

General Teaching Block, Dallam School, Milnthorpe, Cumbria

Rapid Desk-based Assessment and Evaluation



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## SUMMARY

Cumbria County Council's Historic Environment Service (CCCHES) was consulted by Capita Symonds Ltd regarding a proposed scheme for the erection of a teaching block at Dallam School, Milnthorpe (centred on NGR SD 5006 8167). The scheme affects an area considered to have a high archaeological potential and so CCCHES advised that the applicant provide information concerning the potential impact of the proposal on archaeological remains. In order to provide this information, a rapid deskbased assessment, visual inspection and an archaeological evaluation of the site was considered necessary. Oxford Archaeology North (OA North) were commissioned to undertake the work in May 2008.

During a previous evaluation at the school in 2005 four human cremations were uncovered, three of which were of late Bronze Age date and grouped together, the fourth was Neolithic and was located away from the other three (ASUD 2005a; ASUD 2005b). An undated pit and ditch were associated with the late Bronze Age cremations. This report draws on the results of the previous evaluation and excavation, of which copies are available at the Cumbria Historic Environment Record (HER) office in Kendal.

Thirteen sites of archaeological significance were identified within the study area following consultation of the HER, but none of these will be affected by the proposed development. The Ordnance Survey First and Second edition maps revealed that the area was undeveloped in the nineteenth century and it would appear the site remained unimproved pasture until construction of the school in 1968.

Four evaluation trenches, Trenches 1-4, were excavated, investigating a total of  $75m^2$  of the proposed development area. The trenches were machine-excavated down to the natural geology, which varied from boulder clay to limestone bedrock. A number of possible features were identified and investigated by manual excavation, although only a possible posthole, *104* in Trench 1, merited recording. This possible undated posthole measured 0.3m in diameter and 0.38m in depth. There was no evidence of significant truncation across the site and it appears that the lack of archaeological remains identified genuinely reflects the area examined.

# ACKNOWLEDGEMENTS

OA North would like to thank Martin Howden of Capita Symonds Ltd for commissioning the project. Thanks are also due to Jo Mackintosh of Cumbria County Council Historic Environment Service, Kendal for her assistance with this project. OA North would also like to thank the staff of Dallam School. Colin Brennan, the site manager, was very helpful during the initial site inspection and the evaluation fieldwork.

Vicki Bullock undertook the rapid desk-based assessment and visual inspection. Paul Clark and Harriet Lock undertook the evaluation, with the drawings produced by Alix Sperr. Vicki Bullock and Paul Clark compiled the report. Emily Mercer, who also edited the report, managed the project.

# 1. INTRODUCTION

## 1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Prior to the application to construct a general teaching block at Dallam School, Milnthorpe, Cumbria, a formal brief was issued by Cumbria County Council's Historic Environment Service (CCCHES) (*Appendix 1*), following consultation by Capita Symonds Ltd. This brief stipulated the requirements for a programme of archaeological work due to the high archaeological potential; in 2005 four human cremations were uncovered within the grounds of the school, three of which were of late Bronze Age date and grouped together, the fourth was Neolithic and was located away from the other three (ASUD 2005a; ASUD 2005b). In accordance with the brief, Oxford Archaeology North (OA North) was commissioned to undertake a rapid desk-based assessment, visual inspection and evaluation trenching.
- 1.1.2 The rapid desk-based assessment comprised a search of the Historic Environment Record (HER) in Kendal (formerly the SMR). An appraisal was carried out of the HER information relating to the site and its study area, consisting of a 0.5km radius centred on the site. A visual inspection survey was undertaken to relate the desk-based findings, and identify areas of potential interest or disturbance.
- 1.1.3 The evaluation trenching consisted of the excavation of  $75m^2$ , to assess the extent, nature and significance of any remains that may be threatened by the proposed development.
- 1.1.4 This report sets out the results of the rapid desk-based assessment, visual inspection and the trenching the form of a short document, outlining the findings, and assessment of the impact.

### 1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The site lies within the grounds of Dallam School, Milnthorpe, Cumbria (centred on NGR SD 5006 8167; Fig 1). The school is bounded by properties along Haverflatts Lane to the west and the B6385 to the south, Owlets Ash Fields housing estate to the east and open farmland to the north. Milnthorpe lies 9 miles south-west of Kendal on the A6, within South Lakeland District. The site is approximately 28-30m aOD.
- 1.2.2 The underlying geology is of Carboniferous Dinantian limestones and shaly limestones (British Geological Survey 1977). Overlying the solid geology are drift deposits of glacial material such as gravel and boulder clay which are known to be varied and convoluted in nature (Countryside Commission 1998). The soils that underlie the Milnthorpe area are of the Denbigh 1 Series and are typical brown earths (Ordnance Survey 1983).

# 2. METHODOLOGY

## 2.1 **PROJECT DESIGN**

2.1.1 OA North was requested to submit proposals (*Appendix 2*), in line with the CCCHES brief (*Appendix 1*), which were subsequently approved by CCCHES. These were consistent with the relevant standards and procedures of the Institute of Field Archaeologists and English Heritage, and in line with PPG 16, and generally accepted best practice.

### 2.2 RAPID DESK-BASED ASSESSMENT

- 2.2.1 The rapid desk-based assessment was undertaken as the first stage in a programme of archaeological evaluation, prior to further intrusive investigation in the form of trial trenching. In this instance, a low-level assessment was required which entailed an appraisal of resources at the County Historic Environment Record (HER) Office. The following research was undertaken:
- 2.2.2 *Cumbria County Historic Environment Record (CHER):* an appraisal was carried out of the HER information relating to the site and a study area, consisting of a 0.5km radius centred on the site, following consultation of the CHER, Kendal. Only the primary and secondary sources and any relevant aerial photographs referenced in the HER were assessed.
- 2.2.3 **Oxford Archaeology North:** various publications and unpublished reports on excavations and other work in the town are held within the OA North library, and any relevant archives were examined. OA North also holds a complete series of the *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, which were also consulted.

### 2.3 VISUAL INSPECTION

- 2.3.1 Following the rapid desk-based assessment, a visual inspection of the site was undertaken on 21st May 2008 to provide an understanding of the impact of the proposed redevelopment. This information, together with the desk-based assessment results, was used to inform the positions of the evaluation trenches.
- 2.3.2 The visual inspection was undertaken to:
  - relate the existing landscape to any research findings and note any features of potential archaeological interest;
  - identify any areas of potentially significant disturbance to surviving archaeological remains

• identify any hazards and constraints to undertaking further archaeological work on site, i.e. evaluation trenching (including the siting of live services and Tree Preservation Orders).

