

**Archaeological watching briefs on
a new lake and counterwall trench at
Abbotts Hall Farm,
Great Wigborough, Essex
September 2001**

**on behalf of
the Essex Wildlife Trust
and the Environment Agency**



**report prepared by
Carl Crossan and David Sims**

NGR: TL 9711 1399
CAT project ref: 01/8F
Colchester Museums accesssion code: 2001-178



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CAT Report 211
March 2003

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1 Summary

Wooden structures sealed by thick clay deposits were recorded during watching briefs on machine excavations for a new freshwater lake and a counterwall trench at this coastal site, formerly Abbots Hall Farm, Great Wigborough, Essex. The principal feature consisted of two east-west-orientated rows of posts, approximately 3m apart, stretching across part of a former tidal creek. Radiocarbon dating of a wood sample indicated a date of AD 920 ± 50 years at the one sigma level of confidence. Possible functions include a fishtrap or jetty, but observation was too fragmentary to permit a satisfactory interpretation of the structure.

2 Introduction

- 2.1 Now in the ownership of the Essex Wildlife Trust, Abbots Hall Farm at Great Wigborough in Essex is a 280 hectare coastal farm which is undergoing a programme of environmental works, including the creation of a freshwater lake and alterations to the sea walls. During two watching briefs on machine excavations for the new lake and the excavation of a counterwall trench situated 600m to the east, groups of wooden posts were recorded which are the subject of this report. The watching briefs and excavation were carried out by the Colchester Archaeological Trust (CAT) in September 2001, on behalf of the Essex Wildlife Trust and the Environment Agency. The site is centred at National Grid Reference or NGR TL 9711 1399.
- 2.2 The work was necessitated by a planning application to alter and breach the sea walls for the re-creation of grazing and saltmarsh and to introduce a freshwater lake as part of a coastal wildlife nature reserve.
- 2.3 The project was carried out in accordance with the requirements detailed in Colchester Borough Council's *Guidelines on standards and practices for archaeological fieldwork in the Borough of Colchester* (1999) and *Guidelines on the preparation and transfer of archaeological archives to Colchester Museums* (1999), and the IFA's *Standard and guidance for an archaeological evaluation* (1999).

3 Archaeological background

- 3.1 This is one of a series of reports on archaeological fieldwork undertaken during the conservation programme at Abbots Hall Farm. Other reports relating to recent work at the farm are:
- CAT Report 105 Fieldwalking on the site of the proposed freshwater lake (October 2000)
 - CAT Report 111 Trial-trenching of a site at TL 971 140 (November 2000)
 - CAT Report 161 Fieldwalking and trial-trenching evaluation on 24 hectares of coastal land to be flooded by a proposed breach in the sea wall (November 2001)
 - CAT Report 213 An archaeological watching brief on new creeks and the breaching of the sea wall at Abbots Hall Farm, Great Wigborough, Essex - August-October 2002 (November 2002).
- 3.2 Prior to the current phase of fieldwork, the farm was known to contain a number of late Iron Age and Roman salt-making sites known as red hills (EHCR 11512, 16702, 17068). These are discussed in Fawn *et al* 1990 and Sealey 1995. The fieldwalking and trial-trenching by CAT have resulted in the discovery of one previously unknown red hill and located a further two sites; one Roman, and one Roman and medieval.

4 Aims and objectives

The aims of this project were to record the timber structure as well as possible, and to try to place it in its chronological and environmental context.

5 Fieldwork

5.1 The lake excavations

The site for the new lake lies in a shallow depression which drains south toward the Blackwater and Colne estuary (Salcott Channel: Fig 1). The lake formation involved machine excavation to achieve depths up to 2.5m below the 3.5m OD contour that marks the edge of the lake. In relation to the existing ground profile, this entailed the removal of 1.7m of soil at the deepest point of excavation, where the stratigraphy was as follows:

L1 - ploughsoil: a mid-brown silt loam, occupying the uppermost 20cm.

L2 - yellowish brown clay with grey mottles and reddish brown flecks, from 20cm to 1.0m depth.

