Moto Service Station, A1(M), Junction 45 Wetherby, North Yorkshire



Archaeological Evaluation



Oxford Archaeology North

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SUMMARY

Oxford Archaeology North (OA North) was commissioned by CgMs Consulting to undertake a programme of evaluation trial trenching on behalf of Moto Hospitality Ltd, as part of the planning condition attached to the establishment of new services on the A1(M) at Junction 45 (NGR SE 415 503, Fig 1, Planning Application no. Ref. 6.136.134.F.OUT). Five trenches were excavated between the 5th to the 7th of March 2007. They were located using differentiated GPS and targeted on anomalies identified during a geophysical survey undertaken in January 2007 (Figs 2-4; ASUD 2007). It was hoped that various linear and magnetic dipolar features identified could be investigated to assess their archaeological potential.

Three boundary ditches (105, 108 and 110) were identified in Trenches 2-4, and evidence of extensive bioturbation, namely root action, was observed in Trench 5. Analysis of the Ordnance Survey First Edition map of the site (1850), combined with the late date of the finds recovered from two of the ditches (105 and 108), suggests that the ditches formed nineteenth century field boundaries; these were not present on earlier maps consulted eg Jefferey 1771. The root action observed in Trench 5 seems to be the result of a small wood recorded on the Ordnance Survey First Edition map (1850). No evidence of earlier human activity was identified during the investigative trenching, or anything to suggest that the land has been used for purposes other than farming.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Moto Hospitality Ltd for commissioning the project. Thanks are also due to CgMs Consulting, especially to Sally Dicks and Paul Chadwick for all their help, including the production of the Written Scheme of Investigation.

The evaluation trenching was undertaken by Kelly Clapperton, with assistance from Caroline Bulcock. The drawings were produced by Christina Robinson. The project was managed by Fraser Brown, who also edited the report with Alan Lupton.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Planning permission was granted to Moto Hospitality Ltd to build services on land to the north-east of Junction 46 of the A1(M), Wetherby, North Yorkshire (NGR SE 415 503, Fig 1), on the condition that a programme of archaeological works was implemented (Ref. 6.136.134.F.OUT). CgMs Consulting prepared an Archaeological Written Scheme of Investigation (WSI; Chadwick and Dicks 2007; *Appendix 1*) setting out a programme of evaluation trenches, targeting anomalies identified during a geophysical survey carried out in January 2007 (ASUD 2007). The geophysical survey identified possible ridge and furrow, former field ditches and dipolar magnetic anomalies (Chadwick and Dicks 2007, Fig 2).
- 1.1.2 Oxford Archaeology North (OA North) was subsequently commissioned to carry out the evaluation trenching, which took place from the 5th to the 7th of February 2007. The following report sets out the results of the investigation.

1.2 TOPOGRAPHY AND GEOLOGY

- 1.2.1 The site is located within an area of flat land approximately 500m north-east of Wetherby, around 25m above Ordnance Datum. It drains into *Broad Wath*, which runs along the south-eastern boundary before crossing the centre of the site (Chadwick and Dicks 2007, Fig 1).
- 1.2.2 The site is situated upon a limestone escarpment that runs from Bedale in the north, to Derbyshire in the south, and creates a natural boundary between the Yorkshire Dales to the west and the lowland vales to the east. Several rivers have carved gorges through the limestone, including the Nidd, which flows through Knaresborough (Countryside Commission 1998).
- 1.2.3 The escarpment comprises dolomite and dolomitic Magnesian Limestones, which are overlain by red mudstones with gypsum. To the north of Wetherby, and around the location of the site, the mudstones are overlain by glacial till (*ibid*). The overlying soils comprise of typical argillic brown earths (Ordnance Survey 1983).

1.3 ARCHAEOLOGICAL BACKGROUND

- 1.3.1 The WSI provides a detailed archaeological background (*Appendix 1*), and it is not the intention to repeat it here; a brief archaeological and historical background is provided to put the results of the evaluation trenching into context.
- 1.3.2 A modest number of sites dating from the prehistoric to post-medieval periods have been identified within a 1km radius of the development site, including a cropmark of a possible trackway immediately to the south, under the A1(M)

- Junction 45. Three further cropmarks have been identified through aerial photography; two undated enclosures and a ring ditch. The latter lies approximately 700m to the south-east of the site, and may be the remains of a ploughed out round barrow (Chadwick and Dicks 2007).
- 1.3.3 Previous archaeological investigations for the construction of the new A1(M), bounding the site to the west, identified an east/west aligned ditch 100m to the south of the site, which was thought to mark the boundary between West and North Yorkshire. No dating evidence was recovered. Approximately 15m to the west of the site was the supposed location of a mill identified in the Tithe Award of 1847. No evidence of the mill was identified during a watching brief of the area. A thirty metre trench excavated 60m to the west of the site identified two north-west/south-east linear features; without dating evidence they were interpreted as boundary ditches. Other work in the area only identified modern land drains and field ditches (Chadwick and Dicks 2007).
- 1.3.4 Previous investigations suggest that the land has been drained to facilitate agriculture from at least the post-medieval period. During the nineteenth century much of the open land was enclosed into small rectangular fields, which were subsequently enlarged in the twentieth century, by the removal of various boundaries, and attempts to drain the heavy boulder clay continued (Chadwick and Dicks 2007).

2. AIMS AND METHODOLOGY

2.1 AIMS

2.1.1 The aim of the archaeological evaluation trenching was to establish the location, extent, date, character, condition, significance and quality of the anomalies identified during the geophysical survey. All features identified were to be investigated for their ecofactual and environmental potential, and to clarify the impact of medieval, post-medieval and later ploughing on these deposits. All archaeological investigations were carried out within the parameters defined by PPG16 (Department of the Environment 1990).

