

Trial Trench Evaluation at Rothamsted Research Harpenden, Hertfordshire January 2014

Planning reference: 5/2013/2145

Report No. 14/25

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Illustrator: Amir Bassir BSc



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OASIS REPORT FORM

PROJECT DETAILS	OASIS No: molarnort1 - 170450				
Project name	Archaeological trial trench evaluation at Rothamsted Research, Harpenden, Hertfordshire				
Short description	MOLA was commiss	sioned by CgMs Consulting to conduct an			
(250 words maximum)	archaeological evaluation at Rothamsted Research. Harpende				
	Hertfordshire prior to	a proposed construction of a car park. Two			
	Heritorushire phor to a proposed construction of a car park. Two				
	trenches were excavated. No archaeological features were observed				
	in either of the trenches and no artefacts were recovered. Frequent				
	root disturbance and post-medieval material throughout the agricultural				
	soil reflect the sites use as allotments in the early 20th century.				
Project type	Evaluation				
(eg DBA, evaluation etc)					
Site status	None				
(none, NT, SAM etc)					
Previous work	None				
(SMR numbers etc)	-				
Current Land use	Research test-beds				
Future work Unknown					
yes, no, unknown)					
Monument type/ period	None				
Significant finds	None				
PROJECT LOCATION					
County Site address	Hertiorashire				
(including postcode)	Rolnamsled Research, Harpenden, Herliordshire AL5 2JQ				
Study area (sq m or ha)	0.8ba				
OS Easting & Northing	U.011d				
(use arid sa. letter code)					
Height OD	Height OD Approx. 120 aOD				
PROJECT CREATORS					
Organisation	MOLA				
Project brief originator	District Archaeologist, St	Albans City and District Council			
Project Design originator	CgMs Consulting				
Director/Supervisor	Chris Chinnock				
Project Manager	Adam Yates				
Sponsor or funding body	CgMs Consulting				
PROJECT DATE					
Start date	30/01/2014				
End date	30/01/2014				
ARCHIVES	Location (Accession no.)	Content (eg pottery, animal bone etc)			
Physical	N/A	None			
Paper	tbc	Site file			
Digital	tbc	Mapinfo plans, Word report			
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (MOLA report)				
Title	Archaeological trial trench evaluation at Rothamsted Research, Harpenden,				
Serial title & volume					
	Chris Chinnock				
Page numbers					
Date					
- 4.0					

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ARCHAEOLOGICAL TRIAL TRENCH EVALUATION AT ROTHAMSTED RESEARCH, HARPENDEN HERTFORDSHIRE JANUARY 2014

Abstract

MOLA was commissioned by CgMs Consulting to conduct an archaeological evaluation at Rothamsted Research, Harpenden, Hertfordshire prior to a proposed construction of a car park. Two trenches were excavated. No archaeological features were observed in either of the trenches and no artefacts were recovered. Frequent root disturbance and post-medieval material throughout the agricultural soil reflect the site's use as allotments in the early 20th century.

1 INTRODUCTION

MOLA was commissioned by CgMs Consulting to conduct an archaeological evaluation at Rothamsted Research, Harpenden, Hertfordshire (NGR TL 133 135. Fig 1). The fieldwork was carried out on the 30th January 2014.

In response to the planning application, the District Archaeologist concluded that 'the site has the potential to include heritage assets with archaeological interest as outlined by the National Planning Policy Framework'. As a result a programme of archaeological evaluation was agreed. The requirements were outlined in the Written Scheme of Investigation prepared by CgMs Consulting (Thornton 2013).

2 AIMS AND OBJECTIVES

The evaluation of the site was designed to provide information that will allow for the effective targeting of further investigation of the site, if required, prior to or during the early phases of its development.

The following information was required to allow the development of a strategy for further investigation of the site:

- The location, extent, nature, and date of any archaeological features or deposits that may be present;
- The integrity and state of preservation of any archaeological features or deposits that may be present.

The evaluation was carried out in accordance with the IfA's *standards and guidance for archaeological field evaluation* (IfA 2008), the Northamptonshire Archaeology *Fieldwork Manual* (NA 2011) and *Research and Archaeology Revisited: a revised framework for the east of England* (Medlycott 2011).



Scale 1:10,000

Site location Fig 1



3 Background

3.1 Topography and geology

Rothamsted Research is on the western edge of Harpenden in western Hertfordshire. The site occupies a rectangular area of land (0.8ha) and stands at approximately 120m aOD. The site is bounded by Rothamsted Research buildings to the north, a car park to the west, arable fields to the south and residential properties fronting West Common to the east. The area is relatively flat with a slight drop at its northern boundary.

The underlying geology is mapped as chalk associated with the Lewes Nodular Chalk Formation. Superficial deposits are clay, silt, sand and gravel from the Clay-With-Flints Formation (www.bgs.ac.uk).

3.2 Historical and archaeological background

There are no known records of any archaeological remains within the study site. Evidence for the surrounding is also minimal with most records relating to postmedieval activity in the region. The site itself has been used for research test beds since the early 20th century, prior to which the area was occupied by allotment plots.

