
Land at St Anne's Hospital Appleby-in-Westmorland Cumbria



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**Archaeological Watching Brief
Report EH322/02**

Land at St Anne's Hospital Appleby-in-Westmorland, Cumbria

Archaeological Watching Brief Report for Trustees of The Hospital of St Anne

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PREPARED BY:

Martin Railton

Managing Director

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Heritage Impact Assessment
Archaeological Desk-Based Assessment
Historic Landscape Survey
Written Scheme of Investigation

Geophysical Survey
Trial Trench Evaluation
Archaeological Excavation
Archaeological Watching Briefs

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The archaeological fieldwork was conducted by Martin Railton, Managing Director who also produced and illustrated the report. The medieval pottery was assessed by Sue Thompson, the animal bone was assessed by Megan Stoakley, and the environmental assessment was by Katherine Bostock of Wardell Armstrong LLP.

SUMMARY

In 2025 Eden Heritage Ltd was commissioned to undertake an archaeological watching brief on land at St Anne's Hospital, Boroughgate, Appleby-in-Westmorland, Cumbria. The archaeological work was required in association with the construction of a new outbuilding located to the east side of the almshouses at St Anne's Hospital. The purpose of the new building was to house a plant room for a new communal heating system and associated services, which was granted planning permission and listed building consent by Westmorland and Furness Council (Planning References 23/0674 and 23/0675).

St Anne's Hospital is within an area with significant archaeological potential, close to the historic core of Appleby-in-Westmorland, this being a former county town. The town was likely established in the 12th century, being laid out along Boroughgate, in between the 12th century castle and St Lawrence's Church. St Anne's Hospital was constructed by Lady Anne Clifford, opening in 1653 for the maintenance of 13 poor widows looked after by a 'mother'. The hospital consists of almshouses with a private chapel, arranged around a central courtyard and is designated a Grade II* listed building (Historic England List Entry 1145571).

The archaeological watching brief was undertaken between 21st and 24th January 2025. The watching brief comprised the close monitoring of topsoil removal from the site by machine (including removal of a mound of former garden soil) followed by the excavation of foundations and service trenches to the required depths.

This work revealed medieval activity in the form of two pits and associated deposits, dated by pottery to the late 12th to 14th centuries. The garden is believed to have originally encompassed four medieval burgages, and one of the boundaries may have been immediately to the south of the excavation area. The pits would have been situated to the rear of medieval dwellings on Boroughgate, and were possibly next to one of the medieval burgrave boundaries. The material recovered from the pits was typical of domestic activity during the period, comprising medieval ceramics and food waste, including animal bone and charred cereal grain.

In the 17th century the medieval burgages would have been cleared for the construction of St Anne's Hospital. Finds recovered from the garden also indicated alcohol and tobacco consumption in the 17th and 18th centuries, with evidence for domestic activity at the site up to the present day.

Since the archaeological watching brief was undertaken to observe groundworks associated with the construction of the new outbuilding, no further archaeological work is deemed necessary. However, it is recommended that any future development in the vicinity should be subject to a similar scheme of archaeological work, due to the significant archaeological potential of the area.

1 Introduction

1.1 Project Circumstances

- 1.1.1 The following report outlines the results of an archaeological watching brief undertaken on land at St Anne's Hospital, Boroughgate, Appleby-in-Westmorland, Cumbria (Figure 1 and Figure 2). The archaeological work was undertaken for the Trustees of The Hospital of St Anne of Appleby during construction a new outbuilding at the site, which was granted planning permission and listed building consent by Westmorland and Furness Council (Planning References 23/0674 and 23/0675).
- 1.1.2 The site is within an area with significant archaeological potential, close to the historic core of Appleby-in-Westmorland. The town was likely established in the 12th century, being laid out along Boroughgate, inbetween the 12th century castle and St Lawrence's Church. Located on the east side of Boroughgate, St Anne's Hospital was constructed by Lady Anne Clifford, opening in 1653 for the maintenance of 13 poor widows looked after by a 'mother'. The hospital comprises almshouses with a private chapel, arranged around a central courtyard and is designated a Grade II* listed building (Historic England List Entry 1145571). Previous investigations by Appleby Archaeology Group in the garden of St Anne's Hospital has produced evidence of medieval and later activity (Railton 2023).
- 1.1.3 The new outbuilding was located to the east side of the alms houses and courtyard at St Anne's Hospital and was to house a plant room for a new communal heating system and associated services. The building was located in the garden immediately to the east of an existing outbuilding (Figure 3).
- 1.1.4 As a result, the archaeological watching brief was required in association with the new outbuilding. This was in accordance with a condition of planning consent which stated: *"Prior to the commencement of development of the extension to the outbuilding hereby approved, a written scheme of investigation for an archaeological watching brief must be submitted by the applicant and approved by the Local Planning Authority. Once approved, the scheme shall be implemented in full with an archaeological watching brief being undertaken by a qualified archaeologist. Within two months of the completion of the development of the extension to the outbuilding, a digital copy of the archaeological report shall be furnished to the Local Planning Authority"* (Reference 23/0674).
- 1.1.5 A Written Scheme of Investigation (WSI) for the watching brief was subsequently produced by Eden Heritage Ltd and submitted to Jeremy Parsons, Historic Environment Officer, Westmorland and Furness Council, for approval, prior to the commencement of the project (Eden Heritage Ltd 2024).

2 Methodology

2.1 Scope of the Work

- 2.1.1 The project comprised an archaeological watching brief, which was maintained during the groundworks associated with the construction of the new outbuilding. The watching brief included close monitoring of topsoil stripping and ground reduction by machine from the area of the new outbuilding, followed by the excavation of foundation trenches around the periphery (Figure 3).
- 2.1.2 The general aim of the watching brief was to record any archaeological evidence revealed within the excavated areas, in order to attempt to re-construct the history and past-use of the site.

2.2 Archaeological Watching Brief

- 2.2.1 An archaeological watching brief consists of a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, in this case during the excavation of foundations. All fieldwork was carried out in accordance with codes and practices outlined by the Chartered Institute for Archaeologists for archaeological monitoring (CIfA 2023).
- 2.2.2 In summary, the main objectives of the watching brief were:
- to establish the presence/absence, nature, and extent of archaeological remains revealed by the works and to record these where they are observed;
 - to investigate and record any evidence for archaeological features or finds present;
 - to establish the character of those features in terms of cuts, soil matrices and interfaces;
 - to recover artefactual material, especially that useful for dating purposes;
 - to recover palaeoenvironmental material (where it survives) in order to understand site and landscape formation processes;
- 2.2.3 The excavation work was undertaken by a tracked mini excavator fitted with a ditching bucket under close archaeological supervision. Excavation was undertaken to strip topsoil and turf from the area of the proposed outbuilding, followed by excavation of foundations to the required depths.
- 2.2.4 All potential archaeological features encountered were investigated and recorded according to standard recording procedure as set out in the Museum of London Archaeological Service Archaeological Site Manual (Museum of London 1994). All written records utilised the Eden Heritage *pro-forma* record sheets. A full photographic record in digital format was maintained.
- 2.2.5 All non-modern finds were collected and submitted for specialist assessment (see Section 5). Environmental samples were submitted for specialist assessment and are considered in Section 6.