2.2 FIELDWORK

- 2.2.1 Five trenches of varying lengths, from 25m to 28m, were excavated by a JCB fitted with a 1.8m toothless ditching bucket, down to the first archaeological horizon or natural, under the constant observation of an archaeologist. The trenches had been previously located by differentiated GPS to target anomalies identified during the geophysical survey (Figs 3 and 4). Trenches 1 and 2 were located in the southern field to examine a series of soil filled features, Trench 3 was placed in the northern field to investigate linear anomalies that may reflect ridge and furrow, whilst Trenches 4 and 5, also in the northern field, were sited to explore the scatter of magnetic dipolar anomalies.
- 2.2.2 All trenches and deposits were hand cleaned and recorded using *pro forma* sheets provided by OA North. All archaeological features identified were cleaned, hand excavated and recorded, with appropriate supplementary drawings. A photographic archive was produced, including colour slides and monochrome prints on 35mm film, digital photographs were also taken for presentation purposes. These were also recorded on *pro forma* sheets.

2.3 FINDS

2.3.1 All finds were exposed, lifted, cleaned and bagged in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition). All identified finds and artefacts were retained from all material classes; these were hand collected from stratified deposits for processing and assessment.

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the WSI (*Appendix 1*), and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The archive will be deposited in the County Record Office in Northallerton and a copy of the report will be sent to the Site and Monuments Record Office in Northallerton, on completion of the project.

3. RESULTS

3.1 FIELDWORK

- 3.1.1 The following section summarises the results of the evaluation trenching. Detailed descriptions of trenches and contexts can be found in *Appendices* 2 and 3. Plans of the trench locations and archaeological features in relation to the geophysical survey and Ordnance Survey First Edition map (1850) are given in Figures 3 and 4.
- 3.1.2 *Trench 1* (Fig 3): was aligned east/west and excavated to a maximum depth of 0.4m. It comprised a mid-brown clay-silt topsoil *106*, and orange-grey boulder clay natural *112*. Two field drains were observed at 1.7m and 15m from the eastern end. No features of archaeological significance were identified.
- 3.1.3 **Trench 2** (Fig 3): was aligned east-west and excavated to a maximum depth of 0.38m. It comprised a topsoil **106**, containing post-medieval pottery fragments, and light orange-grey sandy-clay natural **107**. A shallow ditch **108** (Plate 1) was observed and investigated towards the western end of the trench. It was orientated north-west/south-east, and measured 0.56m in width and 0.21m in depth. The ditch had been truncated on its western side by an animal burrow, traversing the feature from east to west. Residual fragments of glass, clay pipe and post-medieval ceramic were recovered from this area, but cannot be used to confidentially date the feature. Three modern ceramic field drains were observed at 2.7m, 4.9m and 6m from the east end of the trench.
- 3.1.4 **Trench 3** (Fig 4): was aligned north/south, and excavated to an average depth of 0.4m. It comprised dark-brown clay-silt topsoil **100**, and dark yellow sandy-clay natural **101**. A ditch **110** (Plate 2) was located at approximately 5m from the northern end of the trench. It was orientated north-west/south-east and contained a dark-grey silty-sand fill **111**. No finds were identified. Ditch **110** had been cut on its the southern side by a modern ceramic field drain, so its complete form remains unknown. A second field drain was observed 17.2m, to the south of the first.
- 3.1.5 **Trench 4** (Fig 4): was aligned north/south, and excavated to a maximum depth of 0.46m. It comprised topsoil **100** and natural **101**. A shallow ditch **105** (Plate 3) was observed and investigated 6m from the southern end. Orientated northeast/south-west and measuring 0.9m in width, it produced several fragments of glass, pottery and iron objects. A number of ceramic roof tiles, concentrated in the southern half of the trench, were recovered from the topsoil **100**.
- 3.1.6 **Trench 5** (Fig 4): was aligned east/west and excavated to a depth of 0.4m. It comprised topsoil **100** and natural **101**. The majority of the trench had been disturbed by extensive root action. A small possible posthole **102** was identified to the western end, measuring 0.17m in diameter and 0.05m in depth. No finds were recovered. A large dump of modern material was located immediately to the east of **102**, and two land drains were observed at the eastern end.

4. DISCUSSION

4.1 DISCUSSION

- 4.1.1 As with previous archaeological investigations in the immediate vicinity, summarised in *Section 1.3*, the trenches excavated across the proposed development site produced information on the nineteenth century land use of the local area. The geophysical survey carried out in January 2007 (ASUD 2007) identified various linear anomalies, the smaller of which can now be confirmed as modern ceramic land drains, installed during the twentieth century. The larger anomalies, were probably earlier nineteenth century field boundaries (ditches *108*, *110*, and *105*); these were identified in Trenches 2-4.
- 4.1.2 The boundary ditches not only tie in with the geophysical survey (Figs 3 and 4), but the Ordnance Survey First Edition map (1850), identified long narrow fields many of which corresponding to the ditches detected in the trenches (Figs 3 and 4). Jefferey's earlier map of the area (1771) does not depict any land boundaries across the site, indicating these were all established in the nineteenth century. It is likely that the possible posthole *102* investigated in Trench 5 was the result of bioturbation rather than human action. The Ordnance Survey First Edition (1850; Figs 3 and 4) suggests that Trenches 4 and 5 were located within a small wood to the north of the development site, explaining the extensive root action identified in Trench 5.
- 4.1.3 The information gathered from the evaluation trenching confirms that nineteenth century land use identified in *Section 1.3* continues within the proposed development site, and corroborates the Ordnance Survey First Edition map (1850). No earlier activity was recorded on the proposed development site, suggesting that the land has been used solely for agriculture.
- 4.1.4 Any future development on the site that penetrates below ground level may potentially impact on buried archaeological remains. However, as the evidence suggests these are likely to be twentieth century field drains and nineteenth century field boundary ditches, any such impact is unlikely to be considered significant.

