CASTLE HILL FARM, BECKSIDE, PENNINGTON, CUMBRIA

Archaeological Watching Brief



Client: Peter and Doreen Fell NGR: 325810 477750 © Greenlane Archaeology Ltd November 2020



The Site		
Site Name	Castle Hill Farm, Beckside, Pennington	
County	Cumbria	
NGR	325810 477750	
Scheduled Monument Name/List Entry Number	Castle Hill/1007127	

Client		
Client Name	Peter and Doreen Fell	
Client's architect/agent	M & P Gadsden	

Planning		
Pre-planning	No	
Planning Application No.	SL/2018/0630	
Plans (e.g. conversion, extension, demolition)	Erection of extension	
Condition number	3	
Local Planning Authority	South Lakeland District Council	
Planning Archaeologist	Jeremy Parsons (Cumbria County Council)	
Groundworks subject to watching brief	Excavation of foundations	
Scheduled Monument Consent ref.	S00240273	

Archiving	
Relevant Record Office(s)/Archive Centre(s)	Barrow-in-Furness
Relevant HER	Cumbria
Relevant museum	Kendal Museum

Staffing		
Watching brief	Dan Elsworth	
Report writing	Dan Elsworth	
Report editing	Jo Dawson	
Illustrations	Tom Mace	
Date watching brief carried out	20 th – 21 st September 2020	

Greenlane Archaeology Ltd, Lower Brook Street, Ulverston, Cumbria, LA12 7EE

Tel: 01229 588 500 Email: info@greenlanearchaeology.co.uk Web: www.greenlanearchaeology.co.uk

Contents

Non	-Technical Summary	2
Ack	nowledgements	2
1.	Introduction	3
2.	Methodology	5
3.	Site History	7
4.	Results	12
5.	Discussion and Conclusion	17
6.	Bibliography	19
Арр	endix 1: Project Design	22
Арр	endix 2: Scheduled Monument Description for Castle Hill	27
Арр	endix 3: Summary Context List	29
Арр	endix 4: Summary Finds List	30
Арр	endix 5: Environmental Sample Data	32
Арр	endix 6: Flot Assessment Report	33

Illustrations

List of Figures

Figure 1: Site location	4
Figure 2: Site plan	15

List of Plates

Plate 1: 'Castle Hill and Environments' showing the suggested location of the medieval manor house relative Castle Hill (from Fell 1929, 49)	• to 9
Plate 2 (left): Extract from the map of <i>c</i> 1825 (from Fell 1929)	10
Plate 3 (right): Extract from the tithe map of 1840	10
Plate 4 (left): Extract from the Ordnance Survey map of 1850	10
Plate 5 (right): Extract from the Ordnance Survey map of 1891	10
Plate 6: Extract from the Ordnance Survey map of 1913	11
Plate 7: The site following the demolition of the outshuts but prior to any groundworks, viewed from the south-w	est 12
Plate 8: The site following initial levelling, showing the extent of deposit 103, viewed from the south	13
Plate 9: The deposit of large stones, part of deposit <i>103</i> , exposed in the western foundation trench, viewed from a north-east	the 13
Plate 10: Shell deposit 105 exposed in the west section, viewed from the east	14
Plate 11: Deposit 107 in cut 108 at the north-east corner of the site, viewed from the west	14

Non-Technical Summary

Following the submission of a planning application to construct a new extension on the west side of Castle Hill Farm, Beckside, Pennington, Cumbria, Greenlane Archaeology was appointed to carry out an archaeological watching brief on the groundworks. The work is located within the Scheduled Monument area for the Castle Hill ring work, which is thought to be of medieval origin, and so Scheduled Monument consent was first obtained for the work. The watching brief was undertaken in September 2020.

While there is evidence for human activity in the wider area from at least the end of the last Ice Age, the predominant feature of archaeological interest at the site is the remains of the ring work. The origins of this are unknown, as it has never seen any substantial archaeological investigation, but it is thought likely to be medieval in date, and is perhaps most comparable to the nearby Aldingham Motte, which was most likely constructed in the 11th century and abandoned by the 14th. Castle Hill's association with the lords of the manor, the Penningtons, is unclear and it has been suggested that they had a manor hall on a different site. In any case, they had relocated to Muncaster by the 14th century so it seems unlikely that any substantial property would have been maintained in Pennington.

The groundworks comprised the initial levelling of the site and then the excavation of a C-shaped set of foundation trenches extending from the existing farmhouse. The earliest deposits comprised the natural clay, present across the site in the base of all of the footing trenches but also preserved as an island on the south-east side of the site below a former outshut. The earliest features of archaeological interest were laid on top of this or cut into it, and comprised a shell midden and possible cess pit. The former was associated with a single sherd of late medieval pottery, which indicates its likely date, while the latter could not be directly dated but evidently ran underneath the west side of the current farmhouse and so is probably also late medieval. Later features primarily comprised extensive drains cut across the site, dating from the late 19th or early 20th century onwards, and remains associated with a former outshut, which were clearly 20th century in date. Finds of interest include a small flake of flint or chert recovered from a sample taken from the shell midden, perhaps indicating a late Mesolithic or early Neolithic presence on the site, and haematite and iron working slag from the cess pit and shell midden, denoting iron smelting on the site in the late medieval period.

Although relatively limited in scope the watching brief revealed a remarkable amount of remains and provides some evidence about the development of the site at Castle Hill. The presence of a late medieval shell midden, dumped close to the earthworks and probably derived from the current farm rather than the ring work, suggests that the latter had fallen out of use by that time. The fact that it was covered by a layer of hill wash deriving from the earthwork bank further indicates that the ring work was not being maintained after this date. The presence of material relating to iron working is also of interest, although it is difficult to be certain whether this is something that was occurring on the site itself.

Acknowledgements

Greenlane Archaeology would like to thank Peter and Doreen Fell and their family for commissioning the project and for their assistance on site, and M & P Gadsden for providing the site plans. Special thanks are due to Guy McCullough, and colleagues James Carson and Charles Waddington, for their assistance during the groundworks. The assessment of the flot from the samples was managed by Lynne Gardiner and carried out by Freddie Sissons at Wardell Armstrong Archaeology.

1. Introduction

1.1 Circumstances of the Project

1.1.1 The circumstances of the project are set out on the inside cover of this report.

1.2 Location, Geology, and Topography

1.2.1 Castle Hil Farm is located approximately 0.5km north-west of the centre of Pennington (although the village is fairly dispersed) and is located on high ground at over 105m above sea level (Ordnance Survey 2010; Figure 1). It is immediately adjacent to the Scheduled Monument of Castle Hill (Historic England 2020; see *Appendix 2*).

1.2.2 The site is situated close to the junction of two different types of solid geology; Bannisdale Slates to the north and carboniferous limestone to the south (Moseley 1978, plate 1). The solid geology is overlain by glacially derived drift deposits and boulder clay; although sands and gravels are also present (Countryside Commission 1998, 27). The close proximity to the coast line was also an important influence on the drift geology, with former marine deposits and earlier, more meandering channels present in the local area at lower levels, although these have been altered by land reclamation and industrial activity such as the construction of the railway.



Figure 1: Site location

Client: Peter and Doreen Fell

© Greenlane Archaeology Ltd, November 2020

2. Methodology

2.1 Desk-Based Assessment

2.1.1 A rapid desk-based assessment was carried out in accordance with the guidelines of the Chartered Institute for Archaeologists (CIfA 2014a). This principally comprised an examination of early maps of the site and published secondary sources. A number of sources of information were used during the compilation of the desk-based assessment:

- **Online Resources**: where available, mapping such as Ordnance Survey maps were consulted online;
- **Greenlane Archaeology**: Greenlane Archaeology's office library includes maps, local histories, and unpublished primary and secondary sources. These were consulted where relevant, in order to provide information about the history and archaeology of the site and the general area.

2.2 Archaeological Watching Brief

2.2.1 The groundworks comprised the excavation of foundation trenches forming an approximately rectangular area extending from the south end of the west elevation of the existing house, as well as some associated levelling following the removal of an existing small outshut (Figure 2). The watching brief therefore monitored all of this groundwork, which involved digging between 0.2m and 1m below the current ground level.

