# LEVENS HALL, KENDAL, CUMBRIA

Archaeological Watching Brief



Client: Levens Heritage

NGR: 349497 485099

© Greenlane Archaeology Ltd

February 2017



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**

Illu	strations	1
No	n-Technical Summary	3
Acl	knowledgements	3
1.	Introduction	4
2.	Methodology	6
3.	Desk-Based Assessment	8
4.	Watching Brief	13
5.	Discussion and Conclusion	22
6.	Bibliography	23
Apı	pendix 1: Summary Context List	26
Apı	pendix 2: Summary Finds List	27
Ш	ustrations	
Lis	st of Figures	
Fig	gure 1: Site location	5
Fig	gure 2: Site plan	20
Lis	st of Plates	
	ate 1 (left): The north elevation of Levens Hall in 2011 (the gardens in which the watching brief took plated to the right)	
Pla	ate 2: Extract from Skyring's mid-18 <sup>th</sup> century plan of Levens Hall and gardens (from Curwen 1898, 33)	10
Pla	ate 3 (left): Ordnance Survey map <i>c</i> 1862	11
Pla	ate 4 (right): Ordnance Survey map 1862	11
Pla	ate 5: Phase plan of Levens Hall	11
Pla	ate 6: Plan of Levens Hall, showing the gardens <i>c</i> 1936 (from RCHME 1936)	12
Pla	ate 7 (left): Location of TP01 against the wall, viewed from the north-west	13
Pla	ate 8 (right): TP01 and the wall, viewed from the west	13
Pla	ate 9: TP01 excavated, viewed from the west	14
Pla	ate 10 (left): TP02 pre-excavation, viewed from north-east	14
Pla	ate 11 (right): TP02 excavated, viewed from the north	14
Pla	ate 12 (left): TP03 pre-excavation, viewed from the south-east	15
Pla	ate 13 (right): TP03 working shot, viewed from the east	15
Pla	ate 14: TP03 excavated, viewed from the east	15
Pla	ate 15: TP04 excavated, viewed from the north-east	16
Pla	ate 16 (left): TP05 working shot, viewed from the west	16
Pla	ate 17 (right): TP05 excavated, viewed from the east	16
Pla	ate 18: TP06 excavated, viewed from the south-east	17
Pla	ate 19: TP07 excavated, viewed from the north	17
Pla	ate 20 (left): WS01 borehole top excavated, viewed from the north-east	18

<sup>©</sup> Greenlane Archaeology Ltd, February 2017

Levens Hall, Kendal,	Cumbria:	Archaeological	Watching	Brie

Plate 21 (right): Material recovered from boring in WS01	18
Plate 22: WS02 working shot, viewed from the west	18
Plate 23 (left): WS03 excavated, viewed from the south-east	19
Plate 24 (right): WS03 excavated, viewed from the north-west	19

# **Non-Technical Summary**

Prior to the submission of a planning application for the construction of a new café at Levens Hall, Kendal, Cumbria, an archaeological watching brief was carried out on the 20<sup>th</sup> December 2016 during the excavation of a series of trial pits and boreholes. These were located within an area of the gardens to the west of the hall, although the available map evidence suggests that it was originally just an area adjoining the entrance drive where it led to the outbuildings and stables.

The upper deposits across the site comprised either deposits of topsoil, within the garden beds or elsewhere, or layers of gravel forming the surfaces of pathways within or around the garden. Below these, in the vast majority of the pits, a layer of dumped rubble with lime mortar and fragmentary animal bone was typically present, in some cases to a considerable depth.

With the exception of the animal bone, which was in some areas very plentiful, and associated quantities of marine shells such as cockle and oyster, finds were limited to small pieces of red earthenware, primarily in the form of brick fragments. However, a small number of fragments of late medieval pottery were also recovered from one of the boreholes. Against the northern boundary of the garden a section of wall was also uncovered, on the same alignment of the extant wall but evidently earlier than it.

It is apparent that prior to the development of the garden, which was only certainly in existence by the 19<sup>th</sup> century even though it is known as the '17<sup>th</sup> Century Garden', a large amount of material had been dumped across the area, perhaps partially as a deliberate attempt to level or raise the ground, although it incorporated a considerable amount of domestic and food waste. The date at which this occurred is uncertain, although it seems that the area has been used for the disposal of rubbish for a considerable period of time.

# Acknowledgements

Greenlane Archaeology would like to thank Levens Heritage for commissioning the project, and their agents Nicola Foot at Haigh Architects and Emma Cochrane at Blackett-Ord Conservation Architects for their assistance during the project. Further thanks are also due to the staff at Levens Hall and Terra Consult for their assistance on site.

The watching brief was carried out by Dan Elsworth, who also wrote the report, with the illustrations produced by Tom Mace. The animal bone and medieval pottery was assessed by Tom Mace and the ceramic building material and metal finds by Dan Elsworth, who also managed the project.

### 1. Introduction

## 1.1 Circumstances of the Project

- 1.1.1 Prior to the submission of a planning application for the creation of a new café on the west side of Levens Hall, Kendal, Cumbria, (NGR 349497 485099), a series of investigative test pits and boreholes were excavated on the site. Greenlane Archaeology was requested by the client's agents to carry out an archaeological watching brief during this work so that an assessment could be made of the archaeological potential. The watching brief was carried out on the 20<sup>th</sup> December 2016.
- 1.1.2 Levens Hall is a Grade I Listed building with at least 14<sup>th</sup> century origins (Perriam and Robinson 1998, 354). Significant additions were made in the 16<sup>th</sup> to early 19<sup>th</sup> centuries and the former brew house, which is the subject of the present application, is thought to be of 16<sup>th</sup> century origin (*ibid*). Other archaeological remains are known from the local area, including prehistoric and later material found during excavations carried out in the 1960s in the park associated with the hall (Sturdy 1972; Turnbull 1994; Turnbull and Walsh 1996, Cherry and Cherry 2000). A previous watching brief in the adjoining yard to the south revealed a number of features and deposits dating from the medieval period onwards (Greenlane Archaeology 2011).

## 1.2 Location, Geology, and Topography

- 1.2.1 Levens Hall (Plate 1) is located in the Lake District on the south bank of the River Kent approximately 10 kilometres south-south-west of Kendal (Ordnance Survey 2008; see Figure 1). The excavation took place within the courtyard and across a small path to the side of the potting sheds and the greenhouses to the west of the main house. The area in which the watching brief took place comprises formal gardens, with slightly raised beds divided by gravel paths, although there is an area of paving along the east side. Two of the pits were excavated immediately outside the garden area, adjacent to the boundaries around it, but in areas still effectively forming gravel paths.
- 1.2.2 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 and conspicuous limestone hills and outcrops (Countryside Commission 1998, 64).



