

Fig. 24. Phase 3. Late Roman period (Enclousres A, E, F and G)

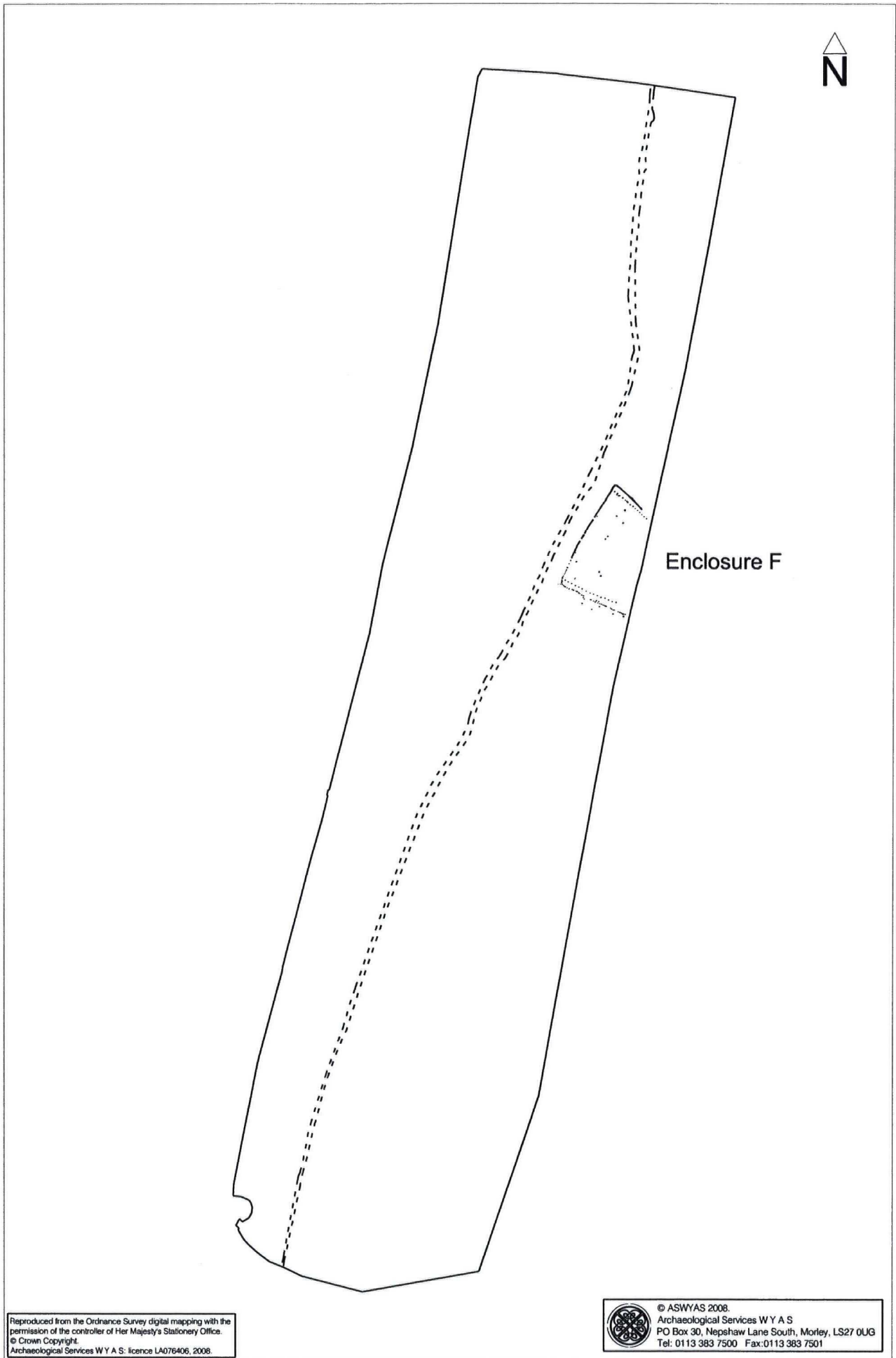


Fig. 25. Phase 4. Late or Post Roman (Enclosure H)

