sections 1-3

Ditch 0004 was identified in the eastern end of the site although it did not become visible until after an overnight rain shower (plate 4). It was aligned approximately northwest-southeast. In an excavated section it measured 1.2m in width and cut the natural subsoil to a depth of 0.22m (Section 3 in Fig. 3; plate 5). The fill (0005) consisted of pale brown to yellow silty clay with occasional small fragments of broken flint, small flint pebbles and very occasional flecks of charcoal. No finds were recovered from the fill of this feature.

6. Finds and environmental evidence

6.1 Ceramic building material

By Richenda Goffin

A total of 48 fragments of ceramic building material weighing 1253g was recovered from fill 0002. All the pieces are similar in appearance and represent different sized fragments of curved tile. They are in a poor condition, being fractured with their external surfaces often missing, with considerable lamination present. The tiles vary in colour between a dull dark orange and a brighter orange, sometimes with dark grey on the inner and outer surfaces. Many of inner surfaces of the tiles are in a better state of preservation than the outer, revealing that the tiles have medium grade moulding sand on their interiors.

The fabric of the tiles is fine sandy with moderate red clay pellet inclusions and sparse medium to large flint inclusions up to 6mm in width. The inside surface of the tiles has abundant medium sized coarse sand from the moulding. Some of the tile has buff coloured streaks indicating that the clays are poorly mixed.

Although very fragmentary, enough survives of the tiles to show that they would have had a curved profile (thickness c. 13-22mm). No mortar is present and none of the tiles have any nail holes. The tiles are most probably the remains of Roman *imbrices* rather than later tiles such as ridge tiles (S. Anderson, *pers. comm*).

In view of the fragmentary and apparent burnt appearance of the tile and the charcoal that it was found with, it is possible that the finds may be a dumped deposit perhaps from clearing out an oven. There are no signs of mortar on any of the tiles or any evidence of re-use.

6.2 An assessment of the plant macrofossils

By Anna West

Introduction and Methods.

Three environmental bulk samples were taken from archaeological features during an evaluation at Scrivener Drive, Ipswich. 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 flot was collected in a 300 micron mesh sieve. The dried flots were scanned using a binocular microscope at x16 magnification and the presence of any plant remains or artefacts are noted on Table x.

The non-floating residues were collected in a 1mm mesh and sorted when dry. All artefacts/ecofacts were retained for inclusion in the finds total.

Quantification

For the purpose of this initial assessment, items such as seeds, cereal grains and small animal bones have been scanned and recorded qualitatively 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*

Results

In general the preservation of plant material within these samples is through charring and is relatively poor. Modern fibrous roots were present within all of the flots and made up the majority of the material in each.

Sample No	Context No	Cut No	Flot vol (ml)	% Flot scanned	Flot Contents
1	0001	0003	200	100	Charcoal fragments ++, Charred seeds ##, Fibrous rootlets ++
2	0002	0003	200	100	Charcoal fragments +++, Charred seeds ##, Fibrous rootlets +
3	0005	0004	200	100	Un-charred seeds #, Snails +, Coal fragments +, Fibrous roots +++, Ferrous spheroid #, Fibrous rootlets +++

Table 1. Results

Samples 1, fill (0001) and 2, fill 0002 from possible oven [0003] both contained what appear to be whole and fragmented pyrenes (stones) from a Blackthorn/Bullous (*Prunus*) or Hawthorn (*Crataegus*) species. Sample 2 also contained a single charred Elder (*Sambucus nigra* L.) seed, whilst both had a small number of Cleavers (*Galium aparine* L.). These are common hedgerow species and the *Prunus/Crataegus* may represent fuel used within the oven feature. Cleavers is a common weed that climbs and clings to surrounding plants for support using barbed hairs on the surface of its leaves. Fragments of this plant could easily have been accidentally gathered and burnt along with wood cut or collected for fuel.

Sample 3, fill (0005) from ditch [0004] did not contain any charred macrofossils within it. A single un-charred Clover (*Trifolium* sp.) and a single Goosefoot (*Chenopodium* sp.) were observed along with small fragments of coal and a single ferrous spheroid. Ferrous spheroids usually indicate the presence of metal working in the area, however as this single specimen is accompanied by fragments of coal and un-abraded weeds seeds it is possible that this material is intrusive within the archaeological feature.

Conclusions and recommendations for further work

In general the samples were moderate to poor in terms of identifiable material. Samples 1 and 2 both contain material that would be suitable for radiocarbon dating (charcoal

from sample 2 was subsequently sent dating). No finds were recovered from Ditch 0005 and Sample 3 provides no material that aid in dating this feature.

Although the current assemblage is very limited, it is suggested that if further interventions are planned on this site that 40 litre bulk samples should be taken from any sealed and dated archaeological contexts in order to provide data regarding the utilization of plant resources and the surrounding environment.

6.3 Radiocarbon dating

A sample of charcoal from Sample 2, consisting of charred cereal grains and wood fragments, was sent for radiocarbon dating (SUERC-54710 [GU34707]). The results suggest a date of between 130 and 323 calAD (at 2σ) with an 83.9% probability that the date lies between 130 and 259 calAD (i.e. 2nd to 3rd century AD). This range of dates falls within the Roman period of occupation. See Appendix 4 for a copy of the dating certificate.

7. Discussion

No evidence for any further Middle Bronze Age cremations or associated monuments were identified within the excavated area indicating extent of the known cremation cemetery does not extend this far to the southwest.

The possible oven (0003) interpretation is based on the presence of charcoal and the initial appearance of the tile as a structural element but given the lack of any *in-situ* burning or other possible structural elements it is more likely to be a dump of material in the partially backfilled ditch. The environmental evidence indicates the presence of species that could be used as fuel in an oven type feature but this is not conclusive.