2.3 Archive

- 2.3.1 The project archive has been prepared in accordance with the recommendations in *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Brown 2011). The project archive can be accessed under the unique Eden Heritage Ltd reference **EH322 SAH/A**.
- 2.3.2 All recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information (this included controlled storage, correct packaging, and regular monitoring of conditions). All work was carried out in compliance with Chartered Institute for Archaeologists Standards and guidance for finds work (CIfA 2014a) and those set by UKIC (1990).
- 2.3.3 Copies of the final report (in PDF/A format) will be provided to the Cumbria Historic Environment Record (HER), where viewing will be available on request.
- 2.3.4 Eden Heritage Ltd supports the **Online Access to the Index of Archaeological InvestigationS** (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological fieldwork. As a result, details of the results of this study will be made available by Eden Heritage Ltd as a part of this national project, and a copy of the report will be uploaded to OASIS. The OASIS reference is: **edenheri1-535950**.

3 Background

3.1 Location and Geological Context

- 3.1.1 The site is located in the centre of Appleby-in-Westmorland in the Eden Valley, Cumbria. Appleby is the former county town of Westmorland (now located in Westmorland and Furness), founded within a loop of the River Eden (Figure 1). St Anne's Hospital is situated on the east side of the main street of Boroughgate approximately mid-way between Appleby Castle and St Lawrence's Church (Figure 2).
- 3.1.2 The new outbuilding is on the east side of the almshouses at St Anne's Hospital to the east of the central courtyard (Figure 2). The new building will be constructed immediately adjacent to an existing outbuilding within the garden of St Anne's Hospital, located between Nos 5 and 6 (Figure 3).
- 3.1.3 The solid geology comprises sandstone known as Penrith Sandstone Formation. This sedimentary bedrock formed approximately 272 to 299 million years ago in the Permian Period. This is overlain by glacial Till deposits formed up to 2 million years ago in the Quaternary Period (BGS 2025).

3.2 Archaeological and Historic Background

- 3.2.1 This historical and archaeological background is intended only as a summary of historical developments within and around the project site and is not a full desk-based assessment. References to the Cumbria Historic Environment Record (HER) are included where known.
- 3.2.2 The name 'Appleby' is believed to originate from the Danish 'byr' (meaning farmstead) and Old English 'aepple' (apple), meaning 'dwelling or farmstead with an apple tree'. Its earliest documented form is 'Aplebi' in 1130 (Lee 1998). The earliest settlement at Appleby-in-Westmorland, appears to have been on the east side of the River Eden, in the area now known as Bongate. It is believed that a Danish manor and village were situated in this area (Higham 1986, 326).
- 3.2.3 The political situation was complex in the Eden Valley during the 10th century, when it was ceded to the Scottish kingdom of Strathclyde, and attacked by the English under Ethelred in 1000, but was held by Scotland at the time of the Norman conquest (Summerson 1993). However, King William Rufus took Carlisle in 1092, and it is believed that a motte and bailey was constructed in Appleby-in-Westmorland soon after (Holdgate 2006, 13).
- 3.2.4 The Norman town of Appleby-in-Westmorland (HER 1175) was subsequently laid out in the loop of the river to the west of the earlier settlement. The axis of the new town was the main street of Boroughgate, which it is believed originally ran from the castle bailey in the south (the highest point in the town), to the church in the north, with long strips of land or 'burgages' laid out either side. The new town was also a 'borough', a place where the burgages were free from land taxes, but had

other rights granted by the Lord of the manor in return for the rents they paid. The town is believed to have come into existence around 1100, and in 1179 received its first charter (Rollison 1996, 46).

3.2.5 From the end of the 12th century, and throughout the 13th century, Appleby-in-Westmorland prospered as a centre of trade, linked to the surrounding countryside through its market focused on Boroughgate. However, by the end of the 14th century a combination of plague, climate change and Anglo-Scottish disputes had left large parts of the town in ruins, and it took until the 16th century to recover (Rollison 1996, 103-104).

3.2.6 A feoffment (transfer of property) dated 31st December 1650 describes the property now occupied by St Anne's Hospital as *"all the burgage houses and close one acre between the houses and burgages of Leonard Smith on the south side, and the houses and burgages of Mr George Hilton of Murton on the north side, abutting the Eden on the east side and the street called Boroughgate on the west side"*. This land originally encompassed four medieval burgages and houses, the remains of which would have presumably been cleared for the construction of the hospital (Railton 2017, 25).

3.2.7 On 2nd August 1651 Lady Anne obtained a charter for the founding of the hospital, which was constructed soon after, eventually opening in 1653. The land to the east was utilised as garden plots and is depicted as such on the Hill's 1754 Plan of Appleby-in-Westmorland (Plate 1).



Plate 1: Extract from Isaac Thompson's 1754 Plan of Appleby (site circled in red)

3.2.8 The First Edition Ordnance Survey map of 1861 (not reproduced here) depicts the garden area subdivided into fourteen regular allotments, subdivided by paths. The area continued to be cultivated until relatively recent times but is now grassed over and used as a communal garden.

3.2.9 The existing outbuilding (currently used as a laundry) was constructed in the late 19th century after the time of the First Edition Ordnance Survey map, but prior to the 1899 Ordnance Survey map.

3.3 Previous Archaeological Work

- 3.3.1 The garden of St Anne's Hospital was investigated by Appleby Archaeology Group in 2016 as part a Community Archaeology Project, known as 'Dig Appleby – Breaking the Ground'. A preliminary geophysical (earth resistance) survey was undertaken of the garden which detected variations relating to the former garden plots (Railton 2017, 28). Three test pits were subsequently excavated to test the results of the geophysical survey, and to investigate any evidence for medieval occupation. Test Pit 1 in northwest corner of the garden (immediately to the east of the chapel), revealed a compact surface, from which a single sherd of medieval pottery was recovered. This was covered by 0.6m of garden soil. Test Pit 2 in the northeast corner of the garden revealed only rubble deposits from a demolished post-medieval outbuilding. Test Pit 3 (measuring 1m by 2m) was located to the south of the area of the proposed extension. This revealed a similar compact surface beneath 0.4m of garden soil, plus a possible post hole. A significant assemblage of medieval pottery was recovered from the final test pit as well as a range of post-medieval finds (Railton 2017). Most of the medieval ceramics appeared to date to the 13th-14th century, being similar to material previously recovered from Shaw's Wiend on the west side of Boroughgate (Brooks, McCarthy and Railton 2013).
- 3.3.2 A larger trench (measuring 1m by 5m) was subsequently excavated in the southeast corner of the garden at St Anne's Hospital in 2021 as part of the next phase of the Dig Appleby project, known as 'Dig Appleby – Digging Deeper'. This trench was also located to intercept the expected location of a former medieval burgage boundary, which predated the construction of the almshouses. This revealed two possible pits and a post hole dated dating to the 13th or 14th century, overlain by a substantial medieval soil layer, from which significant quantities of medieval pottery and animal bone were recovered. Analysis of the bone suggested that horn-working was taking place at the site in the medieval period (Railton 2019, 72). The excavation also revealed the modification of the natural sloping ground surface between two medieval burgages, which was subsequently backfilled to create a level area. Later activity comprised the laying out of post-medieval garden plots and paths for St Anne's Hospital. The garden of St Anne's Hospital produced the most medieval ceramics of any of the sites investigated during the Dig Appleby project (Railton 2023).
- 3.3.3 A survey of two of the almshouses (Nos 1 and 2) was undertaken by Dig Appleby volunteers in 2021 while they were empty. The report included a summary of the history of St Anne's Hospital including details of some of former residents which were transcribed from historic documents (CVBG 2022).

