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SUMMARY

Recent archaeological reconnaissance identified a deep east-west aligned linear cut that corresponded to the plotted course of the vallum. This had previously been misidentified in 2009 as a modern intrusion associated with construction of the bungalow in 1964. It would appear highly likely that this landscape feature represents the vallum and that the course identified by English Heritage and Ordnance Survey remains correct.

1. INTRODUCTION

1.1 Project Origins

In 2014 Cumbria County Council's Historic Environment Service (CCCHES) was consulted by Carlisle City Council regarding planning permission for an extension to a dwelling at Braeside, Monkhill (figure 1). The planning application covering this fieldwork was No. 1/14/0413.

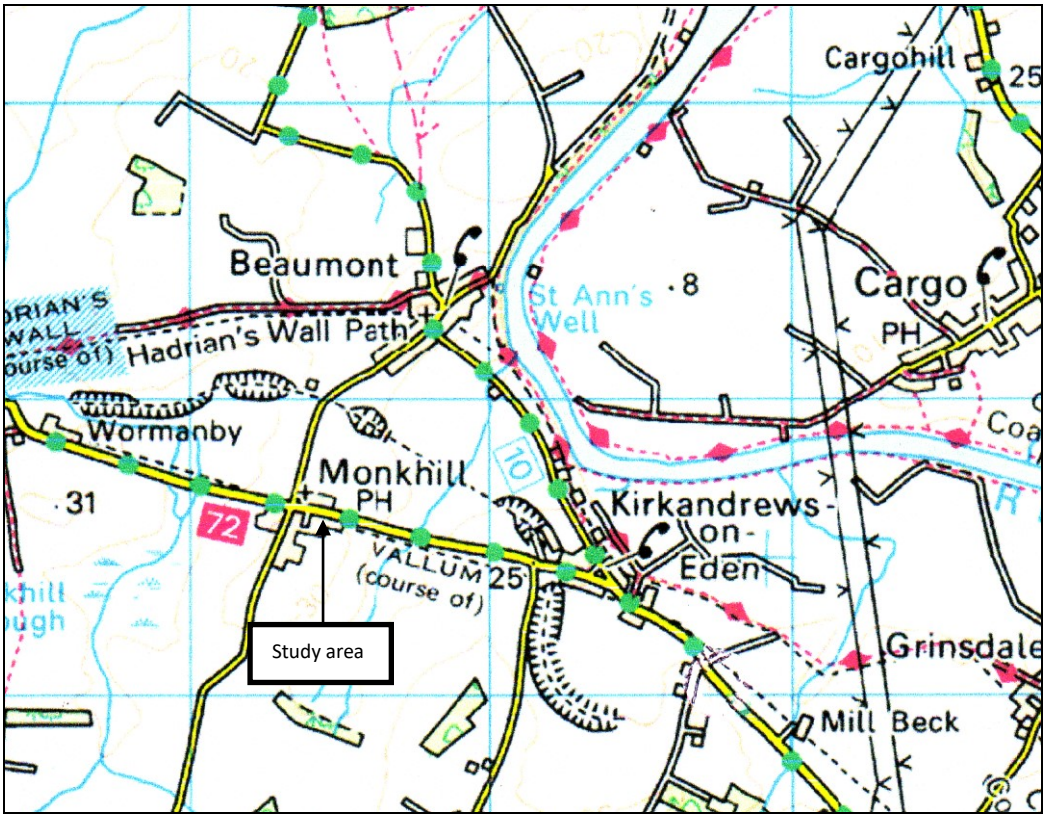

Figure 1. Site location (OS Copyright, Licence no. 100044205)

Gerry Martin Associates Ltd was commissioned by Mrs Elizabeth Marrs, the client to undertake a short Programme of Archaeological Watching Brief relating to the proposed impact of the development.

This report describes the results of that archaeological reconnaissance and its archaeological context as summarised in the following report.

All projects are carried out in accordance with PPS 5 (2010) and the guidelines and recommendations issued by the Institute of Field Archaeologists and English Heritage.

The development of the site involved the machine removal of topsoil and overburden within the proposed building footprint.

This report illustrates the results of that archaeological watching brief with reference to archaeological context as summarised in section 5. 3 entitled discussion.

Gerry Martin has achieved the accreditation level of MIfA (Member) with the Institute of Archaeologists (IfA).

2. METHODOLOGY

2.1 Project Design

In response to a request by Cumbria County Council's Historic Environment Service (CCCHES), Gerry Martin Associates Ltd submitted a Working Scheme of Investigation (WSI). The WSI document outlined the contractors' professional competence as well as general project objectives, including the methodology and the resources needed for the successful expedition of this work.