L3 - greyish brown clay with reddish brown flecks, from 1.0m to 1.4m depth.

L4 - grey clay: natural, from 1.4m depth; up to 0.3m excavated.

5.1.1 Feature F1

Excavation below the 1.0m point revealed two east-west-orientated lines of wooden posts set approximately 3m apart (Feature or F1a and F1b; Fig 2). These were sealed by yellowish brown mottled clay (Layer or L2).

In total, 117 pieces of wood were individually recorded in the F1 group. Where identifiable, the wood was oak. Individual pieces ranged in thickness from 2cm to 13cm and most were roughly trimmed to a variety of profiles. In F1a, the majority of timbers were round. In F1b, most were square or rectangular with a smaller number of triangular or round section. The majority were vertical or nearly so with occasional smaller pieces, possibly collapsed, resting at an angle alongside and partly within the line of F1b (Fig 3). The vertical posts (where removed) had sharpened points. Loose pieces of wood lay to either side of the two lines of posts.

Other than the wood, the only stratified find was of Roman pottery, a samian *tettina* base, probably of 2nd-century date, from the interface between L2 and L3 (ie at the level of the surviving tops of the posts) close to F1b. Six wood samples were initially examined by the Dendrochronology Laboratory at Sheffield University but proved to be unsuitable for analysis. One sample was subsequently submitted to the Scottish Universities Research and Reactor Centre (SURRC), East Kilbride, for radiometric dating. This resulted in a radiocarbon age of 1030 ±50 years BP (before AD 1950) at the one sigma level of confidence. A copy of the dating certificate and calibration plot is included in the appendix.

The full extent of the posts was not established. The excavated lake profile gradually rose (see cover photograph), leaving unexcavated the shallower levels to the east and west of the exposed feature. The pattern of F1 posts shown in Figure 2 thus represents only those revealed by the deeper excavations for the lake.

Before the lake was flooded, the exposed posts F1a and F1b were covered with a protective mound of clay.

5.1.2 Feature F2

Approximately 34m to the south of F1, a single north-south-orientated row of posts (feature F2 in Fig 4) was uncovered on the western slope of the lake excavation. The tops of nine posts were revealed, with up to 20cm exposed by the machine. The majority were between 5cm and 8cm wide, except for one larger, roughly square-cut post with 10cm sides. They were sealed by clay deposits which appeared to be equivalent to L2, and were first exposed at a depth of 70cm. At the same depth, a 5m x 3m area of red burnt clay and charcoal lay 6m to the west of the post line. The material was between 2cm and 5cm thick and appeared to be redeposited, rather than burnt *in situ*.

5.2 The Copt Hall counterwall trench

This 200m-long by 2.1m-wide trench was situated approximately 600m to the east of the lake site (Fig 1). The stratigraphy consisted of topsoil above yellowish-brown clay containing occasional reddish-brown sandy patches. Natural bluish-grey clay was exposed at a depth of 1.3m.

Nine wooden posts were noted at the eastern ends of the trench (F3; Fig 5). Only the tops of the posts were uncovered, and these were found to be between 85cm and 105cm below the top of the trench. Those to the east were about 7cm in cross-section and three of the four were in line. The posts to the west, however, were irregularly placed, rectangular in shape, and smaller, with an average cross-section of 3cm x 2cm.

6 Finds

The only noteworthy find was a 2nd-century samian ware base referred to in section 5.1.1 above. This proved to be residual. Other finds are listed in the archive notes.

7 Discussion

The date of the F1 structure relies on the radiocarbon result (see appendix) which points to a late Saxon origin, ie AD 920 \pm 50 years at the one sigma level of confidence.

Observation was too restricted to determine the purpose of these structures. The double line of posts (F1) extended for an unknown distance across a probable former tidal creek. Its light, close-knit construction might indicate a fishtrap. Coastal fishtraps were common in the Saxon period, but these were normally funnel-shaped and needed only one line of posts rather than the parallel pair seen here. In plan, F1 appears more likely to have been a bridge or jetty than a fishtrap. However, the uprights seem rather lightweight for a freestanding wooden bridge or jetty, but are perhaps more suited as a retaining support for a bank or small causeway.