4 Archaeological Watching Brief

4.1 Introduction

- 4.1.1 The archaeological watching brief was undertaken between 21st and 24th January 2025. The watching brief comprised the close monitoring of topsoil removal and ground reduction from the site by machine followed by the excavation of foundation trenches to the required depths (Figure 3).
- 4.1.2 The area of the proposed new outbuilding comprised an area of lawn in the garden to the east of the courtyard entrance and the existing outbuilding. This area incorporated a rectangular platform which had a greater deeper depth of garden soil; this appears to relate to a previous cultivation plot.
- 4.1.3 Turf and topsoil **(102)** was first removed from an area measuring 5.8m by 6.1m on the east and south sides of the existing outbuilding. This comprised dark black/brown loam between 0.2m and 0.5m deep containing modern and post-medieval pottery, glass, clay pipe and animal bone. The topsoil appeared to form a terrace in section, probably because of previous gardening activities (Plate 2).



Plate 2: Section showing the depth of modern topsoil **(102)**, looking south-east (1m scale)

- 4.1.4 An earlier soil was revealed beneath the topsoil **(102)**. This comprised brown silty clay **(101)** up to 0.2m deep, containing post-medieval pottery, glass, clay pipe and animal bone. This was similar to the soil layer previously identified in the archaeological test pits (Railton 2017; Test Pits TP1 & TP3).
- 4.1.5 The area was initially excavated to a depth of c.0.5m to expose the natural red/brown clayey sand **(100)** containing frequent pebbles and cobbles, which was present across the whole of the excavation area (Plate 2). Foundation trenches measuring 0.7m wide and 0.3m deep were

subsequently excavated around the periphery of the excavated area (see Figure 4 and Plate 3).

- 4.1.6 The linear foundation trench **[103]** for the existing outbuilding was identified cutting the soil layer **(101)** on the west side of the excavation. This was 0.4m wide and 0.4m deep filled with mixed red sandstone rubble and mortar fragments **(105)** and was removed to expose the building foundations **(104)**. These comprised several flat stone slabs, up to 0.5m long and 0.08m deep, above which were foundation stones of red sandstone. The building was constructed in the late 19th century (Plate 3).
- 4.1.7 A small area was left unexcavated at the south-east corner of the outbuilding due to the presence of a rainwater downpipe and drain which ran south-west (Figure 4). A service trench was also exposed on the south-west side of the excavated area, to the south of the outbuilding. This was 0.7m wide and contained a ceramic drain linking to services running along the west side of the almshouses.



Plate 3: Excavated area showing the foundations of the existing outbuilding, looking south-west
(1m scale)

- 4.1.8 The excavation revealed two pits cutting the natural red/brown clayey sand **(100)** which were investigated by hand. Because the machine excavation was undertaken in two stages, these features were also investigated in stages. The first pit **[107]** was located on the east side of the excavation and partially underlay the existing outbuilding (Plate 4). A section was excavated through the pit, but this was restricted by the presence of a large boulder in the pit partially underlying the outbuilding.
- 4.1.9 The second pit **[113]** was immediately to the east and was partially within the foundation trench for the new building. Two sections of this feature were excavated to avoid destabilizing the foundations.
- 4.1.10 The following section describes the features, and the deposits encountered in more detail.



Plate 4: Pit [107] partially underlying the existing outbuilding, looking north (1m scale)



Plate 5: Section through pit [107] showing deposits, looking south-west (1m scale)

4.2 Results

- 4.2.1 The first pit [107] measured 1.1m deep, 2.1m wide and at least 2.1m long, being sub-rectangular in plan, with rounded corners, straight sides and relatively flat base (Figure 5 and Plate 5). The pit contained several deposits, the primary deposit being a 0.08m-deep deposit of black/brown silty clay (112) containing large quantities of charcoal, which was sampled for further analysis (Sample <2>).

- 4.2.2 Above this was a 0.1m deep deposit of red/brown silty clay containing occasional pebbles **(111)**, 0.08m of brown silty clay **(110)**, and 0.15m of red/brown silty clay **(109)** containing frequent charcoal fragments, which were interpreted as backfill deposits containing re-deposited red/brown silty clay.
- 4.2.3 Above these were a 0.3m deep deposit of grey/brown silty clay **(108)** which contained several large boulders and smaller cobbles at the surface (Figure 5 and Plate 5). One large boulder measuring 0.6m by 0.4m by 0.4m partially underlay the foundations of the existing outbuilding, so was left *in situ*. These stones appeared to have been deliberately deposited to fill the pit. Animal bone was recovered from the grey/brown silty clay **(108)** directly underlying the boulders (see Section 6).
- 4.2.4 Overlying the boulders was a 0.5m-deep deposit of brown silty clay **(106)** which contained sandstone pieces, charcoal fragments, sherds of medieval pottery and animal bone. This was also sampled for environmental assessment (Sample <1>). The upper part of this fill had been truncated by the foundation trench for the existing outbuilding **[103]** and was partially removed during the machining.
- 4.2.5 The second pit **[113]** measured 1.3m by 1.4m and was oval in plan, being approximately 0.5m deep with curving sides and a rounded base (Figure 4). This was filled with mixed brown silty clay **(114)** containing occasional cobbles, stone pieces, medieval pottery and animal bone (Plate 6).
- 4.2.6 The medieval finds and samples from both pits are discussed in detail in Sections 5 to 7 below.



Plate 6: Section through pit **[113]** showing mixed fill **(114)**, looking south-west (1m scale)

4.3 Discussion

- 4.3.1 Both pits were likely medieval, based on the recovery of medieval pottery from the fills and the absence of any later finds; they probably relate to activity pre-dating the foundation of St Anne's Hospital. The relationship with the outbuilding confirms that they pre-date the late 19th century.
- 4.3.2 Based on the former presence of four medieval burgages in the garden at St Anne's Hospital, it is possible one of the medieval burgage boundaries would have been immediately to the south of the proposed new extension area (assuming they were all spaced equally). The pits could therefore have been placed on the edge of one of the medieval burgages. Similar features were recorded during the investigation of a burgage boundary in the garden to the south-east (Railton 2019 and 2023).

5 Finds Assessment

5.1 Introduction

- 5.1.1 All finds were returned to the Eden Heritage Ltd offices where they were assessed under the direction of Martin Railton, Managing Director. All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists' *Standard & Guidance for finds work* (CIfA 2020a). Artefacts were assessed according to material type and conforming to the deposition guidelines recommended by Brown (2011).
- 5.1.2 The majority of the finds were recovered during the machine excavation and are classified as unstratified (U/S). However, some finds and animal bone were also recovered from the pits [107] and [113]. This included a small assemblage of medieval ceramics, and some post-medieval ceramics, glass and clay pipe. Animal bone is included in the Zooarchaeology Assessment (see Section 7).
- 5.1.3 The total numbers of artefacts recovered during the excavation are summarised in Table 1 below.

Context	Material	Quantity	Weight (g)	Period	Notes
106	Ceramic	7	163	Medieval	Body sherds x 7 including the base of a handle. Assessed as being 12th-14th century in date.
114	Ceramic	3	40	Medieval	Body sherds x 3 (one highly glazed sherd) Assessed as being 12th-14th century in date.
U/S	Ceramic	19	511	Medieval	Body sherds x 15, Base sherds x 2, Handles x 2 Assessed as being 12th-14th century in date.
U/S	Ceramic	5	239	Post-medieval	Brown glazed earthenware x 4 including three body sherds and one rim, Stoneware x 1 Assessed as being 18th-19th century in date.
U/S	Clay Pipe	10	45	Post-medieval	Stem fragments x 10 including one stem with a heel. Assessed as being 17th-18th century in date.
U/S	Glass	11	2,650	Post-medieval	Green bottle glass fragments x 11 including 7 x bases and one neck. Assessed 17th century.

Table 1: Artefacts recovered during the excavation.