## **Appendix 6:**

# **Written Scheme of Investigation for Stage 1 Archaeological Mitigation at Newbridge Quarry Extension, Pickering, North Yorkshire**

## **1. Introduction**

This written scheme is prepared on behalf of Cemex UK Operations Limited and details the archaeological mitigation strategy proposed to facilitate Phase 1 of an extension to the existing Newbridge Quarry into a *c.*20 hectare area to the north-west of New Hambleton Farm, approximately 2km to the north of Pickering (central grid reference SE 799 876); an area bounded by Swainsea Lane to the west and Haugh Wood to the east, and the existing quarry to the south. The scheme has been designed following consultation with the North Yorkshire Heritage and Environment Section.

The extension site area is relatively flat and lies at between 90-105m AOD. The solid geology is Upper Calcareous Grit (Upper Oxfordian Stage) and the soils are shallow well-drained calcareous fine loams of the Elmton 2 Association.

The actual new areas of mineral extraction cover a total area of 17 hectares and are to be quarried in five separate phases. The remaining area includes a stand-off area to the north of New Hambleton Farm, in the south-east corner of the site, and a similarly sized area in the north-west corner of the site. Both of these areas may ultimately be used for stockpiling spoil and planting (see Fig. 2).

## **2. Previous Archaeological Work**

Between 1999-2006 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 a small possibility of 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.

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 and a radiocarbon date carried out on one of them, suggests that they are of Late Roman date. An assessment of some of the key finds assemblages from this work is provided as Appendix 5 to this report.

With regard to the New Hambleton extension site, archaeological work has taken the form of an initial desk-based assessment (Dodds 2005; 2008). This study drew upon cropmarks from air photographs to establish the existence of archaeological enclosures in parts of the site. In order to enhance this picture the new extraction area was the subject of a 100% geophysical magnetometer survey, which was carried out in 2007 (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, having several ditched rectilinear enclosures associated with it, especially on its eastern side, as well as a number of field boundaries. Apart from the continuation of two E-W linear ditches, and a diagonal NW-SE anomaly that may be geological, the geophysical survey has revealed few anomalies of obvious potential archaeological interest in the eastern half of the site. The geophysical survey results provided the principal data set for determining the locations of the 33 trial excavation trenches detailed in the main part of this report.

### **3. Aims and Objectives**

The aims of the mitigation work in advance of Phase 1 of the mineral extraction will be:

- to preserve by record the archaeological features and deposits to be impacted upon by the proposed 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 will be:

- 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

##### *Stripping, recording and sample excavation*

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 will be to continue the 'strip, record and excavate' methodology that was employed for the sites to the south between 1999-2006, though this will not necessarily be the method employed for subsequent phases.

The work will involve the controlled stripping of ploughsoil to the archaeologically required level. This shall be carried out under archaeological supervision. The 360 degree mechanical excavator employed will employ a back-acter equipped with a toothless ditching bucket. Stripping will take place in level spits to the top of the first archaeological horizon or undisturbed natural. The resulting surface will be inspected for archaeological remains. Where archaeological remains require clarification, the relevant area will be cleaned by hand. Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits, nor shall plant (mechanical excavator and dumpers) run upon the stripped area unless it is agreed with the supervising archaeologist.

The exposed archaeological features will be surveyed and planned at a suitable scale. The level of manual excavation shall be determined by the North Yorkshire Heritage and Environment Section. This work will be executed in a controlled and stratigraphic manner in order to meet the aims and objectives of the work. The selected features will normally be investigated employing the following sampling strategies:

