

# Brauncewell Limestone Quarry Extension Archaeological Watching Brief and Excavations 2005

NGR: TF 0330 5205 Site Code: BCQ 05 LCNCC Accession No.: 2005.90

Report for Brauncewell Quarries Ltd

> by M. Jordan

LAS Report No. 833

June 2005

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Conservation Services

- 5 JUL 2005

Highways & Planning Directorate

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# Brauncewell Limestone Quarry Extension 2005 Archaeological Watching Brief and Excavations

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#### Summary

An archaeological watching brief was carried out during a further phase of topsoil removal, for the most recent extension to the limestone quarry. Excavation and recording of significant features was also undertaken. The work revealed two large northwest/southeast orientated ditches, one east/west ditch and the remains of a possible enclosure in the east of the site. Small quantities of pottery of 2<sup>nd</sup> century date were found in the ditches.

#### Introduction

Lindsey Archaeological Services (LAS) was commissioned in March 2005 by John Dickinson of Brauncewell Quarries Ltd to conduct an archaeological watching brief during topsoil removal in preparation for an extension to the existing limestone quarry at Nipton Lane, Brauncewell (Fig. 1). The watching brief was required by Lincolnshire County Council to fulfil the remaining condition of Planning Consent No. N/15/439/90. Works were conducted in accordance with the Scheme of Works (dated March 1997). Groundworks were monitored by Matthew Jordan, between the 26th and 29th April 2005.

#### Site Location, Topography and Geology

Brauncewell Quarry is situated c.0.5km west of the A15 Lincoln to Sleaford road, 20km south of Lincoln and 7km north of Sleaford (Fig. 1). The local geology consists of limestone brash and bedrock with pockets of sand, derived from the Middle Jurassic Lincolnshire Limestone. Heights range from around 34m to 41m O.D, with the site itself lying at around 35-36m. The location of the watching brief was in the north half of the quarry, west of the area of the 2001 excavation on land sloping up towards Church Row Plantation (Fig. 1 and 2).

#### **Previous Archaeological Investigations**

Archaeological investigations at the quarry have been carried out since 1993 and are recorded in a series of reports (Field 1993, Field 1994, Tipper 1994, Johnson 1996, Taylor 1997, McDaid 1998, McDaid and Field 2004). Presented here is only a brief summary of previous work on the site (Fig. 2).

In 1993, an archaeological desk-top study was carried out by LAS (Field 1993) which identified the multiple linear ditch complex as a crop-mark on aerial photographs, and then more clearly in 1992 (Fig. 1). This was followed by archaeological evaluation in 1994, consisting of field-walking by LAS and magnetometer survey by the Landscape Research Centre Ltd (Field 1994). This in turn led to a programme of limited excavation later in 1994 (Tipper 1994), which revealed the ground plan of the

prehistoric multiple ditches, as well as an extensive complex of Late Iron Age to mid-Roman features comprising quarry pits, enclosures, burials, pits and postholes. In 1995 a trench was machine-excavated through some of the quarry pits (as part of the continuing watching brief programme (Field 1996).

In September 1996, a programme of geophysical survey was carried out to the east and north of the existing quarry (Johnson 1996). This recovered further evidence of the multiple ditch complex, as well as evidence for enclosures, ditches, pits and a possible structure. Parts of two of the enclosures, and the potential structure identified in geophysical survey were the main focus of the 1997 excavations.

In 1997 excavations concentrated on the area east of the existing quarry covering most of the rectangular enclosure and internal structure identified by the geophysical survey followed by a Watching Brief over the remainder of the area and additional land to the south.

In 2001 archaeological excavations occurred in the northeast part of the quarry, over the prehistoric multiple linear ditch complex. The most obvious archaeological features were the quarry pits and enclosure ditches, previously located by the geophysical survey, and fence lines. The excavations also revealed eight hut circles and smaller post-built structures, interpreted either as granaries (grain stores), or sheds for general storage, weaving or cooking.

#### **Aims and Objectives**

The purpose of the watching brief was to record and establish the presence or absence, quality and extent of archaeological remains and their location within the development area.

#### Method

The area of the quarry extension had already been stripped using a loading shovel without archaeological supervision in November 2004. The area was re-stripped using a 360° machine to reveal features which lay under the remaining topsoil, or were not clearly visible due to the length of time since the original topsoil stripping.

