ARCHAEOLOGICAL SERVICES WYAS

Newbridge Quarry Extension, Pickering
North Yorkshire

Archaeological Excavation: Phase 1

Interim Assessment Report

January 2010

Report No. 2105

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Cemex UK Operations Limited

Newbridge Quarry Extension
Pickering
North Yorkshire

Archaeological Excavation: Phase 1

Interim Assessment Report

Summary

Archaeological work was undertaken in advance of the Phase 1 extraction of the northern extension to Newbridge Quarry, Pickering. The work consisted initially of a watching brief on a new access road, followed by a monitored topsoil strip of the Phase 1 extraction area. This revealed the continuation of a ditched trackway and numerous discrete features. The pottery dating suggests that some of the discrete features belong to the Bronze Age, with the bulk of features dated to the pre-Roman Iron Age or Romano-British period.

Six roundhouse structures were identified on site with one potentially dating to the Bronze Age, the others being typical of the pre-Roman Iron Age or Romano-British period. Three of the structures were identified some distance from the trackway and hint at a more extensive exploitation of the landscape than had been suggested at the evaluation stage.

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Report Information

Client:	Cemex UK Operations Limited
Address:	
Report Type:	Archaeological Excavations
Location:	Newbridge Quarry, Pickering
County:	North Yorkshire
Grid Reference:	NGR SE 799 876
Period(s) of activity represented:	Bronze Age, Iron Age and Romano-British
Report Number:	2105
Project Number:	3482
Site Code:	NQE09
Planning Application No.:	NY/2007/0150/ENV
Museum Accession No.:	
Date of fieldwork:	17th September- 1st October and 21st October-1st December
Date of report:	January 2010
Project Management:	Ian Roberts BSc FSA MIfA
Fieldwork supervisor:	David Williams BA PIfA
Report:	David Williams
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Photography:	Site staff
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Acknowledgements

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The post-excavation finds and environmental processing was supervised by Zoe Horn who also co-ordinated the post-excavation specialists. The report was prepared by David Williams and Ian Roberts.

1 Introduction

Archaeological Services WYAS (ASWYAS) was commissioned by Cemex UK to carry out an archaeological excavation in advance of five phases of limestone extraction within the northern extension of the Newbridge Quarry site. The initial phase (Phase 1) of extraction covers an area of just under 3.1 hectares.

Site location and topography

Newbridge Quarry lies about 2km to the north of Pickering (Fig. 1). The whole northern extension covers an area of about 20 hectares immediately to the north-west of New Hambleton Farm (central NGR SE 799 876); an area bounded by Swainsea Lane to the west, Haugh Wood to the east, and the existing quarry to the south. The land gently slopes up towards the north and lies at between 90-105m OD.

Soils, geology and land-use

The solid geology is Malton Oolite and Coral Rag (Upper Oxfordian Stage) and the soils are described as shallow well-drained calcareous fine loams of the Elmton 2 Association. The area is presently occupied by three fields, the north and west fields being under an arable regime, whilst that to the south-east is under pasture.

2 Archaeological and Historical Background

Between 1999 and 2006 limestone extraction at Newbridge Quarry was preceded by a series of extensive open-area archaeological excavations, initially by the MAP Consultancy and from 2003 by Archaeological Services WYAS. The work identified some evidence for early prehistoric activity in the form of residual finds, but most of the evidence is for Iron Age and Romano-British occupation, with some small potential for post-Roman activity. With the exception of three potential square barrows and an area of Iron Age open settlement, the settlement evidence principally took the form of a series of rectilinear enclosures that were appended to, or were focussed upon, a double ditched trackway (or droveway) that ran north-south through the entire phased extraction area. The enclosures, which were mainly on the eastern side of the trackway, were in some cases superimposed, with most containing roundhouses. Associated features have provided evidence of a generally mixed economy with arable cultivation represented by crop driers and querns, and animal husbandry reflected in the animal bones recovered (Signorelli and Roberts 2006).