2.2.2 All aspects of the archaeological recording were carried out according to the standards and guidance of the Chartered Institute for Archaeologists (CIfA 2014b) and Greenlane Archaeology's own excavation manual (2007). The deposits encountered were recorded in the following manner:

- *Written record*: descriptive records of all deposits were made using Greenlane Archaeology's *pro forma* record sheets;
- **Photographs**: photographs in colour digital format (both 12 meg JPEG and RAW file format) were taken of the site as well as general working shots. A selection of the colour digital photographs is included in this report. A written record of all of the photographs was also made using Greenlane Archaeology's *pro forma* record sheets;
- **Drawings**: a plan of the watching brief area was produced at a scale of 1:100 based on a site plan supplied by the client.

2.3 Environmental Samples

2.3.1 **Strategy**: two samples, each of 10 litres, were taken from two different contexts from two different features. All of the material recovered was processed. A summary of all of the samples taken and the material recovered from them is presented in *Appendix 5* and *Appendix 6*.

2.3.2 **Processing**: the samples were wet sieved by hand; the light fragments were floated off and collected in 250µm and 500µm sieves with the coarse component (retent) collected on a 1mm mesh. The flot and retent were then dried in a drying oven. The flot was sent for specialist assessment (see *Appendix 5*). The retent was also examined by eye and all ecofacts and artefacts extracted.

2.3.3 The flots were scanned using a stereo microscope (up to x45 magnification). Any nonpalaeobotanical finds were noted on the flot *pro forma* (Table 1). All suitable sized fragments of charcoal (>2mm of transverse section) were selected for identification. This accounted for approximately half of the assemblages. The charcoal was identified to species as far as possible, using Hather (2000), Schweingruber (1982) and the author's reference collection. Nomenclature for plant taxa followed Stace (2010). The environmental assemblage has been assessed for its local, regional and national potential and for its potential to contribute to the relevant research frameworks.

2.4 Finds

2.4.1 **Processing**: all of the artefacts recovered from the watching brief were washed. They were then naturally air-dried or dried in the drying oven and packaged appropriately in self-seal bags with white write-on panels.

2.4.2 **Assessment and recording**: the finds were assessed and identified in the first instance by Jo Dawson and Thomas Mace. The finds were recorded directly into the catalogue produced as part of this report (*Appendix 4*).

2.5 Archive

2.5.1 The archive of the project will be deposited with the relevant Record Office or Archive Centre, as detailed on the cover sheet of this report, together with a copy of the report. The archive has been compiled according to the standards and guidelines of the CIfA guidelines (CIfA 2014c). In addition, details will be submitted to the Online AccesS to the Index of archaeological investigationS (OASIS) scheme. This is an internet-based project intended to improve the flow of information between contractors, local authority heritage managers and the general public. A digital copy of the report will be provided to the client and to the relevant Historic Environment Record, as detailed on the cover sheet of this report.

6

3. Site History

3.1 Site History

Prehistoric Period (c11,000 BC - 1st century AD): there is limited evidence for activity in the 3.1.1 county in the period immediately following the last Ice Age; excavations of a small number of cave sites have found artefacts of Late Upper Palaeolithic type and the remains of animal species common at the time but now extinct in this country (Young 2002), with human remains found in one of these caves also dated to the end of this period (Smith et al 2013). The county was also clearly inhabited during the following period, the Mesolithic (c8,000 – 4,000 BC), as large numbers of artefacts of this date have been discovered during field walking and eroding from sand dunes along the coast, but these are typically concentrated in the west coast area and on the uplands around the Eden Valley (Cherry and Cherry 2002). In the following period, the Neolithic (c4,000 - 2,500 BC), large scale monuments such as burial mounds and stone circles begin to appear in the region and one of the most recognisable tool types of this period, the polished stone axe, is found in large numbers across the county, having been manufactured at Langdale (Hodgson and Brennand 2006, 45). During the Bronze Age (c2,500 - 600 BC) monuments, particularly those thought to be ceremonial in nature, become more common still. Burials in the form of cremations are also one of the typical features of the period known from the wider area, with one recorded close to the site between Pennington and Ulverston (Barnes 1954). While there is evidence for prehistoric activity from the general area of the town in the form of casual finds such as stone axes and axe hammers, generally dating from the Neolithic and Bronze Age (CCC and English Heritage 2002, map D), the extent of any associated settlement is, as yet, uncertain. Stray finds of Bronze Age date are found throughout the county, with a spear head (Cowper 1907, 39-40), bronze axe (Cowper 1888, 204), and stone axe hammers of Neolithic or Bronze Age (Cooper 1918, 105) date recorded in the local area, although their exact findspots are uncertain. A large enclosure identified on Hoad, to the north of town, is considered to be of Late Bronze Age or Iron Age origin (Elsworth 2005; 2014). Sites that can be specifically dated to the Iron Age ($c600 \text{ BC} - 1^{\text{st}}$ century AD) are very rare; the enclosure on Hoad may represent a hillfort, a typical site of this period, but it has not yet been scientifically dated.

3.1.2 **Romano-British to Early Medieval Period (1st century AD – 11th century AD)**: late 18th and 19th century antiquarians considered a Roman military presence in the Furness area beyond question, but by the 20th century there was a complete reversal of opinion (summarised in Elsworth 2007, 31-37). It is evident that in this part of the country, initially at least, the Roman invasion had a minimal impact on the native population in rural areas (Philpott 2006, 73-74), but ultimately the evidence suggests a strong Roman influence or "background" presence in the peninsula during the Roman period, which doubtless would have been attractive for its rich iron reserves (Shotter 1995, 74; Elsworth 2007, 37, 41-43). While there have been occasional finds of Roman coins and pottery from around the general area, no evidence has yet been confirmed of settlement in the immediate area from that period, although there is a possible concentration of pottery finds in the area around the Gill (Elsworth 2007). A recent reappraisal of the evidence for Roman activity in the general area, however, suggests that a road or roads may have passed close to or through Ulverston and that this could have had an associated settlement (Elsworth 2007). One of the suggested routes of the roads follows the route of Daltongate and then part of the current A590, approximately 1km south-east of the site.

3.1.3 Finds and sites of early medieval date are extremely rare in the whole region, although they are represented by some spectacular discoveries such as the 10th century hoard of silver coins found recently near Stainton (Boughton *et al* 2012). The nature of settlement across the wider area following the collapse of Roman administration at the end of the 4th century is highly debateable but initially at least it is likely that Furness as a whole was part of a post-Roman area inhabited by the Britons who formed into regional groups and who were evidently present in the area as demonstrated by various placenames (Edmonds 2013, 21). It is perhaps possible that Furness was part of a kingdom known as Rheged, the extent of which is unclear but may have been based around the Lyvennet Valley in northeast Cumbria or Carlisle, although it clearly stretched across the modern border into Scotland and may have had an influence as far as North Yorkshire (Clarkson 2010, 68-78). By the late 7th century, the southern part of Cumbria at least had come under the control of the Angles based in the North East as

Cartmel is named in a grant made by King Ecgfrith to Cuthbert, apparently in collusion with the native British nobility (Edmonds 2013, 20). How much direct control the Anglian kingdom of Northumbria actually had is difficult to determine however. From the end of the 8th century and into the early 10th century the Irish Sea coast began to see considerable movement of Norse Vikings, who had originally come from what is now Norway and settled in Scotland, the Isle of Man, and Ireland (Griffith 2010). At least some of those in Ireland were forcibly expelled by the Irish in 902 and as a result many settled along the North West coast in what is now Cumbria and Lancashire (*ibid*). Place-name evidence demonstrates that they were particularly prevalent in Furness; the name Ulverston is probably from the Anglo-Saxon personal name 'Wulfhere', under the influence of the Norse pronunciation, although it has also been suggested that it was vill of the manor of Hougun (SLDC 2005, 4). The latter idea is perhaps further supported by the notion that it may derive from 'how-town', from the Norse 'haugr-tun' meaning hill-town; it was commonly known as 'Ooston' in the 19th and early 20th centuries (Elsworth 2005, 15). The name Pennington is also of early medieval origin, probably deriving from an Old English word for 'penny' (Ekwall 1922, 210). However, an alternative suggestion (given that the earliest recorded form is Pennigetun) is that it has a similar origin to that suggested for Pen-y-Ghent in North Yorkshire. This has been suggested as a reference by native Christian Britons to a hill (pen) occupied by non-Christians (genti, meaning Pagans) (Breeze 2006, 164-165), perhaps derived in the period following Strathclyde's expansion into the area (see Elsworth 2018). Like Ulverston, Pennington is recorded in the Domesday survey of 1086 (Ekwall 1922, 210) and so must have existed as a settlement before that date. Again, finds of the Viking period are relatively rare in the immediate area, although a human burial with an iron sword found while excavating for a cellar at Conynger Hurst in Pennington (Barber 1894, 224) might be Viking in date, and the mound known as Ellerbarrow nearby has long been suggested as a burial site of similar date: 'There is a local tradition that in this mound lie the remains of "Lord Ella, and his golden sword beside them" (ibid), although it has never been investigated and its origins are uncertain (Historic England 2020a) and the notion of any connection to an historical 'Ella' was dismissed as unlikely as early as 1805 (Close 1805, 408). Of additional interest is a tympanum found near the site in a building at Beckside Farm; this is of 12th century date but incorporates a runic inscription of Norse type (first reported by Gaythorpe 1903; it is now located in the parish church at Pennington). This, along with other inscriptions from the region, appears to demonstrate that the Norse language continued to be used well into the medieval period.