## 2.4 EVALUATION TRENCHING

- 2.4.1 The topsoil was removed by machine (fitted with a toothless ditching bucket) under archaeological supervision to the surface of the first significant archaeological deposit. This deposit was cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. All features of archaeological interest were investigated and recorded
- 2.4.2 All trenches were excavated in a stratigraphical manner. Trenches were located by use of a Total Station, and altitude information has been established with respect to Ordnance Survey Datum.
- 2.4.3 All investigation of intact archaeological deposits was exclusively manual. Selected pits and postholes were only half-sectioned, linear features were subject to no more than a 10% sample, and extensive layers were sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, was undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.
- 2.4.4 All information identified in the course of the site works was recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, and monochrome contacts) to identify and illustrate individual features. Primary records were available for inspection at all times.
- 2.4.5 Results of all field investigations were recorded on *pro forma* context sheets. The site archive includes both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

# 2.5 ARCHIVE

2.5.1 A full, professional archive has been compiled in accordance with the project design (*Appendix 2*) and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the HER (the index to the archive and a copy of the report). OA North will deposit the original record archive of projects (paper, magnetic and plastic media) with the County Record Office, Kendal.

# 3. RAPID DESK-BASED ASSESSMENT RESULTS

### 3.1 **PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS**

- 3.1.1 A total of four archaeological events are recorded for Milnthorpe in the CHER. However, no archaeological work has been recorded as having been undertaken in Milnthorpe prior to 2003, although the town of Milnthorpe has been examined by an Extensive Urban Survey (EUS) (CCC 2006). OA North undertook a desk-based assessment and watching brief on land adjacent to Cross Keys Yard, Milnthorpe (OA North 2003). The site was close to the probable centre of medieval Milnthorpe, near the market place, and at the cross roads of the main routes through the town, and, therefore had the potential to incorporate significant subsurface remains relating to the earlier history of the town. The assessment highlighted a wealth of documentary evidence, but no evidence of early post-medieval or medieval archaeology was encountered.
- 3.1.2 In 2004, OA North undertook a desk-based assessment and watching brief on the site of a former butcher's shop at No 11 The Square. No surviving archaeological deposits were observed during the watching brief, however, suggesting the construction and demolition of the post-medieval building had potentially removed any earlier, medieval material that may have existed (OA North 2004).
- 3.1.3 In August 2005 Archaeological Services, University of Durham (ASUD) undertook an evaluation at Dallam School, Milnthorpe in advance of the construction of an extension to the school. Thirteen trenches were excavated which showed the site had been unimproved pasture prior to levelling in 1968 when the school was constructed. One significant archaeological feature was identified however; an isolated pit containing ash, bone and Grooved Ware pottery later dated to the Neolithic period (ASUD 2005a).
- 3.1.4 Further to this work, in mitigation of the development, ASUD undertook an excavation in October 2005, in which three cremation burials were identified. Two of the cremations were placed in urns and typologically dated to the late Bronze Age. The undated remains of a possible stone-filled boundary ditch, and a pit containing an undiagnostic flint flake, were also found in close proximity to the burials which may be contemporary (ASUD 2005b).

## **3.2 HISTORICAL BACKGROUND**

3.2.1 *Prehistoric period:* no prehistoric remains were known from the vicinity of the site previous to the scheme of works undertaken by Archaeological Services, University of Durham (ASUD 2005a, 2005b). Generally, there is evidence for activity throughout the South Lakes during the Neolithic and Bronze Age periods, from 3500 cal BC onwards, in the form of stray finds such as stone axes, adzes, axe-hammers and quernstones (Hodgkinson *et al* 2000). A circular enclosure in Dallam Deer Park (HER 2492) has tentatively been

identified as a ring cairn of prehistoric date, but is unexcavated and has also been identified as a later beacon, watchtower or medieval building. No other prehistoric remains are known from the surrounding area. Dallam School Cremation Cemetery, Milnthorpe (HER 41439), comprised an isolated pit containing ash, burnt human bone and Grooved Ware pottery dating to the late Neolithic. No related features were found in the excavated vicinity. No further analysis, such as age-at-death or sex of the individual, was thought possible due to the poor nature of its preservation (ASUD 2005a). A cluster of three cremation burials were identified during a second phase of investigation prior to the proposed extension of the existing school. Two of the cremations were placed in urns and typologically dated to the Late Bronze Age. The undated remains of a possible stone-filled boundary ditch, and a pit containing an undiagnostic flint flake, were also found in close proximity to the burials and may be contemporary (ASUD 2005b).

- 3.2.2 *Roman period:* the main Roman road along the west coast of England ran through the Lune valley some 12km to the east of Milnthorpe and no Roman remains are known from the vicinity.
- 3.2.3 *Medieval period:* the settlement at Milnthorpe was not mentioned in the Domesday survey of 1086 (Faull and Stinson 1986). However, the manor of Heversham was held by Roger de Poitou, as part of the Barony of Kendal for William the Conqeror. During consolidation of the power in the north by William Rufus in 1082, the area around Kendal passed to Ivo de Taillebois, who gave a third to the abbey of St Mary in York, and two thirds were allegedly administered from a manor house in Milnthorpe (*ibid*). The lands were with the de Tallebois family until the thirteenth century when the great, great grandson of Ivo de Tallebois changed his name to William of Lancaster. His daughter married Alexander de Wyndesore who obtained the granting of a market and fair from Edward I in the manor of Heversham to be held at Milnthorpe around 1280. The charter was re-confirmed in 1334 to William de Wyndesore and it was established that a weekly market could be held on Fridays and a fair held annually (*ibid*).
- 3.2.4 The Milnthorpe lands remained in the hands of the de Wyndesores until the later fourteenth century when it passed into the Nevil family who were a branch of the Earls of Westmorland. On the death of the last male Nevil, around 1577, the land was sold to a Thomas Bradley as the manor of Heversham and Milnthorpe, who owned it for twenty years before selling it on to the Bellingham family (*ibid*).
- 3.2.5 The earliest specific mention of Milnthorpe appears to be in the Register of St Bees of 1282. The origin of the name and fourteenth century references indicate there was at least one water-powered mill in Milnthorpe in the medieval period (Somerville 1930, 74; Farrer 1923, 151). The mill was part of the manor and there was a tax/tithe on the use of the mill, which was paid to the church until this was commuted (given over) as part of the 1803 Enclosure Act. The early date of the mill may indicate that the mill races, weirs and the overall management of the River Bela also date back to this period (OA North 2003).

