Wessex Archaeology

M27 (Junction 11 to 12 Climbing Lanes), Hampshire

Archaeological Watching Brief Report

Ref: 69430.01

October 2008

M27 (Junctions 11 to 12 Climbing Lanes)
Hampshire

Archaeological Watching Brief Report

Prepared for:

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M27 (Junctions 11 to 12 Climbing Lanes) Hampshire

Archaeological Watching Brief Report

Summary

An Archaeological Watching Brief was maintained by Wessex Archaeology during ground works associated with widening the M27 in Hampshire between Junctions 11 and 12 (NGR 460835 106640).

A number of potential archaeological sites lie close to the motorway including Red Barns, Hampshire's only in situ Palaeolithic site, and a raised beach probably of the same date as the recently excavated Palaeolithic site at Boxgrove, West Sussex.

No archaeological features, deposits or artefacts were exposed during the Archaeological Watching Brief. The works confirmed that construction and maintenance works associated with the existing M27 motorway have disturbed the ground surfaces in proximity to the carriageway.

The Archaeological Watching Brief was undertaken on 19 May 2008.

M27 (Junctions 11 to 12 Climbing Lanes) Hampshire

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Acknowledgements

Wessex Archaeology would like to thank Costain Group Plc for commissioning the work. Neil Carter and Paul Sprague of Costain Group plc gave help and advice during the site works. Ann Gout of Costain Group Plc and Rob Sutton of Atkins, the Contractors Archaeologist, also gave advice throughout the project and commented upon the report.

The Archaeological Watching Brief was undertaken by Mike Dinwiddy and Jamie Wright. The illustration was prepared by Elizabeth James and the project was managed by Mark Williams.

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1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Costain Group Plc to undertake an Archaeological Watching Brief during aspects of the construction of climbing lanes on the M27 between Junctions 11 and 12 (hereafter 'the Site') NGR 460835 106640 .

1.1.2 A programme of archaeological works was requested, comprising an Archaeological Watching Brief, supported by a Written Scheme of Investigation. The Written Scheme of Investigation (Wessex Archaeology 2008) was prepared in response to an Archaeological Design prepared by Atkins, the Contractors Archaeologist, which detailed the methodology and location for archaeological investigations (Atkins 2008).

1.1.3 The Written Scheme of Investigation, set out the manner in which Wessex Archaeology would implement the Archaeological Watching Brief. It was prepared in accordance with best practice following the standards and guidance given in the Institute of Field Archaeologist's *Standard and Guidance for an Archaeological Watching Brief* (revised 1999).

1.2 Site Location, Topology and Geology

1.2.1 The construction works took place along the M27 between Junctions 11 and 12, to the north-west of Portsmouth (**Figure 1**).

1.2.2 Between Junctions 11 and 12 the motorway ascends, in a cutting, the southern edge of Ports Down from 35m aOD (above ordnance datum) to 50m aOD over a distance of 1km before descending eastwards to reclaimed former salt marsh at below 5m aOD. The Site lies in the syncline of the Hampshire Basin with Ports Down forming a minor anticline within the basin. The geological deposits are mapped as Cretaceous Upper Chalk, forming Ports Down, overlain in the east by River and Valley Gravel (Pleistocene) and Coombe Deposits (Holocene); small areas of Tertiary Reading Beds and Quaternary Raised Beach are shown to the west (GSB Sheet 316, 1958).

1.3 Archaeological and Historical Background

1.3.1 An Environmental Impact Assessment was prepared which detailed and assessed the impact of scheme works on potential archaeological remains (Highways Agency 2006). Works in the areas detailed below had the

potential to impact upon preserved archaeological remains of various dates including potentially artefact bearing Pleistocene gravels.

1.3.2 Hampshire's only *in situ* Lower Palaeolithic site, Red Barns, lies at NGR 460900 106200, 200m south of the motorway between Junctions 11 and 12 (ApSimon et al. 1977; Wenban-Smith et al. 2000). This site, notable for the quantity of artefacts recovered (over 5500 from 40m^2), has been dated to between 200,000 and 425,000BP, with the balance of probabilities suggesting the older half of this date range.

1.3.3 Boxgrove in West Sussex is an internationally important Lower Palaeolithic site, positioned on the former sea shore below a chalk cliff. The former beach gravels are known to extend to the west and during the original construction of the M27 a raised beach deposit was exposed at Junction 11 while Raised Beach deposits are mapped close to the M27. Curiously the Red Barns location was 10m below the level of the raised beach deposits.

2 AIMS

2.1 Archaeological Watching Brief

2.1.1 The principal aim of the Archaeological Watching Brief was to provide further information concerning the presence/absence, date, nature and extent of any buried archaeological remains and to investigate and record these within the scheme.