- Linear features: sufficient excavation will be carried out to investigate the depth, profile and fills of a ditch or gully and to recover dating and environmental evidence from its fills. Normally this will involve a minimum of 10% sample dispersed along the length of the feature (each sample section to be not less than 1m), or a minimum of a 1m sample section if the feature is less than 10m long or if only a small part of it is exposed. With respect to trial trenches, one 1m section will be located and recorded adjacent to the trench edge. Feature intersections will always be excavated in such a way to determine a stratigraphic relationship.
- Discrete features: pits, post-holes and other discrete features will normally be half-sectioned to determine and record their form and to record the nature and sequence of their infilling before full excavation (if deemed necessary).
- A full written, drawn and photographic record of all material revealed during the course of the work shall be made. The excavation limits will be surveyed using electronic survey equipment with larger scale hand drawn plans of features at 1:20 or 1:50, as appropriate. Sections of linear and discrete features will be drawn at 1:10. All sections, plans and elevations will include spot-heights related to Ordnance Datum in metres, correct to two decimal places. Tie-in information will be undertaken during the course of the evaluation and will be fixed in relation to nearby permanent structures and roads and to the National Grid.
- All artefacts recovered will be retained and removed from the site for assessment and analysis, and where it is appropriate finds shall be recorded three dimensionally. Non-

modern artefacts will be collected from the excavated topsoil and subsoil. Finds material will be stored in controlled environments, where appropriate. All artefacts recovered will be retained, cleaned, labelled and stored as detailed in the guidelines laid out in the IFA Guidelines for Finds Work. Any conservation work will be undertaken by approved conservators working to UKIC guidelines.

- Archaeological Services WYAS shall fully record all excavated and unexcavated archaeological contexts by 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, in accordance with best practice and in accordance with methods previously approved by the North Yorkshire Heritage and Environment Section. All contexts, and any small finds and samples from them will be given unique numbers. Bulk finds will be collected by context. Colour transparency and monochrome negative photographs at a minimum format of 35mm will be supported by a colour digital record.
- A soil-sampling programme shall be undertaken during the course of the investigation for the identification and recovery of carbonised and waterlogged remains, vertebrate remains, molluscs and small artefactual material. Environmental and soil specialists will be consulted during the course of the excavation with regard to the implementation of this sampling programme. Provision should be made for the removal of soil samples from all securely stratified deposits should be sampled for retrieval and analysis of all biological remains. This comprehensive approach will allow the site's environmental potential to be accurately assessed, so that a more appropriate strategy may be implemented for subsequent mitigation works. Sampling methods will follow English Heritage guidance (English Heritage 2002).
- Flotation samples, for the recovery of charred plant remains, charcoal, small animal bones and mineralised plant remains, should be between 40 and 60 litres in size, although this may depend upon the volume of the context. Coarse sieved samples for the recovery of animal bones and other artefact/ecofact categories should be 100 litres plus. Entire contexts should be sampled if the volume is low. Whenever possible, flotation and coarse sieved (wet or dry) samples should be processed during fieldwork to allow the continuous reassessment and refinement of sampling strategies. Samples from waterlogged and anoxic deposits, which might contain plant macros and entomological evidence should normally be 20 litres in size (occasionally referred to as GBA – General Biological Analysis – samples). The English Heritage (2002) guidance and the regional science advisor will be consulted regarding sample size for other specialist samples which may be required.
- Environmental material removed from site will be stored in appropriately controlled conditions. The processing of environmental samples will be undertaken in accordance with the English Heritage (2002) guidance. In addition, the processing of environmental samples will only take place within facilities approved for such purposes by English Heritage's Regional Science Advisor.
- In the event of human remains being discovered they will be left *in situ* and covered and protected in the first instance. The removal of human remains will only take place in compliance with the Burial Act 1857 and with an exhumation licence obtained from the Ministry of Justice (MoJ) prior to the removal of the remains. Provision will be made for the specialist reporting of the remains by a recognised osteoarchaeologist.

- Provision will be made for the recovery of samples suitable for scientific dating (e.g. radiocarbon/AMS dating, archaeomagnetic and dendrochronological dating).
- All finds of gold and silver and associated objects shall be reported to HM Coroner according to the procedures relating to the Treasure Act 1997, after discussion with the Cemex UK and the North Yorkshire Heritage and Environment Section.

