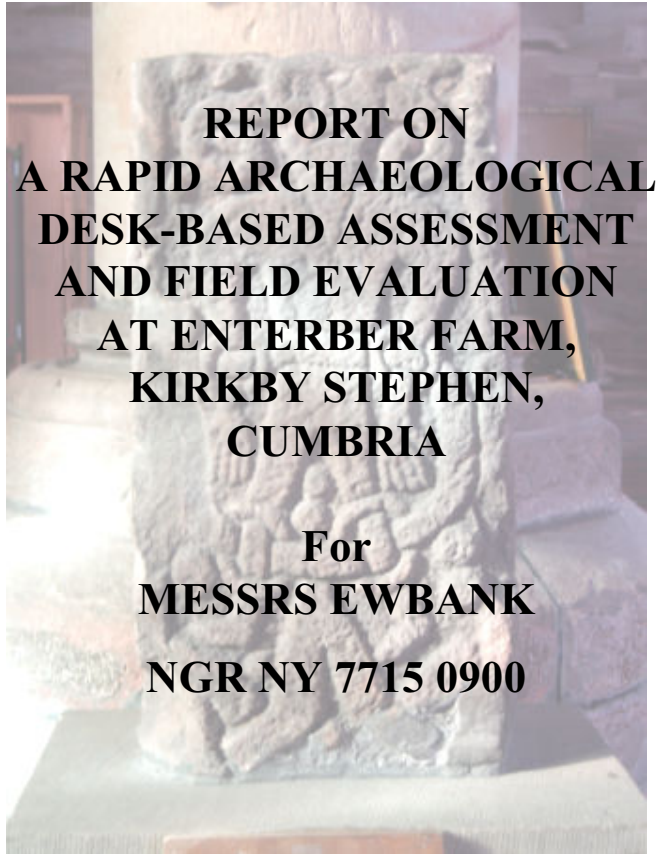

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. 238/06



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NON-TECHNICAL SUMMARY

In March 2006, North Pennines Archaeology Ltd undertook a rapid desk-based assessment and archaeological evaluation on land between Waitby Road and Soulby Road, near Enterber Farm, Kirkby Stephen, Cumbria (NY 7715 0900). Alan Ewbank of Messrs Ewbank had submitted a planning application for the development of employment land. As a result, Cumbria County Council's Historic Environment Service (CCCHES) recommended a programme of archaeological work be undertaken in accordance with a written scheme of investigation submitted to and approved by CCCHES. The initial stage of work consisted of a rapid desk-based assessment, followed by the excavation of a series of linear trial trenches.

The desk based assessment provided a brief outline of the topographical, geological, historical and archaeological background of the development area, covering all periods from the prehistoric to the early twentieth century in order to give a context in which to view the results of the evaluation. A total of 82 sites of historic and archaeological interest were identified. The majority of these were representative of the post-medieval expansion of Kirkby Stephen. The prehistoric period was represented by a stone axe find and funerary monuments; in addition there was the potential that several of the enclosure sites identified by crop marks and aerial photographs may be prehistoric in date. The Roman period is evidenced by several coin hoards; a possible Roman marching camp located at Stennerskeugh, Ravenstonedale, 4km south of the town; and earthworks close to Stennerkeugh, tentatively identified as a line of a possible Roman road. It has been suggested that Streetside Road in the town is the approximate alignment of a possible Roman road heading towards Sedbergh. The medieval period is largely characterised by the town of Kirkby Stephen itself, with the church of St Stephen being the focus of the town centre. The original settlement was most likely centred on Union Square and subsequently expanded into the surrounding countryside.

Of the sites identified by the desk-based assessment, only 3 sites had the potential to be affected by the proposed development. Aerial photographs show a crop mark of a possible prehistoric settlement to the south of the site (HER No. 3495). Furthermore, medieval earthwork remains of a possible settlement, field systems and agricultural practices are located to the south and east (HER nos. 3491 and 17760). As a result of this, the site was considered to have a high potential for below ground remains of prehistoric date near to, or associated with the crop mark, and a high potential for below ground remains associated with medieval settlement and land use.

The results of the evaluation showed that most of the development site was largely characterised by a sequence of shallow linear features, which appeared to pertain to post-medieval agricultural activity, representing a sequence of land boundaries. A number of trenches contained what were at first thought to be archaeological features, however through the subsequent excavation and environmental sampling the conclusion is that they are naturally formed, almost certainly during the last Ice Age as a result of glacial action. The appropriate terminology for this type of landscape is a 'knob-and-kettle topography' that may have been formed either along an active ice front or around masses of stagnant ice. Knob-and-kettle topography is an undulating landscape in which a disordered assemblage of knolls, mounds, or ridges of glacial debris is interspersed with irregular depressions and pits (kettles). In general the north and west of Britain were the gathering grounds for the ice in glacial stages. The high ground and proximity to the Atlantic to provide the snow of which glacier ice is made ensured that Scotland, The Lake District, north Wales and south-west Ireland were the foci of individual ice sheets which as they grew, joined to form major glaciers such as the Irish Sea glacier.

NON-TECHNICAL SUMMARY

The results of both the desk-based assessment and the evaluation indicate that the proposed development will not directly impact on significant archaeological remains, and as such the present programme of work should be sufficient to allow the development to continue.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd (NPAL) would like to thank Alan Ewbank for commissioning the project and for his assistance. NPAL would also like to thank Jeremy Parsons, Assistant Archaeologist, and Jo Mackintosh, Historic Environment Records Officer, both of Cumbria County Council Historic Environment Service, for their assistance with the project, and staff at Cumbria County Records Office in Kendal.

Martin Sowerby undertook the desk-based assessment. Nicola Gaskell, Kevin Mounsey, and Martin Sowerby undertook the evaluation, under the direction of Joanne Beaty, NPA Project Supervisor. Alan James kindly undertook the metal detecting. Martin Sowerby and Joanne Beaty wrote the report, and produced the drawings, Joanne Beaty assessed the finds and Patricia Crompton analysed the environmental samples. Frank Giocco, Technical Director for NPA LTD, managed the project. The report was edited by Matt Town.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In March 2006, North Pennines Archaeology Ltd undertook a rapid desk-based assessment and archaeological evaluation on land between Waitby Road and Soulby Road, near Enterber Farm, Kirkby Stephen, Cumbria, (NY 7715 0900). The work was requested in response to a planning application for the development of employment land by Alan Ewbank of Messrs Ewbank. As a result, Cumbria County Council's Historic Environment Service (CCCHES) recommended a programme of archaeological work be undertaken in accordance with a written scheme of investigation submitted to and approved by CCCHES.
- 1.1.2 This report presents the results of the desk-based assessment and field evaluation, outlining the finding of the work, followed by a statement of archaeological potential for the area, an assessment of the impact of the proposed development, and recommendations for further work if required.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by North Pennines Archaeology Ltd in response to a request by Messrs Ewbank for an archaeological desk-based assessment and field evaluation, on land between Waitby Road and Soulby Road, near Enterber Farm, Kirkby Stephen, Cumbria (NY 7715 0900), in accordance with a brief prepared by CCCHES. Following acceptance of the project design, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists (IFA), and generally accepted best practice.

2.2 DESK-BASED ASSESSMENT

2.2.1 Several sources of information were consulted, in accordance with the project brief and project design. The study area consisted of a 1km radius centred on the proposed development area (Figure 2). The principal sources of information were the Historic Environment Record (HER), maps and secondary sources.

2.2.2 ***Cumbria Historic Environment Record (HER):*** the HER in Kendal, a database of archaeological sites within the county, was accessed. This was in order to obtain information on the location of all designated sites and areas of historic interest and any other, non-designated sites within the study area, which included monuments, findspots, Listed Buildings and Conservation Areas. A brief record including grid reference and description was obtained for the various sites within the study area, and was examined in depth.

2.2.3 ***Cumbria County Record Office (Kendal):*** the County Record Office in Kendal (CRO(K)) was visited to consult documents specific to the study area. Historic maps of the study area, including surveys, Tithe and Enclosure Maps, Acts of Parliament and early Ordnance Survey maps, were examined. A search was made for any relevant historical documentation, particularly regarding the use of the area, drawing on the knowledge of the archivists. Several secondary sources and relevant websites were also consulted.

2.2.4 ***English Heritage NMR and Archaeology Data Service:*** an electronic enquiry was also made of English Heritage's National Monuments Record and the website of the Archaeology Data Service. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.2.5 ***North Pennines Archaeology Ltd (NPAL):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any un-deposited archives of the sites themselves were examined.