3.1.4 Medieval Period (11th century AD – 16th century AD): as already mentioned, Pennington and its larger neighbour Ulverston have pre-medieval origins but it is during the medieval period that they are most firmly recorded. Pennington is recorded regularly in the 12th to 14th centuries (Ekwall 1922, 210) but seems to have remained a relatively small settlement; there is some evidence for planned plots almost in the form of burgages in the area extending from the school eastward towards Rufus Lane. The placename 'row' occurs in several properties in this area, which is also perhaps suggestive of a planned 'street' of properties. During the early 14th century, it was also considerably damaged by raids from Scotland, which left considerable areas of waste (*ibid*). The most significant medieval feature in the immediate vicinity of the site is, of course, the ringwork at Castle Hill Farm itself (Historic England 2020b). While the origins of this structure are unknown it is considered likely to be medieval in origin, although earlier antiquarian accounts suggested anything from a Roman to pre-Conquest date of construction. Limited excavation carried out there by Alfred Fell in 1926 found only 'a small piece of flint, which may have been worked, but if so in a very rough and hardly perceptible manner' but even he acknowledged that this and other prehistoric finds made nearby were not evidence for the date of the earthworks and that a Roman date was also unlikely (Fell 1929, 47). The notion that the remains pre-date the Norman Conquest and were occupied by members of the Pennington family from this time was presented in one of the earliest accounts of the area (West 1805, 304) but such an early date seems unlikely, as stated by Fell (1929, 48-49). It is far more likely that the ringwork is properly medieval in origin, perhaps similar to the motte at Aldingham, which has recently been re-examined and is considered likely to have been primarily constructed in the 12th century, although with the possibility that there was earlier activity on the site (Elsworth and Mace 2015; Higham (1991) includes Castle Hill in her list of mottes in the wider area, all of which seem to have controlled strategic routes). What is seemingly undeniable is that Castle Hill existed by at least 1332 as it is recorded, as 'Castlehou', in a documentary source at this time (Fell 1929, 50). It's association with the Pennington family is unproven; they are thought to have been present in

Furness since before the Norman Conquest (West 1805, 304) and were the lords of the manor, but the site at Castle Hill did not form part of their demesne lands and it has been suggested that a more likely location for a manorial hall would have been an area of flat land close to Bracken Park (Fell 1929, 51-53; see Plate 1). In any case the Pennington family had acquired Muncaster at an early date (Farrer and Brownbill 1914, 338) and had made this their principal residence by at least the mid-14th century (Fell 1929, 55; Perriam and Robinson suggest it was as early as 1318 (1998, 388)) so it is perhaps unlikely that a manorial hall at Pennington would have been maintained for long.



Plate 1: 'Castle Hill and Environments' showing the suggested location of the medieval manor house relative to Castle Hill (from Fell 1929, 49)

3.1.5 **Post-medieval Period (16th century AD – present)**: during the post-medieval period Pennington remained primarily rural in character, an outlier to the more substantial and more industrialised town of Ulverston nearby. Pennington never had any major manufacture and its population were principally engaged in agriculture, although there were iron mines and slate quarries on the periphery (Farrer and Brownbill 1914, 338). A farm at Castle Hill clearly existed from at least the 17th century (Fell 1929, 50) and the map evidence demonstrates that there was a building on the current footprint from at least c1825 (see *Section 3.2* below), although it is apparent that parts of the extant farmhouse are likely to be earlier (D Elsworth personal observation).

3.2 Map Regression

3.2.1 *Introduction*: the earliest maps of the area tend to be relatively lacking in detail and are therefore little use in understanding the development of the site. There are two early 19th century maps that show the site in reasonable detail, but in general the earliest useful maps are those produced by the Ordnance Survey from the mid-19th century onwards.

3.2.2 **Map, c1825**: this clearly depicts the earthworks of the castle as comprising a continuous circuit at this time, with the farm buildings immediately to the east as an approximately L-shaped structure, much as they are on subsequent maps (Plate 2; from Fell 1929).



Plate 2 (left): Extract from the map of *c*1825 (from Fell 1929) Plate 3 (right): Extract from the tithe map of 1840

3.2.3 *Tithe Map, 1840*: this shows the site in more detail, although it does not depict the earthworks of the castle; the farm is again shown as an L-shaped structure (Plate 3). The details from the apportionment provide some additional information, with the farm part of a plot named 'Castle Hill' and described as 'Homestead and Garden & peat house', while the field to the north is named 'Borras Green' (Table 1). This is of interest because the name 'borras', or similar, is typically thought to derive from the Old English word '*burgæsn*' meaning burial place or heap of stones (Smith 1967, 238).

Plot	Owner	Occupier	Name	Description
354	William Parker and William Fell as trustees	William	Castle Hill	Homestead and Garden & peat
	of Hannah Gorill	Gaitskell		house
355	William Parker and William Fell as trustees	William	Borras Green	Arable
	of Hannah Gorill	Gaitskell		

Table 1: Details	from the tithe	apportionment	relating to	Castle Hill
------------------	----------------	---------------	-------------	-------------

3.2.4 **Ordnance Survey, 1850**: this too shows the earthworks of the castle as forming a continuous circuit at this time, although it also depicts the buildings of the farm as forming two main detached blocks rather than a continuous L-shape as on all the other maps (Plate 4).



Plate 4 (left): Extract from the Ordnance Survey map of 1850 Plate 5 (right): Extract from the Ordnance Survey map of 1891

3.2.5 **Ordnance Survey, 1891**: this shows the site in more detail and reverts to the broadly L-shaped arrangement of the farm buildings depicted in earlier maps, with an obvious small extension at the south-

west corner (Plate 5; cf. Plate 4). The earthworks of the castle as also shown as somewhat reduced along the north-west side, suggesting that some erosion has perhaps occurred by this time. A spring is also marked just to the south of the earthworks.

3.2.6 **Ordnance Survey, 1913**: the site is essentially unchanged, although the spring is no longer marked (Plate 6; cf. Plate 5).



Plate 6: Extract from the Ordnance Survey map of 1913

4. Results

4.1 Introduction

4.1.1 The groundworks primarily comprised the excavation of a single foundation trench for the new extension, delineating an approximately rectangular area, following the demolition of the existing lean to outshut (Plate 7). The ground surface beneath the outshut and an area of concrete flooring adjacent to it was also removed and levelled to enable the creation of a new floor within the extension.



Plate 7: The site following the demolition of the outshuts but prior to any groundworks, viewed from the south-west

4.2 Watching Brief

4.2.1 The removal of the existing outshut and associated garden features revealed a deposit of dark reddish-brown firm sandy clay (100), apparently forming the base of a flower bed. Below the part of the outshut that had formed a chicken shed (with a layer of animal droppings within) was a brick floor comprising a single layer of red machine-made frogged bricks (101). The removal of this revealed a deposit of compacted pale brownish buff clay, which was evidently an island of the natural geology that had survived intact beneath the outshut floor and was visible in section at the south end where it had already been partly cut away to accommodate the adjoining concrete floor to the south (102). Elsewhere, across most of the site, following initial levelling and the removal of a concrete floor, was a very mixed deposit primarily comprising dark reddish-brown gravelly silt, but including more recent material comprising grey gravel (103). This evidently represents an area that has been excavated and subsequently backfilled in association with the installation of several phases of drainage, and is within a large irregular cut extending across the site from north-east to south west [106] (Plate 8). Both ceramic and plastic drains were present within it, the former connecting to an extant inspection chamber, and during the excavation of a western footing trench a deposit of sub-angular slab-like boulders was also exposed, presumably representing the remains of a simple drain or soakaway (Plate 9); groundwater seeped into the excavation at this point. Subsequent excavation of the western footing through 103 revealed it to be generally between 0.2m and 0.4m thick.



