

RAINHAM MARSH LOCAL NATURE RESERVE
RAINHAM
LONDON BOROUGH OF HAVERING
ARCHAEOLOGICAL MONITORING



Essex County Council

FIELD ARCHAEOLOGY UNIT

December 2010

RAINHAM MARSH LOCAL NATURE RESERVE

RAINHAM

LONDON BOROUGH OF HAVERING

ARCHAEOLOGICAL MONITORING

Prepared By: M. Germany	Signature:
Position: Project Officer	Date:
Approved By: A. Scruby	Signature:
Position: Project Manager	Date:

Doc. Ref.	2095 Report
Report Issue Date	December 2010
Circulation	Bureau Veritas UK Limited
	Greater London Archaeology Advisory Service
	London Archaeological Archiving Resource Centre

As part of our desire to provide a quality service, we would welcome any comments you may have on the content or the presentation of this report.

Please contact the Archaeological Fieldwork Manager at the

Field Archaeology Unit,

Fairfield Court, Fairfield Road, Braintree, Essex CM7 3YQ

fieldarch@essexcc.gov.uk

Tel: 01376 331470

Fax: 01376 331428

© **Field Archaeology Unit**, Essex County Council, c/o County Hall, Chelmsford
Essex CM1 1QH

CONTENTS

	Summary	1
1.	Introduction	3
2.	Background information	3
3.	Aims and objectives	4
4.	Method	4
5.	Fieldwork results	5
6.	Conclusions	5
	Acknowledgements	6
	Bibliography	6
	OASIS summary	7

FIGURES

(at the back of this report)

1. Location of monitored areas

PLATES

(on the front cover and at the back of this report)

Cover Central section of drainage ditch, looking north

1. Eastern end of northern arm of drainage ditch, looking west
2. Southern end of southern end of drainage ditch, looking north
3. Western end of northern arm of drainage ditch, looking east
4. Northern end of southern arm of drainage ditch, looking north
5. Reed bed between Cold Harbour Land and southern arm of drainage ditch, looking north

RAINHAM MARSH LOCAL NATURE RESERVE
RAINHAM
LONDON BOROUGH OF HAVERING

Client: Bureau Veritas UK Limited

Grid ref: TQ 51950 81300

Dates of fieldwork: 4/11/10, 17/11/10, 24/11/10

Site Code: RML10

ECC FAU project no.: 2095

Oasis ID: essexcou1-88716

SUMMARY

Archaeological monitoring was undertaken on groundworks within Rainham Marsh Local Nature Reserve for the possible revealing of archaeological deposits, features and finds. The groundworks comprised the construction of a large drainage ditch and reed beds. The main objective of the monitoring was to investigate a layer of possible Neolithic peat, indicated by previous geotechnical work to be present c. 1.5m beneath the present-day ground surface.

The groundworks revealed brownish yellow clay beneath 0.2m of topsoil, but no archaeological remains. The ditch, the deepest feature, was not deep enough to reach the latest layer of peat. The nature reserve has probably been predominantly used for the grazing of livestock from at least the medieval period onwards, a theory supported by medieval and post-medieval historical records.

1.0 INTRODUCTION

This report presents the results of a program of archaeological monitoring undertaken on groundworks during the enhancement and incorporation of Rainham Marsh Local Nature Reserve into the London Riverside Conservation Park. The archaeological work was recommended by the Greater London Archaeology Advisory Service (GLAAS) and was undertaken by the Essex County Council Field Archaeology Unit (ECC FAU) on behalf of Bureau Veritas UK Limited. The groundworks comprised the creation of reed beds, wet grazing areas, footpaths, access routes, culverts, bridges and a large drainage ditch. The monitoring was preceded by a desk based assessment (Sparrow 2010).

Copies of this report will be supplied to the client and GLASS. A digital copy of the report will be made publicly available via the Oasis Access to Index of Archaeological Investigations (OASIS) at www.oasis.ac.uk/. The site archive will be stored at the London Archaeological Archiving Resource Centre under the site code RML10.

2.0 BACKGROUND INFORMATION

Rainham Marsh Local Nature Reserve lies on the east edge of London, within a large area of flat ground that was formerly part of the flood plain of the River Thames (Fig. 1). The A13 divides the site into two parts. The limits of the site are the Channel Tunnel Rail Link (CTRL) to the north, a large drainage ditch to the east, Cold Harbour Lane to the south and Ferry Lane and Ferry Lane Industrial Park to the west. Wetlands of the London Riverside Conservation Park lie immediately east of the drainage ditch. Drainage ditches sub-divide the site and are recorded by old maps to be at least 150 years old.

