

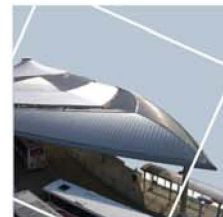
Report 2013/1295



nps archaeology

**Archaeological Watching Brief on the  
Barrow Heath Contact Main,  
Barrow Heath Chlorination Works, New Road,  
Barrow, Suffolk**

BRR053



**Prepared for**  
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April 2013



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<i>Issue 1</i>		

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BAU 01-04-13-2-1295

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Location:	Barrow Heath Chlorination Works New Road, Barrow, Suffolk
District:	St Edmundsbury
Grid Ref.:	TL 779 653
HER No.:	BRR053
OASIS Ref.:	147571
Client:	Anglian Water Services Limited
Dates of Fieldwork:	16 January-8 March 2013

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## **Summary**

*An archaeological watching brief was conducted for Anglian Water Services Limited during groundworks associated with the installation of a new contact main at the Barrow Heath Chlorination Works.*

*There were no significant archaeological features present in the areas affected by this watching brief.*

*Two Prehistoric flint waste flakes were recovered from the colluvium in the valley bottom.*

## **1.0 INTRODUCTION**

An archaeological watching brief was necessary on groundworks associated with the installation of a new 610m long contact main and adjoining pipe and other installations at the Barrow Heath Chlorination Works at New Road, Barrow Heath, Suffolk.

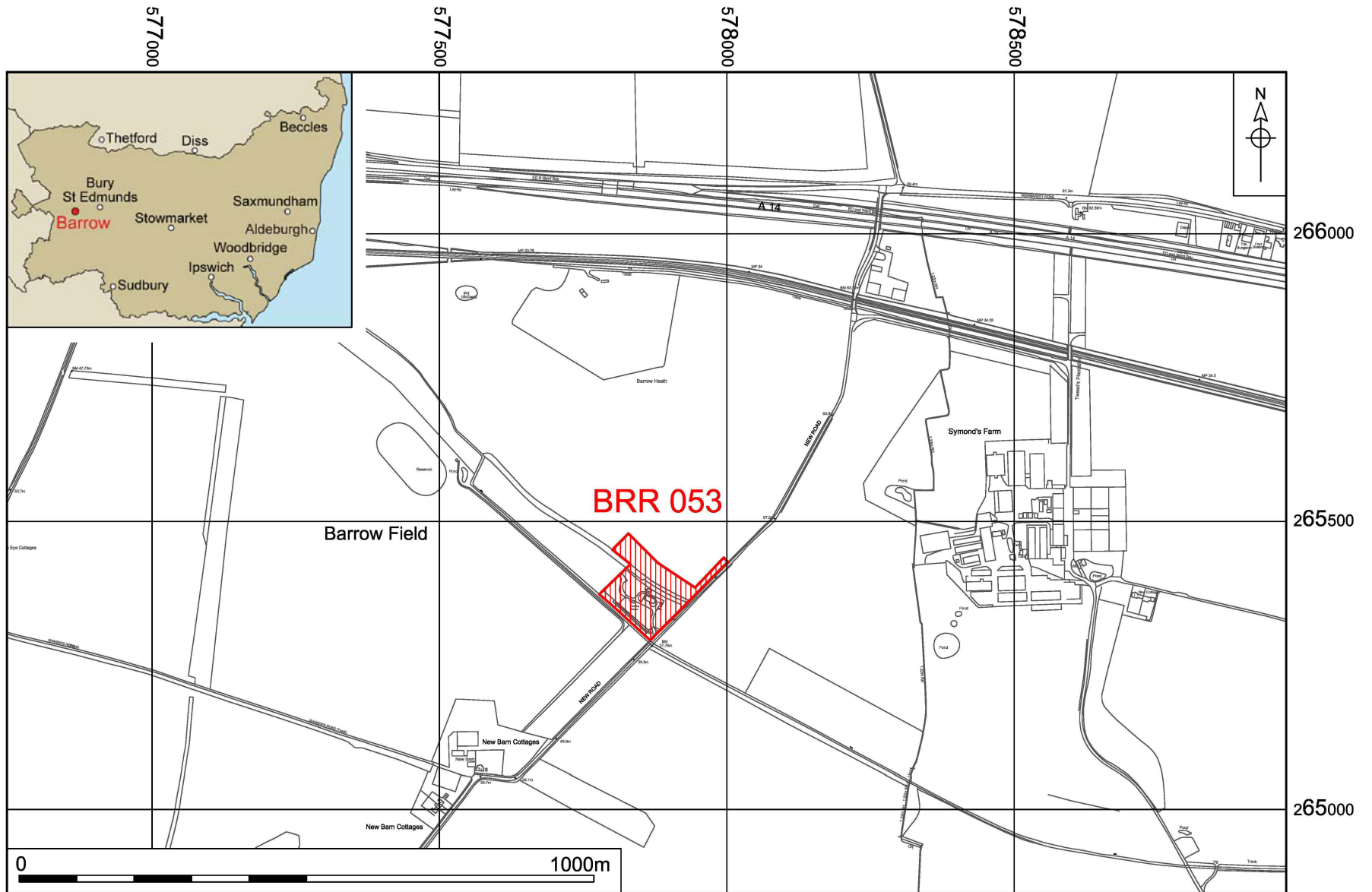
This work was undertaken to fulfil a Brief issued by Suffolk County Council Archaeological Service Conservation Team (Monk 2012). The work was conducted in accordance with a Project Design and Method Statement prepared by NPS Archaeology (01-04-13-2-1295/DW). This work was commissioned and funded by Anglian Water Services Limited.

This programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government 2012). The results will enable decisions to be made by the Local Planning Authority about the treatment of any archaeological remains found.

The site archive is currently held by NPS Archaeology and on completion of the project will be deposited with the Suffolk Historic Environment Record following the relevant policies on archiving standards.

## **2.0 GEOLOGY AND TOPOGRAPHY**

The site lies on Cretaceous Holywell Nodular Chalk Formation and New Pit Chalk Formation (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).



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Figure 1. Site location. Scale 1:10,000

The Barrow Heath Chlorination plant is located in the valley bottom of a tributary of the River Lark, at a height of 37-47m OD, approximately one mile north-east of the village of Barrow and just south of the A14 trunk road.

### **3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

The Suffolk Historic Environment Record (SHER) was consulted during the preparation of this section. A search with a radius of 500m from the water treatment works was made, producing only four records.

An undated square double-ditched enclosure (SHER BRR008) with sides of c.90m (external) and c.80m (internal) is located 240m west of the water treatment works.

There are cropmarks of roads and tracks aligned north to south, east to west and south-west to north-east (SHER BRR035) on aerial photographs of an area 450m south-east of the water treatment works. The east to west road is depicted on a map of 1597.

Metal detecting 300m north of the water treatment works has produced Roman, medieval and post-medieval coins, a medieval lead seal matrix and copper-alloy pilgrim badge, a Langton Down type brooch and a Saxon harness fitting (SHER BRR043).

Metal detecting 360m north of the water treatment works has produced a group of mainly Roman finds (including coins, a box, strap end and spindle whorl), as well as a Bronze Age gouge and medieval buckle, mount and harness pendant (SHER BRR048).

### **4.0 METHODOLOGY**

The objective of this watching brief was to identify, examine and record archaeological deposits within the development area.

The Brief required that all groundworks be monitored.

