



## Swanworth Quarry, Purbeck, Dorset

### Archaeological Watching Brief Report





**SWANWORTH QUARRY  
PURBECK, DORSET**

**ARCHAEOLOGICAL WATCHING BRIEF REPORT**

**Prepared on behalf of:**

**Tarmac Ltd**  
Millfields Road  
Ettingshall  
Wolverhampton  
West Midlands  
WV4 6JP

**By**

**Wessex Archaeology**  
Portway House  
Old Sarum Park  
Salisbury  
Wiltshire  
SP4 6EB

**November 2008**

**Reference 70280.02**

**SWANWORTH QUARRY  
PURBECK, DORSET**

**ARCHAEOLOGICAL WATCHING BRIEF REPORT**

**Contents**

Summary .....	ii
Acknowledgements .....	iii
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 PROJECT BACKGROUND .....	1
1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY.....	1
<b>2 ARCHAEOLOGICAL BACKGROUND .....</b>	<b>2</b>
2.1 INTRODUCTION .....	2
2.2 FEATURES RECORDED WITHIN THE SITE.....	2
2.3 FEATURES RECORDED WITHIN SWANWORTH QUARRY .....	2
2.4 ARCHAEOLOGICAL SITES IN THE LOCAL AREA .....	3
2.5 PREVIOUS INVESTIGATIONS.....	3
<b>3 AIMS .....</b>	<b>4</b>
3.1 WATCHING BRIEF .....	4
<b>4 METHODOLOGY.....</b>	<b>4</b>
<b>5 RESULTS.....</b>	<b>4</b>
5.1 INTRODUCTION .....	4
5.2 STRATIGRAPHIC SEQUENCE .....	5
5.3 ARCHAEOLOGICAL FEATURES .....	5
<b>6 FINDS .....</b>	<b>5</b>
<b>7 ENVIRONMENTAL.....</b>	<b>5</b>
<b>8 CONCLUSION.....</b>	<b>5</b>
<b>9 ARCHIVE .....</b>	<b>6</b>
<b>10 REFERENCES .....</b>	<b>6</b>

**FIGURES**

Figure 1: Site Location Showing Extent of 2008 Watching Brief

**SWANWORTH QUARRY  
PURBECK, DORSET**

**ARCHAEOLOGICAL WATCHING BRIEF REPORT**

**Summary**

Wessex Archaeology was commissioned by Tarmac Ltd to conduct an archaeological watching brief at Swanworth Quarry during the initial stripping of a c.2 ha area to the north east of the current works. The Site lies approximately 1km north of Worth Matravers in the Isle of Purbeck, Dorset and is centred on NGR 497220 078470.

Previous investigations at the Site included a 1.5% evaluation of 32 trenches carried out in 1995 which uncovered no archaeological features within the northern parcel of land under consideration in this report. Findspots of artefacts and features made within the quarry boundaries over the past 70 years, however, maintained a significant archaeological potential which this fieldwork was designed to monitor.

The c.2 ha site was stripped of topsoil and then subsoil, to the top of the natural overburden, allowing for archaeological monitoring of each interface. No archaeological features, deposits or artefacts were revealed.

The fieldwork was carried out between the 22<sup>nd</sup> of September and the 2<sup>nd</sup> of October 2008.

**SWANWORTH QUARRY  
PURBECK, DORSET**

**ARCHAEOLOGICAL WATCHING BRIEF REPORT**

**Acknowledgements**

Wessex Archaeology would like to thank of Tarmac Ltd for commissioning the watching brief. Wessex Archaeology would also like to acknowledge the assistance of Derek Haden, Manager of Swanworth Quarry, and advice of Steve Wallis, Dorset County Archaeologist.

The project was managed on behalf of Wessex Archaeology by Paul McCulloch. The fieldwork was undertaken by Sian Reynolds who also compiled this report with illustrations prepared by S E James.

