

ARCHAEOLOGICAL EVALUATION REPORT

SCCAS REPORT No. 2011/116

Land East of Hawes Street, Ipswich IPS 646

M. Sommers
© July 2011
www.suffolk.gov.uk/environment/archaeology

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

HER Information

Planning Application No: IP/11/00432/FUL

Date of Fieldwork: 19th July 2011

Grid Reference: TM 1656 4331

Funding Body: CgMs Consulting (on behalf of client)

Curatorial Officer: Keith Wade

Project Officer: Mark Sommers

Oasis Reference: suffolkc1-105569

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

Contents

Summary

	Page
1. Introduction	1
2. Geology and topography	1
3. Archaeological and historical background	3
4. Methodology	4
5. Results	5
6. Finds and environmental evidence	6
7. Discussion	7
8. Conclusions and recommendations for further work	7
9. Archive deposition	8
10. Contributors and acknowledgements	8

Disclaimer

List of Figures

1. Site location plan	2
2. 1st (top) and 3rd (bottom) Edition Ordnance Survey, 1:2500 scale sheets	3
3. Trench location plan	5

List of Plates

Plate 1. Trench 1, southern end, camera facing north-west	9
Plate 2. Trench 1, central area, camera facing north-west	9
Plate 3. Trench 2, camera facing south-west	10

List of Appendices

1. Brief and specification	11
----------------------------	----

Summary

An archaeological evaluation was carried out on a parcel of land to the east of Hawes Street, Ipswich, in advance of a proposed housing development. The site was formerly part of an ironworks involved in large-scale engineering. Three trenches were excavated across the proposed site but no archaeological features were identified and no artefacts recovered. At the northern and southern ends of the development area a natural subsoil of pale yellow sand was encountered at a depth of c. 1m. In the central area a dark grey alluvial silt was present at a depth of c. 1.3m to 1.5m suggesting a marshy lagoon or inlet from the main river channel. Concrete footings and slabs, some of which were *in-situ*, were noted in all three trenches. In the southern two trenches the overburden comprised made ground at the base of which was a hard dense layer of slag and clinker or a thick deposit of black sand, ash and clinker. These layers were undoubtedly waste from the former iron works that had been spread over what was probably the original land surface that was otherwise relatively undisturbed. In the northern area large deposits of broken concrete with reinforcing were recorded and the underlying natural deposits had been clearly truncated, probably during the demolition and clearing of the former ironworks. (Suffolk County Council Archaeological Service for CgMs Consulting).

1. Introduction

A residential housing development has been proposed for a plot of land lying to the east of Hawes Street, Ipswich. Planning consent for the development has been granted (IP/11/00432/FUL) but with an attached condition requiring an agreed programme of archaeological work be in place prior to the commencement of the development.

The first stage of the programme of work, as specified in the Brief and Specification produced by Keith Wade of the Suffolk County Council Conservation Team (Appendix 1), was the undertaking of a trenched evaluation in order to ascertain what levels of archaeological evidence may be present within the development area and to inform any mitigation strategies that may then be deemed necessary.

The National Grid Reference for the approximate centre of the site is TM 1656 4331
Figure 1 shows a location plan of the site.

The archaeological evaluation was undertaken by Suffolk County Council Archaeological Service's Field Team who were commissioned by CgMs Consulting, on behalf of a client.

2. Geology and topography

The site consists of an area of roughly level, open ground lying between Hawes Street and a small housing estate to the east. It is divided into two separate areas of unequal size by Jamestown Boulevard, a narrow roadway that provides access to the estate from Hawes Street. The development site lies at a height of c. 3.0m OD whilst the adjacent housing estate lies at a noticeably higher level (c. 4.3m OD), and is situated behind a concrete retaining wall.

The River Orwell, a tidal estuary, lies c. 250m to the east of the site.

The underlying geology consists of river terrace deposits of sand and gravel with occasional pockets of overlying alluvial silt.