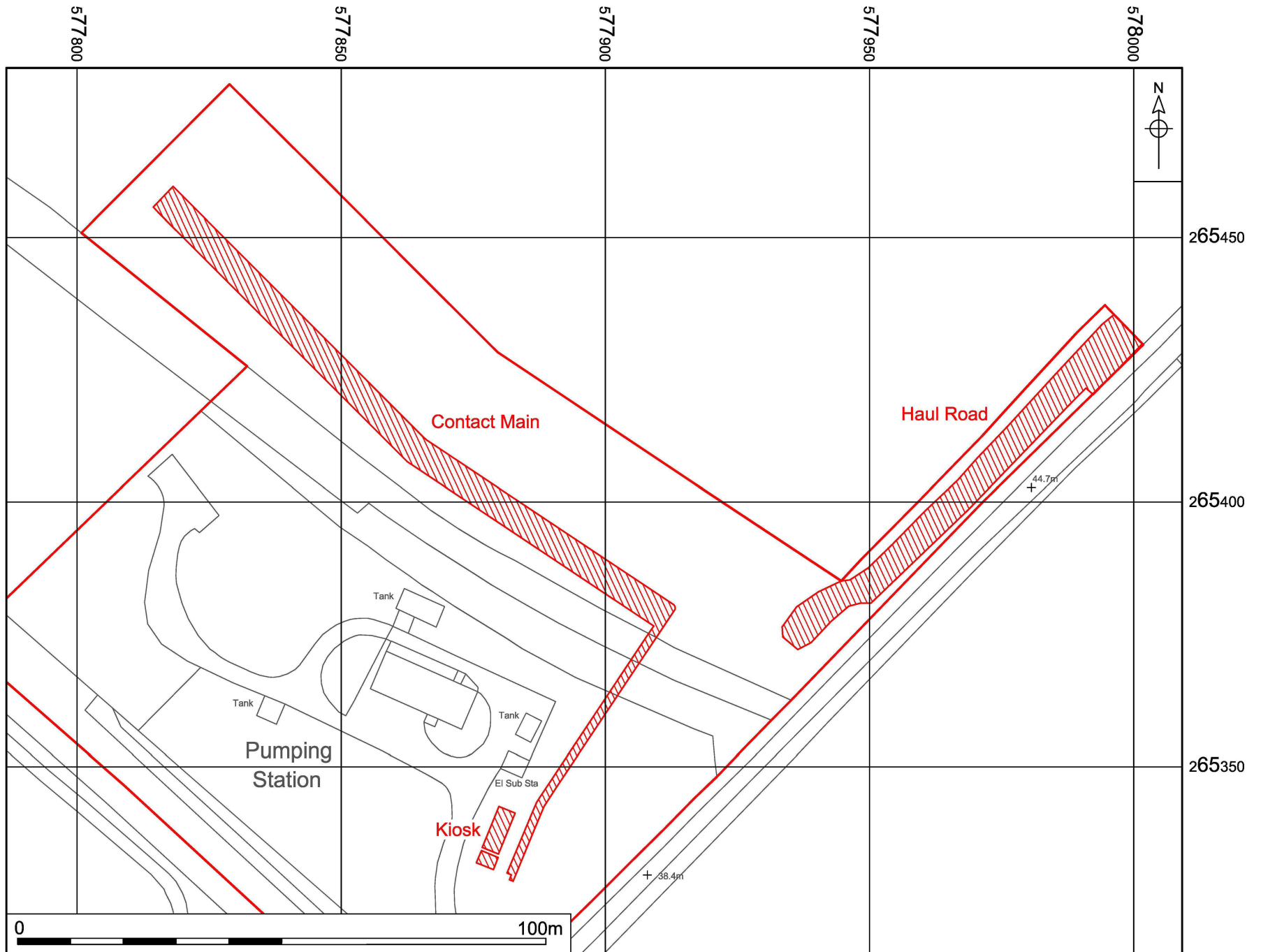
Machine excavation was carried out with a hydraulic 360° excavator equipped with a toothless ditching bucket and operated under constant archaeological supervision.

Spoil, exposed surfaces and features were scanned with a metal-detector. All metal-detected and hand-collected finds other than those which were obviously modern, were retained for inspection.

Due to a lack of suitable deposits, environmental samples were not taken.

All archaeological features and deposits were recorded using NPS Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Colour, monochrome and digital photographs were taken of all relevant features and deposits where appropriate.

Site conditions were good, with the work taking place in fine weather.



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Figure 2. Plan of site. Scale 1:1000



## 5.0 RESULTS

Observations made during the watching brief monitoring of the haul road, the contact main & linkage pipes and the kiosk are presented below and shown on Figure 2

### 5.1 Haul Road

The haul road was excavated on 16 January 2013 (Plate 1). It was situated on a steep slope, sloping downwards from north to south.

Topsoil (1) comprising 0.4m of dark brown clayey sand with occasional flint and sparse chalk gravel was stripped, revealing chalk to the north and reddish brown sand subsoil (2) to the south. The subsoil became more gravelly towards the southern end.

No archaeological features were present. One post-medieval brick was recovered from topsoil (1).



Plate 1. The haul road, facing north

### 5.2 Contact main and linkage pipes

Topsoil in the contact main area was stripped between 29 and 31 January 2013, revealing subsoil (2) beneath. Excavation of the trench began on the 11 February 2013.

The topsoil and subsoil deposits were the same as encountered along the haul road i.e. topsoil (1) was dark brown clayey sand with occasional flint and sparse chalk gravel; subsoil (2) was reddish brown sand. Here the topsoil was 0.5m deep while the underlying subsoil (2) was found to be 0.4m deep.

