

**CHANNEL TUNNEL RAIL LINK
Union Railways (South) Ltd**

Project Area 410

**NASHENDEN VALLEY, BORSTAL, KENT
ARC NSH 97**

**DETAILED ARCHAEOLOGICAL WORKS
INTERIM REPORT
FINAL**

Contract S/400/SP/0008 P481

**Oxford Archaeological Unit
13th September 1999**

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INTERIM REPORT
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Prepared By: Date:	
Checked By: Date:	
Approved By: Position: Date:	

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**Oxford Archaeological Unit
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13th September 1999**

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1 INTRODUCTION

1.1 Location and specification

- 1.1.1 Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Limited (URS) to undertake detailed archaeological investigation at the site of Nashenden Valley, Kent. This work formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the CTRL.
- 1.1.2 The site is centred on URL grid point 53200 45580 and NGR grid point TQ 73194 65581. A single trench, which was specified as detailed excavation, was excavated to further investigate an artefact-bearing colluvial sequence, including a possible Allerød soil horizon identified by the evaluation. The trench was 253 m² (23 m x 11 m) in extent and was excavated between 7th and 21st September 1998. Its location coincided with the evaluation trench in which the possible palaeosol was recorded (1.3.2).

1.2 Geology and Topography

- 1.2.1 The site lies on the western side of Nashenden Valley, south-west of the M2 motorway. The geology of the area consists of Pleistocene head deposits along the base of the valley, associated with a relict tributary of the River Medway, and Pleistocene clay-with-flints on the higher ground. These deposits overlie the Cretaceous Upper Chalk. In some valley slope locations the Pleistocene deposits are overlain by Holocene colluvial sequences containing later prehistoric artefacts. The trench lay on a moderately steep east-west slope, the highest point lying at 37 m OD.

1.3 Background

Surface collection survey

- 1.3.1 The CTRL Environmental Assessment (URL 1994) identified the Nashenden Valley as an area of archaeological potential on the basis of the surface collection survey. This recorded surface concentrations of medieval pottery and prehistoric worked flint, and the possibility that buried land surfaces, features and deposits might be buried beneath the colluvial deposits.

Evaluation

- 1.3.2 Wessex Archaeology conducted a 24 trench evaluation of a 13.5 ha area on the line of the rail link in 1997 (*Archaeological Evaluation at Nashenden Valley, Borstal, Rochester, Kent. Channel Tunnel Rail Link*, Wessex Archaeology report for Union Railways Ltd, 1997). The trenching identified a very low density of features, most if not all of which were of modern date or natural origin. However, a possible buried soil horizon, thought potentially to date from the Allerød Interstadial (c. 11000 BC), was identified in chalk meltwater deposits. Later prehistoric (early and late Bronze Age) pottery was recovered from near the base of colluvial deposits in the valley floor. Burnt flint and charcoal, recovered from the interface of the colluvium and chalk meltwater deposits, produced a thermoluminescence date of 790 +/- 350 BC (68% confidence level).

2 SUMMARY OF RESULTS

2.1 Site Summary

- 2.1.1 A stepped trench was excavated to a maximum depth of 3.50 m, at the location of the evaluation trench in which the possible Allerød soil was identified (ARCNSH97 Trench 1497TT).
- 2.1.2 The section revealed a Holocene colluvial sequence and Pleistocene Coombe Rock deposits, which were of some geological interest but produced no significant archaeological results. Mollusc and pedological samples were taken at 0.10 m intervals from the topsoil to a depth of 1.3 m, which have yet to be assessed.
- 2.1.3 The possible Allerød soil horizon recorded in the evaluation was not identified, even though the evaluation trench was clearly visible in the sides of the excavation, and the section was examined by several geological and geoarchaeological specialists (Dr. Martin Bates, Dr Richard Preece, Dr. Martin Bell and Dr. Richard Macphail).
- 2.1.4 Only two retouched and utilised flint flakes were recovered during sieving of spoil from a section excavated by hand through the colluvium.
- 2.1.5 In spite of the largely negative results, further assessment of the samples recovered from the sequence, in conjunction with scientific dating techniques, may reveal some potential for palaeo-environmental reconstruction.

2.2 Periods Represented

- 2.2.1 The only artefacts recovered from the colluvium tend to support the later prehistoric (Bronze Age or Iron Age) date suggested for these deposits by the evaluation.
- 2.2.2 The underlying Coombe Rock is interpreted as an accumulation of Pleistocene solifluction deposits.

2.3 Feature Types

- 2.3.1 No archaeological features were identified.

2.4 Artefactual Remains

- 2.4.1 The only artefacts recovered from the site were two retouched and utilised flint flakes, recovered from colluvium, which are most likely to be of Bronze Age date.

2.5 Palaeo-environmental and Economic Evidence

- 2.5.1 A series of column samples were taken at 0.10 m intervals from the deep sequence of colluvium and the Pleistocene deposits, for mollusc and pedological analysis. Mollusc shells were clearly visible in some of the layers, suggesting some potential for palaeo-environmental reconstruction. However, the potential is limited by the lack of secure artefactual dating evidence or organic material suitable for radiocarbon dating.

3 FIELDWORK EVENT AIMS

3.1 The Written Scheme of Investigation identified the colluvial deposits as the most important aspect of this investigation, and suggested that the possible late glacial soil horizon might provide information on the upper Palaeolithic/ Mesolithic transition in this area. The fieldwork event aims were as follows:

- Retrieve palaeo-environmental indicators and a dated sequence to define the contemporary environment and changes over time and to make comparisons with and augment colluvial deposits on the south side of the North Downs.
- Determine the contemporary environment of the Upper Palaeolithic and Mesolithic communities which may have been present in the area and any changes arising from the adoption of an agricultural economy.