Rothamsted Research is probably the oldest agricultural research station in the world. Its foundation dates back to 1843 when the owner of Rothamsted Estate, John Bennet Lawes, and Joseph Henry Gilbert started the first of a series of long-term field experiments (<u>www.rothamsted.ac.uk</u>).

4 EXCAVATION METHODOLOGY

Two trenches, each 30m long were excavated using a JCB mechanical excavator fitted with a 1.6m-wide toothless ditching bucket (Figs 3 and 4). The topsoil and subsoil were removed under archaeological direction to reveal natural substrate. The topsoil and subsoil were stacked separately at the side of the excavated area. All procedures complied with MOLA Health and Safety policy and MOLA Health and Safety Operational Procedures (MOLA 2013).

The trenches were cleaned sufficiently to define any features. The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval.

All archaeological deposits encountered during the course of the evaluation were fully recorded, following standard Northamptonshire Archaeology procedures (NA 2011). All deposits were given a separate context number. They were described on *pro-forma* context sheets to include details of the context, its relationships and interpretation. Unstratified animal bones and modern material were not retained.

The locations of the trenches were surveyed and related to the Ordnance Survey National Grid. A full photographic record comprising both 35mm black and white negatives and digital images was maintained. The field data from the evaluation has been compiled into a site archive with appropriate cross-referencing.

The evaluation conformed to the Institute for Archaeologists *Standard and guidance for archaeological field evaluation* (revised Oct 2008). All stages of the project were undertaken in accordance with English Heritage, *Management of Research Projects in the Historic Environment* (MoRPHE) (EH 2006). The evaluation was carried out in accordance with the Written Scheme of Investigation (WSI) prepared by CgMs (Thornton 2013).

5 THE EXCAVATED EVIDENCE

Trench 1 was excavated in the proposed location. Trench 2 was moved slightly to the south to accommodate willow trees planted across the development area (Fig 2). No archaeological features were present in either of the trenches.

The natural substrate, (103) and (203), comprised mid-brown to orange silty clay with patches/bands of gravel throughout. Frequent root disturbance of the natural was evident in both trenches. Mid-brown silty clay subsoil, (102) and (202), was intermittently present in both trenches, between 0.05 and 0.14m thick. Dark brown-black silty clay agricultural soil, (101) and (201), between 0.28 and 0.40m thick was present in both trenches with significant root disturbance and occasional small flint inclusions. Modern, 19th-20th century pottery, glass and other material was spread throughout the topsoil, but was not retained.

A linear variation in the natural was investigated 5.2m from the northern end of Trench 1 to confirm its origin. This had a shallow bowl-shaped profile [105] with a sharp northern boundary and a splayed southern boundary. The excavated part of the feature was 0.95m wide and 0.40m deep, though the southern boundary levelled out and extended for several metres along the trench. The fill (104), comprised clear, homogenous mid-brown silty clay with some flint inclusions throughout and some root disturbance noted. The irregularity in plan and section along with the absence of any artefacts, suggests this was a geological rather than archaeological feature.



Trench 1 looking north Fig 3



Trench 2 looking east Fig 4

6 DISCUSSION

No archaeological deposits of pre-modern date were uncovered during the excavation of the evaluation trenches. The thick agricultural soil and modern material reflect the areas use as allotment plots in the early 20th century.

Due to the Clay-With-Flint geology, special care was taken to look out for worked flint and other Palaeolithic artefacts throughout both trenches (Scott-Jackson 2000). None were found.

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WEBSITES

www.bgs.ac.uk/geoindex/home.html www.rothamsted.ac.uk

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Appendix: Context Inventory

Trench 1	Length, Width & Alignment 30mx1.6m E-W		Surface Height (south end) 120.45m aOD	Depth & Height of Natural 0.46m 119.99m aOD
Context	Context Type	Description	Dimensions	Artefacts/Samples
101	Topsoil	Dark brown/black silty clay, occasional small flint gravel and significant root disturbance throughout.	0.28-0.40m thick	Modern pottery, tile, glass etc.
102	Subsoil	Mid brown silty clay with occasional flint throughout.	0.12-0.13m thick	
103	Natural	Mid-brown to orange silty clay and flint gravel. Slightly darker silt and gravel banding at northern end.		
104	Fill of 105	Compact mid-brown silty clay with angular flint and root disturbance throughout.	0.95m+ wide, 0.40m thick	
105	Cut/Interface	Irregular bowl shaped feature with splayed appearance in plan, geological in nature.	0.95m+ wide, 0.40m thick	

Trench 2	Length, Width & Alignment 30mx1.6m N-S		Surface Height (west end) 119.03m aOD	Depth & Height of Natural 0.35m 118.68m aOD
Context	Context Type	Description	Dimensions	Artefacts/Samples
201	Topsoil	Dark brown/black silty clay, flint gravel and significant root intrusion throughout.	0.20-0.30m thick	Modern pottery, tile, glass etc.
202	Subsoil	Mid-brown silty clay with small flint throughout.	0.05-0.14m thick	
203	Natural	Mid-brown to orange silty clay and flint gravel.		







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