- 3.2.6 One site of medieval date was identified within the study area. Milnthorpe Market Cross is listed in the HER as a medieval, standing monument (HER 2495). The market cross is Listed (Grade II) and according to the Listed Buildings list, the shaft and base are possibly eighteenth century, with the top probably a nineteenth century repair. In 1823 there is a reference to the 'new cross' after the rebuilding of the Cross Keys Inn suggesting it had been moved or replaced (Bingham 2000, 40-41). It was taken down in 1845 and re-erected on top of a lock-up built on its site during the construction of the railway when there was rioting locally. The lock-up was taken down in 1862 and the cross replaced on the ground in its original position (*ibid*). The location for the post-medieval weekly market was linked to the original market cross, seen on Jeffrey's map of 1770, opposite the Cross Keys Inn (OA North 2003).
- 3.2.7 *Post-medieval period:* the manor of Heversham and Milnthorpe was owned by the Bellingham family in 1597. It then appears to have been sold on to numerous families before the Wilsons of Dallam Tower acquired it in the eighteenth century.
- 3.2.8 Numerous documents provide details of the population figures for Milnthorpe from the sixteenth century onwards as well as information on economic activities (Farrer and Brownbill 1911). By the later seventeenth century the hearth tax (1674) shows a total of fifty three names eligible to pay tax. A later Window Tax of 1777 shows a total of one hundred and twenty-six houses to be taxed (*ibid*).
- 3.2.9 The River Bela provided an excellent source of water power, and watermills are referred to as early as the fourteenth century (Somerville 1930). By the post-medieval period there were two main areas of mills that varied in use, including cotton, flax and paper. In the same location there was also an iron forge (Bingham 1987, 156). The Kent estuary, approximately a kilometre to the west, was navigable as far as Milnthorpe up to c 1800 and, there are indications of a port having existed in the fourteenth century. However, the first clear mention of the port dates from 1558 when the area was referred to as Milnthorpe Haven (Hindle 1998, 169). Goods were still being transported to Milnthorpe port from Grange in 1790 (UBD 1790) and by the mid nineteenth century the port at Milnthorpe was a member of the port of Lancaster, although by this time only small vessels could navigate that far upstream.
- 3.2.10 Milnthorpe is shown as 'Milthorp' on Thomas Jeffery's 'Map of Wesstmorland' (1770) and a comparison of the lettering style for placenames implies that it was given the same regard as Kendal by the surveyor. Whereas the nearby settlements of Beetham ('Beethum') and Heversham ('Haversham') were given less regard. A closer inspection reveals an overall town plan with the main east/west streets aligned with a continuous strip of buildings leading towards the river and port. The main north/south road is depicted as having almost no developments along it. The market cross is represented although no details are shown apart from it being a standing structure. There is surprisingly little development at the eastern end of the town, with the routes through and out of town in this direction being shown as dashed lines. This implies that the routes were not formalised roads at this time.

- 3.2.11 The location of Milnthorpe meant it became a communication and transport nexus. The route northwards between Lancaster and Kendal passed through and the estuarine position allowed sea access. The Turnpike Acts for this area were relatively early, the first passed in 1759 (Hindle 1998, 169). By 1826 Blount's map shows terraced buildings were developing along the main north/south road through Milnthorpe. In 1829 the Cross Keys in Milnthorpe was a coaching inn, which ran daily services to Lancaster and regular services to Ulverston and Kendal (Parson and White 1829). Furthermore, the emergence of the railway saw the main line north/south opening in 1846, and then in 1876 the Arnside Branch opened, later known as the Furness Branch Initially, this allowed the transportation of coke and coal, but they were later used for passengers (Bingham 1987, 102).
- 3.2.12 Milnthorpe had a workhouse located beyond the town to the east, which took in the poor from the surrounding area. It was constructed between 1813 and 1816, and was funded from the money raised by the Poor Law. The land at this end of Milnthorpe was owned by the Wilson family and Blount's map (1826) shows a plot of land set aside for the workhouse. The area has since been redeveloped for residential use, although most of the workhouse was reported as still standing in 1987, when an associated pump was recorded (Bingham 1987).
- 3.2.13 Milnthorpe was an area of early enclosure, with small plots called 'parrocks' situated near to the village and farmsteads, with larger closes further away (CCC 2006). Most enclosures were irregular in shape indicating piecemeal reclamation of the land (Bingham 1987). The village was included within the Enclosure Award for Heversham (CRO(K)) WQR/1/38). The area covering Milnthorpe Green is at the eastern end of the town beyond St Thomas' Church and the plan shows clearly the late division of the land by the regular straight lines (OA North 2003).
- 3.2.14 In total, 13 sites of post-medieval date were within the study area. All of which were referenced in the HER. The smithy workshop (HER 14013) and pump (HER 14012) are present on the Ordnance Survey (OS) First (1862) and Second (1898) Edition maps respectively (Figs 2 and 3). Ackenthwaite Sand pit (HER 14014) is present on the OS second edition map (1860). The historic core of Milnthorpe is a Conservation Area and several post-medieval buildings are Listed and referenced in the HER. The site of a former commercial building (HER 40461), within the medieval market place at Milnthorpe was destroyed by a gas explosion and redeveloped in 2003. A Post Office and house, also within the medieval market place, are listed in the HER (40462). Bingham (1987) records that the property dates from at least the eighteenth century.
- 3.2.15 Curwen records that The Royal Oak Inn (HER 40464) was advertised for let in 1843, where the Inn, brewhouse, barn, stables and slaughter house were listed in the particulars. The White Lion Inn (HER 40463) is at least eighteenth century in date, having been recorded as being occupied by a Thomas Huddleston in 1758. This property lies just outside the Conservation Area on the western perimeter of the town. Harmony Hill barn (HER 40785), within the Conservation Area, is shown on the OS First Edition map of 1860. This

barn forms part of the Harmony Hall complex of buildings and gardens which are Listed Buildings (Grade II, 75556).

# 4. ARCHAEOLOGICAL EVALUATION RESULTS

## 4.1 INTRODUCTION

4.1.1 The brief for the evaluation (*Appendix 1*) stated that trenches examining a minimum area of  $75m^2$  should be excavated. This was achieved (Fig 4) by excavating two trenches measuring 15m in length and two trenches measuring 7.5m in length, all of which measured 1.7m wide. The trenches were excavated down to the natural geology, which varied from boulder clay to limestone bedrock. A list of contexts is provided in *Appendix 3*. Although a number of possible features were identified and investigated by manual excavation, only a possible posthole, *104* in Trench 1, was recorded. The lack of archaeological remains identified on site, meant that there were no suitable deposits to assess by palaeoenvironmental or soil micromorphological techniques.