The contact main was inserted into a trench that measured 130.0m long and 2.5m deep (Plate 2).

No archaeological features were visible. Two probably prehistoric flint waste flakes were recovered from subsoil (2).



Plate 2. The contact main trench during excavation, facing east



Plate 3. The trench for the linkage pipes, facing south

The trench for the pipes linking the contact main to the kiosk was dug on 8 March 2013.

The trench measured 6.0-7.0m wide and 2.5m deep (Plate 3). The stratigraphy consisted of 0.3m of topsoil (1), dark brown clayey sand with occasional flint and sparse chalk gravel. The topsoil overlay mid brown silty sand colluvial subsoil (3). The colluvial subsoil (3) varied in depth from 1.0m at the northern and southern ends, to c.2.5m in the centre of the trench, probably indicating where the valley bottom lay.

### **5.3 Kiosk**

The kiosk foundations were only c.0.2m deep and did not go below the base of the topsoil.

## **6.0 FINDS**

by Rebecca Sillwood

The finds assemblage collected during the watching brief is very meagre, comprising four flint flakes and a fragment of brick.

The finds were processed and recorded by count and weight, and information entered onto an Excel spreadsheet. Appendix 2a presents the finds in context number order.

### **6.1 Ceramic Building Material**

A single piece of ceramic building material was recovered from topsoil (1).

This piece is a much abraded brick, with most of its edges missing. The fabric of this object is pale cream to pink, with frequent grog, chalk and pebble inclusions. This is probably a post-medieval brick, of 17th/18th-century date.

### **6.2 Flint**

Four pieces of worked flint (73g) were recovered from two deposits, topsoil (1) and subsoil (2).

All pieces are crisp and unrolled, perhaps unusual considering their context. The raw material consists of pale bluish grey to dark grey patinated flint.

The three pieces from the topsoil have varying amounts of cortex remaining, and are primary and secondary flakes.

The single piece from the subsoil has no cortex remaining, and is probably a tertiary flake.

All of these flints are likely to be prehistoric in date.

## **7.0 CONCLUSIONS**

There were no significant archaeological features or artefacts present in the areas affected by this watching brief. Significant layers of colluvium were present at the valley bottom. One of the colluvial layers contained two prehistoric flint waste flakes, which is suggestive of activity of this date in the vicinity.



### Appendix 1: Context Summary

Context	Category	Cut Type	Fill Of	Description
1				Topsoil
2				Subsoil
3				Colluvial subsoil

### Appendix 2a: Finds by Context

Context	Material	Qty	Wt	Period	Notes
1	Ceramic Building Material	1	975g	Post-medieval	Brick
1	Flint – Struck	3	61g	Prehistoric	
2	Flint – Struck	1	12g	Prehistoric	

### Appendix 2b: OASIS Finds Summary

Period	Material	Total
Prehistoric	Flint – Struck	4
Post-medieval	Ceramic Building Material	1

**Appendix 3: OASIS Report Summary**

# OASIS DATA COLLECTION FORM: England

[List of Projects](#) | [Manage Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

## Printable version

**OASIS ID: norfolka1-147571**

### Project details

Project name	Barrow Heath Contact Main
Short description of the project	An archaeological watching brief was conducted for Anglian Water Services Limited during groundworks associated with the installation of a new contact main at the Barrow Heath Chlorination Works. There were no significant archaeological features present in the areas affected by this watching brief. Two Prehistoric flint waste flakes were recovered from the colluvium in the valley bottom.
Project dates	Start: 16-01-2013 End: 08-03-2013
Previous/future work	No / No
Any associated project reference codes	BRR053 - HER event no.
Type of project	Recording project
Site status	None
Current Land use	Transport and Utilities 3 - Utilities
Monument type	NONE None
Significant Finds	BRICK Post Medieval
Significant Finds	STRUCK FLINT Late Prehistoric
Investigation type	"Watching Brief"
Prompt	National Planning Policy Framework - NPPF

### Project location

Country	England
Site location	SUFFOLK ST EDMUNDSBURY BARROW Barrow Heath Contact Main, Barrow Heath Chlorination Works, New Road
Study area	17500.00 Square metres
Site coordinates	TL 779 653 52 0 52 15 23 N 000 36 24 E Point