2.3 FIELD EVALUATION

2.3.1 The field evaluation consisted of the excavation of a series of linear trial trenches in order to provide a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals.

In summary, the main objectives of the evaluation were:

- To establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed.
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to recover artefactual material, especially that useful for dating purposes;
- to recover paleoenvironmental material where it survives in order to understand site and landscape formation processes.

2.3.2 Sixteen trenches measuring 20m X 1.6m were excavated, which constitutes a 5% sample of the development area (Figure 1), 1.4 ha in area. Trenches were excavated by a JCB 3CX mechanical excavator to either the top of archaeological deposits, or the natural substrate, whichever was observed first.

2.3.3 Trenches were subsequently cleaned by hand and all features investigated and recorded according to the North Pennines Archaeology Ltd standard procedure as set out in the Excavation manual (Giecco 2001).

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the project design, and in accordance with current English Heritage guidelines (1991). The archive will be deposited within an appropriate repository and a copy of the report given to the County Historic Environment Record, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA 06 ENT-A.

3. BACKGROUND

3.1 LOCATION AND TOPOGRAPHY

- 3.1.1 Kirkby Stephen lies within the undulating farmland of the upper Eden Valley, approximately 37km south-east of Penrith, in that part of east Cumbria formerly constituting the county of Westmorland. The town is situated on the A685 and to the north-east of the River Eden. The early settlement was a focal point for various roads and tracks from Sedbergh and the Lune Valley to the south, whilst on the northern side of Kirkby Stephen there was an obvious route down the Eden Valley to Appleby and beyond. To the north-east there was a link with the Roman road running through Brough and the Stainmore Pass (Birkbeck 2000). The excavation was focused on the field adjacent to Kirkby Stephen Grammar School and within the boundary of the town itself. The surrounding landscape consists of open and rolling farmland that has rectilinear field structure subdivided by hedgerows with a high density of mature hedgerow trees (Countryside Commission 1998). The parish of Kirkby Stephen, in the East Ward of the Barony of Westmorland, originally consisted of nine townships being: Kaber, Nateby, Mallerstang, Smardale, Soulby, Waitby Wharton, Winton and Hartley.
- 3.1.2 The area to be investigated was of irregular shape, forming an area of c1.4ha of permanent pasture, centred on (NY 7715 0900). The Kirkby Stephen to Soulby road forms the western boundary of the development site and the road to Waitby forms its eastern boundary. The north-west boundary coincides with the edge of a plateau on which the development will be sited. From this the land sloped downward to an area of marshy ground.
- 3.1.3 The drift geology of the study area is categorised as belonging to the Clifton Association, which is a group of seasonally waterlogged soils that developed into a reddish fine loamy till, and related glacio-fluvial deposits that are stagnogley in character (Jarvis 1984 et al) The underlying geology is composed of calcareous magnesium conglomerate, which forms part of the lower series of carboniferous or mountain limestone also known as Breccia. This rock is made up of small pieces of limestone fused with sandstone. Locally this stone is known as Brockram. Overlying this is the Devensian glacial till. (Braithwaite 1884).

3.2 HISTORIC BACKGROUND

- 3.2.1 **Prehistoric Period:** evidence for early prehistory in Cumbria is known from sites dating from the Upper Palaeolithic period onwards (Young 2002). Upper Palaeolithic and Mesolithic material was discovered on the terraces of the Tees at Towler Hill, in Teesdale, approximately 15km east of Kirkby Stephen and further sites have been identified in south Cumbria (Salisbury 1997, Young 1992). The Cherrys have carried out extensive field walking within Cumbria, especially the Upper Eden Valley, identifying a large number of Mesolithic, Neolithic and Bronze Age sites (Cherry and Cherry 1983). On the limestone uplands of the Eden Valley most of the sites of Late Mesolithic appearance were found at heights of between 275m and 300m above mean sea level. The location of these lithic scatter sites demonstrates repeated use of specific topography, usually near to a convenient water supply. Most of the sites identified by the Cherrys remain unexcavated and so detailed interpretation has not been possible (Cherry

and Cherry 2002). The fertile lands of the Eden Valley have been thought to attract settlement since the Neolithic Period and the location of monuments in this period appears to suggest a shift in the emphasis of Neolithic activity from the coastal plain to the edge of the Lake District hills and the Eden Valley (Hodgkinson et al 2000, 37). Fieldwork has indicated that the majority of Neolithic long barrows are located within the Eden Valley (Waterhouse 1985, 7). Perhaps the most well known prehistoric monuments in the area are Long Meg and Her Daughters stone circle to the north east of Kirkby Thore near Langwathby and King Arthur's Round Table and Mayburgh henge at Eamont Bridge near Penrith.

- 3.2.2 The area around Kirkby Stephen, particularly to the north, has a wealth of prehistoric remains (RCHM 1936). There are a considerable number of funerary monuments across the area, particularly round cairns of the Bronze Age; however, there is also a long cairn at Rayseat Pike, Crosby Garrett Fell, which is of Neolithic Date. (LUAU 1997). At Weisber Hill, south-west of Kirkby Stephen a series of possible round barrows and earthworks were excavated by Dr Greenwell in 1877, and the finds recovered from the excavations indicated a Bronze Age date (RCHM 1936). At Ash Fell, again to the south-west of the town, traces of a ring ditch were noted, and at Windy Hill, 4km to the south of Kirkby Stephen, two barrows were excavated, one containing a crouched human burial (RCHM 1936). A polished stone axe was found in Kirkby Stephen, however its exact find spot is unknown (Richardson 1980).
- 3.2.3 Later periods are similarly very well presented; there are a particularly large number of enclosed settlements to the south of Appleby, and within the Upper Eden Valley (RCHM 1936). A minority of these have a form which is typologically of Iron Age date, one of the most notable being the Hillfort at Castle Folds on Great Asby Scar. Similarly, there is also an Iron Age-type enclosed settlement at Gilts Farm, to the west of Kirkby Stephen, at Crosby Ravensworth. The majority of these enclosed settlements, however, are of a form typologically now ascribed to the Romano-British period, although they may have had Iron Age origins (*ibid*). Earthwork remains at Croglam Castle approximately 1km south-east of the town have been suggested as being of Iron Age date, however it is most likely that these are in fact Romano-British. The earthwork consists of a roughly oval enclosure of about 1.5 acres, surrounded by a ditch with an outer rampart. A hollow was noted to the north-east, which was presumably an entrance (RCHM 1936). Associated with the landscape of Croglam Castle are Croglam Dykes, a dyke or dykes running up to the Hillfort in a northerly direction. The earthworks are of unknown date but most likely represent pre-Roman or Romano-British remains (Jones 2003). To the north-west of Enterber Farm at Waitby, earthworks show the buried remains of an enclosed Romano-British farmstead. The enclosure runs all the way around the summit of Castle Hill, and includes a group of five small sub-rectangular enclosures, which could be interpreted as small stock pens or possible roundhouses. There are several other earthworks identified from aerial photographs in the area; however most of these remain unexcavated and therefore it is impossible to ascertain either a function or date.
- 3.2.4 **Roman:** there is considerable evidence for Roman military activity around the study area during the Roman period (Shotter 1997); at nearby Brough was a Roman fort, linked to that at Brougham by the trans-Pennine Roman road from Scotch Corner. Some areas of so-called pre-Roman activity and settlement have been identified outside the

town, including features seen in aerial photographs. However without substantiation from sub-surface investigation, it is difficult to determine precisely the date and nature of this activity. It is, however, clear that some of these remains are possibly of Roman origin by their form and nature.