The surface geology of the nature reserve consists of layers of silt clay and peat laid down during periods of sea level change during the Pleistocene and Holocene. The peat layers probably contain palaeoenvironmental remains that can be used to reconstruct the past environment. Geotechnical logs indicate that the latest layer of peat lies c. 1.5m or more beneath the present-day ground surface.

The marsh was probably used for hunting, fishing, the collecting of reed, and the grazing of cattle and sheep during the past. The site is prevailingly wet and muddy and was probably unattractive for prolonged habitation. Any associated settlement probably took place on high ground to the north. Rainham village, which sits on the high ground, was possibly founded during the Saxon period. Archaeological excavation at the Tesco site has revealed Neolithic

and Bronze Age features, including a wooden trackway. Medieval documents record the marsh being used for the grazing of livestock. It is probable that the marsh contains features associated with land claim and exploitation although these may have been disturbed by later activity.

More detailed information concerning Rainham Marsh can be found in the desk based assessment (Sparrow 2010).

3.0 AIMS AND OBJECTIVES

The aim of the archaeological monitoring was to determine the character, location, extent, date, quality and significance of any archaeological remains disturbed by the groundworks. Research aims set out in the Greater Thames Research Framework (Williams and Brown 1999) relevant to the monitoring include:

- The changing environment within the Rainham Marsh part of the Greater Thames Estuary during the Holocene, including its geomorphology, vegetation and climate
- Characterisation of human exploitation of the floodplain and its effect on the environment and how it may have changed through time

4.0 METHOD

Monitoring was undertaken during the construction of three reed beds and a large drainage ditch in the western part of the site. The construction of the drainage ditch received the greatest attention as it was the most likely to expose the latest layer of peat, which could then be sampled for carbon dating and palaeoenvironmental analysis. Both the reed beds and the drainage ditch were excavated by a tracked excavator equipped with a broad toothless bucket.

The archaeological work was carried out in accordance with the Institute of Field Archaeologists' *Standard and Guidance for Archaeological Field Evaluation* and the Association of Local Government Officers' *Standards for Field Archaeology in the East of England* (IFA 2008; Gurney 2003). The ECC FAU is a registered archaeological organisation with the Institute of Field Archaeologists. The ECC FAU uses its own recording system to record all archaeological deposits and features.

5.0 FIELDWORK RESULTS

The dimensions of the drainage ditch varied between sections (Plates 1 to 5). The northern arm was c. 3m wide and 0.6m deep, the southern arm c. 7m wide and 1m deep, and the bend where they met c. 10m wide and 1.2m deep. All depths were recorded from the level of the existing ground surface. The profile of the ditch comprised gradually sloping sides and broad flat bases. The reed beds were less than 1m deep.

The groundworks revealed brownish yellow soft/sticky silt clay, beneath c. 0.2m of dark greyish brown soft silt clay topsoil. Both deposits contained numerous roots and very few natural inclusions. There were no archaeological remains apart from infrequent pieces of plastic and modern building materials, all within the topsoil. Both the ditch and the reed beds were insufficiently deep to expose the latest layer of peat.

6.0 CONCLUSIONS

No archaeological remains have been uncovered in any of the working areas, including the latest layer of peat which lies at least 1.5m deep beneath the present-day ground surface. The results of the monitoring support documentary and cartographic sources in that they further suggest that the marsh has been only lightly exsposed from at least the medieval period onwards, probably for the grazing of cattle and sheep.

ACKNOWLEDGEMENTS

The archaeological monitoring was commissioned by Bureau Veritas UK Limited and was undertaken with the assistance of David Rose and the construction firm VolkerFitzpatrick.

The fieldwork was undertaken by Mark Germany and the project was managed by Ellen Heppell and Adrian Scruby. Figure 1 was drawn by Andrew Lewsey.