8 Archive deposition

All site records, finds and photographs will be deposited with Colchester Museums for permanent storage under accession code 2001-178.

9 Acknowledgements

This fieldwork was commissioned by the Essex Wildlife Trust and carried out with considerable assistance from the Environment Agency who were responsible for engineering the lake excavations. We would particularly like to thank the following for their interest and help in the course of the work:

Duncan Bridges, former Conservation Manager, the Essex Wildlife Trust
David Waskett, Site Engineer, the Environment Agency
Peter Murphy of the University of East Anglia, Norwich, for visiting the site at short notice and for his invaluable advice throughout
the Dendrochronology Laboratory at Sheffield University
Scottish Universities Research and Reactor Centre.

Site recording was carried out by David Sims, Laura Pooley and Simon Rulton.
Samian ware identification was by Stephen Benfield of CAT.

10 References

- | | | |
|----------------|------|--|
| CAT Report 105 | 2000 | A fieldwalking evaluation at Abbots Hall Farm, Great Wigborough, Essex, by Howard Brooks |
| CAT Report 111 | 2000 | An evaluation at Abbots Hall Farm, Great Wigborough, Essex, by Carl Crossan |

CAT Report 161	2001	A fieldwalking and trial-trenching evaluation at Abbots Hall Farm, Great Wigborough, Essex, by Howard Brooks
CAT Report 213	2002	An archaeological watching brief on new creeks and the breaching of the sea wall at Abbots Hall Farm, Great Wigborough, Essex - August-October 2002, by Kate Orr
Fawn, A J, Evans, K A, McMaster, I, & Davies, G M R	1990	<i>The red hills of Essex: salt-making in antiquity</i>
Sealey, P R	1995	'New light on the salt industry and red hills of prehistoric and Roman Essex', <i>EAH</i> , 26 , 65-81

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Distribution list:

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Appendix: SURRC radiocarbon-dating certificate and calibration plot



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RADIOCARBON DATING CERTIFICATE

14 January 2003

Laboratory Code	GU-10644
Submitter	Carl Crossan Colchester Archaeological Trust Ltd. Camulodunum 12 Lexden Road, Colchester Essex CO3 3NF
Site Reference	Abbotts Hall Farm, Great Wigborough
Sample Reference	2001-178 / T44 / 5
Material	Wood : No species given
Delta ¹³C rel. PDB	-25.4‰
Radiocarbon Age BP	1030 ± 50

N.B. 1. The above ¹⁴C 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.