- 3.2.5 A possible Roman marching camp has been located at Stennerskeugh, Ravenstonedale with distinct entrances on the south and east sides. The earthen banks are substantial, and there are other earthworks close by indicating the line of a possible Roman road (**Site 8**). It has been suggested that Streetside Road (HER 15536) in the town is the approximate alignment of a possible Roman road heading towards Sedbergh (Road 371; Margary 1973).
- 3.2.6 A hoard of Roman coins was uncovered close to the town, though, as yet, neither the precise find spot nor the full details of the coins have been disclosed. However, one coin, which has been identified, is a relatively uncommon issue of Marius, who was the second emperor of the so-called "Gallic Empire" (AD268). There has also been a large number of other stray finds of Roman coins reported in this area (Shotter 1988, 1989 and 1991)
- 3.2.7 **Early Medieval:** evidence for Early Medieval activity in north Cumbria is extremely limited, the end of the Roman economy depriving the archaeologist of diagnostic artefactual evidence on all but a small minority of sites (Higham 1986). Once the Roman administration ended in 410AD, the native Britons gradually reverted to their own autonomy. Angles had begun to enter eastern Cumbria by the seventh century AD, but the west of the county appears politically more stable (Crowe 1984). The discovery of early medieval settlement sites in the region is rare, but a number of putative Romano-British rural sites excavated more than forty years ago may have had late phases that could have been observed with the use of radiocarbon dating. Recent excavations at Dacre in Cumbria have produced evidence for rectangular post-built buildings and sunken-feature buildings perhaps dating to the seventh or eighth centuries AD (Newman 2004). North Cumbria fell under the aegis of Anglo-Saxon, Scandinavian and Scottish influences (Hodgkinson *et al* 2000), and in the seventh century, the region was absorbed into the kingdom of Northumbria.
- 3.2.8 Very little is known about the origins and development of Kirkby Stephen; the name clearly indicates influence by the Scandinavian migration and probably signifies a well-established settlement by the 9th century. The place name indicates that the settlement grew up around the church (Fellows-Jenson 1985). It seems almost certain that the settlement surrounding it was in existence before the Norman Conquest. The town's name, Kirkby, comes from two Scandinavian words, *kirk*, a church, and *by*, a town.
- 3.2.9 It has been suggested that the early focus of settlement was at Union Square, once known as the Green (Birkbeck 2000). Although there is little in the way of direct evidence for activity in the early medieval period in Kirkby Stephen, several fragments of carved stones have been recovered from the town, mostly from the vicinity of the church. Most notable is the 'Loki Stone', part of a cross shaft with the carving of a horned and bound figure representing the Norse god 'Loki' (pictured on the cover). This was early Christian symbol of the devil in human form. Examples of these types are rare, but a similar shaft and bound devil have been found at Otley in Yorkshire (Birkbeck 2000). Other fragments of stone in the church include a hogback stone and carved cross

shafts, some of these are decorated and the majority are 10th and 11th century in date, as well as a hogback stone indicating Scandinavian influence and probable settlement.

- 3.2.10 **Later Medieval:** by the eleventh century, the political situation in Cumbria was volatile, with the emergent kingdom of Strathclyde to the north and the growing power of England to the south competing for political control (Kirkby 1962). Much of the modern county of Cumbria remained outside Norman control (thus not being included in Domesday Book of 1086) until 1092 when William II marched north to Carlisle. The region was given to King David of Scotland in 1135, returning to England after the Anarchy (Whellan 1860, 84-5).
- 3.2.11 The development of Kirkby Stephen during the Middle Ages is unclear. Birkbeck (2000) suggests the focal point of the town was the church, with a market added at a later date in front of the church. During William the Conquerors reign (1066 - 1087), the church was owned by Ivo de Talebois, Baron of Kendal, who gave the church and its land to St. Mary's Abbey in York (*ibid*). This has led to a belief that it may have been from the abbot of St Mary's Abbey, Stephen, that the church got its name. The church, also known as the Cathedral of the Dales, dates from around the 11th century and has traces of both Saxon and Norman stonework. After the dissolution of the monasteries in 1538 by Henry VIII, the church was sold off.
- 3.2.12 In the reign of Edward I (1272-1307) Robert de Veteripont included Kirkby Stephen manor to his estate, and it later passed to his daughter Idonea who subsequently sold it to the Cliffords. At the time of Robert de Cliffords death in 1314, he owned a manor house in Kirkby Stephen in a place called Mellbecks, which is located towards the top end of the town (Birkbeck 2000).
- 3.2.13 During the 13th and 14th centuries, fairs proliferated throughout England as more Bishops, Barons and Lords were granted the right to hold weekly markets and annual fairs, many associated with specific Saints and usually linked with the rural calendar. Kirkby Stephen's St Luke's Fair, was granted by Edward III in 1352 in return for an undertaking by Robert de Clifford, Baron of Westmorland, who owned the manor of Kirkby Stephen, to provide the King with men at arms and archers for his wars with Scotland. In the reign of Henry VIII, the king granted the lordship of the manor of Kirkby Stephen to Lord Wharton. It then passed successively to the Earls of Thanet and the Hothfields, the Lowthers and finally to the Musgraves of Hartley Castle. King James I, by his charter, in 1606, granted to George, Earl of Cumberland, instead of the foregoing markets and fairs, "*one market on Monday and two fairs yearly; one on the Wednesday, Thursday, and Friday after Whitsuntide, and the other on the two days next before the feast of St. Luke, and on that feast day; with a court of piepowder, tolls, tollages, and other jurisdiction thereunto belonging.*" (RCHM 1936).
- 3.2.14 **Post-Medieval:** during the late seventeenth and eighteenth centuries there was enough capital and prosperity available in Cumbria for the rebuilding of towns, villages in stone (Rollinson 1967). As a result there are few remaining examples of domestic architecture dating from before 1610, other than the large houses built by wealthy landowning families.
- 3.2.15 There is no record of the extent of settlement in the town area, nor of buildings to be found there before the 19th century. It seems probable that dwellings and shops were clustered around what is still the nucleus of the town, the Market Square, the Green,

Mellbecks, Market Street and Primrose Hill. Evidence from the Tithe map of 1844 reveal few buildings south of the Town Head, including Bollam Terrace and the Crescent, Rowgate and West Garth (Jones 2003).

- 3.2.16 One of the most significant changes to the landscape character of the area around Kirkby Stephen was the construction of the Settle to Carlisle Railway and the prosperity it brought. The line was built between the years of 1869 and 1876 by the Midland Railway Company (Mitchell and Joy 1989). Construction was undertaken primarily in order to give the Midland Railway a direct route to Scotland and to avoid having to use the line from Ingleton to Lowgill, which was owned by its great rival the London and North Western Railway. The station itself is constructed 1.5km from the town and is represented by two stations (Kirkby Stephen East and West stations). The station building is an example of Midland Railway architecture at its best, and was the only station on the line to have the luxury of a first class waiting room (*ibid*). Kirkby Stephen East formed a key junction with the Carlisle and Settle line and the Eden Valley line with the route to the west towards Appleby and Penrith, Tebay to the south and east over Stainmore summit and Barnard Castle. The Eden Valley line ran from Darlington to Penrith, it opened in 1862 and finally closed in 1962 (Preston 1997). As a result of the railway and the prosperity it brought a number of new buildings were constructed especially along south road leading to the station and a number of buildings into the town, such as the Board School, Auction Mart and the creation of Jubilee Park, to the south of the railway station on former common land (Birkbeck 2000).

4. ASSESSMENT RESULTS

4.1 INTRODUCTION

4.1.1 These assessment results are based on primary documents, most notably maps, and on the secondary sources used in *Section 3*. The results are presented according to the archive from which they were consulted. There are 77 HER records for the study area in close proximity to the site and most of these are of a post-medieval date. Extra information was gathered from the immediate vicinity, defined as a 1km radius centred on the site. A full list of the sites identified by the assessment is given in the Gazetteer in *Appendix 1*.

4.2 HISTORIC ENVIRONMENT RECORD (HER)

4.2.1 **HER:** there were 77 HER records within the study area, which is defined as a 1km radius around the site (Fig 2). A full description can be found in *Appendix 1*.

4.2.2 **Listed Buildings:** the listed building records show 52 buildings within a 1km radius of the site. The buildings are summarised in *Appendix 1*.

4.3 CUMBRIA RECORD OFFICE (KENDAL)

4.3.1 The Cumbria Record Office in Kendal (CRO(K)) was consulted to collate maps for regression analysis of the study area. Information from primary and secondary sources, including archaeological or historical journals, has been incorporated into the historic background (*Section 3.2*).

4.4 CARTOGRAPHIC SOURCES

4.4.1 As part of the documentary search at the Cumbria Record Office in Kendal (CRO(K)), an in-depth scan of the early maps for Kirkby Stephen was undertaken. A cartographic date range of between 1777 and 1925 was obtained. The development area will now be discussed with reference to these early sources, noting any changes to the development area within this period.

4.4.2 **Jeffery's Map of Westmorland, 1777, and Ordnance Survey Map Cumbria 1868 – First Edition 25" to 1 mile** (Figs 3 and 4): the maps show the development area as a field of irregular shape, forming an area of c1.4ha of permanent pasture. The Kirkby Stephen to Soulby road forms the western boundary of the development site and the road to Waitby forms its eastern boundary. The north-west boundary coincides with the edge of a plateau on which the development will be sited. The maps also show a field boundary running alongside the slope and this must have been removed since 1925.