Most of the features were cleaned photographed and then half-sectioned in order to discover their depth and to check the fills for dating evidence. Each identified feature was assigned a number by LAS for recording purposes, and these numbers are used on the plans and sections, and in this report text in bold. A Plan of the site was produced by Midlands Survey and Engineering, using a survey station positioned on the western perimeter bund.

Results (Fig. 3, Pls. 1, 2 and 3)

Ditches (Fig. 4 and 5, Pls. 4, 5, 6 and 7)

A substantial north-northwest/south-southeast ditch 5013 ran the length of the site, it measured 1.65m wide x 0.56m deep. It contained the fills 5022, 5021, 5019, 5018 and 5016, which were alternating

layers of silty sands and sands containing frequent limestone inclusions which represent the deliberate and natural infilling of the ditch. Fill **5021** contained one abraded sherd of 2<sup>nd</sup> century pottery. **5013** cut the east/west orientated ditch **5027** which was shallower measuring 1.20m wide x 0.13m deep. No dating material was recovered from **5027**, but it may predate the Roman period and be part of an earlier Iron Age field system ditch complex.

Running northwest/southeast along the west of the area was the substantial V-shaped ditch 5076, which contained the sandy fills 5088 and 5077/5078 with limestone inclusions. Its recut 5091 contained 5093 and 5092 which were deposits of angular limestone in an orange brown sandy matrix. Sealing this were the silty sand layers 5090 and 5089. The substantial nature of the ditch suggest it was probably a boundary or defensive ditch rather than being for agricultural purposes. Material in the bottom of the ditch (layers 5092 and 5093) may derive from the upcast bank. Later fills 5090 and 5089 probably represent more gradual silting of the ditch. Ditch 5076 was previously identified from aerial photographs of the area (Figs. 2 and 3).

#### Possible enclosure ditch (Fig. 5, Pl. 8)

**5023** and **5074** were shallow truncated linear features which contained the orange brown sandy silt fills **5024** and **5075** respectively. **5023** ran north-northwest/south-southeast parallel to **5013** for over 10 metres, while **5074** was a curving east/west section to the north. They may represent the remains of a truncated enclosure ditch which contained pottery of 2<sup>nd</sup> century date. This suggests it was contemporary with ditch **5013** and therefore was evidence of Roman occupation. **5055** was a short section of shallow ditch running east/west to the east of **5024** and may be part of the enclosure. No significant features were revealed within the enclosure.

#### Circular ditches (Pl. 9)

**5050** was the remains of a post-Roman ring ditch. It was sub-circular in plan with an opening to the east. It measured 0.40m wide and 0.18m deep with a diameter of 1.8m. It contained fill **5051** which contained two fragments of post-roman pottery and may represent an agricultural feature such as a drainage ditch for a circular hay-rick.

#### Pits (Fig. 5)

Pit **5048** was a substantial rectangular pit which measured 2.7m wide x 1.5m and was 0.75m deep it contained the fills **5080**, **5082**, **5081** and **5049**. It was located just west of ditch **5023** and though contained no dating evidence it may be connected with the enclosure.

#### Glacial/miscellaneous features

**5070** was a large 33m long east/west linear channel 4 to 5m across with a shallow concave profile 0.20m deep. It contained **5079** a red brown silt sand which is likely to represent a post-glacial channel rather than an archaeological feature. Several small irregular shaped features were also identified (**5001-5011**) which were representative of glacial features i.e. ice wedges within the sand and gravel

natural. 5071 represented the remains of an east/west orientated plough furrow which cut ditch 5023.

Numerous small deposits of burnt gravel (5072, 5069, 5064, 5063, 5062, 5061, 5060, 5069, 5067, 5035, 5057, 5036, 5058, 5066, 5065, 5032, 5056, 5054, 5053, 5052), were present in the southern half of the area and may represent clearance of scrub or small trees. No dating material was retrieved and the features were generally irregular in plan and section.

#### Discussion

Ditches 5013 and 5076 were both substantial ditches located to the west of the previously identified ditches including the multiple boundary feature seen as cropmarks. Ditch 5013 yielded two pottery fragments datable to the 2<sup>nd</sup> century AD. However this does not enable us to accurately date the construction of the ditches. Ditch 5013 may well have been constructed in the Iron Age or earlier and the Roman pottery may belong to the period when it silted up and went out of use. The V-shaped ditch 5076 to the east contained no dating evidence, but did show evidence of being re-cut, following a period of silting. It also ran on a similar alignment to the ditches revealed in the aerial photographs and located during the earlier phases of excavation. This could associate this ditch with those excavated during the 2001 excavations which were assumed to be Iron Age in origin and showed evidence of being recut in the 2<sup>nd</sup> century.

