MYLEN HOUSE,
MONKHILL,
CUMBRIA

DESK-BASED ASSESSMENT AND ARCHAEOLOGICAL WATCHING BRIEF REPORT

CP. NO: 11062

22/04/2015

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Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Chartered Institute for Archaeologists (ClfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by Wardell Armstrong Archaeology on the preparation of reports.

REVISION SCHEDULE			
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DATE:	22/10/2014		
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DATE:	29/10/2014		

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SUMMARY

WA Archaeology have been commissioned by Lisa Kerford of Aptus Utilities Ltd to undertake a archaeological watching brief within the village of Monkhill, Cumbria (NGR NY 334355 558660), during the excavation of a 86m long cable trench. The work is required as all of the groundworks lies within the vicinity of the Scheduled Ancient Monument of Hadrian's Wall Vallum, part of the Frontiers of the Roman Empire UNESCO World Heritage Site.

The archaeological watching brief was undertaken over two days on the 17th and 18th of September 2014. The watching brief monitored the groundworks associated with the cable trench. No archaeological remains were noted.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology would like to thank Lisa Kerford of Aptus Utilities Ltd, for commissioning the project, and for all assistance throughout the work.

The Rapid Desk Based Assessment was written by Cat Peters whilst the archaeological watching brief was undertaken by Scott Vance. The report was written by Ed Johnson and the figures were produced by Adrian Bailey. The project was managed by Frank Giecco, Regional Manager for WAA. The report was edited by Richard Newman, Project Manager for WAA.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Wardell Armstrong Archaeology (WAA) was invited by Lisa Kerford of Aptus Utilities Ltd to undertake an archaeological watching brief during the excavation of a 86m long cable trench. The work was required as all of the groundworks lies within the vicinity of the Scheduled Ancient Monument of Hadrian's Wall Vallum between the dismantled railway west of Kirkandrews Farm and the dismantled railway south east of Burgh by Sands in wall miles 70 and 71 (SM No.26118 and all of the scheme is situated within the Hardian's Wall buffer zone).

1.1.2 Archaeological features relating to the vallum are known to survive in the area of the proposed groundworks. The work could possibly damage any archaeological remains that may be present. As a result of its statutory designation, this work had to be carried out under scheduled monument consent with an authorized route and trench dimensions. A condition of the SMC stipulated a programme of archaeological work be undertaken in accordance with a written scheme of investigation submitted to and approved by the Mike Collins, English Heritage Historic Environment Adviser for Hadrian's Wall.

1.1.3 The watching brief was supplemented with a rapid desk-based assessment, in order to achieve an understanding of the nature of the existing resource regarding the geographical, topographical, archaeological and historical context of the site.

1.1.4 All groundworks associated with this work were excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (CIfA 2014), and were consistent with the specification provided and generally accepted best practice.

1.1.5 This report outlines the results of the archaeological research and the monitoring works undertaken on-site.

1.2 NATIONAL LEGISLATION

1.2.1 Statutory designations comprise scheduled monuments, protected wrecks, listed buildings and conservation areas. The Ancient Monuments and Archaeological Areas Act (1979) provides protection for scheduled monuments.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A written scheme of investigation was submitted by WAA on behalf of Aptus Utilities Ltd, to support a Scheduled Monument Consent application submitted by Aptus Heritage Ltd. The written scheme of investigation was adhered to in full, and the work was consistent with the relevant standards and procedures of the Chartered Institute for Archaeologists (CIfA), and generally accepted best practice.

2.2 DESK BASED ASSESSMENT

2.2.1 Information for the desk-based assessment has been derived mainly from online resources including Heritage Gateway (Heritage Gateway 2012), Pastscape (English Heritage 2007a, 2007b) and English Heritage Designation (English Heritage 2013) datasets. Following this, the local studies sections at Carlisle Archive Centre (CAC) were consulted in order to study maps and documents relevant to the study area. This included the collection of historic maps, including Tithe or Enclosure maps and early Ordnance Survey Maps. Collections consulted for pertinent references included Directories, Business Records, Miscellaneous Records and Diocesan Records

2.2.2 For the purposes of the present study a 0.5km search area, centred around the site, was chosen for the search. An additional assessment of records outside that boundary was consulted if they were of particular relevance.

2.2.3 The rapid desk-based assessment was undertaken in accordance with the Institute for Archaeologists *Standard and Guidance for Desk-Based Assessments* (CIfA 2014).

2.3 THE WATCHING BRIEF

2.3.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits revealed during excavations undertaken within the scheduled areas along the line of a cable trench. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (CIfA 2014).

2.3.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;

- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
- to produce a photographic record of all contexts using colour digital and 35mm monochrome formats as applicable, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful of dating purposes;
- to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).

2.4 The observed works involved the archaeological monitoring of a total of one foundation pits excavated for the replacement of one telegraph pole, required for the refurbishment of the high voltage power line in this area (Figure 2).

2.5 THE ARCHIVE

2.5.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (Walker 1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited at Carlisle Archive Centre, with a copy of the report also submitted to Cumbria County Council Historic Environment Service, where viewing will be made available upon request. The archive can be accessed under the unique project identifier WAA13, CP 11062, MON-A.