## 4.2 **RESULTS**

- 4.2.1 **Trench 1:** this trench (Plate 2, Fig 4 and 5) was located at the northern end of the site, was aligned broadly east/west, and was 15m in length. The trench was excavated to a maximum depth of 0.8m. Topsoil, **100**, in this trench comprised sandy-clay to a maximum depth of 0.22m and overlay subsoil **101**. This layer was 0.34m thick and comprised sandy-silty-clay; it sealed subsoil **102**, which consisted of 0.28m thickness of clay. This layer directly overlay the natural geology, **103**, which comprised boulder clay, containing a high proportion of limestone, presumably eroded from the bedrock. A number of possible features were investigated within this trench, with all of them appearing natural in origin, although one, **104** (Fig 5), may possibly have represented a posthole. This feature was 0.3m in diameter and 0.38m deep. No finds were recovered from its single fill.
- 4.2.2 Trench 2: this trench (Plate 3) was 15m long, and located to the south of Trench 1, towards the middle of the site (Fig 4), and was aligned northwest/south-east. It was excavated to a maximum depth of 0.46m, and the topsoil, 200, comprised sandy-clay, to a depth of 0.4m. This directly overlay the natural geology, which comprised, for the most part, degraded limestone, 201. However, there was an outcrop of solid limestone bedrock, 202, towards the centre of the trench. No archaeological features were identified within this trench.
- 4.2.3 **Trench 3:** this trench (Plate 4) was located to the south of Trench 2, towards the south-western boundary of the site (Fig 4). The trench was 7.5m long and excavated to a maximum depth of 0.65m. The topsoil, **300**, comprised sandy-clay to a maximum depth of 0.18m, and overlay the silty-clay subsoil, **301**, which was a maximum of 0.2m thick. This in turn overlay the natural geology, **302**, which consisted of degraded limestone. A number of possible features were investigated, but all proved to be natural in origin.

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4.2.4 **Trench 4:** this trench (Plate 5) was located to the south of Trench 2, towards the south-eastern boundary of the site. The trench was 7.5m long and excavated to a maximum depth of 0.65m. The topsoil, **400**, comprised sandy-clay to a maximum depth of 0.28m, and overlay the sandy-clay subsoil, **401**, which was a maximum of 0.28m thick. This in turn overlay the natural geology, **402**, which consisted of degraded limestone. Three possible features were investigated, but all proved to be natural in origin, probably formed by root action.

## 4.3 FINDS

4.3.1 In all, 11 fragments were recovered during the investigation, all from a total of four contexts, 200, 300, 400 and 401, which apart from subsoil 401, are all topsoil. All the fragments are of small size, and slightly abraded. Their distribution is shown below, Table 1.

Context	Pottery	Ironwork	Totals
200	2	1	2
300	4		4
400	3		3
401	1		1
Totals	10	1	11

Table 1: Distribution of finds

4.3.2 A single, very small, fragment of an upright rim in a sandy unglazed fabric from subsoil *401* cannot be identified with precision, but seems most likely to be of medieval date. It is extremely abraded, suggesting that it is perhaps not in its original place of deposition. With the exception of the fragment from *401*, the pottery can be dated to the nineteenth century or later. It is, for the most part, probably locally-made brown-glazed, slip-decorated wares and other black-glazed wares, including the base of a teapot. There was, in addition, a small fragment of Creamware, in common use in the late eighteenth and earlier nineteenth century, and this probably reflects the date of the entire group. The single iron nail, being hand-forged, cannot be dated with any precision.

# 5 CONCLUSIONS

## 5.1 **DISCUSSION**

- 5.1.1 During the rapid desk-based assessment, 13 sites were identified from the HER within the study area, none of which would be affected by the proposed development. These comprised a prehistoric site, Dallam School Cremation Cemetery (HER 41439); a medieval site, the Market Cross (HER 2495); with the remaining sites being of post-medieval date.
- 5.1.2 The discovery of late Neolithic and the late Bronze Age remains just under 150m east of the current proposed development site at Dallam School (ASUD 2005a; 2005b), consisting of four cremation burials, and a possibly associated stone-filled linear feature and pit, is of regional importance. Given the close proximity of this site to the evaluation site it was considered that there was the potential to discover further prehistoric remains.
- 5.1.3 However, the evaluation exercise located only a single putative feature, the possible posthole *104*, within Trench 1. Little can be inferred from a single undated posthole, especially in this case, as there is some uncertainty as to whether it was man-made or naturally formed. There was no evidence of significant truncation across the site and it appears that the lack of archaeological remains identified, genuinely reflects a lack of previous activity within the areas examined.
- 5.1.2 A study of the effectiveness of various archaeological investigation techniques (Hey and Lacey 2001) highlighted the difficulty of locating Neolithic and Bronze Age features through evaluation. Consequently, the possibility exists that further finds relating to these periods, and to the previously discovered sites, remain undiscovered within the proposed development area.

# BIBLIOGRAPHY

### **CARTOGRAPHIC SOURCES**

British Geological Survey (BGS), 1977 Ten Mile Map, Quaternary Geology: South Sheet,

Institute of Geological Sciences (IGS), 1979 Ten Mile Map, Solid Geology: South Sheet,

Thomas Jeffery, 1770 A Plan of Kendal, inset of Map of Westmorland

Enclosure Award for Heversham, 1803, CRO (K) WQR/1/38

R. Blount Map of Milnthorpe Township, 1826 WD/D/Acc950/49

Ordnance Survey First Edition 1:2534, 1862 Sheet 46.3

Ordnance Survey Second Edition 1:2534, 1898 Sheet 46.3

Ordnance Survey Third Edition 1:2534, 1915 Sheet 46

Ordnance Survey 1983 Soils of Northern England, London

### SECONDARY SOURCES

Archaeological Services University of Durham (ASUD), 2005a Dallam School, Milnthorpe, Cumbria; Archaeological Evaluation unpubl rep

Archaeological Services University of Durham (ASUD), 2005b Dallam School, Milnthorpe, Cumbria; Archaeological Excavation unpubl rep

Bingham, R 1987 The Chronicles of Milnthorpe, Minlthorpe

Bingham, R 2000 Memories of Milnthorpe for the Millenium: a look back at a Westmorland village before 1950, Milnthorpe

CCC (Cumbria County Council), 2006 Extensive Urban Survey; Archaeological Assessment Report Milnthorpe, unpubl

Countryside Commission, 1998 Countryside Character, Volume 2: North West, Cheltenham