Plate 1 (left): The north elevation of Levens Hall in 2011 (the gardens in which the watching brief took place are located to the right)

34,9500

Client: Levens Heritage

Figure 1: Site location

Key: watching brief area

# 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 2014) for a previous project carried out at the site (Greenlane Archaeology 2011) and relevant information gathered as part of that is utilised in this report. The intention of this element of the project was to assess the potential and nature of the deposits and finds that were likely to be encountered during the course of the groundworks and principally comprised an examination of early maps of the site, information from the Cumbria Historic Environment Record, and published secondary sources. The following sources of information were used during the desk-based assessment:
  - 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;
  - **Greenlane Archaeology Library**: additional secondary sources were examined to provide information for the site background.

## 2.2 Watching Brief

- 2.2.1 The watching brief monitored the excavation of a series of test pits and borehole pits placed across the gardens to the west of the north front of Levens Hall. All aspects of the archaeological recording were carried out according to the standards and guidance of the Chartered Institute for Archaeologists (CIfA 2014b). The excavated area comprised only approximately 10m², and was typically excavated by hand using a post-holer shovel and iron bar (Figure 1 and Figure 2), with the boreholes subsequently been produced by a mobile boring rig. Any features of interest were subsequently cleaned by hand using a trowel and the position of each pit was recorded relative to the known location of nearby buildings and other structures that were evident on the site plans and Ordnance Survey maps. The underlying deposits and features were recorded in the following manner:
  - **Written record**: descriptive records were made using Greenlane Archaeology *pro forma* record sheets;
  - Photographs: photographs in both colour print and colour digital format were taken of all
    archaeological features uncovered during the groundworks, as well as general views of the site,
    the surrounding landscape, and 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 pro forma record sheets;
  - **Drawings**: drawings were produced on site as follows:
    - i. A trench location plan was produced at a scale of 1:200.

# 2.3 Environmental Samples

2.3.1 No environmental samples were taken as no appropriate deposits were encountered.

#### 2.4 Finds

- 2.4.1 **Processing**: all of the artefacts recovered from the watching brief 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.
- 2.4.2 **Assessment and recording**: the finds were assessed and identified in the first instance by Jo Dawson. The finds were recorded on *pro forma* record sheets and a catalogue was produced (*Appendix* 3).
- 2.4.3 The medieval pottery finds were analysed following guidelines provided by the *Medieval Pottery Research Group* (2001) and fabric types were identified and described using the *Guidelines for the*

Processing and Publication of Medieval Pottery from Excavations (Blake and Davey 1983), the pottery colour chart prepared by *The Study Group for Romano-British Coarse Pottery* (1976), and *Pottery in Archaeology* (Orton *et al* 2008).

2.4.4 Given the small size of the animal bone assemblage, all fragments were rapidly scanned and assigned to taxa wherever possible, although lower-order categories were also used (e.g. sheep/goat, cattle-size). Epiphyseal fusion and dental eruption and wear data were assessed. Bone condition, erosion and fragment size were noted in order to assess bone preservation, while gnawing, burning and butchery marks were recorded to determine bone treatment. Biometrical data were not recovered at this assessment stage, although a few measureable bones are present in the assemblage. No pathological bones were noted. Overall, however, the assemblage falls well below the minimum reliable sample size of around 500 (with reference to a number of statistical parameters after van der Veen and Fieller (1982, 296)).

#### 2.5 Archive

2.5.1 A comprehensive archive of the project has been produced in accordance with the project design and current ClfA 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. A digital copy of this report will be provided for Cumbria County Council Historic Environment Service, one for the client, a digital copy with the client's agent, and one will be retained by Greenlane Archaeology. In addition a digital record of the project will be made on the *Online Access to the Index of Archaeological Investigations* (OASIS) scheme.

### 3. Desk-Based Assessment

## 3.1 Background History

- **Prehistory and Early History** there is a considerable amount of evidence for activity in the area, from at least 6,000 years ago. Archaeological excavations in Levens Park to the south revealed a number of features including lithic artefacts dated to the late Mesolithic (Cherry and Cherry 2000). This were discovered below a low mound, interpreted as a prehistoric ring cairn that had been subsequently re-used (Sturdy 1976); Beaker pottery from the early Bronze Age was certainly recovered from it, although this was not published until sometime later (Turnbull and Walsh 1996). Immediately to the west of Frosthwaite, on Sizergh Fell, excavation of burial mounds recorded prehistoric material (McKenny-Hughes 1904a; 1904b), some of which was later re-interpreted as also being of Beaker period (Fell 1953). More recent excavation on the same site failed to discover finds of similar date, or any further burials, but did identify evidence of earlier, Neolithic activity (Edmonds and Evans 2007), and remains of a similar date have also been found in the Levens area (Cherry and Cherry 1987). Recent work within Levens village has also recorded a crouched burial radiocarbon dated to the late Iron Age (OA North 2004), which is an extremely rare discovery within the North West (Hodgson and Brennand 2006, 55). Another burial, perhaps of a similar date, was also discovered on Sizergh Fell, however (McKenny-Hughes 1912a). Remains dating from the Roman period are not plentiful from the general area, although coins have been found in reasonable numbers (Shotter 2004). Evidence of immediately post-Roman activity is also not certain, although burials found near Levens in 1911 may be early Christian on account of their orientation (McKenny-Hughes 1912b).
- 3.1.2 **Levens Hall**: the Levens district belonged to *Tosti*, the great Earl of Northumberland, before being forfeit to Roger de Poitou after the Conquest (Curwen 1898, 2) and was granted to *Normannus de Hieland*, Yealand, later de Redman (d1184), by the baron of Kendal c1170 (Greenwood 1903, 272-3, 276). The Redmans (variously written Redmayne, Redmaine, or Redmain (Curwen 1898, 2)) probably commenced building Levens Hall in the early part of the 14<sup>th</sup> century *in the fierce days of Border warfare, when a man's home was literally his castle'* (Greenwood 1903, 286); *'the first building... took the form of a border Pele tower... for the defence of their owners against the raiding Scots, and for a refuge and protection for their tenants and dependents'*, which was annexed with an aula or great hall to the west side (Greenwood 1903, 285) and there are remains of a 14<sup>th</sup>-century house within the Hall as it stands today (RCHME 1936, 151), most notably in the basement level of the house which has features in 14<sup>th</sup> century style (Hyde and Pevsner 2010, 492).
- 3.1.3 The Park was enclosed by licence in 1360 (Curwen 1898, 39; Greenwood 1903, 286-7) and the Redmans held unbroken possession of the estate until 1489 when Levens was sold to Alan Bellingham (Curwen 1898, 4). The Bellinghams had bought the rest of the property which formed the estate by 1550 (Beckett 1985, 132).
- 3.1.4 The Hall is considered a *'little altered example of the Elizabethan age* [and] *is largely a reconstruction of Sir James Bellingham'* (1577-1641) (RCHME 1936, 151), who is attributed with having *'built most of what makes it memorable'* (Hyde and Pevsner 2010, 492); the tower on the north and the staircase-wing on the south of the hall-block, the kitchen-wing, and the then detached brew house [latterly the boiler house] were built around the 16<sup>th</sup> century (RCHME 1936, 151; a 'new brew house' is also mentioned as being built in the late 17<sup>th</sup> century, which was presumably a separate structure (Bagot at Munby 1988, x)), although the one-step four-light window in its gable is as a rule a sign of the late 17<sup>th</sup> century, and the main block of the house faces across a 17<sup>th</sup> century entry court (Hyde and Pevsner 2010, 492).
- 3.1.5 Levens remained in the possession of the Bellinghams for two centuries but 'in a few years of indulgent living' Alan Bellingham (d1693), the heir to the estate, amassed substantial debts which forced him first to mortgage and then sell the estate (Beckett 1985, 132; Munby 1998, 194). Tradition holds that he 'gambled his property bit by bit' and that Levens passed either 'by game or purchase' (Curwen 1898, 5), 'traditionally said to have been the result of a game of cards' (Munby 1998, 200), to his cousin (Munby 1998, 194), Colonel James Grahme or Graham (of the Netherby family) (Hyde and Pevsner 2010, 492) in 1689. The Graham family is thought to have been 'descended from the Earls of Monteith in