### Project creators

Name of Organisation	NPS Archaeology
----------------------	-----------------

Project brief originator	Suffolk County Council Archaeological Services
Project design originator	NPS Archaeology
Project director/manager	David Whitmore
Project supervisor	Steve Hickling
Type of sponsor/funding body	Utility
Name of sponsor/funding body	Anglian Water Services Ltd

### Project archives

Physical Archive recipient	Suffolk County Council
Physical Contents	"Ceramics", "Worked stone/lithics"
Digital Archive recipient	NPS Archaeology
Digital Contents	"Ceramics", "Worked stone/lithics", "other"
Digital Media available	"Images raster / digital photography", "Images vector", "Spreadsheets", "Text"
Paper Archive recipient	Suffolk County Council
Paper Contents	"Ceramics", "Worked stone/lithics", "other"
Paper Media available	"Context sheet", "Map", "Plan", "Report"

### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Watching Brief on the Barrow Heath Contact Main, Barrow Heath Chlorination Works, New Road, Barrow, Suffolk
Author(s)/Editor(s)	Hickling, S.
Other bibliographic details	Report 2013/1295
Date	2013
Issuer or publisher	NPS Archaeology
Place of issue or publication	Norwich
Description	A4 paper; double-sided, colour-printed, spiral-bound; PDF
Entered by	Jayne Bown (jayne.bown@nps.co.uk)
Entered on	8 April 2013



# OASIS:

Please e-mail [English Heritage](#) for OASIS help and advice

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Cite only: <http://www.oasis.ac.uk/form/print.cfm> for this page

**Appendix 4: Archaeological Specification**

Economy, Skills and Environment  
9–10 The Churchyard, Shire Hall  
Bury St Edmunds  
Suffolk  
IP33 1RX

## Brief for Continuous Archaeological Recording

FOR

### **Barrow Heath Contact Main**

<b>CONSULTEE:</b>	Anglian Water
<b>HER NO. FOR THIS PROJECT:</b>	To be arranged
<b>GRID REFERENCE:</b>	TL 779 653
<b>DEVELOPMENT PROPOSAL:</b>	Pipe and compound
<b>CURRENT LAND USE:</b>	Pumping station/Agricultural land
<b>THIS BRIEF ISSUED BY:</b>	Rachael Monk Assistant Archaeological Officer Conservation Team Tel. : 01284 741230 E-mail: rachael.monk@suffolk.gov.uk
<b>Date:</b>	28 <sup>th</sup> November 2012

### **Summary**

- 1.1 A length of new pipe and associated temporary compound at Barrow Heath pumping station has been proposed by Anglian Water.
- 1.2 Topsoil stripping and groundworks involved in the laying of the pipe and construction of the temporary compound have the potential to impact upon any archaeology present.
- 1.3 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 Written Scheme of Investigation (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 Suffolk County Council's Archaeological Service (SCCAS/CT) for scrutiny. The work must not commence until this office has approved both the archaeological contractor as suitable to undertake the work, and the WSI as satisfactory.

- 1.4 The WSI should be approved before costs are agreed with the commissioning client, in line with Institute for Archaeologists' guidance. Failure to do so could result in additional and unanticipated costs.
- 1.5 Following acceptance, SCCAS/CT will advise the LPA that an appropriate scheme of work is in place. The WSI, however, is a sufficient basis for the discharge of the planning condition relating to archaeological investigation. Only the full implementation of the scheme, both completion of fieldwork and reporting, will enable SCCAS/CT to advise the LPA that the condition has been adequately fulfilled and can be discharged.
- 1.6 The 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.

### **Archaeological Background**

- 2.1 The scheme lies in an area of archaeological interest, recorded in the County Historic Environment Record. The proposal lies in proximity to finds of Roman and medieval date (HER no. BRR 048), as well as an undated cropmark (BRR 008). As a result there is high potential for archaeological deposits to be disturbed by development in this area and the proposed works would cause significant ground disturbance with the potential to damage any archaeological deposit that exists.