DoE, 1990 Planning Policy Guidance 16: Archaeology and Planning, PPG16

English Heritage, 1991 Management of Archaeological Projects, 2<sup>nd</sup> edn, London

Farrer, W, 1923 *Records of Kendale*, Cumberland and Westmorland Antiquarian and Archaeological Society Record Series, 1998 Reprint

Farrer, W and Brownbill, J, 1911 *The Victoria History of the Counties of England: Lancashire*, **6**, London

Faull, ML and Stinson, M (eds) 1986 Yorkshire, in J Morris (ed), *Domesday Book*, **30**, Chichester

Hey, G, and Lacey, M, 2001 Evaluation of Archaeological Decision-making Processes and Sampling Strategies, Oxford

Hindle, BP 1998 Roads and Tracks of the Lake District, Milnthorpe

Hodgkinson D, Huckerby, E, Middleton, R and Wells, C 2000 *The Lowland Wetlands of Cumbria*, Lancaster

McIntire, WT, 1936 The Port of Milnthorpe, *Trans Cumberland Westmorland Antiq* Arch Soc, **36**, n ser, 34-61

OA North 2003 Land Adjacent to Cross Keys Yard, Milnthorpe, Cumbria: Archaeological Assessment and Watching Brief, unpubl rep

OA North 2004 11 The Square, Milnthorpe, Cumbria; Archaeological Desk-based Assessment and Watching Brief, unpubl rep

Parson, W, and White, W, 1829 A History, Directory and Gazetteer of Cumberland and Westmorland, Leeds

Somerville, J, 1930 Water Power Mills of South Westmorland and The Kent, Bela and Gilpin and Their Tributaries, Kendal

Universal British Directory (UBD), 1790, London

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Figure 1: Site location

narth



Figure 2: Extract from Ordnance Survey map 1862



Figure 3: Extract from Ordnance Survey map 1898







Plate 1: South-west-facing view of site prior to evaluation



Plate 2: East-facing view of Trench 1



Plate 3: South-east-facing view of Trench 2



Plate 4: South-facing view of Trench 3



Plate 5: East-facing view of Trench 4

# APPENDIX 1: PROJECT BRIEF

#### 1. SITE DESCRIPTION AND SUMMARY

Site: Dallam School, Milnthorpe

Grid Reference: SD 5006 8167

Scope of Proposed Development: general teaching block

Scope of Evaluation: 75 square metres of trial trenching

Detailed proposals and tenders are invited from appropriately resourced, qualified and experienced archaeological contractors to undertake the archaeological project outlined by this Brief and to produce a report on that work. The work should be under the direct management of either an Associate or Member of the Institute of Field Archaeologists, or equivalent. Any response to this Brief should follow IFA Standard and Guidance for Archaeological Field Evaluations, 2001. No fieldwork may commence until approval of a specification has been issued by the County Historic Environment Service.

#### 2. PLANNING BACKGROUND

- 2.1 Cumbria County Council's Historic Environment Service (CCCHES) has been consulted by Capita Symonds regarding a proposed scheme for the erection of a teaching block at Dallam School, Milnthorpe.
- 2.2 The scheme affects an area considered to have a high archaeological potential and so the County Historic Environment Service has advised that the applicant provide information concerning the potential impact of the proposal on archaeological remains. In order to provide this information an archaeological evaluation of the site is necessary. This Design Brief sets out the requirements for the adequate archaeological evaluation of the site.
- 2.3 This advice is in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) and with policy C19 of the South Lakeland Local Plan.

#### 3. ARCHAEOLOGICAL BACKGROUND

3.1 Four human cremations were revealed during an archaeological evaluation and subsequent archaeological excavation at the school in 2005 (Archaeological Services, 2005, *Dallam School, Milnthorpe, Cumbria: Archaeological Evaluation,* unpublished report & Archaeological Services, 2005, *Dallam School, Milnthorpe, Cumbria: Archaeological Excavation,* unpublished report). Three of the cremation were grouped together and have been dated to the late Bronze Age. The fourth cremation was located away from the other three and has been dated to the late Neolithic period. An undated pit and ditch were associated with the late Bronze Age cremations.

#### 4. SCOPE OF THE PROJECT

#### 4.1 Objectives

4.1.1 The evaluation should aim to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied.

#### 4.2 Work Required

- 4.2.1 Before any on site work commences the County Historic Environment Record should be consulted and a *rapid* desk-based survey of the existing resource undertaken. This should include an assessment of those primary and secondary sources referenced in the County Historic Environment Record.
- 4.2.2 A visual inspection of the site. This should include a walkover of the site noting any surface features of potential archaeological interest, areas of potentially significant disturbance, and hazards and constraints to undertaking further archaeological work on site (including the siting of live services, Tree Preservation Orders and public footpaths).
- 4.2.3 The excavation of a series of linear trial trenches to adequately sample the threatened available area, and the investigation and recording of deposits and features of archaeological interest identified within those trenches. All features must be investigated and recorded unless otherwise agreed with the County Historic Environment Service. Initial topsoil removal can be undertaken by machine, but subsequent cleaning and investigation must be by hand. A minimum sample of 75 square metres of trial trenching should be investigated.
- 4.2.4 The evaluation should provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment should also be provided, wherever possible.
- 4.2.5 The following analyses should form part of the evaluation, as appropriate. If any of these areas of analysis are not considered viable or appropriate, their exclusion should be justified in the subsequent report.
  - A suitably qualified specialist should assess the environmental potential of the site through the examination of suitable deposits, including: (1) soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features, and; (2) the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits.
  - Advice is to be sought from a suitably qualified specialist in faunal remains on the potential of sites for producing bones of fish and small mammals. If there is potential, a sieving programme should be undertaken. Faunal remains, collected by hand and sieved, are to be assessed and analysed, if appropriate.
  - The advice from a suitably qualified soil scientist should be sought on whether a soil micromorphological study or any other analytical techniques will enhance understanding site formation processes of the site, including the amount of truncation to buried deposits and the preservation of deposits within negative features. If so, analysis should be undertaken.

#### 5. SPECIFICATION

- 5.1 Before the project commences a project proposal must be submitted to, and approved by, the County Historic Environment Service.
- 5.2 Proposals to meet this Brief should take the form of a detailed specification prepared in accordance with the recommendations of The Management of Archaeological Projects, 2<sup>nd</sup> ed. 1991, and must include:
  - A description of the excavation sampling strategy and recording system to be used
  - A description of the finds and environmental sampling strategies to be used
  - ✤ A description of the post excavation and reporting work that will be undertaken
  - Details of key project staff, including the names of the project manager, site supervisor, finds and environmental specialists and any other specialist sub-contractors to be employed
  - Details of on site staffing, expressed in terms of person days

- ✤ A projected timetable for all site work and post excavation work
- The proposed locations of the trial trenches
- 5.3 Any significant variations to the proposal must be agreed by the County Historic Environment Service in advance.