4.4.3 **Ordnance Survey Map Cumbria 1901 – Second Edition 25" to 1 mile** : the map depicts the field identically to the First Edition map.

4.4.4 **Ordnance Survey Map Cumbria 1925 – Third Edition 25" to 1 mile** : the map depicts the field identically to the Second Edition map.

4.5 AERIAL PHOTOGRAPHY

- 4.5.1 Aerial photographs show a crop-mark of a possible prehistoric settlement to the south of the development area (HER No 3495). Furthermore, medieval earthwork remains of a possible settlement, field systems and agricultural practices are located to the south and east (HER nos. 3491, 17760).

4.6 ARCHAEOLOGICAL INVESTIGATIONS

- 4.6.1 Little archaeological work of note had been carried out in the Kirkby Stephen area for some time and early antiquarians undertook the majority of these.
- 4.6.2 In 1993, the Lancaster University Archaeological Unit, now Oxford Archaeology North (OAN), undertook a desk-based assessment for proposed route of the A685 bypass. It identified several areas of archaeological potential; however, this road scheme was cancelled due to insufficient funding (LUAU 1993). In 2002, OAN carried out a Landscape Survey at Hartley Fold Estate, Hartley (OAN 2002).
- 4.6.3 In 2003, North Pennines Heritage Trust excavated a number of evaluation trenches at Rowgate (NY 7707 0779), located to the south of the town centre in response to a planning application for a residential development. In total 6 trenches, were excavated across the site. No significant archaeological deposits, were uncovered, apart from post-medieval land drains and an associated culvert.
- 4.6.4 In September 2003, Brigantia Archaeological Practice carried out an archaeological evaluation on the Melbecks area of the town. It proved there was no significant remaining archaeological potential and the land use must have been agricultural/horticultural since the foundation of the medieval settlement of Kirkby Stephen (Brigantia Archaeological Practise 2003).

5. EVALUATION RESULTS

5.1 INTRODUCTION

- 5.1.1 The machine stripping of the trenches, which were subsequently excavated by hand down to the natural subsoil, permitted an examination of the archaeological remains within the development site. Where no features of archaeological interest were located, a trench record sheet was compiled, and context numbers were not issued.

5.2 TRENCH 1

- 5.2.1 Trench 1 was 25m long by 1.80m wide and was orientated in a east-west direction. The trench was positioned in the western section of the evaluation area. The maximum depth of the trench was approximately 0.40m.
- 5.2.2 The machine stripping removed 0.30m of topsoil, consisting of mid to dark greyish brown clayey silt with occasional very small stone inclusions, This overlay a deposit of mid brownish orange, moderately compacted clayey silt, approximately 0.42m in depth. This deposit has been interpreted as the subsoil. The lowest horizon encountered was a very mixed mid greyish yellow clayey silt, with frequent poorly sorted gravels, which was clearly natural in origin.
- 5.2.3 No evidence of any archaeological features was found in the base of Trench 1.

5.3 TRENCH 2

- 5.3.1 Trench 2 was 20m long by 1.80m wide and was orientated in a north-south direction. The trench was positioned in the north-west area of the evaluation area. The maximum depth of the trench was approximately 0.80m.
- 5.3.2 The trench was machine stripped to reveal three distinct layers within the trench. The topsoil reaches a depth of 0.35m and consisted of mid-grey clayey silts, moderately compacted with little or no inclusions. Underneath the topsoil was the subsoil/natural, which consisted of mid-brownish orange clayey sand, with occasional sub-rounded-rounded stones, 0.04m in diameter on average, and approximately 0.45m deep in section.
- 5.3.3 A linear feature [104], subsequently interpreted as a post medieval field boundary, was observed cutting across the northern end of the trench, aligned approximately north-south. It measured 0.39m wide and survived to a maximum depth of 0.08m. The nature of the single fill (103), suggested that this ditch filled in naturally rather than being deliberately backfilled. One small fragment of pipe stem was recovered from the fill.

5.4 TRENCH 3

- 5.4.1 Trench 3 was 27m long by 1.80m wide and was orientated in a north-south direction. The trench was positioned in the north-west area of the evaluation area. The maximum depth of the trench was approximately 0.65m.
- 5.4.2 The trench was machine stripped to reveal two distinct layers within the trench. The topsoil reached a depth of 0.30m and consisted of mid-grey, moderately compacted

clayey silt, with occasional small inclusions. Underneath the topsoil was the subsoil/natural, which consisted of mid-brownish orange clayey sand, with occasional sub-rounded-rounded stones, 0.05m in diameter on average, and approximately 0.35m deep in section.

- 5.4.3 Across the northern end of the trench, several ditch and posthole type features were noted cutting into the natural soil horizon. A large pit **[118]**, which at first was interpreted as the remains of a ditch terminus, was demonstrated to be a deep sub-circular feature of unknown date. This was located approximately 7.40m to the south-east of a number of possible post-holes, and had a diameter of 1.30m, and a depth of 1.10m. It had near vertical sides, the erosion of which was likely to have resulted in the deposition of the lowest excavated fill **(117)**, implying that this feature had been open for some time. The presence of clay within the upper fill **(116)** may represent deliberate backfilling, although it is highly likely that it was a result of the gradual accumulation of surrounding soil horizons that had washed into the feature over a long period of time. Seven medium to large post-hole type features, all cut into the natural subsoil, were noted, of which two were excavated **[120]** and **[121]**. It is highly likely that these features are of a geological origin rather than a form of human intervention due to their irregularity and the fact that the features were all devoid of small finds and evidence of post packing. The geology of the environs of Kirkby Stephen is made up of a glacial landscape, which is called a knob and kettle topography, these features most likely show evidence of this. Linear feature **[124]** situated along the south-west corner of the trench was the continuation of the ditch seen in Trench 2, again aligned north-south. It measured 0.5m wide and 0.14m deep. The fill **[123]** produced several fragments of post-medieval pottery.

5.5 TRENCH 4

- 5.5.1 Trench 4 was 25m long by 1.80m wide and was orientated in an east-west direction. The trench was positioned in the northern section of the evaluation area. The maximum depth of the trench was approximately 0.40m. A sondage was excavated at the north end of the trench to a maximum depth of 1.30m.
- 5.5.2 The trench was machine stripped to a maximum depth of 0.40m revealing three deposits. The topsoil was made up of very loose, dark brown to black sandy silt with occasional small stone inclusions. Its maximum depth was 0.25m deep in section. This in turn overlaid the subsoil/natural, which consisted of a moderately compacted mid orangish brown clayey silt which in turn overlaid the natural soil horizon. The natural consisted of very mixed, compacted, mid greyish yellow sandy silt with frequent inclusions of small sub-angular stones.
- 5.5.3 Situated in the southern end of the trench, and identified as the same feature seen in Trench 2 and 3 was ditch **[105]**. This feature was 1.10m wide with a depth of 0.27m, and was aligned north-south. It was filled by: a dark brown, almost black, silty loam **(106)**; and by **(107)**, a loose orange gravel deposit which incorporated some silt along the edges, probably indicating natural erosion, which occurred whilst **[105]** was an open feature. Fill **(106)** contained fragments of pottery dated to the post-medieval period as well as animal bone and CBM.

5.5.4 Similar geological features first noted in Trench 3 were observed in the southern end of the trench. These consisted of sub-circular to sub-rectangular features and were filled with loose, dark, silty sand, which appear to have been formed naturally through geological processes.

5.6 TRENCH 5

5.6.1 Trench 5 was 15m long by 1.80m wide and was orientated in an east-west direction. The trench was positioned in the northern section of the evaluation area. The maximum depth of the trench was approximately 0.45m.

5.6.2 The trench was machine stripped to reveal of 0.40m revealing two distinct deposits. The topsoil was made up of very loose, mid to dark greyish brown sandy silt with occasional small stone inclusions up to 0.12 in diameter. Its maximum depth was 0.25m deep in section. This in turn overlaid the subsoil/natural, which consisted of a moderately compacted mid brownish orange clayey sand. The natural soil horizon consists of degraded limestone, which is mixed with brownish yellow sandy clay.

5.6.3 Similar geological features first noted in Trench 3 and Trench 4 were observed in the south-eastern end of the trench. These consisted of sub-circular to sub-rectangular in shape and were filled with loose, dark, silty sand, with occasional very small gravels at the base of the features. Again, they appear to be naturally formed.