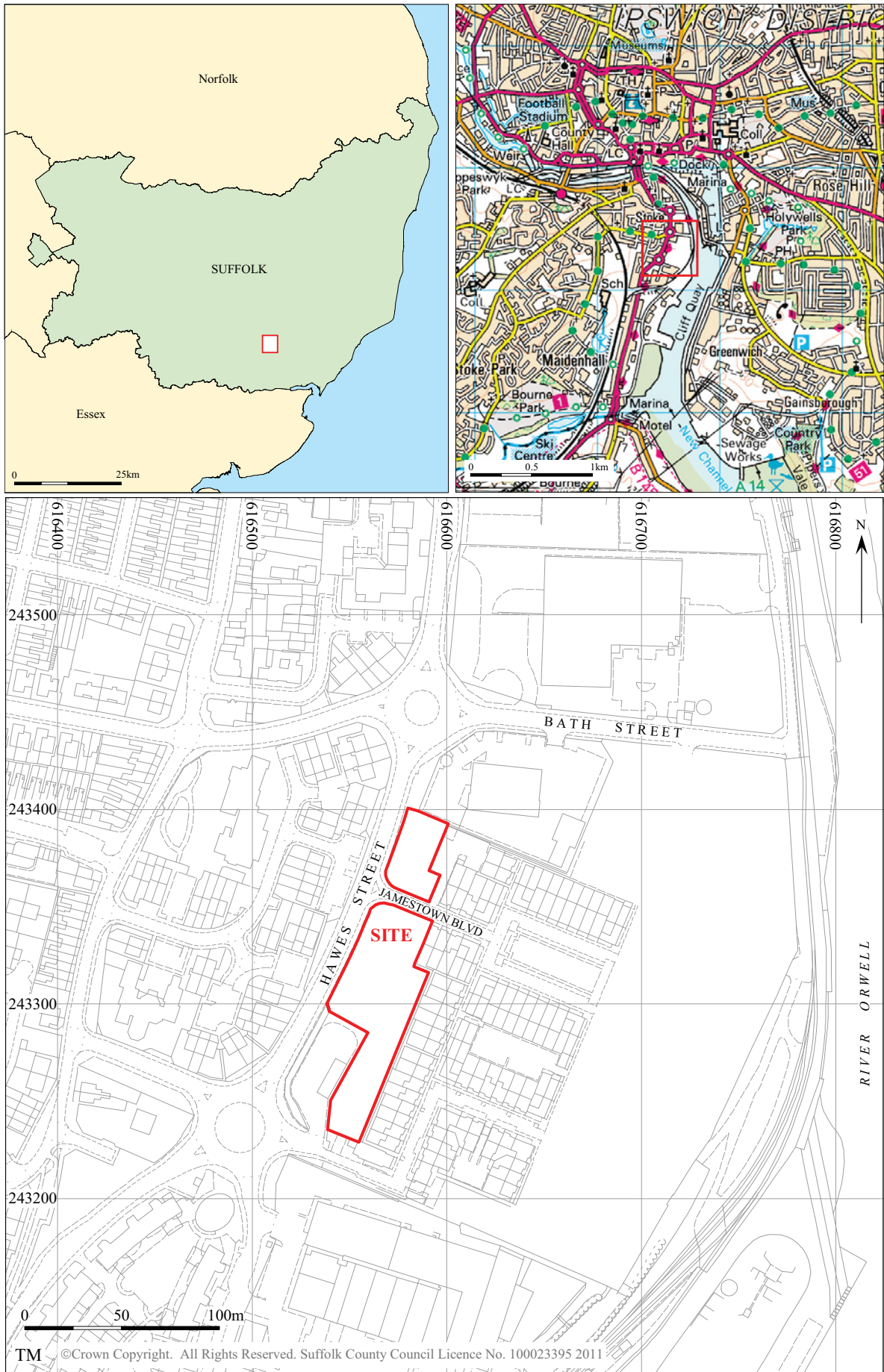


Figure 1. Site location plan

3. Archaeological and historical background

The development area lies within the boundaries of the former Waterside Works of Ransomes and Rapier Limited, a large scale engineering and iron works which was active on this site from c. 1869 until 1987 when the works closed. The works were demolished and the site cleared for future development during 1990 and early 1991. It is recorded on the County Historic Environment Record, reference IPS 518.