Plate 8: The site following initial levelling, showing the extent of deposit 103, viewed from the south



Plate 9: The deposit of large stones, part of deposit *103*, exposed in the western foundation trench, viewed from the north-east

4.2.2 In the north-west corner of the site, the excavation cut into the slope at the point where it formed a level track around the side of the earthworks of the ring work, this revealed an upper deposit of pale greyish brown silty clay up to 0.35m thick (**104**), essentially the topsoil or material that had washed down the slope. Below this was the natural (**102**), albeit slightly darker than that exposed to the south-east due to being less dried out. At the interface was a deposit of marine shells, in the same matrix as **104**, covering an area of approximately 2m in length (north/south) and 0.1m thick (**105**). The excavation of the

northern footing revealed a patch of soft greenish grey silt against the house (**107**), with a lense of dark reddish-brown silt 0.1m wide along its west side apparently coinciding with an area of heat-affected natural clay. This deposit appeared to be within a cut, although only the west side of this was exposed and was linear running approximately north/south and essentially vertically-sided [**108**]. The excavation of the footings revealed deposit **107** to be at least 0.2m thick and extending below the house to the east. Its exact relationship with deposit **104** was unclear due to disturbance caused by pipes in the north-east corner.



Plate 10: Shell deposit 105 exposed in the west section, viewed from the east



Plate 11: Deposit 107 in cut 108 at the north-east corner of the site, viewed from the west



Client: Peter and Doreen Fell

[©] Greenlane Archaeology Ltd, November 2020

4.3 Finds and Samples

4.3.1 **Introduction**: a total of 110 finds were recovered during the watching brief, the majority of which (95 fragments) comprised post-medieval pottery. With the exception of one fragment of medieval pottery, all of the dateable finds were post-medieval in date, and they are catalogued in *Appendix 4*, and are listed below by find type.

4.3.2 **Medieval pottery**: a body sherd of a Late Medieval Reduced Grey ware vessel was recovered from the shell midden (**105**). The Reduced Grey Ware tradition appears around the late 13th century, and became the dominant ware type throughout the region during the 15th and 16th century (Brooks 2000, 140; Bradley and Miller 2009, 664), and persisted into the early 17th century (Whitehead *et al* 2013). The description of the sherd in *Appendix 4* follows *Guidelines for the Processing and Publication of Medieval Pottery from Excavations* (Blake and Davey 1983) and *Pottery in Archaeology* (Orton *et al* 2008).

4.3.3 **Post-medieval pottery**: in total, 95 fragments of post-medieval pottery were recovered from the watching brief, all from deposit **103**. These included a range of types including utilitarian wares such as brown- and black-glazed red earthenwares (for kitchenware such as crocks and pancheons), which can be broadly dated to the late 17th to early 20th century, and stoneware of 19th to early 20th century date. The finewares were more closely dateable, the earliest being porcelain dated to the 18th century. There was also white earthenware (including Asiatic Pheasants transfer-printed pattern) and bone china (including Broseley transfer-printed pattern). All of these types are very common for the area and the period, and most likely represent waste from domestic settings, perhaps in this case originally deriving from a midden to the rear of the farmhouse.

4.3.4 *Glass*: in total, 10 fragments of glass bottles were recovered, all from context *103*. These could be dated to the early 20th century and again most likely represent rubbish originating at the farm.

4.3.5 **Animal bone**: the midsection of an unidentified long bone fragment, missing both ends, was recovered from **103**.

4.3.6 **Industrial residue:** a single piece of haematite was recovered from the lense of apparently burnt material present in context **107**. While impossible to date in itself it is not something that naturally occurs in the immediate local area and must have been brought to the site. Its association with a deposit of burnt material potentially indicates that iron smelting was being carried out nearby.

4.3.7 **Toy**: the head and shoulder of a porcelain shoulder doll with moulded enamelled black hair was recovered from context **103**, and was dated to the 19th to early 20th century.

4.3.8 *Plastic*: a pink plastic coil was recovered, and was dated to the 20th century.

4.3.9 **Samples**: a range of artefacts and ecofacts were recovered from the two samples taken on site; collected from the shell midden (**105**; Sample **<1>**) and fill of the possible cess pit (**107**; Sample **<2>**). From **105** a substantial amount, making up at least 50% of the whole sample, was marine shells, primarily (*c*95%) cockle (*Cerastoderma edule*) but also mussel (*Mytilus edulis*). Fragmentary animal bone was also present, as well as small amounts of pottery, some iron objects, haematite, iron working slag, a single piece of glass, a single flake of dark grey flint or chert, and carbonised organic material. From **107** charred organic material, haematite and iron working slag were also recovered. A full report on the flots recovered from the two samples is presented in *Appendix 5*. In summary though both contained charcoal derived from ash trees and the sample from the shell midden (**105**) contained a single well-preserved barley grain, again perhaps indicative of originating as domestic refuse.

5. Discussion and Conclusion

5.1 Discussion

5.1.1 The watching brief revealed a small number of features of archaeological interest, although some of these could not be readily dated. A relatively large assemblage of finds was also recovered, the vast majority of post-medieval date. The results can therefore provide some information about the development of the site in the late medieval and post-medieval periods.

5.1.2 **Phase 1 – Natural**: an island of the natural geology (**102**) was revealed in the south-east corner of the site, where it had been preserved beneath the former outshut. Elsewhere it was discovered in all of the footing trenches, typically at a depth of 0.3m to 0.4m below the surface.

5.1.3 **Phase 2 – late medieval?**: the only dateable medieval feature recorded during the watching brief was the shell midden (*105*), from which a single piece of late medieval pottery was recovered. This deposit seems likely to have accumulated once the ringwork had gone out of use, which arguably demonstrates that it had been abandoned by as early as the 14th century. Deposit *105* does, however, indicate that the site was not totally abandoned and it seems plausible that this shell midden derives from the farmhouse or an immediate precursor to it. The exploitation of shell fish for food during the medieval period is attested from other recent pieces of work in the local area; at Aldingham two middens made up primarily of cockle shells, but with other marine shell species and fish bone, were revealed in section eroding from the shoreline close to the medieval motte and dated by its finds to the 12th to 14th century (Appley 2015). At Priory Gardens, Cartmel, a midden deposit mostly comprising large animal bone fragments but also mussel and other shells and fish bones was also dated to the medieval period and probably derived from the nearby priory (Greenlane Archaeology 2015). Other material collected from the sample at Castle Hill included small pieces of pottery and iron objects, which are also suggestive of general domestic waste, although iron ore (haematite) and iron working slag was also recovered indicating that iron working, perhaps smelting, was carried out nearby (see also *Section 5.1.4* below).

5.1.4 The stratigraphic position of the probable cess pit [**108**], which evidently extended below the current house, also suggests a late medieval date, although it could not be directly dated. This feature was additionally interesting because of the presence of iron ore (haematite) and iron working slag, further suggesting that iron smelting had been carried out nearby, although difficult to understand how this material became incorporated into a cess pit and it cannot be demonstrated with certainty that such material was being processed on site.

5.1.5 **Phase 3 – post-medieval?**: it is apparent that stratigraphically the layer of topsoil (**104**), which probably derived as hillwash from the ramparts of the ringwork, represents the next phase, although it could not be dated in itself. This is still of interest, however, as it indicates that the earthworks of the ring work were not being maintained at this time.

5.1.6 **Phase 4 – late 19th - early 20th century/modern**: a substantial number of drains cutting into the underlying natural (**102**) are grouped together as cut **106**. It is apparent that this represents several phases of renewal and replacement, some of which is relatively modern, but the finds recovered from the fill (**103**) indicate that this began in the 19^{th} or early 20^{th} century. It is likely that these finds represent domestic waste from the house, perhaps a midden that became incorporated into the fill of the drain trenches.