The tiles have been identified as a type of Roman roof tile and the associated charcoal has been radiocarbon dated to a probable date of around 2nd to 3rd century. The presence of this material in the ditch would suggest the ditch is also Roman in date. Its alignment does not correspond to any existing or documented field patterns.

Although the tile and charcoal is unlikely to be part an *in-situ* oven it may be a result of the clearing out of, or the demolition of, an oven. Given that the tile is a type of roof tile it is just possible it has originated from a building that may have been destroyed by fire although the amount of material present is very limited.

No other Roman material was identified within the site limits. The nearest known activity consists of Roman pottery scatters, which are recorded on the HER in two areas within 450m to the southeast. The presence of Roman material on this site would suggest an area of activity, possibly an occupation site, in the immediate vicinity.

The two linear features, 0006 and 0007, are undoubtedly modern field boundaries that are related to the present hedgerows. They have been backfilled in recent times, judging by the modern material evident in their fills.

8. Conclusions

No significant archaeological features worthy of preservation are located within the footprint of the proposed road. The ditch and the tile and charcoal within its fill are Roman in date and indicate the probable presence of a site of a Roman site in the vicinity.

9. Archive deposition

Historic Environment Record reference under which the archive is held: PIN 003. The digital archive will be stored on the SCC secure servers at the location:

*R:\Environmental Protection\Conservation\Archaeology\Archive\Pinewood\PIN 003 Excavation
(IP8 Access Road)*

Digital photographs are held under the references: HWX 54 to HWX 65.

A summary of this project has been entered into OASIS, the online database, under the reference: suffolkc1-172862 (see Appendix 3).

10. Acknowledgements

The excavation was carried out by Preston Boyles and Mark Sommers from Suffolk County Council Archaeological Service, Field Team.

The project was directed by Mark Sommers and managed by Dr Rhodri Gardner, who also provided advice during the production of the report.

The finds analysis was by Richenda Goffin, the environmental analysis was undertaken by Anna West and Ellie Hillen provided the illustrations (all SCCAS/FT)

11. Bibliography

Stace, C., 2010 *New Flora of the British Isles, (3rd Edition)* Cambridge University Press

Plates

(featured scale is 1m in length with 0.5m divisions)



Plate 1. Ditch 0007 (centre right) visible running across the excavation area camera facing south (ref. HWX65)



Plate 2. Possible oven 0003 as first exposed, camera facing northwest (ref. HWX 55)



Plate 3. Possible oven 0003 after further excavation, camera facing northeast (ref. HWX 59)



Plate 4. General view, camera facing west. Ditch 0004 is visible to the right (ref. HWX 61)



Plate 5. Section across Ditch 0004, camera facing northwest (ref. HWX 63)

Appendix 1. Written scheme of investigation

ARCHAEOLOGICAL WRITTEN SCHEME OF INVESTIGATION

for

Controlled Topsoil Strip and Excavation at IP8 Access Road, Ipswich

Rhodri Gardner
© May 2013
www.suffolk.gov.uk/environment/archaeology

Lucy Robinson, County Director of Economy, Skills and Environment
Endeavour House, Russell Road, Ipswich, IP1 2BX.

Document Control

Title: Controlled topsoil strip and excavation at IP8 Access Road, Ipswich

Date: May 2013

Issued by: Suffolk County Council Archaeological Service, Field Team

Author: Rhodri Gardner

Checked by: Stuart Boulter

Issued to: Jess Tipper, SCCAS/CT

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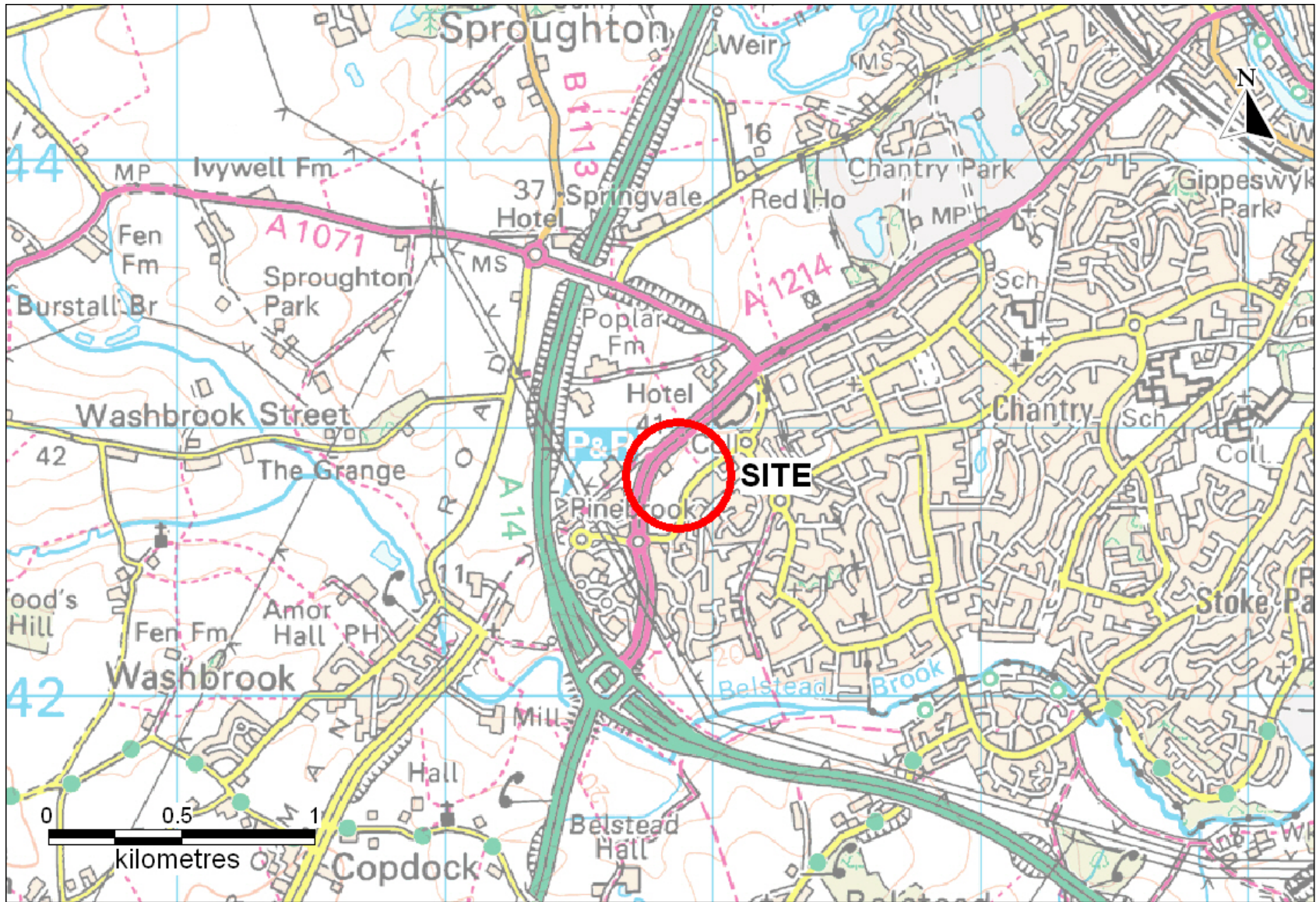
1. Site location
2. Site detail showing area of topsoil strip

