N	CC HER
SNY	223,498
ENY	57
CNY	1597
Parish	6003
Rec'd	17/02/00

Marfield Quarry - Masham North Yorkshire Quarry Extension Phases 1 and 2

đ

Geological Testpits Archaeological Watching Brief

November 1999

Marfield Quarry - Masham North Yorkshire Quarry Extension PHASE 1 and 2

Geological Testpits Archaeological Watching Brief

Contents	
Figure List	2
1. Introduction	3
2. Site Description	3
3. Geology	3
4. Historical and Archaeological Background	4
5. Results	6
6. Conclusions	6
7. Bibliography	7

Figure List	Page	
1. Site Location. Scale 1:25000.	8	
2. Location of Testpits 1 to 8. Scale 1:2500.	9	

.

Marfield Quarry - Masham North Yorkshire Quarry Extension PHASES 1 and 2

Geological Testpits Archaeological Watching Brief

1. Introduction

An Archaeological Watching Brief was conducted by MAP Archaeological Consultancy Ltd on the 21st and 24th of September 1999 during the excavation of eight testpits in Phases I and II, on behalf of Lafarge Redland Aggregates Ltd at the Marfield quarry, near Masham, North Yorkshire (Fig. 1).

A pre-planning evaluation of the quarry extension was commissioned by Redland Aggregates Ltd. This was carried out between April 1995 to December 1996. The evaluation followed a staged format and was composed of a number of different techniques. The initial stage of work was a Desktop Study of the proposed quarry extension area (Areas 1-14 : MAP 1995). This was subsequently followed up with further work consisting of Geophysical Survey (GSB 1995- Areas 6, 9, 12 & 1996 - Areas 8, 13), fieldwalking (MAP 1995i - Areas 6, 9, 12) and Trial and Sample Excavations in Areas 6, 9, 12 & 14 (MAP 1996 i-iv).

The extension to the present workings at Marfield is to be undertaken in five phases. A Watching Brief was undertaken on the excavation of eight engineering testpits in Phases 1 and 2 prior to development of the quarry extension (formerly Areas 8, 9 and 10 of the pre-planning evaluation : Fig. 2).

All maps within this report have been produced from Ordnance Survey with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright. License No. AL 50453A.

2. Site Description

Marfield Quarry is situated in the parish of Ellington High and Low, North Yorkshire, to the north-west of the town of Masham (SE 8277 2110 : Fig. 1). Phases 1 and 2 of the quarry extension are located to the north of the existing quarry working (SE 8322 2109), approximately 0.9 kilometres south-east of Low Ellington village, and cover an area of 18.1 hectares, at a height of between 92m and 115m OD.

The fields within Phases 1 and 2 of the quarry extension had previously been areas of pasture and arable farm land.

3. Geology

The soils in the areas are typical brown earths of the East Keswick Association formed over a parent of drift from Palaeozoic and Mesozoic sandstones and shales. Such soils are usually well drained fine or coarse loams, sometimes with slowly permeable subsoils and subject to slight seasonal waterlogging (Mackney et al 1983). Auguring in Area 12 found that the soils were coarse loamy typical brown earths. The profile comprised a scatter of angular and sub angular mainly sandstone clasts, this overlay an Ap (0-0.25m) horizon of dark red brown coarse loams. Auguring beyond 0.3m was prevented by the stoniness of the B/C horizon. The shallowness of the soils may be a local variation peculiar to the site and/or it may be due to topsoil erosion and ploughing (GSB 1995).

4. Historical and Archaeological Background

Desktop Study

The Desktop Study considered an area of land to the north of the existing quarry of approximately 85 hectares. The report evaluated the known archaeological and historical resource, describing and illustrating land use, previous archaeological information, earthwork analysis, a walkover survey and historical summaries of the village of Low Ellington and the lost village of Swarthorpe.

Historical records and the hedgerow survey illustrated how the landscape had changed over the past 1000 years. The known archaeological data for the area was limited to a gold torque found in Swinton Park in 1815 and the two stone coffins found in Nunneries Field, Marfield in 1835 and 1836. Aerial photographic data was restricted to the earthwork features still present in the landscape. Information derived from the walkover survey provided detail on the range, date and survival of earthworks.

Earthwork sites included the village earthworks of Low Ellington, lynchets and ridge and furrow, hedge banks with and without associated stone walls, ponds, trackways and clearance cairns. In addition, two elongated mounds were discovered in Areas 6 and 9, which may represent pillow mounds.

Recent Watching Briefs at Marfield Quarry have provided poor artefact assemblages with finds ranging in date from the Roman period through to modern times (MAP 1994 & 1995ii). In addition features interpreted as storage pits of Iron Age date have been recorded during the working of the present quarry (WYAS 1988). Even so the well drained soils, reliable supplies of water from both the River Ure and becks such as Broad Beck, and the local topography suggests that this area would be an ideal location for Prehistoric and possibly later settlement.

Pre-Conquest settlement was recorded in Domesday in the villages of Swarthorpe and Ellington and this continued into at least the 12th century at Swarthorpe and to the present day at Low Ellington. The impact of man on the landscape was also evident from the surviving earthworks.

Geophysical Survey

As part of the pre-planning evaluation Areas 6, 8, 9, 12, 13 and 14 were assessed by geophysical survey (a total area scan, followed up with a 50% magnetometer survey).