Scotland' (Munby 1998, 183). 'The conveyance on 5 February 1689, was done by the straightforward method of "bargain and sale" and a breakdown of the costs in a paper at Levens can be summarized thus:

'Paid:

Mortgages and loans between May 1687 and July 1688 £17,870:00:00 (including £3200 for interest and some principals)

To be paid:

Debts and interest to various creditors £5,869:19: 3

Mr Pigeon and Mr Hilton to make up the purchase money £660:00: 9

(the Timber yet unvalued)

Total: £24,400:00:00' (Munby 1998, 194).

The purchase of the estate seems to have been a bargain since it was thought to be worth £40,000 in 1711 (Beckett 1985, 132).

- James Grahme (1650-1730) had a distinguished military career (Munby 1998, 183, 186-7) and his marriage to Dorothy Howard, one of the Maids of Honour to Catherine of Braganza, queen consort of Charles II, brought him within the ambit of the court (Curwen 1898, 6; Munby 1998, 186). In 1679 he was attached to the Duke of York's household, the future James II of England, and he was appointed privy purse to the Duchess of York, and shortly afterwards to the Duke (Munby 1998, 187). He was Keeper of the Privy Purse after the Duke ascended the throne in 1685 (Beckett 1985, 131; Munby 1998, 190). However, in the aftermath of the Revolution of 1688, which saw King James II deposed, 'his career seemed in ruins when he was tainted with Jacobitism' (Beckett 1985, 131) and 'he and his brothers suffered for their loyalty to the house of Stuart (Munby 1998, 183) during the reign of William III of Orange (William III van Oranje). He was sought for high treason after his elder brother was arrested en route for France with treasonable papers in his possession and although he received a pardon in 1692 he was again imprisoned after a brief visit to James II in France and was imprisoned a further time after the discovery of the Fenwick conspiracy in 1696 (Beckett 1985, 131). After his release he retired to the Levens estate to concentrate again on regaining political respectability and 'we find him representing the City of Carlisle, as Member of Parliament in 1685, Appleby in 1702, and Westmorland during the Parliaments of 1708, 1710, 1713, 1714, and 1722' (Curwen 1898, 6). 'Symbolic of his return to the political scene was Grahme's appointment as a deputy-lieutenant of Westmorland in 1715, the year of the Jacobite invasion, and by 1722 he was searching Catholic houses for non-jurors during the Atterbury plot crisis' (Beckett 1985, 132).
- 3.1.7 During his time at the estate Grahme carried out further renovations and alterations to the Hall (RCHME 1936, 151), for instance, the building of the south wing, connecting the kitchen-wing with the brew-house, to provide extra accommodation for domestic offices and servants, is well-documented between 1692 and 1695 (see Bagot and Munby 1988) and can be seen as an investment by Grahme in his recently purchased estate (Munby 1986, 275; 1989, 233; 1998, 196; Hyde and Pevsner 2010, 492). The kitchen-wing was repaired following a fire in 1703 and the main staircase was added to the body of the house in 1717 (Munby 1986, 275; 1998 196). The fantastic gardens were also designed and laid out for Grahme by Monsieur Guillaume Beaumont, 'Gardener to James II and Col. James Grahme', c1690s (Hyde and Pevsner 2010 495; Munby 1998, 183).
- 3.1.8 When Colonel Grahme died in 1730 the estate passed to his eldest daughter and only surviving child, Catherine (Beckett 1985, 139), who was married to her first cousin, Henry Bowes Howard, 4<sup>th</sup> Earl of Berkshire, and the estate then 'became the inheritance of that noble family' (Curwen 1898, 7). 'Her husband was created Earl of Suffolk in 1745' (Beckett 1985, 139). His grandson, also called Henry (the fifth Earl of Berkshire and 12<sup>th</sup> Earl of Suffolk) became heir of the estates upon the death of his father, Viscount Andover, in 1757, but dying without issue, bequeathed the estates to his mother, Lady Andover, in 1779, and after her death, to his sister Frances (Curwen 1898, 7). Frances married Richard Bagot Esq. in 1783, who assumed by 'sign manual' the surname of Howard (*ibid*). Their daughter, Hon.

Mary Howard, married 'Colonel, the Honourable Fulke Greville Upton, second son of Clothworthy, first Baron of Templetown, who also assumed the name of Howard', and inherited the property after Frances Howard's death in 1818 (Curwen 1898, 8). Following his death the estates passed to his nephew who died without issue in 1883 and was succeeded by Josceline Fitzroy Bagot, the great great nephew of Richard and Frances Howard, by entail (*ibid*). The Hall saw further alterations during this time; the south wing of the courtyard was altered in the latter part of the 18<sup>th</sup> century and the Howard Tower at its east end is an early 19<sup>th</sup>-century addition (RCHME 1936, 151). The Bagots, to whom the house is now residence, 'are [also] a family of great antiquity' (*ibid*).

3.1.9 The area in which the watching brief took place is at present a formal garden, known as the '17<sup>th</sup> Century Garden' (Haigh Architects 2016, 8). The reason for this is not known but it is perhaps because the adjoining part of the hall was built in the late 17<sup>th</sup> century, even though the garden does not appear to have developed until after the mid-18<sup>th</sup> century (see *Section 3.2* below).