The possible enclosure **5023**, contained 2<sup>nd</sup> century pottery possibly providing evidence for a Roman settlement on the site. However it was severely truncated, its full form was not visible and the lack of associated features make it hard to ascertain its function. Previous excavation in 1994 produced evidence for Roman quarrying and possible occupation dating to the 3<sup>rd</sup> to 4<sup>th</sup> century. The 2001 excavations produced small quantities of 2<sup>nd</sup> century pottery in the upper fill of the boundary ditches. The latest season of excavations have helped to confirm Roman activity in the 2<sup>nd</sup> century west of these ditches.

#### Conclusion

The watching brief and excavated features identified, show the continuation or Roman/Iron Age activity on the site with further ditches and enclosures occurring to the west of the multiple ditch. These features add to the knowledge of the site providing further evidence of the activities taking place around one of the best recorded prehistoric multiple boundaries in the county and the East midlands region as a whole. In addition the evidence suggests that further features may be seen as the quarry advances further westwards.

Matthew Jordan
Lindsey Archaeological Services
June 2005

#### Acknowledgements

LAS would like to thank Brauncewell Quarries Ltd for their help. The pottery report was by Margaret J. Darling. This report was edited and collated by Naomi Field.

#### Reference

Field, N., 1993. Brauncewell Limestone Quarry: Archaeological Desk Top Study. Report for Brauncewell Quarries Ltd, November 1993.LAS Report 68.

Field, N., 1994. Brauncewell Limestone Quarry Extension: Archaeological Evaluation. Report for Brauncewell Quarries Ltd, March 1994. LAS Report 81.1

Field, N. and McDaid, M., 2004. *Brauncewell Limestone Quarry Extension Excavations and Watching Brief 2001-2.* Report for Brauncewell Quarries Ltd, Lindsey Archaeological Services. Report 704

Taylor, C., 1997. Brauncewell Limestone Quarry Extension Excavations, 1997. Report for Brauncewell Quarries Ltd, Lindsey Archaeological Services and Network Archaeology Limited, January 1997. Report 113

Tipper, J., 1994. Archaeological Excavations at Brauncewell Limestone Quarry. Report for Brauncewell Quarries Ltd, Lindsey Archaeological Services, August 1994. Report 105.1

#### **Site Archive**

Context sheets: 95

Plans: 2 Sections: 13 Correspondence:

Photographs: LAS film nos.05/28, 05/29, 05/40 Specialist reports: Pottery report by M.J. Darling