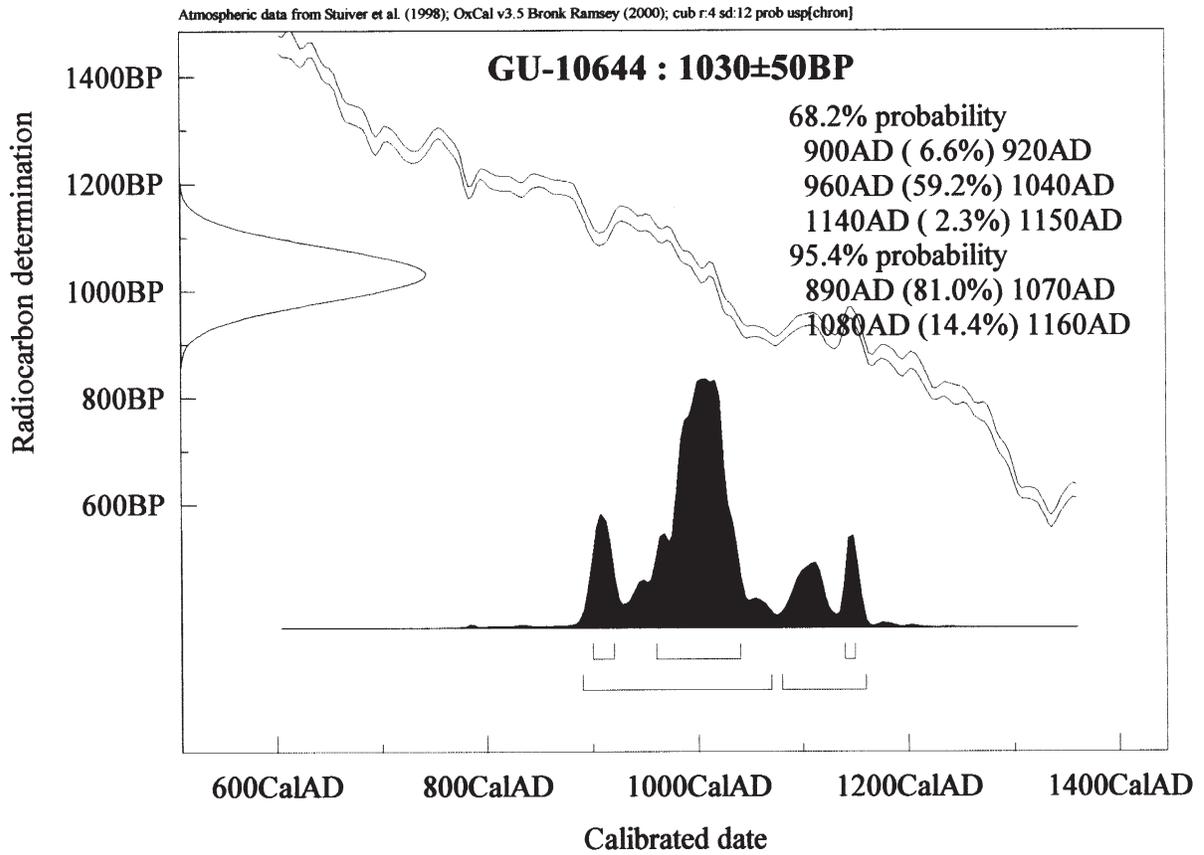
2. The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration programme (OxCal3).

3. Samples with an AA coding are measured at the University of Arizona AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to SURRC should also quote the GU coding that is given in parentheses after the AA code.

Conventional age and calibration age ranges calculated by :- *R. Anderson* Date :- 15-1-03