Three extended inhumations were recovered from the settlement areas, although these need not necessarily be contemporary. The commonest form of burial was cremation, with some thirty un-urned examples being recovered, often from the upper fills of the trackway ditches. Their stratigraphic position in the ditch fills suggests that they are probably of Late Roman

date. A possible post-Roman phase to the site has been proposed, but the evidence for this is insubstantial.

A full desk-based assessment was originally carried out for the New Hambleton Farm extension in 2005 (Dodds 2005) and has since been revised and updated in the light of the excavations in 2005 and 2006 (Pollington 2008). Although this study drew upon cropmarks from air photographs to establish the existence of archaeological enclosures in parts of the site, it is the enhancement by a 100% geophysical (magnetometer) survey that has produced the clearest picture of the archaeological potential of the site (Webb 2008). The geophysical survey results revealed that the western half of the site is occupied by what is almost certainly a continuation of the north-south double ditched trackway found to the south. As before, it seems to have formed a coaxial focus for other field boundaries and has several ditched rectilinear enclosures associated with it, especially on its eastern side. One very well defined square enclosure contains a rectangular geophysical anomaly that could be a building, whilst other unusual anomalies include a circular feature, which might be a prehistoric barrow, and an area of magnetic enhancement within the trackway in this area. The origin of the latter could be due to burning, which given the association of the trackway with cremation burials to the south, offers intriguing possibilities. The geophysical results reveal a complex dog-leg in the trackway, in an area that is obviously the result of several intersecting boundaries created at different times in the past and thus a key area to understanding the phasing of the landscape as a whole.

Archaeological trail trenching (Williams and Roberts 2008) following the geophysical survey saw trenches targeting areas with archaeology and also blank areas detected by the geophysical survey. The trenches confirmed that the trackway with appended enclosures and field systems is broadly of later Iron Age and Romano-British in origin. The evaluation did not identify any obvious early unenclosed settlement phase, as was identified to the south, or any other notable earlier prehistoric activity.

3 Aims and Objectives

The aims of the mitigation work for Phase 1 of the mineral extraction were:

- to preserve by record the archaeological features and deposits to be impacted upon by the mineral extraction;
- to enhance the archaeological record for this part of North Yorkshire;
- to better understand the archaeology of the prehistoric, Roman and post-Roman periods, and the transition between those periods;

- to fully characterise the archaeology of the Phase 1 extraction area to better inform the most appropriate strategy to be adopted in advance of the Phase 2 and subsequent phases of mineral extraction.

Specifically the objectives of the archaeological investigations were:

- to record the nature and extent of the archaeological remains within the Phase 1 extraction area;
- to determine the date, function, condition, character, quality of survival, importance and date of such archaeological remains;
- to obtain an understanding of the development of the site through time and establish a phased chronology that articulates with the site investigated to the south and provides input into the iterative strategy for dealing with the archaeology of the extension area;
- to bring the findings into the public domain through deposition of the results in the North Yorkshire HER and through appropriate publication.

4 Methodology

Watching Brief

An archaeologist was present to monitor the machine excavation of foundations for a new access road and crossing point into the Phase 1 area of extraction. Appropriate written, drawn and photographic records were made in accordance with ASWYAS watching brief guidelines, site recording manual (ASWYAS 2003, 2006) and IfA standards and guidance (IfA 2008). The excavation limits were surveyed using electronic survey equipment.

Strip and record excavations

The Phase 1 extraction covers an area of about 3.1 hectares in the south-western corner of the extension area. The archaeological approach for this area was to continue the successful 'strip, record and excavate' methodology that was employed for the sites to the south between 1999-2006.

All work was carried out in accordance with accepted professional standards and guidelines (English Heritage 1991, IfA 2008a) and in accordance with the ASWYAS site recording manual (ASWYAS 2003).