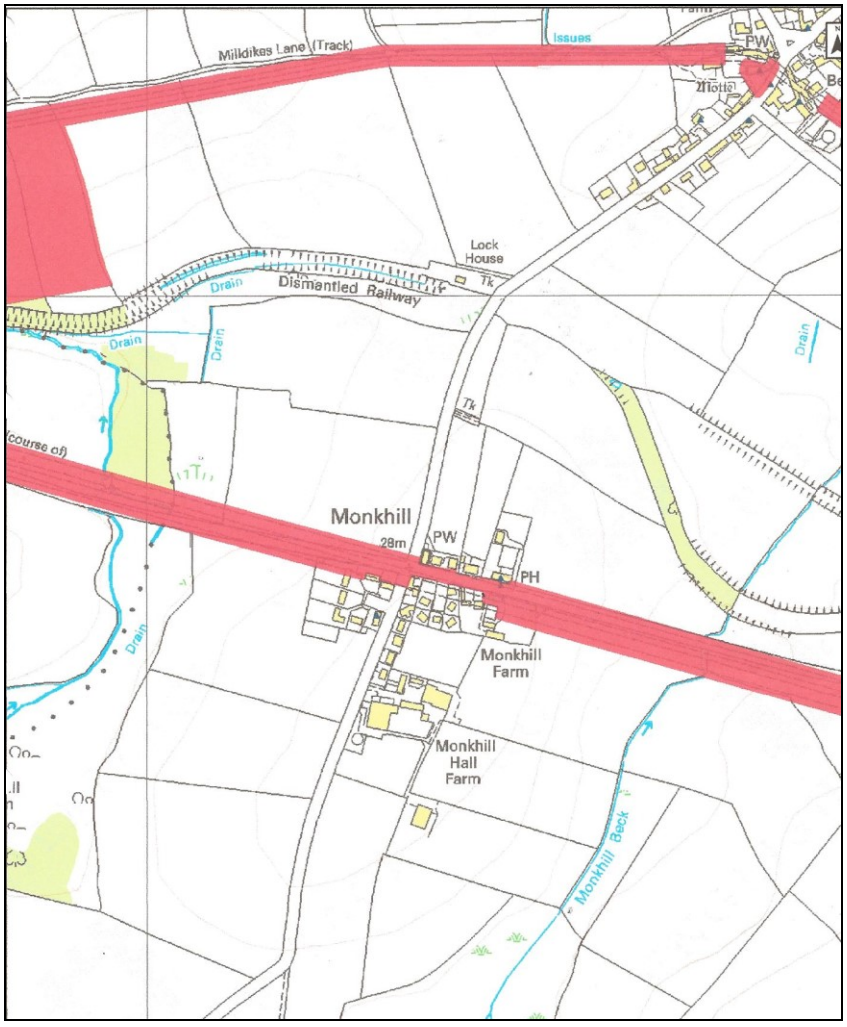

Figure 2. Scheduled area (shaded red)

Gerry Martin Associates Ltd were commissioned to undertake the archaeological fieldwork following approval of the project design by the curatorial body.

The following report has been assembled to the relevant standards and protocols of the Institute of Field Archaeologists (Standard and Guidance for Archaeological Field Evaluation, 2008), combined with accepted best practice and in accordance with the brief prepared by the curatorial authority.

Fieldwork took place on 2nd September 2014 and was undertaken by Gerry Martin.

The study area is exempt from designated Scheduled Monument status as administered by English Heritage (figure 2)

2.2 Archive

The archive has been compiled in accordance with the project design and the guidelines set out by English Heritage (1991) and the Institute of Field Archaeologists (1994).

The project seeks to promote and apply the Hadrian's Wall Research Strategy as outlined by English Heritage (Symonds & Mason 2009).

The archive will be deposited with an appropriate repository, Tullie House Museum, Carlisle and a copy of the report donated to the County Sites and Monuments Record.