Checked and signed off by :- *Gordon S Cook* Date :- 15-1-03

Calibration Plot



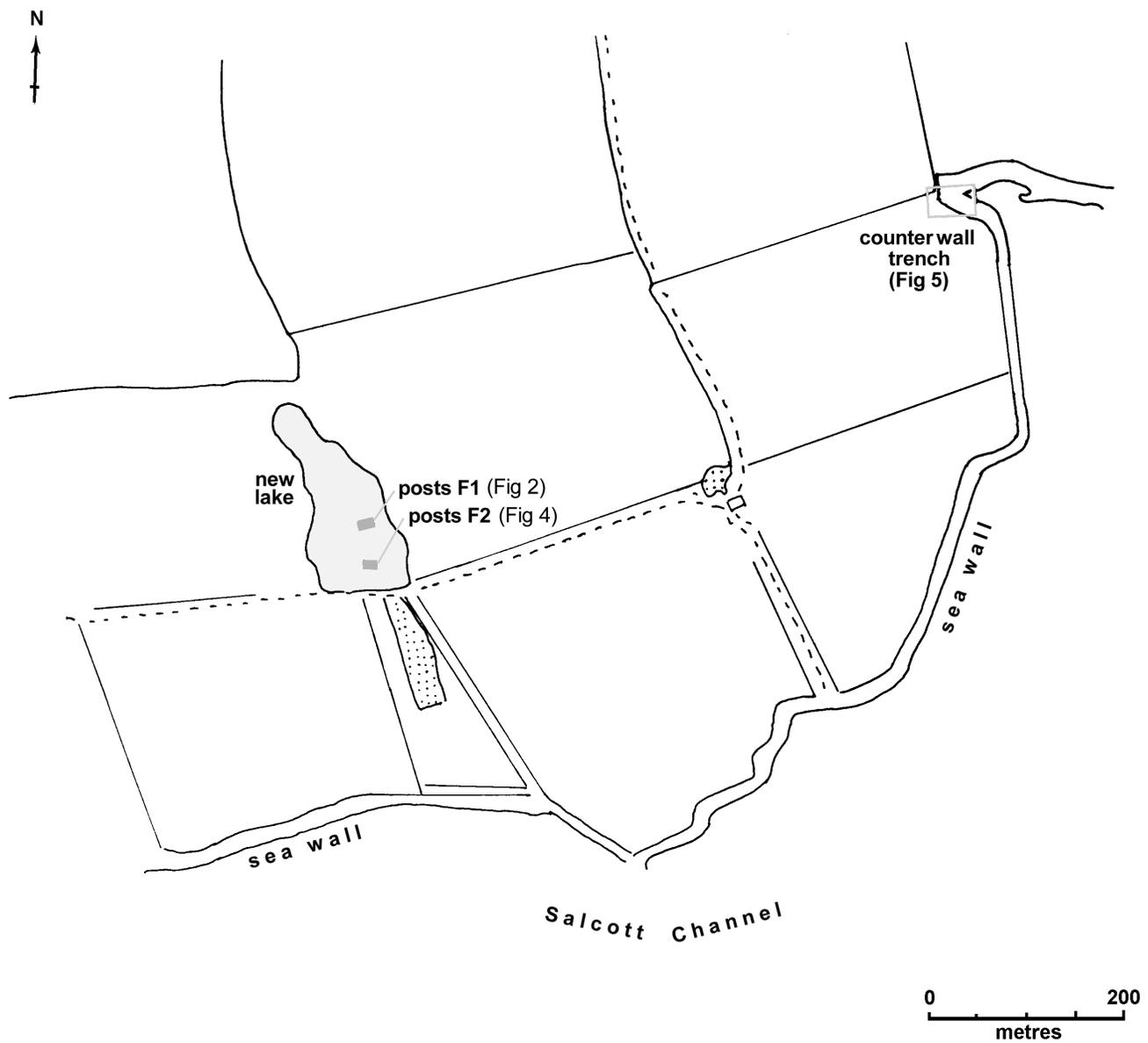


Fig 1 Location plan.