### 5. Archive Preparation and Deposition

The primary site archive from the Phase 1 excavations will contain all the data collected during the on-site investigation, including records, finds and environmental samples. It will be quantified, ordered, indexed and internally consistent. Adequate resources will be provided during fieldwork to ensure that all records are checked and internally consistent. Archive consolidation will be undertaken immediately following the conclusion of fieldwork:

- the site archive will be checked, cross-referenced and indexed as necessary;
- all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of the recipient museum;
- all retained finds will be assessed and recorded using pro forma recording sheets, by suitably qualified and experienced staff;
- a selection of the environmental samples will be processed by suitably experienced and qualified staff and recorded using pro forma recording sheets, to identify the presence or absence of environmental remains.

The archive will be assembled in accordance with the specification set out in English Heritage's "*Management of Archaeological Projects 2*" (English Heritage, 1991; Appendix 3). In addition to the site records, artefacts, ecofacts and other sample residues, the archive shall contain:

- site matrices where appropriate;
- a summary report synthesising the context record;
- a summary of the artefact record;
- a summary of the environment record.

Provision will be made for the eventual deposition of the archive, artefacts and environmental material in the appropriate recipient museum, subject to the permission of the relevant landowner. The museum curator will be advised of the timetable of the proposed investigation prior to evaluation commencing and Archaeological Services WYAS will adhere to any reasonable requirements the museum may have regarding conservation and storage of the excavated material and the resulting archive. The archive will be prepared in accordance with the guidelines published in "*Guidelines for the preparation of Excavation Archives for long-term storage*" (United Kingdom Institute for Conservation, 1990) and "*Standards in the Museum care of archaeological collections*" (Museums and Galleries Commission, 1994). Provision will be made for the stable storage of paper records and their long-term storage on

a suitable medium. The timetable for deposition will be agreed subject to the further mitigation requirements beyond the Phase 1 stage of the work.

The archiving of any digital data arising from the project should be undertaken in a manner consistent with professional standards and guidance (Richards & Robinson 2000). The archaeological contractor should liaise with an appropriate digital archive repository to establish their detailed requirements and discuss the transfer of the digital archive.

The archaeological contractor should also liaise with the HER Officer, North Yorkshire County Council, to make arrangements for digital information arising from the project to be submitted to the North Yorkshire Historic Environment Record for HER enhancement purposes. The North Yorkshire Historic Environment Record is not an appropriate repository for digital archives arising from projects.

## **6. Report Preparation, Contents and Distribution**

### *Interim Assessment Report*

Upon completion of the Phase 1 stage of the work an interim report will be prepared. This will include assessments of the significance and potential for further analysis of the artefacts, ecofacts and stratigraphic information recovered. This interim assessment report shall be prepared in accordance with English Heritage's "*Management of Research Projects in the Historic Environment*" or MoRPHE (English Heritage, 2008; PPN 3, Archaeological Excavation, 4.3 and 4.4).

An assessment report will include the following:

- a non-technical summary of the results of the work;
- a summary of the project's background;
- the site location;
- an account of the method;
- the results of the excavation, including phasing and interpretation of the site sequence and the assessment of artefacts and ecofacts, if recovered, and
- an appendix catalogue of the archaeological material recovered during the excavation.

The assessment report will be supported by an overall plan of the site, accurately identifying the location of trenches. Individual trench plans will show the location of archaeological features within each trench and supporting section drawings and photographs will illustrate the form and depth of the features and the nature of their fill.

The assessment report will outline the archaeological significance of the deposits identified, and provide an interpretation of the results in the context of what has been found in the region, but with particular regard to what was found in preceding phases of work on the quarry site.



The interim results of the Phase 1 excavations will be used to review the need for any changes in approach needed for the Phase 2 and subsequent phases of work and to inform the production of the Phase 2 Written Scheme of Investigation, which will be prepared in consultation with the North Yorkshire Heritage and Environment Section and the English Heritage Regional Science Advisor.

The interim assessment report and Phase 2 WSI will be produced to a timetable agreed with Cemex UK and the North Yorkshire Heritage and Environment Section. Copies of the reports will be supplied electronically to the North Yorkshire Historic Environment Record and to the English Heritage Regional Science Advisor.