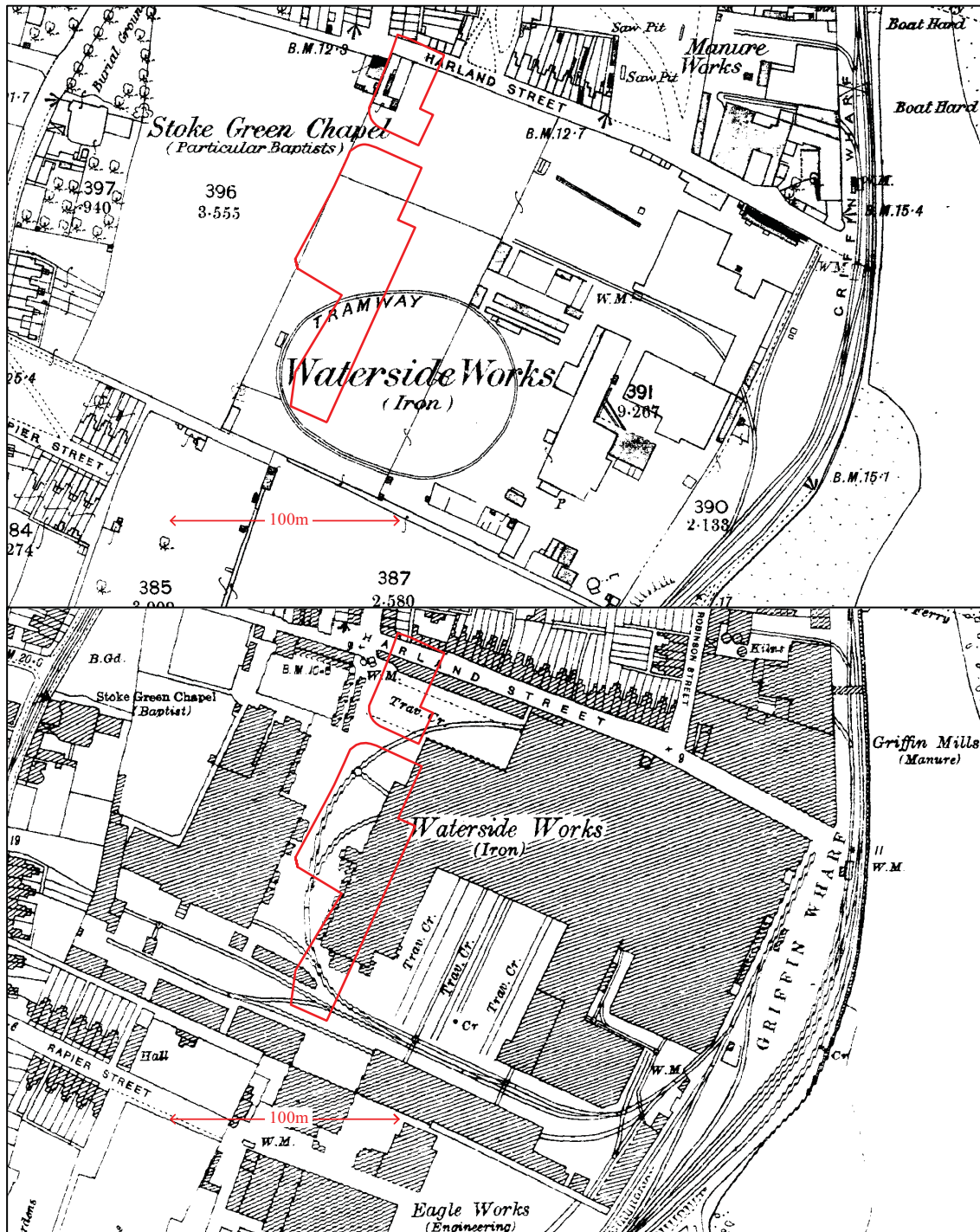


Figure 2. 1st (top) and 3rd (bottom) Edition Ordnance Survey, 1:2500 scale sheets (rescaled extracts; site outlined in red)

Additionally, the development site lies adjacent the Area of Archaeological Importance defined for Ipswich in the *Ipswich Local Plan*. It is also situated on a gravel terrace overlooking the River Orwell with a high potential for prehistoric activity.