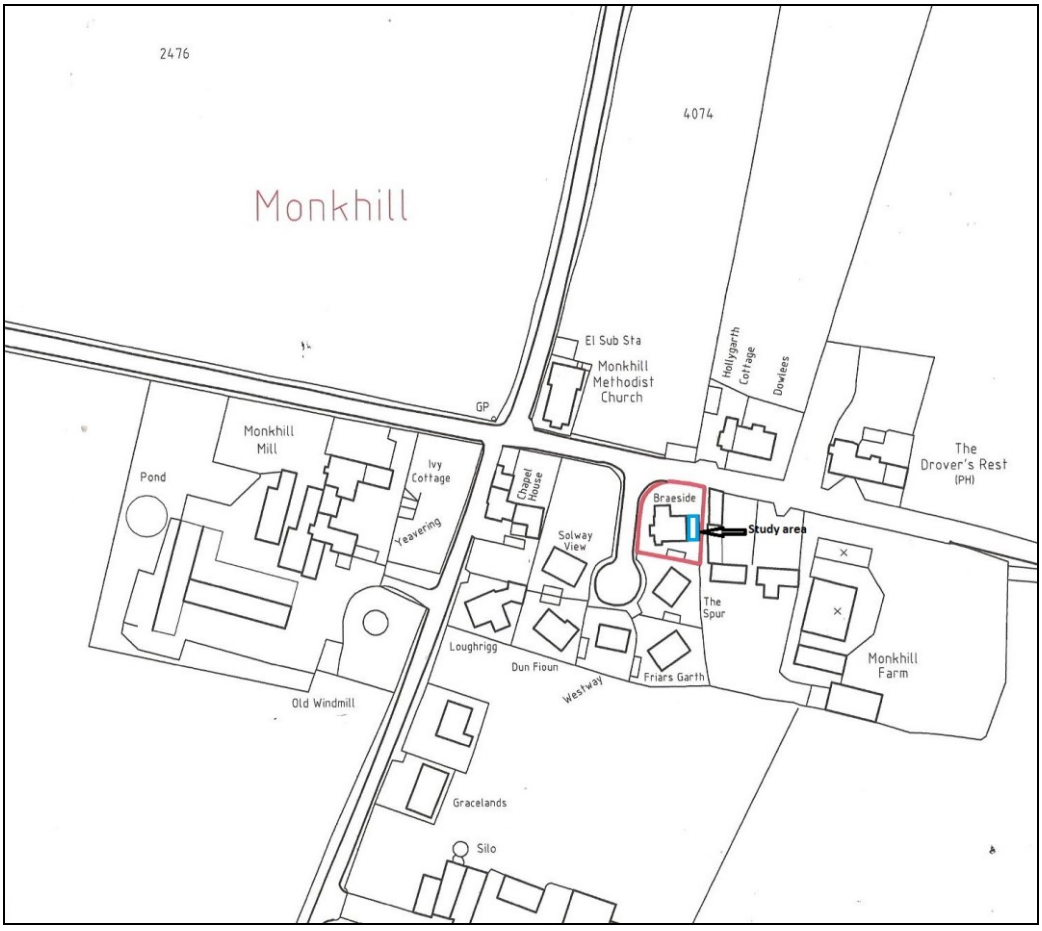

Figure 3. Site location in detail

3. BACKGROUND

3.1 Location, topography and geology

The study area NY 34416 58608 (figure 3) is partially located along the projected course of the vallum and just south of the Burgh-Carlisle road. The site lies approximately 1 mile east of Burgh-by-Sands and 4 miles west of Carlisle.

The study area is situated on a prominent bluff at circa 30m OD, the land falling away to the east towards Monkhill Beck, a descent westwards and bounded by Solway marshland further north.

The local geology has produced a relatively heavy soil with a high clay content due to the local underlying pink Boulder Clay and orange alluvial sands and gravel lain during successive glaciations between 2,000,000 and 12,000 years ago.

Solid geology comprises of bedded Permian and Triassic red sandstone lain between 200,000,000 and 300,000,000 years ago.

4. HISTORICAL CONTEXT

4.1 Desk-based assessment

The study area (figure 3, NY 34416 58608) lies within a landscape associated with Hadrian's Wall that forms part of a World Heritage Site.

In particular it lies to the south of the line of Hadrian's Walls vallum (Scheduled Monument no. 26118). In this area, the vallum diverges from the Wall. The vallum runs as a straight course by Monkhill and Wormanby to Burgh-by-Sands, lying south of the modern road to Monkhill and then crossing north. The ditch is well-developed at Monkhill Beck, just before its approach to (sic) Beaumont (Collingwood 1978, 245), actually Monkhill.

Aerial photographic evidence reveals a series of crop-marks immediately to the south of Monkhill Hall, an established property approximately 250m south of Monkhill Farm, thought to be part of a temporary Roman camp (Historic Environment no. 426), circa 65m x 45m in size, although no trace has been observed on the ground.

In 1995 aerial photography revealed a possible circular plan watchtower (HER no. 15237), 20m in diameter, close to modern farm buildings at Monkhill Hall.

New photographs taken during the summer of 2006 suggested an east-west aligned ditch approximately 130m in length, projecting westwards from a long, narrow north-south aligned enclosure (130m x 30m) approximately 300m southwards. This enclosure nestled against a long north-south aligned field boundary approximately 480m in length. Provisionally, these crop-marks have been interpreted as Roman ditches indicative of Roman rural settlement in this vicinity.

In close proximity to the putative watchtower (HER 15237), was a rectangular enclosure approximately 40m x 30m in size.

The possibility of Roman camps in this vicinity is unsurprising. At Cummersdale and Knockupworth, forts have been found during aerial reconnaissance (McCarthy 1999, 177) and this appears to reinforce the strategic importance of Carlisle and the established fort at Burgh-by-Sands during the late first and second centuries AD.

The area was probably a rich agricultural area during the Roman period growing wheat and barley for the nearby military centres. This produced a landscape of rectilinear field systems bounded by ditches, tracks and hedges with intermittent farmsteads. The typical farmstead was set inside a ditched and embanked enclosure, which varied in plan. Within the enclosure were rectangular and

circular plan buildings (suggestive of both native and Roman influence), cobbled yards and some degree of drainage (McCarthy 1993, 24-25). These farmsteads do not appear to be materially ostentatious reflecting functional use rather than any suggestion of social mobility or stratification.

A number of watching briefs and archaeological evaluations have been undertaken recently in this vicinity.

- A watching brief in 2005 on behalf of United Utilities, revealed two ditch cuts associated with the vallum at NGR 334325 558600 (Jefferson 2006, 245).
- A watching brief conducted at the adjacent property Monkhill Maulds during 2005 produced no cultural deposits of any antiquity (Martin 2005, 4).
- An evaluation at Hall Croft, Monkhill produced no deposits of any antiquity, a linear crop-mark identified as a modern drain (Martin 2007, 11).
- An evaluation within Monkhill Farm during 2007 failed to identify the course of the vallum (Marshall 2007, 10).
- Two evaluations at Monkhill Farm during 2012 (Martin 2012, 10-11) and 2013 (Martin 2013B, 11-16) revealed the course of the vallum.
- An evaluation at land near Monkhill, Carlisle, (NY 34430 58900) that revealed probable Iron Age or earlier segmented field ditches (Martin 2008, 11).

Germane to this particular project was a watching brief conducted in 2009 at Braeside (Sowerby 2009, 9-12) when a northern extension was added to the bungalow (figure 4). The conclusion from this exercise was that “no trace of the vallum was revealed”. This explanation will be discussed in greater detail later in this report.

The 1831 tithe map DRX/769/22 (figure 5) denotes that the property was owned by William Wiseman who resided at the adjacent house. The study area measured three rods and twenty five perches and the proportions of the field remained unchanged until around 1964 when the current development took place.

Interestingly, the vallum is not depicted on the tithe map whilst at least one building in Monkhill straddled the course of the ditch. This suggests that a significant proportion of the vallum must have been backfilled by 1831.

The 1868 Ordnance Survey twenty five Inch map covers plot 310 (figure 6) and describes the study area as a field.

The vallum is clearly illustrated on the first edition map and enters the study area at its eastern end.

