18 HARMONY HILL, MILNTHORPE, CUMBRIA

Archaeological Evaluation



Client: Toby Taylor Planning Ap. Ref.: 5/07/1294

NGR: SD 5000 8161

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Non-Technical Summary

A planning application was submitted by Toby Taylor for the construction of a new dwelling at 18 Harmony Hill, Milnthorpe, Cumbria. Following a recommendation by Cumbria County Council Historic Environment Service, an archaeological planning condition was placed on the planning consent by South Lakeland District Council. The work required a rapid desk-based assessment and 25 square metres of evaluation trenching. A project design was produced by Greenlane Archaeology and following the acceptance of this the desk-based assessment and evaluation were undertaken in February 2008.

The excavation of two evaluation trenches revealed a single 17th/18th century pit and a thick cultivation soil. This subsoil also contained pottery and other domestic refuse of 18th and 19th century origin suggesting the land was first developed at that time. An enclosure map of 1803 shows the plot to be at the rear of four cottages, which have subsequently been demolished. It would now seem likely that the cottages were constructed as early as the beginning of the 18th century.

A marked clay tobacco pipe stem, manufactured by Thomas Marsh and dated to the first half of the 18th century, was recovered from one of the evaluation trenches. A sample of the fill of the pit mentioned above contained very small residual fragments of medieval pottery dated to the late 15th to early 16th century.

Acknowledgements

Greenlane Archaeology would like to thank Toby Taylor for commissioning the project, and Beth Taylor for her help during the site visit and evaluation, and for allowing access to the deeds. Additional thanks are due to the staff of Cumbria Record Office in Kendal and Kendal Local Studies Library for help with accessing their archives. Thanks are also due to Jo Mackintosh, Historic Environment Record Officer, for providing access to the Cumbria Historic Environment Record, and to Jeremy Parsons, Historic Environment Officer at Cumbria County Council, for providing a brief, approving the project design and proposed trench plan, and monitoring the evaluation. Specialist identification of finds from the sample was very kindly provided by Scott Timpany of Headland Archaeology and Stephen Rowland of Oxford Archaeology North, and specialist identification of the clay tobacco pipe was also very kindly provided by Peter Davey of the University of Liverpool.

The desk-based assessment and site visit were carried out by Jo Dawson who also managed the project. The report was written by Sam Whitehead, who was assisted in the field by Steve Clarke. The sample was processed and assessed by Jo Dawson, with charred cereals identified by Scott Timpany of Headland Archaeology, and animal bone identified by Stephen Rowland of Oxford Archaeology North. The finds were assessed by Jo Dawson, who edited the report together with Daniel Elsworth.

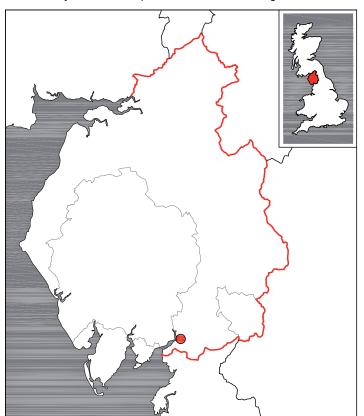
1. Introduction

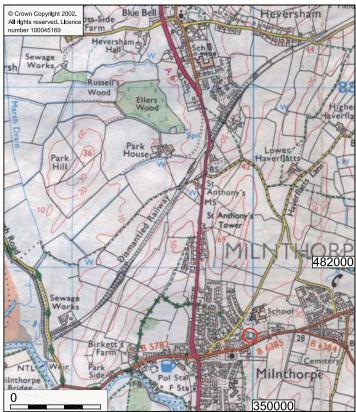
1.1 Circumstances of the Project

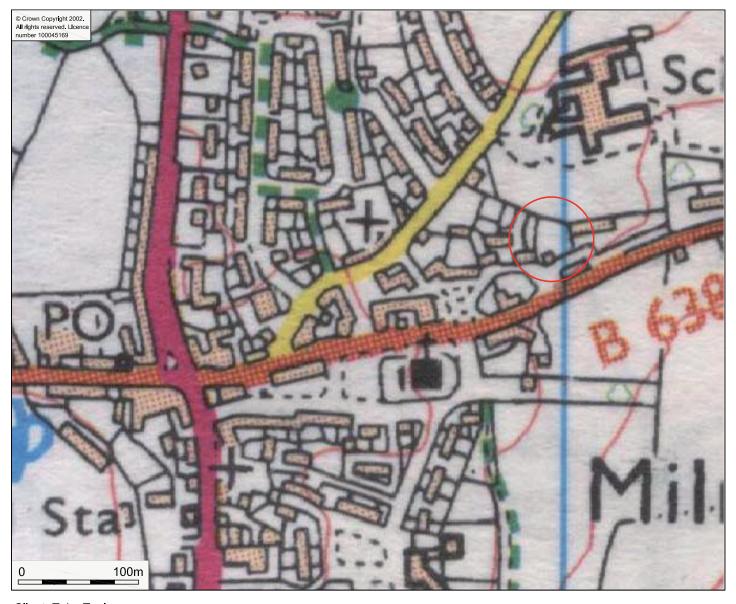
1.1.1 A planning application was submitted by Toby Taylor (hereafter 'the client') for the construction of a new dwelling at 18 Harmony Hill, Milnthorpe, Cumbria (Planning Application No. 5/07/1294; NGR SD 5000 8161). South Lakeland District Council (SLDC), after consultation with Cumbria County Council Historic Environment Service (CHES), placed an archaeological condition on the planning consent, and a brief for the works was then issued by CHES, comprising an evaluation of part of the site (*Appendix 1*). The evaluation is intended to establish, where possible, whether any remains of archaeological significance are present on the site, their nature, degree of survival, extent, significance, and date. As part of the work on site a desk-based assessment was also to be carried out. This was intended to set the site in its historical and topographical context, and establish the location, extent, survival, and significance of any known archaeological remains on the site prior to the evaluation.

1.2 Location, Geology, and Topography

1.2.1 Milnthorpe is located at the top of the Kent estuary in the north-east corner of Morecombe Bay, in south Cumbria, and roughly nine miles south-west of Kendal on the A6 (Fig 1). The underlying geology of the area comprises Dinantian Carboniferous limestone which outcrops in places but is covered by glacial tills (Moseley 1978, plate 1) in the vicinity of the site. The landscape is characterised by gently undulating pasture, conspicuous limestone hills and outcrops (Countryside Commission 1998, 64). The site is to the rear of 18 Harmony Hill which is towards the east end of the village; it is currently a garden and lies at approximately 20m above sea level.







Client: Toby Taylor
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Figure 1: Site location

2. Methodology

2.1 Desk-Based Assessment

- 2.1.1 A desk-based assessment was carried out in accordance with IFA guidelines (IFA 2001). This principally comprised an examination of early maps of the site, the deeds, census information, and published secondary sources. A number of sources of information were used during the desk-based assessment:
 - Cumbria County Council Historic Environment Record (CCCHER): this is
 a list of all the known sites of archaeological interest within the county, which
 is maintained by Cumbria County Council and is the primary source of
 information for an investigation of this kind. All of the known sites of
 archaeological interest within 100m of the centre of the proposed
 development area were examined; each identified site comes with a grid
 reference, description and source and any additional information referenced
 was also examined as necessary. In addition, unpublished reports of
 archaeological investigations in the vicinity of the site were examined;
 - Cumbria County Record Office, Kendal (CRO(K)): this was visited in order to examine early maps and plans of the site, and local and regional histories;
 - The client: the client provided access to the deeds for the property;
 - **Greenlane Archaeology Library**: additional secondary sources, used to provide information for the site background, were examined.

2.2 Site Visit

2.2.1 The site was visited on 11th February 2008. The proposed development area was rapidly examined, and colour digital record photographs were taken (Plate 9). The access to the site and other relevant parts of it were measured in preparation for the evaluation trenching.