5. BIBLIOGRAPHY

5.1 PRIMARY SOURCES

1771 Jefferey's Map of Yorkshire, Sheet XIII

1850 Ordnance Survey First edition Yorkshire

1983 Ordnance Survey Soils of Northern England

5.2 SECONDARY SOURCES

ASUD 2007 A1(M) junction 46, Wetherby, North Yorkshire. Geophysical surveys, Unpubl Rep 1612

Chadwick P and Dicks S, 2007 Archaeological Written Scheme of Investigation: proposed Moto Service Station, Wetherby, North Yorkshire, unpub client report

Countryside Commission, 1998 Countryside Character Volume 3: Yorkshire and The Humber, Cheltenham

Department of the Environment (DoE), 1990 Planning Policy Guidance Note 16, London

English Heritage, 1991 Management of Archaeological Projects, 2nd edn, London

UKIC, 1998 First Aid for Finds, London (new edition)

6. ILLUSTRATIONS

6.1 FIGURES

Figure 1	Site location
Figure 2	Trench location plan, showing areas of geophysical survey and 1850 Ordnance Survey First Edition map
Figure 3	Trenches 1-2 showing features, geophysical anomalies and 1850 Ordnance Survey First Edition map
Figure 4	Trenches 3-5 showing features, geophysical anomalies and 1850 Ordnance Survey First Edition map

6.2 PLATES

Plate 1	Boundary ditch 108, Trench 2, looking to the south-west		
Plate 2	North-east facing section through boundary ditch 110, note the modern ceramic drain cutting the ditch, Trench 3, looking to the south-west		
Plate 3	North-east facing section through boundary ditch <i>105</i> , Trench 4, looking to the south-west		

APPENDIX 1 WRITTEN SCHEME OF INVESTIGATION

Archaeological Written Scheme of Investigation

Proposed Moto Service Station, Wetherby, North
Yorkshire

Paul Chadwick BA FSA MIFA & Sally Dicks BA AIFA

February 2007

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8.0	Health and Safety Considerations
9.0	Other Matters

Appendix 1: Geophysical Survey Report (ASUD 2007)

[Not reproduced in this report]

LIST OF ILLUSTRATIONS

Fig. 1 Site location

Fig. 2 Trench locations overlain on geophysical survey results

[Not reproduced in this report]

1.0 INTRODUCTION AND SCOPE OF DOCUMENT

- 1.1 This Archaeological Written Scheme of investigation has been prepared by Paul Chadwick and Sally Dicks of CgMs Consulting on behalf of Moto Hospitality Ltd.
- 1.2 It presents a proposal for a programme of evaluation trenching on land northeast of Junction 46 of the A1 (M), Wetherby, North Yorkshire. The site is centred at National Grid Reference SE 415 503.
- Outline planning permission (Ref. 6.136.134.F.OUT) was granted September 2005 for the construction of a Motorway Service Area. Condition No. 35 states:

No development shall take place on the application site until the Applicants, or their agents or successors in title, have secured the implementation of a programme of archaeological works in accordance with the written scheme of investigation that has been submitted to, and approved in writing by, the Local Planning Authority.

- 1.4 During initial consultations with Mr Neil Campling, the North Yorkshire County Archaeological Officer and Advisor to the local planning authority, it was advised that a programme of geophysical survey followed by a programme of targeted evaluation trenching was required on the site.
- 1.5 Accordingly, a geophysical survey was undertaken during January 2007. The results of the survey are reproduced in full at Appendix 1. The survey identified a series of parallel linear anomalies which may represent evidence of ridge and furrow cultivation, a series of soil filled features likely to represent former field ditches and a large scatter of dipolar magnetic anomalies of probable near-surface ferrous and/or fired debris.
- 1.6 Therefore, this document presents a WSI for a trench-based field evaluation targeted on the anomalies identified by the geophysical survey. The document will form the basis of a tender exercise amongst appropriate specialist archaeological contractors. Once appointed, the

archaeological contractor will prepare a Method Statement and Risk Assessment for the project.

2.0 GEOLOGICAL AND TOPOGRAPHIC BACKGROUND

2.1 Geology

- 2.1.1 British Geological Survey Sheet 70 (Leeds: 2003) shows that the site is underlain by glacial deposits (Devensian Glaciation) overlying Magnesium Limestone.
- 2.1.2 The results of recent archaeological work in advance of and during the construction of the A1 (M), indicates that a ploughsoil has developed over a heavy boulder Clay (Glacial Till).

2.2 **Topography**

- 2.2.1 The site is located within an area of flat land some 500m northeast of the outskirts of Wetherby. The site is generally level at c.25m Above Ordnance Datum (AOD).
- 2.2.2 The site drains into *Broad Wath* which runs along the south-eastern boundary, turns west and crosses the centre of the site.