The close proximity of a building representing Monkhill Farm almost certainly proves that the ditch had been backfilled and was probably not visible at this time as a prominent landscape feature. It appears highly likely that the representation of the vallum at this location was largely conjectural and cannot be relied upon as an accurate field record (Perriam *pers comm*).

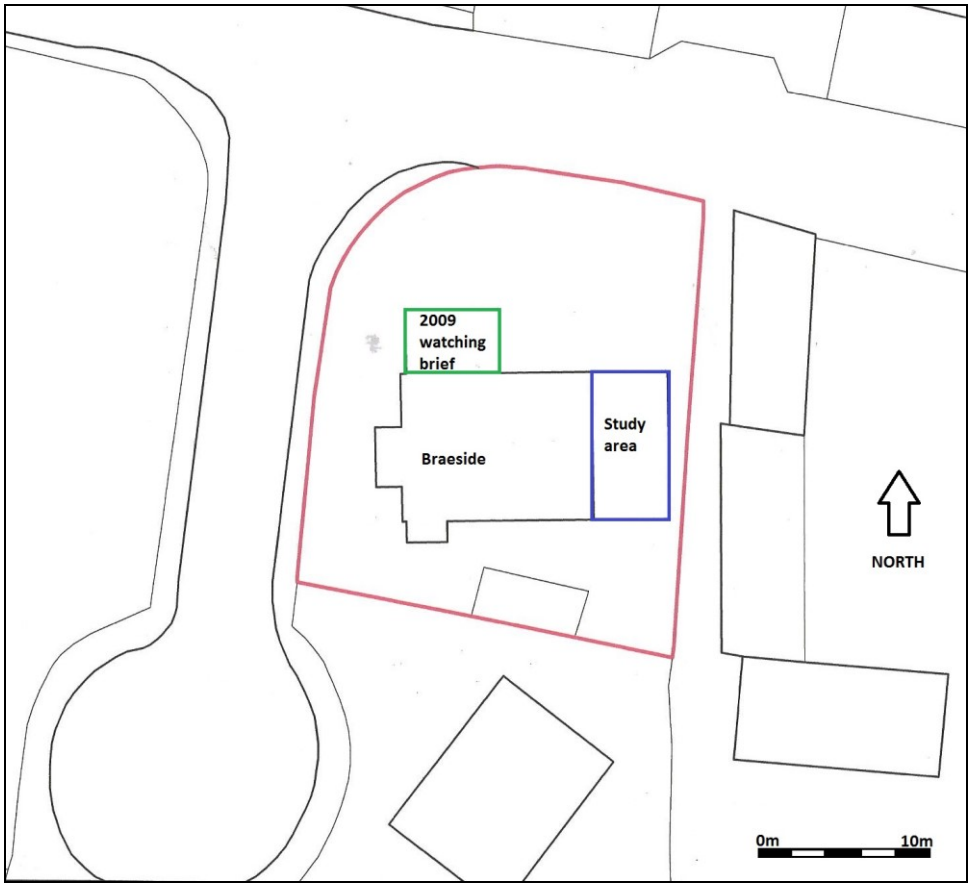

Figure 4. Fieldwork undertaken at Braeside Monkhill

Figure 5. 1831 Tithe map DRX/769/22

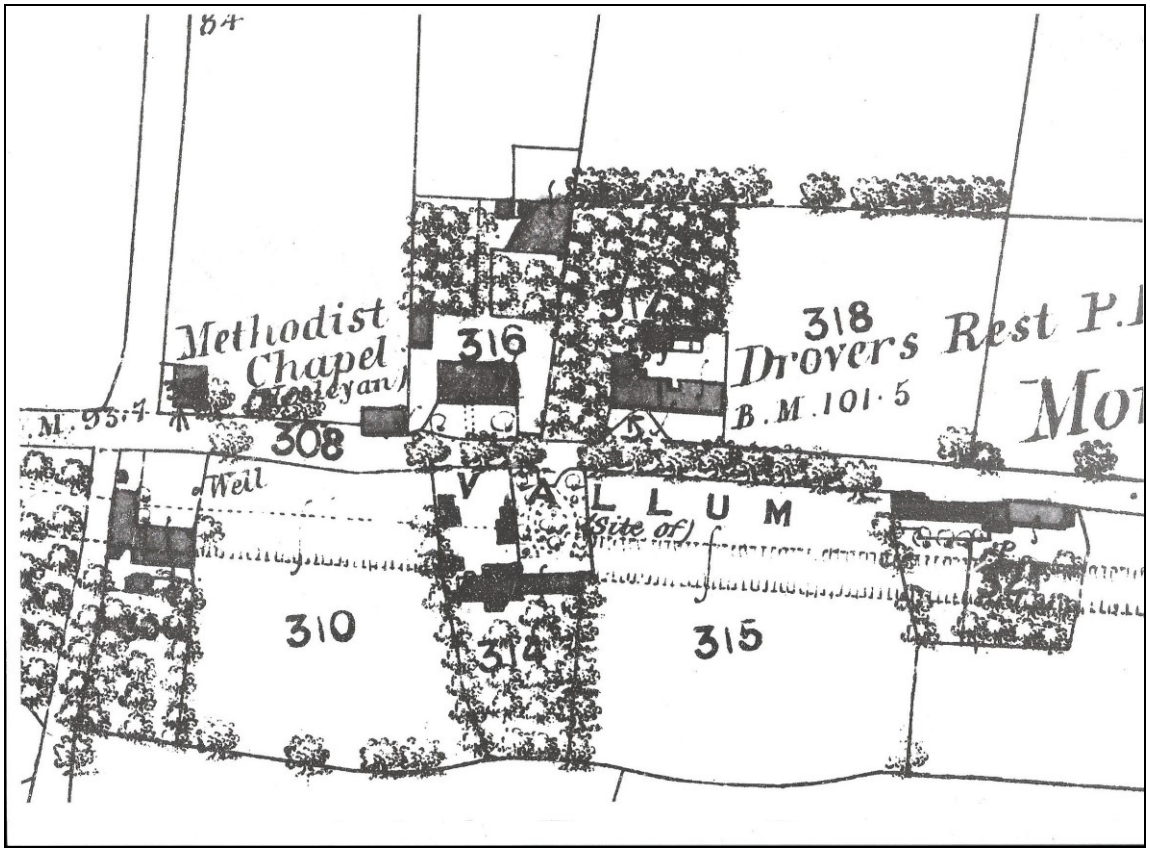

Figure 6. Ordnance Survey map of 1868

5 RESULTS

5.1 Methodology

The objective of the watching brief investigation was to carry out a formal programme of archaeological observations and investigations during any operations on site that may disturb or destroy archaeological or architecturally informative deposits or remains. The specific aims of the work were to:

- Provide a record of those works associated with the removal of the topsoil