The survey in Area 8 located some anomalies which appeared to be pit like responses and others that could be geological. Some lengths of linear anomalies were also noted along with

a number of burnt/fired remains. In Area 9, the survey located a number of pit type anomalies along with linear features, which may represent ploughing of field divisions. The presence of strong anomalies suggested the presence of fired remains.

Fieldwalking Results

A programme of fieldwalking in Areas 6, 9 and 12 was introduced to compliment the geophysical survey.

Area 9 was initially line walked in three sections due to its large size (Areas 9A, 9B and 9C) and the results were variable. Areas B and C were generally poor, pottery was predominantly of post medieval and modern date, although two sherds of medieval pottery were observed in Area C. The quantity of flint observed was high, but was mostly natural with only one worked flint artefact recovered. In contrast the occurrence of pottery, worked flint, and stone was much higher in Area A despite the fact that it was the second smallest area and approximately half the size of Area C.

Distribution of finds categories pottery, and brick and tile in Area A showed no defined concentrations, but the distribution of flint and burnt stone showed a marked concentration in the north of Area 9 which also appears to correspond with geophysical anomalies in this area. Flint recorded in Area 9A showed a marked increase in the occurrence of worked pieces, mostly flakes.

As a result of the initial fieldwalking, a programme of intensive fieldwalking was conducted in Area 9A. The aims of this phase of work were to define distribution patterns seen in the initial fieldwalking and to determine the presence of specific artefact clusters. The intensive survey in Area 9A produced a varied collection of artefacts consisting of a small flint assemblage, pottery of medieval, post-medieval and modern date, brick and tile, post-medieval and modern glass, modern ironwork, animal bone and a quantity of burnt stone.

The results of the survey showed that artefacts and materials of recent date displayed a fairly even distribution across the area with no specific grouping or clustering. This applied to the distribution of pottery, glass, iron and brick and tile. The distribution of flint and more especially burnt stone showed a marked preference for the western and to a lesser degree the central areas of Area 9A. The occurrence of burnt sandstone along the western section of the survey area was very marked and may suggest activity.

Apart from a random background incidence of flint, there is little evidence for any major prehistoric activity within the areas considered. Later Roman material is non existent and only a small medieval assemblage was recovered suggesting that Areas 6 and 9 were only brought into cultivation within the post medieval period.

Evaluation Excavations

Excavation concentrated on Areas 6, 9, 12 and 14. Areas 6, 9, and 12 were arable and were excavated in between crop rotation. Area 14 was pasture. All the areas were sampled based on the geophysical data.

A total of ten trenches were excavated in Area 9 in September 1996. The excavation of seven of the trenches (Trenches 1, 2, 3, 5, 6, 9 and 10) showed that the geophysical anomalies were the result of differences within the drift geology. In Trenches 7 and 8 the geophysical anomalies had been created by modern disturbance; only in Trench 4 were archaeological deposits revealed.

The burnt pit was excavated in Trench 4, but was unlike the limekilns found in Areas 6 and 12 as it lacked the flue and stoke/raking-out hole, present in the previously excavated kilns. It was also sub-rectangular rather than circular or oval, and had a different west to east alignment. In addition, to judge from the thinness and generally discontinuous nature of the baked material forming its edges it had not been subjected to the same degree of burning.

Archaeomagnetic dating of the feature produced a date of 1585-1650 AD, much earlier than the limekilns excavated in Areas 6 and 12 which dated to the late Seventeenth to the mid Eighteenth centuries.

5. Results

The excavation of eight engineering testpits was observed by an archaeologist during the excavation by a mechanical excavator (JCB JS300 LC) with a toothed bucket.

Testpits 1 to 8 were excavated to gauge the depth of the aggregate in specific areas of Phases 1 and 2. Each testpit ranged in size between 10m by 8m (Testpit 1 : Fig. 2), and 7m by 6m (Testpit 4: Fig. 2). Excavation revealed topsoil, subsoil and "natural" geological deposits either sands, clays or gravels to a depth of c. 9m. In addition, a cast iron water pipe was encountered in Testpit 6.

6. Conclusions

No archaeological features or artefacts were recovered from the Watching Brief.

7. Bibliography

GSB 1995	Marfield Quarry, Masham. Report on Geophysical Survey. Survey No. 95/95
GSB 1996	Marfield Quarry, Masham. Report on Geophysical Survey. Survey No. 96/112
Mackney 1983	Soils of England and Wales. Sheet 1: Northern England. Soil Survey of England and Wales.
MAP 1994	Marfield Quarry, Masham, North Yorkshire. Archaeological Watching Brief.
MAP 1995	Marfield Quarry - Masham, North Yorkshire. Proposed Quarry Extension. Desktop Evaluation.
MAP 1995i	Marfield Quarry - Masham, North Yorkshire. Proposed Quarry Extension. Areas 6, 9, & 12. Fieldwalking Survey
MAP 1995ii	Marfield Quarry, Masham, North Yorkshire. Archaeological Watching Brief.
MAP 1996i	Marfield Quarry, Masham, North Yorkshire. Archaeological Sample Excavations. Area 6.
MAP 1996ii	Marfield Quarry, Masham, North Yorkshire. Archaeological Sample Excavations. Area 9
MAP 1996iii	Marfield Quarry, Masham, North Yorkshire. Archaeological Sample Excavations. Area 12.
MAP 1996iv	Marfield Quarry, Masham, North Yorkshire. Archaeological Sample Excavations. Area 14.
WYAS 1988	Watching Brief at Marfield Quarry.