2.3 Evaluation

- 2.3.1 The brief (see Appendix 1) issued by the CHES requested a minimum of 25 square meters of trenching, this was to take the form of a single 'L' shaped trench that ran north/south and east/west and would be 1.7m wide. Due to restricted space in the garden and the presence of several trees the trenches had to be excavated separately (see Fig 2) but essentially replicated the layout proposed. It was anticipated that the trenches may encounter the minor property boundaries evident on the 1914 Ordnance Survey map (Plate 5) which are likely to date back to the 19th century and relate to the now demolished cottages that once fronted the street.
- 2.3.2 The topsoil and subsoil were machine stripped down to the natural geology and the archaeological features were hand cleaned and excavated. The archaeological features were then recorded in the following manner:
 - Written record: descriptive records of all deposits and cuts were made using Greenlane Archaeology pro forma record sheets. In addition, a general record of each trench and the day's events was also made;
 - Photographs: photographs in both 35mm colour print and colour digital format were taken of all archaeological features uncovered during the evaluation, as well as general views of the evaluation trenches, the surrounding landscape and working shots. A selection of the colour digital

photographs is included in this report, and the remainder are presented on the accompanying CD. A written record of all of the photographs was also made on Greenlane Archaeology *pro forma* record sheets;

- Drawings: drawings produced for each trench included the following:
 - i. a trench plan at a scale of 1:50;
 - ii. sections at a scale of 1:20.
- 2.3.3 The location of the trench was recorded relative to the known location of nearby buildings and other structures that were evident on the site plans and Ordnance Survey maps. A summary context list is presented in Appendix 3.

2.4 Environmental Samples

- 2.4.1 **Strategy**: samples were taken from any negative cut feature that was deemed to have the potential for the preservation of organic matter; these organic remains may then help to understand the function of the feature.
- 2.4.2 **Processing**: the sample was processed using flotation techniques, with 250µm and 500µm sieves used for the flot, and a 1mm mesh used for the retent. The flot and retent were then naturally air dried.
- 2.4.3 **Assessment and recording:** artefacts and ecofacts were removed from the flot and retent and were assessed. The content of the flot and retent was recorded on *pro forma* record sheets, and this information is summarised in *Appendix 5*, and discussed in *Section 4.3*.

2.5 Finds

- 2.51 **Processing:** all of the artefacts were washed, with the exception of metal and glass, which were dry-brushed. They were then naturally air-dried and packaged appropriately in self-seal bags with white write-on panels.
- 2.5.2 **Assessment and recording:** the finds were assessed and identified, and were recorded on *pro forma* record sheets. A catalogue of the finds was produced (*Appendix 4*). The marked clay tobacco pipe has been sent to Peter Davey so that a cast of the stamp can be taken for the National Stamp Collection in Liverpool.

2.6 Archive

2.6.1 A comprehensive archive of the project has been produced in accordance with the project design (see *Appendix 2*), and current IFA and English Heritage guidelines (Brown 2007; English Heritage 1991). The paper and digital archive and a copy of this report will be deposited in the Cumbria Record Office in Kendal on completion of the project. Three copies of this report will be deposited with the Cumbria Historic Environment Record, one with the client, and one will be retained by Greenlane Archaeology. In addition, a record of the project will be made on the OASIS scheme.

3. Desk-Based Assessment

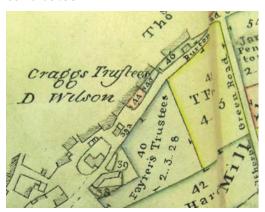
3.1 General Background

- 3.1.1 The name Milnthorpe is thought to comprise the old English *miln* meaning mill, and the Scandinavian *thorpe* meaning secondary settlement (Field 2005, 25). This fits well with the fact that it was part of the manor of Heversham, a place that is thought to have Anglian origins. An alternative meaning suggested is 'the hamlet with a mill' (Smith 1967, 95, quoted in CCC and EH *c*2002, 3).
- 3.1.2 The town of Milnthorpe has been assessed by an Extensive Urban Survey; the site falls within the presumed medieval core of the town and is deemed to have considerable potential for medieval activity and remains. The following paragraphs (*Sections 3.1.3-8*) are intended to highlight this general potential and are summaries of information presented in the Extensive Urban Survey (CCC and EH *c*2002, 4-5).
- 3.1.3 **Medieval:** at the time of the Norman Conquest Milnthorpe was in the manor of Heversham which was held by Tostig, the Earl of Northumbria. The manor was divided and granted to the Lords of Kendale, in 1160 the Milnthorpe moiety whose caput was at Milnthorpe manor or court was passed from William de Lancaster to Alexander de Wyndsore. Milnthorpe was retained by the Wyndsore family until 1385 during which time it was granted a market charter, in 1280 (*ibid*).
- 3.1.4 Milnthorpe mill was located in part of the part of the manor of Heversham that was granted to St Mary's Abbey, York, by Ivo do Taillebois in 1094. The mill was referred to as Heversham Mill as it was originally part of the Heversham manor; this would appear to be the mill on the Bela at Milnthorpe which was owned by the Church and first mentioned in 1460. There is as yet no evidence to suggest where Milnthorpe's medieval cornfields were located (*ibid*).
- 3.1.5 Milnthorpe also had an early port; the de Wyndsore's made use of this to campaign in Ireland where they claimed ownership of land. The importance of this port is testified by the abundance of fortified towers along the Kent estuary, principally to guard against Scottish invasions and possibly Irish pirates too (*ibid*).
- 3.1.6 **Post-medieval**: the port of Milnthorpe ensured that trade flourished in and around the town which became the main port for Westmorland. The wharf was located one mile west of Milnthorpe on the Arnside road; the construction of the Lancaster canal in 1819 eventually undermined the port's trade (*ibid*).
- 3.1.7 Several mills were known to exist in the 17th century, a paper mill was located near to the old bridge and before that there was an iron forge on the same site. There were several flax and paper mills on the River Bela; the best surviving example is the Bela Mill built in the early 19th century and devoted to the manufacture of twine, sacking and canvas; in 1886 it turned to the manufacture of combs.
- 3.1.8 Milnthorpe had an early history of land enclosure; many of the tiny plots termed 'parrocks' are irregular in shape, suggesting piecemeal reclamation. The neater rectangular plots located to the north of the town are thought to be typical of the 17th century (*ibid*).

3.2 Map Regression

3.2.1 **Enclosure map 1803-15:** this is the earliest detailed map available for Milnthorpe, and it shows the buildings along the southern edge of the site (Plate 1). They lie on Burton Road, the north side of which appears to be fairly extensively built up. Text next to the site reads 'Craggs Trustees' and 'D Wilson', although it is not clear exactly which areas of land these labels refer to. The site can be most easily

located with reference to the warehouse (labelled 39a), which stands in front of it to this day. The number 39a refers to a small allotment owned by R Craggs Trustees, according to the reference table in the corner of the map. Although the ownership of the site is not clear from this map, Craggs Trustees seem to be the most likely candidates.