5.2 Medieval Ceramics

By Megan Stoakley

- 5.2.1 A total of 40 sherds of medieval pottery sherds with a combined weight of 752g were recovered (Table 2). The condition ranged from moderate to good, with only occasional abraded sherds noted. Most of the sherds had clean breaks with very little evidence of post-depositional abrasion, suggesting that they were close to the site of deposition and had been subject to very little, if any, disturbance. Although no rejoining sherds could be found, it is likely that many of the sherds belong to the same vessels, with a Minimum Number of 10 Vessels (MNV) present within the assemblage

Context	Sample	No	Wgt	Date	Comments	Fabric	Base	Rim	Body	Handle	Sooting	Glaze	Decoration	Condition	MNV
106		2	67	Late 12th-14th	Fully reduced to mid grey. Fully glazed externally	Lightly gritted reduced			2			2		Good	1
106	1	4	22	Late 12th-14th	Reduced to mid grey, pale external margins occasionally oxidised when not glazed	Lightly gritted reduced			4			1		Moderate	3
106		4	86	12th-14th	Oxidised orange buff partially glazed jug sherds. 1 x strap jug scar. Upright rim sherds	Sandy	1	2	1			3		Mod - good	1
106		1	6	Late 12th-14th	Oxidised to orange buff internally with reduced core. Heavily sooted externally	Lightly gritted	1				1			Moderate	1
106	1	7	15	Late 12th-14th	Oxidised to orange buff. Occasional sooting. Small sherds	Lightly gritted			7		2	4		Moderate	3
114		1	14	12th-14th	Coarse pinky fabric, oxidised light grey internally. Unglazed	Lightly gritted			1					Abraded	1
114		1	11	12th-14th	Coarse sandy fabric with external glaze with uneven coverage	Lightly gritted			1			1		Good	1
114		1	13	12th-14th	High status jug with applied pellets and dark green glaze	Scarborough ware?			1			1	1	Good	1
U/S		19	518	Late 12th-14th	Glazed jug sherd	Lightly gritted / sandy	3	1	14	2		18	2	Good	4
Total		40	752				5	3	31	2	3	30	3		16

Table 2: Medieval pottery data (Eleven sherds were recovered from environmental Sample <1> (106) and are included in the table).

- 5.2.2 *Methods:* The pottery was examined with a x10 hand lens and recorded according to guidelines published by the Medieval Pottery Research Group (PCRG, SGRP & MPRG 2016) and the Society for Museum Archaeologists (2020a-b). The medieval pottery fabrics was compared to previous assemblages recovered from Appleby (Brooks & McCarthy 2013; Railton & Thompson 2023) and Carlisle (McCarthy & Taylor 1990; Brooks 2010).
- 5.2.3 *Results:* Three body sherds were recovered from context **(114)**. Two of these sherds were a coarse pinky buff lightly gritted fabric reduced to a light grey internally. One was glazed with a light apple green glaze, while the second sherd was unglazed although splashes of glaze were observed. The unglazed fragment was fairly flat and may represent part of a base of a large vessel, while the glazed sherd was likely a large jug or storage jar. Both represent utilitarian vessels. The third sherd recovered from **(114)** was a body sherd from a high-status Scarborough ware vessel with a very hard sandy fabric, reduced to pale grey with a buff interior. This sherd also represented a jug although this was a much more high-status vessel with fine walls and applied pellets beneath a thick dark green glaze.
- 5.2.4 Seven sherds were recovered from context **(106)**. All seven sherds likely represent jugs; it is possible that as few as three vessels are represented although no conjoining sherds were identified. One vessel comprised a coarse sandy / lighted gritted fabric reduced to a mid grey with a thick but uneven green glaze. The second vessel was a smoother oxidized fabric with occasionally reduced core. The scar of a strap handle was observed just below a simple upright rim and the jug was glazed with a patchy light green glaze. The third vessel was represented by a single base sherd of similar fabric, heavily sooted externally, suggesting its use as a cooking vessel.
- 5.2.5 The bulk of the assemblage comprised unstratified sherds, comprising fragments of lightly gritted fabrics, which tended to be largely reduced to a light or mid grey with pinky buff oxidised external surfaces where they were unglazed. The glaze ranged from light patchy green to a thicker and darker green copper rich glaze, with an occasional pale margin seen below the glazed surfaces.
- 5.2.6 Although the body sherds within the assemblage were undiagnostic, there is no reason to suggest that there is anything other than jug fragments. The three rim sherds were upright, with strap handles attached close to the rim, and bases were either slightly sagging or flat.
- 5.2.7 The majority of the vessels appeared to be undecorated, with decoration confined to the applied pellets seen on the single high-status Scarborough ware sherd from **(114)** and a small portion of combed decoration on an unstratified sherd. External banding was occasionally noted on the unstratified glazed body sherds, formed either when being wheel thrown or impressed before firing.
- 5.2.8 *Discussion:* With the exception of the Scarborough ware jug, all vessels were likely to be locally made and typical of the fabrics found within the Eden Valley during the Late 12th to 14th centuries. This

date also corresponds to Scarborough ware pottery production; these products were widely traded although more commonly recovered from along the east coast.

5.3 Post-medieval Ceramics

By Martin Railton

- 5.3.1 A total of five small sherds of post-medieval ceramics, weighing 239g, were recovered during the excavation. These were recovered from the topsoil **(102)** and subsoil **(101)** during machining. The sherds were in good condition, suggesting they have not moved far from the point of deposition.
- 5.3.2 A narrow range of post-medieval fabrics were present, comprising four sherds of lead glazed red earthenware and stoneware of 18th to 19th century date. Three sherds were body sherds, and one was a rim fragment. The sherds were from utilitarian vessels, probably storage jars, bowls or jugs.
- 5.3.3 The sherds are of very limited research value but confirm the presence of nearby domestic activity.

5.4 Clay Pipe

By Martin Railton

- 5.4.1 Ten fragments of clay tobacco pipe, weighing 45g, were recovered during the investigation in the garden of St Anne's Hospital. The pipe fragments were also in good condition, suggesting they have not moved far from the point of deposition.
- 5.4.2 The fragments were all undecorated stem fragments up to 120mm in length with a diameter of between 5mm and 11mm. No decoration was noted, and no maker's marks were present. One fragment bore a small heel, which would have been located beneath the bowl. One had a shaped/flattened mouthpiece and on another stem fragment the bowl connection was evident.
- 5.4.3 The stem-hole size was measured to give an idea of the date for the fragments although this should only be considered a rough guide. Seven stems had a narrow stem-hole of 2mm and the remainder were 2.8mm. An overall date of late 17th-18th century is appropriate for the clay pipe (Oswald 1975).
- 5.4.4 Three of the pipe stems have evidence of burning at the bowl end, including the stem with a heel. This is likely evidence of cleaning; pipes were often placed in a hearth so that the heat from the fire would burn away the tar build up and 'clean' them for further use.
- 5.4.5 The stems are very limited research value but illustrate tobacco use in the 17th-18th century.

5.5 Glass

By Martin Railton

-
- 5.5.1 Eleven sherds of post-medieval bottle glass, weighing 2,650g, were recovered during the investigation in the garden of St Anne's Hospital. The glass was in relatively poor condition, with some surface damage, abrasion and highly patinated surfaces on the majority of the sherds.
- 5.5.2 The fragments were all very similar green glass bottle fragments, including seven bases, three body sherds, and one neck fragment. No decoration was noted, and no maker's marks were present.
- 5.5.3 The bottles appear to be squat hand-blown wines bottles. The neck fragment has a double folded out rim. The bases are flat, measuring 12mm to 13mm in diameter, with a pronounced dome or 'kick-up' between 45mm to 60mm deep. Several of the bases also have clear pontil or punt marks. These scars indicate where the pontil, punty or punt was broken from a work of blown glass (Hedges 1990).
- 5.5.4 The bottle fragments likely all date to the 17th century. It is probable that they were all deposited together (they were found in the same location) and indicate the consumption of alcohol.