4. Methodology

The trial trenches were machine excavated down to the level of the natural subsoil using the back acting hoe of a wheeled 'JCB' type excavator. A toothless ditching bucket was fitted although in some areas, namely parts of Trench 2 and all of Trench 3, it was necessary to undertake the excavation using a toothed bucket due to the compact nature of the overburden. The location of the trenches was broadly in accordance with a plan approved by the County Archaeological Service Conservation Team which was designed to sample all areas of the proposed development site. However, it should be noted that Trench 1 was mistakenly situated slightly further to the south than the location set out in the Written Scheme of Investigation (Gardner 2011).

The machining of the trenches was closely observed throughout in order to identify any archaeological features and deposits and to recover any artefacts that might be revealed. Excavation continued until undisturbed natural deposits were encountered, the exposed surface of which was then examined for cut features. Had any features or significant deposits been identified they would have been sampled through hand excavation in order to determine their depth and shape and to recover datable artefacts.

Following excavation of the trenches, the nature of the overburden was recorded, the trench locations plotted and the depths noted.

A photographic record of the work undertaken was also compiled using a 10 megapixel digital camera.

5. Results

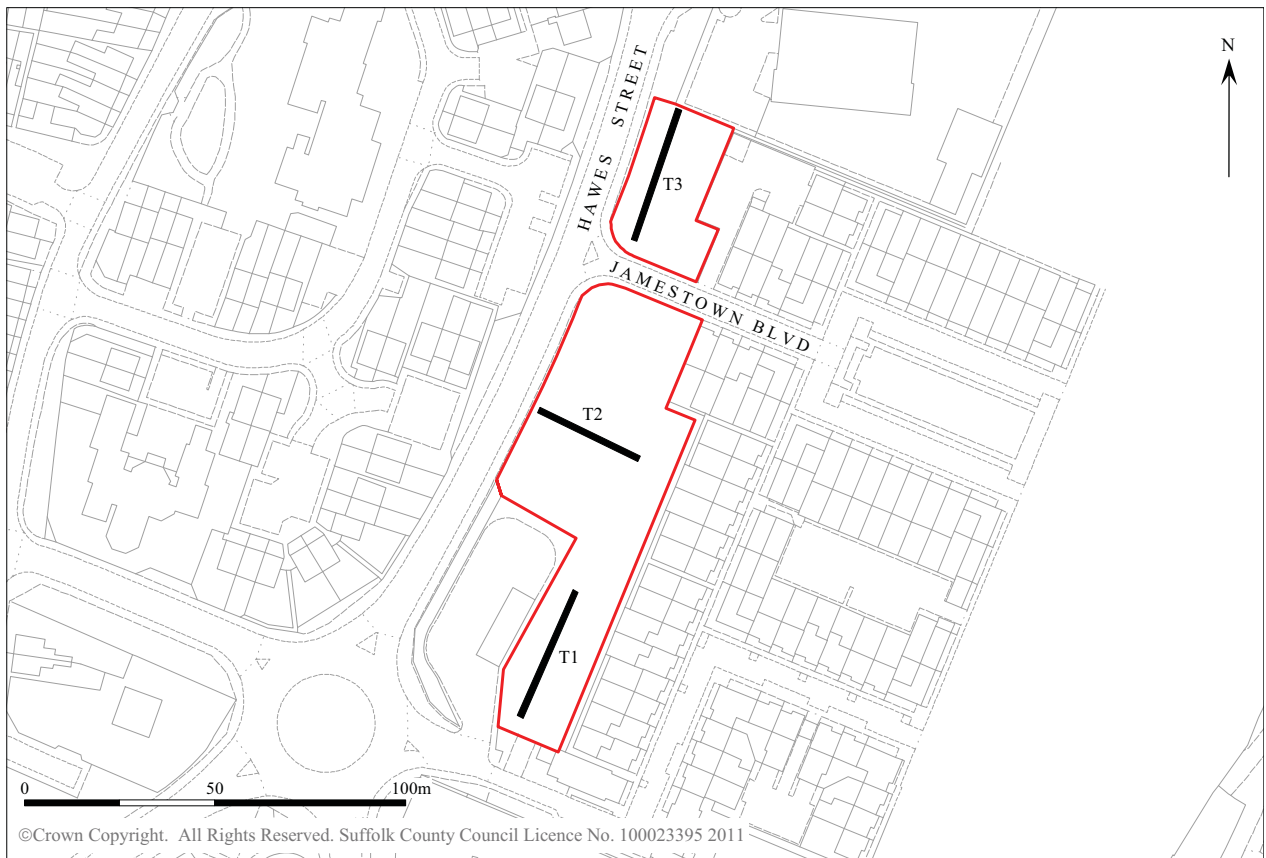


Figure 3. Trench location plan

Figure 3 indicates the locations of the excavated trial trenches. A description of each trench follows below:

Trench 1 - ran approximately north-east to south-west and measured 35m in length. In the south-west end of the trench the natural subsoil consisted of a pale yellow, silty sand and lay at a depth of 0.95m (Plate 1). The subsoil continued at this depth for approximately 6m at which point a large concrete footing ran across the trench on a north-west to south-east alignment. To the north-east of this footing the natural subsoil dipped and was overlain by a deposit of dense, grey alluvial silt, the top of which lay at a depth of 1.5m (Plate 2). Overlying these natural deposits was a layer of dense dark brown to black silty sand with charcoal and ash that varied in thickness between 0.15m to 0.25m. This was in turn overlain by a layer of iron working slag and clinker, some 0.2m thick, which had become cemented to form a hard dense layer. This was overlain by a thick deposit of brown loam containing frequent 19th and 20th century building