**SWANWORTH QUARRY  
PURBECK, DORSET**

**ARCHAEOLOGICAL WATCHING BRIEF REPORT**

**1 INTRODUCTION**

**1.1 Project background**

1.1.1 Wessex Archaeology was commissioned by Tarmac Ltd to conduct an archaeological watching brief at Swanworth Quarry during the initial machine strip of a c.2 ha area to the north east of the current works, prior to mineral extraction. The Site lies approximately 1km north of Worth Matravers in the Isle of Purbeck, Dorset and is centred on NGR 497220 078470 (**Figure 1**) hereafter referred to as ‘the Site’.

1.1.2 Conditional planning permission for extraction was granted by the Mineral Planning Authority Dorset County Council in 1994 with the following condition relating to archaeology:

*“No development shall take place in that part of the site lying to the east of the eastern quarry face until such time as the applicant has first secured implementation of a program of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Mineral Planning Authority and, subsequently, agreed a scheme for the preservation or recording of such remains as may be deemed appropriate by the Authority.”*

**1.2 Site location, topography and geology**

1.2.1 The Site comprised a roughly square area of c.2 ha in extent located adjacent to the north eastern extent of the active quarry works, close to the access route leading from the Kingston – Worth Matravers road. The area is the last to be quarried before Tarmac Ltd initiates an extensive restoration scheme.

1.2.2 The Site has a significant slope running from 120m above Ordnance Datum (aOD) in the south-east to 112m aOD in the north-west with a shallow coombe running north-south from the northern boundary.

1.2.3 The underlying solid geology of the area is Purbeck limestone, a light brown, thinly laminated sandy limestone with abundant chert nodules. The limestone is approximately 35m deep within the quarry, and overlies sandstone which in turn rests on Kimmeridge clay. Within the Site the limestone is topped by ‘overburden’ up to 15m deep consisting of bands of clay, mudstone and limestone.

## **2 ARCHAEOLOGICAL BACKGROUND**

### **2.1 Introduction**

2.1.1 The archaeological background of the Site was fully described in the report of the 1995 evaluation (Wessex Archaeology 1995) and will be summarised below.

2.1.2 The limestone uplands of Purbeck have produced evidence of human activity and settlement from the early prehistoric period onwards. Observations and finds from Swanworth Quarry itself over the last seventy years point towards the presence of a Late Bronze Age/Early Iron Age (c.1000-500 BC) settlement.

### **2.2 Features recorded within the Site**

2.2.1 Dorset County Council's Sites and Monuments Record (SMR) records one feature of possible archaeological interest within the Site. The remains of a lynchet are recorded as surviving 'very little' in a site visit record of 1985, and was completely ploughed out by the time of the 1995 evaluation.

### **2.3 Features recorded within Swanworth Quarry**

2.3.1 The quarry itself (formerly known as Sheepsleights Quarry) has been a source of important archaeological discoveries in the past. The principal discoveries relate to evidence for late prehistoric occupation remains, the NMR entry relating to them reproduced below:

- "SY 968783: Examination of the Sheepsleights or Swanworth Quarry since 1941 has revealed evidence of a Late Bronze Age settlement and Early Iron Age shale industrial site. About six saucer shaped hollows or pits and one deeper pit were discovered between 1941-9 (Calkin 1949), some containing Late Bronze Age bucket shaped vessels probably for storing grain. An occupation floor close to the pits contained fragments of Late Bronze Age pottery, animal bones, limpet shells, a scraper, rough flakes and a hammerstone.
- A Late Bronze Age/Early Iron Age stone lined grain storage pit containing carbonised spelt was found on the site in 1964 (Calkin 1967) and the remains of a similar pit were seen previously in 1952 (Calkin 1953); the latter containing a Late Bronze Age bronze razor. A small rectangular stone cist was recorded c.3m to the west of the 1964 grain pit and to the south east were three areas of dark earth, one area containing a few bone fragments and a saddle quern. A Late Bronze Age beaker found in 1958 (Calkin 1968) and a bronze armlet in 1968 (Farrar 1970) were also recorded from the quarry. Evidence of an Early Iron Age shale industry manufacturing armlets was recorded on the Late Bronze

Age occupation floor (see above) although not in pits. Early Iron Age sherds, including fine black ware were also seen”

- 2.3.2 Further evidence for the extent of the Late Bronze Age/Early Iron Age occupation on the site of the quarry was discovered in 1983. Archaeological observation during topsoil stripping at the southern end of the quarry reported the base of a stone lined cist or pit, the vestiges of a shallow pit, and a linear feature. These features were filled and associated with occupation remains including a collection of over one hundred sherds of Late Bronze Age pottery (Cox 1987).