The results of Phase 1 will be made accessible to the wider research community by the submission of a summary report to appropriate journals and newsletters, and the North Yorkshire Historic Environment Record (NYHER), and an on line summary made to OASIS (subject to the agreement of Cemex UK). It should be noted that under the Environmental Information Regulations (2005) information submitted to NYHER becomes publicly accessible except where disclosure might lead to environmental damage. Any request for the information to remain confidential as sensitive information will be subject to a public interest test.

## **7. Analysis, Publication and Dissemination**

Upon completion of archaeological work associated with all of the extraction phases at the northern extension site a programme of final analysis, based upon the previous assessments, will be produced. Effectively this will accompany the Phase 5 interim assessment report as the WSI for the final post-excavation phase of the work.

The results of the work will be made accessible to the wider research community and the public through the publication of results from the whole site, either as a stand alone monograph, or as a journal article, as appropriate. The inclusion with the results of the 1999-2006 excavation work in the publication of those from the extension area remains to be decided, but it is possible that these could form separate publications.

## **8. Public Engagement**

Opportunities for public engagement should be considered at all stages of the work, in so far as this proves practical with respect to Health and Safety and does not compromise the proper execution or time-scale of work.

## **9. Copyright and Ownership**

Unless aspects of copyright and ownership are specifically agreed between the Archaeological Services WYAS and Cemex UK, copyright of the reports will reside with Archaeological Services WYAS, who shall extend this to Cemex UK for the purposes of their Mineral

Planning requirements. The archive will be owned by Cemex UK until which point transfer is agreed with the designated Museum, unless directed otherwise.

Copyright in the documentation prepared by the archaeological contractor should be the subject of additional licences in favour of North Yorkshire County Council to use such documentation for their statutory functions, and to provide copies to third parties as an incidental to such functions.

### **10. Health and Safety**

Archaeological Services staff will abide by the Health and safety regime of Newbridge Quarry. Notwithstanding, Archaeological Services WYAS have their own Health and Safety policies compiled using national guidelines which conform to all relevant Health and Safety legislation.

In addition, Archaeological Services WYAS will undertake a 'Risk Assessment' prior to on-site work commencing which sets project specific risk mitigation requirements to which all members of staff must adhere to. Archaeological Services WYAS always ensures that Health and Safety takes priority over archaeological matters.

### **11. Insurance**

Archaeological Services WYAS has effected appropriate insurance cover with Zurich Municipal Insurance, Park House, 57-59 Well Street, Bradford, via Wakefield Metropolitan District Council. Any further enquiries should be directed to The Chief Financial Officer, Insurance Section, Wakefield MDC, PO Box 55, Newton Bar, Wakefield, WF1 2TT.

### **12. Monitoring**

The fieldwork will be monitored by the North Yorkshire Heritage and Environment Section and English Heritage's Regional Science Advisor, who will be afforded the opportunity to inspect the site and the records during any stage of the work.