- Provide a record of any significant archaeological or architectural features encountered by intrusive activities

In order to achieve these objectives, a record of all archaeological informative deposits encountered during the ground operations were made consisting of detailed context records on individual pro-forma sheets and field drawings, according to the protocols set out in the GMA manual.

The ground-works were undertaken by excavating machine under archaeological supervision. This action consisted of observation of the spoil removal and monitoring the displaced soil. Revealed sections were checked for any past cultural activity and if necessary recorded according to the protocols of the GMA manual.

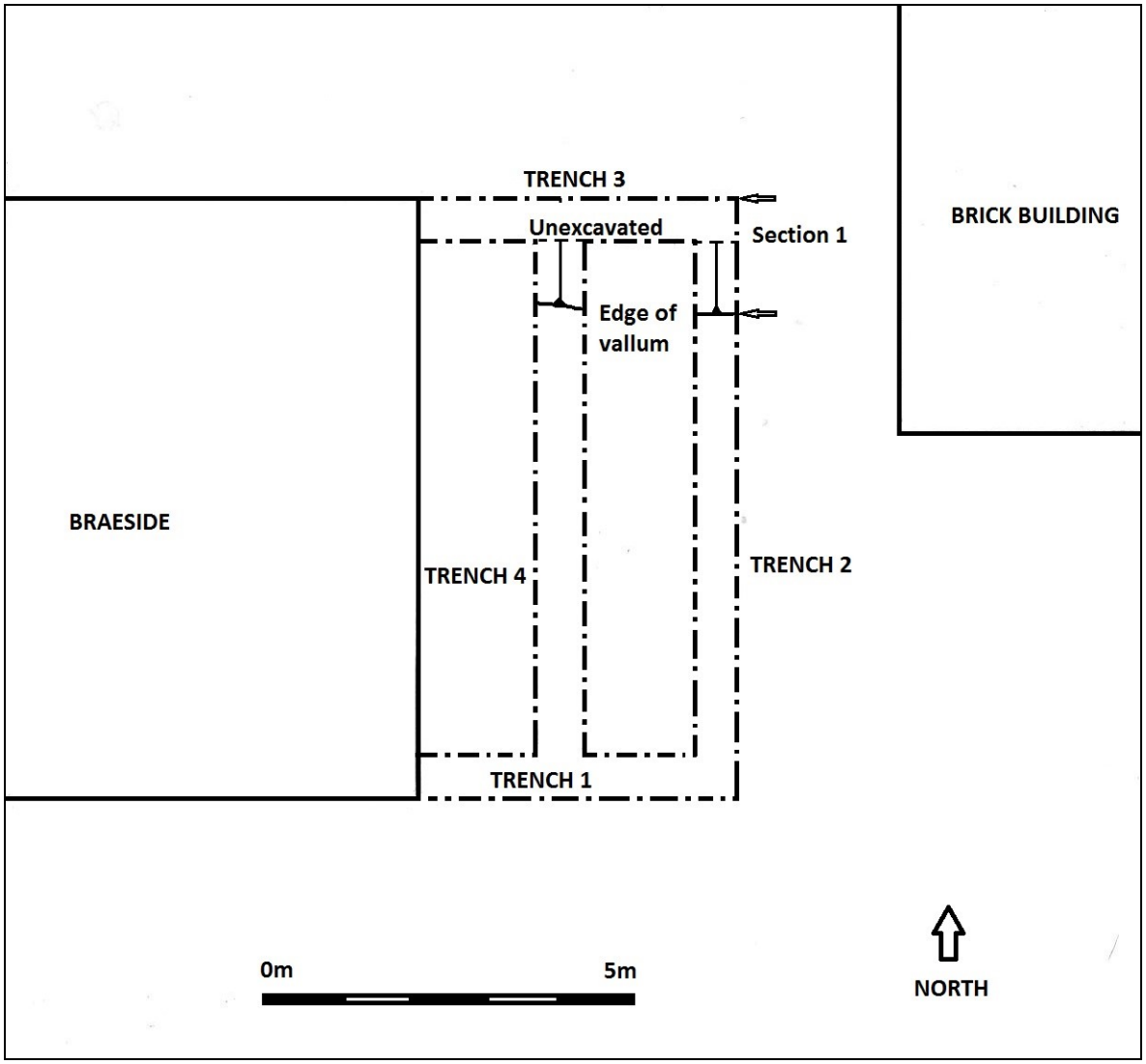

Figure 7. Plan of the excavation

5.2 Results

The watching brief comprised four footings that formed the new extension (figure 7). These trenches are summarised as follows