#### 6. **REPORTING AND PUBLICATION**

- 6.1 The archaeological work should result in a report, this should include as a minimum:
  - ✤ A site location plan, related to the national grid
  - ✤ A front cover/frontispiece which includes the planning application number and the national grid reference of the site
  - The dates on which the fieldwork was undertaken
  - ✤ A concise, non-technical summary of the results
  - ✤ An explanation of any agreed variations to the brief, including justification for any analyses not undertaken (see 4.2.5)
  - ♦ A description of the methodology employed, work undertaken and the results obtained
  - Plans and sections at an appropriate scale showing the location and position of deposits and finds located
  - ✤ A list of, and dates for, any finds recovered and a description and interpretation of the deposits identified
  - ✤ A description of any environmental or other specialist work undertaken and the results obtained
- 6.2 Three copies of the report should be deposited with the County Historic Environment Record within two months of completion of fieldwork. This will be on the understanding that the report will be made available as a public document through the County Historic Environment Record.
- 6.3 The results of the evaluation will need to be made available for inclusion in a summary report to a suitable regional or national archaeological publication if further archaeological fieldwork is expected.
- 6.4 Recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation should **not** be included in the report. Such recommendations are welcomed by the County Historic Environment Service, and may be outlined in a separate communication.
- 6.5 Cumbria HER is taking part in the Online Access to Index of Archaeological Investigations (OASIS) project. The online OASIS form at <u>http://ads.ahds.ac.uk/project/oasis</u> must therefore also be completed as part of the project. Information on projects undertaken in Cumbria will be made available through the above website, unless otherwise agreed.

### 7. THE ARCHIVE

- 7.1 An archive must be prepared in accordance with the recommendations in Brown, DH, 2007, *Archaeological Archives A Guide To Best Practice In Creation, Compilation, Transfer and Curation*, Archaeological Archives Forum. Arrangements must be made for its long term storage and deposition with an appropriate repository. A copy shall also be offered to the National Monuments Record.
- 7.2 The landowner should be encouraged to transfer the ownership of finds to a local or relevant specialist museum. The museum's requirements for the transfer and storage of finds should be discussed before the project commences.
- 7.3 The County Historic Environment Service must be notified of the arrangements made.

#### 8. **PROJECT MONITORING**

- 8.1 One weeks notice must be given to the County Historic Environment Service prior to the commencement of fieldwork.
- 8.2 Fieldwork will be monitored by the Historic Environment Officer on behalf of Capita Symonds.

#### 9. FURTHER REQUIREMENTS

- 9.1 It is the archaeological contractor's responsibility to establish safe working practices in terms of current health and safety legislation, to ensure site access and to obtain notification of hazards (eg. services, contaminated ground, etc.). The County Historic Environment Service bears no responsibility for the inclusion or exclusion of such information within this Brief or subsequent specification.
- 9.2 All aspects of the evaluation shall be conducted in accordance with the Institute of Field Archaeologist's *Code of Conduct* and the IFA's *Standard and Guidance for Archaeological Field Evaluations*.
- 9.3 Human remains must be left *in situ*, covered and protected when discovered. No further investigation should normally be permitted beyond that necessary to establish the date and character of the burial, and the County Historic Environment Service and the local Coroner must be informed immediately. If removal is essential, it can only take place under appropriate Department for Constitutional Affairs and environmental health regulations.
- 9.4 The involvement of the County Historic Environment Service should be acknowledged in any report or publication generated by this project.

#### **10. FURTHER INFORMATION**

For further information regarding this brief, contact

Jeremy Parsons Historic Environment Officer Cumbria County Council County Offices Kendal Cumbria LA9 4RQ Tel: 01539 773431 Email: Jeremy.Parsons@cumbriacc.gov.uk

For further information regarding the County Historic Environment Record, contact

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# APPENDIX 2: PROJECT DESIGN

#### 1. INTRODUCTION

#### 1.1 **PROJECT BACKGROUND**

1.1.1 Capita Symonds (hereafter the 'client') has requested that Oxford Archaeology North (OA North) submit proposals for an archaeological investigation of an area of land at Dallam School, Milnthorpe, Cumbria (centred NGR SD 5006 8167). The erection of a teaching block is proposed in an area of high archaeological potential; four human cremations were uncovered during an archaeological evaluation at the school in 2005, three of which were Bronze Age and the fourth was Neolithic. Consequently, as part of the proposed scheme, the client has consulted Cumbria County Council's Historic Environment Service (CCCHES), from which a formal brief has been issued requesting an evaluation of the proposed development area. The following proposals have been prepared in accordance with the CCCHES brief.

#### **1.2** OXFORD ARCHAEOLOGY NORTH

- 1.2.1 Oxford Archaeology North has considerable experience of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 30 years. Evaluations, assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.
- 1.2.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

#### 2 OBJECTIVES

- 2.1 This initial phase of the archaeological investigation aims to evaluate the potential for archaeological deposits, and determine their extent, nature and significance of any remains that may be threatened by the proposed development. To this end, the following programme has been designed to provide an archaeological evaluation. The results will provide information as to the impact of the proposed development on any archaeological remains. The stages to achieve these ends are as follows:
- 2.2 **Rapid desk-based assessment:** to provide a rapid assessment of the site to identify the archaeological potential prior to any development (in accordance with the IFA standards (1999)).
- 2.3 *Visual Inspection Survey:* to undertake a site inspection to relate the desk-based assessment findings, and identify areas of potential archaeological interest or disturbance.
- 2.4 *Archaeological Evaluation:* to implement a programme of trial trenching examining a minimum of 75m<sup>2</sup> within the proposed development area.
- 2.5 **Report and Archive:** a report will be produced for the client within eight weeks, unless a report submission deadline is agreed with the client at the time of commission. An archive will be produced to English Heritage guidelines (MAP 2 (1991)).
- 3. HEALTH AND SAFETY
- 3.1 **Risk Assessment:** OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.
- 3.2 *Services and other constraints:* full regard will, of course, be given to all constraints (services etc.) during the evaluation as well as to all Health and Safety considerations. As a

matter of course the field team will use a Cable Avoidance Tool (CAT) and Genny prior to any excavation to test for services. However, this is only an approximate location tool. Any **information regarding services**, i.e. drawings or knowledge of live cables or services, within the study area and held with the client should be made known to the OA North project manager prior to the commencement of the evaluation.