# **APPENDIX 1**

### Brauncewell Quarry (BCQ 05) Context Summary

Context no Context Type		Description	Length	Width	Depth		
5001	Cut	Natural feature 0.15m			0.25m		
5002	Fill	Fill of 5001					
5003	Cut	Natural feature	2.42				
5004	Fill	Fill of 5003		17.06.10			
5005	Cut	Natural feature					
5006	Fill	Fill of 5005		1.27			
5007	Cut	Natural feature		Caler			
5008	Fill	Fill of 5007	Natural feature Fill of 5007		2 are		
5009	Cut	Natural feature			9.43		
5010	Fill	Fill of 5009					
5011	Cut	Natural feature					
5012	Fill	Fill of 5011	The state of the s				
5013	Cut	Ditch	1.65m		0.56m		
5014	Cut	Pit	0.2m	0.35m			
5015	Fill	Fill of 5014					
5016	Layer		Topsoil				
5017	Layer	Natural					
5018	Fill	Fill of 5013	100 PER 100 PE		0.08m		
5019	Fill	Fill of 5013			0.13m		
5020	Fill	Fill of 5013			0.20m		
5021	Fill	Fill of 5013	100		0.08m-0.15m		
5022	Fill	Fill of 5013			0.09m-0.20m		
5023	Cut	Linear feature	10m +	0.44m	0.08m		
5024	Fill	Fill of 5023	10m +	0.44m	0.08m		
5025	Cut	Natural feature					
5026	Fill	Fill of 5025		<b>*************************************</b>			
5027	Cut	Linear feature		1.2m	0.13m		
5028	Fill	Fill of 5027		0.08m			
5029	Fill	Fill of 5027			0.04m-0.08m		
5030	Cut	Pit	0.5m diameter		0.35m		
5031	Fill	Fill of 5030	0.5m diameter	**	0.35m		
5032	Cut	Pit			0.00		
5033	Fill	Fill of 5032					
5034	Layer	Burnt gravel	0.2m diameter				
5035	Layer	Burnt gravel		***			
5036	Layer	Burnt gravel	0.4m	0.3m	**		
5037	Fill	Fill of 5041		0.5m	0.10m		
5038	Fill	Fill of 5041		1.75m	0.6m		
5039	Fill	Fill of 5041		0.6m	0.4m		
5040	Fill	Fill of 5041		0.75m	0.3m		
5041	Cut	Ditch		1.73m	0.6m		
5042	Fill	Fill of 5041					
5043	Fill	Fill of 5013			0.15m		
5044	Fill	Fill of 5013			0.08m		
5045	Fill	Fill of 5013			0.32m		
5046	Fill	Fill of 5013			0.12m		
5047	Fill	Fill of 5027		1.65m	0.3m		
5048	Cut	Pit	2.7m	1.5m	0.75m		
5049	Fill	Fil of 5048		1.5m	0.5m		
5050	Cut	Ring gully		0.4m	0.18m		
5051	Fill	Fill of 5050		0.4m	0.18m		
5052	Layer	Burnt gravel	.15m diameter				
5053	Layer	Burnt gravel	.25m diameter		1		

# Brauncewell Quarry (BCQ 05) Context Summary

5054	Layer	Burnt gravel	0.4m	0.3m		
5055	XXX	xxxx				
5056	XXX	XXXX				
5057	Layer	Burnt gravel	0.4m	0.3m		
5058	Fill	Fill of 5083		0.4m	0.3m	
5059	Layer	Burnt gravel				
5060	Layer	Burnt gravel				
5061	Layer	Burnt gravel	0.4m	0.3m		
5062	Layer	Burnt gravel	1.5m	0.9m	0.4m	
5063	Layer	Burnt gravel 1.5m   Burnt gravel 0.6m diameter			0.3m	
5064	Layer	Burnt gravel	0.6m	0.45m	0.18	
5065	Layer	Burnt gravel	0.4m	0.2m		
5066	Layer	Burnt gravel	2 1 to 2			
5067	Cut	Pit	0.8m diameter			
5068	Fill	Fill of 5067	0.8m diameter			
5069	Layer	Burnt gravel	1m			
5070	Cut	Glacial channel	33m	0.3m 4-5m	0.3m	
5071	Cut	Plough Furrow				
5072	Layer	Burnt gravel 0.5m diameter				
5073	Layer	Burnt gravel				
5074	Cut			0.7m	0.3m	
5075	Fill	Fil of 5074 4m + 0.7m		0.3m		
5076	Cut	Ditch 3.15m		1.3m		
5077	Fill	Fill of 5076			0.1m	
5078	Fill	Fill of 5076				
5079	Fill	Fill of 5070	33m	33m 4-5m		
5080	Fill	Fill of 5048				
5081	Fill	Fill of 5048		0.35m		
5082	Fill	Fill of 5048			0.25m	
5083	Cut	Pit 1.7m 0.95m		0.6m		
5084	Fill	Fill of 5083			0.4m	
5085	Cut	Pit	1.2m	0.9m		
5086	Fill	Fill of 5085				
5087	Fill	Fill of 5064				
5088	Fill	Fill of 5076				
5089	Fill	Fill of 5076 2.3m		0.38m		
5090	Fill	Fill of 5076 2.6m		0.25m		
5091	Cut	recut of ditch 5076 2.5m			0.92m	
5092	Fill	Fill of 5091	0.66m			
5093	Fill	Fill of 5091		1.26m 0.8m		
5094	Fill	Fill of 5027	50m+	1.3m	0.3m	
5095	Fill	Fill of 5027		0.2m	0.05m	

**APPENDIX 2** 

# REPORT 188 ON POTTERY FROM BRAUCEWELL QUARRY, LINCOLNSHIRE, BCQ05

#### for LINDSEY ARCHAEOLOGICAL SERVICES

by Margaret J. Darling, M.Phil., F.S.A., M.I.F.A.