## Bibliography

- Allason-Jones, L., 1996, *Roman Jet in the Yorkshire Museum*, York
- ASYWAS, 2007, 'Archaeological Recording Manual', unpubl.
- Bayley, J. and Butcher, S. 2004, *Roman Brooches in Britain*, Rep. Res. Comm. soc. Antiq. London 68, London
- Bayley, J., Dungworth, D. and Paynter, S., 2001, *Archaeometallurgy*, English Heritage Centre for Archaeology Guidelines, London
- Bevan, B., 1999, 'Land-Life-Death-Regeneration: interpreting a middle Iron Age landscape in eastern Yorkshire', in Bevan, B. (ed.), *Northern Exposure: Interpretive Devolution and the Iron Ages in Britain*, Leicester Archaeol. Monogr. 4, 123-47
- Bradley, R., 2007, *The Prehistory of Britain and Ireland*
- Branigan, K., 1984, 'North-East England in the First Century', in Wilson, P.R., Jones, R.F.J. and Evans, D.M. (eds), *Settlement and Society in the Roman North*, 27-33
- Buckland, P.C., Runnacles, R.B. and Sumpter, A.B. 1990, The Petrology of the Iron Age Pottery, in Wrathmell and Nicholson (eds), 128-34
- Cameron, R., 2003, *Keys for the identification of Land snails in the British Isles*, Field Studies Council Occasional Publication 79, Shrewsbury, FSC Publications
- Cameron, R.A.D. and Redfern, M., 1976, British Land Snails, *Synopses of the British Fauna (New Series)* 6, London, Academic Press
- Challis, A.J. and Harding, D.W., 1975, *Later prehistory from the Trent to the Tyne*, British Archaeological Reports 20
- Cool, H., 2007, 'Metal and glass', 171-83 in Catchpole, T. 'Excavations at the Sewage Treatment Works, Dymock, Gloucestershire, 1995', *Trans. Bristol and Gloucestershire Archaeological Society* 125, 137-219
- Cunliffe, B., 2005, *Iron Age Communities in Britain* (4th ed.)
- Corder, P., 1928, *The Roman Pottery at Crambeck, Castle Howard*, Roman Malton and District Report 1
- Corder, P. 1930a, *The Roman Pottery at Throlam, Spalding-on-the-Moor, East Yorkshire*, Roman Malton and District Report No. 3, Hull
- Corder, P. 1937, 'A pair of fourth century Romano-British kilns near Crambeck', *Antiq. J.* 17, 392-413
- Corder, P., 1930b, *The defences of the Roman Fort at Malton*, Roman Malton and District Report 2
- Corder, P. and Kirk, J. L., 1932, *A Roman Villa at Langton, near Malton, East Yorkshire* Roman Malton and District Report No. 4, Yorkshire Archaeological Society
- Darling, M.J., 2004, 'Guidelines for the archiving of Roman pottery', *Journal of Roman Pottery Studies* Vol 11, 67-75.
- Dent, J.S., 1983, 'The Impact of Roman Rule on the Native Society in the Territory of the Parisi', *Britannia* 14, 35-44

- Dent, J., 1999, 'The Yorkshire Wolds in late prehistory and the emergence of an Iron Age society', in Halkon, P. (ed.), *Further Light on the Parisi*, 4-11
- Didsbury, P., 2004, 'The Iron Age and Roman pottery' in: P.A. Rahtz and L. Watts, *The north manor and north-west enclosure Wharram: A study of settlement on the Yorkshire Wolds IX*, York University Archaeological Publications 11, 139-183.
- Dobney, K., Hall, A. R., Kenward, H. K. and Milles, A., 1992, 'A working classification of sample types for environmental archaeology', *Circaea, the Journal of the Association for Environmental Archaeology* 9 (for 1991), 24-6
- Dodds, J., 2005, 'Newbridge Quarry, Pickering: Desk-based Assessment', ASWYAS Rep. 1333
- Ellis, A.E., 1969, *British Snails: A guide to the non-marine gastropoda of Great Britain and Ireland – Pleistocene to recent*, Oxford, Oxford University Press
- English Heritage, 2002, *Environmental Archaeology : A guide to the theory and practice of methods, from sampling and recovery to post-excavation* [2002/01].  
<http://www.helm.org.uk/upload/pdf/Environmental-Archaeology.pdf>
- English Heritage, 2006, *Management of Research Projects in the Historic Environment: the MoRPHE Project Managers Guide*
- Evans, J. 1999, 'The Hawling Road Ceramic series', in Halkon and Millett 1999, 200-218
- Evans, J. 2002, 'Pottery from the CFA excavations', in P.R. Wilson (ed.) *Cataractonium: Roman Catterick and its hinterland. Excavations and research, 1958-1997*, CBA Research Report 128
- Evans, J.E. et al. 2005, 'Later Iron Age and Roman Pottery', in I. Roberts *Ferrybridge Henge: the Ritual Landscape*, 130-143. Yorkshire Archaeol. 10, Archaeological Services WYAS
- Evans, J. ,2006, 'The Roman Pottery', in Millett M., 2006, 126-201
- Evans, J.E., Hartley, K.H and Mills, P., forthcoming, 'The mortaria', in H.E.M. Cool and D.J.P. Mason (eds), *Roman Piercebridge: Excavations by D.W. Harding and Peter Scott 1969-1981*. Monograph of the Architectural and Archaeological Society of Durham and Northumberland
- Fenton-Thomas, C., 2003, *Late Prehistoric and Early Historic Landscapes on the Yorkshire Chalk*, Br. Archaeol. Repts, Br. Ser. 350
- Freestone, I.C. and Middleton, A.P., 1991, 'Report on the petrology of pottery from Iron Age Cemeteries at Rudston and Burton Fleming', in I.M. Stead (ed.), *Iron Age cemeteries in East Yorkshire: Excavations at Burton Fleming, Rudston, Garton-on-the-Wold and Kirkburn*, Engl. Heritage Archaeol. Rep. 22, 162-64
- French, D. H., 1971, 'An Experiment in Water Sieving', *Anatolian Studies* 21 59-64
- Giles, M., 2007, 'Good fences make good neighbours? Exploring the ladder enclosures of Late Iron Age East Yorkshire', in Haselgrove, C. and Moore, T. (eds), *The Later Iron Age in Britain and Beyond*, 235-49
- Halkon, P. and Millett, M. 1999, *Rural Settlement and Industry: studies in the Iron Age and Roman Archaeology of Lowland East Yorkshire*, Yorkshire Archaeological Report no. 4. Yorkshire Archaeological Society, Roman Antiquities Section and East Riding Archaeological Society