## 3.2 Map Regression

3.2.1 **Robert Skyring, c1750**: an undated but probably mid-18<sup>th</sup> century plan of Levens Hall, currently held within the hall itself (although it was reproduced by Curwen (1898, 33) who gives the date as 'about 1720'), is the earliest detailed depiction of the building and associated grounds. Because of the manner in which the hall has been shown, which uses a perspective view rather than an actual plan, and the relatively limited amount of detail, it is difficult to be certain what is being depicted in the area in which the watching brief took place. However, it does not appear that it comprised part of the formal gardens at the hall at that time, rather it was on the edge of a drive linking the main entrance to the outbuildings and stable block to the rear.

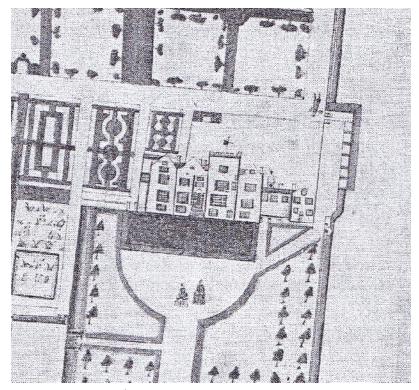


Plate 2: Extract from Skyring's mid-18<sup>th</sup> century plan of Levens Hall and gardens (from Curwen 1898, 33)

3.2.2 **Ordnance Survey map c1862**: the early editions of the Ordnance Survey mapping show open areas of the courtyard and between the courtyard and the potting sheds (see Plate 3 and Plate 4). The area to the west of the potting sheds (currently the site of the greenhouses) appears to be undeveloped.

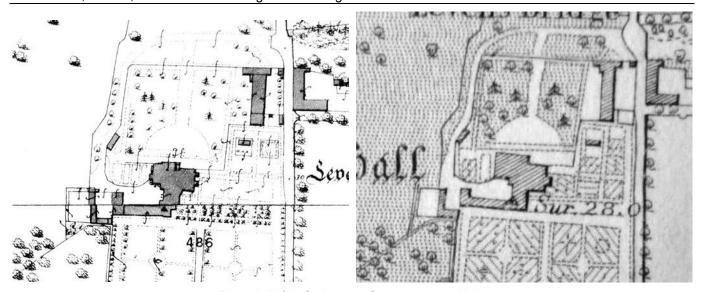


Plate 3 (left): Ordnance Survey map c1862 Plate 4 (right): Ordnance Survey map 1862

3.2.3 **Phase plan of the Hall (after Greenwood 1903, no plate or page number)**: a plan reproduced by Greenwood (1903) from an original drawing by Curwen shows the suggested phases of development of the Hall to that point. At the time, the area to the west of the brew-house was marked as an open yard with a coal house to the west side. The phase plan has been simplified and re-oriented here, so that north is up the page (Plate 5). The suggested dates are based upon those given by Curwen in his *Historical Description of Levens Hall* (1898).

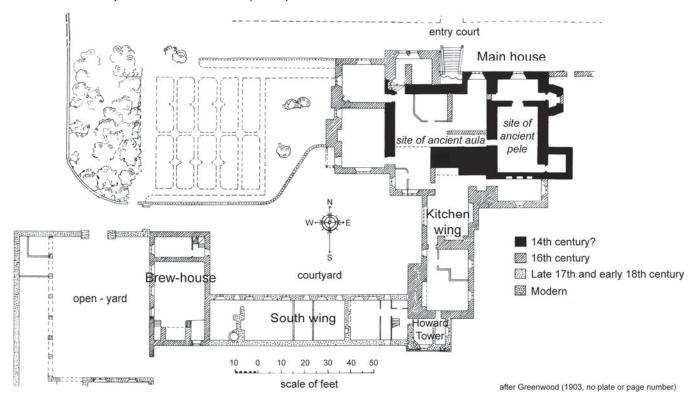


Plate 5: Phase plan of Levens Hall

3.2.4 **Plan of 1936**: the plan reproduced in *An Inventory of the Historical Monuments in Westmorland* (RCHME 1936, 154) shows that the arrangement of the house is mostly unchanged to this day and that the courtyard and areas to the west of the main house were still open at the time (Plate 6). The guttering and cobbled surface of the courtyard is shown in more detail.

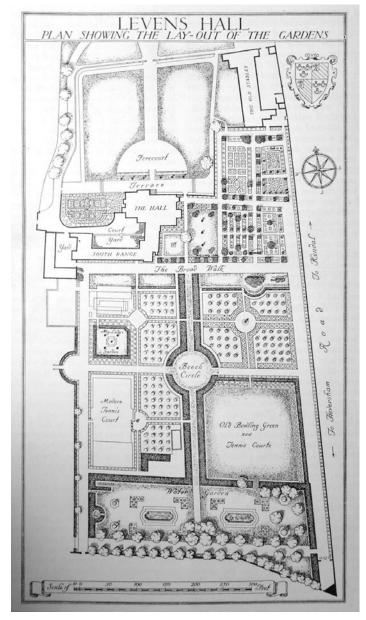


Plate 6: Plan of Levens Hall, showing the gardens c1936 (from RCHME 1936)

#### 3.4 Conclusion

- 3.4.1 Levens Hall is thought to have its origins in the early part of the 14<sup>th</sup> century (Greenwood 1903, 285-286), although occupation shortly before that date is possible and there is evidence for much more ancient activity in the general area. Since that time the estate has been essentially in the possession of three families only; the Redmans, the Bellinghams, and the Grahmes with their successors (Curwen 1898, 9).
- 3.4.2 The area in which the watching brief took place certainly seems to have formed part of the formal gardens at the hall by the late 19<sup>th</sup> century, but a century before that it may have formed part of the drive way connecting the main entrance to the hall with the stables to the rear.

# 4. Watching Brief

#### 4.1 Introduction

4.1.1 The groundworks began with the excavation of a series of test pits (TP) and window sample (WS) boreholes across the areas of the ornamental gardens (see Figure 2). These were excavated in the accessible areas at the time, namely the flower beds and the surface of the paths (TP03 and TP04 and WS01 to WS03), although four test pits were excavated outside of the garden itself, against the boundary walls to the north (TP02) and west (TP01) and in an area primarily occupied by tanks and an electrical sub-station in a space along the south side (TP05, TP06 and TP07). All of the test pits and the initial excavation of the boreholes was carried out by hand using a two-handled post-holer shovel and iron bar. Following on from this the boreholes were continued, to depth of several meters in some cases, with a percussion rig.