BIBLIOGRAPHY

- | | | |
|----------------------------|------|---|
| IFA | 2008 | <i>Standard and guidance for archaeological evaluation.</i> Institute of Field Archaeologists |
| Gurney, D. | 2003 | <i>Standards for Field Archaeology in the East of England.</i> E. Anglian Archaeol. Occ. Paper 14 |
| Sparrow, P. | 2010 | <i>Rainham Marsh Local Nature Reserve, Rainham, London Borough of Havering. Archaeological Desk-Based Assessment.</i> ECC FAU project 1095 |
| Williams, J. and Brown, N. | 1999 | <i>An archaeological research framework for the Greater Thames Estuary</i> |

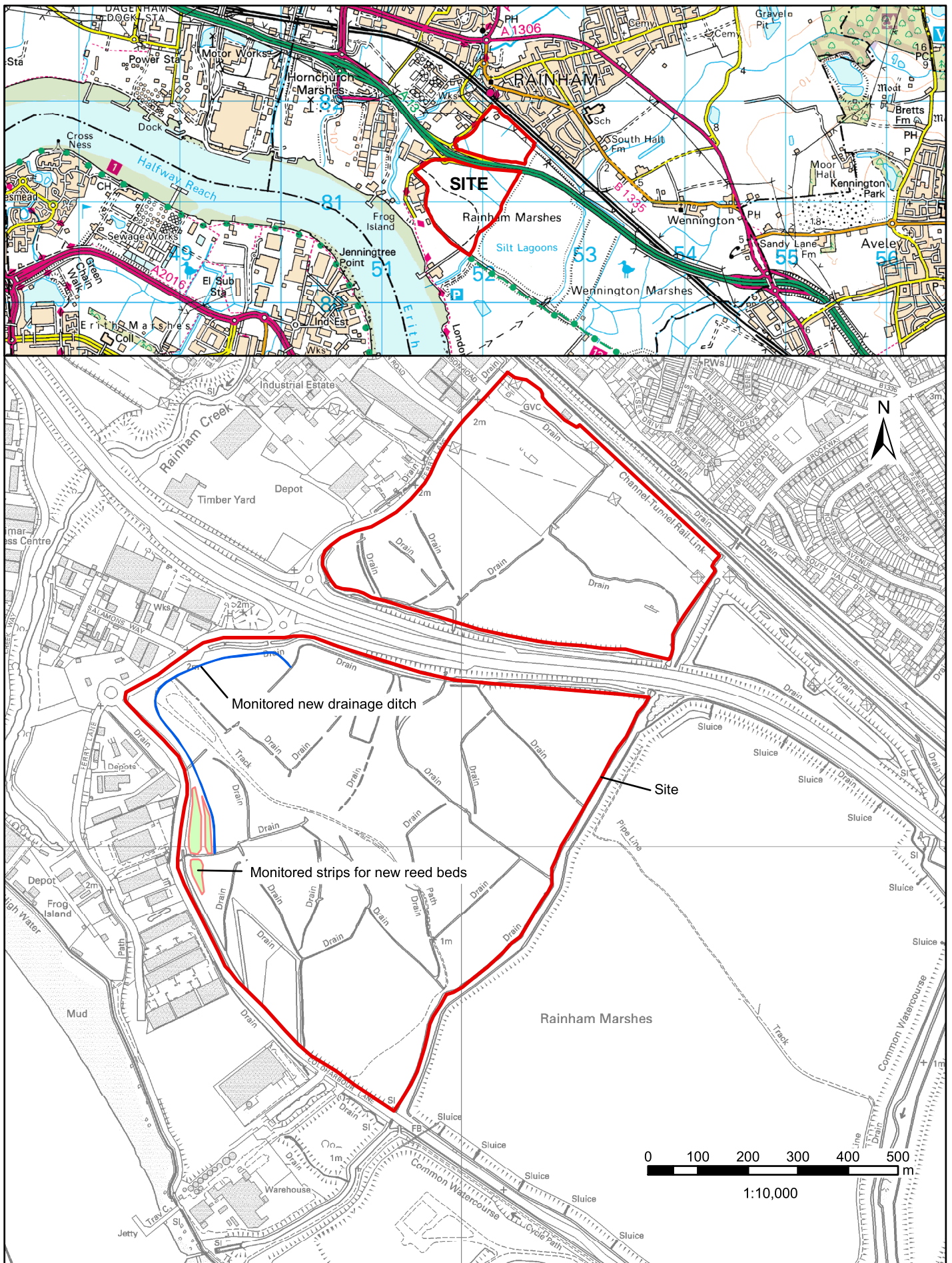


Fig.1. Location of monitored areas

Reproduced by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown copyright. Licence number LA100019602



Plate 1. Eastern end of northern arm of drainage ditch, looking west



Plate 2. Southern end of southern arm of drainage ditch, looking north



Plate 3. Western end of northern arm of drainage ditch, looking east



Plate 4. Northern end of southern arm of drainage ditch, looking north



Plate 5. Reed bed between Cold Harbour Lane and southern arm of drainage ditch, looking north