5.1.7 **Phase 5 – 20^{th} century**: the most recent phases of activity, with the exception of later periods of renewal of the drains of Phase 4, are represented by the brick floor (**101**) that was originally presented within a small outshut that stood against the main building, and the base of a flower bed (**100**). The bricks used in the former and the stratigraphic position of the latter, above the backfilled drain trenches of Phase 4, demonstrate that both are 20^{th} century in date.

5.2 Conclusion

5.2.1 The watching brief, although of a relatively small area, made some interesting discoveries relating to the development and use of the site from the medieval period onwards. The presence of the shell

midden and, to a lesser extent, the cess pit, would seem to suggest that the ringwork had been abandoned by at least the 14th century. This is fitting to some extent with the limited documentary evidence relating to the manorial history of the site, but also with the only other excavated comparable site; the motte at Aldingham, which was evidently abandoned at the same time, initially in favour of a moated site nearby and subsequently for Gleaston Castle (Elsworth and Mace 2015).

5.2.2 Apart from Fell's, evidently limited, excavation at the site in 1926, the watching brief remains the only piece of intrusive archaeological investigation of the Scheduled remains at Castle Hill. Ultimately, a piece of work of this scale will not be able to answer very many of the outstanding questions regarding the understanding of the site and its origins, but it has, however, provided some useful information and a useful comparison to the recently published work carried out previously at Aldingham Motte, which is perhaps the most similar local site to it.

6. Bibliography

6.1 Primary and Cartographic Sources

NA IR 29/18/244, 1840a Plan of the Parish of Pennington in the County Palatine of Lancaster Drawn for the Commutation of Tithes

NA IR 29/18/244, 1840b Apportionment of the Rent Charge in Lieu of Tithes in the Parish of Pennington in the County of Lancaster

Ordnance Survey, 1850 Lancashire Sheet XVI, 1:10,560, surveyed in 1846-1847

Ordnance Survey, 1891 Lancashire Sheet XVI.2, 1:2,500, surveyed in 1888

Ordnance Survey, 1913 Lancashire Sheet XVI.2, 1:2,500, revised in 1910-1911

Ordnance Survey, 2010 The English Lakes: South-western area; Coniston, Ulverston & Barrow-in-Furness, **OL6**, 1:25,000

6.2 Secondary Sources

Appley, CJ, 2015 The Excavation and Recording of Two Medieval Shell Deposits at Aldingham, in DW Elsworth and T Mace (ed) *Aldingham Motte, Cumbria and its Environs in the Medieval Period*, CWAAS CARR **5**, Bowness-on-Windermere, 47-55

Barber, H, 1894 Furness and Cartmel Notes, Ulverston

Blake, H, and Davey, P, 1983 *Guidelines for the Processing and Publication of Medieval Pottery from Excavations*, Directorate of Ancient Monuments and Historic Buildings, Occ Paper 5, London

Boughton, D, Williams, G, and Ager, B, 2012 Buried Wealth of the Norse North West, *Current Archaeology*, 264, 26-31

Bradley, J, and Miller, I, 2009 'The Medieval and Post-Medieval Pottery'. In C Howard-Davis (ed.) *The Carlisle Millennium Project. Excavations in Carlisle, 1998-2001. Volume 2: The Finds*, Oxford, 660-677

Breeze, A, 2006 Three Celtic Toponyms: Setantii, Blencathra, and Pen-Y-Ghent, Northern History, **43: 1**, 161-165

Brooks, CM, 2000 'The Medieval Pottery'. In M R McCarthy (ed.) Roman and Medieval Carlisle: The Southern Lanes. Excavations 1981-2, Kendal, 139-143

Chartered Institute for Archaeologists (CIfA), 2014a Standard and Guidance for Desk-Based Assessment, revised edn, Reading

ClfA, 2014b Standard and Guidance for an Archaeological Watching Brief, revised edn, Reading

ClfA, 2014c Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives, revised edn, Reading

Cherry, PJ, and Cherry, J, 2002 Coastline and Upland in Cumbrian Prehistory – A Retrospective, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 3rd ser, **2**, 1-20

Clarkson, T, 2010 The Men of the North: The Britons of Southern Scotland, Edinburgh

Cooper, J, 1918 A Neolithic Celt from Bason Bank, South Cumberland, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **18**, 105

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

Cowper, HS, 1888 Some Prehistoric Remains in North Lonsdale, *Trans Cumberland Westmorland Antiq* Archaeol Soc, 2st ser, **9**, 200-205

Cowper, HS, 1907 Bronze Age Relics from Furness, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **7**, 39-41

Cumbria County Council (CCC) and English Heritage (EH), c2002 Extensive Urban Survey Archaeological Assessment Report: Kirkby Stephen, unpubl rep

Edmonds, F, 2013 The Furness Peninsula and the Irish Sea Region: Cultural Interactions from the Seventh Century to the Twelfth, in C Downham (ed), *Jocelin of Furness: Proceedings of the 2011 Conference*, Donnington, 17-44

Ekwall, E, 1922 The Place-Names of Lancashire, Manchester

Elsworth, DW, 2005 Hoad, Ulverston, Cumbria: Archaeological Landscape Investigation, unpubl rep

Elsworth, DW, 2007 The 'Streetgate' at Conishead, the 'Castellum' at Dalton, and Roman Furness, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 3rd ser, **7**, 31-48

Elsworth, DW, 2014 Hillforts Around Morecambe Bay, in T Saunders (ed), *Hillforts in the North West and Beyond*, Archaeology North West, n ser, **3**, Manchester, 51-60

Elsworth, DW, 2018 The Extent of Strathclyde in Cumbria: Boundaries and Bought Land, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 3rd ser, **18**, 87-104

Elsworth, DW, and Mace, T (ed), 2015 Aldingham Motte, Cumbria and its Environs in the Medieval Period, CWAAS CARR **5**, Bowness-on-Windermere

Farrer, W, and Brownbill, J, 1914 The Victoria History of the County of Lancaster, 8, London

Fell, A, 1929 A Furness Manor: Pennington and its Church, Ulverston

Gaythorpe, H, 1903 The Runic Tympanum Lately Found at Pennington, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **3**, 373-379

Greenlane Archaeology, 2007 Archaeological Excavation Manual, unpubl rep

Griffith, D, 2010 Vikings of the Irish Sea, Stroud

Higham, MC, 1991 The Mottes of North Lancashire, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **91**, 79-90

Historic England, 2020a Eller Barrow, Round Barrow, https://historicengland.org.uk/listing/the-list/listentry/1007230

Historic England, 2020b Castle Hill, https://historicengland.org.uk/listing/the-list/list-entry/1007127

Hodgson, J, and Brennand, M, 2006 The Prehistoric Period Resource Assessment, in M Brennand (ed), *The Archaeology of North West England: An Archaeological Research Framework for the North West Region, Volume 1: Resource Assessment*, Manchester, 23-58

Moseley, F. (ed), 1978 The Geology of the Lake District, Yorkshire Geological Society, occ publ 3, Leeds

Orton, C, Tyers, P, and Vince, A, 2008 *Pottery in Archaeology*, Cambridge, 10th printing (1993)

Perriam, DR, and Robinson, J, 1998 The Medieval Fortified Buildings of Cumbria: An Illustrated Gazetteer and Research Guide, CWAAS extra ser, **29**, Kendal

Philpott, R, 2006 The Romano-British Period Resource Assessment, in Brennand, M, (ed) The Archaeology of North West England: An Archaeological Research Framework for the North West Region – Volume 1, Resource Assessment, Archaeology North West 8, Manchester, 59-90

Shotter, DCA, 1995 Romans in South Cumbria, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **95**, 73-77

Smith, AH, 1967 The Place-Names of Westmorland: Part II – the Barony of Westmorland Analyses, Index, Maps, English Place-Name Soc, **43**, Cambridge

Smith, IA, Wilkinson, DM, and O'Reagan, HJ, 2013 New Lateglacial Fauna and Early Human Mesolithic Human Remains from Northern England, *J Quaternary Science*, **28:6**, 542-544

South Lakeland District Council (SLDC), 2005 Ulverston Conservation Area Draft Character Appraisal, unpubl rep