#### 4.2 Results

4.2.1 **TP01**: this test pit, which measured c0.3m by 0.4m, was located immediately to the west of the boundary wall of the garden (Plate 7 and Plate 8). The uppermost deposit comprised a loose pale gravelly material, 0.1m thick (100), over a very dark greyish brown sandy-silty-clay matrix, with 75% rounded gravel and 10% angular cobbles, 0.5m thick (101). There was a large boulder at the base on the east side, which possibly formed part of the footing for the extant wall, extending to a depth of c0.5m (Plate 9).





Plate 7 (left): Location of TP01 against the wall, viewed from the north-west Plate 8 (right): TP01 and the wall, viewed from the west



Plate 9: TP01 excavated, viewed from the west

4.2.2 **TP02**: this test pit was located immediately north of the boundary wall (Plate 10). The initial deposit of loose, rounded gravel, mixed with lime mortar, 0.1m thick (**200**), became more rubble filled, with angular limestone cobbles in mid brown sandy-silt, but still contained lime mortar and some slate, to a depth of at least 0.5m (**201**). The south side had a well-built wall, six courses remaining, 0.6m deep (**202**). This earlier wall was below the current wall, 0.45m north/south 0.3m east/west, 0.25m to 0.3m out from the extant wall (Plate 11).





Plate 10 (left): TP02 pre-excavation, viewed from north-east Plate 11 (right): TP02 excavated, viewed from the north

4.2.3 **TP03**: this test pit was located in the round flowerbed to the west (Plate 12 and Plate 13). The initial deposit comprised a very dark brownish grey garden soil, that was very loose and loamy and 0.35m thick (**300**), which lay over a firmer and more brown silty clay (**301**), with 25% angular limestone cobbles and lime mortar flecks over 0.7m thick (Plate 14).



Plate 12 (left): TP03 pre-excavation, viewed from the south-east Plate 13 (right): TP03 working shot, viewed from the east



Plate 14: TP03 excavated, viewed from the east

4.2.4 **TP04**: this test pit was in the round flowerbed to the east. The initial deposit comprised a loose dark brownish-grey loam, 0.3m thick (**400**), over a firmer mid-brownish-grey silty clay, with 25% angular limestone cobbles, lime mortar, bone, and shell, at least 0.7m thick and extending to the base of the pit (**401**) (Plate 15).



Plate 15: TP04 excavated, viewed from the north-east

4.2.5 **TP05**: this test pit was located next to the tanks against the south side of the area, outside of the garden proper (Plate 16). The upper deposit of dark grey soft loam, 0.15m thick (**500**), overlay mid greyish-brown silty-clay with lime mortar and 10% angular cobbles, 0.25m thick (**501**), which in turn overlay a paler brown sandy clay with lime mortar and 10% angular cobbles (**502**), 0.6m thick (Plate 17).



Plate 16 (left): TP05 working shot, viewed from the west Plate 17 (right): TP05 excavated, viewed from the east

4.2.6 **TP06**: this test pit was also located on the south side of the area, to the east of TP05 and TP07. The upper deposit of soft dark grey silt, with 30% angular cobbles, was 0.35m thick (**600**), and lay over a paler grey silty-clay with lime mortar and 15% angular cobbles, 0.7m thick (**601**) (Plate 18).



Plate 18: TP06 excavated, viewed from the south-east

4.2.7 **TP07**: this test pit was located within the path on the south side of the gardens. The initial deposit of gravel forming the path, which was 0.1m thick, was on top of a textile membrane (**700**). Below this was a firmer mid greyish brown sandy clay, with 10% angular cobbles and lime mortar (**701**) and 1% slate, 0.9m thick (Plate 19).



Plate 19: TP07 excavated, viewed from the north

4.2.8 **WS01**: this borehole, to the west side of the area, c0.3m square, was initially dug with a post-holer and bar through loose grey gravel 0.1m thick forming the surface of the path (1000). This overlay a loose angular limestone rubble and some slate in a grey-brown silt matrix, 0.7m deep, also with lime mortar flecks (1001) (Plate 20). The rubble was observed to continue for c2-2.5m in the borehole before reaching a brown clay and pale grey silt, presumably of natural origin (Plate 21).





Plate 20 (left): WS01 borehole top excavated, viewed from the north-east Plate 21 (right): Material recovered from boring in WS01

4.2.9 **WS02**: this borehole was fairly centrally located on the north side of the area. The initial deposit, a loose gravel 0.1m thick (**2000**), overlay mid brown silty clay, with 20% angular cobbles and lime mortar throughout, to a depth of 1m (**2001**) (Plate 22). Some bone fragments and brick were noted.



Plate 22: WS02 working shot, viewed from the west

4.2.10 **WS03**: this borehole was on the east side of the area. The loose grey gravel forming the path, which was c0.05m thick (**3000**), overlay a firmer mid brown clay, 0.15m thick (**3001**). This in turn overlay a lime mortar rich deposit of angular cobbles in a mid-brown sandy clay matrix (**3002**), from which lots of bone and shell and medieval pottery were recovered, c0.5m thick, below which was a darker but similar deposit (**3003**) (Plate 23 and Plate 24).

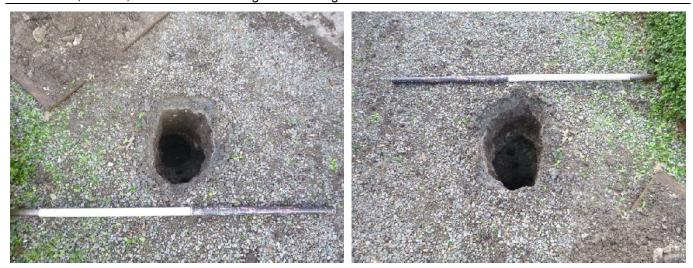


Plate 23 (left): WS03 excavated, viewed from the south-east Plate 24 (right): WS03 excavated, viewed from the north-west