2.5.2 Wardell Armstrong Archaeology and Cumbria County Council Historic Environment Service, support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by Wardell Armstrong Archaeology, as a part of this national project. The unique OASIS identification number for this project is **wardella2-193790**.

3 SITE LOCATION AND GEOLOGY

3.1 SITE LOCATION

3.1.1 Monkhill is located 4 miles west of Carlisle, Cumbria on the Solway Estuary. The Solway Basin is a broad, lowland plain landscape fringed by the low, rugged, relatively remote coastline of the Solway Firth and the Irish Sea. It is framed by the Cumbria High Fells to the south, the hills of the Scottish borders to the north and the Border Moors and Forests to the north-east. To the north, the foreshore of the Solway Firth is dominated by large expanses of intertidal mudflats etched by a shifting maze of minor channels (BGS 2001).

3.2 GEOLOGICAL CONTEXT

3.2.1 The bedrock geology under the site consists of the Kirklinton Sandstone Formation formed approximately 200 to 251 million years ago in the Triassic Period (BGS 2013). The overlying superficial geology has been greatly influenced by the movement of the Southern Scottish and Lake District ice sheets (Smith 2008, 13) and consequently consists of diamicton clay, silt, sands and gravel tills.

4 RAPID DESK BASED ASSESSMENT

4.1 INTRODUCTION

4.1.1 The purpose of this study is to achieve an understanding of the nature of the existing resource regarding the geographical, topographical, archaeological and historical context of the site. The historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.

4.1.2 The designated and non-designated assets and events within a 0.5km search area of the site are listed in Appendix 1 and displayed in Figure 2. All figures can be found in Appendix 2.

4.2 HISTORICAL CONTEXT

4.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments around the study area.

4.2.2 ***Palaeolithic:*** The British Isles was first colonised by stone tool using hominids over half a million years ago. During the most recent geological period, the Pleistocene, massive north-south travelling ice sheets repeatedly scoured the landscape during prolonged periods of extreme cold. None of the major Pleistocene glaciations, as these cold periods are known, extended into southeast England, and consequently the majority of the evidence for the earliest occupation of the British Isles has been discovered here. In Northern England, evidence of Palaeolithic occupation is extremely scarce, but the discovery of Late Upper Palaeolithic blades at Lindale Low cave, near Grange-over-Sands, and at Bart's Cave, Aldingham, on the Furness peninsula, mean that the existence of a Cumbrian Palaeolithic can no longer be entirely dismissed (Chamberlain & Williams, 2001).

4.2.3 No early Palaeolithic material has ever been recovered within Cumbria. During the most recent geological period, the Pleistocene, massive north-south travelling ice sheets repeatedly scoured the landscape during prolonged periods of extreme glaciation. Information on the conditions in Cumbria is provided by pollens laid down during the Windermere Interstadial; winter conditions were cold, with excessive flooding, and vegetation only survived in the summer months (Hodgkinson *et al* 2000). The latest glaciation, the Devensian, presumably removed much of the evidence from previous periods (Chamberlain and Williams 2001).

4.2.4 No Palaeolithic material has been located within a 1 km radius of Monkhill, Cumbria.

4.2.5 ***Mesolithic***: By around 8,000 BP, the last of the major ice sheets had retreated. Rising sea levels submerged the land bridge between Britain and continental Europe, an event that traditionally marks the beginning of the Mesolithic, or middle stone age period. Mesolithic populations were active on the Cumbrian coast, for

example at Eskmeals, and St Bees, and it is likely that the Kent valley was occupied at this time.

4.2.6 Mesolithic activity in the North Cumbrian Plain is equally scarce, though sites dating to the later Mesolithic are known along the entire length of the Cumbrian coast (Cherry and Cherry 2002, Young 2002); the earliest evidence for Mesolithic activity on the Cumbrian Plain consists predominantly of isolated finds of that date. Hunter-gatherer activity was influenced by changing relative sea levels on the Solway coast, which formed shingle banks and created the climate for forestation in the area (Lloyd *et al* 1999); there is some evidence of small-scale tree clearance during this period. At St Bees Head, to the south of Silloth, several Mesolithic flint working sites have been found, some spanning through to the Bronze Age (Hodgkinson *et al* 2000), and material occasionally turns up during minor archaeological works (e.g. OA North 2002).

4.2.7 From c7000 cal BP, a sequence of acute sea-level changes affected the area, resulting in a dramatic rise in the sea level, before a gradual return to current levels (Hodgkinson *et al* 2000); this may have effectively removed large numbers of sites along the coast. The present lack of material is also explained by poor visibility of the finds; the retrieval of these finds is heavily influenced by exposures of the material, and is also biased to areas which have been extensively field walked (Hodgkinson *et al* 2000, Brennand and Hodgson, 2004). The presence of Mesolithic activity has been better evidenced on the Scottish side of the Solway through the coastal erosion of raised beach deposits; these depositional conditions are absent on the Cumbrian coast (Bewley 1994).

4.2.8 No Mesolithic material has been located within a 1 km radius of Monkhill.

4.2.9 ***Neolithic:*** The succeeding Neolithic period is characterised by increased density of occupation, which may be a result of the gradual adoption of a settled agricultural lifestyle.