## **2.4 Archaeological Sites in the local area**

- 2.4.1 The area around Swanworth Quarry has provided a wide range of archaeological evidence from most periods, earlier prehistoric to medieval. Three confirmed and one possible Bronze Age barrows exist within 500m of the Site, that at Afflington containing a primary cremation and secondary inhumation burials. Iron Age/Roman occupation is found at both Kingston Barn (750m to the north) and Compact Farm (700m to the south east), the latter probably associated with a number of Roman cist burials (850m to the south east). The medieval period is represented by areas of lynchets (400m and 1km to the south west) and the deserted medieval village of Weston (800m to the south).

## **2.5 Previous Investigations**

- 2.5.1 Following an application for the current planning permission for the extension to Swanworth Quarry two phases of archaeological investigation were carried out.
- 2.5.2 Between the 3<sup>rd</sup> and 7<sup>th</sup> of April 1995 an evaluation of the application area was carried out. Of the 32 trenches only four contained archaeological features, all concentrated in the southern portion of the application area. These features took the form of narrow, shallow ditches or gullies and were assigned a tentative later prehistoric or Romano-British date by the excavators (Wessex Archaeology 1995).
- 2.5.3 Between the 22<sup>nd</sup> and 31<sup>st</sup> of May 1996 a watching brief was carried out during topsoil stripping of part of the southern portion of the Site. Two sub-circular features and a 16m ditch or gully were observed cutting into the natural clay, but excavation cast doubts as to their anthropogenic origin.
- 2.5.4 Further monitoring of stripping of the central portion of the permitted area was carried out in August 2002. No archaeological features or deposits were observed.

### 3 AIMS

#### 3.1 Watching Brief

3.1.1 The aims of the watching brief were to:

- Contribute to heritage knowledge of the area through the recording of any archaeological remains exposed as a result of excavations in connection with the groundworks.
- Place any remains within their chronological and regional context as well as to the local landscape.
- Recover any artefacts and collect Palaeo-environmental samples that would assist in the interpretation of the site.

3.1.2 The aim of this report is to provide evidence of the results of the watching brief in order to satisfy the Dorset County Archaeologist and the Mineral Planning Authority that the requirements of the relevant archaeological planning condition have been met.

### 4 METHODOLOGY

4.1.1 The initial groundworks, namely the stripping of the top- and sub-soils were carried out under constant archaeological supervision by a suitably qualified member of Wessex Archaeology staff. Spoil generated by the works was scanned for artefacts.

4.1.2 The top- and sub-soils were removed separately using a 10 tonne bull dozer with a 2.5m toothed bucket and stored in a 4m high bund along the eastern edge of site. The travel of the bull dozer and assisting dumper truck over the stripped surface largely obscured any *in situ* archaeological features, but for a short period of time immediately following stripping it was possible to confirm the presence or absence of archaeological features or artefacts and to halt work if necessary.

4.1.3 A digital photographic record of the Site was made charting all aspects covered by this watching brief.

### 5 RESULTS

#### 5.1 Introduction

5.1.1 A summary table of the Site (recorded as Trench 1) giving brief soil descriptions and dimensions can be found in **Appendix 1**. Site location is illustrated on **Figure 1**.