- 3.3 **Contamination:** any known contamination issues or any specific health and safety requirements on site should be made known to OA North by the client to ensure all procedures can be met, and that the risk is dealt with appropriately. Should any presently unknown contamination be discovered during excavation, it may be necessary to halt the works and reassess the risk assessment. Should it be necessary to supply additional PPE or other contamination avoidance equipment this will be costed as a variation.
- 3.4 *Staff issues:* all project staff will be CSCS qualified, proof of which can be provided in the form of CSCS cards.
- 3.5 A portable toilet with hand washing facilities is required and can be provided and located on or adjacent to the site, unless the client would prefer to arrange alternative facilities. Therefore, the cost has been provided as a contingency item.
- 3.6 *Fencing/hoarding requirements:* unless significant archaeological deposits are discovered and it is necessary for the trenches to remain open for monitoring purposes, the trenches will be backfilled once they have been recorded and planned.
- 3.7 During such time that the trenches are open, they will be protected by heras fencing with appropriate excavation signage.

#### 4. METHOD STATEMENT

#### 4.1 RAPID DESK-BASED ASSESSMENT

- 4.1.1 *Introduction:* a desk-based assessment is usually undertaken as the first stage of a programme of archaeological recording, prior to further intrusive investigation in the form of trenching. It is not intended to reduce the requirement for evaluation, excavation or preservation of known or presumed archaeological deposits, but it will provide an appraisal of archaeological constraints and a guide to any requirement for further archaeological work.
- 4.1.2 In this instance, a rapid, or low-level, desk-based assessment is required, which entails an appraisal of resources at the County Historic Environment Record Office. The following research will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the time scale of the project.
- 4.1.3 *Cumbria County Historic Environment Record (CHER):* the work will include consultation of the County Council's Historic Environment Record ((HER), formerly the Sites and Monuments Record (SMR)) in Kendal. An appraisal will then be carried out of the HER information relating to the site and its study area, consisting of 0.5km radius centred on the site. Only the primary, secondary and relevant aerial photographs referenced in the HER will be assessed.
- 4.1.4 **Oxford Archaeology North (OA North):** various publications and unpublished reports on excavations and other work in the town are held within the OA North library, and any relevant archives will be examined. OA North also holds a complete series of the *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, which will also be considered.

#### 4.2 VISUAL INSPECTION

- 4.2.1 Following the desk-based assessment the site will be visited to provide an understanding of the area of impact by the proposed redevelopment. This information will be used to inform the proposed positions of the evaluation trenches, prior to the next stage (4.3, below).
- 4.2.2 A visual inspection of the site will be undertaken to;

- relate the existing landscape to any research findings and note any features of potential archaeological interest,
- identify any areas of potentially significant disturbance to surviving archaeological remains,
- identify any hazards and constraints to undertaking further archaeological work on site, i.e. evaluation trenching (including the siting of live services and Tree Preservation Orders).

#### 4.3 TRIAL TRENCHING

- 4.3.1 The programme of trial trenching will establish the presence or absence of any previously unsuspected archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. In this way, it will adequately sample the threatened available area.
- 4.3.2 **Trenches:** the evaluation is required to examine a minimum of 75m<sup>2</sup>. The exact location and configuration of the trenches will be determined by the desk-based assessment and visual inspection. However, this would equate to trenches measuring a total length of approximately 45m, with the width being equivalent to a typical excavator bucket (approximately 1.7m). Subject to the assessment there may also be additional areas of disturbed land, which are inappropriate for evaluation and hence may reduce the overall area requiring evaluation trenching.
- 4.3.3 *Methodology:* the topsoil will be removed by machine (fitted with a toothless ditching bucket) under archaeological supervision to the surface of the first significant archaeological deposit. This deposit will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. All features of archaeological interest must be investigated and recorded unless otherwise agreed by CCCHES. The trenches will not be excavated deeper than 1.2m to accommodate health and safety constraints; any requirements to excavate below this depth will involve recosting.
- 4.3.4 Any impeding rubble/concrete surfaces will need to be removed prior to trenching. Therefore, any concrete surfaces that require breaking out will be carried out under OA North supervision, using a breaking arm mounted on the mechanical excavator. This will be subject to a variation.
- 4.3.5 All trenches will be excavated in a stratigraphical manner, whether by machine or by hand. Trenches will be located by use of GPS equipment which is accurate to +/- 0.25m, altitude information will be established with respect to Ordnance Survey Datum.
- 4.3.6 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.
- 4.3.7 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, and monochrome contacts) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 4.3.8 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.
- 4.3.9 *Environmental Sampling:* environmental samples (bulk samples of 40 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable

deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified.

- 4.3.10 Advice will also be sought as to whether a soil micromorphological study or any other analytical techniques will enhance the understanding of the site formation processes, including the amount of truncation to buried deposits and the preservation of deposits within negative features. Should this be required the costs for analysis have been provided as a contingency.
- 4.3.11 *Faunal remains:* if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA north's specialist in faunal remains, and subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.
- 4.3.12 *Human Remains:* any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. CCCHES and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations. Any delays caused by unforeseen and complex excavation of inhumations may be subject to a variation to the cost of the contract and will be agreed with the client.
- 4.3.13 *Contingency plan:* a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the Costings document and would be in agreement with the client.
- 4.3.14 The evaluation will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, an impact assessment will also be provided.

#### 4.4 FINDS

- 4.4.1 All finds recovered during the evaluation investigation will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.
- 4.4.2 Finds recovery and sampling programmes will be in accordance with best practice (current IFA guidelines) and subject to expert advice. OA has close contact with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs in-house artefact and palaeoecology specialists, with considerable expertise in the investigation, excavation, and finds management of sites of all periods and types, who are readily available for consultation. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC). Emergency access to conservation facilities is maintained by OA North with the Department of Archaeology, the University of Durham.
- 4.4.3 Neither artefacts nor ecofacts will be collected systematically during the mechanical excavation of the topsoil unless significant deposits, for example clay pipe waster dumps, are encountered. In such an eventuality, material will be sampled in such a manner as to provide data to enhance present knowledge of the production and dating of such artefacts, although any ensuing studies will not be regarded as a major element in any post-excavation analysis of the site. Other finds recovered during the removal of overburden or metal detecting survey will be retained only if of significance to the dating and/or interpretation of the site. It is not anticipated that ecofacts (eg unmodified animal bone) will be collected during this procedure.