rubble and concrete which in turn was sealed beneath a thin layer of bright yellow sand and a thin topsoil.

Trench 2 - was aligned north-west to south-east and measured 28m in length. It had been intended to continue this trench further to the south-east but this was not possible due to the presence of a live high-voltage cable. In the north-western end of the trench a concrete slab was present at a depth of c. 0.45m. It was 4m in width and in excess of 0.4m thick. Removal of this slab would require a larger machine fitted with a breaker. The remainder of the trench was excavated to a depth of 1.7m at which level the dense grey alluvial silt seen in trench 1 was encountered. It was overlain by a 0.5m thick deposit of black sand and silt with ash and charcoal/clinker and occasional orange/yellow sand lenses. The layer of cemented iron working slag was present at a depth of 0.7m and was overlain by brown loam with 19th/20th century building debris (Plate 3).

Trench 3 - was excavated in the plot to the north of Jamestown Boulevard. It was aligned approximately north-east to south-west and measured 35m in length. The natural subsoil in this area consisted of pale yellow sand which was encountered at a depth of 1.2m beneath of mass of disturbed redeposited soil containing large amounts of building rubble, primarily concrete. Excavation of this trench was problematic due to the presence of the substantial deposits of broken concrete knitted together with steel reinforcement that continued down to the level of the natural subsoil, which was undoubtedly truncated.

6. Finds and environmental evidence

No artefactual evidence was recovered during the evaluation.

7. Discussion

The results of evaluation failed to identify any significant archaeological features or deposits.

An extensive layer of slag and clinker was present which had become cemented by corrosion products. This overlay either a layer of ash and clinker or a dark brown to black silty sand with ash/charcoal. These deposits are smelting waste from the ironworks that has been spread over what was likely to be the original land surface and was probably undertaken purely as a method of disposal. The circular tramway marked on the 1st Edition Ordnance Survey map (Fig. 2), a section of which crosses the development area, was likely to have been built in order to facilitate the removal of smelting waste from the works.

A large area of alluvial silt, which had been buried beneath the ironwork waste, was noted in the central area of the site suggesting a large marshy lagoon or an inlet off the main river had been present. The positioning of the footing on the south-west side of this silt is probably coincidental rather than an actual revetted edge.