## **5.2 Stratigraphic sequence**

- 5.2.1 Owing to the natural slope of the Site the deposit stratigraphy and subsequently the stripped level varied with a differing thickness of topsoil and colluvial sub-soils above the natural overburden.
- 5.2.2 The dark grey brown silty clay loam topsoil was consistent in character across the Site with an average depth of 0.3m increasing slightly within the shallow coombe.
- 5.2.3 Subsoil was only noted within the central coombe and comprised of colluvial pale yellow brown silty clay with minimal coarse components. Where present this context extended to a maximum of 0.5m depth, concentrated in the southern section of the coombe. Following removal of this layer the coombe was shown to extend much further across Site than was evident before stripping, occupying most of the north-south extent from the northern boundary. It possible that this area was levelled with material removed from earlier quarry working, thus masking the extent of the coombe.
- 5.2.4 The natural overburden, sealing the limestone mineral, consisted of mixed lenses of stone, sand and clay as expected (see above 1.2.3). The limestone was largely tabular (<0.2m) with some rounded blocks occurring in outcrops (<0.4m). The majority of the stone was held within a matrix of pale brown silty clay but along the slopes of the coombe a fine to medium sand (ranging from white to mid red brown in colour) predominated.

## **5.3 Archaeological features**

- 5.3.1 No archaeological features or discrete deposits were exposed during the watching brief.

## **6 FINDS**

- 6.1.1 No artefacts were recovered from the top- or sub-soils inspected during the watching brief.

## **7 ENVIRONMENTAL**

- 7.1.1 No significant environmental remains were identified on the Site.

## **8 CONCLUSION**

- 8.1.1 No archaeological features were noted in either the top- or sub-soil strips, and no residual material was recovered from these contexts.
- 8.1.2 This confirms the results of the 1995 evaluation and the 1996 watching brief which suggested a low level of archaeological activity in the

southern portion of the Site which could not be proved to extend to the north.

- 8.1.3 Consistent with the two previous phases of work, no residual material was present in the top- or sub-soils, despite the range of features and find spots summarised above (see 2.3). The Site is well placed within a prehistoric landscape and would be expected to produce some evidence of archaeological activity. It is possible that as the Site is relatively low lying in comparison to the surrounding area, in particular along the course of the coombe which dominates the Site, it suffered from poor drainage and was not deemed suitable for habitation or intense agriculture.

## **9 ARCHIVE**

- 9.1.1 Following completion of all archaeological works the Site archive will be prepared to the relevant standards set out in Appendix 3 of English Heritage (1991) *Management of Archaeological Projects*. In due course the archive will be deposited with the Dorset County Museum.

## **10 REFERENCES**

Calkin J.B. 1949, 'The Isle of Purbeck in the Iron Age', *Proc. Dorset Nat. Hist. Archaeol. Soc* 70 (1948), 30-2

Calkin J.B. 1953, 'Iron Age Finds at Sheepsleights, Worth Matravers', *Proc. Dorset Nat. Hist. Archaeol. Soc* 74 (1952), 50-1

Calkin J.B. 1966, 'A Grain Pit at Sheepsleights, Worth Matravers', *Proc. Dorset Nat. Hist. Archaeol. Soc* 88 (1966), 149-51

Calkin J.B. 1968, 'A Beaker form Sheepsleights, Worth Matravers', *Proc. Dorset Nat. Hist. Archaeol. Soc* 89 (1967), 139-40