5.6.4 No evidence of any further archaeological features was found in the base of Trench 5.

5.7 TRENCH 6

5.7.1 Trench 6 was 30m long by 1.80m wide and was orientated north-south. The trench was positioned in the middle of the evaluation area. The maximum depth of the trench was approximately 0.35m.

5.7.2 The trench was machine stripped to a depth of 0.35m revealing three distinct layers and a linear feature running north-west to south-east through the southern part of the trench. The topsoil was made up of approximately 0.30m of loosely compacted mid greyish brown clayey silts. This, in turn overlaid subsoil/natural, which consisted of moderately compacted light brownish grey clayey silt, with occasional small stone inclusions. The natural consisted of a well-compacted reddish brown clayey silt with small stone inclusions.

5.7.3 A linear feature [125] was noted running through the southern end of the trench on a north-west to south-east alignment, and was possibly connected to a similar feature in Trench 3. The fill (126) produced post-medieval pottery and was made up of a similar fill to the topsoil.

5.8 TRENCH 7

5.8.1 Trench 7 was 19.5m long by 1.80m wide and was orientated in a north-west direction. The trench was positioned along the eastern extent of the evaluation area. The maximum depth of the trench was approximately 0.55m.

5.8.2 The trench was machine stripped revealing three distinct layers. The topsoil was made up of 0.25m of loose, mid greyish brown clayey silts. This, in turn, overlaid the

subsoil/natural, which consists of a moderately compacted light brownish grey clayey silt, with occasional small stone inclusions, up to 0.18m deep. The natural was slightly reddish brown clayey silt; moderately to well compacted with frequent small stone inclusions, which were sub-angular to sub-rounded in shape.

- 5.8.3 Later post medieval activity was represented in this trench by two linear features [109] and [111], which were interpreted as evidence for agricultural practise (field boundary ditches). Both were aligned north-south and ran parallel to each other. The earliest ditch appears to be [109], which possibly cuts [111]. Both had a similar depth of 0.30m to 0.35m, although [109] was 1.25m wide, whilst [111] measured 0.65m. Both components of the ditch contained a similar homogenous fill (108) and (110) which indicates that the fill was formed as a result of natural accumulation of material into an exposed feature.

5.9 TRENCH 8

- 5.9.1 Trench 8 was 20m long by 1.80m wide and was orientated in a north-south direction. The trench was positioned at the western edge of the evaluation at the bottom of a natural slope. The approximate maximum depth of the trench was 0.90m.
- 5.9.2 The trench was machine stripped to a depth of 0.90m and was made up of three distinct layers. The topsoil was made up of 0.30m of loose, mid greyish brown clayey silts. This, in turn overlaid the subsoil/natural, which consists of moderately compacted light brownish grey clayey silt, with occasional small stone inclusions up to 0.60m deep. The natural was made up of a reddish brown clayey silt mix with small stone inclusions.
- 5.9.3 There were no archaeological features in this trench.

5.10 TRENCH 9

- 5.10.1 Trench 9 was 20.50m long by 1.80m wide and was orientated in a north-south direction, the trench was positioned at the western extent of the evaluation area, placed halfway down the slope. The maximum depth of the trench was 1.10m deep. At the southern end of Trench 9 a sondage was excavated to a depth of 1.10m.
- 5.10.2 Trench 9 was machine stripped to reveal three distinct layers. The topsoil was made up of 0.30m of loosely compacted dark grey sandy silt. Sealed beneath this was approximately 0.40m of orangey brown silt/sand mix subsoil. A sondage was excavated at the southern extent of the trench to a depth of 1.10m to reveal the natural surface of reddish brown clay with small stone inclusions.
- 5.10.3 There were no archaeological features in this trench.

5.11 TRENCH 10

- 5.11.1 Trench 10 was 22m long by 1.80m wide and was orientated in an east-west direction in the middle of the evaluation area cutting across the natural slope. The maximum depth of the trench was 1.40m deep. A sondage was excavated at the western extent of the trench to a depth of 1.40m.

5.11.2 Trench 10 was machine stripped to reveal three distinct layers. The topsoil was made up of 0.30m of mid-greyy brown sandy silt mix, sealed beneath this was 0.20m of orangey brown clayey silt subsoil. This, in turn overlaid the natural, a reddish brown clay with small stone inclusions. A sondage was placed at the western extent of the trench at a depth of 1.40m to show the depth of natural on the slope.

5.11.1. There were no archaeological features in this trench.

5.12 TRENCH 11

5.12.1 Trench 11 was 20m long by 1.80m wide and was orientated in an east-west direction. The trench was positioned in the south-eastern end of the evaluation area. The maximum depth of the trench was approximately 0.70m. At the north-west extent of the trench a sondage was excavated to a depth of 1m.

5.12.2 The trench was machine stripped revealing two distinct layers. The topsoil was made up of 0.40m of loose, mid-dark greyish brown sandy silt, This, in turn, overlaid 0.30m of subsoil/natural, which consists of a moderately compacted pale orange clayey sand. The natural was slightly reddish brown clayey silt; moderately to well compacted with frequent small stone inclusions.

5.12.3 Situated in the centre of the trench were two ditches both previously identified in Trench 7. The earliest ditch appears to be [115] which possibly cuts [113]. Both had a similar depth of 0.24m, although [113] was 0.80m wide, whilst [115] measured 1.32m. Both components of the ditch contained a similar homogenous fill (112) and (114) which indicates that the fill was formed as a result of natural accumulation of material into an exposed feature.

5.12.4 No finds were recovered from the trench.

5.13 TRENCH 12

5.13.1 Trench 10 was 15m long by 1.80m wide and orientated in a north-west direction. The trench was positioned along the eastern extent of the evaluation area. The maximum depth of the trench was 0.80m deep.

5.13.2 The trench was machine stripped to reveal three distinct layers. The topsoil was made up of 0.30m of mid-grey, loosely compacted clayey silts. This sealed 0.40m of an orangey-brown subsoil made up of moderately compacted clayey silt. The natural comprised of a moderate to well-compacted reddish brown clayey silt with small stone inclusions.

5.13.3 There were no archaeological features of note in Trench 12.

5.14 TRENCH 13

5.14.1 Trench 13 was 20.5m long by 1.80m wide and was orientated north-north-west by south-south-east. The trench was positioned in the north-eastern extent of the evaluation area. The maximum depth of the trench was approximately 0.65m. At the north-west end of the trench a sondage was excavated to a depth of 1m.

- 5.14.2 The trench was machine stripped to reveal three distinct layers. The topsoil was made up of 0.25m of moderately compacted, mid brownish grey slightly clayey silts. This in turn overlaid 0.15m of subsoil, which consists of moderately compacted greyish brown clayey silt. No inclusions were noted. The natural comprised of light, slightly reddish brown clayey silt, moderately to well compacted with frequent small stone inclusions up to 0.05 in diameter.
- 5.14.3 No archaeological features were noted in the base of Trench 13.

5.15 TRENCH 14

- 5.15.1 Trench 14 was 19.7m long by 1.80m wide and was orientated north-west to south-east. The trench was positioned parallel to the eastern boundary of the site. The maximum depth of the trench was 0.80m deep.
- 5.15.2 The trench was machine stripped to reveal three distinct layers within the trench. The topsoil comprised of 0.40m of loosely compacted mid to dark greyish brown sandy silt. Sealed beneath was the subsoil, which comprised of 0.40m of moderately compacted orangey brown clayey silt. The natural was made up of reddish brown well-compacted clayey silt with small stone inclusions.
- 5.15.3 There were no archaeological features noted in Trench 14.

5.16 TRENCH 15

- 5.16.1 Trench 15 was 18.5m long by 1.80m wide and was orientated in an east-west direction. The trench was positioned in the north-eastern extent of the evaluation area. The maximum depth of the trench was approximately 0.65m. At the north-west end of the trench a sondage was excavated to a depth of 1m.
- 5.16.2 The trench was machine stripped to reveal three distinct layers. The topsoil was made up of 0.30m of moderately compacted, mid-dark brownish grey clayey silts. This in turn overlaid 0.20m of subsoil, which consisted of moderately compacted, light brownish grey clayey silt, with occasional small stone inclusions. The natural comprised of light orangey brown silty clay mix, moderately to well compacted, with frequent small stone inclusions up to 0.06 in diameter.
- 5.16.3 No archaeological features were noted in the base of Trench 15.