### **Requirement for Archaeological Investigation**

- 3.1 The significant archaeologically damaging activity in this proposal will be the topsoil stripping and groundworks carried out in association with the construction of the temporary compound and laying of the new pipe.
- 3.2 Assessment of the available archaeological evidence indicates that this area which will be affected by the development can be adequately recorded by continuous archaeological monitoring. Any ground works, and also the upcast soil, in these areas are to be closely monitored during and after excavation by the archaeological contractor in order to ensure no damage occurs to any heritage assets.
- 3.3 The archaeological investigation should provide a record of archaeological deposits which are damaged or removed by any development [including services and landscaping] permitted by the current planning consent. Opportunity must be given to the archaeological contractor to hand excavate and record any archaeological features which appear during earth moving operations and of soil sections following excavation.
- 3.4 The method and form of development should be also monitored to ensure that it conforms to previously agreed locations and techniques upon which this brief is based.
- 3.5 If unexpected remains are encountered SCCAS/CT must be informed immediately. Amendments to this brief may be required to ensure adequate provision for archaeological recording.

## Arrangements for Archaeological Investigation

- 4.1 All arrangements for the excavation of the site, the timing of the work and access to the site, are to be defined and negotiated by the archaeological contractor with the commissioning body.
- 4.2 The project manager must also carry out a risk assessment and ensure that all potential risks are minimised, before commencing the fieldwork. The responsibility for identifying any constraints on fieldwork (e.g. designated status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites and ecological considerations rests with the commissioning body and its archaeological contractor.

## Reporting and Archival Requirements

- 5.1 The project manager must consult the Suffolk HER Officer to obtain an event number for the work. This number will be unique for each project or site and must be clearly marked on any documentation relating to the work.
- 5.2 An archive of all records and finds is to be prepared and must be adequate to perform the function of a final archive for deposition in the Archaeological Service's Store or in a suitable museum in Suffolk.
- 5.3 It is expected that the landowner will deposit the full site archive, and transfer title to, the Archaeological Service or the designated Suffolk museum, and this should be agreed before the fieldwork commences. The intended depository should be stated in the WSI, for approval.
- 5.4 The project manager should consult the intended archive depository before the archive is prepared regarding the specific requirements for the archive deposition and curation (including the digital archive), and regarding any specific cost implications of deposition.
- 5.5 The WSI should state proposals for the deposition of the digital archive relating to this project with the Archaeology Data Service, or similar digital archive repository, and allowance should be made for costs incurred to ensure proper deposition (<http://ads.ahds.ac.uk/project/policy.html>).
- 5.6 A report on the fieldwork and archive, consistent with the principles of *MAP2*, must be provided. Its conclusions must include a clear statement of the archaeological value of the results, and their significance in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 5.7 An unbound hardcopy of the report, clearly marked DRAFT, must be presented to SCCAS/CT for approval within six months of the completion of fieldwork unless other arrangements are negotiated. Following acceptance, a single hard copy and also a .pdf digital copy should be presented to the Suffolk HER.
- 5.8 Where appropriate, a digital vector plan should be included with the report, which must be compatible with MapInfo GIS software, for integration in the Suffolk HER.

- 5.9 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. When the project is completed, all parts of the OASIS online form must be completed and a copy must be included in the final report and also with the site archive. A .pdf version of the entire report should be uploaded where positive results have been obtained.
- 5.10 Where positive results are drawn from a project, a summary report must be prepared, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute of Archaeology and History*. It should be included in the project report, or submitted to SCCAS/CT, by the end of the calendar year in which the work takes place, whichever is the sooner.
- 5.11 When no significant features or finds are found, a short report will be sufficient with the following information: grid ref., parish, address, planning application number and type of development, date(s) of visit(s), methodology, plan showing areas observed in relation to ground disturbance/proposed development, depth of ground disturbance in each area, depth of topsoil and its profile over natural in each area, observations as to land use history (truncation etc), recorder and organisation, date of report.
- 5.12 This brief remains valid for 12 months. If work is not carried out in full within that time this document will lapse; the brief may need to be revised and re-issued to take account of new discoveries, changes in policy and techniques.

### **Standards and Guidance**

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.

The Institute for Archaeologists' *Standard and Guidance for an archaeological watching brief* (revised 2001) should be used for additional guidance in the execution of the project and in drawing up the report.

### **Notes**

The Institute of Archaeologists maintains a list of registered archaeological contractors ([www.archaeologists.net](http://www.archaeologists.net) or 0118 378 6446). There are a number of archaeological contractors that regularly undertake work in the County and SCCAS will provide advice on request. SCCAS/CT does not give advice on the costs of archaeological projects.