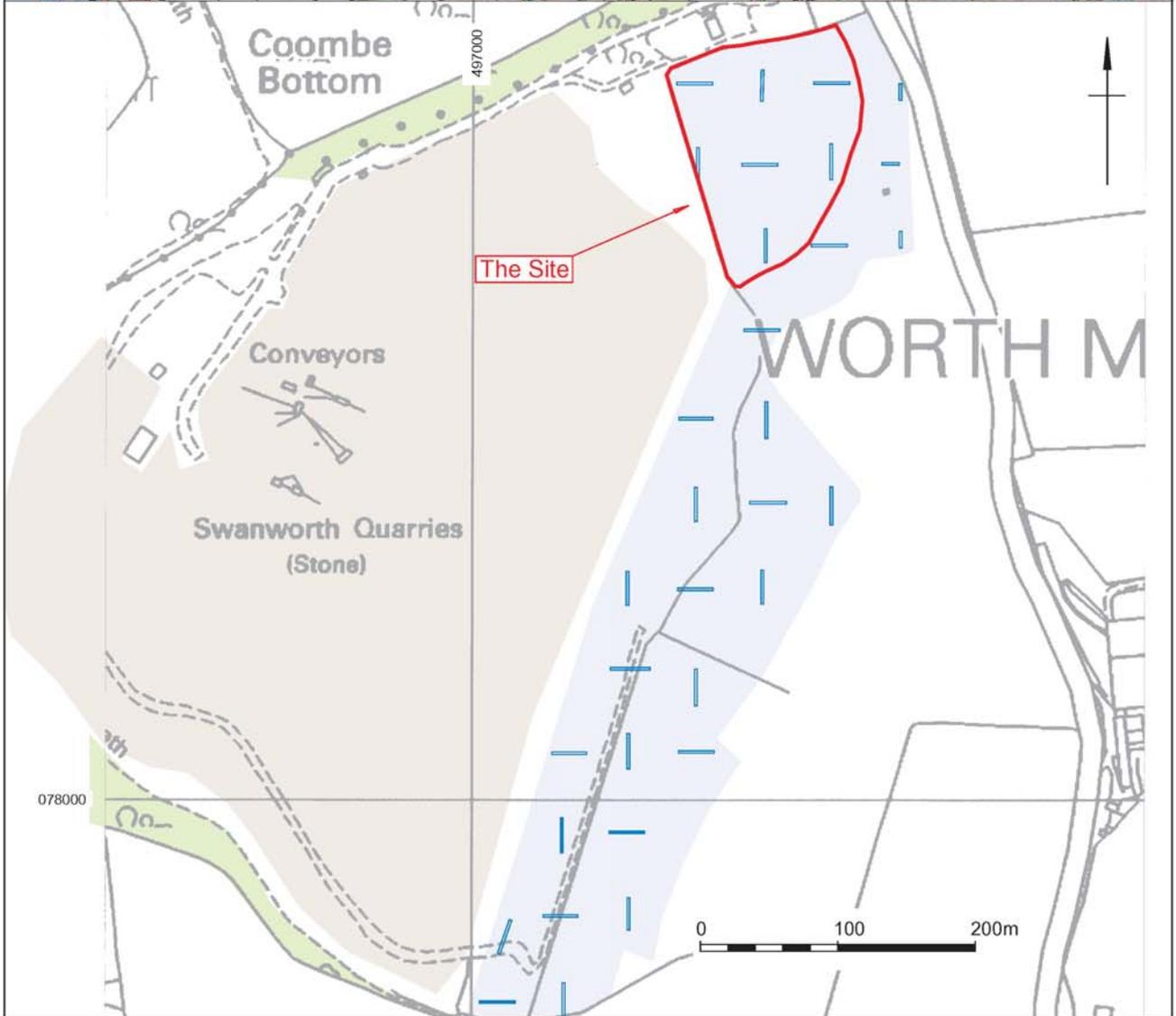
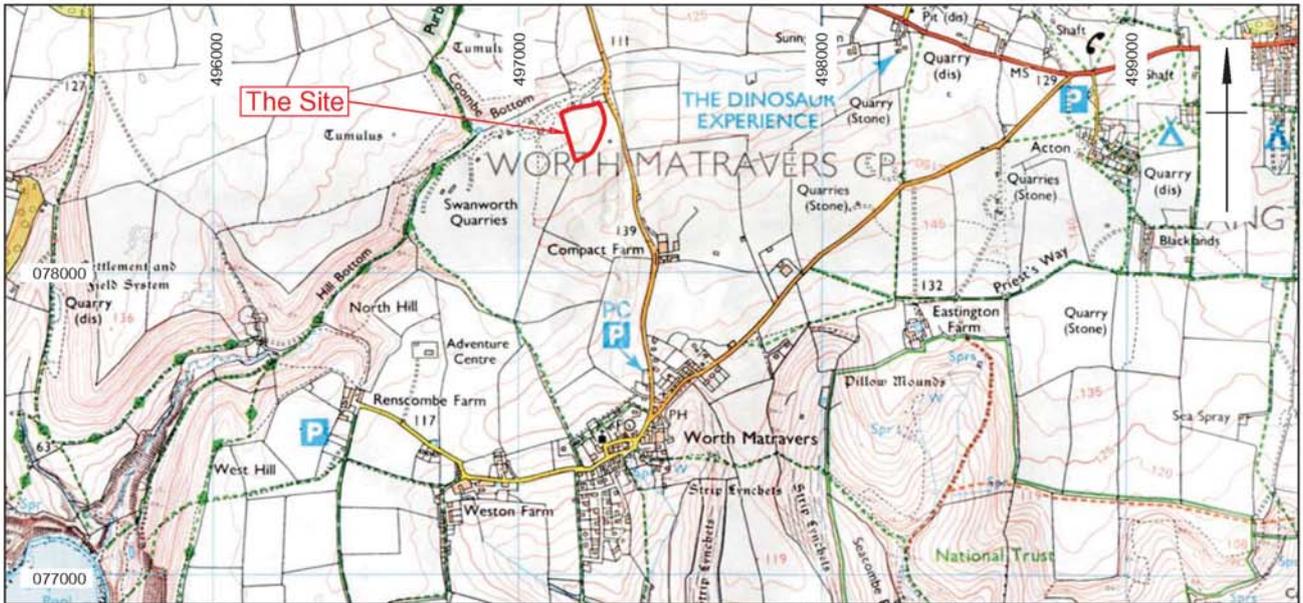
Cox P.W. 1987, 'Archaeological observations near Worth Matravers', *Proc. Dorset Nat. Hist. Archaeol. Soc* 108 (1986), 174