5.17 TRENCH 16

- 5.17.1 Trench 16 was 20m long by 1.80m wide and was orientated east-west and the trench was positioned at the south-eastern extent of the evaluation area. The maximum depth of the trench was 0.60m deep.
- 5.17.2 The trench was machine stripped to reveal three distinct layers. The topsoil was made up of 0.30m of mid to dark greyish brown sandy silt. Sealed beneath was the subsoil, which comprised of 0.30m of orangey brown moderately compacted clayey silt. The natural was reddish brown clayey silt with frequent small stone inclusions. There were no archaeological features noted at the base of Trench 16.

6. FINDS AND ENVIRONMENTAL DATA

6.1 FINDS REPORT

- 6.1.1 **Introduction:** The pottery and other artefactual material was cleaned and packaged according to standard guidelines, and was recorded under the supervision of F Giecco (NPA Ltd Technical Director). The metalwork has been placed in a stable environment and will be monitored for corrosion.
- 6.1.2 **Medieval Pottery:** Two sherds of reduced Greenglaze pottery of 13th to 14th century date were recovered, one from the topsoil build up **(100)** the other from an unstratified context.
- 6.1.3 **Post Medieval Pottery:** 152 sherds of 18th to 20th century domestic pottery were recovered from the evaluation area. 36 of which, were recovered from sealed contexts. 7 from **(123)**, 21 from **(106)** and 8 from **(126)**. The remainder of sherds were recovered from either the topsoil build up or unstratified contexts.
- 6.1.4 **The Clay Tobacco Pipe:** Fragments of clay tobacco pipes were recovered from the evaluation. There were two late 17th century bowls with no milling recovered from the topsoil build up, with one 18th century bowl fragment recovered from an unstratified context. The rest of the clay tobacco fragments date from the 17th to 19th century and are largely made up of clay pipe stems. One clay pipe stem was recovered from **(123)** and is dated to the 19th century.
- 6.1.5 The remainder of the finds recovered were made up of 19th / 20th century domestic glass, iron, slate and lead. It is recommended that no further work be carried out on this material.

6.2 THE SMALL FINDS

- 6.2.1 **Small find number one** was a Cu Alloy 19th century machine manufactured thimble with regularly spaced knurlings.
- 6.2.2 **Small find number two** was a Cu Alloy decorative object, possibly part of a buckle. Rectangular in shape, decorated with a leaf design around the edge of the object with two holes in the centre for fastening.
- 6.2.3 **Small find number three** was a 12th century clipped short cross Ag coin. This particular coin was minted from 1180 to 1247 without changing design. The coin depicts Henry II as HENRY REX, but was also used during the reign of King Richard I and King John. All of which were kings of the Plantagenet family.
- 6.2.4 **Small find number four** was a complete Ag threepenny bit with a date of 1865 on the reverse and a portrait of Queen Victoria on the front.
- 6.2.5 All of the small finds were recovered from unstratified contexts by metal detector. It is recommended that no further work be carried out on this material.

6.3 ENVIRONMENTAL AND BONE REPORT

- 6.3.1 **Introduction:** in the 16 trenches excavated, some 9 contexts were considered worth sampling. All of the samples came from linear features. All the whole earth samples were selected for processing in order to assess their environmental potential. This will help provide further information as to the depositional processes involved in their formation. The methodology employed required that the whole earth samples be broken down and split into their various different components. This was achieved by a combination of water washing and flotation. The recovered remains can then be assessed for content.
- 6.3.2 Flotation separates the organic, floating fraction of the sample from the heavier mineral and finds content of sands, silts, clays, stones, artefacts and waterlogged material. Heavy soil and sediment content measuring less than 1mm falls through the retentive mesh to settle on the bottom of the tank. Flotation produces a 'flot' and a 'residue' for examination, whilst the heavier sediment retained in the tank is discarded. The method relies purely on the variation in density of the recovered material to separate it from the soil matrix, allowing for the recovery of ecofacts and artefacts from the whole earth sample.
- 6.3.3 The retent, like the residue from wet sieving, will contain any larger items of bone, or artefacts. The flot or floating fraction will generally contain organic material such as plant matter, fine bones, cloth, leather and insect remains. A rapid scan at this stage will allow further recommendations to be made as to the potential for further study by entomologists or palaeobotanists, with a view to retrieving vital economic information from the samples. Favourable preservation conditions can lead to the retrieval of organic remains that may produce a valuable suite of information in respect of the depositional environment of the material, which may include anthropogenic activity, seasonality and climate and elements of the economy.
- 6.3.4 The contents of the samples are listed below in Tables 1 and 2.

SAMPLE NUMBER	CONTEXT NUMBER	SAMPLE SIZE (litres)	FLOT SIZE (cm ³)	RETENT SIZE (cm ³)
1	106	20	100	4000
2	107	10	10	4500
3	108	10	10	1000
4	110	10	15	1000
5	112	30	15	2000
6	116	30	20	2500
7	121	10	10	1000
8	119	3	5	1000
9	126	10	15	2000

Table 1 Details of samples and contexts

DETAILS			RETENT FRACTION										LIGHT FRACTION										
Context	Context type	Sample number	Root material	Charred wood	Waterlogged wood	Coal	Bone	Gravel	Stones	Insects	Charred wood	Root material	Charred grain	Snail shells	Small mammal	Coal	Chenopodium	Raspberry	Sambucus nigra	Stellaria media	Urtica dioica	Scirpus	Woody plant parts
106	Fill	1	1	0	0	0	0	2	3	0	0	3	0	3	1	0	0	0	1	1	1	1	1
107	Fill	2	1	0	0	0	0	2	3	0	0	3	0	1	0	0	0	0	0	1	1	0	0
108	Fill	3	1	0	0	1	0	2	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0
110	Fill	4	1	0	0	1	0	3	2	0	0	3	1	0	0	0	0	0	0	0	0	0	0
112	Fill	5	0	0	0	1	0	3	2	0	1	3	0	0	0	2	0	0	0	0	0	1	0
116	Fill	6	1	1	0	1	0	3	2	0	1	3	0	0	0	1	0	0	0	0	0	0	0
121	Fill	7	1	0	0	1	0	3	2	0	1	3	0	0	0	1	0	0	0	0	0	0	0
119	Fill	8	1	0	0	1	0	3	1	0	1	3	0	0	0	1	0	0	0	0	0	0	0
126	Fill	9	1	0	0	1	0	3	1	0	0	3	0	0	0	1	1	1	1	0	1	1	0

Table 2 Contents of flot and retent residues from samples.

Key to tables: Fill = ditch, posthole or pit fill. Contents assessed by scale of richness 0 to 3. 0 = not present, 1 = present, 2 = common, 3 = abundant.

6.3.5 **Sample 1 (Context 106):** this sample from Trench 4, was from the fill of a ditch, thought to be the same feature seen in Trenches 2 and 3. The matrix was a dark brown almost black silty loam (**106**). The retent was made up of stones and gravel with a small amount of root material present. The flot however contained a considerable amount of small, low-spined gastropod (snail) shells of 2-6mm diameter and some whorled gastropod shells 5mm in height.

Seeds comprised weed seeds as common gromwell, chickweed and common nettle. Common nettle colonises areas of nitrogen rich grasslands and waste places. There was also a lot of root material present, a fragment of large mammal bone and 2 rat bones (femur and humerus). This sample also contained post-Medieval pottery.

6.3.6 **Sample 2 (Context 107):** this sample also came from the same feature as above [**105**] but this fill was a loose orange gravel deposit edged with silt. The retent of this sample was made up of gravel and stones with a small amount of root material. The flot contained weed seeds of *Chenopodium*, chickweed and common nettle with a small amount of root material present. There were also a few snail shells as in (**106**) above.

6.3.7 **Sample 3 (Context 108):** this fill comes from a shallow linear feature [**109**] in Trench 7. From this silty homogenous fill the retent produced stones and gravel, a small amount of both root material and coal. The flot yielded common nettle seeds and a lot of root material.