3.2 At this stage it seems that the fieldwork event aims have not been addressed successfully, although assessment of the environmental samples may reveal some potential for palaeo-environmental reconstruction. In the absence of significant artefactual dating evidence, the value of the sequence will rely on the identification and recovery from the samples of material suitable for scientific dating methods.

3.3 The absence of the possible late glacial soil horizon clearly reduces or removes the potential of the site for reconstructing the upper Palaeolithic/ Mesolithic environment.

4 SUMMARY OF POTENTIAL

4.1 The site lies within the North Downs landscape zone and was intended to investigate the environmental context of human activity in the area, potentially spanning the periods ‘hunter-foragers’ (400,000 BC - 4,500 BC), early agriculturalists (4500 BC – 2000 BC) and ‘farming communities’ (2000 BC – 100 BC). At present, the lack of significant artefactual dating evidence or other signs of human activity from the colluvial sequence, and the absence of the possible late glacial soil horizon, suggest that the site has limited potential for addressing any of the wider project aims. Further assessment of the samples recovered may suggest some potential for palaeo-environmental reconstruction, if scientific dating of deposits within the sequence proves possible.

APPENDIX 1**ARCHIVE INDEX**

ITEM	NUMBER OF ITEMS	NUMBER OF FRAGMENTS	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	13		
A1 plans	1		
A4 plans	1		
A1 sections	2		
A4 sections			
Small finds	2		
Films (monochrome) S=slide; PR=print	3 PR		M
Films (Colour) S=slide; PR=print	3 S		M
Flint (boxes)	1 size 4	2	W, M
Pottery (boxes)			
Fired clay (boxes)			
CBM (boxes)			
Stone (boxes)			
Metalwork (boxes)			
Glass (boxes)			
Slag (boxes)			
Human Bone (boxes)			
Animal Bone (boxes)			
Misc.			
Soil Samples (No.)	1 mollusc column 1 pedology column		UP
Soil Samples (bags/tubs)	13 molluscs 13 pedology		See above
Soil Samples (Monolith/kubiena tin)			

Key to box sizes

Cardboard boxes

Size 1 = Bulk box	391mm x 238mm x 210mm
Size 2 = Half box	391mm x 238mm x 100mm
Size 3 = Quarter box	386mm x 108 mm x 100mm
Size 4 = Eighth box	213 mm x 102 mm x 80 mm
Size 5 = Sixteenth box	110mm x 88 mm x 60 mm
Size 6 = Skeleton box	600 mm x 241 mm x 225 mm

Plastic boxes

Size 4 = Small	(dimensions as size 4 cardboard)
Size 8 = Medium	260mm x 184mm x 108mm
Size 9 = Large	308mm x 216mm x 144mm

APPENDIX 2

SUMMARY REPORT

Nashenden Valley, Kent (TQ 73194 65581)

Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Limited (URS) to undertake detailed archaeological investigation at the site of Nashenden Valley, Kent. This work formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the CTRL.

A stepped trench was excavated to a maximum depth of 3.50 m, at the location of an evaluation trench in which a possible Allerød soil was identified (ARC_NSH_97 Trench 1497TT). The section revealed a Holocene colluvial sequence and Pleistocene Coombe rock deposits which were of some geological interest but produced no significant archaeological results. The possible Allerød soil horizon recorded in the evaluation was not identified. Mollusc and pedological samples were taken at 0.10 m intervals from the topsoil to a depth of 1.3 m, which have yet to be assessed.

Only two retouched and utilised flint flakes were recovered during sieving of spoil from a section excavated by hand through the Holocene colluvium.

In spite of the largely negative results, further assessment of the samples recovered from the sequence, in conjunction with scientific dating techniques, may reveal some potential for palaeo-environmental reconstruction.

APPENDIX 3

SMR SHEET

Site Name: Nashenden Valley, Borstal, Kent	
Summary: A stepped trench was excavated to a maximum depth of 3.50 m, at the location of an evaluation trench in which a possible Allerød soil was identified. The section revealed a Holocene colluvial sequence and Pleistocene Coombe rock deposits. It was of some geological interest but produced no significant archaeological results.	
District: Rochester	Parish: Borstal
Period(s):	1. Prehistoric (finds only)
NGR Easting: TQ 73194	NGR Northing: 65581
Type of Recording: Evaluation Watching — Brief Field Walking (Delete) Excavation Geophysical Survey Measured Survey	
Date of Recording: (From) 21/9/98	(To) 25/9/98
Unit Undertaking Recording: Oxford Archaeological Unit	
<p>Summary of Fieldwork Results:</p> <p>Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Limited (URS) to undertake detailed archaeological investigation at the site of Nashenden Valley, Kent. This work formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the CTRL.</p> <p>A stepped trench was excavated to a maximum depth of 3.50 m, at the location of an evaluation trench in which a possible Allerød soil was identified (Trench 1497TT). The section revealed a Holocene colluvial sequence and Pleistocene Coombe rock deposits which were of some geological interest but produced no significant archaeological results. The possible Allerød soil horizon recorded in the evaluation was not identified. Mollusc and pedological samples were taken at 0.10 m intervals from the topsoil to a depth of 1.3 m, which have yet to be assessed.</p> <p>Only two retouched and utilised flint flakes were recovered during sieving of spoil from a section excavated by hand through the Holocene colluvium.</p> <p>In spite of the largely negative results, further assessment of the samples recovered from the sequence, in conjunction with scientific dating techniques, may reveal some potential for palaeo-environmental reconstruction.</p>	
Location of Archive / Finds:	
Bibliography:	
Summary Compiler: Stuart Foreman	Date: 26/8/99