Appendices

1. SCC Health and Safety Policy
2. Risk Assessments
3. SCC Insurance Certification

1. Background

- 1.1 The Contracting Team of the Suffolk County Council Archaeological Service have been asked by Ipswich Borough Council (IBC) to prepare documentation for archaeological works at the site of a new access road off Scrivener Drive in Ipswich. This Written Scheme of Investigation covers that work only.
- 1.2 The archaeological excavation is required in accordance with paragraph 141 of the *National Planning Policy Framework* which advises that planning permission be conditional upon an agreed programme of work taking place, to record and advance understanding of the significance of any heritage assets that might be present before they are damaged or destroyed.
- 1.3 The site's archaeological potential is due to its location adjacent to a known Bronze Age cremation cemetery, which was encountered prior to the construction of the Suffolk One Sixth Form Centre (Sommers, 2011). This revealed a total of nineteen (19) cremation burials.
- 1.4 All fieldwork would be carried out by members of SCCAS Field Team under the supervision of a Project Officer (Mark Sommers). Project management would be the responsibility of the Head of Archaeology Contracting Rhodri Gardner.



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Figure 1. Site location

2. Summary project details

Site Information

Site Name	IP8 Access Road
Site Location/Parish	Ipswich
Grid Reference	TM 1289 4281
Access	Off Scrivener Drive
Planning No	TBA
HER code	TBA prior to commencement
OASIS Ref	TBA prior to commencement
SCCAS Job Code	TBA
Type:	Strip, map and excavate
Area	c. 1,277m ²
Project start date	TBA
Duration	1 week
Number of personnel on site	Up to 3.

Personnel and contact numbers

SCCAS Project Manager	Rhodri Gardner	01473 581743
Project Officer (first point of on-site contact)	Mark Sommers	07753 788607
Finds Dept	Richenda Goffin	01284 352447
Sub-contractors	Holmes Plant & Construction	01473 890766
Curatorial Officer	Jess Tipper	01284 741225
Consultant	N/A	
Developer	N/A	-
Client	Touching the Tide & ADLHS	-
Site landowner	Suffolk Wildlife Trust	-

Emergency contacts

Local Police	Ipswich Police	01473 613500
Local GP	-	-
Location of nearest A&E	Ipswich Hospital, Heath Road, Ipswich, IP4 5PD	01473 712233
Qualified First Aiders	TBA	
Base emergency no.	N/A	

Hire details

Plant:	N/A	
Accommodation Hire	N/A	
Toilet Hire	N/A	
Tool hire	N/A	

3. Archaeological method statement

Fieldwork

- 3.1 The professional archaeological support would be carried out by members of the SCCAS field team led by an experienced member of staff of Project Officer Grade (Mark Sommers). The rest of the SCC team will comprise up to 1 further experienced Site Assistants.
- 3.2 All mechanised stripping operations will be carried out using a tracked mechanical excavator fitted with a toothless ditching bucket.
- 3.3 Machine clearance work will be carried out under the direct supervision of an archaeologist at all times. All overburden will be removed stratigraphically until the first undisturbed archaeological horizon or natural deposits are encountered. The archaeological horizon in this case occurs at shallow depth – c. 300mm below the existing ground surface.
- 3.4 Spoil will be temporarily stockpiled adjacent to the site edge. Topsoil and subsoil will be stored separately to allow sequential backfilling to take place.
- 3.5 The site area is shown in Figure 2. This includes both the road corridor and a SUDS basin and soakaway.
- 3.6 In accordance with the requirements of SCC Conservation Team specifications all archaeological features that are exposed will be hand excavated and recorded as follows (as a minimum):

Features that are, or could be interpreted as, structural will be excavated fully. Post holes and pits will be examined in section initially and then excavated fully. Fabricated surfaces (internal and external) will be exposed fully. All other features will be sufficiently examined to establish, where possible, their date and function. For example:

A minimum of 50% of the fills of discrete features such as pits will be excavated (in some instances 100% may be requested by the Archaeological Officer).

Any graves encountered will be excavated fully – with 100% of their fill removed.

Linear features (ditches, etc) will be sample excavated (minimum of 10%) by means of 1m wide slots across their width.