- Haselgrove, C., 1984, 'The Later Pre-Roman Iron Age between the Humber and the Tyne', in Wilson *et al.* (eds), 6-26
- Hayes, R.H. and Whitley, E., 1950, *The Roman Pottery at Norton, East Yorkshire*, Roman Malton and District report No. 7 Oxford.
- Hingley, R., 1989, *Rural Settlement in Roman Britain*
- Institute of Field Archaeologists, 2001, *Standard and Guidance for archaeological field evaluation*
- James, S. and Millett, M., (eds), 2001, *Britons and Romans – Advancing an Archaeological Agenda*
- Kerney, M., 1999, *Atlas of the land and freshwater molluscs of Britain and Ireland*. Colchester, Harley Books
- Kerney, M.P. and Cameron, R.A.D., 1979, *A field guide to the land snails of Britain and North-West Europe*, Glasgow, Collins
- Knight, D, 1998, 'Guidelines for the Recording of later Prehistoric Pottery in the East Midlands', Trent & Peak Archaeological Trust internal document.
- Loveluck, C., 2003, 'The archaeology of post-Roman Yorkshire, AD 400-700: overview and future directions for research', in Manby *et al.* (eds), 151-170
- Mackey, R., 2003, 'The Iron Age in East Yorkshire: A Summary of Current Knowledge and Recommendations for Future Research', in Manby *et al.* (eds), 117-21
- Manby, T.G., King, A. and Vyner, B., 2003, 'The Neolithic and Bronze ages: a time of early agriculture', in Manby *et al.* (eds), 35-113
- Manby, T.G., Moorhouse, S. and Ottaway, P. (eds), 2003, *The Archaeology of Yorkshire. An assessment at the beginning of the 21st century*
- McKinley, J.I., 1993, 'Bone fragment size and weights of bone from modern British cremations and the implications for the interpretation of archaeological cremations', *International Journal of Osteoarchaeology* 3: 283-287
- Millett, M. 2006, *Shiptonthorpe, East Yorkshire: archaeological studies of a Romano-British roadside settlement*, Yorkshire Archaeol. Soc. Report 5.
- Monaghan, J., 1997, *Roman pottery from York. The pottery*, Fasc. 8, in P.V. Addyman (ed.) *The Archaeology of York*. Vol. 16. York Archaeological Trust/Council for British Archaeology
- Ottaway, P., 2003, 'Roman Yorkshire: a rapid resource assessment', in Manby *et al.* (eds), 125-150
- Pollington, M., 2008, 'Newbridge Quarry, Pickering, North Yorkshire: Archaeological Desk-based Assessment', ASWYAS Rep. 1900 (Revision of Dodds 2005)
- Powlesland, D., 1986, 'Excavations at Heslerton, North Yorkshire 1978-82', *Archaeological Journal* 143, 53-173
- Powlesland, D., 2003, 'The Heslerton Parish Project: 20 Years of Archaeological Research in the vale of Pickering', in Manby *et al.* (eds), 275-91
- Ramm, H., 1978, *The Parisi*, Peoples of Roman Britain