- 4.4.4 Otherwise artefacts and ecofacts will be collected and handled as per specification. All material will be collected and identified by stratigraphic unit during the evaluation trenching process. Finds will be processed and administered at regular intervals (on a daily basis) and removed from the site.
- 4.4.5 Any waterlogged finds will be treated as appropriate. In the case of large deposits of waterlogged environmental material (eg unmodified wood), advice will be sought with the OA North consultant with regard to an appropriate sampling strategy.
- 4.4.6 Where possible, spot dates will be obtained on pottery and other finds recovered from the site. Artefacts will be examined and commented upon by OA North in-house specialists.
- 4.4.7 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 on advice from the recipient museum's archive curator.
- 4.4.8 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

#### 4.5 REPORT

- 4.5.1 One bound and one unbound copy of a written synthetic report will be submitted to the client, and three copies to the Cumbria HER within eight weeks of completion of the work. The report will include;
  - a site location plan related to the national grid
  - a front cover to include the planning application number, where relevant, and the NGR
  - a concise, non-technical summary of the results
  - the circumstances of the project and the dates on which the fieldwork was undertaken
  - description of the methodology, including the sources consulted
  - a summary of the historical background of the study area
  - an interpretation of the results and their significance, using the 'Secretary of State's criteria for scheduling ancient monuments' included as Annex 4 of PPG 16 (DoE 1990)
  - appropriate plans showing the location and position of features or sites located
  - a statement, where appropriate, of the archaeological implications of the proposed development
  - photographs as appropriate
  - a copy of this project design, and indications of any agreed departure from that design
  - the report will also include a complete bibliography of sources from which data has been derived, and a list of any further sources identified but not consulted
  - an index to the project archive
- 4.5.2 *Confidentiality:* all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

#### 4.6 ARCHIVE

4.6.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with Appendix 3 of the current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects (paper, magnetic and plastic media) with the County Record Office, Kendal, and the material archive will be submitted to an appropriate museum.

#### 5. OTHER MATTERS

#### 5.1 ACCESS

5.1.1 Liaison for basic site access will be undertaken through the school. It is understood that there will be access for both pedestrian and plant traffic to the site.

#### 5.2 **REINSTATEMENT**

5.2.1 It is understood that there will be no requirement for reinstatement of the ground beyond backfilling. The ground will be backfilled so that the topsoil is laid on the top, and the ground will be roughly graded with the machine. Should there be a requirement by the client, other than that stated, this will involve recosting.

#### 5.3 INSURANCE

5.3.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

#### 5.4 **PROJECT MONITORING**

5.4.1 Whilst the work is undertaken for the client, the County Archaeologist or representative will be kept fully informed of the work and its results, on behalf of the local planning authority, and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with CCCHES in consultation with the client.

#### 5.5 WORK TIMETABLE

- 5.5.1 *Rapid Desk-based Assessment:* approximately two-three days will be required for this element.
- 5.5.2 *Visual Inspection:* approximately one day will be required to complete this element, which would be undertaken following the desk-based assessment.
- 5.5.3 *Evaluation Trenching:* approximately two days will be required to complete this element. A trench location plan will be drawn up following the results of the desk-based assessment, to be agreed by CCCHES.
- 5.5.4 *Report and Archive:* the report and archive will be produced following the completion of all the fieldwork. The final report will be available within eight weeks of completion of the fieldwork, and the archive deposited within six months.
- 5.5.5 OA North would require a formal written agreement at least one week before commencement in order to notify CCCHES and schedule the work as above.

#### 5.6 STAFFING

- 5.6.1 The project will be under the direct management of **Emily Mercer BA** (Hons) MSc AIFA (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 5.6.2 The desk-based assessment will be undertaken by an OA North project officer or supervisor experienced in such work. Due to scheduling requirements it is not possible at present to provide the staff details.
- 5.6.3 The evaluation will be supervised by either an OA North project officer or supervisor experienced in this type of project, with an assistant. Due to scheduling requirements it is not

possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

- 5.6.4 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis** (OA North finds manager). Christine has extensive knowledge of finds from many periods in the North West.
- 5.6.5 Assessment of any palaeoenvironmental samples will be undertaken by or under the auspices of **Elizabeth Huckerby MSc** (OA North project officer). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey.

#### BIBLIOGRAPHY

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

Institute of Field Archaeologists, 1999 Standard and Guidance for archaeological desk-based assessment, unpubl

Institute of Field Archaeologists, 2001 Standard and guidance for archaeological field Evaluations, unpubl

SCAUM (Standing Conference of Archaeological Unit Managers), 1991 Health and Safety Manual, Poole

United Kingdom Institute for Conservation (UKIC), 1990 Guidelines for the preparation of archives for long-term storage, London

United Kingdom Institute for Conservation (UKIC), 1998 First Aid for Finds London

Context	Trench	Maximum Depth	Description
100	1	0.22m	Sandy-clay topsoil
101	1	0.34m	Sandy-silty-clay subsoil
102	1	0.28m	Clay subsoil
103	1		Stony sandy-clay natural
104	1	0.38m	Possible posthole
105	1	0.38m	Silty-clay fill of <b>104</b>
200	2	0.40m	Sandy-clay topsoil
201	2		Degraded limestone natural
202	2		Outcrop of fissured limestone bedrock
300	3	0.18m	Sandy-clay topsoil
301	3	0.20m	Silty-clay subsoil
302	3		Degraded limestone natural
400	4	0.28m	Sandy-clay topsoil
401	4	0.28m	Sandy-clay subsoil
402	4		Degraded limestone natural

# **APPENDIX 3: CONTEXT LIST**

Ctxt	OR	Material	Category	No	Description	Date
200	1001	Ceramic	Vessel	2	One fragment of brown-glazed redware; one fragment of late grey stoneware bottle.	Nineteenth century or later
200	1002	Iron	Nail	1	Small, hand-forged nail	Unknown
300	1000	Ceramic	Vessel	4	One fragment of base, cream- bodied blackware, probably a teapot; one fragment of thin-bodied black-glazed redware; two fragments of brown-glazed redware with simple slip-trained decoration.	Nineteenth century
400	1003	Ceramic	Vessel	3	One fragment of Creamware; one fragment of thin-bodied black- glazed redware; one fragment of brown-glazed redware with simple slip-trained decoration.	Nineteenth century
401	1004	Ceramic	Vessel	1	One very small fragment of sandy unglazed fabric. Possibly from an upright rim.	Medieval?

# APPENDIX 4: FINDS CATALOGUE

Ctxt = Context number, OR = object record number, No = number of fragments recovered.