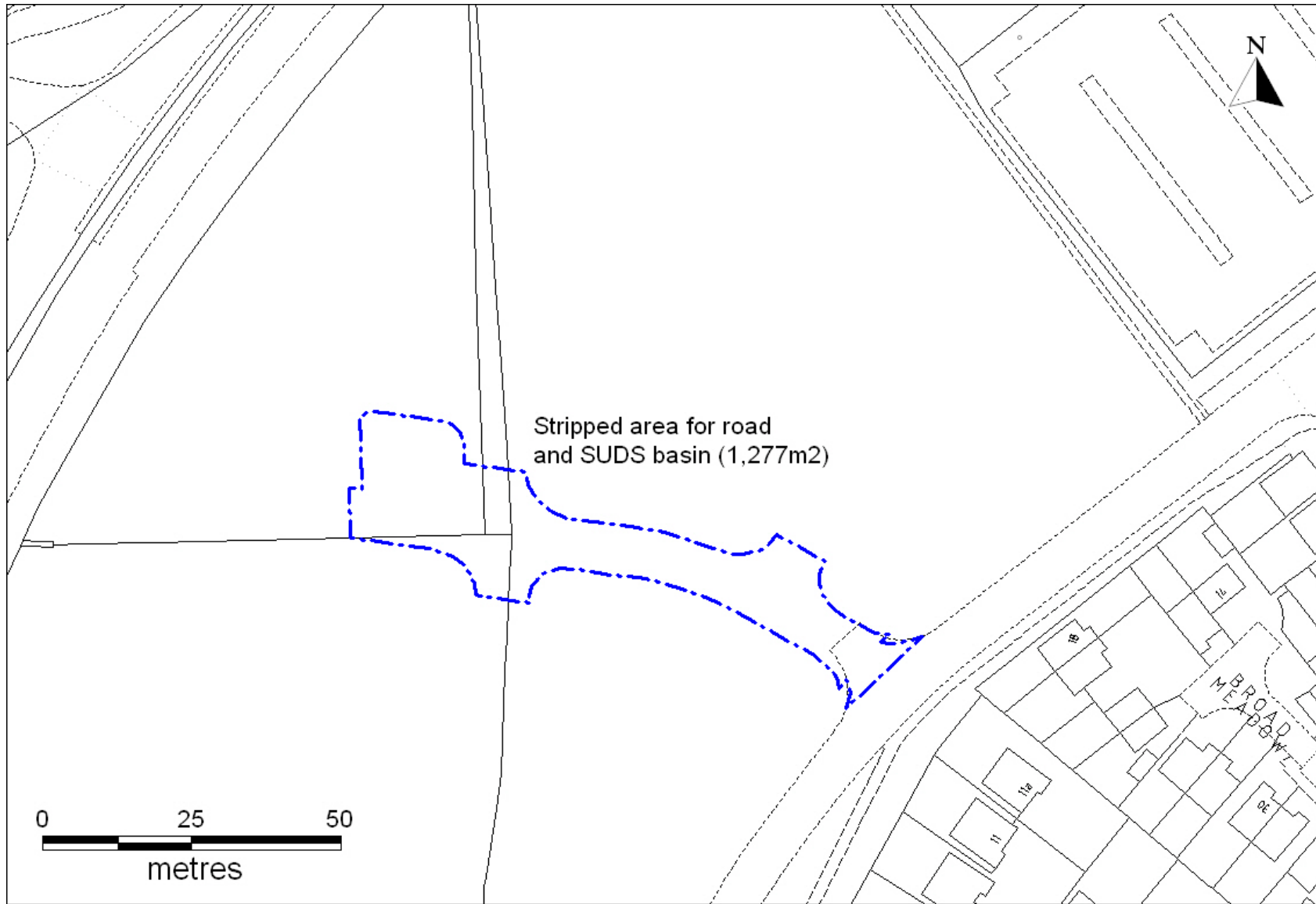
Metal detecting will be carried on throughout the excavation by suitably experienced operators.

- 3.7 Archaeological features will be planned at a scale of 1:20 or 1:50, as appropriate, and located using a Total Station Theodolite or RTK GPS unit as appropriate. Sections/profiles will be drawn at a scale of 1:10 or 1:20, also as appropriate.
- 3.8 All archaeological deposits and features will be recorded using SCCAS *pro forma* context sheets in a single numerical sequence using the unique HER number (FRS 001). All hand-drawn plans and sections will be made on archive-stable, gridded drawing film.
- 3.9 All finds will be bagged and labelled with the site code and context number. No discard policy will be considered until after the fieldwork stage is completed and all finds subjected to initial assessment.
- 3.10 Bulk environmental soil samples (40 litres each) will be taken from selected archaeological features and retained until an appropriate specialist has assessed their potential for palaeo-environmental remains. The sampling strategy will address questions of:
 - the range of preservation types (charred, mineral replaced, waterlogged), and their quality,
 - concentrations of macro-remains,
 - and differences in remains from undated and dated features
 - variation between different feature types and areas of site

- 3.11 Decisions will be made on the need for further analysis of environmental samples following this assessment. If necessary advice will be sought from English Heritage's Regional Advisor in Archaeological Science on the need for specialist environmental sampling.
- 3.12 A digital photographic record will be made at all stages of the fieldwork. Image format will be high resolution (minimum 10 megapixel) JPEG.
- 3.13 In the event of human remains being encountered on the site they will be treated with due care and attention in accordance with appropriate standards (e.g. Brickley and McKinley 2004, McKinley and Roberts 1993). Guidelines from the Ministry of Justice will be followed at all times and this will include obtaining a licence for exhumation prior to the removal of any remains from site. All human remains will be recorded *in situ* prior to their appropriate lifting, packing and marking.