#### 9 May 2005

The pottery amounted to 27 sherds, weighing 0.317 kg, from five contexts. The condition of the pottery is poor, abraded and fragmented. No problems are anticipated for long term storage. The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery*.

#### **DETAILS OF THE POTTERY**

Ditch 5013, context 5021 A single very abraded body sherd from a Nene Valley colour-coated (NVCC) beaker in a light brown fabric. Datable probably to the early to mid 2nd century.

Context 5045 From the same ditch, two abraded body sherds, not closely dateable.

Linear feature 5023, context 5024 21 sherds, of which 20 are from a single vessel in an oxidized fabric with quartz and occasional shell inclusions (OXSH), a bowl with an everted rim, diameter probably 30cm. The other sherd is an abraded grey body sherd. The dating rests on the bowl which is not a closely datable type, but is likely to occur first in the 2nd century, perhaps continuing into the 3rd century. This fabric and type does not appear to have been seen before from recent excavations at Brauncewell quarry.

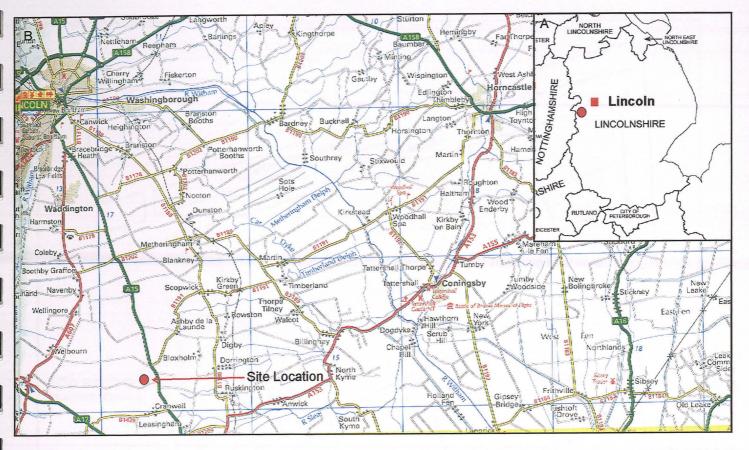
**Ditch 5041, context 5038** A single body sherd from a jar or bowl, probably quite large, which can be dated only to the Roman period.

Ring gully, context 5051 Two fragments, probably from the same vessel in a light brown fabric with green glaze. Post-Roman.

#### ARCHIVE DATABASE

Cxt	Fabric	Form	Manuf+	Ve	Altn	DNo	Details	Lnk	Shs	Wt
5021	NVCC	BK	-	-	VABR	-	BS LTBN FAB	-		1 :
5021	ZDATE	-	-	-	-	-	EM3	-	-	-
5038	GREY	JB	-	-	-	-	BS LTBN FAB; DKGRY SURFS; 10MM; LGE VESS?		1	1 1:
5038	ZDATE	-	-	-	-	-	ROM	-	-	-
5045	GREY	-	- 0	-	ABR	-	BSS;SANDY	-	2	2 1
5045	ZDATE	-	-	-	-	-	ROM	-	-	-
5051	PRO	-	-	1?	-	-	BSS;LTRB FAB;GREEN GLAZE	-	2	2 :
5051	ZDATE	-	- \	-	-	-	POSTRO	-	-	-
5024	<b>GREY</b>	-	-	-	VABR	_	BS	-		1 14
5024	OXSH	BEV	-	-	VABR	-	RIM>SHLDR GROOVE;DKGRY FB;OCC.SHELL;LTRB SURFS;DIAM30?	-	20	27
5024	<b>ZDATE</b>	-	-	_	-	-	2-3C?	-	-	-

