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## **SUMMARY**

An east-west aligned undated ditch was observed. Parallel and to the north of the perceived course of Hadrian's Wall, this particular ditch probably represents the Wall's forward ditch.

Due to the potentially hazardous conditions and water inundation, only basic observations could be undertaken.

## 1. INTRODUCTION

### 1.1 Project Origins

Cumbria County Council's Historic Environment Service (CCCHES) was consulted by Carlisle City Council regarding a planning application for an extension behind 13 Beech Grove, Carlisle as requested under Planning Application 1/11/0456.

As potential and significant archaeological remains may be encountered, an archaeological watching brief has been requested from Cumbria County Council.

Gerry Martin Associates Ltd has been commissioned by the client, to undertake an archaeological watching brief relating to the ground works for this development.

The development of the site involved the machine removal of superfluous concrete and clay within the proposed building footprint as well as the insertion of various service trenches attending to the development.

A desk-based assessment was also required prior to the watching brief taking place.

This document describes the results of that archaeological watching brief and its archaeological context within the desk-based assessment.

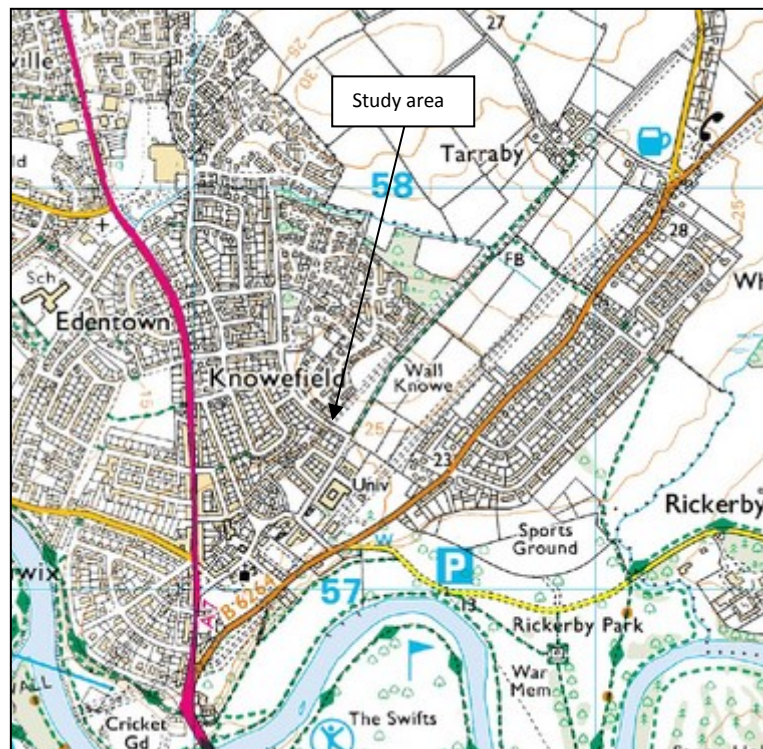


Figure 1. Site location, 13 Beech Grove, Carlisle (OS Copyright, Licence no. 100044205)