3.0 ARCHAEOLOGICAL BACKGROUND

- 3.1.1 Examination of data in the North Yorkshire Sites and Monuments Record (SMR), and published sources indicates that there are a modest number of sites and finds dated to the prehistoric, Medieval, Post-Medieval and more recent periods within a 1km radius of the site. However, the SMR records a cropmark identified from aerial photographic survey of a possible trackway immediately south of the site under the A1 (M) junction (HER MNY 18234).
- 3.1.2 Within a 1km radius of the site the SMR records three cropmarks identified by aerial photographic survey, including two undated enclosures (SMR MNY 18235 at SE 4164 5080 and SMR MNY 17003 at SE 4164 5080) and a ring ditch (SMR MNY 17001). The ring-ditch which lies some 700m south-east of the study site, may be the remains of a ploughed out round barrow.
- 3.1.3 Archaeological investigations and monitoring took place at numerous locations along the route of the proposed A1 (M) which bounds the site to the west. Site WWA (SE 4136 4893) lay some 100m south of the site. It was located to investigate an earthwork thought to mark the County Boundary between West and North Yorkshire. A watching brief recorded the remains of an east-west aligned ditch however no evidence of an associated bank was identified. Site WWX (SE 4135 5025) lay to the east of the Broad Wath watercourse some 15m west of the site. The area is thought to have been the site of the mill mentioned in the Kirk Deighton Tithe Award for 1847. A watching brief was undertaken over an area 38m by 36m in extent. No evidence of the mill was identified. However, a number of modern features relating to agricultural activity were recorded. Site WW2 (SE 4131 5009) lay some 60m west of the site. A single 30m trench was excavated at the site. Two north-west/south-east aligned linear features were recorded in the trench. These features, which contained no dateable evidence, were interpreted as field boundaries or drainage ditches. Site WW3 (SE 4144 5052) lay to the north of Broad Wath some 25m west of the site. A single trench was excavated at the site and no archaeological features were recorded. Site WWC (SE 4115 4986) lay some 200m southwest of the site. A single trench was excavated at the site and the general area was stripped under

- archaeological supervision. The remains of modern field ditches and field drains were the only features identified in this area (OA 2004).
- 3.1.4 The recent geophysical survey (see Appendix 1) identified a series of parallel linear anomalies on a northwest-southeast alignment, a series of soil filled features with a northwest-southeast alignment and a large scatter of dipolar magnetic anomalies within the northern part of the study site.
- 3.1.5 The series of parallel anomalies on a northwest-southeast alignment may reflect land drains, although within the northern part of the site they may evidence ridge and furrow cultivation. The series of soil filled features are likely to be the remains of former field boundaries and the scatter of magnetic dipolar anomalies almost certainly reflect items of near-surface ferrous and/or fired debris.
- 3.1.6 The various phases of assessment and field evaluation along the alignment of the A1 (M) suggest that this area of heavy Boulder Clay has required drainage to facilitate arable agriculture (ridge and furrow) and more recently (mid 19th century) the former open fields were enclosed into a series of moderate to small, rectangular fields. The 20th century has seen the removal of several of the 19th century field boundaries and continued attempts to drain the land. More recently the construction of the A1 (M) and its associated junction 45 has involved the removal of the enclosure field pattern.
- 3.1.7 In short, nearby archaeological investigations on the A1 (M) and the results of the recent geophysical survey indicate that the site appears to be of limited archaeological interest. Therefore, this WSI seeks to test the modest number of geophysical anomalies identified.

4.0 AIMS AND OBJECTIVES

4.1 THE AIMS OF THE ARCHAEOLOGICAL WORK ARE:

General aims:

- To test, as far as reasonably practicable, the location, extent, date, character, condition, significance and quality of the geophysical anomalies.
- To establish the ecofactual and environmental potential of archaeological deposits and features encountered.

Site specific aims:

 To clarify the impact of Medieval, Post-Medieval and more recent ploughing and hence assess the degree of archaeological survival of buried deposits.

4.2 **Research Framework**

- 4.2.1 THE INVESTIGATION WILL BE CONDUCTED WITHIN THE GENERAL PARAMETERS DEFINED BY PPG16 'ARCHAEOLOGY AND PLANNING', THE NORTH YORKSHIRE STRUCTURE PLAN AND HARROGATE BOROUGH COUNCIL LOCAL PLAN.
- 4.2.2 More specifically, the work aims to test the model of archaeological potential constructed based on the results of the geophysical survey and the available SMR evidence.

5.0 METHOD STATEMENT

5.1.1 In order that the investigation supplies information of the required quality, the Codes, Standards and Guidance issued by the Institute of Field Archaeologists (IFA) form a requirement of this specification.

5.2 TRIAL TRENCHING

- 5.2.1 Machine dug trenches will be excavated according to the pattern shown on Fig. 2. All five trenches will be 25m by 1.8-2m. The trenches have been targeted on anomalies identified by the geophysical survey. Trenches 1 and 2 are located to investigate the scatter of magnetic dipolar anomalies identified in Transect 3. Trench 3 is located to investigate the possible linear anomalies which may reflect ridge and furrow identified in Transect 4. Trench 4 and 5 are located to investigate a series of soil filled features identified in Transect 1.
- 5.2.2 In addition to those trenches shown, a contingency of 100m² will be allocated, as necessary, to further explore areas where the evaluation trenching locates archaeological features. The contingency will be allocated if necessary following an on site review with CgMs Consulting and the local authority's Archaeological Advisor.
- 5.2.3 All trenches will be excavated using a standard toothless ditching bucket fitted to an appropriate hydraulic tracked or wheeled machine, such as a JCB or 360'Hymac.
- 5.2.4 The machine used will be powerful enough for a clean job of work and able to mound spoil neatly, a safe distance from trench edges. Mini garden excavators or bulldozers are not suitable.
- 5.2.5 All machine work will be undertaken under the direct supervision of an appropriately experienced archaeologist, machining will cease immediately if significant evidence is revealed.
- 5.2.6 Machine excavation is to be taken down to the top of 'natural' or the top of any archaeological level, whichever is the higher. In the event of significant archaeological deposits being encountered, CgMs Consulting and the County Archaeologist will be informed immediately. Some further limited excavation may be required to clarify the nature, character and

date of the archaeological deposits, but the primary objective is to establish the presence/absence of archaeological deposits, their depth and extent.