5.6 Research Potential

- 5.6.1 The medieval pottery corresponds with material recovered previously from the garden at St Anne's Hospital relating to the medieval occupation of the site. No further work is recommended on this small assemblage; however, the results of these excavations should be added to the growing body of material recovered during previous phases of work throughout Appleby-in-Westmorland.
- 5.6.2 The post-medieval ceramics, glass and clay pipe provide evidence for the occupation of the almshouses in the 17th to 19th centuries. No work is recommended on the post-medieval finds.

6 Environmental Assessment

6.1 Introduction

By Katherine Bostock

- 6.1.1 Two environmental samples were presented for assessment following the archaeological excavation (Table 3). The total combined weight of processed sediment was 47kg (31l). The samples were of a sandy matrix. This report presents the results of the assessment of the environmental samples, palaeobotanical and charcoal remains in accordance with Campbell *et al.* (2011).

Table 3: Bulk samples taken during the investigation

Sample	Context	Type	Size (Lt)
1	106	Bulk	30
2	112	Bulk	1

6.2 Methodology

- 6.2.1 The bulk environmental samples were processed at Wardell Armstrong in Carlisle. The colour, lithology, weight, and volume of each sample was recorded using standard SLR pro forma recording sheets cf. Table 1.3. The samples were processed with 500-micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). Once dried, the residues from the retention mesh were sieved to 4mm and the artefacts and ecofacts removed from the larger fraction and forwarded to the finds department. The smaller fraction was scanned with a magnet for microslags such as hammerscales. This fraction was then examined for smaller artefacts such as beads.
- 6.2.2 The flots were retained and scanned using a stereo microscope (up to x45 magnification). Any non-palaeobotanical finds were noted on the flot pro forma. Once fully recorded and all relevant material removed the non-archaeological component of the flot was discarded.
- 6.2.3 Plant remains were identified using the author's reference collection along with Cappers *et al.* (2012), Stace (2010) with Jacomet (2006) for cereals.

6.3 Results

- 6.3.1 Samples <1> and <2> were both taken from the same medieval pit **[107]** (Tables 4-6).
- 6.3.2 Sample <1> was taken from upper fill **(106)**. The flot produced forty-nine charred plant specimens and 0.31 grams of charcoal. Thirteen of the specimens were identified as carbonized cereal grains, three were barley (*Hordeum sp.*) grains, of which two had the angular cross section of hulled barley, eight free-threshing wheat (*Triticum aestivum/turgidum* type) grains and two indeterminate wheat

(*Triticum sp.*) grains. There was also a knotweed seed (*Persicaria sp.*), and the remaining thirty-five specimens were indeterminate cereal grains. The material recovered from the dried residue consisted of magnetic material, charcoal, bone, eleven sherds of pottery and a small glass bead.

- 6.3.3 Sample <2> was taken from the lower fill (112). Eight charred specimens and 3.58 grams of charcoal were recovered from the flot. The specimens were identified as a hulled barley (*Hordeum sp.*) grain, two sedge (*Carex sp.*) seeds, three goosefoot (*Chenopodium sp.*) seeds, a chickweed (*Stellaria media*) and an indeterminate cereal grain. Only magnetic material was recovered from the dried residue.

Table 4: Sample Data

<>	C	CP	Texture	Matrix	P W	PV	CS	Components	Shape	SW	SV	>S W	>SV
1	106	mid brown	friable	silty sand	44	29	pale brown	stone >1cm, 30%; stone <1cm, 20%; sand, 50%	sub-rounded	856 9	510 0	342 2	170 0
2	112	mid brownish black	soft	sandy clay	3	2	pale brownish white	stone >1cm, 35%; stone <1cm, 40%; sand, 25%	sub-angular	426	300	208	150
					47	31							

Key: C = context number, <>= sample number, CP= colour of pre-processed sediment, MP= matrix of pre-processed sediment, PW= weight (kg) of pre-processed sediment, PV= volume (l) of pre-processed sediment, CS= colour of dried retent residues, SW= weight (g) of dried retent residues, SV= volume (ml) of dried retent residues, >SW= weight (g) of the >4mm fraction of dried retent residues, >SV= volume (ml) of dried retent residues, RM = size of retent mesh.

Table 5: Finds from samples

		Bead		Bone		Charcoal		Magnetic material		Pottery	
<>	C	wt (g)	act	wt (g)	ab	wt (g)	ab	wt (g)	ab	wt (g)	act
1	106	<1	1	85	2	1	2	9	5	36	11
2	112							<1	2		

Key: C = context number, <>= sample number, NR = Not Recovered, Act. = actual number, Ab = abundance score: 1=1-10, 2=11-50, 3=51-150, 4=151-250, 5=>250

Table 6: Flot data

<>	C	Description of flot	WF	VF	Charcoal (grams)	CPR (quantity)
1	106	very fine rootlets 5%; sand 10%; comminuted charcoal 85%	20.9	55	0.31	49
2	112	very fine rootlets 5%; sand 15%; comminuted charcoal 65%; charcoal 15%	22.7	67	3.58	8

Key: C = context number, <>= sample number, WF = weight (g) of flot, VF = volume (ml) of flot.

6.4 Discussion

- 6.4.1 The associated arable weed seeds, recovered in sample <2>, are generally characteristic of disturbed and damp waste ground habitats, and are probably present as arable weeds. *Carex sp.* remains in the assemblage indicate damp ground, while *Chenopodium sp.* indicates cultivated and waste ground habitats and *Stellaria media* cultivated and open ground.
- 6.4.2 Overall, sample <1> was dominated by wheat grains, most of which were identified as free-threshing

wheat. Barley grains, which were most likely a hulled, six-row variety, were common and only one arable crop weed seed was recovered. Sample <2> was different, being dominated by arable crop weed seeds and only recovered a single identifiable cereal grain, a hulled barley. This range of crops is consistent with a post-Roman date (e.g. Moffett 2006; McKerracher 2019). Although it is difficult to be more specific based on the environmental specimens recovered, the pottery recovered from sample <1> was medieval. The archaeobotanical assemblage is consistent with accumulations of carbonised debris from routine food preparation and crop processing activities associated with domestic occupation.

6.4.3 Basic charcoal identification was undertaken for two fragments from sample <1> and four fragments from sample <2>, which were large enough to allow for identification. The fragments from sample <1> were identified as diffuse-porous wood and oak (*Quercus sp.*), while all four fragments from sample <2> were oak (*Quercus sp.*).

6.4.4 The bead recovered from sample <1> is a light blue translucent colour and is annular in profile measuring 2mm in diameter and weighing <0.5g. Other glass beads of medieval date have been recovered from Lancashire (LAN-43BFC7), the Wirral (LVPL-0140D2, LVPL-AC8807) and Northumberland (NCL-1AD5F7) (PAS 2025). The small size of the bead indicates that it is unlikely to have formed part of a paternoster or rosary; it may have formed part of a small bracelet or necklace or may have been sewn onto clothing or alternatively may have been used in lace-making.

6.5 Radiocarbon suitability

6.5.1 The charred macrofossils recovered from both samples have the potential to be considered for radiocarbon dating and should be considered first as single growth entities. The charcoal from both samples could be used for radiocarbon dating due to the size of the fragments recovered, and where charcoal is being considered, the remainder of the fragments in the sample's charcoal assemblage should be identified to species, as long-lived species, such as oak, may provide skewed dates.