THE FIGURES



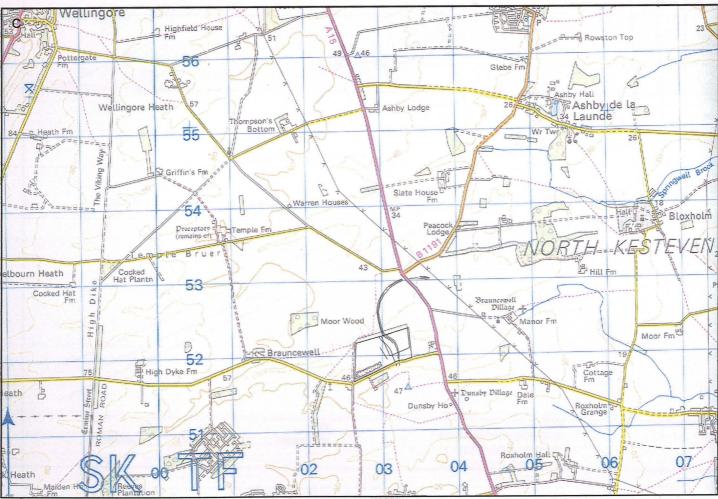


Fig. 1 Location of Brauncewell Quarry showing location of multiple linear ditch cropmark. (C based on the 2000, 1:50 000 Ordnance Survey map, Landranger 121, Crown copyright, reproduced