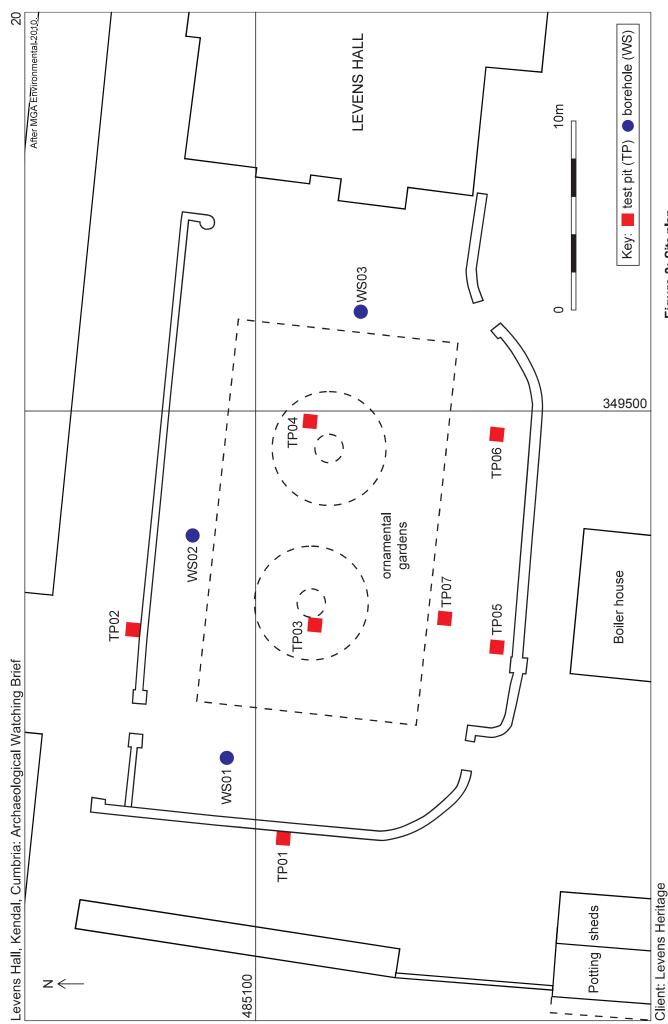


Figure 2: Site plan

© Greenlane Archaeology Ltd, February 2017

#### 4.3 Finds

- 4.3.1 *Introduction*: a total of 187 artefacts and ecofacts were recovered during the watching brief, including medieval pottery, ceramic building material, post-medieval pottery, post-medieval glass, animal bone, and shell.
- 4.3.2 *Medieval pottery*: four fragments of late medieval reduced grey ware were recovered from *3002*. This ware type was introduced possibly in the late 13<sup>th</sup> or 14<sup>th</sup> century, becoming the dominant 15<sup>th</sup> to 16<sup>th</sup> century ware, and persisted into the early 17<sup>th</sup> century based on comparable material recovered from elsewhere in the region (McCarthy and Brooks 1992; Bradley and Miller 2009, 663-664; Brooks 1999, 103; 2000, 140; summarised in Greenlane Archaeology 2013, 9; Mace and Dawson 2013, 74). The material recovered from the courtyard area next to the south wing and kitchen block during an earlier watching brief at the Hall was generally considered to be earlier, possibly late 12<sup>th</sup> to 14<sup>th</sup> century (Greenlane Archaeology 2011, 23), however, the suggested date ranges for many of these pottery types is approximate.
- 4.3.3 **Ceramic material**: a fragment of fired clay was recovered from each of contexts **401** and **601**. Both pieces were very small and very well worn. They may be fragments of a sandy fabric, of possible late 12<sup>th</sup> to 14<sup>th</sup> century date, but this is uncertain. If so, they are probably residual.
- 4.3.4 *Ceramic building material*: red brick fragments were recovered from *301*, *401*, *502*, *601*, *701* and *2001*. These are all post-medieval in date.
- 4.3.5 **Post-medieval pottery**: a body fragment of red earthenware, probably from a plant pot, was recovered from **401**. This is not closely dateable but certainly post-medieval.
- 4.3.6 **Post-medieval glass**: one fragment of a fairly opaque, very dark green (or possibly brown) glass bottle was recovered from **301**. It was probably post-medieval in date.
- 4.3.7 **Animal bone**: animal bone was recovered from **301**, **401**, **601**, **701**, **2001**, and **3002**. The majority of the material came from **3002**, which was from the borehole (WS03) closest to the hall. The assemblage was hand-retrieved (as opposed to bulk sieving) and included bones of probably cattle and sheep and some bird bone. The bone is in reasonable condition but fragmented, which prevented species identification in most cases. None of the bone appeared burnt or gnawed, and is undoubtedly representative of domestic waste produced by the occupants of the hall.
- 4.3.8 **Shell**: cockle shells, mostly fragments, were recovered from **301**, **401**, **701** and **3002**. Cockles were widely used locally as a food and were collected from the sands or Morecambe Bay. There was a particularly large quantity recovered from **3002**. This context also contained large fragments of oyster shell as did **301**, and these too were collected from the local area as a foodstuff. The date of these shells is uncertain, other than by association with other artefacts from the same contexts, which makes a post-medieval date likely in most cases.
- 4.3.9 **Composite**: a knife handle was recovered from **3002**. The material of the handle is apparently bone or horn, although the severe corrosion of the iron blade which was inserted into it made this difficult to ascertain. Two small corroded sections of flat iron from the same context may have been part of the blade. Further specialist analysis, including x-raying, would be necessary to determine the form of these objects in more detail.

### 5. Discussion and Conclusion

#### 5.1 Discussion

- Across the site a relatively similar range of deposits was revealed, with an upper layer of either gravel, forming the surface of paths, or soil, forming part of the garden bed or within areas of disused land, was present, below which was a deposit of stony and lime mortar rich material. In many of the pits this lower deposit also contained fragments of animal bone and small pieces of ceramic building material, although in WS03 there was a particular concentration and what appeared to be a more organic deposit of similar form below this. This general deposit is consistent with material having been dumped across the whole area, at least some of which was clearly food and domestic waste. The date at which this occurred is not certain in most areas - the presence of small and generally poorly datable pieces of ceramic building material is not particularly useful dating evidence, although some would indicate a post-medieval date. However, the medieval pottery in WS03 might suggest it was deposited in the 13<sup>th</sup> - 17<sup>th</sup> century, although these fragments could have been redeposited from elsewhere. The purpose of these dumped deposits is unclear, although it is apparent in the material recovered from the boreholes that they were quite deep in places. It seems likely, given the map evidence, that this represents material put down when this area formed part of the entrance drive to the hall, as shown in the mid-18<sup>th</sup> century plan, and prior to its use as gardens from at least the late 19<sup>th</sup> century, perhaps in order to level or raise the ground. It is also noteworthy that the area appears to have been used for dumping domestic waste, although this may have just been something that was incorporated into the dumped material, something that was also observed during work to the south, although the same deposit(s) of dumped material were not as apparent (Greenlane Archaeology 2011).
- 5.1.2 The only archaeological feature revealed during the watching brief was the wall exposed in TP02. The purpose and date of this is uncertain. No buildings are recorded in this location and so it is likely to represent the remains of an earlier boundary wall, pre-dating the one that now defines the north side of the garden.

#### 5.2 Conclusion

5.2.1 The watching brief revealed that there are certainly deposits of archaeological interest within the proposed development area, albeit in the form of material dumped across it. This is of uncertain date but some at least is apparently of later medieval origin and in any case it clearly predates the existence of the gardens in this area. Its purpose is unknown but the substantial quantity of material represented is significant and suggests a deliberate attempt to raise or otherwise alter the ground level. The wall along the north side is of uncertain date, but clearly pre-dates the existing boundary wall, which was presumably constructed when this part of the gardens was laid out, unless it was built during a later phase of alteration.