2.1.2 A Metal Detecting Survey was undertaken on Areas 2 and 3 and an Archaeological Watching Brief was to be maintained on Areas 1 and 2 of the following aspects of the scheme:

- A pipe trench excavated between chainage 40,000 and 40,200 (Area 1)
- A service trench between chainage 40,900m and 40,960m (Area 2)
- Embankment re-profiling between chainage 42,300m and 42,500m (Area 3)
- As developments in the design and construction methodologies identified additional areas for work, the contractor's archaeologist liaised, when appropriate, with the design team and informed Wessex Archaeology of relevant developments.
- Particular concern was raised that Pleistocene gravels could have been disturbed and accordingly a visit was requested to assess their provenance.

3 METHOD

3.1 Monitoring of Development

3.1.1 A Metal Detecting Survey was carried out prior to topsoil excavation in two areas. The presence of much metalwork associated with the original construction and later use of the motorway meant that there was an excessive 'background noise' and no metal objects of antiquity could be detected. The contractor's archaeologist was informed of the results and no further metal detecting was undertaken during topsoil stripping.

3.1.2 An Archaeological Watching Brief was carried out during the groundworks for 2 areas of the development.

3.1.3 All recording was undertaken using Wessex Archaeology's *pro forma* recording system, supported by a photographic record and day book entries.

3.2 Date of work

3.2.1 The Archaeological Watching Brief and Metal Detecting were undertaken on 19 May 2008.

4 RESULTS

4.1 Metal detecting

Areas 2 and 3

4.1.1 Topsoil stripping was proposed in Areas 2 and 3, respectively (Fig. 1). These areas were investigated using a metal detector. It was immediately apparent that there was a large amount of motorway related metal work, including iron bars, aluminium can ring pulls, barbed wire, tin cans etc, which was drowning the response of any potential archaeological material. It was realised that this heavy, modern background noise made metal detecting impractical.

4.2 Archaeological Watching Brief

Area 1

4.2.1 The Site was visited following concerns that works may have impacted on Pleistocene gravels. The motorway lay within a cutting at 45m aOD (Fig. 1).

4.2.2 A trench, excavated for piping through the hard shoulder on the northern side of the motorway, was 160m long by *c*. 5m wide and 3m deep. It was principally cut through the backfill of an existing water pipe and was 100% shored with metal sheeting but the embankment to the north had been cut and battered and was not shored. Here the soil profile showed a topsoil with a depth of *c*. 0.2m with a sharp, straight boundary to the chalk below.

No gravel was present and the nature of the boundary between the topsoil and the chalk suggested that the chalk may have been truncated during the construction of the motorway in the 1970s.

Area 2

4.2.3 A trench, on the northern side of the motorway, was adjacent to the top of a coombe draining south-east towards the coast and giving a view to the present coast-line. It was at 50m aOD. This trench was *c*. 10m long and much gravel was present along its northern edge, where it had cut the embankment. However inspection showed this gravel to be round, of uniform *c*. 20mm size and of anthropogenic origin having been disturbed, during the excavation of the trench, from its position in a land drain.

Area 3

4.2.4 Following the monitoring of Areas 1 and 2 it was considered that the potential for preserved archaeological remains in Area 3 was negligible. Area 3 was not monitored.

5 FINDS

5.1 No archaeological artefacts were recovered.

6 ENVIRONMENTAL

6.1 No soils suitable for environmental analysis were encountered.

7 CONCLUSION

7.1 The pipe trench in Area 1 was close to Junction 11 where a raised beach, probably a component of the Slindon Sands, was exposed during the construction of the motorway. However the present works were located within a modern cutting and only solid, chalk geology was exposed.

7.2 At Area 2 the ground works were on the edge of the dry valley in which lay the site of Red Barns. The exposed gravels were, however, a modern deposit and, lying at a height of 50m aOD, were 10m higher than those of the Slindon Sands and 20m higher than the site of Red Barns.

8 ARCHIVE

8.1 Museum

8.1.1 It is proposed to deposit the archive with the Hampshire County Council Museum Service, Winchester.

8.2 Archive Storage

8.2.1 The project archive is currently held at the offices of Wessex Archaeology under the site code 69430. The archive comprises a ring bound file that contains a watching brief attendance form, the risk assessment, the method statement, site location plans, a written record of the watching brief and a digital photographic record sheet. All material will be packaged according to overall standards required for the acceptance of archaeological archives.

8.2.2 The complete Site archive, which will include records, plans, photos, and artefacts will be prepared to comply with guidelines set out in *Environmental Standards for the permanent storage of excavated material from archaeological sites* (UKIC 1984, Conservation Guidelines 3), and *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990).

8.3 Copyright

8.3.1 The full copyright of the written/illustrative archive relating to the site will be retained by Wessex Archaeology Ltd under the *Copyright, Designs and Patents Act* 1988 with all rights reserved. The Museum Service, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms to the Copyright and Related Rights regulations 2003.