- Trench 1: 4.50m length x 0.60m width excavated to a depth of 0.50m where natural drift geology was encountered. Trench consisted of modern brown garden soil.
- Trench 2: 7.10m length x 0.60m width excavated to a depth of 0.50-0.60m where natural drift geology was encountered. Trench mainly comprised modern brown garden soil but the probable vallum edge **3** was seen at the northern terminal of the trench.
- Trench 3: 4.50m length x 0.60m width excavated to a depth of 1.50m where natural drift geology was partially observed. Trench consisted of upper fill to the vallum.
- Trench 4: 7.10m length x 0.60m width excavated to a depth of 0.40m where natural drift geology was encountered. Trench mainly comprised modern brown garden soil but the probable vallum edge **3** was seen at the northern terminal of the trench.

Figure 8. Trench configuration

The vallum

The edge of a very large cut was seen in Trenches 2 (figure 8) and 4 and almost certainly corresponded to the vallum. Excavation was maintained to a depth of 1.50m, but at the northern end of Trench 3, natural was not observed.

The upper fill comprised dark grey silty sand **1** that was 0.70m in depth and was essentially a levelling deposit. This material sealed light brown silty sand **2** that butted the side of a steep cut **3** revealing natural Boulder Clay (figure 9).

The fills were clear of extraneous modern material but displayed no significant soil development or profile probably the culmination of tertiary deposition after a gradual accumulation within the ditch (figure 10).

Ingress of water quickly occurred and conditions were damp although organic remains were not present at this depth. The confined space also made it very difficult to ascertain further observations.

No artefacts were evident.

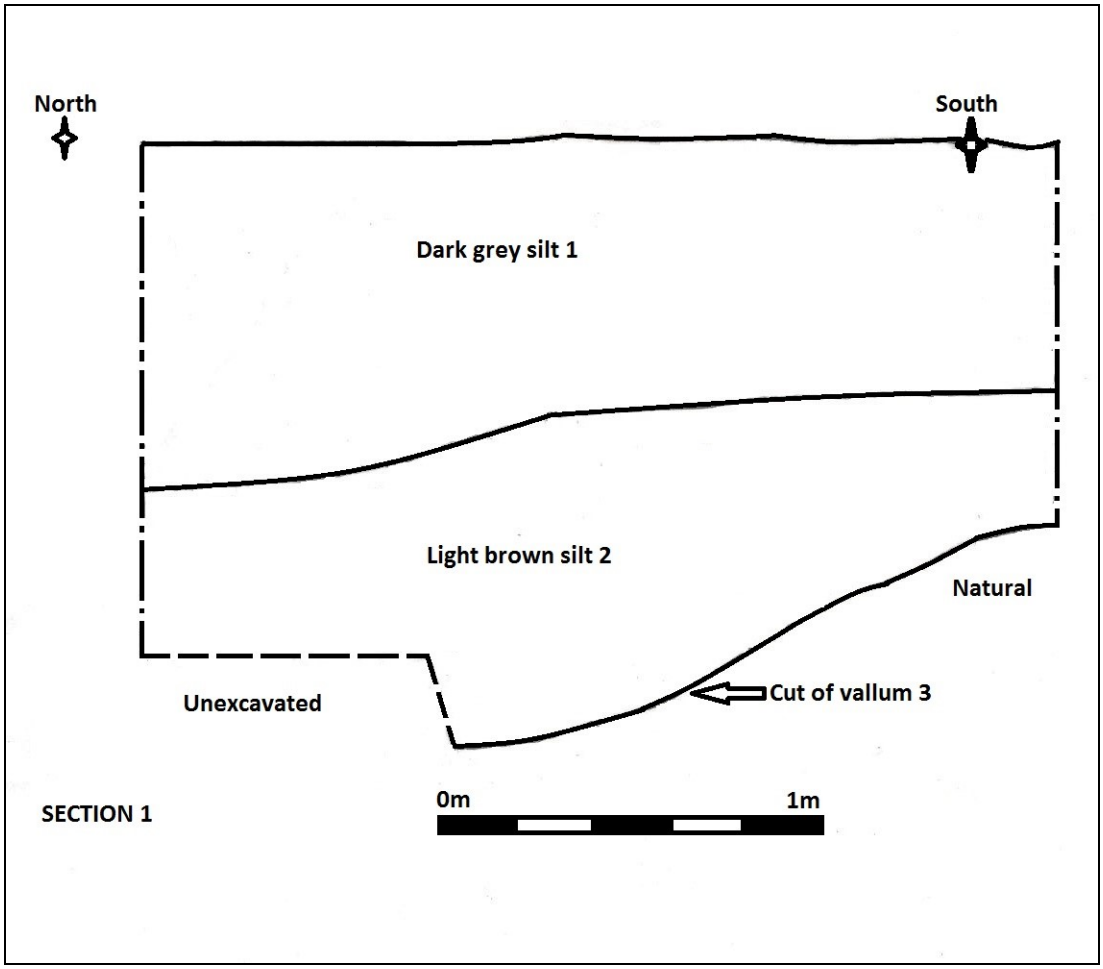

Figure 9. Section through southern edge of the vallum

Figure 10. Section through southern margin of the vallum

Figure 11. Southern side of vallum

Figure 12. Predicted course of vallum (arrow on wall)

5.3 Discussion

Classically, the vallum comprises a steep-sided ditch usually 6m in width and 3m in depth with a flat base flanked by two mounds north and south, set back approximately 9m from the ditch edge and probably constructed to deny multiple crossings up to the Wall or to delimit a prohibited zone close to the Wall.