General Management

- 3.14 The fieldwork will be carried out over a one week period commencing on the 1st July 2013.
- 3.15 The Post-excavation Assessment (PXA), if one is required, will be completed by the end of September 2014.
- 3.16 All publication outcomes will then be completed by the following April (2015) at the latest, although the intention would be to produce the written journal publication sooner – within six months of the completion of the PXA.



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Figure 2. Site detail and with previous excavation results

4. Post-excavation

- 4.1 A PXA report will be produced in accordance with English Heritage's "Management of Research Projects in the Historic Environment" MORPHE (English Heritage, 2006). This will identify the significance of the archaeological results of the excavation and outline appropriate measures for their dissemination, including the timetable for the proposed work.
- 4.2 Relevant research themes contained in the following documents are important considerations that will be addressed during the production of the PXA:
- Research and archaeology: A framework for the Eastern Counties: 1 Resource Assessment (Glazebrook 1997)
 - Research and archaeology: A framework for the Eastern Counties: 2 Research Agenda and Strategy (Brown and Glazebrook 2000)
 - Regional research framework for the Eastern Region (Medleycott and Brown 2008)
 - Research and Archaeology Revisited: a revised framework for the East of England (Medlycott, M, 2011)
- 4.3 The site archive will be consistent with the guidelines issued by the SCCAS Conservation Team (2010), as well as the principles of MORPHE (English Heritage, 2006).
- 4.4 All site data will be entered on a computerised database compatible with the County HER. All site plans and sections will be copied to form a permanent archive on archivally stable material. Ordnance Datum levels will be on the section sheets. The photographic archive will be fully catalogued within the County HER photographic index.
- 4.5 All finds will be processed, marked and bagged/boxed to County HER requirements. Where appropriate finds will be marked with a site code and a context number.
- 4.6 Bulk finds will be fully quantified on a computerised database compatible with the County SMR. Quantification will fully cover weights and numbers of finds by OP

and context with a clear statement for specialists on the degree of apparent residuality observed.

- 4.7 Metal finds on site 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 will be x-rayed 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.
- 4.8 All artefactual material recovered will be held by the SCC Contracting Team until their analysis of the material is complete. Ownership of all such archaeological finds will then be given over to the relevant authority. There is a presumption that this will be SCCAS/CT, who will hold material in suitable storage to facilitate future study and ensure its proper preservation.
- 4.9 In the event that artefacts of significant monetary value are discovered separate ownership arrangements may be negotiated, provided they are not subject to Treasure Act legislation.
- 4.10 A copy of the PXA report in DRAFT form will be submitted to SCCAS/CT for approval prior to final submission. A copy of the approved report will then accompany the archive when it is deposited.
- 4.11 Suffolk Historic Environment Record is registered with the Online Access to Index of Archaeological Investigations (OASIS) project. The SCCAS Contracting Team will provide appropriate details relating to this project by completing the OASIS form at <http://ads.ahds.ac.uk/project/oasis>, in accordance with the guidelines provided by English Heritage and the Archaeology Data Service. The completed form will be included as an appendix to the final report.
- 4.12 Other dissemination outcomes will be determined during the production of the WSI but are to include (as a minimum) deposition of the digital archive with the Archaeology Data Service (ADS), illustrated lectures for the ADLHS, a summary

for reproduction in the PSIAH "Archaeology in Suffolk" section. A paper for a suitable period journal would also be a desirable outcome if the results merit acceptance.

5 Health and Safety Considerations

5.1 The project will be carried out in accordance with the Suffolk County Council statement on Health and Safety at all times. Particular hazards to SCCAS staff identified with this project are as follows:

Working with plant machinery

Physical work in an outdoor setting

Deep excavations

Use of hand tools

5.2 Specific risk assessments for these are provided in Appendix 2. Others have been developed for use during activities conducted with volunteers and schools and will be applied as required following the preparation of a pre-excavation checklist.

5.3 All SCCAS staff are experienced in working under similar conditions and on similar sites to the present site and are aware of all SCCAS H&S policies. All staff will be issued with a copy of the project's risk assessment and will receive a safety induction from the Project Officer. All permanent SCCAS excavation staff are holders of CSCS cards.

5.4 From time to time it may be necessary for site visits by external specialists or SCCAS Conservation Team members. All such staff and visitors will be issued with the appropriate PPE and will undergo the required inductions. PPE is not restricted to the list below – additional items will be provided if circumstances require it.

5.5 PPE that could be required in this case includes:

- Hard Hat (to EN397)
- High Visibility Clothing (EN471 Class 2 or greater)
- Safety Footwear (EN345/EN ISO 20346 or greater – to include additional penetration-resistant midsole)

- 5.6 Other PPE that may be deployed as necessary includes:
- Gloves (to EN388)
 - Eye Protection (safety glasses to at least EN 166 1F)
- 5.7 SCC Archaeological Service holds Public Liability Insurance for up to £50,000,000. SCC Archaeological Service holds Professional Negligence Insurance for up to £5,000,000. Both certificates are reproduced in Appendix 3.
- 5.8 Suffolk County Council is firmly dedicated to following an EMS policy. On site the SCCAS Project Officer will police environmental concerns. All rubbish will be bagged and removed either to areas designated by the client or returned to SCC property for disposal.
- 5.9 All movements to and from site will respect any existing perimeter fencing/hoarding with all points of entry returned to their locked condition (if applicable), with the site kept secure via any existing means at all times.

Appendix 1. Suffolk County Council Health and Safety Policy

Health & Safety Policy – HS01



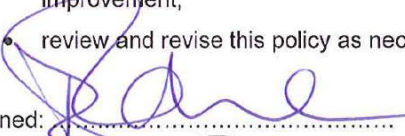
Health and Safety Policy Section 1 - General Statement of Policy

Suffolk County Council is fully committed to comply with the Health and Safety at Work Act etc 1974 and associated legislation.