8.4 Security Copy

8.4.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in the form of microfilm. The master jackets and one diazo copy of the microfilm will be submitted to the National Monuments Record Centre (Swindon); a second diazo copy will be deposited with the paper records at the Museum, and a third diazo copy will be retained by Wessex Archaeology.

9 REFERENCES

Atkins, 2008, *Highways Agency M27 Junctions 11-12 Climbing Lanes: Archaeology Design* Unpub. project brief.

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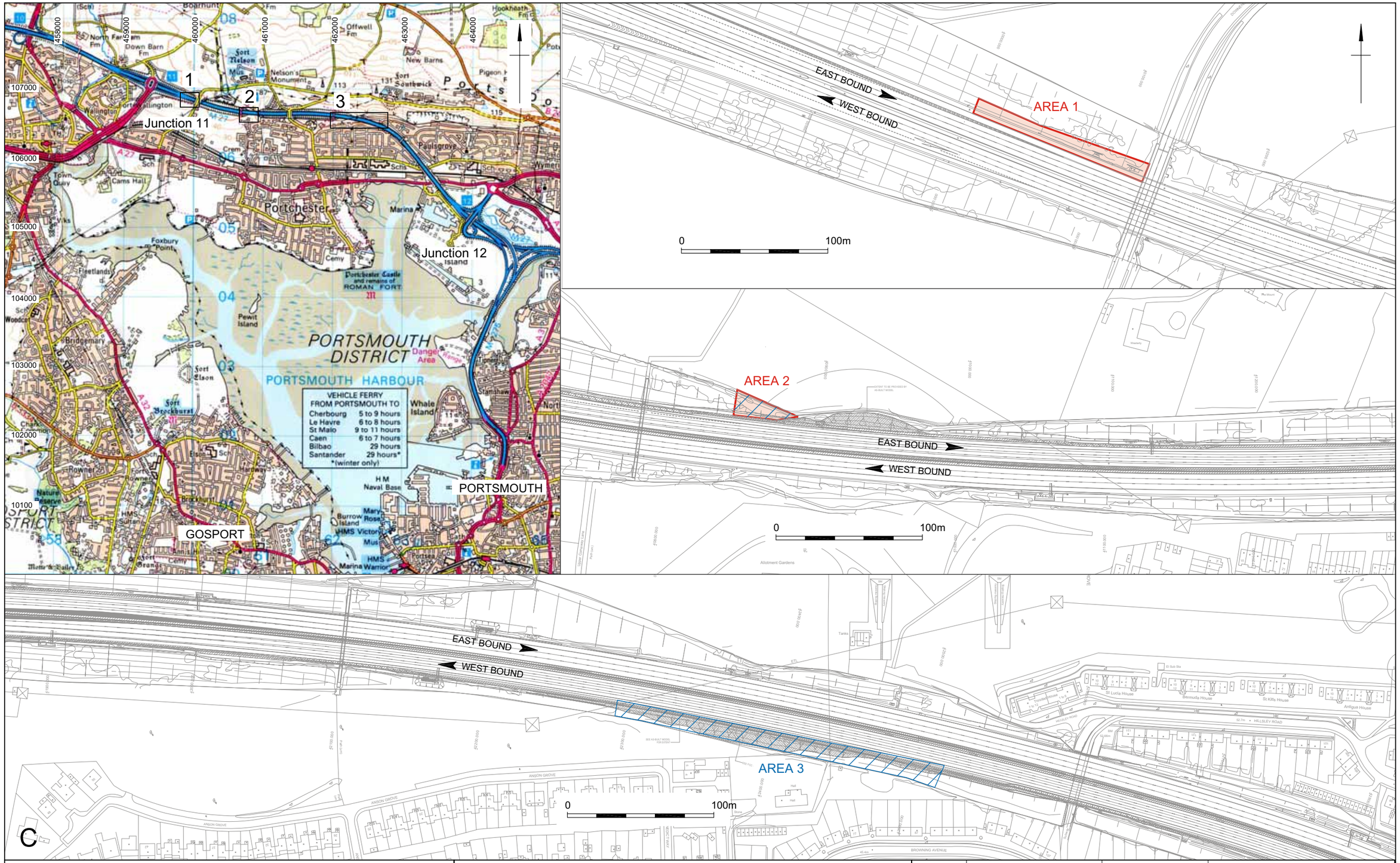
Wessex Archaeology, 2008, *M27 (Junction 3-4 and 11-12) Climbing Lanes: Written Scheme of Investigation for an Archaeological Watching Brief* Unpub. Client Rep. Ref. T11964.01



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Area of Watching brief

Area of metal detection

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Site location maps

Figure 1

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