- Richards, J. and Robinson, J. (eds), 2000, *Digital Archive From Excavation and Fieldwork A Guide to Good Practice* (Archaeology Data Service)
- Rigby, V., 1976, 'Coarse pottery', in I.M. Stead, *Excavations at Winterton Roman Villa and Other Roman Sites in North Lincolnshire*, Department of the Environment Archaeol. Rep. 9, London
- Rigby, V., 1980, 'Coarse Pottery', in I.M. Stead, *Rudston Roman Villa*, Yorkshire Archaeol. Soc, 45-94
- Rigby, V., 1986, 'The Later Prehistoric and Roman Pottery', in Powlesland 1986, 141-156
- Rigby, V., 2004, *Pots in Pits: the British Museum East Yorkshire Settlement Project 1988-1992*, East Riding Archaeologist Vol. 11
- Runnacles, R.B and Buckland, P.C., 1990, 'The Iron Age Pottery', in I. Roberts (ed.), *The Iron Age Settlement at Ledston*, Archaeological Services WYAS Publications 7, 20-21.
- Schweingruber, F. H., 1990, *Anatomy of European Woods*, Paul Haupt Publishers Berne and Stuttgart
- Signorelli, L. and Roberts, I., 2006, 'Newbridge Quarry, Newbridge, Pickering: Interim Report on Excavations', ASWYAS Rep. 1627
- Silver, I. A., 1969, 'The ageing of domestic animals' in D. Brothwell and E. Higgs (eds), *Science in Archaeology*, 283-302
- Stace, C., 1997, *New Flora of the British Isles*, 2<sup>nd</sup> Edition Cambridge University Press.
- Stallibrass, S., 1995, 'Review of the vertebrate remains' in Huntley, J. P. and Stallibrass, S., 1995. *Plant and Vertebrate Remains from Archaeological Sites in Northern England: Date Reviews and Future Directions*, 84-198
- Stoetz, C., 1997, *Ancient Landscapes of the Yorkshire Wolds*
- Swan, V.G, 2002, 'The Roman pottery of Yorkshire in its wider historical context', in P. Wilson and J. Price (eds), *Aspects of industry in Roman Yorkshire and the North*, 35-79, Oxbow Oxford
- Taylor, J., 2001, 'Rural Society in Roman Britain', in James and Millett (eds), 46-59
- Tomber, R. and Dore, J., 1998, *The National Roman Fabric Reference Collection. A Handbook*, MoLAS Monograph 2. London
- Toynbee, J. M. C., 1973, *Animals in Roman Life and Art*
- van der Veen, M. and Fieller, N., 1982, 'Sampling seeds', *Journal of Archaeological Science* 9, 287-298
- Vince, A., 2007, 'Characterisation Studies of Iron Age and Mediaeval Pottery', in A165 Reighton Bypass, Reighton, North Yorkshire: Excavation, Evaluation and Watching Brief, ASWYAS Rep. 1720, 99-111
- Wardle, P., 1991, *Earlier Prehistoric Pottery Production and Ceramic Petrology in Britain*, Brit. Archaeol. Rep. 225
- Watts, L., Jones, A. and Rahtz, P., 2003, 'Roman Villa Site at Blansby Park, Pickering: Excavations at the Park Gate Roman Site in 2000', *Yorkshire Archaeological Journal* 75, 15-56

- Webb, A., 2008, 'Newbridge Quarry, Newbridge, Pickering: Geophysical Survey', ASWYAS Rep. 1770
- Wrathmell, S and Nicholson, A., 1990, *Dalton Parlours Iron Age Settlement and Roman Villa*, Yorkshire Archaeology 3, West Yorkshire Archaeology Service
- Zohary, D. and Hopf, M., 2000, *Domestication of Plants in the Old World*, 3<sup>rd</sup> Edition Oxford University Press