4.2.10 By the Later Neolithic and Bronze Ages, the distribution of artefacts such as stone axes, arrowheads and axe-hammers indicates widespread settlement throughout Cumbria. Studies into the distribution of Stone Axes suggest that both wetlands/coastal areas and the plain itself were occupied at this time (Hodgkinson et al 2000). Polished Stone axes from the Langdale mines in the Cumbrian mountains were traded extensively throughout the British Isles, and it is likely that by the 3rd millennium BC, Neolithic inhabitants of Cumbria were part of an extensive trans-European trading network.

4.2.11 The Neolithic period has been traditionally associated with the development of increasingly sedentary agricultural communities, the appearance of ceremonial and funerary monuments and the development of distinctive pottery and lithic forms, though the manner and chronology of these developments is now in question (Brennand and Hodgson 2004). In the Late Neolithic, the first indications for the existence of social hierarchies are visible through intensification of settlement, land use and artefact production (*ibid*).

4.2.12 In Cumbria, the majority of the archaeological record for this period is represented by ceremonial and funerary monuments, and lithic scatters. As for the Mesolithic, distribution of finds is heavily biased to the location and intensity of particular fieldwork (Hodgkinson *et al* 2000). Polished stone axes from the Langdale axe factory in the Cumbrian Mountains were traded extensively throughout the British Isles, and it is likely that by the 3rd millennium BC, the inhabitants of Cumbria were part of an extensive trans-European trading network. Evidence for settlement is primarily inferred by the distribution of these polished stone axes, few of which come from reliable contexts. Over one hundred have been recovered from the Solway Plain, and studies into the distribution of these axes have produced a pattern suggesting exploitation of both the wetlands and coastland areas, and settlement of the plain itself (Hodgkinson *et al* 2000).

4.2.13 Much of the lowland evidence indicates that the majority of Neolithic settlement focused on sandy ridges along coasts, tarns and marshes, with an economy mainly based on natural resources (Bewley 1994). A significant number of monuments in the lowlands have been obliterated by intensive agricultural activity (Hodgkinson *et al* 2000, Brennand and Hodgson, 2004), and there is only a limited amount of excavated evidence, and even fewer stratigraphically secure assemblages, directly related to Neolithic occupation (Hodgson and Brennand 2004, 7). Most of the cropmark sites identified in the area have traditionally been assigned an Iron Age or Romano-British date (Bewley 1994), though excavation of one of these sites at Plasketlands, near Mawbray, uncovered an extensive palisade of posts, suggesting possible domestic settlement, dated to the mid-fourth millennium BC (Hodgkinson *et al* 2000, 111).

4.2.14 No Neolithic material has been located within a 1 km radius of Monkhill, Cumbria.

4.2.15 ***Bronze Age***: In the Bronze Age, human society continued to change and develop. Early metalwork finds are rare in Northern England, and metal production and ownership may have been the sole province of a privileged few.

4.2.16 The Bronze Age is marked nationally by the introduction of bronze metalwork, changes in pottery styles, the increased occurrence of single burial traditions and changes in monumental building. In the north-west, there is a great deal of continuity through from the Late Neolithic, though there are hints of changes in the religious, agricultural and social practices. There is a significant increase in clearance activity and the initiation of cereal cultivation in the Early Bronze Age; environmental evidence in the form of cereal pollen, dated to c2000 BC, points to the definite presence of agriculture by this time (Hodgkinson *et al* 2000). Despite this, archaeological evidence is scarce, and excavation of Bronze Age sites in Cumbria is limited. Remnants of timber palisades, suggested to be of late prehistoric date, were uncovered at the turn of the nineteenth century on Bowness Common (Hodgson 1904), and a collection of flint artifacts were recovered during excavations at Bowness fort, one of which is thought to be Bronze Age (Potter 1979).

4.2.17 By the beginning of the second millennium BC, social change is reflected most clearly by the adoption of new burial practices. Cist burial, the practice of burying

the dead in stone chambers dug into the ground and covered by slabs, seems to have become common at around this time throughout upland Northern England. Though cist burials are often found in isolation, it is suspected that they represent the surviving remnants of long vanished, or hitherto undetected, Bronze Age agricultural landscapes. Recent excavations undertaken by North Pennines Archaeology Ltd at New Cowper Farm, near Aspatria, uncovered an early cist burial containing a charcoal rich fill that was radiocarbon dated to 2400-2380 cal BC and 2360-2140 (Davies 2006). This feature may have been associated with a number of undated ditched boundary features, possibly of Bronze Age date, that might represent subsurface remains similar to some of the extensive cropmark sites identified on the North Cumbrian Plain through aerial photographic evidence (cf. Bewley 1994).