We recognise that good health, safety and wellbeing is integral to our organisational and business performance by reducing injuries and ill health, protecting the environment and reducing unnecessary losses and liabilities. Our service delivery decisions will always consider the impact on health, safety and wellbeing.

We aim to be exemplary in all matters relating to the health, safety and welfare of our staff and all those who may be affected by our activities . To this end we will:

- benchmark our health & safety performance against other similar organisations;
- provide adequate control of the health and safety risks arising from our work activities;
- consult with our employees on matters affecting their health and safety;
- provide and maintain safe plant and equipment;
- ensure safe handling and use of substances;
- provide information, instruction and supervision with adequate professional advice;
- ensure all employees are competent to do their tasks, and give them adequate training;
- prevent incidents, injuries and cases of work-related ill health;
- maintain safe and healthy working conditions;
- commit to progressive improvement in health & safety performance using current recognised good practice such as 'HSG65' and similar models of continuous improvement;
- review and revise this policy as necessary at regular intervals.

Signed:  Chief Executive.

Date: *27th January 2012*

Signed:  Leader.

Date: *31st January 2012*

Review date: Date: January 2014

If you need help to understand this information in another language or would like this information in another format, including audio tape or large print, please call **08456 066 067**.

Appendix 2. Risk Assessments



Specific Risk Assessments for Archaeological Excavation: IP8 Access Road, Scrivener Drive, Ipswich

- 1 Working with plant machinery
- 2 Physical work in an outdoor setting
- 3 Deep excavations
- 4 Use of hand tools

1-5 = Low risk

6-12 = Medium risk

20-25 = High risk

Risk Assessment 1 Working with plant machinery

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Direction and supervision of tracked 360 ^o excavator.	Various.	Staff in close proximity to excavation (operation of bucket & manoeuvre of boom).	Accidental contact with boom or bucket or unexpected movement of machine.	Principally SPO/PO, but at times may involve others.	10	Only PO to supervise machinery. No personnel to be within radius of boom. All staff to wear high visibility clothing, hard hats and safety footwear at all times.	5	R V Gardner	30/05/13	Call emergency services. First Aid if required.

Severity	Likelihood				
	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Risk Assessment 2 Physical work in an outdoor setting

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Hand excavations of archaeological features.	Various.	Extremes of heat, cold and wet weather. Trip hazards.	Hypothermia, heat stroke, sunburn. Minor injuries.	All field staff.	9	All staff provided with appropriate clothing for weather conditions. No staff to work alone in extreme conditions. Regular sweep for trip hazards.	2	R Gardner	30/05/13	First Aid if required. Call emergency services if necessary.

Severity	Likelihood				
	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Risk Assessment 3 Deep excavations

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Excavation of trial trenches and archaeological features within.	Various.	Trench collapse, falls, and work in confined spaces.	Physical injury (minor to rare major examples), suffocation.	All field staff.	12	No excavation beyond safe depth in any circumstances (not necessary for evaluation stage of works). No excavation of trenches beyond depth of 1.2m (or shallower where there is risk of collapse in the judgement of the PO if deposits are unconsolidated).	2	R Gardner	30/05/13	Call emergency services. First Aid if required.

Severity	Likelihood				
	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Risk Assessment 4 Use of hand tools

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Excavation of archaeological features using shovels, mattocks, forks, wheelbarrows and small tools	Various.	Splinters from poorly maintained equipment, trip hazards from unused equipment, accidental striking of personnel in close proximity, some heavy lifting.	Minor injuries.	All field staff.	8	Ensure all tools in serviceable condition. Careful policing of temporarily unused equipment (e.g. no discarded hand tools near trench edges). Ensure all tools carried appropriately.	4	R Gardner	30/05/13	First Aid if required.

Severity	Likelihood				
	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Appendix 3. SCC Liability Insurance Certification



To Whom It May Concern

Our ref: Our Ref: QLA-19A004-0013 17 July, 2012

Zurich Municipal Customer: Suffolk County Council

This is to confirm that Suffolk County Council have in force with this Company until the policy expiry on 31/07/2013 Insurance incorporating the following essential features:

Policy Number: QLA-19A004-0013

Limit of Indemnity:

Public Liability:	£ 50,000,000	any one event
Products Liability:	£ 50,000,000	for all claims in the
Pollution:) aggregate during any one period of insurance	
Employers' Liability:	£ 50,000,000	any one event inclusive of costs

Zurich Municipal
Zurich House
2 Gladiator Way
Farnborough
Hampshire
GU14 6GB

Telephone 0870 2418050
Direct Phone 01252 384594
Direct Fax 01252 0
E-mail
sally.rose@uk.zurich.com@zurich.com

Communications will be monitored regularly to improve our service and for security and regulatory purposes

Zurich Municipal is a trading name of Zurich Insurance plc

A public limited company incorporated in Ireland. Registration No. 13460
Registered Office: Zurich House, Ballsbridge Park, Dublin 4, Ireland.

UK branch registered in England and Wales Registration No. BR7985.
UK Branch Head Office: The Zurich Centre, 3000 Parkway, Whiteley, Fareham, Hampshire PO15 7JZ

607109.02 (1/08/2002) 1002 MGH

Authorised by the Irish Financial Regulator and subject to limited regulation by the Financial Services Authority. Details about the extent of our regulation by the Financial Services Authority are available from us on request.

Excess :

Public Liability/Products Liability/Pollution: £ £311,000 any one event
Employers' Liability: £ £311,000 any one claim

Indemnity to Principals :

Covers include a standard Indemnity to Principals Clause in respect of contractual obligations.