# 6. Bibliography

## 6.1 Primary and Cartographic Sources

Ordnance Survey c1862 1:2,500, Westmorland Sheet 42.7

Ordnance Survey c1862 1:2,500, Westmorland Sheet 42.11

Ordnance Survey, 1862 1:10,560, Westmorland Sheet 42, surveyed 1858

Ordnance Survey, 2008 The English Lakes: South-Eastern Area Windermere, Kendal & Silverdale, **OL7**, 1:2,500

## 6.2 Secondary Sources

Beckett, JV, 1985 The Finances of a Former Jacobite: James Grahme of Levens Hall, *Trans Cumberland Westmorland Antig Archaeol Soc*, 2<sup>nd</sup> ser, **85**, 131-142

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

Bagot, A, and Munby, J, 1988 'All Things is Well Here': Letters from Hugh James of Levens to James Grahame, 1692-95, CWAAS rec ser 10, Kendal

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

Brooks, CM, 1999 The Medieval and Post-Medieval Pottery, In C Howard-Davis and M Leah (ed), Excavations at St Nicholas Yard, Carlisle, 1996-7, Trans *Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> series, **99**, 102-107

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

Brown, DH, 2007 Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer, and Curation, IfA, Reading

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

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

Cherry, J, and Cherry, PJ, 1987 Fieldwalking at Levens, *Trans Cumberland Westmorland Antiq Archaeol* Soc, 2<sup>nd</sup> ser, **87**, 254-255

Cherry, PJ, and Cherry, J, 2000 A Late Mesolithic Assemblage from Levens Park, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **100**, 25-32

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

Curwen, JF, 1898 Historical Description of Levens Hall, Kendal

Davey, PJ, 1981 Guidelines for the Processing and Publication of Clay Pipes from Excavations, *Medieval and Later Pottery in Wales*, **4**, 65-88

Davey, PJ, and Higgins, DA, 1984, *Draft Guidelines for Using the Clay Tobacco Pipe Record Sheets*, unpubl rep (Copy in the National Pipe Archive, Liverpool University, Acc No 1999.02.01)

Edmonds, M, and Evans, H, 2007 Made and Found: Cairns and Natural Mounds on Sizergh Fell, in J Cherry (ed) *Studies in Northern Prehistory: Essays in Memory of Clare Fell*, Cumberland Westmorland Antiquarian Soc, extra ser **33**, Kendal, 115-140

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

Fell, C, 1953 A Beaker Burial on Sizergh Fell, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **53**, 1-5

Greenlane Archaeology, 2007 Archaeological Excavation Manual, unpubl rep

Greenlane Archaeology, 2011 Levens Hall, Kendal, Cumbria: Archaeological Watching Brief, unpubl rep

Greenlane Archaeology, 2013 Holm Cultram Abbey, Abbeytown, Cumbria: Pottery and Clay Tobacco Pipe Analysis, unpubl rep

Greenwood, W, 1903 The Redmans of Levens, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **3**, 272-306

Haigh Architects, 2016 Proposed New Café, Levens Hall, Kendal, LA8 0Pd: Heritage Design and Access Statement, unpubl

Hodgson, J, and Brennand, M, 2006 Prehistoric Period Resource Assessment, in M Brennand (ed), *The Archaeology of North West England – An Archaeological Research Framework for North West England: Volume 1 Resource Assessment*, Archaeology North West, **8:18**, 23-58

Hyde, M, and Pevsner, N, 2010 *The Buildings of England: Cumbria; Cumberland, Westmorland and Furness*, London

Institute for Archaeologists (IfA), 2008a Standard and Guidance for Archaeological Desk-Based Assessment, revised edn, Reading

Mace, T, and Dawson, J, 2013 The Pottery, in J Walker and M Graham (eds), St. Mary's Abbey, Holme Cultram, Abbeytown Cumbria, Bowness on Windermere, 70-87

McCarthy, MR, and Brooks, CM, 1992 The Establishment of a Medieval Pottery Sequence in Cumbria, England, In D Gaimster and M Redknap (ed) *Everyday and Exotic Pottery from Europe c650-1900*, Exeter, 21-37

McKenny-Hughes, T, 1904a On Another Tumulus Sizergh Fell, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **04**, 201-204

McKenny-Hughes, T, 1904b Some Notes on Mound Opening, With a Description of One Recently Explored on Sizergh Fell, Westmorland, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **04**, 71-79

McKenny-Hughes, T, 1912a On an Ancient Enclosure and Interment on Heaves Fell, *Trans Cumberland Westmorland Antig Archaeol Soc*, 2<sup>nd</sup> ser, **12**, 397-402

McKenny-Hughes, T, 1912b On Some Interments Near Hying, Westmorland, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **12**, 403-405

Medieval Pottery Research Group (MPRG), 2001 *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, MPRG Occ Paper 2, London

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

Munby, J, 1986 The Finances of James Grahme, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **86**, 274-276

Munby, J, 1998 The Early Career of James Grahme of Levens, 1650-1692, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> series, **98**, 183-205

OA North, 2004 7 Nelson Square, Levens, Cumbria: Excavation Assessment Report, unpubl rep

Orton, C, Tyers, P, and Vince, A, 2008 Pottery in Archaeology, 10<sup>th</sup> edn, Cambridge

Perriam, DR, and Robinson, J, 1998 *The Medieval Fortified Buildings of Cumbria*, Cumberland Westmorland Antiq Archaeol Soc, extra ser **29**, Kendal

Royal Commission on Historical Monuments of England (RCHME), 1936 *An Inventory of the Historical Monuments of Westmorland* 

Shotter, DCA, 2004, Romans and Britons in North-West England, 4th edn, Lancaster

Study Group for Romano-British Coarse Pottery, The, 1976 Colour Chart for use in describing Earthenware Pottery in Archaeological Reports, London

Sturdy, D, 1972 A Ring-Cairn in Levens Park, Westmorland, Scottish Archaeological Forum, 4, 52-55

Turnbull, P, 1994 Two Objects of Silver from the Levens Park Cairn, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **94**, 295

Turnbull, P, and Walsh, D, 1996 A Beaker Burial in Levens Park, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2<sup>nd</sup> ser, **96**, 13-26

Van der Veen, M, and Fieller, N, 1982, Sampling Seeds, Journal Archaeol Science, 9, 287-298