4.2.18 Cremation burial was also adopted in the Bronze Age, often associated with barrow mounds; numerous putative Bronze Age monuments, including over twenty possible barrows, have been identified as crop-mark sites on the North Cumbrian Plain, though most of these remain unexcavated (Bewley 1994, Hodgkinson *et al* 2000). It is often unclear whether the contrasting practices of cist burial and cremation burial represent events of contrasting chronology or contrasting social practice. At Ewanrigg, to the south-west of Maryport, field walking discovered prehistoric pottery; a series of subsequent excavations identified a total of 29 cremation burials and a single cist burial. Radiocarbon dates (2470 cal BC - 1520 cal BC) suggest that burials were being interred over a period of about 940 years during the Bronze Age. The relationship between the excavated cemetery at Ewanrigg, and an adjacent, unexcavated, settlement site (identified from aerial photographs) is unclear (Bewley 1986). Settlement sites dating to the Bronze Age are seldom identified, although aerial photography of the Penrith area has identified a number of sites that are yet to be tested by excavation (Higham, 1983). Environmental studies, however, have identified cereal pollen dating from c2000 BC, clearly demonstrating the presence of agriculture in the North Cumbrian Plain by the Bronze Age (Hodgkinson et al, 2000).

4.2.19 By the beginning of the 2nd millennium BC social change is reflected most clearly by the adoption of new burial practices. Cist burial, the practice of burying the dead in stone chambers dug into the ground and covered by slabs, seems to have become common at around this time throughout upland Northern England. Though cist burials are often found in isolation, it is suspected that they represent the surviving remnants of long vanished, or hitherto undetected, Bronze Age agricultural landscapes.

4.2.20 Another burial practice attributable to the Bronze Age is cremation burial. Sometimes cremation burials are associated with barrow mounds. The ploughed out remains of twenty or so barrows have been identified by aerial photography, and these may date to the Bronze Age (Bewley 1994). It is often unclear whether the contrasting practices of cist burial and cremation burial represent events of contrasting chronology or contrasting social practice.

4.2.21 No Bronze Age material has been located within a 1 km radius of Monkhill, Cumbria.

4.2.22 ***Iron Age:*** During the Iron Age the impression nationwide is of a major expansion in population as evidenced by an abundance of settlement sites. There is also clear evidence for a growing social complexity and hierarchy, as demonstrated by high status burials and contrasting settlement sites, for example hillforts compared to small farmsteads.

4.2.23 In Cumbria, however, settlement sites and burials attributable to the Iron Age are hard to identify. Once again, a number of unexcavated settlement sites identified by aerial photography may date to this period but have until recently been attributed to the Romano-British period (see below and Bewley 1994, Higham 1983). Two hillforts are known at the southern end of the northern coastal plain at Carrock Fell and Swarthy Hill (Hodgkinson et al 2000). Possible Iron Age crouched burials have been excavated at Crosby Garrett in eastern Cumbria (Hodgson and Brennand eds. 2004).

4.2.24 There is a scarcity of evidence for settlement on the Solway Plain in the early- to mid-Iron Age, and evidence seems to point to the lowlands being sparsely populated at this point, though archaeological fieldwork in the area has not been intensive and the aceramic character of the assemblages causes problems of identification (Hodgkinson *et al* 2000, Brennand and Hodgson 2004). Silloth lay within the so-called territory of the *Brigantes*; though it is unclear to what extent this territory was a Roman construct (Brennand and Hodgson 2004, 22). Cropmarks of large numbers of undated and unexcavated prehistoric enclosures, field systems and trackways have been discovered through the study of aerial photographs, and most are thought to be of Iron Age date (Bewley 1994). The excavated enclosure at Wolsty Hall, for example, is Iron Age, and continues in use into the Romano British period (Blake 1959).

4.2.25 Although settlements are hard to locate, during the later Iron Age there appears to have been a major expansion in forest clearance in the area, primarily for agrarian purposes; this is illustrated by a substantial drop in arboreal pollen seen in environmental samples dated to this period. Detailed analysis of the timbers from the fort at Carlisle (*Luguvalium*) has also shown that the majority started growing in the first or second centuries BC (Hodgkinson *et al* 2000, 115).

4.2.26 There are no known sites within the area, which can be directly attributed to the Iron Age, however a number of cropmark sites have to potential to be pre-Roman in origin.

4.2.27 ***Romano-British:*** The Roman advance on the northwest of England was launched during the 70s and 80s AD, and the campaigns of Agricola, governor of Britain AD 78-84, consolidated the Roman hold on the North. During the Roman period there was certainly a heavy military presence in Cumbria. Hadrian's Wall, perhaps begun in 122 AD, was built to define the northern limit of the Roman Empire and a network of military roads, forts and settlements soon sprung up around the focus of Hadrian's Wall (Breeze and Dobson 1976). The earliest timber fort was constructed at Carlisle in AD 72 (Philpott ed. 2004). Intensive occupation of the fort at Carlisle continued until the 4th century, with extensive evidence for a vicus and associated

civilian settlement to the south. The best evidence for the continued use of forts into the 5th century comes from Birdoswald (Wilmott 1997).

4.2.28 There is considerable evidence for Roman military activity around the study area during the Roman period, which presumably relate to the direct construction of Hadrian's Wall. Located approximately 0.6km to the north-west of Monkhill is Beaumont temporary marching camp (Site 7; HER 425). The camp lies 40m to the south of Milecastle 71 and the proximity of the Beaumont camp to the fort at Burgh-by-Sands and the Wall possibly suggest that it may have used to house construction gangs, though this is not proven. The east side of the camp is complete and measures some 525 feet (160m) between the corner-angles, though only short lengths of the north and south sides are known and no trace of the western defences are visible. It is very likely that the camp was oriented towards the north, which may indicate an east-west measurement of around 100m if the standard Roman *tertiata* pattern (3:2 ratio) was followed (Welfare and Swan 1995). There is also another temporary Roman camp to the west of Monkhill (Site 1; HER 426), of which the south, east and west sides are still visible.