Full Policy :

The policy documents should be referred to for details of full cover.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Sally Rose'.

Sally Rose
Underwriting Services
Zurich Municipal
Farnborough



To Whom It May Concern

Our ref: SS/PS/B'HAM

14 August, 2012

Zurich Municipal Customer: Suffolk County Council

This is to confirm that Suffolk County Council have in force with this Company until the policy expiry on 31st July 2013 Professional Negligence Insurance incorporating the following essential features:

Policy Number: QLA-19A004-0013

Services covered: Service C - Archeology

Limit of Indemnity: £ 5,000,000 any one claim and *in the aggregate for all claims* first made against the Insured and notified to Zurich Municipal during the period of insurance

Excess : £ 311,507 any one claim

Retroactive Date: 01/08/2006

Exclusions

Standard insurance market exclusions apply, notably exclusion of Pollution other than sudden and accidental; punitive or exemplary damages; express warranties or guarantees; claims the cause of which occurred prior to the Retroactive Date.

This is a brief summary and the full policy should always be referred to for exact details of cover.

Yours faithfully

Sally Rose
Underwriting Services
Zurich Municipal

Zurich Municipal
Zurich House
2 Gladiator Way
Farnborough
Hampshire
GU14 6GB

Telephone 0870 2418050
Direct Phone 0121 6978594
Direct Fax 0121 978585
E-mail sally.rose@zurich.com

Communications will be monitored regularly to improve our service and for security and regulatory purposes

Zurich Municipal is a trading name of Zurich Insurance plc

A public limited company incorporated in Ireland. Registration No. 13460
Registered Office: Zurich House, Ballsbridge Park, Dublin 4, Ireland.

UK branch registered in England and Wales
Registration No. BR7985.
UK Branch Head Office: The Zurich Centre,
3000 Parkway, Whiteley, Fareham,
Hampshire PO15 7JZ

Authorised by the Irish Financial Regulator and subject to limited regulation by the Financial Services Authority. Details about the extent of our regulation by the Financial Services Authority are available from us on request.

Appendix 2. Context list

Context Number	Feature Number	Feature Type	Category	Description	Interpretation
0001	0003	Oven	Fill	Final fill of possible oven 0003. Consists of mid greyish brown firm silty clay containing occasional small sub-rounded and sub-angular stones + charcoal flecks.	fill of possible oven 0003 after it had gone out of use, alternatively, upper fill of ditch 0004
0002	0003	Oven	Fill	Fill of possible oven 0003. Consists a dark layer of charcoal across the base and sides of cut 0003, patchy in places. Contains a mass of tiles fragments in one corner that are partially pressed into the edges of the cut. Does not appear to be in-situ structure	spread off charcoal and tile though to be the primary component of a possible oven 0003 although may be just a dump of material in ditch 0004
0003	0003	Oven	Cut	Roughly rectangular cut with rounded corners. Sloping sides down to a flat base. Appears to be 'lined' with a layer of charcoal and a small area of dense tile fragments (0002)	Initially interpreted as a possible oven due to the presence of the charcoal layer and the tile, which was thought to be part of the structure. Later weathering revealed that the 'cut' was within a linear feature (ditch 0004) raising the possibility that layer 0002 was just a dump of material in the partially backfilled ditch.
0004	0004	Ditch	Cut	Linear feature cut. Aligned southwest-northeast. 1.2m wide and 0.2m deep. Sloping sides down to a broad flat base.	Interpreted as ditch, probable field boundary of unknown date. Does not align with any known historic boundary
0005	0004	Ditch	Fill	Fill of cut 0004. Consists of pale brown to yellow silty clay with occasional flints and infrequent charcoal flecks	Ditch fill - probably a naturally accruing infill
0006	0006	Ditch	Cut	Linear feature - aligned north-south. Clearly modern debris in the fill - not excavated	Ditch, field boundary - along the line of the present hedgerow
0007	0007	Ditch	Cut	Linear feature - aligned east-west. Clearly modern debris in the fill - not excavated	Ditch, field boundary - along the line of the present hedgerow

Appendix 3. OASIS data collection form

OASIS ID: [suffolkc1-172862](#)

Project details

Project name	IP8 Access Road, Scrivener Drive, Ipswich
Short description of the project	Continuous monitoring of topsoil strip in advance of road construction revealed an undated ditch and an undated possible oven. Oven more likely to be just a dump of tile and charcoal in a ditch. Tile identified as Roman imbrices - later reuse?. No MBA cremations were identified despite being within 100m of previously excavated examples.
Project dates	Start: 24-02-2014 End: 25-03-2014
Previous/future work	No / No
Any associated project reference codes	PIN 003 - HER event no.
Type of project	Recording project
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m
Monument type	DITCH Uncertain
Monument type	OVEN Uncertain
Significant Finds	TILE Roman
Investigation type	"Open-area excavation"
Prompt	National Planning Policy Framework - NPPF

Project location

Country	England
Site location	SUFFOLK BABERGH PINWOOD PIN 003 - IP8 Access Road
Study area	1140.00 Square metres
Site coordinates	TM 1288 4281 52.0422113427 1.10451983506 52 02 31 N 001 06 16 E Point

Project creators

Name of Organisation	Suffolk County Council Archaeological Service
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Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Suffolk County Council Archaeological Service, Field Team
Project director/manager	Rhodri Gardner
Project supervisor	M. Sommers
Type of sponsor/funding body	Developer

Project archives

Physical Archive recipient	Suffolk County Council Archaeological Service
Physical Archive ID	PIN003
Physical Contents	"Ceramics"
Digital Archive recipient	Suffolk County Council Archaeological Service
Digital Archive ID	PIN003
Digital Contents	"other"
Digital Media available	"Database", "Images raster / digital photography", "Text"
Paper Archive recipient	Suffolk County Council Archaeological Service
Paper Archive ID	PIN003
Paper Contents	"other"
Paper Media available	"Correspondence", "Notebook - Excavation", "Research", "General Notes", "Plan", "Report", "Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Excavation Report: IP8 Access Road, Scrivener Drive, Pinewood, Suffolk
Author(s)/Editor(s)	Sommers, M.