West, T, 1805 The Antiquities of Furness, 2nd edn with additions by W Close, Ulverston

Whitehead, S, Williams, D, and Mace, T, 2013 'Excavation of Medieval Burgage Plots to the Rear of 130-136 Stricklandgate, Kendal', *Trans Cumberland Westmorland Antiq Archaeol Soc*, 3rd series, **XIII**, 89-115

Young, R, 2002 The Palaeolithic and Mesolithic Periods in Northern England: An Overview, in Brooks, C, Daniels, R, and Harding, A, (ed), *Past, Present and Future: The Archaeology of Northern England*, Architect Archaeol Soc Durham Northumberland, res rep **5**, 19-36

Appendix 1: Project Design

Archaeological Watching Brief Cover Sheet and Project Design

The Site		
Site Name Castle Hill, Beckside, Pennington		
County	Cumbria	
NGR	325810 477750	

Client		
Client Name	Peter and Doreen Fell	
Client's architect/agent	M & P Gadsden	

Planning				
Pre-planning?	No			
Planning Application No.	SL/2018/0630			
Plans (e.g. conversion, extension, demolition)	Erection of extension			
Condition number	3			
Local Planning Authority	Cumbria County Council			
Planning Archaeologist	Jeremy Parsons			
Groundworks subject to watching brief	Excavation of foundation trenches			

Archiving				
Relevant Record Office(s)/Archive Centre(s)	Barrow-in-Furness			
Relevant HER	Cumbria			
Relevant museum	The Dock Museum, Barrow-in-Furness			



1. Introduction

1.1 Project Cover Sheet

1.1.1 All the details specific to this project are set out on the cover sheet of this project design. The project design itself covers all elements that are involved in an archaeological watching brief.

1.2 Greenlane Archaeology

1.2.1 Greenlane Archaeology is a private limited company based in Ulverston, Cumbria, and was established in 2005 (Company No. 05580819). Its directors, Jo Dawson and Daniel Elsworth, have worked continuously in commercial archaeology since 2000 and 1999 respectively, principally in the north of England and Scotland. Greenlane Archaeology is committed to a high standard of work, and abides by the Chartered Institute for Archaeologists' (CIfA) Code of Conduct. The watching brief will be carried out according to the Standards and Guidance of the CIfA (CIfA 2014a).

1.3 Staff

1.3.1 **Dan Elsworth (MA (Hons)), ACIFA)** graduated from the University of Edinburgh in 1998 with an honours degree in Archaeology, and began working for the Lancaster University Archaeological Unit, which became Oxford Archaeology North (OA North) in 2001. Daniel ultimately became a project officer, and for over six and a half years worked on excavations and surveys, building investigations, desk-based assessments, and conservation and management plans. These have principally taken place in the North West, and Daniel has a particular interest in the archaeology of the area. He has managed many recent projects in Cumbria and Lancashire including several archaeological building recordings and watching briefs. He is very experienced at building recording, having carried out numerous such projects, mainly in Cumbria and Lancashire.

1.3.2 **Tom Mace (BA (Hons), MA, MIFA)** has extensive experience of working on a variety of archaeological projects, especially watching briefs, but also excavations, evaluations, and building recordings, as well as report writing and illustration production. He joined Greenlane Archaeology in 2008 having worked for several previous companies including Archaeological Solutions and Oxford Archaeology North. He currently works on a broad range of projects and is also responsible for the production of all illustrations for reports and publications as well as some post-excavation assessments. He is a Member of the Chartered Institute for Archaeologists.

1.3.3 **Jo Dawson (MA (Hons), ACIFA)** graduated from University of Glasgow in 2000 with a joint honours degree in Archaeology and Mathematics, and since then has worked continuously in commercial archaeology. Her professional career started at Glasgow University Archaeological Research Division (GUARD), following which she worked for Headland Archaeology, in Edinburgh, and then Oxford Archaeology North, in Lancaster. During this time she has been involved in a range of different archaeological projects. She has extensive experience of both planning and pre-planning projects, and has undertaken assessments of all sizes. Since establishing Greenlane Archaeology in 2005 she has managed numerous projects in south Cumbria, including desk-based assessments and evaluations. She currently mainly carries out quality control of reports and post-excavation assessments. She is an Associate member of the Chartered Institute for Archaeologists.

1.3.4 **Specialists:** Greenlane Archaeology have a range of outside specialists who are regularly engaged for finds and environmental work. Engagement is dependent upon availability, but specialists typically engaged are as follows:

Specialism	Specialist
Animal bone	Naomi Sewpaul
Ceramic building material, medieval and Roman	Phil Mills
Conservation	York Archaeological Trust
Clay tobacco pipe	Peter Davey (or Tom Mace in house for smaller assemblages)
Flots	Headland Archaeology, Edinburgh
Human bone	Malin Holst
Industrial residue	Gerry McDonnell
Medieval pottery	Chris Cumberpatch for assemblages from the North East of England
Miscellaneous find types, for example Roman glass and medieval and	Chris Howard-Davis
earlier metalwork	
Prehistoric pottery	Blaise Vyner
Radiocarbon dates	Scottish Universities Environmental Research Centre
Roman pottery	Ruth Leary
Samian	Gwladys Monteil
X-ray of metal finds	York Archaeological Trust

2. Objectives

Client: Peter and Doreen Fell © Greenlane Archaeology Ltd, November 2020

2.1 Desk-Based Assessment

2.1.1 Where an archaeological desk-based assessment has not already been carried out in a previous phase of work, the objective will be to examine early maps of the site and any other relevant primary and secondary sources in order to better understand its dating and development, and set it in its historic context.

2.2 Watching Brief

2.2.1 To carry out an archaeological watching brief on the relevant areas of groundworks, in order to identify any and record surviving any archaeological remains that are revealed.

2.3 Report

2.3.1 To produce a report detailing the results of the watching brief.

2.4 Archive

2.4.1 Produce a full archive of the results of the project.

3. Methodology

3.1 Desk-Based Assessment

3.1.1 Where an archaeological desk-based assessment has not already been carried out in a previous phase of work, an examination of various sources, particularly early maps and plans relating to the site, will be carried out, including other relevant primary and secondary sources. The sources that will be used as part of the desk-based assessment will include:

- **Record Office/Archive Centre**: the majority of original and secondary sources relating to the site are deposited in the relevant Record Office(s) or Archive Centre(s), as specified in the cover sheet of this project design. Of principal importance are early maps of the site. These will be examined in order to establish the development of the site, date of any structures present within it, and details of land use, in order to set the site in its historical, archaeological, and regional context. In addition, any details of the site's owners and occupiers will be acquired where available;
- **Online Resources**: where available, mapping such as Ordnance Survey maps and tithe maps will be consulted online;
- **Greenlane Archaeology**: Greenlane Archaeology's office library includes maps, local histories, and unpublished primary and secondary sources. These will be consulted where relevant, in order to provide information about the history and archaeology of the site and the general area.

3.2 Watching Brief

3.2.1 The relevant area of groundworks will be monitored, with one archaeologist on site. If there are several areas being excavated concurrently it may be considered necessary to have more than one archaeologist on site.