4.2.29 A further cropmark of a 20-metre diameter circular feature has also been observed by Barri Jones who interpreted the cropmark as a Watch Tower (Site 2; HER 15237). This feature is one of a number of similar watchtowers in an inter-visible chain running east to west. Jones believed he had found a tower at Monkhill where a faint penannular cropmark (now largely destroyed by a modern building) may show the remains of its defences.

4.2.30 The most significant Roman remains within Monkhill comprise part of the Vallum for Hadrian's Wall. (Site 6; HER 5782**,** Scheduled Ancient Monument 26118). In general the Vallum lies around 35 metres south of the Wall itself, but does vary considerably (ibid; 18-19). This is what happens near Monkhill; the Wall departs from Vallum at Kirkandrews and follows a series of bluffs to the north to Beaumont while the Vallum continues straight. As it passes through Monkhill the current road roughly follows the line of the Vallum's route, before the wall rejoins the Vallum near Burgh-by Sands (Collingwood Bruce, 1966; 199). The land between Vallum and Wall appears to be demarcated as a military zone or corridor with crossings built opposite forts which would allow the funnelling of cross wall traffic into easily policed crossings (de la Bédoyère 2002; 18-19).

4.2.31 The general character of the Vallum as recorded elsewhere along its length shows that it consisted of a flat bottomed ditch just under six metres wide which was flanked on both sides by a bank measuring three metres high and six metres wide. These banks were usually situated around nine metres away from the ditch (de la Bédoyère, 2002; 18). The banks flanking the ditch were often neatly revetted (Shotter, 1996; 64) and even in poor terrain the Vallum was present, showing how much of an integral part of the wall it was (Shotter, 1996; 65).

4.2.32 ***Early Medieval:*** Evidence for Early Medieval activity in 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). However, work in recent decades has shown that the 'Romans' did not leave behind them a cultural

vacuum, and archaeology has begun to fill in the gap known as the 'Dark Ages.' Written history, for this period, is provided by the Northumbrian monk, The Venerable Bede. His *Historia Ecclesiastica* was written in the early 8th century.

4.2.33 Once the Roman administration ended in 410AD, the tribal identities of the native Britons gradually reasserted themselves over their pre-Roman territories. Monkhill is situated within the early medieval tribal territory of Rheged. The territory of Rheged closely mirrors the north-western portion of the Roman civitas of Brigantia; extending as far north as Galloway and south to either the Lone Gorge, the River Ribble or the Mersey (Clarke and Chapman, 2000, 9).

4.2.34 Anglo-Saxons had begun to enter eastern Cumbria by the later 6th and 7th centuries AD (Crowe 1984). Legend links Urien and Owain to both King Arthur, the semi-mythical British military leader, and the countrymen of Strathclyde and Wales, who were united in their opposition to invasions by the Saxons

4.2.35 No Early Medieval material has been located within a 1 km radius of Monkhill, Cumbria.

4.2.36 ***Later Medieval:*** In the 11th 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 Rufus marched north to Carlisle and drove out Dolfin.

4.2.37 Two records exist within the HER relating to medieval activity close to Monkhill. The locations of both are not accurately known. The first is Castle Green Motte Site, Beaumont on Eden (Site 8; HER 5649). This motte, belonging to the Le Brun family was probably abandoned in the 14th century. It is thought that the proposed location of the motte is built upon a former Roman milecastle, which would mean that it is closer to Beaumont than Monkhill; however, such a structure could suggest that a wider amount of activity was occurring during this period, possibly stretching towards Monkhill.

4.2.38 The second record (Site 4; HER 19545) relates to the finding of a later medieval reduced green ware jug. This probably dates to the 15th century and is an indicator of activities occurring in the area at that time.

4.2.39 ***Post Medieval and Modern***: The cultural developments of the sixteenth and seventeenth centuries laid the foundations for radical changes to society and the environment that commenced in the eighteenth century (McNeil and Newman *et al* 2004). The worlds first Industrial Revolution produced unprecedented social and environmental change and north-west England was at the epicentre of the resultant transformation (*ibid*).

4.2.40 The eighteenth to twentieth centuries witnessed widespread changes within the landscape of the north-west, and most of the region was affected in some way by developments in agricultural practise, land management and increased industrialisation (McNeil and Newman *et al* 2004). Cumbria however, experienced

its agricultural revolution later than most regions of the north, but even so there was a noticeable and notable quickening in the pace of land and stock improvement in the late 18th century and especially in the decades between 1800-1840 when the pioneers such as Howard of Corby and Curwen of Workington were innovating so extensively (Burgess 1989). A report into agriculture in the north of England in the 1790's showed the county to be backwards: people took a long time in generally improving land by manuring, introducing new root and clover crops, getting better strains of livestock and above all investing in land drainage (Burgess 1989).