- 6.3.8 **Sample 4 (Context 110):** This sample came from the other shallow linear feature in Trench 7 [111]. The soil was homogenous silt with inclusions of gravel and stones.
- The retent of this sample was made up of gravel and stones with a small amount of root material present. The flot contained 1 charred oat grain and an amount of root material.
- 6.3.9 **Sample 5 (Context 112):** the features seen in Trench 11 are possibly the same as those seen in Trench 7. They again contain the same homogenous fill as (112) and (114) in features [113] and [115] respectively. Only context (112) was sampled. The retent was made up of stones and gravel, and a small amount of coal and coke. The flot contained a seed of the *Scirpus* genus, a small amount of charred wood and some root material.
- 6.3.10 **Sample 6 (Context 116):** this was the upper fill of [118] in Trench 3 and contained some clay within the soil matrix. The retent again was mainly stones and gravel with a small amount of root material and coal. The flot bore no seeds, a small amount of coal and charred wood and mainly root material.
- 6.3.11 **Sample 7 (Context 121):** this fill was also recovered from a feature in Trench 3. Originally thought to be postholes there was no evidence of post packing or finds. The retent contained only stones and gravel with a small amount of coal and root material. The flot consisted of mainly root material with a small amount of charred wood and coal.
- 6.3.12 **Sample 8 (Context 119):** this fill of feature [120] in Trench 3 was a mid brown soil and thought to be a natural feature. The retent consisted of mainly gravel with some stones. There was also a small amount of coal and root material. The flot was made up of root material with a small amount of coal and charred wood.
- 6.3.13 **Sample 9 (Context 126):** the fill of feature [125], a linear feature in Trench 6, produced post-Medieval pottery. The fill was a similar matrix to the topsoil, a loosely compacted mid greyish brown clayey silt. The retent produced mainly gravel with some stones. There was also a small amount of root material and coal. The flot contained seeds of *Scirpus*, *Chenopodium* and common nettle, all weed seeds. Raspberry and elder seeds were also present.
- 6.3.14 **Discussion:** there was very little of interest recovered from any of the samples apart from the snail shells in Sample 1, context (106). These shells can be very specific to conditions from which they are recovered, the nature of the ground and the moisture regime being very important to the different species of snail, plant distribution not having much effect. Snails need lime rich soils to extract the minerals from which to construct their shells. The shape of the shells is also very specific to species where there is also a correlation to species with the niche each one inhabits.
- 6.3.15 Feature [105] from Trench 4 could have been open for a period. Although the matrix contained fragments of post-Medieval pottery, animal bone and common building material the snails could have been washed in from a colluvial deposit, especially as there is none of this material in the adjoining trench which may be contemporary with the feature. This suggests the snails are localised to this particular soil type.
- 6.3.16 No scientific dating was done on material recovered from the site.

6.3.17 **Conclusion and recommendations:** charred grain was recovered from only one of the samples in the flot and that as a single oat. Other seed material recovered comprised of weed seeds. The only dateable finds came from the post-Medieval period. The potential for further information being gained from the examination of this material is limited and so it is recommended that no further work be done.

6.4 VERTEBRATE REMAINS

6.4.1 Only very small amounts of bone were recovered by hand during the excavation. There was a rat right half pelvis recovered from context (100) in Trench 3. From Trench 4, context (106), there was a sheep sized bone recovered and fragments of an oyster shell, typical for the post-Medieval period. Context (126) from Trench 6 produced 2 sheep metacarpals, very degraded and badly preserved.

6.4.2 Unstratified bone was recovered from Trench 2 as a partial rib of either cattle or horse. From trench 5 unstratified bone was a tibia, probably from a rabbit. Unstratified material from Trench 10 was a sheep tooth and a rib, probably also sheep from the size.

6.4.3 None of the bone is present in sufficient quantity to form an assemblage worthy of further study.

6.5 MOLLUSC REMAINS

6.5.1 One partial valve from an oyster, probably the left, was recovered from Trench 4, context (106). Unlike modern times oysters were a common food in the post-Medieval period and so this is not an unusual find for the era. There were a lot of snail shells recovered from context (106). The material is too small to warrant further investigation.

7. CONCLUSIONS

7.1 ARCHAEOLOGICAL POTENTIAL

- 7.1.1 The desk-based assessment revealed the surrounding area was relatively high in archaeological potential, particularly relating to the prehistoric period, early medieval period and medieval period. However, the results of the evaluation have shown there is little evidence of definite archaeological material of interest.
- 7.1.2 The features investigated during the evaluation consisted of several linear features **[104]**, **[124]** and **[125]** all of which seem to be on the same alignment with similar fills. These linear features could be connected to the enclosure ditch featured on the 1st ed OS map for the area. The related artefactual material from these linear features consisted of 19th century pottery sherds and a clay pipe stem. The type of fill could also suggest that the enclosure was left open over a period of time and slowly filled up with the surrounding topsoil.
- 7.1.3 The two parallel ditches **[111]** and **[113]** contained no dateable evidence to give an approximate age. The depth and width of these linear features was comparable with the others, but the fill was completely different. This could indicate that the linear features were also of a similar date, but backfilled in one event rather than over a period of time.
- 7.1.4 The geological features seen in several of the trenches, most notably Trench 3, first appeared to show evidence of buildings or structures. However, excavation of two of these features, **[120]** and **[122]**, showed that both were filled by a homogeneous and undifferentiated fill **(119)** and **(121)** which did not show any signs of human activity. The largest feature, **[118]** remains enigmatic. At first, it appeared to be a fairly typical large pit, with steep sides and a concave base. Whilst it is unlikely that this feature represented structural remnants, its form and dimensions were reminiscent of a man made feature, although this remains inconclusive. The lack of positive dating evidence, is however problematic, and furthermore, although the excavation of these features have thrown some insight into the nature of them, a definitive answer to their interpretation at this time remains elusive.
- 7.1.5 The results of the programme of evaluation trenching appears to demonstrate a low potential for archaeological remains, despite earthworks from the immediate vicinity suggesting potential for prehistoric activity in the region. Therefore no further archaeological work is recommended prior to the development of the site.

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APPENDIX 1: GAZETTEER SITES

No.	Source	Site Name	Site Type	Period	NGR
1	HER 3491	Habers	Field System	Unknown	NY 376900 508200
2	HER 3492	Low Mill , Kirkby Stephen	Field system and crop mark	Unknown	NY 377600 509300
3	HER 6577	Kirkby Stephen	Rotary Quern Find	Unknown	NY 377000 508000
4	HER 6711	Hartley	Field System	Unknown	NY 378000 508700
5	HER 6754	Kirkby Stephen	Medieval Village	Medieval	NY 377500 508720
6	HER 6755	Hartley	Medieval Village	Medieval	NY 378200 508700
7	HER 20257	Guide stone	Stone	Post-Medieval	NY 376430 509165
8	HER 15536	Streetside Road Kirkby Stephen	Possible Roman Road	Roman	NY 377620 508700
9	HER 15537	Thringill Road Alignment Hartley	Road	Prehistoric and Roman	NY 378188 509142
10	HER 15616	Lowmill Bridge Kirkby Stephen	Bridge	Post-Medieval	NY 377530 509050
11	HER 15617	Franks Bridge Kirkby Stephen	Bridge	Post-Medieval	NY 377635 508725
12	HER 15618	Kirkby Stephen Tarn	Natural Feature	Unknown	NY 376850 508450
13	HER 15619	Bloody Bones Lane	Place Name Animal Burial	Post-Medieval	NY 377190 508880
14	HER 15651	Kirby Stephen Gate Toll House	Toll House	Post-Medieval	NY 377230 507995
15	HER 15652	Bollamgate Cottage Toll House Kirkby Stephen	Toll House	Post-Medieval	NY 377570 508115
16	HER 15664	Kirkbank Lane Earthworks Kirkby Stephen	Road	Unknown	NY 377390 509630
17	HER 15665	Kirkby Stephen Carding Mill	Cotton Mill Saw Mill Watermill	Post-Medieval	NY 377500 509060
18	HER 15666	Hartley Low Mill and Dam	Watermill	Post-Medieval	NY 377600 508990
19	HER 15667	Hartley Roman Road	Road	Unknown	NY 377750 508735
20	HER 15668	New Stepping Stones Bridge Hartley	Stepping Stones	Post-Medieval	NY 377420 509500
21	HER 15669	Kirkby Stephen High Mill	Watermill	Post-Medieval	NY 377840 508650
22	HER 16914	Greensike Lane Structure	Pound	Post-Medieval	NY 376770 509330
23	HER 17760	Stobars Hall Lynchets	Lynchets	Medieval	NY 376900 508900
24	HER 17751	Kirkby Stephen	Findspot	Prehistoric	NY 377000 508000