3.2.2 The watching brief methodology will be as follows:

- All excavation will be carried out under supervision by staff from Greenlane Archaeology. Should the excavation technique utilised be deemed liable to have an adverse effect on any archaeological deposits that might be present an alternative method will be sought, where feasible;
- All deposits of archaeological significance will be examined by hand if possible in a stratigraphic manner, using shovels, mattocks, or trowels as appropriate for the scale;
- The position of any features, such as ditches, pits, or walls, will be recorded and where necessary these will be investigated in order to establish their full extent, date, and relationship to any other features. If possible, negative features such as ditches or pits will be examined by sample excavation, typically half of a pit or similar feature and approximately 10% of a linear feature;
- All recording of features will include detailed plans and sections at a scale of 1:20 or 1:10 where practicable or sketches where it is not and photographs in both colour print and colour digital format. In addition, photographs will also be taken of the site before work begins and after completion;
- All deposits, drawings and photographs will be recorded on Greenlane Archaeology pro forma record sheets;

24

- All finds will be recovered during the watching brief for further assessment as far as is practically and safely
 possible. Should significant amounts of finds be encountered an appropriate sampling strategy will be
 devised;
- All faunal remains will also be recovered by hand during the watching brief as far as is practically and safely
 possible, but where it is considered likely that there is potential for the bones of fish or small mammals to be
 present appropriate volumes of samples will be taken for sieving;
- Deposits that are considered likely to have, for example, preserved environmental remains, industrial
 residues, and/or material suitable for scientific dating will be sampled. Bulk samples of between 20 and 60
 litres in volume (or 100% of smaller features) where possible, depending on the size and potential of the
 deposit, will be collected from stratified undisturbed deposits and will particularly target negative features
 (e.g. gullies, pits and ditches) and occupation deposits such as hearths and floors. An assessment of the
 environmental potential of the site will be undertaken through the examination of samples of suitable
 deposits by specialist sub-contractors, who will examine the potential for further analysis. All samples will be
 processed using methods appropriate to the preservation conditions and the remains present;
- Any articulated human remains discovered during the watching brief will be left *in situ*, and, if possible, covered. The client will be immediately informed as will the local coroner. Should it be considered necessary to remove the remains this will require a Home Office licence, under Section 25 of the Burial Act of 1857, which will be applied for should the need arise. Any loose human bones discovered during the watching brief will be retained and removed from site for specialist assessment before being returned in order to be reinterred;
- Any objects defined as 'treasure' by the Treasure Act of 1996 (HMSO 1996) will be immediately reported to the local coroner and securely stored off-site, or covered and protected on site if immediate removal is not possible;
- Should any significant archaeological deposits be encountered during the watching brief these will
 immediately be brought to the attention of the Planning Archaeologist so that the need for further work can
 be confirmed. Any additional work will be carried out following discussion with the Planning Archaeologist
 and subject to a new project design, and the ensuing costs will be agreed with the client. It is considered
 unlikely in this case that the excavation will be deep enough to reach the significant archaeological deposits
 encountered during a previous period of archaeological investigation.

3.3 Report

3.3.1 The results of the watching brief will be compiled into a report, which will provide a summary and details of any sources consulted. It will include the following sections:

- A front cover including the appropriate national grid reference (NGR);
- A concise non-technical summary of results, including the date the project was undertaken and by whom;
- Acknowledgements;
- Project Background;
- Methodology, including a description of the work undertaken;
- Results of the watching brief, including finds and samples;;
- Discussion of the results including phasing information;
- Bibliography;
- Illustrations at appropriate scales including:
 - a site location plan related to the national grid;
 - a plan showing the location and extent of the area subject to archaeological watching brief;
 - plans and sections of any features discovered during the watching brief;
 - photographs of any features encountered during the watching brief;

- copies of selected historic maps and plans of the site relevant to the understanding of its development.

3.4 Archive

3.4.1 The archive, comprising the drawn, written, and photographic record of any deposits of archaeological interest and/or working shots identified during the watching brief, formed during the project, will be stored by Greenlane Archaeology until it is completed. Upon completion it will be deposited with the relevant Record Office or Archive Centre, as detailed on the cover sheet of this project design, together with a copy of the report. The archive will be compiled according to the standards and guidelines of the ClfA (ClfA 2014b). In addition details will be submitted to the Online AccesS to the Index of archaeological investigationS (OASIS) scheme. This is an internet-based project intended to improve the flow of information between contractors, local authority heritage managers and the general public.

3.4.2 A copy of the report will be provided to the client and a copy will be provided for the relevant Historic Environment Record, as detailed on the cover sheet of this project design.

4. Work timetable

4.1 Greenlane Archaeology will be available to commence the project on the date specified on the Order Form, or at another date convenient to the client. It is envisaged that the elements of the project will carried out in the following order:

- **Task 1**: rapid desk-based assessment (where this has not already been carried out as a previous phase of archaeological work);
- Task 2: archaeological watching brief;
- **Task 3:** production of draft report including illustrations;
- Task 4: feedback on draft report, editing and production of final report;
- *Task 5*: finalisation and deposition of archive.

5. Other matters

5.1 Access and clearance

5.1.1 Access to the site will be organised through co-ordination with the client and/or their agent(s). It is assumed that the watching brief will be able to be undertaken without obstruction. Greenlane Archaeology reserves the right in increase the price if problems with access result in delays to the work.

5.2 Health and Safety

5.2.1 Greenlane Archaeology carries out risk assessments for all of its projects and abides by its internal health and safety policy and relevant legislation. Health and safety is always the foremost consideration in any decision-making process.

5.3 Insurance

5.3.1 Greenlane Archaeology has professional indemnity insurance to the value of **£1,000,000**. Details of this can be supplied if requested.

5.4 Environmental and Ethical Policy

5.4.1 Greenlane Archaeology has a strong commitment to environmentally and ethically sound working practices. Its office is supplied with 100% renewable energy by Good Energy, and uses ethical telephone and internet services supplied by the Phone Co-op. In addition, the company uses the services of The Co-operative Bank for ethical banking, Naturesave for environmentally-conscious insurance, and utilises public transport wherever possible. Greenlane Archaeology is also committed to using local businesses for services and materials, thus benefiting the local economy, reducing unnecessary transportation, and improving the sustainability of small and rural businesses.

6. Bibliography

CIfA, 2014a Standard and Guidance for an Archaeological Watching Brief, Reading

ClfA, 2014b Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives, Reading

Appendix 2: Scheduled Monument Description for Castle Hill

(from Historic England 2020)

Overview

Heritage Category: Scheduled Monument List Entry Number: 1007127 Date first listed: 04-Dec-1924

Location

The building or site itself may lie within the boundary of more than one authority. County: Cumbria District: South Lakeland (District Authority) Parish: Pennington National Grid Reference: SD 25772 77750

Summary

Castle Hill.

Reasons for Designation

Ringworks are medieval fortifications built and occupied from the late Anglo-Saxon period to the later 12th century. They comprised a small defended area containing buildings which was surrounded or partly surrounded by a substantial ditch and a bank surmounted by a timber palisade or, rarely, a stone wall. Occasionally a more lightly defended embanked enclosure, the bailey, adjoined the ringwork. Ringworks acted as strongholds for military operations and in some cases as defended aristocratic or manorial settlements. They are rare nationally with only 200 recorded examples and less than 60 with baileys. As such, and as one of a limited number and very restricted range of Anglo-Saxon and Norman fortifications, ringworks are of particular significance to our understanding of the period.

Castle Hill medieval ringwork is representative of its period and is reasonably well-preserved as an earthwork. The monument will contain archaeological deposits relating to its construction, use and abandonment and provides insight into the character of medieval fortifications

History

See Details.

Details

This record was the subject of a minor enhancement on 24 March 2016. This record has been generated from an "old county number" (OCN) scheduling record. These are monuments that were not reviewed under the Monuments Protection Programme and are some of our oldest designation records.

The monument includes the remains of a medieval earthwork castle in the form of a ringwork, situated next to Pennington Beck with commanding views of the Pennington Beck valley. The ringwork enclosure is sub-rectangular and is protected by a semi-circular rampart, a partial ditch on the north east, east and south sides and a steep natural slope on its north west and south west sides. The earthworks measure nearly 40m east-west, the rampart is about 3m high at its north end and 1m at its south west end.

Legacy

The contents of this record have been generated from a legacy data system. Legacy System number: CU 362 Legacy System: RSM – OCN

Sources

Other PastScape Monument No:- 37766

Legal

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Digital, Culture, Media and Sport. End of official listing.