Although there was some truncation of the natural subsoil, particularly in the northern trench, in other parts of the development area the original land surface appeared to have been buried in b the ironworks waste products, probably in the late 19th century, and it must be assumed that the lack of earlier evidence is a true reflection of the level of early activity in this area.

8. Conclusions and recommendations for further work

The evaluation did not identify any significant archaeological deposits or features that could be under threat from the proposed development. Consequently, no further work is recommended.

9. Archive deposition

Historic Environment Record reference under which the archive is held: IPS 646.

Digital archive:

*R:\Environmental Protection\Conservation\Archaeology\Current Recording Projects\
Ipswich\IPS 646 Evaluation (Hawes Street)*

Digital photographs are held under the references HLE21 to HLE25

A summary has also been entered into OASIS, the online database, ref. suffolkc1-105569

10. List of contributors and acknowledgements

The evaluation was carried out by Phil Camps and M. Sommers from Suffolk County Council Archaeological Service, Field Team.

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

11. Bibliography

Gardner, R. 2011, *Land adjacent Anduff Car Wash, Hawes Street, Suffolk, Archaeological Evaluation by Trial Trench, Written Scheme of Investigation & Safety Statement and Risk Assessment* (unpublished document)

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.

Plates (scales are divided into 0.5m sections)



Plate 1. Trench 1, southern end, camera facing north-west (photo ref. HLE01)



Plate 2. Trench 3, central area, camera facing north-west (photo ref. HLE03)



Plate 3. Trench 2, camera facing south-west (photo ref. HLE05)

SUFFOLK COUNTY COUNCIL ARCHAEOLOGICAL SERVICE - CONSERVATION TEAM

Brief and Specification for an Archaeological Evaluation

Evaluation by Trial Trench

Land adjacent to Anduff Car Wash, Hawes Street, Ipswich

1. Background

- 1.1 Planning consent has been granted for the erection of 21 dwellings on land adjacent to the Anduff Car Wash, Hawes Street, Ipswich (IP/11/00432/FUL).
- 1.2 The planning consent contains a condition requiring the implementation of a programme of archaeological work before development begins (condition 55 in Circular 11/95). In order to establish the full archaeological implications of the proposed development, an archaeological evaluation is required of the site. **The evaluation is the first part of the programme of archaeological work and decisions on the need for, and scope of, any further work will be based upon the results of the evaluation and will be the subject of additional briefs..**
- 1.3 The development area lies adjacent to the Area of Archaeological Importance defined for Ipswich in the Ipswich Local Plan .and it lies on the gravel terrace of the River Orwell which has a high potential for prehistoric activity. Any ground-works associated with the proposed development has the potential to cause damage or destruction to any underlying heritage assets. A previous permission, which included this area (IP/05/00819/FUL) did have an archaeological condition but this part of the site was not developed.
- 1.4 The archaeological works undertaken on the developed area were a monitoring of the building contractor's ground works. This showed heavy disturbance from the grubbing of old foundations and no archaeological features or finds were recorded. However, this remaining portion of the site lies further from the river and has a higher archaeological potential which should be assessed through evaluation.
- 1.5 All arrangements for the field evaluation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area of the proposed development are to be defined and negotiated with the commissioning body.
- 1.6 Detailed standards, information and advice to supplement this brief are to be found in *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Papers 14, 2003.
- 1.7 In accordance with the standards and guidance produced by the Institute of Field Archaeologists this brief should not be considered sufficient to enable the total execution of the project. A Project Design or Written Scheme of Investigation (PD/WSI) based upon this brief and the accompanying outline specification of minimum requirements, is an essential requirement. This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (9-10 The Churchyard, Shire Hall, Bury St Edmunds IP33 2AR; telephone: 01284 741230 or fax: 01284 741257) for approval. The work must not commence until this office has approved both the archaeological contractor as suitable to undertake the work, and the PD/WSI as satisfactory. The PD/WSI will provide the basis for measurable standards and will be used to establish whether the requirements of the planning condition will be adequately met.
- 1.8 Before any archaeological site work can commence it is the responsibility of the developer to provide the archaeological contractor with either the contaminated land report for the site or a written statement that there is no contamination. The developer should be aware that investigative sampling to test for contamination is likely to have an impact on any archaeological

deposit which exists; proposals for sampling should be discussed with this office before execution.