- 5.2.7 If the machine has to re-enter the trench, care will be taken to ensure that it does not damage underlying remains, particularly in soft ground conditions. The machine will not be used to cut arbitrary trial trenches down to natural deposits, without regard to the archaeological stratification and leaving a section record only.
- 5.2.8 Archaeological evaluation may require work by pick and shovel or occasionally further use of the machine. Such techniques are only appropriate for the removal of homogeneous or low-grade deposits which may give a "window" into underlying levels. They must not be used on complex stratigraphy and the deposits to be removed must have been properly recorded first.
- 5.2.9 Particular care should be taken not to damage any areas containing significant remains which might merit preservation in-situ. Such evidence would normally include deep or complex stratification, settlement evidence and structures. Such areas should be protected and not left open to the weather, or other forms of deterioration. Whilst investigation will not be at the expense of any structures, features or finds which might reasonably be considered to merit preservation, it is important that a sufficient sample is studied.
- 5.2.10 Any human remains must be left in-situ, covered and protected. Removal can only take place under the terms of an appropriate Home Office licence (S25 of the Burial Act 1857) and with due regard for environmental health regulations. Such removal must be in compliance with the Disused Burial Grounds Amendment Act 1981.
- 5.2.11 Those areas of the site where visual inspection suggests the presence of features or possible features will, if necessary, be hand-cleaned to ensure features are properly defined and sufficient to produce a base plan.
- 5.2.12 All discrete features will be cleaned sufficient to enable identification and recording.

- 5.2.13 Trench excavations must be maintained in a safe condition at all times.
- 5.2.14 Archaeological features should initially only be sampled sufficiently to characterise and date them. However, at least 50% (by plan area) of pits, postholes, structural features, and domestic/industrial features and 10% (by plan area) of linear features; all terminals and intersections should be investigated.
- 5.2.15 Additional excavation, up to complete removal, may be required should excavated samples fail to provide any datable evidence. If required, this will only be applied to a few selected features and in the event of obviously similar features these requirements will be relaxed following on site discussion with CgMs and the local authority's archaeological advisor.
- 5.2.16 Advice on the appropriateness of the sampling strategies will be sought the English Heritage Regional Advisor in Archaeological Science (Yorkshire Region). Archaeological field evaluations procedures are outlined in the 2002 Centre for Archaeology Guidelines, Environmental Archaeology: A guide to the theory and practice of Methods from sampling and recovery to post-excavation.
- 5.2.17 All trenches will be backfilled on completion. Topsoil and subsoil deposits will be replaced in their correct sequence.

5.3 Monitoring

- 5.3.1 The local authority's Archaeological Advisor will be notified by CgMs
 Consulting at least five working days prior to commencement of work on
 site of the start date and supervisor/project manager's name.
- 5.3.2 Reasonable access to the site is to be arranged for representatives of the local authority and their Archaeological Advisor, Mr Neil Campling of North Yorkshire County Council, who may wish to make site inspections to ensure that the archaeological investigation is progressing satisfactorily.

5.4Recording Systems

- 5.4.1 The recording system used must be fully compatible with that used elsewhere in North Yorkshire. Context sheets should include all relevant stratigraphic relationships and for complex stratigraphy a separate matrix diagram should be employed. This matrix should be fully checked during the course of the investigation.
- 5.4.2 The site archive will be so organised as to be compatible with other archaeological archives produced in North Yorkshire. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used. This requirement for archival compatibility extends to the use of computerised database.
- 5.4.3 The site grid is to be accurately tied into the National Grid, preferably by EDM or theodolite, and located on to the 1:2500 map of the area.
- 5.4.4 Plans indicating the location of the excavated trenches and the location of all archaeological features encountered are to be drawn at an appropriate scale.
- 5.4.5 All trench positions are to be accurately tied in to the site and national grid.
- 5.4.6 All structures, deposits and finds are to be recorded according to accepted professional standards.
- 5.4.7 Plans of archaeological features on the site should be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 depending on the complexity of the feature.
- 5.4.8 All archaeological plans and sections should be on drawing film and should include context numbers and OD spot heights for all principal strata and features.
- 5.4.9 Other plans will include a site location plan, a general plan (e.g. OS 1:1250) showing investigation area and development site in relation to

surrounding locality and street pattern. These will be supplemented by trench plans at 1:500 (or 1:200), which will show the location of the areas investigated in relationship to the investigation area, OS grid and site grid (if any). The locations of the OS bench marks used and site TBMs will also be identified.

- 5.4.10 A photographic record of the project is required. This will include black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation mounted. The transparencies will be mounted in suitable frames. Digital images are acceptable.
- 5.4.11 Publication of the results, at least to a summary level and beyond if justified shall take place in the year following the evaluation. A copy of the final publication report as well as the full archive report shall also be supplied to an appropriate Museum or similar repository agreed with local authority's Archaeological Advisor.