4.2.41 In the eighteenth and nineteenth centuries one of the greatest forces for landscape change in the countryside was parliamentary enclosure. In the north west this occurred from the 1750s until the nineteenth centuries. Some 483,000 acres were affected in the region with about 80% of this in Cumbria (White 2003). The Monkhill area was covered by a tithe dated 1840. The area contains a small number of farmsteads, which presumably have origins in the later medieval and earlier post-medieval periods.

4.2.42 The commons of Burgh Barony, in which Monkhill is situated, were allocated and divided up by agreement with the Lord of the Manor in 1680, (Nicolson & Burn, 1776; 224). This would mean a change in land use and enclosure around this period.

4.2.43 The site of Monkhill Mill (Site 5; HER 10314) lies to the west of the village and used to be a Corn Mill set on the northern shore of a small reservoir. Although the date of its construction is unknown it was mentioned in an advertisement in the Cumberland Journal in 1801. The windmill (tower mill) now minus cap and sails lies close to the centre of the settlement and was probably erected in the later 18th century, and was under same ownership of nearby water mill (Hughes, 1972; 131)

4.2.44 Running to the north of Monkhill, and in places re-using the route of an earlier canal is the former line of the Carlisle and Silloth railway (Site 9: HER 10036). In 1852 the Carlisle & Silloth Bay Railway & Dock Company was established which undertook work to establish a port on the north Cumberland Coast. This was to be the first wet dock on the Cumbrian Coast. When the Carlisle & Silloth Bay Railway & Dock Company (C&SBRDC) opened their Carlisle to Silloth line in 1856 it utilised the Port Carlisle Branch as far as Drumburgh and the remaining part of the Port Carlisle line then became a horse worked branch. The Port Carlisle Railway Company agreed to supply a locomotive if the C&SBRDC provided rolling stock. The NBR leased the line from 1862. Several stations were at first only open on Saturdays. In 1954 the Carlisle & Silloth Bay Railway became the first line in the country to have steam trains replaced by diesel units but even so it closed completely ten years later.

4.3 PREVIOUS WORK

4.3.1 INTRODUCTION: The assessment results are based on primary documents, most notably maps, and on the secondary sources used in *Section 2.2*. The results are presented according to the archive from which they were consulted. There are 12 HER records located within a 1km radius of Monkhill. A full list of the sites identified by the assessment is given in *Appendix 1*.

4.3.2 HISTORIC ENVIRONMENT RECORD (HER)

4.3.3 ***HER:*** There were **12** HER records within the study area, which is defined as a 1km radius around the site. Only **1** site (Course of Vallum, HER 5782, SM 26118) will be directly affected by the scheme of works. All HER sites are summarised in Appendix 1 and shown on Figure 2.

4.3.4 CUMBRIA RECORD OFFICE (CARLISLE)

4.3.5 The Cumbria Record Office in Carlisle (CRO(C)) 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 Carlisle (CRO(C)), an in-depth scan of the early maps for the Monkhill area was undertaken. A cartographic date range of between 1844 and 1865 was obtained. The proposed utility work area will now be discussed with reference to these early sources, noting any changes to the development area within this period.

4.4.2 ***Tithe Apportionment Map for Monkhill, 1843-44 (CRO(C)):*** the first available map for Monkhill is the Tithe Apportionment Map *c*1843-1844 (Fig 3) which shows the village in detail. It is apparent that the village has seen little in the way of development at this time and only seven properties are present. The properties, which are present, are the Windmill (Site 10; HER 1032), the building that later formed the Drovers Rest Inn, Chapel House and Ivy Cottage, Hollygarth Cottage and Dowless (Site 11; HER 41774). A number of other structures are present which may relate to outbuildings or agricultural barns. The map also clearly shows field boundaries, which may survive as sub-surface archaeological features and may well be exposed during the watching brief.

4.4.3 ***First Edition Ordnance Survey Map, 1865 – 25" to 1 mile****:* the First Edition Ordnance Survey map (Fig 4) again depicts Monkhill to be comparatively underdeveloped. The most significant change, however, is the projected line of the Vallum has been added. The map appears to show the Vallum running somewhat to the south of the main junction, whereas it appears further to the north on later mapping. Interestingly, as the area was mapped before the introduction of deep ploughing techniques, the Vallum therefore, would be visible as an upstanding earthwork. The Windmill (Site 10; HER 1032) and the Drovers Rest Public House are labelled for the first time.4.5 ARCHAEOLOGICAL INVESTIGATIONS

4.4.4 In April 2005, North Pennines Archaeology undertook archaeological monitoring during groundworks that will form part of the new scheme of works. During the watching brief a number of archaeological features were encountered including some deposits that may relate to the Vallum itself (Jefferson 2005).

5 ARCHAEOLOGICAL WATCHING BRIEF

5.1 INTRODUCTION

5.1.1 The watching brief monitoring was undertaken over two days on the 17th and 18th of September 2014 and watched excavation of approximately 80m of cable trench. All areas were excavated by a 6-tonne tracked excavator using a toothless bucket.