Farrar R.A.H. 1970, 'Some Recent Archaeological Discoveries in Dorset – Worth Matravers, Sheepsleights, Swanworth Quarries', *Proc. Dorset Nat. Hist. Archaeol. Soc* 70 (1948), 30-2

Wessex Archaeology, 1995, 'Swanworth Quarry, Purbeck, Dorset. Archaeological Evaluation – 1995'. Ref 37178.04

## APPENDIX 1: Trench Summary Table

Trench No. 1		
Context	Description	Depth (m)
101	Topsoil – Dark grey brown silty clay loam with 3% sub-angular/sub-rounded tabular limestone (<0.1m).	0.00-0.30
102	Subsoil – Colluvial mid brown silty clay with 1% sub-angular/sub-rounded tabular limestone (<0.05m). Only present in shallow coombe running north-south through the centre of site.	0.30-0.80
103	Overburden – Very mixed deposits of tabular limestone (<0.2m), fine to medium sand ranging from white to pale red brown, and pale yellow brown silty clay.	0.30+



- Limit of 2008 Watching Brief
  - 1995 Evaluation area
  - 1995 Evaluation trench
  - 1995 Evaluation trench containing archaeological feature
- Wessex Archaeology**

Reproduced from the 1999 Ordnance Survey 1:25000 Explorer © map with the permission of the controller of Her Majesty's Stationery Office © Crown copyright, Wessex Archaeology, Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB. Licence Number: 100028190. Digital data reproduced from Ordnance Survey 1:10000 data © Crown Copyright 2008 All rights reserved. Reference Number: 100020449. This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	6/10/08	Revision Number:	0
Scale:	1:25000 7 1:5000	Illustrator:	SEJ
Path:	Y:\Projects\70280\Drawing Office\Report Figs\WB\08_10_6\sitebase.dwg		

Site location showing extent of 2008 watching brief

Figure 1



**WESSEX ARCHAEOLOGY LIMITED.**

**Registered Head Office:** Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.

Tel: 01722 326867 Fax: 01722 337562 [info@wessexarch.co.uk](mailto:info@wessexarch.co.uk) [www.wessexarch.co.uk](http://www.wessexarch.co.uk)

**London Office:** Unit 113, The Chandlery, 50 Westminster Bridge Road, London SE1 7QY.

Tel: 020 7953 7494 Fax: 020 7953 7499 [london-info@wessexarch.co.uk](mailto:london-info@wessexarch.co.uk) [www.wessexarch.co.uk](http://www.wessexarch.co.uk)