6.6 Statement of potential and recommendations

6.6.1 The charred macrofossils from this site have the potential to support an AMS radiocarbon dating strategy, as outlined above. However, the requirement for radiocarbon dating will depend on the research aims and objectives of the project.

6.6.2 The magnetic material recovered from the samples contained microslags and they have the potential for further analysis. The final decision regarding submission of material for analysis, however, should be reliant on the archaeological potential of the sampled deposits and their ability to contribute to the research aims/objectives of the investigation.

7 Zooarchaeology

7.1 Introduction

By Megan Stoakley

- 7.1.1 A total of 49 animal bones, weighing 785g, were recovered from deposits **(106)**, **(108)** and **(114)** and recovered as unstratified material (Table 7). The bones were in moderate to good condition; most of the cortical bone surfaces were present and trabecular bone was also present.

7.2 Methodology

- 7.2.1 Specialist guidelines adhered to for zooarchaeological analysis include 'Animal Bones & Archaeology: recovery to archive' (Baker & Worley 2019) and the Society for Museum Archaeologists (2020c) plus reference material from Reitz & Wing (2008), Schmid (1972), Serjeantson (1996), Hillson (1992) and Ruscillo (2006). The author's in-house skeletal reference collection and technical manual were also used to aid identification of species. The material was also assessed on its potential for age estimation. Butchery marks, gnaw-marks and pathologies/trauma were also observed and recorded. Biological sex profiles of the animals were not established at assessment stage.
- 7.2.2 The material has been recorded onto an MS Excel spreadsheet. The animal bone data in Table 7 comprises contexts, weight, quantities, anatomical elements, condition, preservation, minimum number of individuals, species, broad dates and descriptions.
- 7.2.3 No complete bones were recorded and therefore no Withers heights calculations were undertaken.

7.3 Results

- 7.3.1 A minimum number of eight individuals are present in this small assemblage comprising a single fish species (1), cattle (*Bos taurus*) (2), horse (*Equus caballus*) (1), sheep / goat (*Ovis aries* / *Capra hircus*) (1), a large-sized ungulate species (1) and two medium-sized ungulate species (*Ovis aries* / *Capra hircus* / *Capreolus capreolus*).
- 7.3.2 The cattle bones are limited to partial bones, including two humeri, a vertebra, a tibia, mandible and pelvic fragment. A calf vertebra was recovered as unstratified material. The equine bones are limited to a maxillary portion with teeth; the sheep / goat bones consist of a partial femur, a rib and naturally-shed horn cores. The large-sized and medium-sized ungulate species consist of miscellaneous rib and vertebral fragments and the only fish bone present in the assemblage comprises a vertebra.
- 7.3.3 No butchery marks, saw-marks, unusual pathologies or unusual staining were observed on the

bones. A caprovid horn core recovered as unstratified material had evidence of rodent gnaw-marks, either from a rat (*Rattus rattus*) or from a mouse (*Mus musculus*). Four very small fragments recovered from **(106)** were calcined white, indicating that they were either burnt or roasted.

- 7.3.4 The animal bone from **(106)** was recovered in conjunction with medieval pottery and a bead of the same period.

7.4 Statement of potential and recommendations

- 7.4.1 The animal bone recovered from **(108)** and **(114)** may be suitable for radiocarbon dating.
- 7.4.2 The animal bone is of low archaeological significance overall and further analysis will not contribute to or enhance any archaeological regional research frameworks (NWRRF 2025).

Table 7: Zooarchaeological data

CON	<E>	QTY	WGT	COND	% SURV	MNI	ANAT EL.	SPECIES	AD	NON-A	SEX	BUTCH	GNAW	PATH	STAIN	MEAS	FINDS BY ASSOC	FURTHER DESCRIPTIONS
114		1	147	Mod	20	1	Humerus	<i>Bos taurus</i>	Y	N	N	N	N	N	N	N	Med pot	Distal portion of a right-sided cattle humerus, no unusual staining, pathology, butchery marks or gnaw-marks
108		3	123	Mod	15	1	Maxilla	<i>Equus caballus</i>	Y	N	N	N	N	N	N	N	None	Partial equine maxilla, 4 x incisors present - heavy wear, probable older animal. No unusual pathology, butchery marks, gnaw-marks or staining
u/s		4	26	Good	<10	1	Limb misc	MSU	Y	N	N	N	N	N	N	N	None	Miscellaneous limb bone fragments, probably from either a sheep or goat (caprovid). Could be femur / humerus / tibia.
u/s		1	5	Good	50	1	Vertebra	<i>Bos taurus</i>	N	Y	N	N	N	N	N	N	None	Partial unfused vertebra, probably from a calf
u/s		1	22	Good	70	-	Femur	<i>Ovid aries / Capra hircus</i>	Y	N	N	N	N	N	N	N	None	Shaft of a caprovid femur - proximal and distal ends missing. No pathologies, staining or butchery marks
u/s		1	6	Mod	<20	-	Rib	<i>Ovid aries / Capra hircus</i>	Y	N	N	N	N	N	N	N	None	Partial rib fragment
u/s		2	72	Mod	90	1	Horn cores	<i>Ovid aries / Capra hircus</i>	Y	N	N	N	Y	N	N	N	None	Almost complete caprovid horn cores, rodent gnaw-marks on one (either <i>Rattus rattus</i> or <i>Mus musculus</i>). No saw marks - probably naturally shed or on animal when dead
u/s		1	52	Mod	<20	-	<i>Os coxae?</i>	<i>Bos taurus</i>	Y	N	N	N	N	N	N	N	None	Possible pelvis fragment, no butchery marks, unusual staining or pathology observed
u/s		1	23	Mod	<10	-	Mandible	<i>Bos taurus</i>	Y	N	N	N	N	N	N	N	None	Partial mandibular ramus portion - no unusual staining, butchery, pathology / trauma observed
u/s		1	25	Good	10	-	Tibia	<i>Bos taurus</i>	Y	N	N	N	N	N	N	N	None	Distal portion of a right-sided cattle tibia - small species

CON	<E>	QTY	WGT	COND	% SURV	MNI	ANAT EL.	SPECIES	AD	NON-A	SEX	BUTCH	GNAW	PATH	STAIN	MEAS	FINDS BY ASSOC	FURTHER DESCRIPTIONS
u/s		1	197	Good	90	-	Humerus	<i>Bos taurus</i>	Y	N	N	N	N	N	N	N	None	Shaft and distal portion of a left-sided humerus - small species of cattle. No unusual pathology, butchery marks, gnaw-marks or staining observed.
106	1	1	0.012	Good	100	1	Vertebra	Fish	Y	N	N	N	N	N	N	N	Med pot	Not identifiable to species of fish
106	1	31	87	Mod	<20	2	Mixed: rib frags, vert frag, unidentifiable frags	LSU & MSU	Y	N	N	N	N	N	N	N	Med pot	Likely from a caprovid and cattle, 5 bits calcined white (burnt or roasted)
		49	785.012			8												

8 Conclusions

8.1 Interpretation

- 8.1.1 The excavation for the new outbuilding in the garden at St Anne's Hospital has revealed medieval activity in the form of two pits, dated by pottery to the late 12th to 14th centuries. The garden is believed to have originally encompassed four medieval burgages, and one of the boundaries may have been immediately to the south of the excavation area. The pits would have been situated to the rear of medieval dwellings on Boroughgate, possibly next to one of the medieval burgrave boundaries. The material recovered from the pits was typical of domestic activity during the period, comprising medieval ceramics and food waste, including animal bone and charred cereal grain.
- 8.1.2 This archaeological evidence is similar to that previously recovered from a trench in the south-east corner of the garden (Railton 2019). This comprised two possible pits and a post hole, tentatively dated dating to the 13th or 14th century, overlain by a substantial medieval soil layer, from which significant quantities of medieval pottery and animal bone were recovered. Analysis of the bone suggested that horn-working was also taking place at the site in the medieval period (Railton 2023).
- 8.1.3 The medieval burgages would have presumably been cleared for the construction of the hospital. St Anne's Hospital was constructed by Lady Anne Clifford, opening in 1653 for the maintenance of 13 poor widows looked after by a 'mother'. Finds recovered from the garden indicate alcohol and tobacco consumption in the 17th and 18th centuries, with domestic activity up to the present day.
- 8.1.4 An outbuilding was constructed immediately to the west of the excavated area in the late 19th century, partially overlying one of the medieval pits. This suggests further medieval evidence may survive beneath the building. Both pits will be preserved beneath the floor of the new outbuilding.