English Heritage's scheduling and the Ordnance Survey predicted that the course of the vallum passed through the north-eastern tip of Braeside and within the footprint of the 2009 building extension.

An evaluation in 2007 in close proximity within Monkhill Farm failed to locate the vallum (Marshall 2007, 10) suggesting that the vallum lay further northwards and closer to the road. Based on this result and the negative watching brief in 2009, subsequent research has attempted to deflect the course of the vallum northwards (figure 13) either by a kink in its alignment or attempting "best fits" (Martin 2013B, 10). None of these possibilities has been entirely convincing based on largely non-intrusive field reconnaissance.

In the light of this recent watching brief it appears highly likely that the fieldwork undertaken at Braeside in 2009 did isolate the vallum but failed to recognise its true identity.

The 2009 watching brief encountered a broad east-west aligned cut **102** only observed on its south side (Sowerby 2009, 9). Although not mentioned in the report, natural drift geology was not

encountered until a depth of "nine feet" was reached and "15 cubic metres of concrete" was required to provide a solid foundation (Marrs *pers comm*).

The upper fill **103** within ditch **102** contained brick and masonry rubble as well as a salt-glazed box drain anfd this was undoubtedly associated with construction of the bungalow in 1964. However, the author of the report has mistaken a modern tertiary fill as the primary fill for this feature. The conclusion that "no trace of the vallum was revealed" (Sowerby 2009, 12) was erroneous.

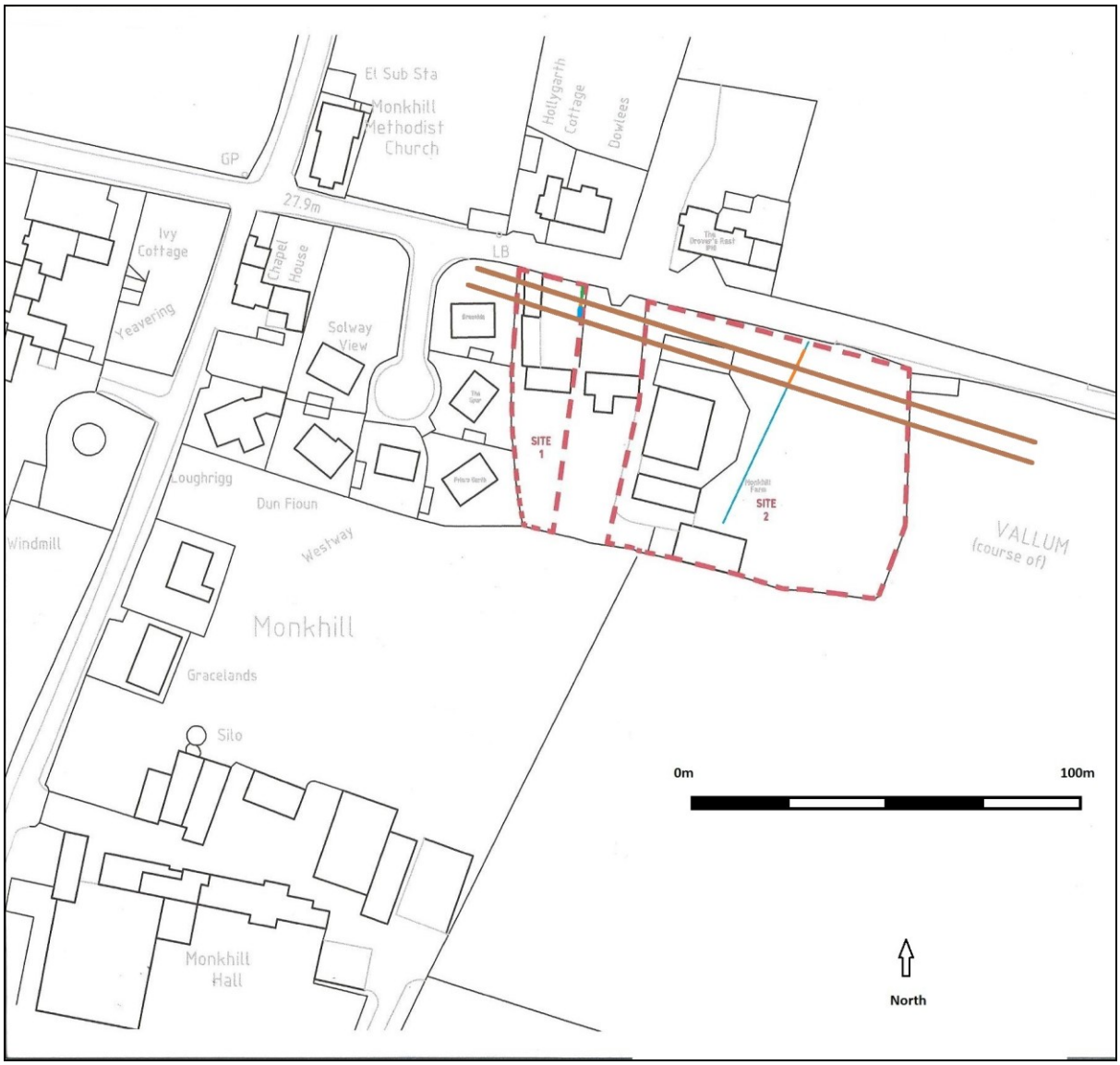

Figure 13. Proposed course of vallum (brown outline)

Supporting evidence for the vallum identified during the current watching brief was as follows:

- Cut **3** matches the alignment given by the Ordnance Survey and English heritage.
- Fills **1** and **2** were unadulterated by modern extraneous material and therefore unlikely to be part of the construction restitution dating to 1964.