The initial work involved the controlled stripping of ploughsoil to the archaeologically required level. This was carried out under direct archaeological supervision by a 360° mechanical excavator fitted with a toothless ditching bucket. The stripping was undertaken in level spits to the top of the first archaeological horizon or undisturbed natural. The resulting

surface was then inspected for archaeological remains. Where archaeological remains required clarification, the relevant areas were also cleaned by hand.

The exposed archaeological features were surveyed and planned at suitable scales. The excavation work was undertaken in a controlled and stratigraphic manner in order to meet the aims and objectives of the work. The features exposed were investigated employing the following sampling strategies:

Linear features: sufficient excavation was undertaken to investigate the depth, profile and fills of ditches and gullies, and to recover dating and environmental evidence from the fills. This comprised of a 20% sample, dispersed along the length of the feature. Intersections between linear features were excavated in such a way to determine the stratigraphic relationship and sequence.

Discrete features: pits, post–holes and other discrete features were initially half-sectioned to determine and record their form and to record the nature and sequence of their infilling. The features were then subjected to full excavation in order to recover artefacts, environmental samples and confirm the from of the features.

A full written, drawn and photographic record of all material revealed during the course of the work was made. The excavation limits were surveyed using electronic survey equipment with larger scale hand drawn plans of features at 1:20 or 1:50. Sections of linear and discrete features were drawn at 1:10 or 1:20. All sections, plans and elevations include spot-heights related to Ordnance Datum in metres, correct to two decimal places. Tie-in information was also obtained during the course of the excavation to allow the fixing of the excavation areas in relation to nearby permanent structures, roads and to the National Grid.

All artefacts recovered were retained and removed from the site for assessment and analysis. Only non–modern artefacts were collected from the excavated topsoil and subsoil. All artefacts are currently stored in controlled environment within ASWYAS stores, in accordance with the guidelines laid out in the IfA Guidelines for Finds Work (IfA 2008b).

The excavation fully recorded all excavated and unexcavated archaeological contexts through detailed written records giving details of location, composition, shape, dimensions, relationships, finds, samples, and cross-references to other elements of the record and other relevant contexts. All contexts, and any small finds and samples were given unique numbers. Bulk finds were collected by context. Colour transparency and monochrome negative photographs at a minimum format of 35mm were also supported by a colour digital record.

A soil-sampling programme was undertaken during the course of the investigation for the identification and recovery of carbonised and waterlogged remains, vertebrate remains, molluscs and small artefactual material. Flotation samples, for the recovery of charred plant remains, charcoal, small animal bones and mineralised plant remains, were typically between

40 and 60 litres in size, although this depended upon the volume of the deposit. Entire contexts were sampled if the volume was very low.

5 Results

Watching Brief *(Fig. 2; Plate 1)*

The watching brief was undertaken upon the new access road. Most of the new access road passed through areas that had previously been quarried, consequentially only the final stretch of road that passed through an undisturbed area to the south of the Phase 1 strip area. An area of approximately 236m² measuring 23.6m in length and 15.3m in width was excavated down to the limestone bedrock. The excavation of this area would allow for the construction of a concrete crossing point to permit heavy machinery to get to the new quarry area. The limestone natural was sealed by a subsoil 0.30-0.35m in depth. This in turn was overlain by topsoil 0.25-0.35m in depth. No archaeological features or remains were encountered within the area stripped for the new access road.

Strip and record excavations

The fills of the majority of the features across the site comprised of a reddish brown or a yellowish brown colour, made up of silty clays. The variance in colour was heavily dependant upon the proximity of the paleo-channels identified on site, the closer the channel the more yellow the archaeological deposit was. The colour and texture of fills in individual features are only discussed at this stage if they varied from this norm.

The features exposed can be subdivided into various elements, comprising of groups of pits or post-holes, field systems, trackway ditches and structures. These individual elements that can be grouped into a coherent features are reported below with a selection of the discrete features arrange by date. Phasing the features and structures is at this stage difficult to do due to their discrete nature and the wide date range of the pottery, where this exists.