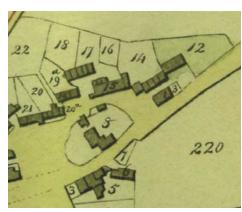
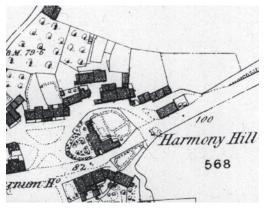


Plate 1: Enclosure map 1803-1815 (CRO(K) WQR/I 38 1803-15)

Plate 2: Mount's map of 1826 (CRO(K) WD/D/Acc.950/49 1826a)

- 3.2.2 **Mount's map 1826:** this is a map showing the land holdings of the estate of George Wilson of Dallam Tower, with these parcels of land indicated by pink and green colouring (Plate 2). A reference book accompanies the map, giving details of these landholdings. However, large parts of the map are not coloured, since they do not form part of the Dallam Tower estate. The entire map is indexed with numbers on all plots of land, and these numbers correspond to a poor rate book that appears not to have survived. It is unfortunate, therefore, that although the site can be easily identified on the map as plot number 14, there is no corresponding ownership, occupier, or land use information. A row of four cottages can be seen on the south side of the plot, against the road and opposite the warehouse, with a slightly larger cottage adjoining the row on its western end, and another building in the south-west corner of the plot.
- 3.2.3 The poor rate closest in date that has survived and is held within the Record Office in Kendal is that for 1844. This was examined briefly in case the numbering bore any relation to the earlier rate. However, it was found that this was not the case. The plot immediately to the east of the site, number 12, was held by the Dallam Tower estate, this fact indicated by a green colour wash. It is the closest plot for which detailed information is available, and the reference book indicates that at the time it was a weaving shop and paddock (CRO(K) WD/D/Acc.950/49 1826b).
- 3.2.4 It should be noted that, according to explanatory text within the reference book that accompanies Mount's map, there is no tithe map for this area since tithes in the large ecclesiastical parish of Heversham were commuted at the time of the enclosure award in 1815 (*ibid*).
- 3.2.5 **Ordnance Survey c1859:** the first edition 1:2500 scale map was surveyed at the same time as the first edition 1:10,560 scale map; the former is therefore the most useful of the earliest Ordnance Survey maps for this area as the more detailed of the two (Plate 3). This shows a similar layout of buildings along the south side of the site to that shown on Mount's map. However, the eastern row of cottages appears to be three rather than four, and what appeared to be the larger cottage to the west is divided into two. Additional detail is shown of what is evidently two small buildings in the south-west corner of the plot, together with their associated enclosures.

3.2.6 **Ordnance Survey 1898:** this is similar, although not identical, to the previous Ordnance Survey map (Plate 4). What is likely to be an outside toilet is shown in the north of the site, while the cottage divisions of the two buildings in the south-west corner of the plot appear to have been reduced to one.



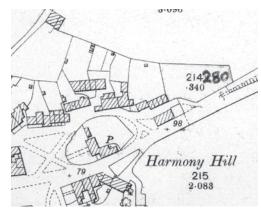


Plate 3: Ordnance Survey c1859

Plate 4: Ordnance Survey 1898

3.2.7 **Ordnance Survey c1914:** this is an enlargement of the 1898 map, produced to allow the numbers and boundaries (hand-written in red) corresponding to the 1910 land valuation to be marked on the map (Plate 5). Minor garden divisions relating to the cottages along the south side of the plot have appeared – these are likely to have been fairly insubstantial, possibly paths, fences, or hedges, and not of enough substance to have been included by the Ordnance Survey.



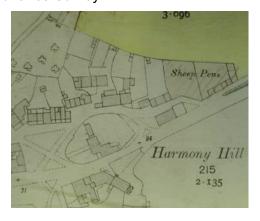


Plate 5: Ordnance Survey c1914

Plate 6: Ordnance Survey 1914

- 3.2.8 **Ordnance Survey 1914:** this is a revised edition of the 1898 map, and shows several changes within the site (Plate 6). More detail is shown in the area of the possible outside toilet, a boundary is shown running north/south, there is a change in the location of a building along the western boundary, and the internal cottage divisions are also slightly different.
- 3.2.9 Ordnance Survey mapping from 1957 and 1969 for the area covering the site was located in the map catalogue in the Record Office in Kendal, but unfortunately the maps in question appeared to be missing when searched for.

3.3 Documentary Sources

3.3.1 *Introduction:* due to frequent changes in the site's address, it proved difficult to trace in the documentary sources. Information was compiled from the client's

deeds, the 1910 valuation, the census records, and Curwen's history of the town. Searches for original documents relating to the property, such as any that might have been present in the Record Office in Kendal, proved fruitless. Similarly, the information available meant that a search of trade directories would not have yielded any further details.

- 3.3.2 **Estate sale 1820:** Curwen, in his history of the parish of Heversham with Milnthorpe, describes the properties along the 'East Road' in a fairly logical order. The site seems likely to form part of the property described as 'Red Warehouse and Cottages' (Curwen 1930, 57). The warehouse was so named because its woodwork was always painted red (*ibid*), and this appears to have been the same warehouse that now stands opposite the site to the south. It is recorded that 'In 1820 the late William Cragg's estate was sold, consisting of a house, workshop and ropewalk, six freehold cottages, six other cottages, a joiner's shop, warehouses, etc., all near Harmony Hill' (*ibid*). The enclosure map shows that the warehouse opposite the site was owned by R Cragg's Trustees, and it is probable that the site itself may have been in the same ownership (see Section 3.2.1, above). There was presumably a family connection between R Cragg and William Cragg.
- 3.3.3 *Estate sale 1833:* Curwen records this later sale, again as part of 'Red Warehouse and Cottages'. He records that 'in January, 1833, six cottages were put up for sale, near Harmony Hill, the property of the late Christopher Dodd' (ibid).
- 3.3.4 **Census 1841:** starting with the occupier information on the 1910 valuation, the cottages were traced back through successive census records. This was problematic, since on no two censuses did the cottages maintain the same address. However, using Owlet Ash to the east as a locator, it was possible to check the cottages were in the correct relative positions, and also to check the direction along the street that the individual carrying out the census had travelled. The first census, carried out in 1841, had no address or property name information, and there was not enough of a continuation of occupiers to identify the cottages.
- 3.3.5 **Census 1851:** this is the earliest census that the cottages could be traced back to with any degree of confidence (HO107/Piece 2442/Folio 550/Page 9-10 1851). Of the probable five cottages at the front of the site, four are occupied, and two of these are inhabited by families with the surname Mayor, who were at the time sack makers, linen weavers, and handloom weavers. No address or property name is given for any of the cottages.
- 3.3.6 **Census 1861:** this is the first census for which an address is recorded (RG9/Piece 3972/Folio 34/Page 31-32 1861). The cottages are listed as being on 'Rotten Row', and one of the occupying families has the surname Mayor, the head of the household being a weaver.
- 3.3.7 **Census 1871:** once again no address or property names are given for the cottages (RG10/Piece 5289/Folio 26/Page 13 1871). The occupiers include two families with the surname Mayor, and although these are essentially the same families as are recorded in 1851, the emphasis on weaving as a trade has decreased, and their occupations are described as general dealer, post messengers, fish dealer, and paper maker.
- 3.3.8 **Census 1881:** no addresses or property names are given for the cottages (RG11/Piece 5215/Folio 21/Page 1 1881). One of the occupying families has the surname Mayor, and the head of the household's occupation has changed from general dealer to coal dealer.
- 3.3.9 **Census 1891:** all the cottages are described as 'Mayors Cottages', presumably referring to the fact that the Mayor family have lived in one or two of the cottages for the past 40 years at least (RG12/Piece 4334/Folio 18/Page 5 1891). For

the first time, information relating to the size of the cottages is given, in that the number of rooms occupied is listed if it is less than five. Of the four inhabited cottages (the fifth being empty), all are said to have four rooms occupied. In one case this (presumably two up two down) cottage housed a family of seven. Jane Mayor, apparently the last surviving member of the Mayor family, is widowed and living on her own, on her own means, in what is today known as 18 Harmony Hill.