5.5Finds and Samples

- 5.5.1 A high priority should be given to dating any remains and so all artefacts and finds are to be retained.
- 5.5.2 Assessments of artefacts should be made by appropriately qualified named specialists.
- 5.5.3 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained. No finds will, however, be discarded without the prior approval of the local authority's Archaeological Advisor.
- 5.5.4 All finds and samples will be treated in a proper manner and to the standards of the UK Institute of Conservators Guidelines. They will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in the UK Institute for Conservation "Conservation Guideline No 2". Appropriate guidelines set

out in the Museums and Galleries Commissions "Standards in the Museum Care of Archaeological Collections (1991)" will also be followed.

5.5.5 On completion of the project, it is anticipated that the landowner will consent the deposition of artefacts and archive in an appropriate Museum or similar repository agreed with the local authority's archaeological advisor.

6.0 REPORT PREPARATION, CONTENTS AND DISTRIBUTION

- 6.1 A draft report on the results of the evaluation will be prepared within 3 weeks of completing the fieldwork. This should include:
 - The aims and methods adopted in the course of the evaluation
 - Perceived archaeological potential of the site based on historic, cartographic, archaeological, SMR, geographical, topographic and environmental evidence
 - Illustrative material including maps, plans, sections, drawings and photographs as necessary
 - ❖ The nature, extent, date, condition and significance of the archaeological finds with specialist opinions and parallels from other sites if required
 - The anticipated degree of survival of archaeological deposits across the site, as affected by its present state and recent land-use
 - The likely effect of development (nature and extent of proposed groundworks)
 - Summary of archaeological impact.
- 6.2 Copies of the draft evaluation report should be sent to CgMs. Once approved 1 unbound and 5 bound copies will be supplied to CgMs, copies will be submitted to the commissioning body, the planning authority, and the North Yorkshire Sites and Monuments Record.

7.0 ARCHIVES

- 7.1 The site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990).* On completion of the project the archive is to be deposited in an appropriate Museum or similar repository to be agreed with the English Heritage.
- 7.2 In addition, at the start of work (immediately before fieldwork commences an OASIS online record http://ads.ahds.ac.uk/projects/oasis/ must be initiated and key fields completed on Details, Location and Creators Forms.

All appropriate parts of the OASIS online form must be completed for submission to the SMR. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

8.0 HEALTH AND SAFETY CONSIDERATIONS

- 8.1 All relevant health and safety regulations must be followed including the Health and Safety at Work etc. Act 1974 and the Management of Health and Safety Regulations, 1992.
- 8.2 Machinery should be kept away from unsupported trench edges and access routes should be supervised and controlled. Barriers, hoardings and warning notices should be installed as appropriate. Safety helmets and safety boots are to be used by all personnel as necessary.
- 8.3 A Risk Assessment and Health and Safety Method Statement must be completed prior to the commencement of any site work.

9.0 OTHER MATTERS

- 9.1 Archaeological Contractor
- 9.1.1 The Archaeological Contractor will have a proven track record in undertaking field evaluations and investigations on rural sites.
- 9.1.2 The field team deployed by the Archaeological Contractor will include only full time professional archaeological staff. All staff in supervisory positions should be Members of the Institute of Field Archaeologists (IFA).
- 9.1.3 The Archaeological Contractor should preferably be a body on the IFA Register of Archaeological Organisations.
- 9.1.4 The composition of the project team must be detailed and agreed in advance with CgMs Consulting (this is to include any subcontractors).

9.2 **Copyright**

- 9.2.1 It is recognised that the copyright of written, graphic and photographic records and the evaluation report rests with the originating body. However, CgMs Consulting and their client require an agreement to facilitate the copying and use of any or all materials resulting from this project.
- 9.2.2 The following **statutory provisions and codes of practice** are to be adhered to where relevant:
 - All statutory provisions and by-laws relating to the work in question, especially the Health and Safety at Work etc Act 1974;
 - b) The Institute of Field Archaeologists Code of Conduct;
 - c) The Institute of Field Archaeologists Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology; and

Any finds believed by the archaeological contractor to fall within the statutory definition of Treasure shall be advised immediately to CgMs and notified to the relevant Coroner's Office.

9.2.3 **<u>Variations</u>** - Variations to the Specification or Project Design that the contractor may wish to make must be approved, in advance, by CgMs and the County Archaeologist.

APPENDIX 2 TRENCH REGISTER

No.	Location	Alignment	Dimensions	Description
1	South field	East/west	Length 27.5m Width 1.5m Depth 0.4m	The trench comprised topsoil <i>106</i> and natural <i>112</i> . Two field drains were observed running north-west/south-east across the trench at 1.7m and 15m from the western end. No features of archaeological significance were observed.
2	South field	East/west	Length 27.5m Width 1.5m Depth 0.38m	The trench comprised topsoil 106 and natural 107. A shallow boundary ditch 108 was identified towards the western end. A slot revealed that it had been truncated by an animal burrow. Three land drains were identified towards the eastern end of the trench, a ceramic pipe was observed in the most western.
3	North field	North/south	Length 23m Width 1.5m Depth 0.95m	The trench comprised topsoil 100 and natural 101. A boundary ditch 110 was observed running north-east/south-west across the trench. This had been truncated to the south by a field drain. No finds were recovered from 110. A second field drain was located to the southern end of the trench at 17.2m.
4	North field	North/south	Length 27.5m Width 1.5m Depth 0.46m	The trench comprised topsoil 100 and natural 101, towards the northern end of the trench were discrete deposits of natural gravel which may explain the anomalies detected by the geophysical survey. A small boundary ditch 105 was observed 6m from the southern end of the trench. A number of ceramic roof tiles, glass and iron objects were recovered from the feature. Two field drains were observed in the north of the ditch, as well as some plough scarring.
5	North field	East/west	Length 28.2m Width 1.5m Depth 0.4m	The trench comprised topsoil 100 and natural 101. The majority of the natural had been heavily disturbed by extensive bioturbation. A small possible posthole 102, was identified towards the western end of the trench, but may also be the result of root action. Two land drains were observed towards the eastern end, while a large deposit of modern brick, ash, iron objects and other refuse was detected - this may correspond to geophysical anomalies.