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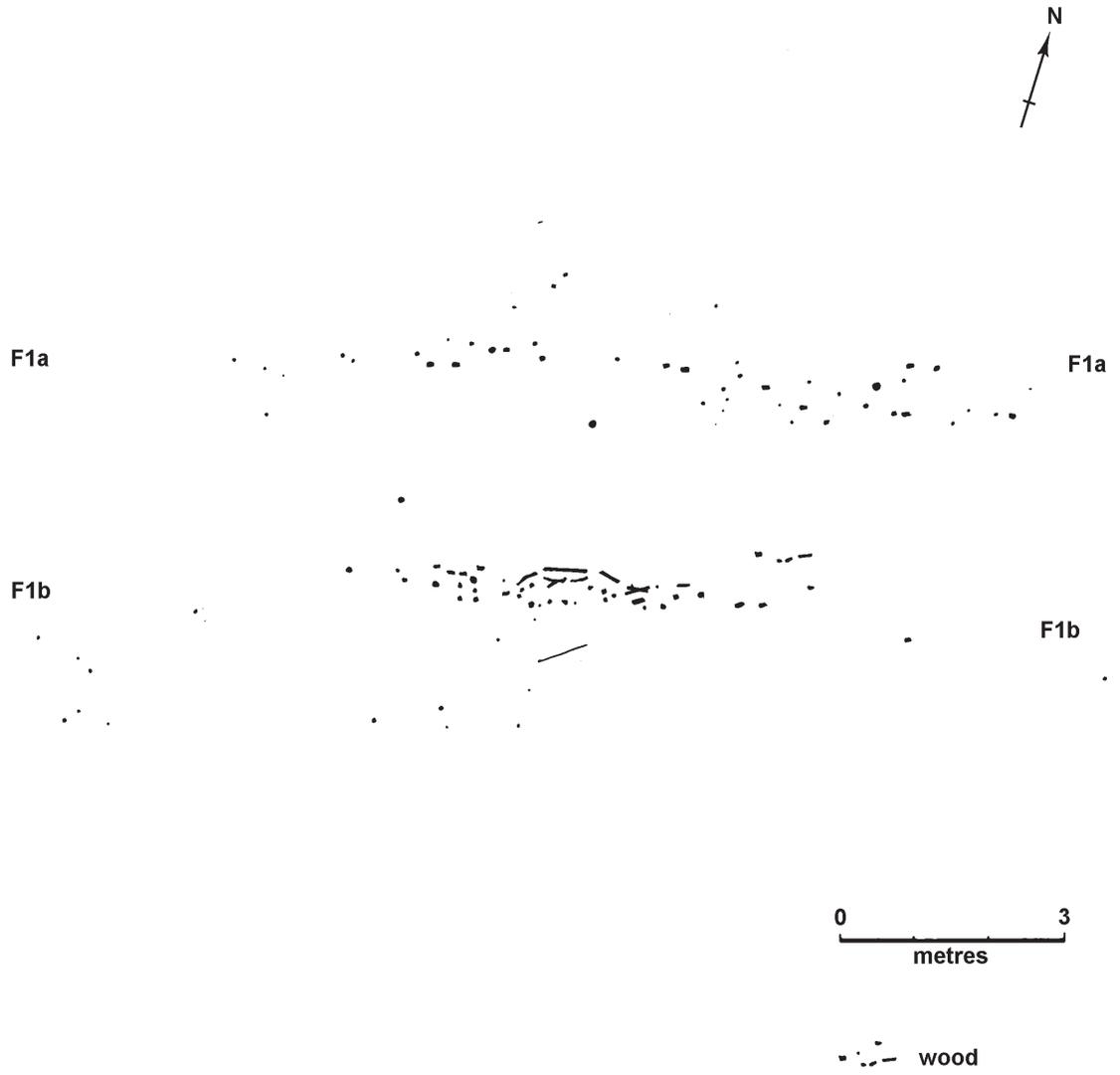


Fig 2 F1a and F1b: plan.

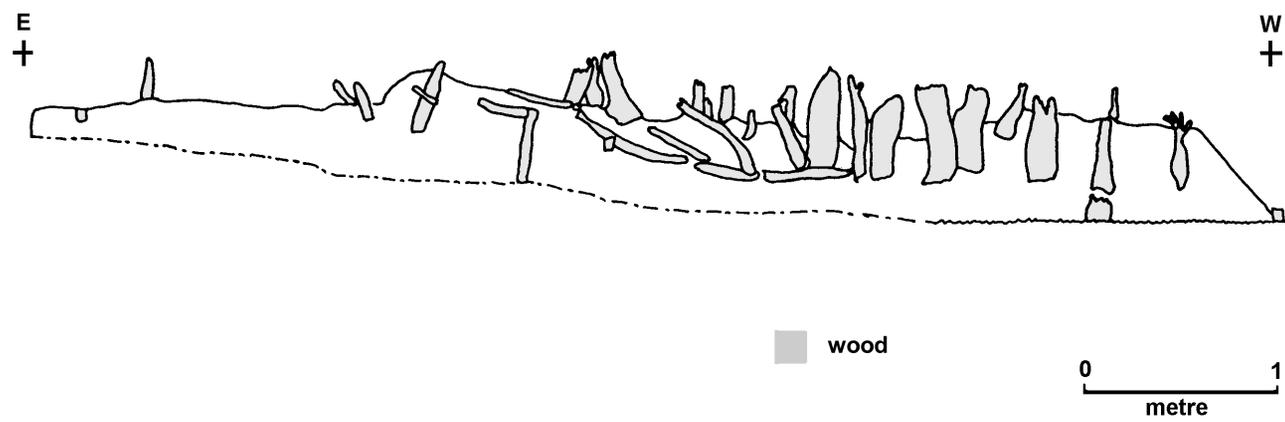


Fig 3 F1b: elevation detail.