No.	Source	Site Name	Site Type	Period	NGR
		Stone Axe Find			
25	HER 19034	Kirkby Stephen Electric Light and Power Company	Power Station	Post-Medieval	NY 377460 508580
26	HER 19035	Kirkby Stephen Private Power Station	Power Station	Post-Medieval	NY 377500 509100
27	HER 19083	Coin Finds Kirkby Stephen	Findspot	Roman	NY 377000 508000
28	HER 40295	Coffin Bridge, Hartley	Bridge	Post-Medieval	NY 377985 509055
29	HER 40315	Hartley Hill Cairn	Round Cairn	Prehistoric	NY 377982 508834
30	HER 40316	Hartley Hill Earthworks Hartley	Terrace	Unknown	NY 377810 508720
31	HER 40323	Myers Barn Hartley	Barn	Post-Medieval	NY 377970 509420
32	HER 41442	Faraday Road Barn	Barn	Post-Medieval	NY 377445 508710
33	HER 20206	Market Street	Building	Post-Medieval	NY 377485 508570
34	HER 20207	Faraday Road	Building	Post-Medieval	NY 377450 508580
35	HER 20208	Redmayne House	Building	Post-Medieval	NY 377390 508850
36	HER 20209	The Green (East End) No1	Building	Late-Medieval	NY 377390 508850
37	HER 20210	Brougham House	Building	Post-Medieval	NY 377400 508370
38	HER 20211	North Road (East Side No 39)	Building	Post-Medieval	NY 377490 508850
39	HER 20212	North Road (east Side No.41)	Building	Post-Medieval	NY 377490 508840
40	HER 20213	North Road (East Side No. 43)	Building	Post-Medieval	NY 377490 508830
41	HER 20215	North Side (Market Square)	Portico Entrance to the Church	Post-Medieval	NY 377510 508750
42	HER 20216	St Stephens Church	Building	Medieval	NY 377500 508820
43	HER 20217	Market Square Shop	Building	Post-Medieval	NY 377530 508740
44	HER 20218	Hunters Shop	Building	Post-Medieval	NY 377525 508720
45	HER 20219	Mitre House	Building	Post-Medieval	NY 377535 508700
46	HER 20220	Forecourt Gate and Railings Close to Mitre House	Gate and Railings	Post-Medieval	NY 377525 508710
47	HER 20221	Market Square South Side Nos. 23 and 25	Building	Post-Medieval	NY 377510 508700
48	HER 20222	Market Square West Side Old Grammar School	Building	Post-Medieval	NY 377485 508705
49	HER 20223	Market Square West Side No.27	Building	Post-Medieval	NY 377475 508710
50	HER 20224	Pennine Hotel	Building	Post-Medieval	NY 377475 508720

No.	Source	Site Name	Site Type	Period	NGR
51	HER 20225	Market Square West Side Sleddall House	Buildings	Post-Medieval	NY 377470 508735
52	HER 20226	Market Square west Side No. 35	Building	Post-Medieval	NY 377470 508745
53	HER 20227	Market Square West Side No.36	Building	Post-Medieval	NY377480 508745
54	HER 20228	Market Square West Side No.3	Building	Post-Medieval	NY377485 508825
55	HER 20229	Market Square East Side No.13	Building	Post-Medieval	NY 377490 508790
56	HER 20230	Market Square East Side Kings Arms Hotel	Building	Post-Medieval	NY377520 508685
57	HER 20231	Market Square Barclays Bank	Building	Post-Medieval	NY 377535 508665
58	HER 20232	Market Square West Side No.14	Building	Post-Medieval	NY 377470 508775
59	HER 20233	Market Square West Side No.16 and 18	Building	Post-Medieval	NY 377475 508760
60	HER 20234	Market Street West side to rear of No. 16	Building	Post-Medieval	NY 377460 508760
61	HER 20235	Market Street West Side Croft House and adjacent shop	Building	Post-Medieval	NY 377480 508690
62	HER 20236	Market Square West Side No.28	Building	Post-Medieval	NY 377480 508680
63	HER 20237	Market Square West Side No.32	Building	Post-Medieval	NY 377490 508665
64	HER 20238	Market Square West Side No. 34	Building	Post-Medieval	NY 377490 508660
65	HER 20239	Market Street West Side NO. 36	Building	Post-Medieval	NY 377490 508655
66	HER 20240	Market Street Black Bull Hotel	Building	Post-Medieval	NY 377490 508645
67	HER 20241	Market Street West Side No.40	Building	Post-Medieval	NY 377490 508635
68	HER 20242	Market Street Fletcher House	Building	Post-Medieval	NY 377485 508560
69	HER 20243	Market Street West Side Forecourt Gates and Railings	Railings	Post-Medieval	NY 377495 508565
70	HER 20244	Melbecks East Side	Building	Post-Medieval	NY 377585 508505
71	HER 20245	Melbecks East Side The Manor House	Building	Post-Medieval	NY 377635 508575
72	HER 20246	Melbecks	Railings	Post-Medieval	NY 377625 508585

No.	Source	Site Name	Site Type	Period	NGR
73	HER 20247	Nateby Road North Side No. 2 and 3	Buildings	Post-Medieval	NY 377535 508510
74	HER 20248	Nateby Road North Side Temperance Hall	Building	Post-Medieval	NY 377545 508500
75	HER 20249	Nateby Road North Side House adjoining Temperance Hall	Building	Post-Medieval	NY 377555 508500
76	HER 20250	Stoneshot East Side Eden Lodge	Building	Post-Medieval	NY 377610 508700
77	HER 20251	Vicarage Lane East Side Former Grammar School	Building	Late-Medieval	NY 377565 508800
78	HER 20252	Vicarage Lane West Side	Building	Post-Medieval	NY 377555 508800
79	HER 20253	Waitby Road Stobars Hall	Building	Post-Medieval	NY 376830 508940
80	HER 20254	Waitby Road North Lodge to Stobars Hall	Building	Post-Medieval	NY 376900 509295
81	HER 20255	Franks Bridge	Bridge	Post-Medieval	NY 377640 508725
82	HER 20256	Lowmill Bridge	Bridge	Post-Medieval	NY 377530 509050
83	HER 3495	Stobars Hall	Possible Settlement	Unknown	NY37100 508700

Table 1: List of HER sites adjacent to Development Area (shown on Figure 2)

APPENDIX 2: CONTEXT LIST

Context Number	Trench	Category	Interpretation
100	All	Layer	Topsoil
101	All	Layer	Subsoil
102	All	Layer	Natural
103	2	fill	Of [104]
104	4	Cut	Land Drain
105	4	Cut	Ditch
106	4	Fill	of [105]
107	4	Fill	of [105]
108	7	Fill	of [109]
109	7	Cut	Ditch
110	7	Fill	of [111]
111	7	Cut	Ditch
112	11	Fill	of [113]
113	11	Cut	Ditch
114	11	Fill	of [115]
115	11	Cut	Ditch
116	3	Fill	of [118]
117	3	Fill	of [118]
118	3	Fill	Unknown
119	3	Fill	of [120]
120	3	Cut	Unknown
121	3	Fill	of [122]
122	3	Cut	Unknown
123	3	Fill	of [124]
124	3	Cut	Ditch
125	6	Cut	Ditch
126	6	Fill	of [125]

APPENDIX 3: FIGURES AND PLATES

FIGURE 1: SITE LOCATION

FIGURE 2: LOCATION OF GAZETTEER SITES AND DEVELOPMENT AREA

FIGURE 3 : JEFFERYS MAP OF 1777

FIGURE 4 : FIRST EDITION ORDNANCE SURVEY MAP, 1868

FIGURE 5 : TRENCH LOCATION PLAN

FIGURE 7: TRENCH 3, 4 AND 11 PLANS

FIGURE 8: SECTION DRAWINGS

PLATE 1: GEOLOGICAL FEATURE [118], TRENCH 3, SOUTH-WEST FACING SECTION

PLATE 2: GEOLOGICAL FEATURE [116], TRENCH 3, SOUTH-WEST FACING SECTION

PLATE 3: PLATE 3: TRENCH 5, SHOWING GEOLOGICAL FEATURES SEEN AT THE
BASE OF THE TRENCH, FACING NORTH-EAST

PLATE 4: GEOLOGICAL FEATURES SEEN IN TRENCH 3, SOUTH-EAST FACING

PLATE 5: PLATE 5: DITCHES [113] AND [115], TRENCH 11, SOUTH-WEST FACING

PLATE 6: PLATE 6: DITCH [105], TRENCH 4, LOOKING SOUTH-WEST

PLATE 7: PLATE 7: DITCH [109] AND [111], TRENCH 7, SOUTH FACING