- 3.3.10 *Census 1901:* no members of the Mayor family now reside in the cottages, and with their departure or death has gone the property name from the previous census (RG13/Piece 9414Folio 100/Page 27 1901). All the cottages are now recorded as 'Warehouse Cottages', undoubtedly referring to their proximity to and/or association with the warehouse directly across the road from them. Of the four occupied cottages (one is, once again, uninhabited), only the property known today as 18 Harmony Hill has five or more occupied rooms. Two have four occupied rooms, and one has only two occupied rooms.
- 3.3.11 **1910 Valuation:** this is the only source to directly link the map evidence and the primary written sources giving occupier information (CRO(K) WT/DV/2/39 1910). It describes all the properties on the site as cottages, owned by Benjamin J Clark. Of the four different property numbers given to the cottages, all have different occupiers listed, but two also state that they are 'Empty', perhaps a sign they are gradually going out of use.
- 3.3.12 **Deeds:** the client's deeds were examined, and were found to go back only as far as 1962. It is likely that this can partially be explained by the likelihood that the cottages previously formed part of a much larger landholding (see Section 3.3.2, above), and that the earlier deeds did not follow all parts of the property as it was gradually split up. The 1962 conveyance does not reference any earlier documents, and so describes the property from scratch as follows: 'First all that messuage or cottage known as Wayside Cottage, Harmony Hill, Milnthorpe in the County of Westmorland adjoining on the north side of the road from Milnthorpe to Ackenthwaite and secondly all that the site of four demolished cottages adjoining the east side thereof and thirdly all that garden or close of land on the north of the property first and secondly described containing in area about a quarter of an acre or thereabouts' (Deeds 1962). This shows that although the cottages have been demolished by this date, it occurred recently enough for it to be remembered and worth including in the property description. It also shows that by this time the road had taken the name 'Harmony Hill', referring to Harmony Hall to the south-west. The current cottage is first referred to as number 18 Harmony Hill in a death certificate of 1973 (Deeds 1973).

3.4 Previous Archaeological Investigation

3.4.1 The Historic Environment Record (HER) was examined as part of the desk-based assessment, and none of the sites within the study area were found to be relevant to the proposed development site, as they comprised discrete buildings and structures mainly still extant and unconnected to the site. However, a recent piece of archaeological fieldwork to the north-east of the site was noteworthy, as it related to previously unknown below-ground remains. The evaluation at Dallam School was undertaken by Archaeological Services, University of Durham and revealed a Late Neolithic cremation (ASUD 2005a). The subsequent excavation in 2005 revealed a further three cremations, two of which were urned and all dated from the late Bronze Age. A stone filled ditch and a pit, both of which were undated, were thought to be associated (ASUD 2005b). This site is of regional importance and highlights the possibility for the preservation of prehistoric features in this area.

3.5 Discussion

3.5.1 The desk-based assessment has revealed several sources of information which suggests that site at 18 Harmony Hill shows potential for post-medieval, medieval and even prehistoric remains. The Extensive Urban Survey has revealed the early development of Milnthorpe, whose name is pre-conquest in origin. The survey considers the site to be within the medieval core of the town; it is located between two medieval roads and therefore has the potential for being the site of medieval tenement buildings and associated features. The map regression shows that there have been buildings immediately to the south of the development area since at least 1803 when the first accurate map was published. The census information reveals that the occupants of the now demolished cottages on the southern edge of the site were largely employed in the textile industries of the town, principally weaving in 1851 and 1861; subsequent entries show a wider variety of professions which may suggest a decline in the town's traditional industries around this time. The HER revealed the presence of Neolithic and Late Bronze Age burials close to the site and shows the potential for prehistoric activity in the area.

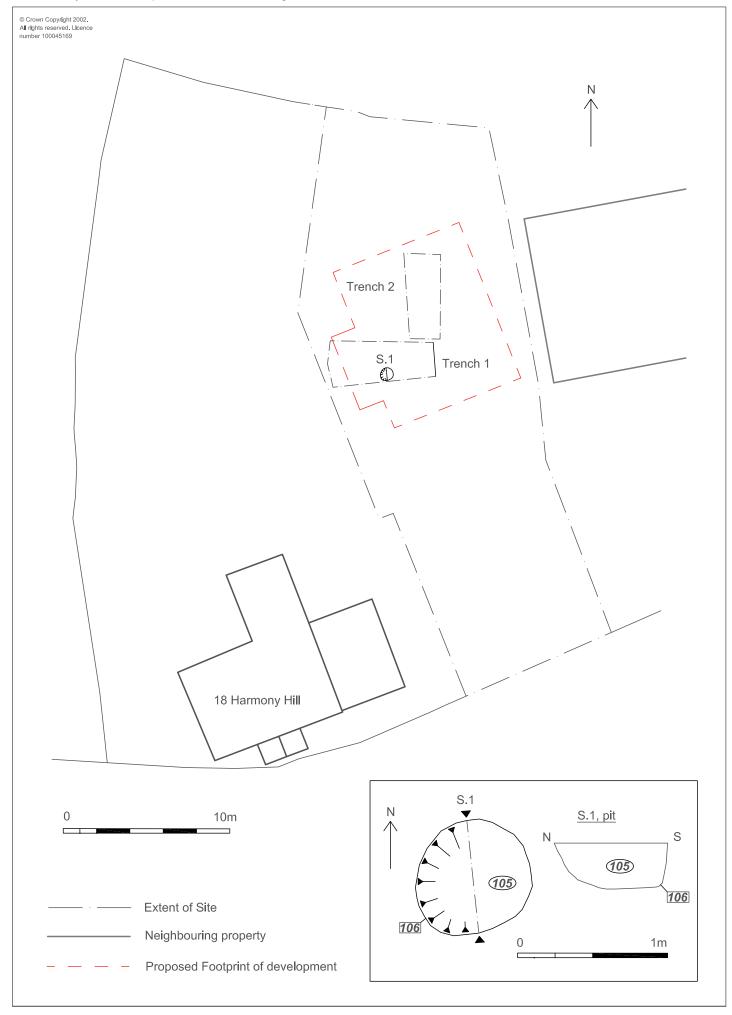
4. Evaluation

4.1 Trench 1

- 4.1.1 This trench contained no archaeological features, pottery recovered from the topsoil and subsoil ranged in date from the late 17th/early 18th century to the 19th/early 20th century, and some had been burnt. The trench was 5m long, north/south, and an average of 2m wide (Plate 7).
- 4.1.2 **Topsoil** *100*: this was a loose, dark greyish-brown silty, sandy-clay with occasional sub-rounded gravels. This deposit was 0.20m thick and contained pottery dating from the late 18th/early 19th century to the 19th/early 20th century.
- 4.1.3 **Subsoil 101**: this was a moderately compact, mid-brownish sandy-clay with occasional sub-rounded gravels. This deposit was 0.30m thick and contained pottery dating from the late 17th/early 18th century to the 19th/early 20th century. A marked clay pipe stem was also recovered that was dated to the first half of the 18th century (see *Sections 4.3.2-3* and Plate 11).
- 4.1.4 **Natural 102**: this was a moderately compact, slightly orangey, mid-brownish sandy-clay that contained moderate quantities of sub-rounded and sub-angular gravels with occasional sub-angular pebbles and sub-rounded cobbles. The gravels, pebbles and cobbles were of mixed provenance as is common in such glacial tills.

4.2 Trench 2

- 4.2.1 This trench was 6.20m long, east/west, and an average of 2.50m wide, the trench revealed a circular pit that contained a single fill (Plate 8). During the evaluation three sherds of pottery dating from the late 17th century to the early 18th century, and a single fragment of burnt bone, were recovered. The topsoil and subsoil included reasonable quantities of pottery, the dates of which ranged from the late 17th century to the early 20th century.
- 4.2.2 **Topsoil 103**: this was a loose, dark-brown silty, sandy-clay with very occasional sub-rounded gravels. This deposit was 0.50m thick and contained pottery dating from the 19th/early 20th century. The deposit also contained three pieces of butchered large mammal bone, glass, and a copper alloy threaded cap.
- 4.2.3 **Subsoil 104**: this was a moderately compact, greyish mid-brown sandy-clay with very occasional sub-rounded gravels. This deposit was 0.30m-0.50m thick and contained a small quantity of red earthenware pottery which dates from somewhere between the late 17th and early 20th century. From this deposit an antler knife handle was also recovered.
- 4.2.4 **Pit fill 105**: this was a moderately compact mid-brown sandy clay with occasional sub-rounded and sub-angular gravels and very occasional flecks of charcoal. Pottery from this deposit dated it to the late 17th/early 18th century. This fill was sampled (see Section 4.3.4, below).
- 4.2.5 **Pit cut 106**: the pit was circular with a diameter of 0.73m and a depth of 0.32m (Plate 10). The sides were steep, slightly concave and irregular, and the base was gently rounded.
- 4.2.6 **Natural 107**: this was a moderately compact, slightly orangey, mid-brownish sandy-clay that contained moderate quantities of sub-rounded and sub-angular gravels with occasional sub-angular pebbles and sub-rounded cobbles. The gravels, pebbles and cobbles were of mixed provenance as is common in such glacial tills.