Roundhouse 1 *(Figs 2 and 3; Plate 2)*

A small roundhouse (RH 1) with a diameter of approximately 5.50m was located to the east of the trackway feature Ditch 5. The structure comprises of six post-holes in a circular arrangement with a second group of post-holes that form a projecting porch. The six post-holes in a circular arrangement (3218, 3220, 3222, 3223, 3225 and 3328) had depths that ranged from 0.13-0.30m, and diameters that ranged from 0.17-0.50m. All six post-holes had two fills; which in four cases were clearly defined post-pipes (3218, 3220, 3223 and 3225).

A further group of six conjoined post-holes represented the south-eastern porched entrance for the roundhouse. The post-holes were arranged in two linear formations. The western group comprised of four post-holes, (3268, 3270, 3284 and 3285) that were all closely spaced

(Fig. 3, S.1122). Each of the four post-holes contained a single fill and ranged from 0.28-0.31m in diameter and 0.29-0.38m in depth.

The eastern side of the porch structure comprises of two post-holes or pits. The northernmost pit contained at least three separate features (Fig. 3, S. 1106). Post-hole 3238 was the initial cut and was 0.20m in diameter and 0.20m in depth, and contained a single fill, 3237 which was in turn cut by pit 3236. This larger pit also contained a single fill 3235, which was dark greyish brown in colour and contained more limestone inclusions that 3237. This in turn was cut by a small pit or post-hole 3234, which contained three deposits and evidence of burning. The primary deposit (3233) was a dark brownish red colour with abundant burnt material. The secondary fill (3232) formed the bulk fill of the feature but did not show signs of having being directly burnt, but did contain flecks of charcoal. This deposit was sealed by a further shallow burnt deposit (3231). Located 0.20m to the south-east was an further deep post-hole (3258) with a broad step to the south-east. Two fills were contained within the post-hole and it was 0.78m in length 0.30m in width and 0.34m deep. The upper fill (3256) also contained flecks of charcoal and burnt material.

Finds recovered from the features forming Roundhouse 1 consisted of flint flakes from deposits 3224, 3232, 3233 and 3235. These were unable to provide a close dating range, but with the majority of the flint artefact dating being to the Mesolithic to Early Bronze Age, and with the presence of Bronze pottery on the site, a Bronze Age date seems most likely. The shape and form of the structure with conjoined post-holes forming a porched entrance way is very similar to the layout of Structures 1 and 2 excavated at Swillington Common (Roberts, Burgess and Berg 2001), both of which were dated to the Bronze Age

The porch structure also produced hazel nut fragments from feature 3234 and oak charcoal from post-holes 3282 and 3270.

Roundhouse 2 *(Figs 2 and 4; Plate 3)*

Roundhouse 2 (RH 2) was defined by a ring of post-holes that was located at the southern end of the stripped area. The outer ring of post-holes was made up of ten post-holes and two large pits. A total of seven features were located internally, with two located centrally.

The post and pit features formed a ring with a diameter of 11m. Three large pits formed the eastern side of the roundhouse, with two of the pits containing intercutting features. The single northern pit (3147) was 1m in length and 0.88m in width and 0.35m in depth, containing the remains of a post-pipe (3145). Pit 3166 (Fig. 4, S.1067) was 0.90m in diameter and 0.40m deep, it contained a single fill (3165), which was a mid orangey brown sandy clay, from which no finds were recovered. This was cut by pit 3164, which was larger but slightly shallower being 1.31m in length and 1.00m wide, and 0.25m deep. Two meters to the south two further intercutting pits were also identified (Fig. 4, S.1059). Pit 3133 was 0.23m deep and 0.75 in length and 0.85m in wide, it contained two fills, with 3131 forming a possible post-pipe. Pit 3144 was located to the north-east of pit 3136 and was 0.8m in length and