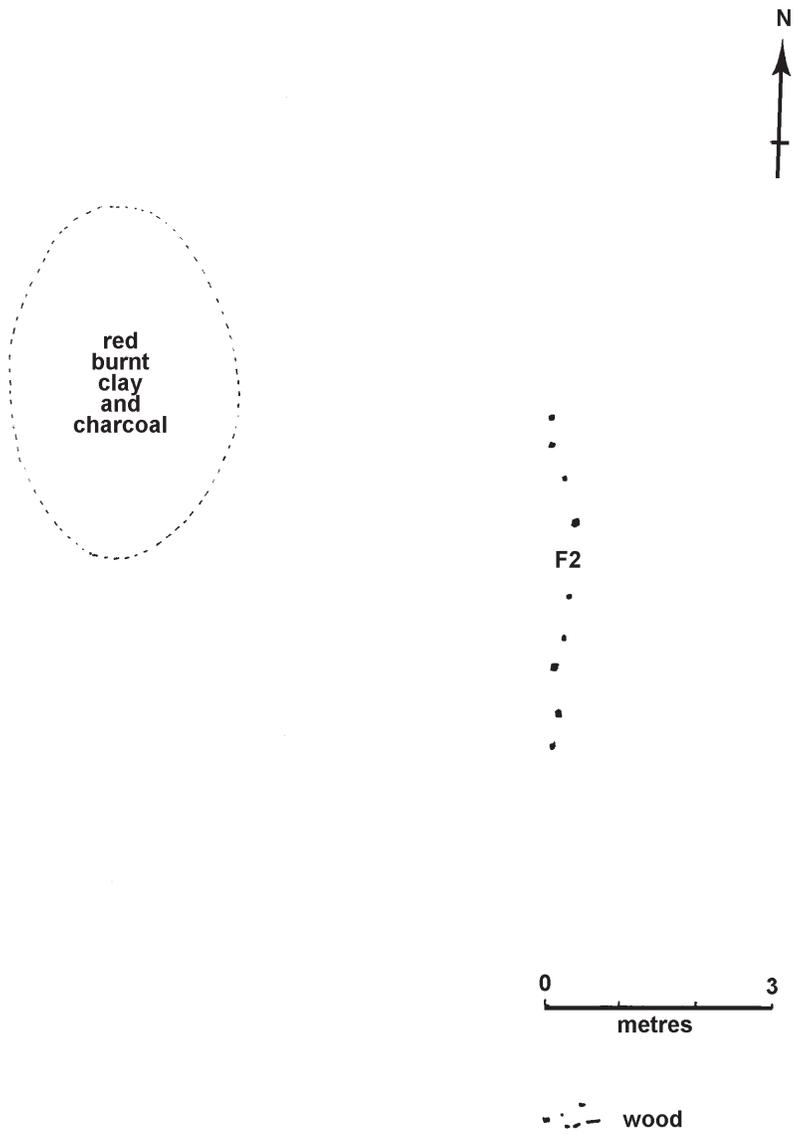


Fig 4 F2: plan.