Client: Toby Taylor
© Greenlane Archaeology Ltd, February 2008

Figure 2: Trench locations and pit section





Plate 7: Trench 1 from the north





Plate 9: View of site from the south-west

Plate 10: Pit 106 from the west

4.3 Finds and Samples

- 4.3.1 **Finds:** in total, 66 finds were recovered during the evaluation, and these are catalogued in Appendix 4. They are all post-medieval in date, and add little to the interpretation of the deposits on site. Dating evidence from the finds has been incorporated into the results above (see Sections 4.1 and 4.2) and the discussion below (see Section 4.4).
- 4.3.2 One artefact was recovered that was of interest in itself a clay tobacco pipe stem marked with a roller stamp saying 'THOMAS:MARSH:', which was recovered from subsoil **101**. The roller stamp was similar in form to those used by Rainford clay pipemakers in the first half of the 18th century (see, for example, George March (Marsh) pipe in Greenlane Archaeology 2006, 22). Within the list of Rainford pipemakers known from documentary sources is one George Marsh (recorded in 1729 and 1740) and one Henry Marsh (recorded in 1724) (King 1982, 276), but no

Thomas Marsh is recorded. It is also possible that the pipe was made by a Cumbrian maker (P Davey pers comm.).

4.3.3 The roller stamp has been applied to the stem twice, one above the other. The edging of semi-circles and lines is relatively deeply impressed, and can be seen clearly in the plates below. The lettering of the name stands in very shallow relief, and the AS:MA of Thomas Marsh can just be made out near the bottom of the far right hand view.



Plate 11: Four views of clay tobacco pipe stem with THOMAS:MARSH: roller stamp

4.3.4 **Environmental sample:** a single environmental sample was taken from the fill of pit **106**, the contents of which is summarised in Appendix 5. The flot included charred cereals (oats and hulled barley), and the retent included three small fragments of medieval pottery, the only artefacts of medieval date to be recovered from the site. Although very small, they appear to be Silverdale-type ware, dated to the late 15th to early 16th century (Plate 12). The retent also included several bone fragments, including the vertebra of a small salmonid (possibly a trout or a very small salmon), a sheep tooth and a sheep/goat tooth, and a bird phalanx (probably from a chicken). Fragments of cockle and mussel shells were also present.



Plate 12: Silverdale-type medieval pottery from retent of sample 105

4.4 Discussion

4.4.1 A reasonable quantity of artefacts were recovered from the two trenches, most of which was domestic refuse in the form of broken pottery, glass, and the occasional piece of butchered animal bone. Most of these artefacts dated from the 18th and 19th centuries which probably ties in with the date of the cottages that once

stood on the street front some fifteen metres to the south. Given the surprising depth of the subsoil it would seem likely that the trenches were situated in the allotments/vegetable patches of the former cottages. Domestic refuse would have been a welcome addition to help break up and enrich the somewhat clayey soils of the area as well as a natural place to dispose of household waste. The fill of pit **106** was sampled and found to be very similar in composition to the subsoil in Trench 2. There was a paucity of organic matter within suggesting that the pit may have only been open a relatively short time (see *Appendix 5*). When these matters are considered it seems unlikely that it was a domestic refuse pit, and that it possibly relates to the removal of a small root bole in order to allow fuller cultivation of the plot. The hand-retrieved finds within the pit fill were of the same date range as those found in the subsoil, and were probably incorporated as it was backfilled.

5. Conclusion

5.1 The results of the field evaluation and the desk-based assessment are broadly complimentary, as discussed in *Section 4.4*. No evidence of medieval activity was found, although three small fragments of residual medieval pottery were recovered from the sample of the fill of pit *106*. It would appear that the evaluation trenches exposed a garden soil that was first cultivated from the late 17th century or the early 18th century. These gardens would probably have been the property of the four small cottages that fronted Burton Road, which is now called Harmony Hill. The earliest detailed map available shows the cottages to be present in 1803, it now seems probable that they were constructed about 100 years earlier than that and represent the first development of that land for residential purposes.

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Appendix 1: Project Brief

BRIEF FOR AN ARCHAEOLOGICAL EVALUATION AT 18 HARMONY HILL, MILNTHORPE, CUMBRIA

Issued by the

County Historic Environment Service

Environment Unit, Economy, Culture and Environment



Date of Brief: 23 January 2008

This Design Brief is only valid for 1 year after the above date. After this period the County Historic Environment Service should be contacted. Any specification resulting from this Brief will only be considered for the same period.

1. SITE DESCRIPTION AND SUMMARY

Site: 18 Harmony Hill, Milnthorpe

Grid Reference: SD 5000 8161

Planning Application No.: 5/07/1294

Area: approximately 400 square metres

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

2. PLANNING BACKGROUND

- 2.1 Cumbria County Council's Historic Environment Service (CCCHES) has been consulted by South Lakeland District Council regarding a planning application for the erection of a dwelling at 18 Harmony Hill, Milnthorpe.
- 2.3 The scheme affects an area considered to have a high archaeological potential and so a condition has been placed on planning consent requiring a scheme of archaeological work to be undertaken at the site. The first phase of this work will be an archaeological evaluation to assess the nature and potential of the site. This Brief deals solely with this phase.
- 2.4 This advice is in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) and with local, sub regional and regional planning policy.

3. ARCHAEOLOGICAL BACKGROUND

3.1 The site lies in an area designated by the Cumbria Extensive Urban Survey as of high archaeological importance. This part of Milnthorpe is likely to have developed during the 17th and 18th centuries when the town was the only seaport in Westmorland. Warehouses for the storage of goods that came to the port are known to have been located in the vicinity.

4. SCOPE OF THE PROJECT

- 4.1 *Objectives*
- 4.1.1 The evaluation should aim to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied.
- 4.2 Work Required
- 4.2.1 A desk-based assessment of the existing resource, to be undertaken before any work commences on site. This should include an assessment of primary and secondary maps and documents relating to the site, to set the evaluation results in their geographical, topographical, archaeological and historical context. Records held by the County Historic Environment Record and the County Records Office in Kendal should be consulted.
- 4.2.2 The excavation of a series of linear trial trenches and/or test-pits to adequately sample the threatened available area, and the investigation and recording of deposits and features of archaeological interest identified within those trenches. All features must be investigated and recorded unless otherwise agreed with the County Historic

Environment Service. Initial topsoil removal can be undertaken by machine, but subsequent cleaning and investigation must be by hand. A minimum of 25 square metres of trial trenching should be investigated.

- 4.2.3 The evaluation should provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment should also be provided, wherever possible.
- 4.2.4 The following analyses should form part of the evaluation, as appropriate. If any of these areas of analysis are not considered viable or appropriate, their exclusion should be justified in the subsequent report.
 - A suitably qualified specialist should assess the environmental potential of the site through the examination of suitable deposits, including: (1) soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features, and; (2) the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits.
 - Advice is to be sought from a suitably qualified specialist in faunal remains on the potential of sites for
 producing bones of fish and small mammals. If there is potential, a sieving programme should be
 undertaken. Faunal remains, collected by hand and sieved, are to be assessed and analysed, if
 appropriate.
 - The advice from a suitably qualified soil scientist should be sought on whether a soil micromorphological study or any other analytical techniques will enhance understanding site formation processes of the site, including the amount of truncation to buried deposits and the preservation of deposits within negative features. If so, analysis should be undertaken.