28

Context	Туре	Description	Interpretation
100	Deposit	Dark reddish-brown firm sandy clay	Overburden
101	Deposit	Frogged machine-made red brick	Floor of former outshut
102	Deposit	Buff/brownish yellow firm clay	Natural
103	Deposit	Varying from dark greyish brown gravelly firm silt to	Fill of cut for pipes/drains
		loose grey gravel, typically up to 0.4m thick	[106]
104	Deposit	Pale greyish brown firm silty clay up to 0.4m thick	Topsoil/hillwash
105	Deposit	Layer of marine shells in same matrix as 104, no more	Midden
		than 0.1m thick	
106	Cut	Irregular, but essentially linear in plan, up to 0.4m deep	Cut for pipes/drains
		and over 2m wide	
107	Deposit	Greenish grey soft silt, with lense of dark reddish-brown	Fill of probable cess pit [108]
		silt with lots of charcoal on west side, at least 0.2m thick	
108	Cut	Linear edge north/south but rest runs out of trench and	Cut of probable cess pit
		below house to east, steeply sloping edges	

Appendix 3: Summary Context List

Appendix 4: Summary Finds List

Context	Type	Quantity	Description	Date range	
103	Animal bone	1	Unidentified long bone fragment from the midsection of the bone (missing both	Uncertain	
103	Pottery	13	ends), there is some surface damage Brown-glazed red earthenware coarseware with white slip coating	19 th - early 20 th century	
103	Pottony 1		Brown-glazed red earthenware crock rim	Late 17 th – early 20 th century	
103	Pottery	2	Black-glazed red earthenware pancheon rim with lug handle, and high-fired hollow- ware body fragment	Late 17^{th} – early 20 th century	
103	Potterv	1	Red earthenware flower pot rim	Late 18 th – 20 th century	
103	Pottery	3	Glazed buff-bodied stoneware jar rim and body fragments, brown washed externally	19 th – early 20 th century	
103	Pottery	1	Olive-green glazed purple bodied stoneware jar base	18 th – early 20 th century?	
103	Pottery	1	Porcelain saucer rim, with blue painted decoration	18 th century	
103	Pottery	1	Factory-produced brown-glazed red earthenware fineware base fragment	Late 18 th – early 20 th century	
103	Pottery	59	White earthenware, including sponge- printed (4 fragments from bowl with blue quartered lozenges along flat rim and figures of eight below; saucer rim with purple leaves below rim, and plate base with pinkish red flower), blue transfer- printed (Asiatic Pheasants x 6, chinoiserie pattern, and other unidentified patterns), flow blue transfer-printed saucer rim, other colours of transfer-printed patterns, including one clobbered pattern; tea cup with three gilded stripes below rim, and factory-produced slipware fragments	19 th – early 20 th century	
103	Pottery	11	Bone china, including Broseley transfer- printed saucer fragments x 2, lilac transfer-printed plate base, and relief- moulded jug handle fragment	19 th – early 20 th century	
103	Pottery	2	Glazed factory-produced buff-bodied earthenware rim fragments	19th – early 20 th century	
103	Тоу	1	Porcelain doll's head and shoulders, moulded hair with black enamel, cheeks and lips tinted pink	19 th – early 20 th century	
103	Glass	10	Colourless bottle fragments, one with embossed lettering along the side 'RODU' (producers?)	Early 20 th century	
103	Plastic	1	Pink coil	20 th century	
105	Pottery	1	Late Medieval Reduced Grey ware: large body fragment from a wheel-thrown vessel made from a soft, uniform dark grey fabric, with some mid-reddish-orange patches towards the outer surface beneath areas of a mid-greenish-brown glaze; the fabric has very few visible inclusions and the glaze is presumably 'dipped' as it is applied uniformly inside and out	Late 13 th to early 17 th century	

31

Appendix 5: Environmental Sample Data

Sample number	Context number	Size (litres)	Context type
1	105	10	Shell midden deposit
2	107	10	Fill of possible cess pit 108

Table 2: Summary of samples taken

Sample number	1	2
Uncharred organic	++	
Charred organic	++++	+++
Ceramic	+	+
Iron working slag		+
Haematite	+	+
Hammerscale	+	
Iron object	+	
Glass	+	
Bone	+++	
Marine shell	++++	
Flint/chert flake	+	

Table 3: Contents of retents (Key: + = 1-9, ++ = 10-20, +++ = 21-50, ++++ = >51)

Appendix 6: Flot Assessment Report

EXECUTIVE SUMMARY

Wardell Armstrong LLP (WA) was commissioned by Greenlane Archaeology to undertake an assessment of the two flots from the bulk samples from the site at Castle Hill Farm, Beckside, Pennington, Cumbria.

Both flots yielded small quantities of charcoal identified as ash (*Fraxinus* sp.), the flot from (**105**) <**1**> also yielded a single cereal grain identified as barley (*Hordeum* sp.).

It may be possible to use the charcoal for radiocarbon determination however the species observed is relatively long growing and may not provide a date for the backfilling of the pit or the midden.

No further work is recommended on this assemblage.

ACKNOWLEDGEMENTS

Wardell Armstrong LLP (WA) would like to thank Dan Elsworth of Greenlane Archaeology for commissioning us to undertake the assessment of the flots from the bulk samples from the site at Castle Hill Farm, Beckside, Pennington, Cumbria, and for all their assistance throughout the work.

The sorting of the flots, identifications and production of this report were undertaken by Freddie Sisson. Lynne F. Gardiner edited this report.

FLOT ASSESSMENT

INTRODUCTION

In October 2020, Wardell Armstrong LLP (WA) was commissioned by the Client to undertake an assessment of the flots from samples taken during fieldwork at Castle Hill Farm, Beckside, Pennington, Cumbria.

The samples were processed elsewhere and the resulting two flots were forwarded for assessment.

This report presents the results of that assessment.

METHODOLOGY

This report presents the results of the assessment of the environmental samples, and charcoal remains in accordance with Campbell et al. (2011) and English Heritage (2008).

The flots were scanned using a stereo microscope (up to x45 magnification). Any non-palaeobotanical finds would be noted on the flot pro forma (Table 1).

All suitable sized fragments of charcoal (>2mm of transverse section) were selected for identification. Fragments were recovered from both assemblages.

The charcoal was identified to species as far as possible, using Hather (2000), Schweingruber (1982) and the author's reference collection. Cereals were identified to species using Jacomet (2006) and the authors reference collection. Nomenclature for plant taxa followed Stace (2010) and cereals followed Cappers and Neef (2012).

The environmental assemblage has been assessed for its local, regional and national potential and for its potential to contribute to the relevant research frameworks.

RESULTS

The flot from (105) <1> yielded a single barley (*Hordeum sp.*) grain which was in an excellent state of preservation.

Charcoal was present in both flots in good to poor states of preservation.

Charcoal from sample <1>, from a suspected shell midden (*105*), yielded 0.77g of charcoal which identified as ash (*Fraxinus sp.*).

Less than 0.01g of charcoal was recovered from sample <2> from fill (107) of a cess pit and was also identified as ash.

Extremely small amounts of shell were present in the 250-micron fraction of the flot from sample <1>. These are likely to be marine molluscs as a very small fragment of mussel (*Mytilus edulis*) was observed. No other fragments were suitable for identification purposes.

DISCUSSION

Due to the paucity of environmental remains gives no meaningful discussion from these results.

STATEMENT OF POTENTIAL AND RECOMMENDATIONS

The charcoal may be employed for radiocarbon submission; however, ash is a relatively long growing species and may provide a skewed radiocarbon age that does not correspond to when the midden or pit was back filled.

A single growth entity would be preferred for radiocarbon determination; however, the single barley grain provides an uncertain provenance as it may be present through bioturbation and is thus deemed not suitable.

BIBLIOGRAPHY

Campbell, G., Moffett, L. and Straker, V. ,2011. *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (second edition), English Heritage, Portsmouth

Cappers, R.T.J. and Neef, R., 2012. Handbook of Plant Palaeoecology. Barkhuis Publishing, Groningen

English Heritage, 2008. MoRPHE Project Planning Note 3 Archaeological Excavations

Hather, J.G., 2000. The Identification of the Northern European Woods: A Guide for Archaeologists and Conservators. Archetype, London

Jacomet S., 2006, Identification of cereal remains from archaeological sites (2nd Ed.), Archaeobotany Lab, IPAS, Basel University

Schweingruber, F.H., 1982. *Microscopic Wood Anatomy* (2nd Ed), Swiss Federal Institute of Forestry Research, Zurich

Stace, C., 2010. The New Flora of the British Isles. 3rd edition. Cambridge University Press: Cambridge

Table 1: flot d	lata
-----------------	------

С	\$	Description of flot	Flot weight	Flot volume	Charcoal (g)	Charcoal Preservation	CPR	CPR Preservation	Flot discarded
105	1	Sand 60%; very fine rootlets 30%; charcoal 10%	61.4	65	0.77	good	1	Excellent	No
107	2	Sand 80%: very fine rootlets 20%	30.8	45	<0.01	poor			No

Key: C=context; <>=sample number; CPR=charred plant remains

<u>34</u>