- 1.9 The responsibility for identifying any restraints on field-work (e.g. Scheduled Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites &c.) rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not over-ride such restraints or imply that the target area is freely available.

2. **Brief for the Archaeological Evaluation**

- 2.1 Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ* [at the discretion of the developer].
- 2.2 Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
- 2.3 Evaluate the likely impact of past land uses and natural soil processes. Define the potential for existing damage to archaeological deposits. Define the potential for colluvial/alluvial deposits, their impact and potential to mask any archaeological deposit. Define the potential for artificial soil deposits and their impact on any archaeological deposit.
- 2.4 Establish the potential for waterlogged organic deposits in the proposal area. Define the location and level of such deposits and their vulnerability to damage by development where this is defined.
- 2.5 Provide sufficient information to construct an archaeological conservation strategy, dealing with , the recording of archaeological deposits, working practices, timetables and orders of cost.
- 2.6 Evaluation is to proceed sequentially: the desk-based evaluation will normally precede the field evaluation unless agreed otherwise. The results of the desk-based work is to be used to inform the trenching design. This sequence will only be varied if benefit to the evaluation can be demonstrated.
- 2.7 This project will be carried through in a manner broadly consistent with English Heritage's *Management of Archaeological Projects*, 1991 (MAP2), all stages will follow a process of assessment and justification before proceeding to the next phase of the project. Field evaluation is to be followed by the preparation of a full archive, and an assessment of potential. Any further excavation required as mitigation is to be followed by the preparation of a full archive, and an assessment of potential, analysis and final report preparation may follow. Each stage will be the subject of a further brief and updated project design, this document covers only the evaluation stage.
- 2.8 The developer or his archaeologist will give the Conservation Team of the Archaeological Service of Suffolk County Council (address as above) five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored.
- 2.9 If the approved evaluation design is not carried through in its entirety (particularly in the instance of trenching being incomplete) the evaluation report may be rejected. Alternatively the presence of an archaeological deposit may be presumed, and untested areas included on this basis when defining the final mitigation strategy.
- 2.10 An outline specification, which defines certain minimum criteria, is set out below.

3. **Specification A: Desk-Based Assessment**

- 3.1 Consult the County Historic Environment Record (HER), both the computerised record and any backup files.

- 3.2 Examine all the readily available cartographic sources (e.g. those available in the County Record Office). Record any evidence for historic or archaeological sites (e.g. buildings, settlements, field names) and history of previous land uses. Where permitted by the Record Office make either digital photographs, photocopies or traced copies of the document for inclusion in the report. *Please remember that copyright permissions should be sought from Suffolk Record Office, or other relevant institution, for anything included in the report.*
- 3.3 Assess the potential for documentary research that would contribute to the archaeological investigation of the site.

4 **Specification B: Field Evaluation**

- 4.1 Trial trenches are to be excavated to cover a minimum 5% by area of the development area and shall be positioned to sample all parts of the site. Trenches are to be a minimum of 1.8m wide unless special circumstances can be demonstrated. If excavation is mechanised a toothless 'ditching bucket' must be used. The trench design must be approved by the Conservation Team of the Archaeological Service before field work begins.
- 4.2 The topsoil may be mechanically removed using an appropriate machine fitted with toothless bucket and other equipment. All machine excavation is to be under the direct control and supervision of an archaeologist. The topsoil should be examined for archaeological material.
- 4.3 The top of the first archaeological deposit may be cleared by machine, but must then be cleaned off by hand. There is a presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of further excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
- 4.4 In all evaluation excavation there is a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation; that significant archaeological features, e.g. solid or bonded structural remains, building slots or post-holes, should be preserved intact even if fills are sampled.
- 4.5 There must be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. The depth and nature of colluvial or other masking deposits must be established across the site.
- 4.6 The contractor shall provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. Advice on the appropriateness of the proposed strategies will be sought from the English Heritage Regional Adviser for Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy and Wiltshire 1994) is available.
- 4.7 Any natural subsoil surface revealed should be hand cleaned and examined for archaeological deposits and artefacts. Sample excavation of any archaeological features revealed may be necessary in order to gauge their date and character.
- 4.8 Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.
- 4.9 All finds will be collected and processed (unless variations in this principle are agreed with the Conservation Team of SCC Archaeological Service during the course of the evaluation).
- 4.10 Human remains must be left *in situ* except in those cases where damage or desecration are to be expected, or in the event that analysis of the remains is shown to be a requirement of satisfactory evaluation of the site. However, the excavator should be aware of, and comply with, the provisions of Section 25 of the Burial Act 1857. "Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England" English Heritage and the Church of England 2005 provides advice and defines a level of practice which should be followed whatever the likely belief of the buried individuals.