5. SPECIFICATION

- 5.1 Before the project commences a project proposal must be submitted to, and approved by, the County Historic Environment Service.
- 5.2 Proposals to meet this Brief should take the form of a detailed specification prepared in accordance with the recommendations of The Management of Archaeological Projects, 2nd ed. 1991, and must include:
 - ❖ A description of the excavation sampling strategy and recording system to be used
 - ❖ A description of the finds and environmental sampling strategies to be used
 - ❖ A description of the post excavation and reporting work that will be undertaken
 - Details of key project staff, including the names of the project manager, site supervisor, finds and environmental specialists and any other specialist sub-contractors to be employed
 - Details of on site staffing, expressed in terms of person days
 - ❖ A projected timetable for all site work and post excavation work
- 5.3 The proposed locations of the trial trenches should be determined following the desk-based assessment and site visit and must be agreed with the County Historic Environment Service.
- 5.4 Any significant variations to the proposal must be agreed by the County Historic Environment Service in advance.

6. REPORTING AND PUBLICATION

- 6.1 The archaeological work should result in a report, this should include as a minimum:
 - A site location plan, related to the national grid
 - A front cover/frontispiece which includes the planning application number and the national grid reference of the site
 - ❖ The dates on which the fieldwork was undertaken
 - ❖ A concise, non-technical summary of the results
 - An explanation of any agreed variations to the brief, including justification for any analyses not undertaken (see 4.2.4)
 - ❖ A description of the methodology employed, work undertaken and the results obtained

- Plans and sections at an appropriate scale showing the location and position of deposits and finds located
- ❖ A list of, and dates for, any finds recovered and a description and interpretation of the deposits identified
- A description of any environmental or other specialist work undertaken and the results obtained
- 6.2 Three copies of the report should be deposited with the County Historic Environment Record within two months of completion of fieldwork. This will be on the understanding that the report will be made available as a public document through the County Historic Environment Record.
- 6.3 The results of the evaluation will need to be made available for inclusion in a summary report to a suitable regional or national archaeological publication if further archaeological fieldwork is expected.
- 6.4 Recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation should **not** be included in the report. Such recommendations are welcomed by the County Historic Environment Service, and may be outlined in a separate communication.
- 6.5 Cumbria HER is taking part in the Online Access to Index of Archaeological Investigations (OASIS) project. The online OASIS form at http://ads.ahds.ac.uk/project/oasis must therefore also be completed as part of the project. Information on projects undertaken in Cumbria will be made available through the above website, unless otherwise agreed.

7. THE ARCHIVE

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

8. PROJECT MONITORING

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

9. FURTHER REQUIREMENTS

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

9.4 The involvement of the County Historic Environment Service should be acknowledged in any report or publication generated by this project.

FURTHER INFORMATION 10.

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Appendix 2: Project Design

18 HARMONY HILL, MILNTHORPE, CUMBRIA

Archaeological Evaluation Project Design



Client: Toby Taylor

February 2008

Planning Application Ref. 5/07/1294

1. Introduction

1.1 Project Background

- 1.1.1 A planning application was submitted by Toby Taylor (hereafter 'the client') for the construction of a new dwelling at 18 Harmony Hill, Milnthorpe, Cumbria (Planning Application No. 5/07/1294; NGR SD 5000 8161). South Lakeland District Council, after consultation with Cumbria County Council Historic Environment Service (CHES), placed an archaeological condition on the planning consent, and a brief for the works was then issued by CHES, comprising an evaluation of part of the site (CHES 2008). The evaluation is intended to establish, where possible, whether any remains of archaeological significance are present on the site, their nature, degree of survival, extent, significance, and date. As part of the work on site a desk-based assessment was also to be carried out. This was intended to set the site in its historical and topographical landscape, establish the location, extent, survival and significance of any known archaeological remains on the site prior to the evaluation.
- 1.1.2 The proposed development site is on the edge of the medieval tenements that make up the early core of Milnthorpe (CCC and EH *c*2002, Map B), although it is considered to have largely developed in the 17th and 18th centuries when the town's importance as Westmorland's only sea port led to increased development (CHES 2008). Milnthorpe is known to have at least early medieval origins; the name is Norse meaning 'hamlet with a mill' (CCC and EH *c*2002, 3), and while there is little evidence for earlier activity recent excavations carried out in advance of expansion at Dallam School (a short distance to the north-east) have identified prehistoric cremations (Platell 2006). Milnthorpe was part of the manor of Heversham at the Norman Conquest and was granted to William de Wyndsore in *c*1160, whose descendants retained it into the 16th century (CCC and EH *c*2002, 4). It was granted a market charter in the 13th or 14th century and from the 14th century onwards its valuable port, the only one in Westmorland, led to further growth and development (*ibid*). During the 18th and 19th century the town was home to various mills (*op cit*, 6-7), and in 1837 a church was built on the former green, the parish church formerly having been at Heversham (*op cit*, 9).

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). Although a new company, its directors, Jo Dawson and Daniel Elsworth, have a combined total of over 16 years continuous professional experience working in commercial archaeology, principally in the north of England and Scotland. Greenlane Archaeology is committed to a high standard of work, and abides by the Institute of Field Archaeologists' (IFA) Code of Conduct. The desk-based assessment and evaluation will be carried out according to the Standards and Guidance of the Institute of Field Archaeologists (IFA 2001a; 2001b).

1.3 Project Staffing

- 1.3.1 The project will be managed by *Jo Dawson (MA (Hons), AIFA)*. Since graduating from the University of Glasgow in 2000 with a joint honours degree in Archaeology and Mathematics, Jo has worked continuously in commercial archaeology. Her professional career started at Glasgow University Archaeological Research Division (GUARD), for whom she worked for six months, following which she worked for Headland Archaeology, in Edinburgh, for two years, and for Oxford Archaeology North, in Lancaster, for three years. During this time she has been involved in a range of different archaeological projects, and, over the past few years, has concentrated on desk-based assessments and environmental impact assessments, as well as finds reports. She has extensive experience of both planning and pre-planning projects, and has undertaken assessments of all sizes. Since establishing Greenlane Archaeology, she has managed many projects in Cumbria, including several recent evaluation projects.
- 1.3.2 The desk-based assessment will be carried out by *Jo Dawson (MA (Hons), AIFA)* or *Daniel Elsworth (MA (Hons), AIFA)*. Daniel 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.

- 1.3.3 The archaeological evaluation will be supervised by **Sam Whitehead (BSc (Hons), MA)**, with assistance from a suitably qualified individual. Sam graduated from the University of Liverpool in 1994 with an honours degree in Archaeology, and has more than seven years continuous professional experience in commercial archaeology, much of which was in a supervisory capacity. He has extensive experience of excavations, evaluations, and watching briefs, as well as report writing and illustration production. Recent relevant projects include evaluations at Upper Brook Street, Ulverston (Greenlane Archaeology 2007c) and Collin Croft, Kendal (Greenlane Archaeology 2007b).
- 1.3.4 All artefacts will be processed by Greenlane Archaeology, and it is envisaged that they will initially be assessed by Jo Dawson, who will fully assess any of post-medieval date. Finds of earlier date will be assessed by specialist sub-contractors as appropriate, and in this case it is envisaged that these may include Ian Miller or Jeremy Bradley, both of Oxford Archaeology North, for medieval pottery. CHES will be notified of any other specialists, other than those named, who Greenlane Archaeology wishes to engage, before any specialist contracts are awarded, and the approval of CHES will be sought.
- 1.3.5 Environmental samples and faunal remains (with the exception of waterlogged deposits) will be processed by Greenlane Archaeology. It is envisaged that they will be assessed by specialist sub-contractors at Headland Archaeology Ltd depending on their timetabling constraints. CHES will be informed and their approval will be sought for these arrangements.

2. Objectives

2.1 Desk-Based Assessment

2.1.1 To examine information held in the Cumbria Historic Environment Record (HER), early maps of the proposed development site, and any other relevant primary and secondary sources in order to better understand its development, set it in its historic context, and assess the significance of any existing and potential archaeological remains.