8.2 Research Potential

- 8.2.1 The medieval ceramics recovered were typical of the fabrics found in the Eden Valley during the Late 12th to 14th centuries. This date also corresponds to Scarborough ware pottery production. It is likely that these products were widely traded, and they could have been sold in the market in Appleby. The medieval bead was an unexpected recovery from one of the environmental samples and likely relates to a personal item or clothing. Little further could be gained from the study of this material, but it adds to the existing evidence for medieval activity from Appleby-in-Westmorland.
- 8.2.2 Since this watching brief was required to monitor the excavations associated with the construction of the new outbuilding, no further work is required. However, it is recommended that any future development in the vicinity should be subject to a similar scheme of archaeological work.

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APPENDIX 1: FIGURES

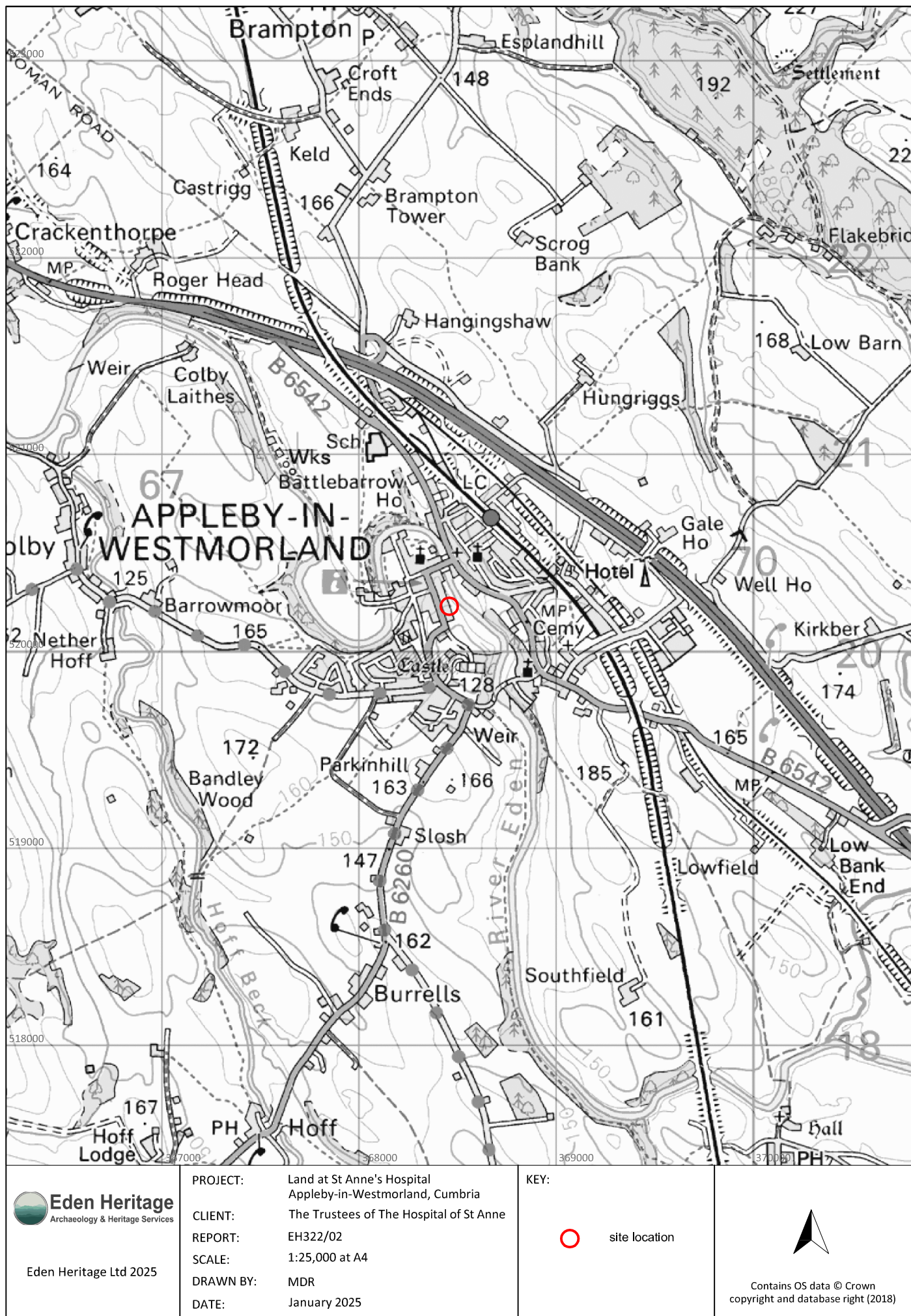


Figure 1: Site Location.



Eden Heritage Ltd 2025

PROJECT: Land at St Anne's Hospital
Appleby-in-Westmorland, Cumbria
CLIENT: The Trustees of The Hospital of St Anne
REPORT: EH322/02
SCALE: 1:2,500 at A4
DRAWN BY: MDR
DATE: January 2025

KEY:



Figure 2: Detailed site location.