# **Appendix 1: Summary Context List**

Context	Туре	Description	Interpretation
100	Deposit	Loose pale gravel, 0.1m thick	Topsoil/gravel from adjoining roadway
101	Deposit	Dark greyish brown sandy-silty clay, 75% rounded gravel and 10% angular cobbles, 0.5m thick	Dumped material?
200	Deposit	Loose rounded gravel and lime mortar, 0.1m thick	Path surface
201	Deposit	Angular limestone cobbles in mid-brown sandy-silt with lime mortar and some slate, at least 0.5m thick	Dumped material
202	Structure	Wall with at least six well-built courses, 0.6m deep, at least 0.3m thick	Wall
300	Deposit	Loose dark brownish-grey loam, 0.35m thick	Garden soil
301	Deposit	Firm brown silty clay with 25% angular limestone cobbles and lime mortar flecks, over 0.7m thick	Dumped material
400	Deposit	Loose dark brownish-grey loam, 0.3m thick	Garden soil
401	Deposit	Firm mid brownish-grey silty clay with 25% angular limestone cobbles, lime mortar flecks and bone, at least 0.7m thick	Dumped material
500	Deposit	Dark grey soft loam, 0.15m thick	Topsoil
501	Deposit	Mid greyish-brown silty clay with 10% angular cobbles and lime mortar flecks 0.25m	Dumped material
502	Deposit	Pale brown sandy clay with lime mortar and 10% angular cobbles, at least 0.6m thick	Dumped material
600	Deposit	Soft dark grey silt with 30% angular cobbles, 0.35m thick	Topsoil
601	Deposit	Pale grey silty-clay with lime mortar flecks and 15% angular cobbles, at least 0.7m thick	Dumped material
700 Deposit Grey gravel 0.1m		Grey gravel 0.1m thick on a textile membrane	Surface of path
701	Deposit	Mid greyish brown sandy clay with 10% angular cobbles and lime mortar and 1% slate fragments, at least 0.9m thick	Dumped material
1000	Deposit	Loose grey gravel 0.1m thick	Surface of path
1001	Deposit	Loose angular limestone rubble and some slate in a grey-brown silt with lime mortar flecks, at least 0.7m thick but perhaps as much as 2.5m thick	Dumped material
2000	Deposit	Loose grey gravel, 0.1m thick	Surface of path
2001			Dumped material
3000	Deposit	Loose grey gravel, c0.05m thick	Surface of path
3001	Deposit	Firm mid brown clay, 0.15m thick	Dumped material?
3002	Deposit	Lime mortar rich rubble comprising angular cobbles in a mid brown sandy clay, with lots of bone, shell and pottery, c0.5m thick	Dumped material
3003	Deposit	Deposit of rubble similar to <b>3002</b> , but a darker brownish-grey colour	Dumped material

# **Appendix 2: Summary Finds List**

Location	Context	Туре	Qty	Description	Date range
TP03	301	Shell	8	3x oyster shell fragments; 5x cockle shell, mostly fragments	Uncertain
TP03	301	Animal bone	15	Mostly very small unidentified fragments, most probably from cattle- and sheep-sized animals; one bird bone fragment (unidentified)	Uncertain
TP03	301	Ceramic building material	3	Red brick fragments	Post-medieval
TP03	301	Glass	1	Very dark green (or brown?) bottle fragment; fairly opaque	Post-medieval
TP04	401	Shell	1	1x cockle shell	Uncertain
TP04	401	Animal bone	7	Small unidentified fragments	Uncertain
TP04	401	Ceramic	1	A small piece of fired clay, with a uniform, soft, lightly-gritted, sandy fabric, oxidised to a light orange colour; if it is a piece of pottery it is very well worn, with no surfaces remaining; it may be a sandy fabric (late 12 <sup>th</sup> to 14 <sup>th</sup> century), but this is uncertain, if so, it is probably residual	Medieval?
TP04	401	Ceramic building material	1	Orangey brick fragment	Post-medieval
TP04	401	Pottery	1	Red earthenware body sherd – plant pot fragment?	Post-medieval
TP05	502	Ceramic building material	3	Red earthenware fragments, with fine and sandy texture – brick or tile?	Post-medieval
TP06	601	Ceramic	1	A small piece of fired clay, with a uniform, soft, sandy fabric, oxidised to a light orange colour; if it is a piece of pottery it is very well worn; it may be a sandy fabric (late 12 <sup>th</sup> to 14 <sup>th</sup> century), but this is uncertain, if so, it is probably residual	Medieval?
TP06	601	Ceramic building material	1	Red earthenware brick fragment with white lime mortar attached	Post-medieval
TP06	601	Animal bone	5	3x fragments of bone marrow; 1x small bone fragment; 1x long bone fragment (also unidentified); probably all cattle and sheep	Uncertain
TP07	701	Ceramic building material	1	Red earthenware – brick fragment?	Post-medieval
TP07	701	Ceramic	1	Soft fragment of fired clay ranging from pale buff grey to orange	Medieval?
TP07	701	Shell	3	Small fragments of cockle shell	Uncertain
TP07	701	Animal bone	6	Small unidentified fragments of probably cattle- and sheep-sized animals	Uncertain
WS02	2001	Animal bone	3	Very small unidentified fragments	Uncertain
WS02	2001	Ceramic building material	2	1x red brick fragment; 1x soft fragment of fired clay, oxidised a light orange colour	Post-medieval

<sup>©</sup> Greenlane Archaeology Ltd, February 2017

Location	Context	Type	Qty	Description	Date range
WS03	3002	Shell	31	3x large fragments of oyster shell; 28x cockle shell, mostly fragments	Uncertain
WS03	3002	Animal bone	85	79x small unidentified fragments, most probably from cattle- and sheep-sized animals and some bird bone fragments (unidentified); 1x small rodent? Bone (unidentified); 2x sheep jaw bone fragments (from two individuals) with teeth attached and 3x loose sheep teeth	Uncertain
WS03	3002	Pottery	4	4x fragments of reduced greyware, conceivably all from the same vessel; the fabric is hard, uniform, with few visibly inclusions, generally reduced to an even mid-grey colour (green/brown 4A), although there are patches which have been oxidised to a reddy orange colour (yellow/brown 4A), generally close to the surfaces; two fragments have a textured surface where grit or plant material (temper) has become attached to the outside - this has affected the firing process (causing the fabric to be oxidised below where the material has fixed); one fragment appears to be the edge of a near upright base, but the vessel form(s) could not be identified beyond saying they are all of the fragments are from a thin-walled vessel or vessels (up to 5mm thick); all of the fragments are evenly glazed, both internally and externally, with a shiny, light khaki green-coloured glaze (brown/yellow 4A), which is a rich reddy-orange colour (yellow/brown 3B) above oxidised patches of the fabric	Late 13 <sup>th</sup> to 17 <sup>th</sup> century
WS03	3002	Composite (Fe and bone)	3	Probable bone knife handle with iron blade inserted into it and two separate possible blade fragments, all very corroded	Post-medieval?