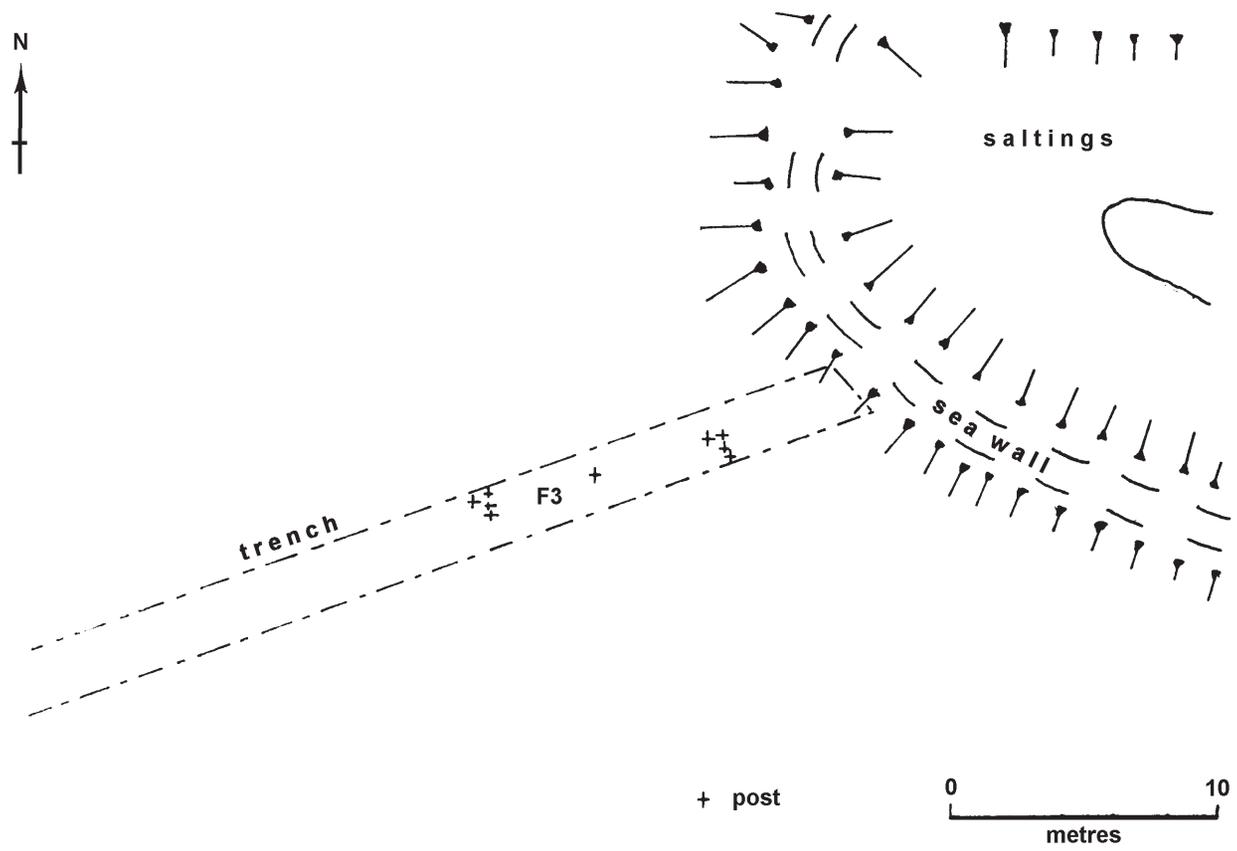


Fig 5 F3: plan.

**Essex Heritage Conservation Record/
Essex Archaeology and History**

Summary sheet

Site name/address: Abbots Hall Farm, Great Wigborough, Essex	
Parish: Great Wigborough	District: Colchester
NGR: TL 9711 1399	Site code: 2001-178
Type of work: Watching brief	Site director/group: Colchester Archaeological Trust
Date of work: September 2001	Size of area investigated: approx 2000 sq m
Location of finds/curating museum: Colchester Museums	Funding source: the Essex Wildlife Trust and the Environment Agency
Further seasons anticipated? Yes	Related EHCR nos: vicinity of 11512, 16702, 17068
Final report: CAT Report 211	
Periods represented: Late Saxon	
<p>Summary of fieldwork results: <i>Wooden structures sealed by thick clay deposits were recorded during watching briefs on machine excavations for a new freshwater lake and a counterwall trench at this coastal site, formerly Abbots Hall Farm, Great Wigborough, Essex. The principal feature consisted of two east-west-orientated rows of posts, approximately 3m apart, stretching across part of a former tidal creek. Radiocarbon dating of a wood sample indicated a date of AD 920 ± 50 years at the one sigma level of confidence. Possible functions include a fishtrap or jetty, but observation was too fragmentary to permit a satisfactory interpretation of the structure.</i></p>	
Previous summaries/reports: CAT Reports 105, 111, 161, 213	
Author of summary: Carl Crossan	Date of summary: March 2003