5.2 RESULTS

5.2.1 A single trench measuring approximately 80m was monitored running along the roadside verge in Monkhill, Cumbria. The trench measured 0.50m in width with a maximum depth of 0.5m. The cable trench was excavated above an existing service run with the cable laid above an existing BT service duct. The only deposit observed was a dark brown silty sand soil (**100**) (Plate 1) the disturbed topsoil backfill within a existing service trench. No archaeological features were noted.

Plate 1: Section across cable trench. 1m scale

6 CONCLUSION

6.1 CONCLUSIONS

6.1.1 During the archaeological watching brief one service trench was monitored. Although in close proximity to Vallum, the watching brief revealed no archaeological features, artefacts or deposits.

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Ordnance Survey First Edition 1867. HMSO © Crown Copyright

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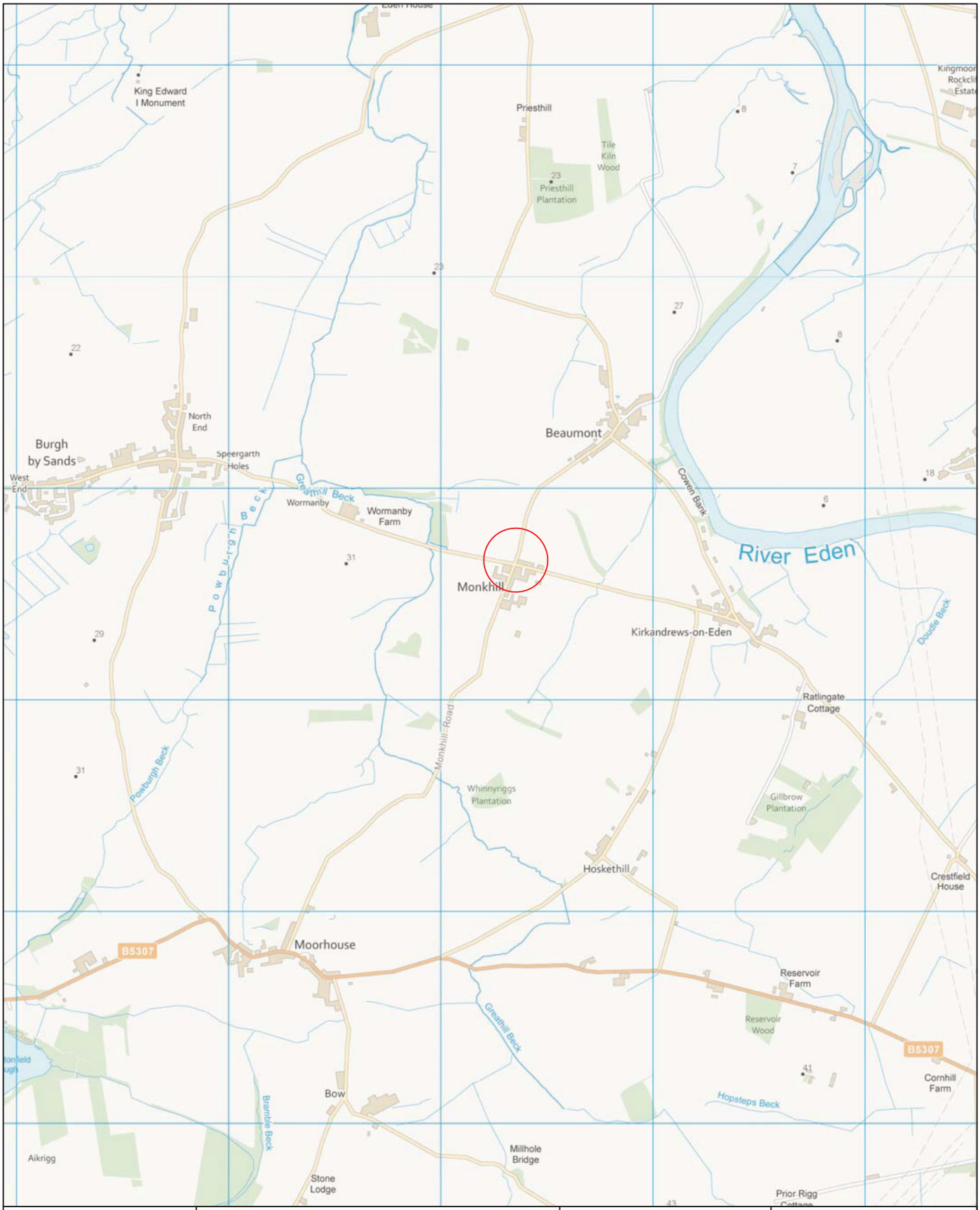
APPENDIX 1: GAZETTEER OF SITES

APPENDIX 1.1 TABLE OF ASSETS

The following table lists all designated and non designated assets which are presently recorded within a 0.5km radius of the site.