2.2 Visual Inspection

2.2.1 To carry out a brief visit and walkover survey of the site in order to provide additional information for the desk-based assessment, in particular regarding any factors likely to have impacted upon the archaeological resource and the likely extent of modern disturbance, as well as the position of vegetation that may have affected buried remains. Any constraints to carrying out further work on the site, particularly regarding issues of health and safety and the location of protected trees, will also be identified.

2.3 Archaeological Evaluation

2.3.1 To excavate a series of evaluation trenches or test pits covering an area of at least 25m². These will assess the presence or absence of features of archaeological interest within the area, their extent, date, and significance.

2.4 Report

2.4.1 To produce a report detailing the results of the desk-based assessment and evaluation, that will outline the historic development of the site, list the known sites of archaeological interest, present the results of the evaluation, and assess the potential of the site and significance of the remains.

- 2.6 Archive
- 2.6.1 Produce a full archive of the results of the desk-based assessment and evaluation.

3. Methodology

3.1 Desk-based Assessment

- 3.1.1 An examination of both primary and secondary sources, particularly maps, but also published and unpublished local histories, pieces of research, articles and studies relating to the proposed development site and a suitable area around it (the 'study area') will be carried out. These sources will be consulted at the following locations:
 - Cumbria Historic Environment Record (HER): this is a list of all of the recorded sites of archaeological interest recorded in the county, and is the primary source of information for a study of this kind. Each site is recorded with any relevant references, a brief description and location related to the National Grid. All of the references relating to sites identified in the HER will be examined in order to verify them and add any necessary background information. In addition, relevant secondary sources, particularly previous archaeological investigations in the immediate area, will also be examined;
 - Cumbria Record Office (Kendal): the majority of original and secondary sources relating to the site are deposited in the Cumbria Record Office in Kendal. Of principal importance are early maps, especially those produced by the Ordnance Survey. These will be examined in order to trace the origin and development of any buildings or other structures on the site, and, where possible, their function. In addition, information relating to the general history and archaeology will also be consulted, in order establish the context of the sites identified within the study area, and the potential for further, as yet unknown, sites of archaeological interest;
 - Greenlane Archaeology: a number of copies of maps, local histories, unpublished reports, and journals are held in Greenlane Archaeology's library. These will be consulted in order to provide further information about the development of the site, and any other elements of archaeological interest.
- 3.1.2 The results of this assessment will be used to establish the location, extent, date, and development of any sites of archaeological interest demonstrated to be present within the proposed development area. The extent of all of the sites identified will be shown on an appropriately scaled map. In addition, areas of archaeological interest or significance will be shown and the extent or level of their potential expressed.
- 3.1.3 Recommendations for areas to be targeted by evaluation trenching will be presented based on the results of the assessment. This will take into consideration the areas in which there is evidence for the presence of archaeological remains, the significance of known remains, areas of high potential, or areas which are likely to be disturbed by subsequent activity on the site.

3.2 Visual Inspection

3.2.1 A brief site visit will be carried out in order to identify areas of modern activity that are likely to have adversely affected areas of archaeological interest. In addition, areas that might present hazards, particularly those relating to health and safety, will also be assessed. Areas that might constrain the excavation of evaluation trenches, such as the position of trees, will also be identified. In addition, the presence of any standing buildings or other structures of historic interest will also be recorded.

3.3 Archaeological Evaluation

3.3.1 A total of at least 25m² of evaluation trenching is required by the brief (CHES 2008). Depending on the results of the desk-based assessment and visual inspection, it is envisaged that this will be covered by excavating two trenches each of approximately 7m long and 1.7m

wide (a standard excavator bucket width), until significant archaeological deposits or the natural geology are reached, or to a depth of 1.2m. These trenches will target the areas identified during the desk-based assessment as having the greatest archaeological potential, following consultation with CHES, but with sufficient distance from the protected trees so as to avoid any damage to them. It is anticipated that the evaluation will take two days on site with two archaeologists (totalling four person days).

- 3.3.2 The evaluation methodology, which is based on Greenlane Archaeology's excavation manual (Greenlane Archaeology 2007a), will be as follows:
 - The site will be checked with a Cable Avoiding Tool (CAT) in order to establish the
 presence of live electrical services. Any existing service plans will also be consulted
 in order to identify the presence of other services;
 - The trenches will be excavated with regard to the position of any services, focussing
 on the areas of high archaeological interest or potential, and avoiding areas which are
 likely to have been severely damaged or truncated by later activity, unless they are
 considered to have a high potential;
 - The overburden (which is likely to largely comprise relatively modern make-up deposits) will be removed by machine under the supervision of an archaeologist until the first deposit beneath it is reached;
 - All deposits below the overburden will be examined by hand in a stratigraphic
 manner, using shovels, mattocks, or trowels as appropriate for the scale. Deposits
 will only be sampled, rather than completely removed, below the first identified level
 of archaeological interest, unless specified by the CHES, with the intension of
 preserving as much in situ as possible;
 - 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. 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 hand-drawn plans and sections, typically at a scale of 1:20 and 1:10, respectively, and photographs in both 35mm colour print and colour digital format;
 - All deposits, trenches, drawings and photographs will be recorded on Greenlane Archaeology pro forma record sheets;
 - All finds will be recovered during the evaluation for further assessment as far as is
 practically and safely possible. Should significant quantities of finds be encountered
 an appropriate sampling strategy will be devised;
 - All faunal remains will also be recovered by hand during the evaluation, 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 preserved environmental remains will be sampled. Bulk samples of between 10 and 40 litres in volume, depending on the size and potential of the deposit, will be collected from stratified undisturbed deposits and will particularly target negative features (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 suitable deposits by specialist sub-contractors (see Section 1.3.5 above), 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 human remains discovered during the evaluation will be left in situ, and, if
 possible, covered. CHES 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 objects defined as 'treasure' by the Treasure Act of 1996 (HMSO 1996) will be immediately reported to the local coroner and secured stored off-site, or covered and protected on site if immediate removal is not possible;
- Each evaluation trench will be backfilled following excavation although it is not envisaged that any further reinstatement to its original condition will be carried out.
- 3.3.3 Should any significant archaeological deposits be encountered during the evaluation these will immediately be brought to the attention of CHES so that the need for further work can be confirmed. Any additional work and ensuing costs will be agreed with the client and according to the requirements of CHES, and subject to a variation to this project design.

3.4 Report

- 3.4.1 The results of the desk-based assessment and evaluation will be compiled into a report, which will include the following sections:
 - A front cover including the appropriate national grid reference (NGR) and planning application number;
 - 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 desk-based assessment including historical background, map regression and appropriate details relating to any sites of archaeological interest identified within the study area or areas of archaeological potential;
 - Results of the evaluation including descriptions of any deposits identified, their extent, form, and potential date, and an assessment of any finds or environmental remains recovered during the evaluation, and the potential for examination of the soil micromorphology;
 - Discussion of the results including an assessment of the significance of any archaeological remains present within the study area, areas of further archaeological potential, areas in which further work is recommended, and appropriate types of further work;
 - Bibliography, including both primary and secondary sources;
 - Illustrations at appropriate scales including:
 - a site location plan related to the national grid;
 - a plan showing the location of the study area in relation to nearby structures and the local landscape;
 - copies of early maps, plans, drawings, photographs and other illustrations of elements of the site, annotated with the extent of the proposed development area where appropriate;
 - a plan showing the position of the evaluation trenches;
 - plans and sections of the evaluation trenches showing any features of archaeological interest;
 - photographs of the evaluation, including both detailed and general shots of features of archaeological interest and the trenches;

- illustrations of individual artefacts as appropriate.