- 4.11 Plans of any archaeological features on the site are to be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. Any variations from this must be agreed with the Conservation Team.
- 4.12 Where appropriate, a digital vector plan showing all the areas observed should be included with the report. This must be compatible with MapInfo GIS software, for integration into the County HER. AutoCAD files should be also exported and saved into a format that can be imported into MapInfo (for example, as a Drawing Interchange File or .dxf) or already transferred to .TAB files.
- 4.13 A photographic record of the work is to be made.
- 4.14 Topsoil, subsoil and archaeological deposit should be kept separate during excavation to allow sequential backfilling of excavations.

5. **General Management**

- 5.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by the Conservation Team of SCC Archaeological Service.
- 5.2 The composition of the project staff must be detailed and agreed (this is to include any subcontractors).
- 5.3 A general Health and Safety Policy must be provided, with detailed risk assessment and management strategy for this particular site.
- 5.4 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 5.5 The Institute of Field Archaeologists' *Standard and Guidance for Archaeological Desk-based Assessments* and for *Field Evaluations* should be used for additional guidance in the execution of the project and in drawing up the report.

6. **Report Requirements**

- 6.1 An archive of all records and finds must be prepared consistent with the principles of English Heritage's *Management of Archaeological Projects*, 1991 (particularly Appendix 3.1 and Appendix 4.1).
- 6.2 The data recording methods and conventions used must be consistent with, and approved by, the County Historic Environment Record.
- 6.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
- 6.4 An opinion as to the necessity for further evaluation and its scope may be given. No further site work should be embarked upon until the primary fieldwork results are assessed and the need for further work is established
- 6.5 Reports on specific areas of specialist study must include sufficient detail to permit assessment of potential for analysis, including tabulation of data by context, and must include non-technical summaries.
- 6.6 The Report must include a discussion and an assessment of the archaeological evidence. Its conclusions must include a clear statement of the archaeological potential of the site, and the significance of that potential in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 6.7 Finds must be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*. The finds, as an indissoluble part of the site archive, should be

deposited with the County HER if the landowner can be persuaded to agree to this. If this is not possible for all or any part of the finds archive, then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate.

- 6.8 The site archive is to be deposited with the County HER within three months of the completion of fieldwork. It will then become publicly accessible.
- 6.9 Where positive conclusions are drawn from a project (whether it be evaluation or excavation) a summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute for Archaeology*, must be prepared. It should be included in the project report, or submitted to the Conservation Team, by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.
- 6.10 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms.
- 6.11 All parts of the OASIS online form must be completed for submission to the HER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

Specification by: Keith Wade

Suffolk County Council
Archaeological Service Conservation Team
Economy, Skills and Environment
9-10 The Churchyard
Shire Hall
Bury St Edmunds
Suffolk IP33 2AR

Tel: 01284 741227

Date: 5th July 2011

Reference: Hawes Street

This brief and specification remains valid for 12 months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.

If the work defined by this brief forms a part of a programme of archaeological work required by a Planning Condition, the results must be considered by the Conservation Team of the Archaeological Service of Suffolk County Council, who have the responsibility for advising the appropriate Planning Authority.