- Cut **3** was close to the boundary with Monkhill Farm and only 2.30m from a brick outbuilding in Monkhill Farm. Slightly surprisingly, the brickwork for this building was in good order with no signs of subsidence from the underlying vallum.

- Fieldwork undertaken at adjacent Monkhill Farm predicted the course of the vallum to pass through at this position marked by a yellow arrow painted on a brick wall (figure 12).

Revisiting the 2009 watching brief, six observations have now been taken of the southern edge of the vallum and one observation of its northern limit within Monkhill. Allowing for minor recording error, plotted out, these points appear to form a straight line (figure 14) with a very close concordance to the English Heritage designation (figure 2).

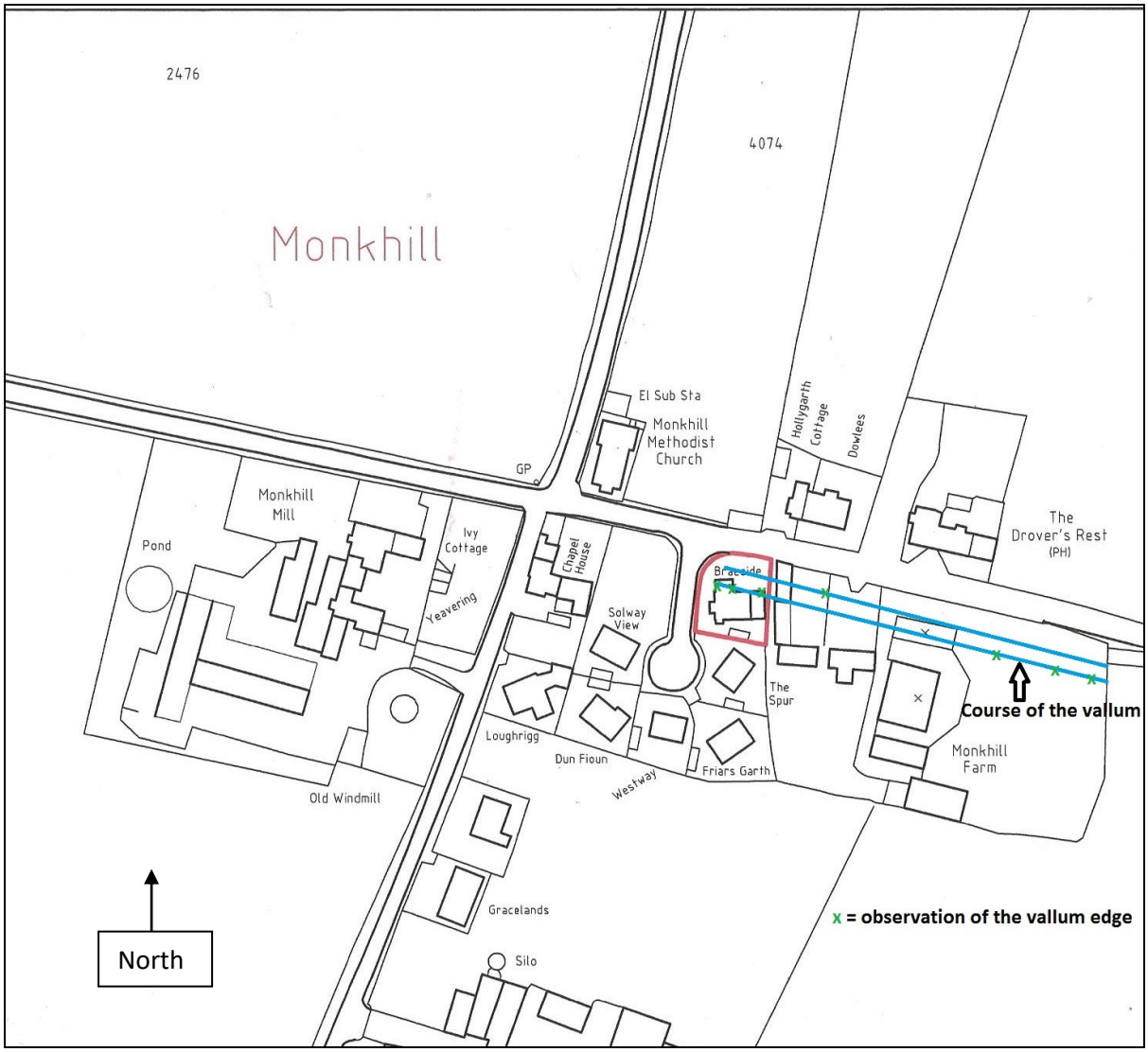

Figure 14. Revision of the course of the vallum (blue outline) based on recent fieldwork

It now appears highly probable that the English Heritage course is correct and that the vallum does lie to the south of the road when passing through Monkhill.

5.4 Finds and environmental analysis

Other than modern surface finds, no artefacts were present that warranted collection.

Inundation by water compromised any environmental sampling although any future research may provide the opportunity to review this position.

6. ACKNOWLEDGMENTS

I am grateful to Mrs Elizabeth Marrs for commissioning the project and to her husband for his assistance with the plans and development details. I would also like to thank the staff of Carlisle Library with my research into the local history of the area and the staff of Cumbria Record Office, Carlisle with the map regression and other documentary research.

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