Other bibliographic details	SCCAS Report No. 2014/030
Date	2014
Issuer or publisher	SCCAS
Place of issue or publication	Ipswich
Description	printed sheets of A4 in card covers and a plastic comb binding

Entered by MS (mark.sommers@suffolk.gov.uk)

Entered on 25 March 2014

Appendix 4. Radiocarbon dating certificate



RADIOCARBON DATING CERTIFICATE

18 August 2014

Laboratory Code SUERC-54710 (GU34707)

Submitter Anna West
Suffolk County Council Archaeological Service
Gold Block, Floor 5
Endeavour House, Russell Road
Ipswich IP4 1LZ

Site Reference PIN 003
Context Reference 0002
Sample Reference <2>

Material Charcoal : Charred cereal grains and wood

$\delta^{13}\text{C}$ relative to VPDB -24.5 ‰

Radiocarbon Age BP 1805 \pm 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is 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.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

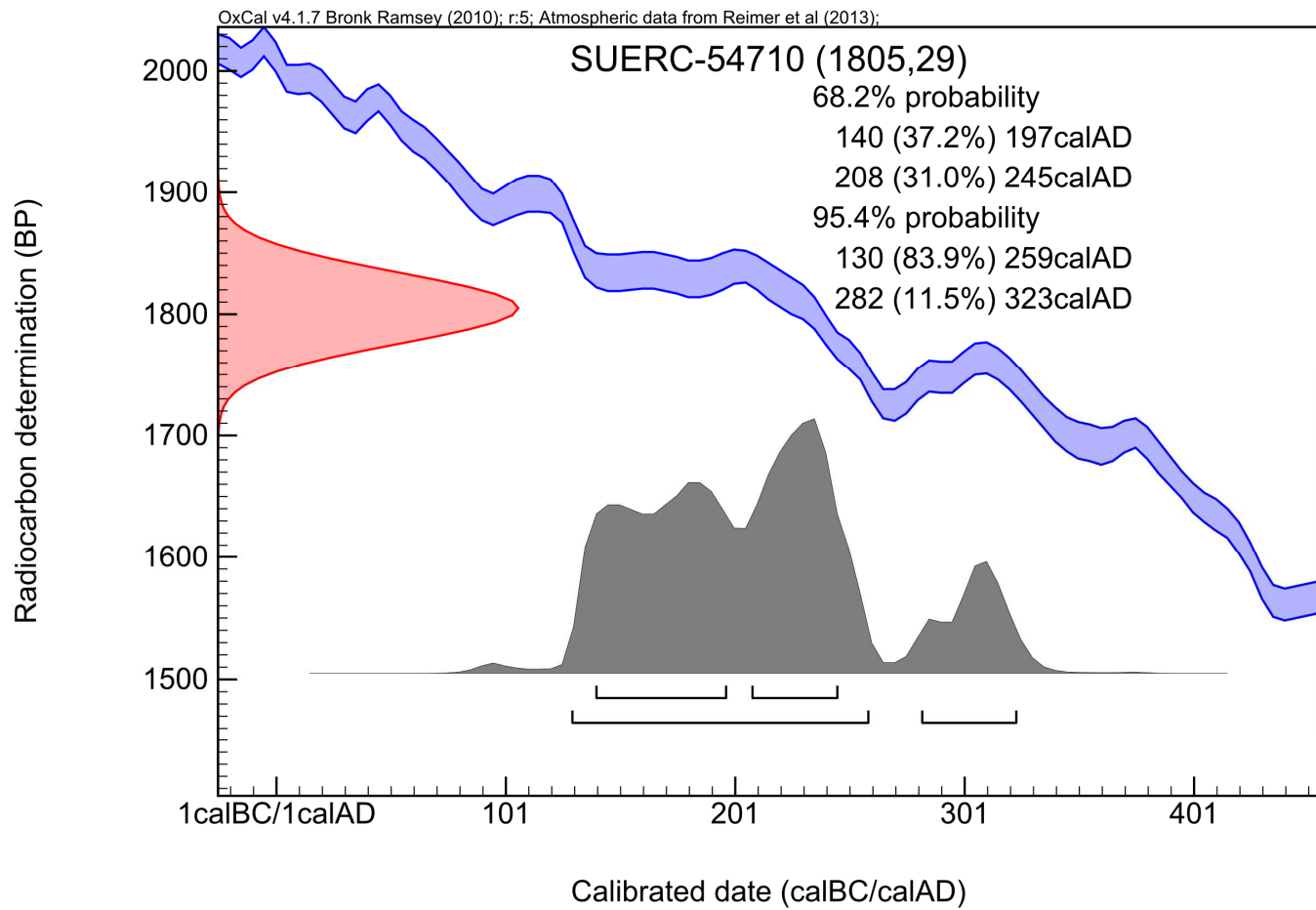
Conventional age and calibration age ranges calculated by :- *E. Dunbar*

Date :- 18/08/2014

Checked and signed off by :- *P. Naynab*

Date :- 18/08/2014

Calibration Plot



Archaeological services Field Projects Team

Delivering a full range of archaeological services

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- Site investigation
- Outreach and educational resources
- Historic Building Recording
- Environmental processing
- Finds analysis and photography
- Graphics design and illustration

Contact:

Rhodri Gardner

Tel: 01473 265879

rhodri.gardner@suffolk.gov.uk

www.suffolk.gov.uk/Environment/Archaeology/