APPENDIX 3 CONTEXT REGISTER

Context No.	Trench	Depth	Description
100	4-6	0.3m	Topsoil: dark-brown friable clay-silt with >1% small stone inclusions. Several fragments of glass, ceramic building materials (CBM) and pottery were recovered.
101	3-5	-	Natural: dark-yellow compact sandy-clay with small to medium sub-angular sandstone inclusions, c 2% overall but up to 60% in certain areas.
102	5	0.05m	Cut for possible posthole: circular in plan, bowl shaped in profile, with concave sides and base, and 0.17m in diameter. Filled by <i>103</i> , this feature may be the result of bioturbation identified over the remainder of the trench.
103	5	0.05m	Fill of possible posthole <i>102</i> : mid-brown soft and friable sandy-silt 1:1, with no discernible inclusions. No finds were recovered.
104	4	0.22m	Fill of boundary ditch <i>105</i> : mid-brown firm silty-sand, with >2% small stone inclusions. Iron, glass and roof tile was recovered from the deposit.
105	4	0.22m	Cut of boundary ditch: linear in plan and shallow ushaped in profile, measuring 0.9m in width, with gradual sides and a concave base. Has been truncated by ploughing towards the top of the feature.
106	1-2	0.26m	Topsoil: bark-brown firm and tacky clay-silt 40/60, with >1% small rounded pebbles, some post-medieval pottery was recovered from the deposit.
107	2	-	Natural: mid-light orange-grey and brown mottled sandy-clay 15/85, with a very compact and sticky texture; containing less than 5% small sub-angular and sub-rounded sandstones.
108	2	0.21m	Cut for small boundary ditch: linear in plan, and squared u-shape in profile, measuring 0.56m in width. The sides were straight and sloping outwards from the base, and a flat base, which was disturbed by an animal burrow running through the western side.
109	2	0.21m	Fill of boundary ditch 108, mid orange-brown fine but firm silty-clay 1:4, with >1% small rounded pebble inclusions. The western edge of the deposit has been truncated by an animal burrow. Fragments of postmedieval pottery, glass and clay pipe were recovered, but may well be residual from the animal disturbance.
110	3	0.22m	Cut for boundary ditch: linear in plan and u-shaped in profile, measuring 0.9m in width, with gradual sides and a concave base. Aligned north-east/south-west, the ditch had been truncated by a modern field drain

			on its southern side.
111	3	0.22m	Fill for boundary ditch <i>110</i> : dark-grey compact silty-sand, with a bluish tint. Contains >1% charcoal flecks, >1% small rounded stones. No finds were recovered from the deposit.
112	1	-	Natural: mix of orange-grey boulder-clay with >5% small stone inclusions, orange-grey clay-sand and orange-yellow loose sand with 2% rounded stone inclusions.