with the permission of the controller of HMSO. LAS Licence No. AL 100002165).

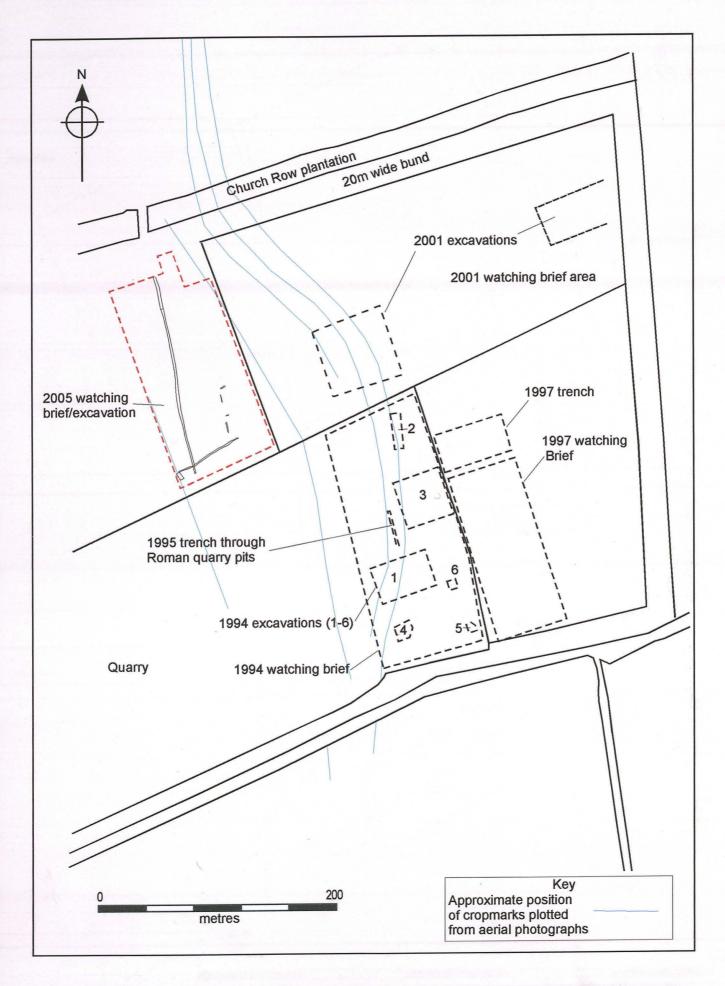
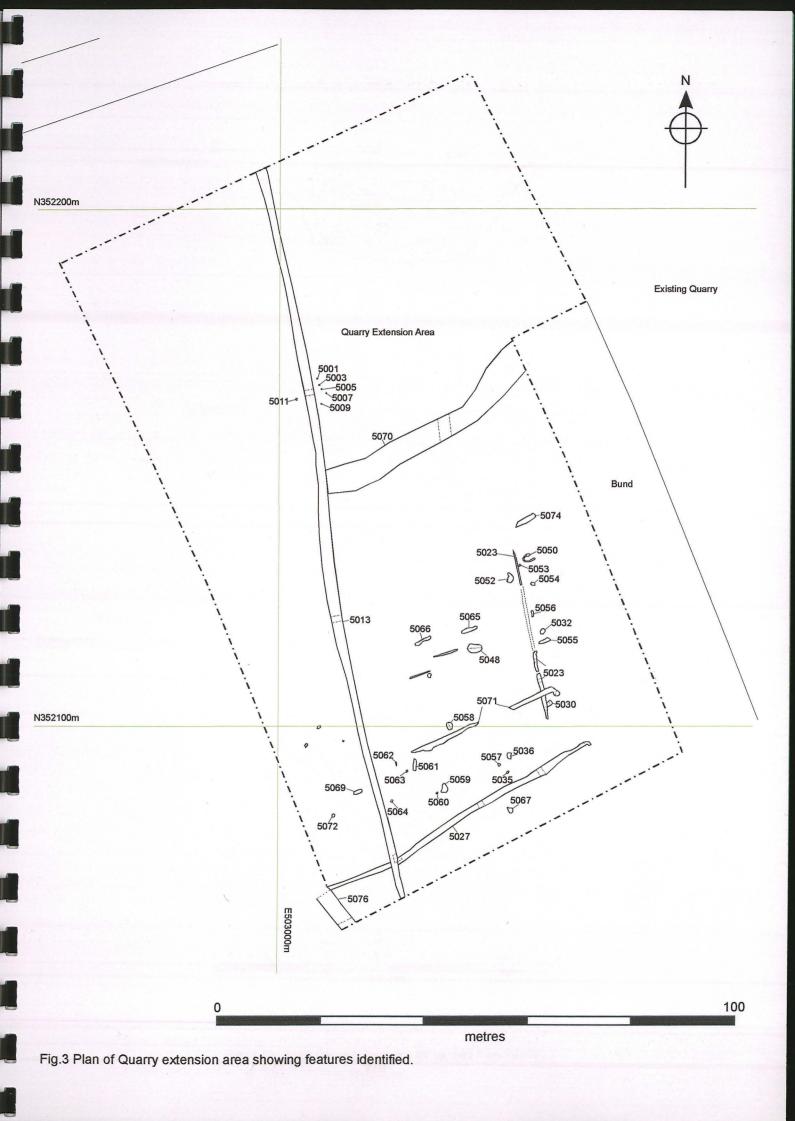
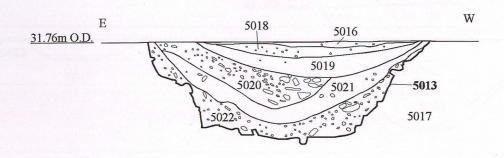
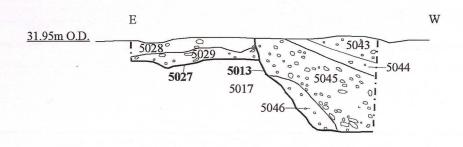