HER No.	Site Type	Description	Period	Scheduled Monument No.	Site No.
10313	Reservoir	Monkhill Lough Reservoir	Unknown		1
15237	Watchtower	Monkhill Watchtower, Beaumont			2
426	Temporary Roman Camp	Monkhill Temporary Marching Camp	Roman		3
19545	Findspot	Green glazed Medieval Jug	Medieval		4
10314	Structure	Corn mill	Post-Medieval		5
5782	Earthwork	Hadrian's Wall Vallum	Roman	26118	6
425	Cropmark	Beaumont Temporary Camp	Roman		7
5649	Earthwork	Castle Green Motte Site	Medieval		8
10036	Railway	Carlisle to Silloth Railway	Post-Medieval		9
10321	Structure	Windmill	Post-Medieval		10
41774	Structure	Hollygarth House/Dowlees Abattoir	Post-Medieval		11
3394	Cropmark	Powburgh Beck Settlement	Romano-British		12

APPENDIX 2: FIGURES



wardell armstrong archaeology

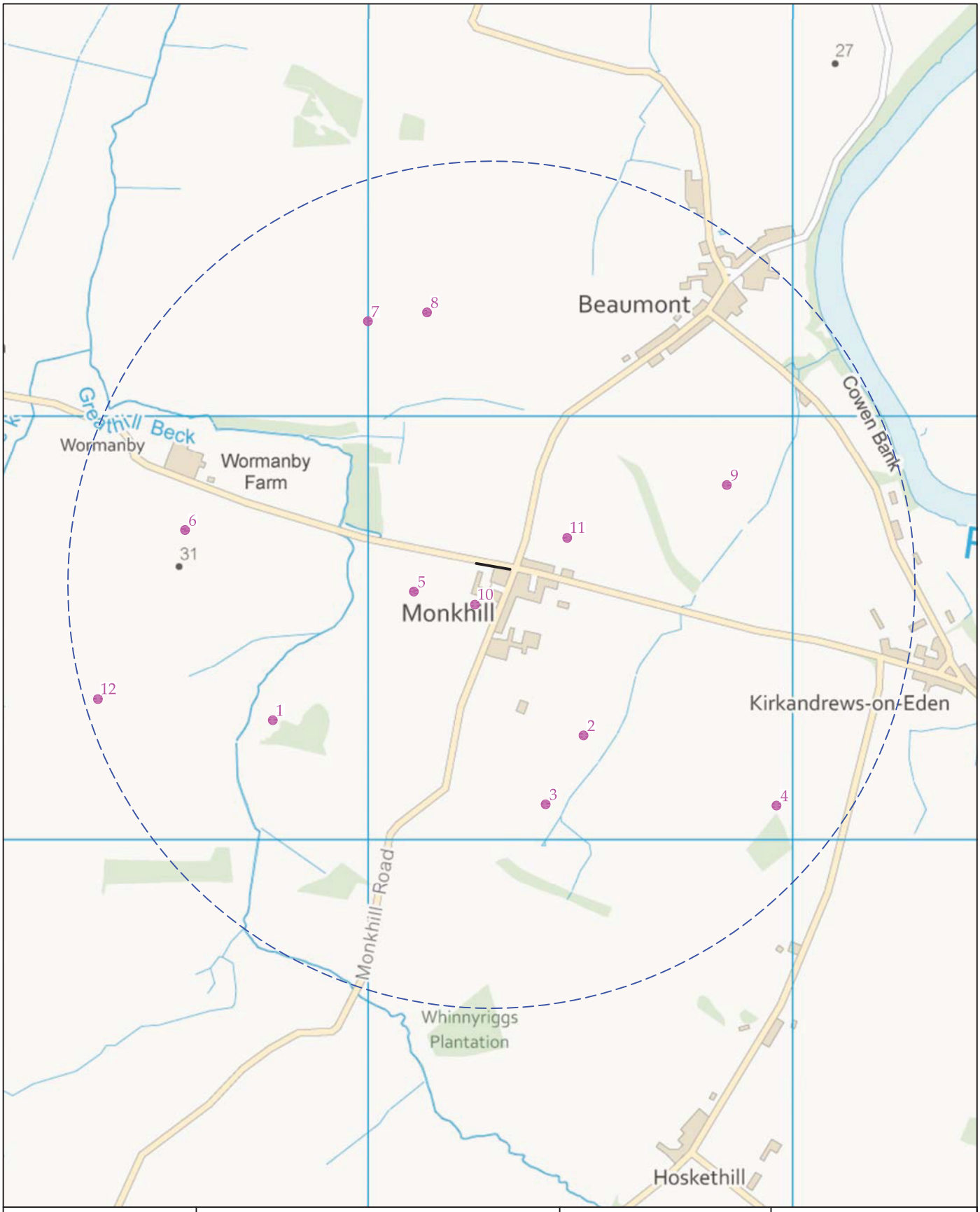
Wardell Armstrong Archaeology 2014

PROJECT:	Mylen House, Monkhill, Carlisle
SCALE:	1:25,000 at A4
REPORT No:	CP11062
CLIENT:	Aptus Utilities Ltd
DRAWN BY:	AB
DATE:	October 2014
FIGURE:	1

KEY:

Site location

Figure 1: Site location.



wardell armstrong archaeology

Wardell Armstrong Archaeology 2014

PROJECT:	Mylen House, Monkhill, Carlisle
SCALE:	1:12,500 at A4
REPORT No:	CP11062
CLIENT:	Aptus Utilities Ltd
DRAWN BY:	AB
DATE:	October 2014
FIGURE:	2

KEY:

1km radius

HER locations

Trench location

Figure 2: Location of HER sites with a 1km search radius.