3.5 Archive

- 3.5.1 The archive, comprising the drawn, written, and photographic record of the desk-based assessment and evaluation, formed during the project, will be stored by Greenlane Archaeology until it is completed. Upon completion it will be deposited with the Cumbria Record Office in Kendal (CRO(K)). The archive will be compiled according to the standards and guidelines of the IFA (Brown 2007), and in accordance with English Heritage guidelines (English Heritage 1991). In addition details of the project 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.
- 3.5.2 A copy of the report will be deposited with the archive at the Cumbria Record Office in Kendal, one will be supplied to the client, and within two months of the completion of fieldwork, three copies will be provided for the Cumbria Historic Environment Record (HER). In addition, Greenlane Archaeology will retain one copy, and digital copies will be deposited with the NMR and OASIS scheme as required.
- 3.5.3 The client will be encouraged to transfer ownership of the finds to a suitable museum. Any finds recovered during the evaluation will be offered to Kendal Museum. The museum is, however, currently at close to full capacity, and it is unlikely that it would be willing to take anything unless it was of exceptional importance. If no suitable repository can be found the finds may have to be discarded, and in this case as full a record as possible would be made of them beforehand.

4. Work timetable

- 4.1 Greenlane Archaeology will be available to commence the project on **8**th **February 2008**, or at another date convenient to the client. The project will comprise the following tasks:
 - **Task 1**: desk-based assessment and visual inspection, including compilation of this element of the report;
 - **Task 2**: submission of proposed evaluation trench location plan to Cumbria County Council Historic Environment Service for approval;
 - Task 3: archaeological evaluation;
 - Task 4: post-excavation work on archaeological evaluation, including processing of finds and production of draft report and illustrations;
 - Task 5: feedback, editing and production of final report and archive.

5. Other matters

5.1 Access

5.1.1 Access to the site for the site visit will be organised through co-ordination with the client and/or their agent(s).

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 £250,000. 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, uses ethical telephone and internet services supplied by the Phone Co-op, is even decorated with organic paint, and has floors finished with recycled vinyl tiles. 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.

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Appendix 3: Summary Context List

Context	Type	Trench	Description	Interpretation
100	Layer	1	Loose, dark greyish-brown silty, sandy-clay with occasional sub-rounded gravels	Topsoil
101	Layer	1	Moderately compact, mid-brownish sandy-clay with occasional sub-rounded gravels	Subsoil
102	Natural	1	Moderately compact, slightly orangey, mid-brownish sandy-clay with moderate sub-rounded and sub-angular gravels, occasional sub-angular pebbles and sub-rounded cobbles	Natural glacial till
103	Layer	2	Loose, dark-brown silty, sandy-clay with very occasional sub-rounded gravels	Topsoil
104	Layer	2	Moderately compact, greyish mid- brown sandy-clay with very occasional sub-rounded gravels	Subsoil
105	Fill	2	Moderately compact, mid-brown sandy clay with occasional sub-rounded and sub-angular gravels and very occasional flecks of charcoal	Backfill of pit 106
106	Cut	2	Circular in plan with steep sides and gently rounded base	Pit
107	Natural	2	Moderately compact, slightly orangey, mid-brownish sandy-clay with moderate sub-rounded and sub-angular gravels with occasional sub-angular pebbles and sub-rounded cobbles	Natural glacial till

Appendix 4: Summary Finds List

Context	Find type	Quantity	Description	Date range
100	Pottery	2	Bone china: cup rim with internal	19 th – early
			band of pink lustre, cup base(?) with pink lustre line	20 th century
100	Pottery	2	Buff-coloured earthenware factory produced slipware	Late 18 th – early 19 th century
100	Pottery	5	White earthenware: blue shell edge plate rim, purple transfer-printed hollow-ware rim, flow blue transfer print, relief-moulded plate rim (enamelled)	19 th – early 20 th century
100	Pottery	5	Pearlware: plate base x 3 including one 'Willow' transfer-printed pattern, 'Willow' transfer-printed plate rim, bowl rim	Late 18 th – early 19 th century
100	Pottery	1	Fine factory-produced silver lustre- glazed red earthenware hollow ware	19 th – early 20 th century
100	Pottery	5	Red earthenware: coarse hollow- ware base (unglazed), coarse base with white slip coating, glaze not present, 3 x thin-walled brown- glazed, including hollow-ware rim and body fragments with white slip lines	Late 17 th – early 20 th century
100	Glass	1	Milk and pink layer on exterior, hollow-ware	19 th – early 20 th century
101	Clay tobacco pipe	1	Stem, medium bore, roller-stamped 'THOMAS:MARSH:'	Early - mid 18 th century
101	Pottery	1	Stoneware bottle fragment, burnt	19 th – early 20 th century
101	Pottery	5	Coarse black-glazed red earthenware	Late 17 th – early 20 th century
101	Pottery	5	Coarse(ish) brown-glazed red earthenware, including one with interior and exterior white slip coating and white slip lines on rim	Late 17 th – early 20 th century
101	Pottery	1	Dark brown-glazed light orange earthenware	Late 17 th – early 18 th century?
101	Pottery	1	Glazed buff-coloured earthenware dish base with internal red slip coating	Late 17 th – early 18 th century
101	Pottery	3	White earthenware including 'Broseley' transfer-printed fragment and tankard base	19 th – early 20 th century
101	Pottery	1	Creamware plate base	Mid 18 th – early 19 th century
103	Bone	4	Butchered large mammal fragments	Not closely dateable
103	Glass	1	Blue bottle mouth with mould seam and hand-applied lip, stoppered closure	19 th century

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Context	Find type	Quantity	Description	Date range
103	Glass	1	Very light turquoise bottle fragment	19 th – early
				20 th century
103	Cu alloy	1	Cap with internal screw thread	Late 18 th –
				early 20 th
				century 19 th – 20 th
103	Pottery	1	Bone china saucer rim, gold stripes	$19^{th} - 20^{th}$
				century
103	Pottery	3	Stoneware: glazed buff-coloured	19 th – early
			marmalade jar frags (ribbed) x 2,	20 th century
			brown-glazed buff-coloured lid (?)	
103	Pottery	6	White earthenware, including burnt	19 th – early
			blue transfer-printed cup rim, and	20 th century
			factory produced blue banded	
			slipware	th
103	Pottery	2	Black-glazed red earthenware dish	Late 17 th –
			fragments with white slip stripes	early 20 th
				century
104	Pottery	2	Brown-glazed red earthenware dish	Late 17 th –
			rim	early 20 th
101	5 "	1		century
104	Pottery	1	Unglazed red earthenware dish rim	Late 17 th –
				early 20 th
101	A 41	1	Curved knife handle with marks	century
104	Antler	1		Post-medieval
405	Dana	1	from corroded iron fittings	Not alongly
105	Bone	1	Large mammal calcined (burnt)	Not closely
405	Dattami	1	fragment	dateable Late 17 th –
105	Pottery	'	Slipware: fine cream-coloured earthenware, yellow-glazed, red slip	early 18 th
			stripes, hollow-ware	-
105	Pottery	2	Coarse black-glazed red	century Late 17 th –
103	Follery	~	earthenware, including one from	early 20 th
			bottle/jug with no internal glaze	century
			Domerjug with no internal glaze	Ceritury

Appendix 5: Environmental Samples

Sample	Context	Volume (litres)	Description
1	105	10	Fill of pit 106

Table 1: Environmental samples

Sample number	1
Volume (litres)	3
Bone	+++
Ceramic (post-medieval?)	++
Charcoal	+
Coal (burnt and unburnt)	++
Glass	+
Hammerscale	+
Medieval pottery	+
Marine shell	++
Mortar	++
Post-medieval pottery	++
Seed (charred)	+
Slag	+

Table 2: Volume and contents of retents (Key: + = 1-5, ++ = 6-20, +++ = 21-100, ++++ = >100)

Sample number	1
Volume (millilitres)	c15
Uncharred seeds	+
Bone	++
Burnt peat	+
Charcoal	++
Oat (charred)	+
Hulled barley (charred)	++
Cereal indet. (charred)	+
Roots	+++

Table 3: Volume of flots and contents (Key: as for Table 2 for charred seeds; all other remains + = 1-5%, ++ = 6-20%, +++ = 21-100%)