Fig. 2 Limits of existing quarry, plan of 1994 excavations, position of 1997 trench, limits of 1997 watching brief, position of the 2001 excavations and limits of the 2001 watching brief, and location of 2005 watching brief/excavations showing location of ditches found.







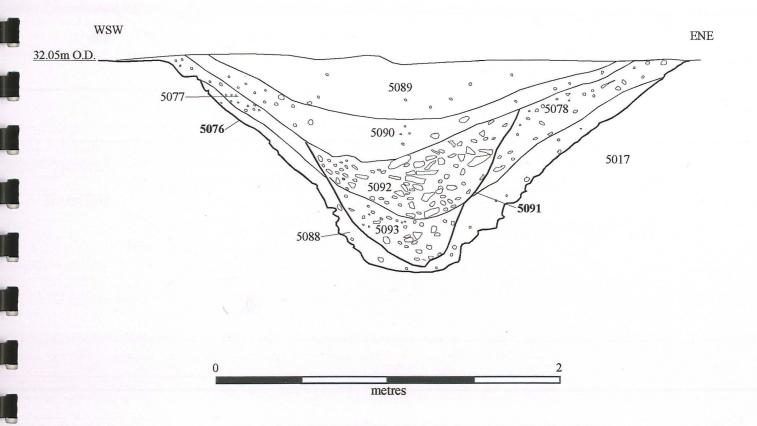
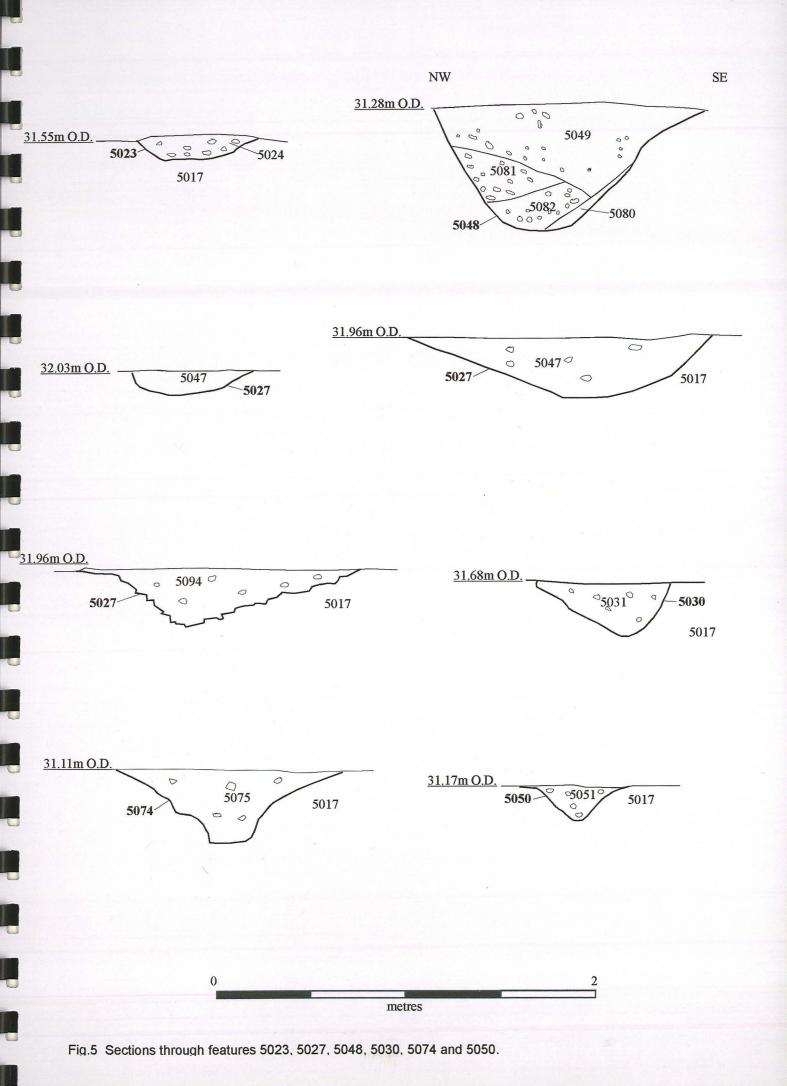


Fig. 4 Sections through features 5013, 5027 and 5076



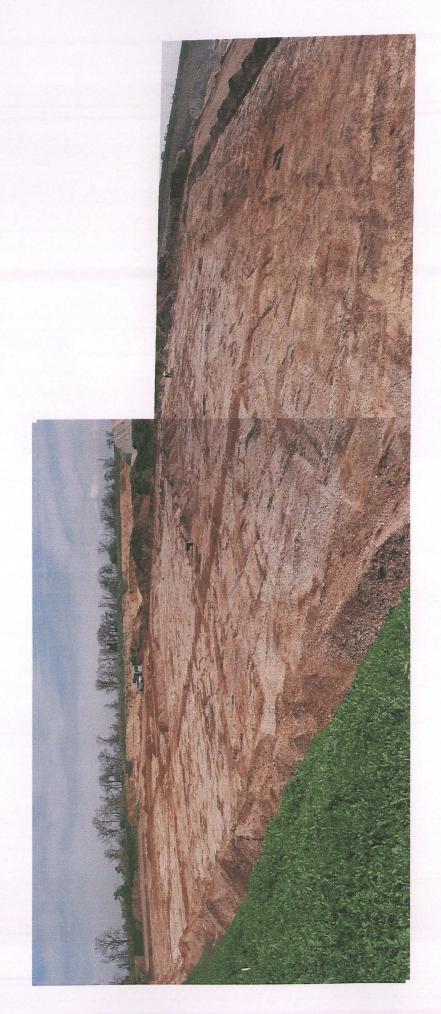
THE PLATES



Pl. 1 General view of site looking west



PL. 2 General view of site looking south



PL. 3 General view of site looking northeast



PL. 4 Ditch 5013, looking south. Scales 1m and 0.50m



Pl. 5 Ditch 5027, looking east. Scales 1m and 0.20m



Pl. 6 Ditch 5013 and 5027, looking south. Scales 1m and 0.50m



PI. 7 Ditch 5076, looking north. Scales 1m and 2m



Pl. 8 Ditch 5023, looking north. Scales 0.50m



Pl. 9 Ring ditch 5050, looking west. Scale 0.50m