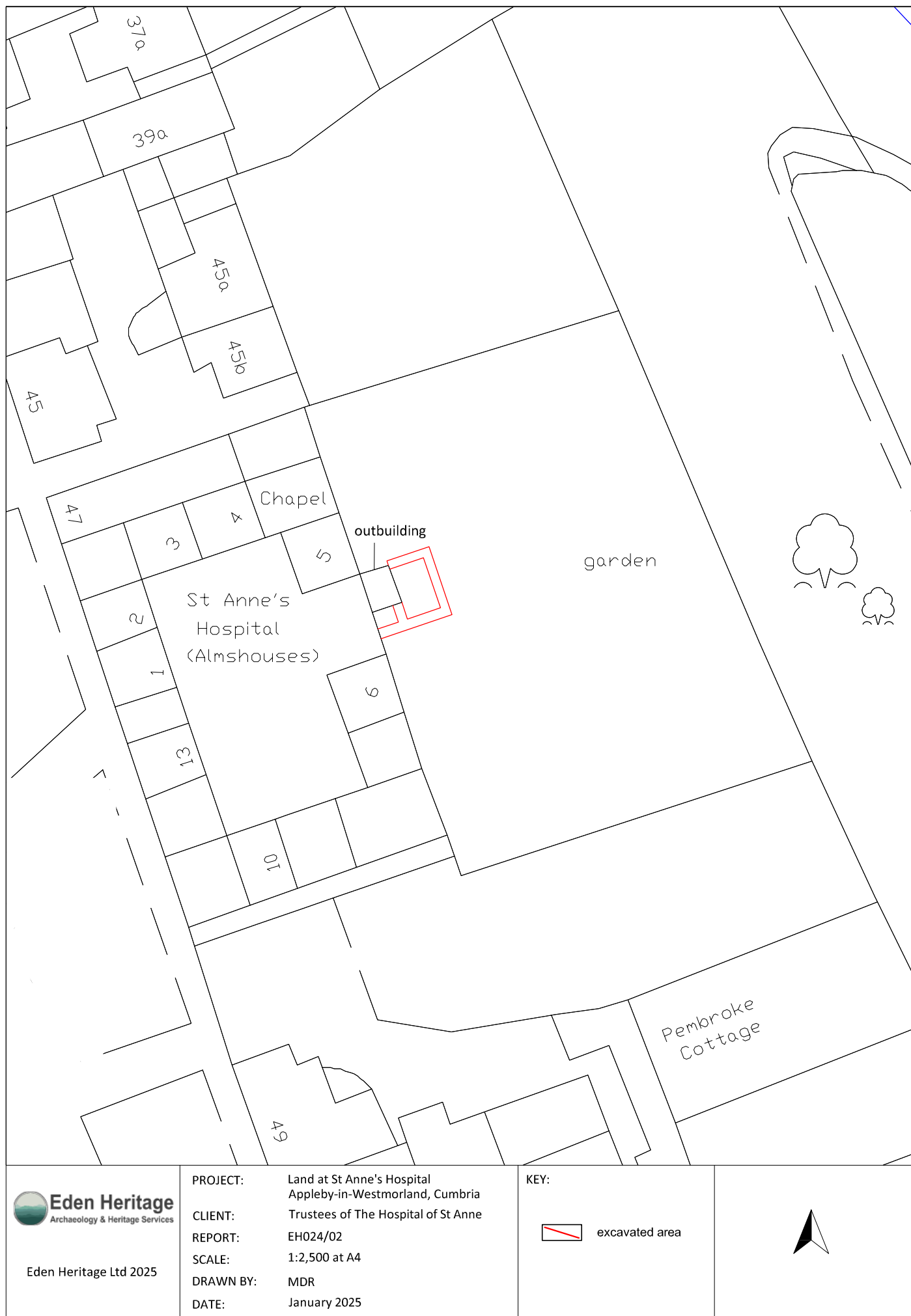


Figure 3: Location of the watching brief.

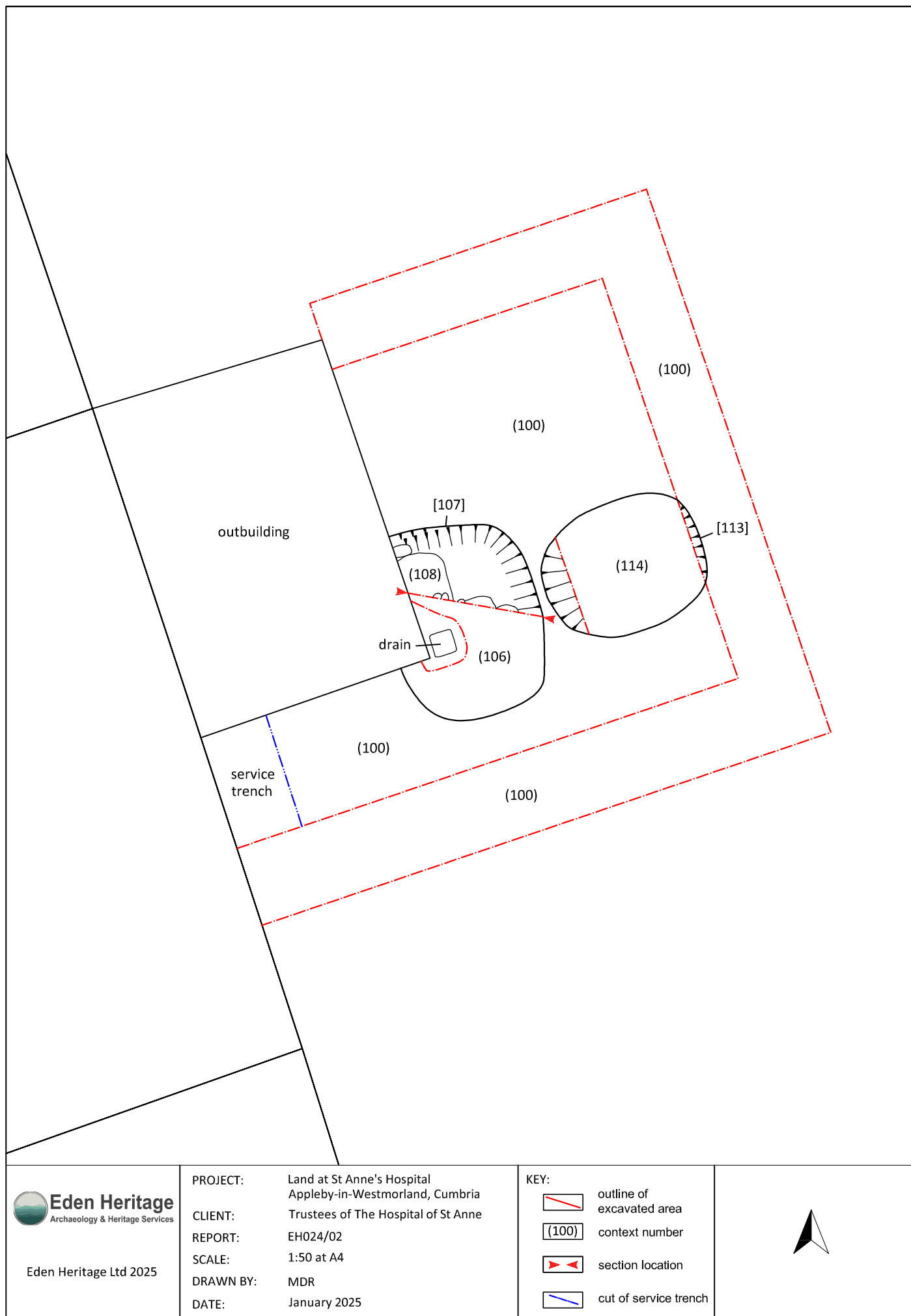


Figure 4: Plan of the excavated features.

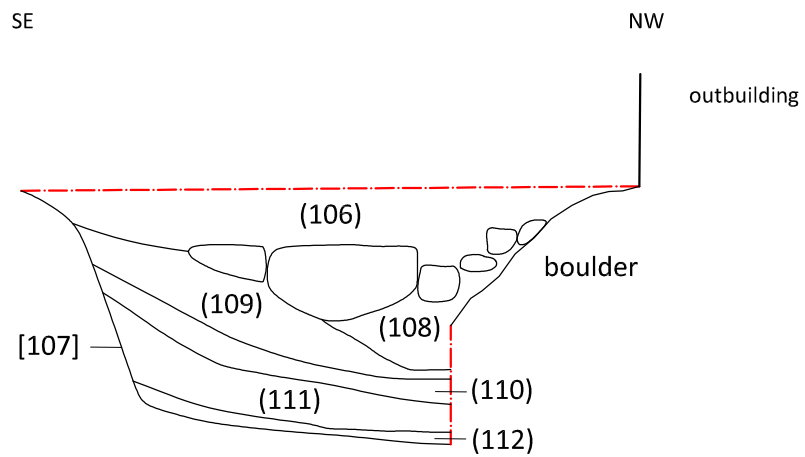


Figure 5: Section through pit [107].

Heritage Impact Assessment
Archaeological Desk-Based Assessment
Historic Landscape Survey
Written Scheme of Investigation

Geophysical Survey
Trial Trench Evaluation
Archaeological Excavation
Archaeological Watching Briefs