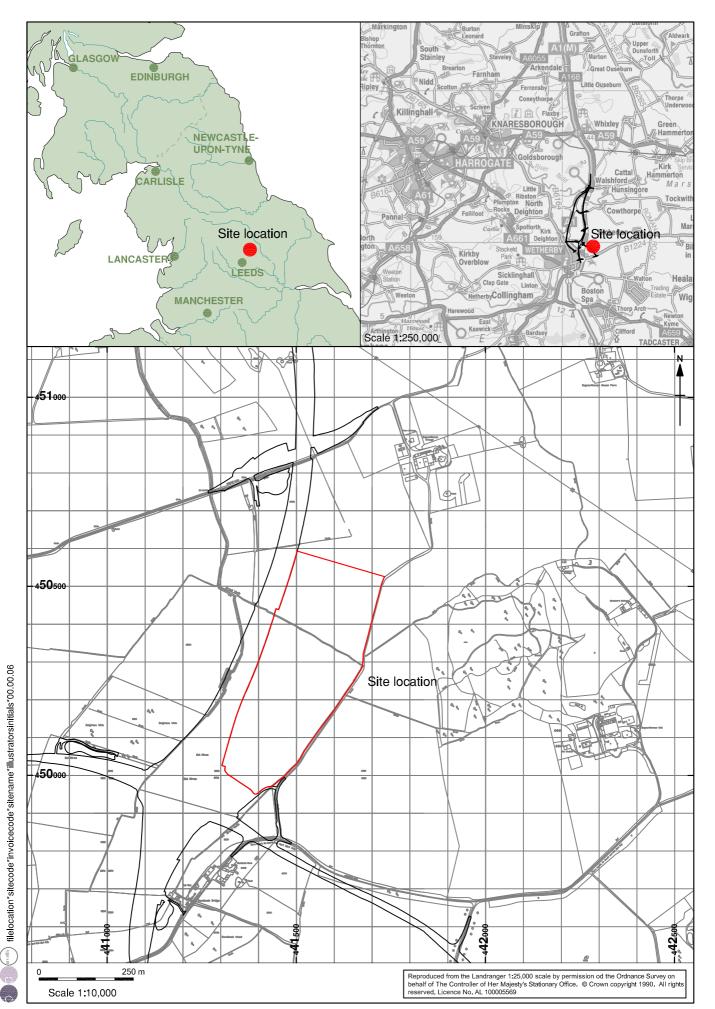


Figure 1: Site location

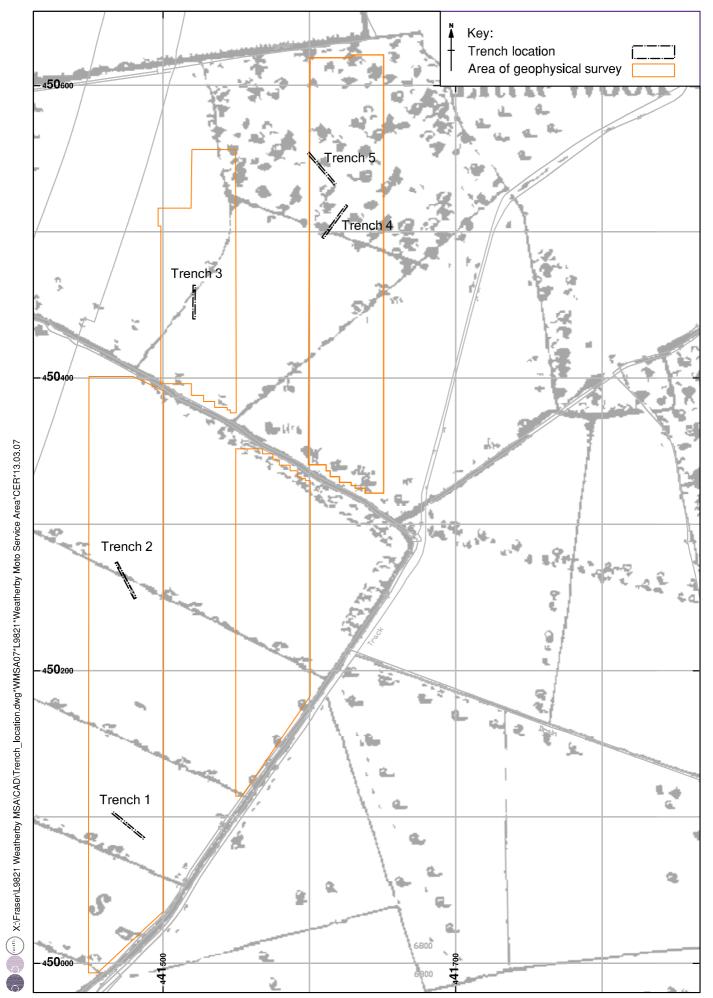


Figure 2: Trench location plan, showing areas of geophysical survey and 1850 Ordnance Survey First Edition map

Figure 3: Trenches 1-2 showing features, geophysical anomalies and 1850 Ordnance Survey First Edition map

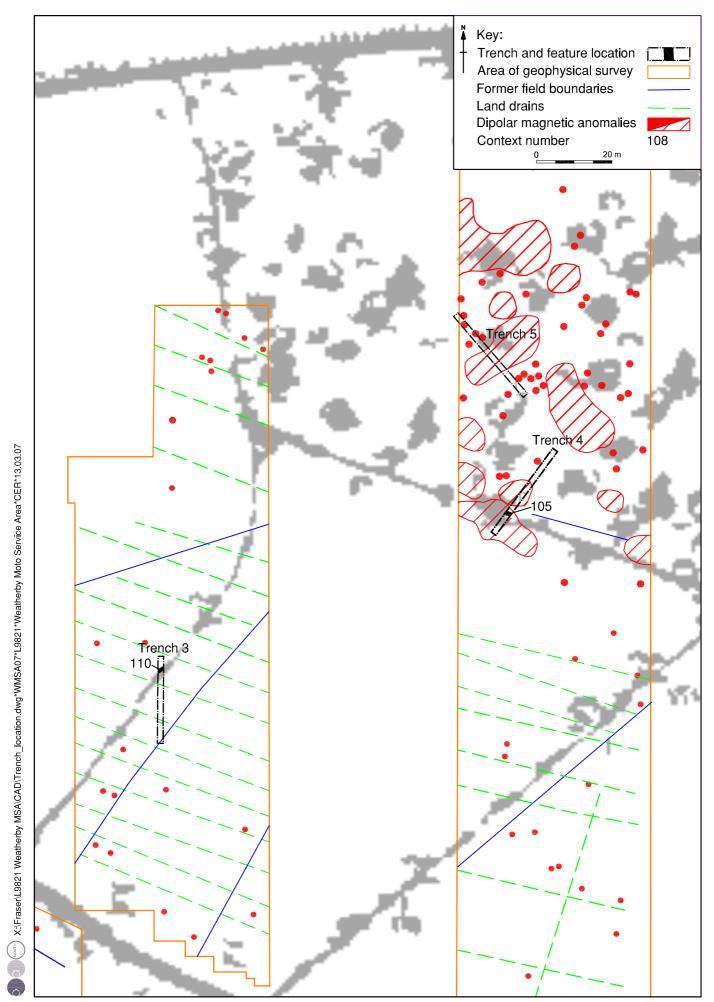


Figure 4: Trenches 3-5 showing features, geophysical anomalies and 1850 Ordnance Survey First Edition map



Plate 1: boundary ditch 108, Trench 2, looking to the south-west



Plate 2: north-east facing section through boundary ditch *110*, note the modern ceramic drain cutting the ditch, Trench 3, looking to the south-west



Plate 3: north-east facing section through boundary ditch 105, Trench 4, looking to the south-west