## 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 project design. This document outlined the contractors'

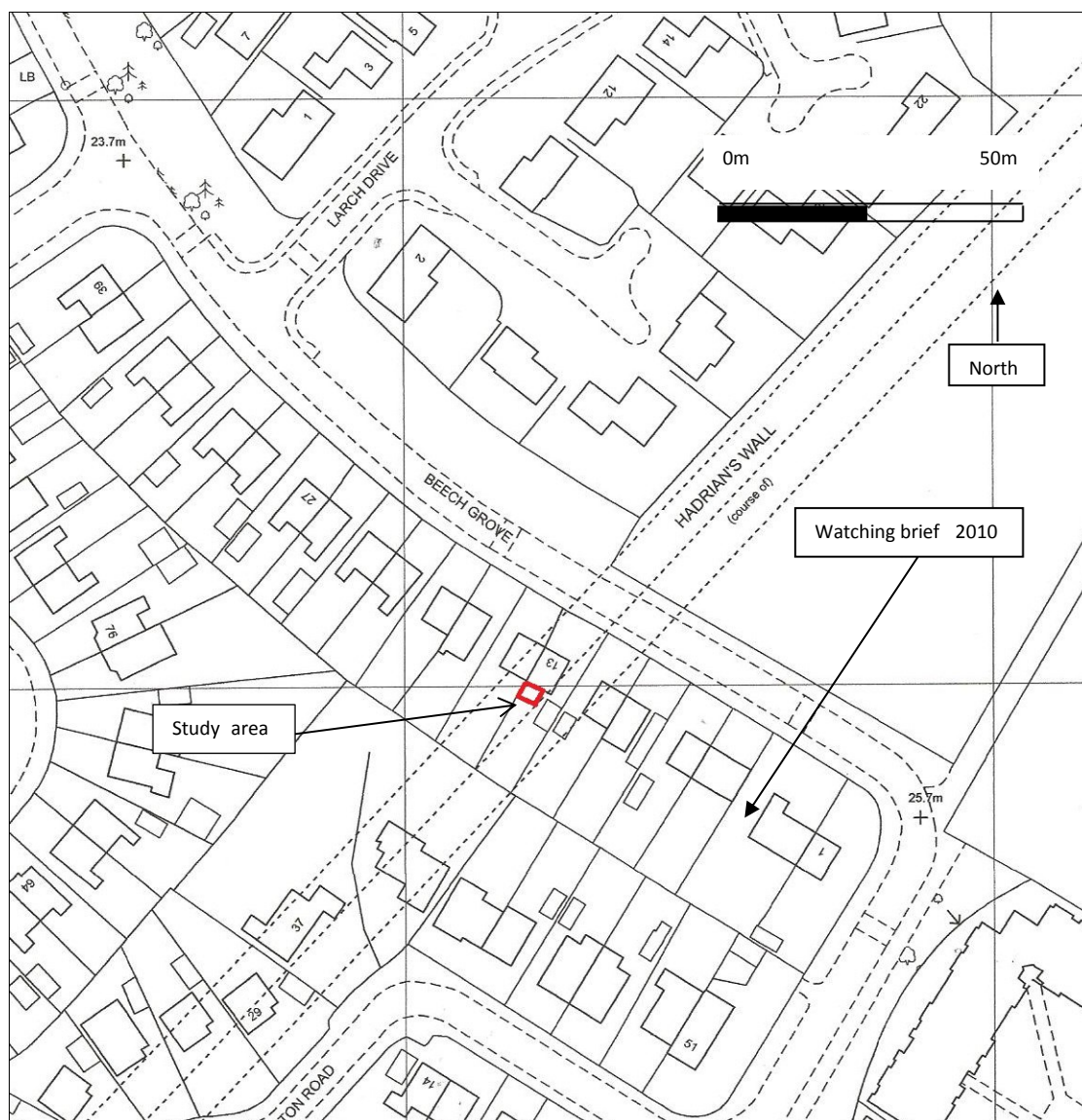


Figure 2. Location of interventions, study area (red outline) (OS Copyright, Licence no. 100044205)

professional competence as well as general objectives required of the project, the methodology and the resources needed for the successful expedition of this work.

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 August 13<sup>th</sup> and August 28<sup>th</sup> 2012.

## **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 (2008).

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

## **3. BACKGROUND**

### **3.1 Location, topography and geology**

The study area lies within an inter-war suburban development approximately 200m east of an east-west aligned ridge that forms the historic core of Stanwix village, a settlement that replaced the Roman cavalry fort of *Ala Petriana*.

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

Solid geology comprises red sandstone.

## **4. HISTORICAL CONTEXT**

### **4.1 Desk-based assessment**

The study area (NY 40319 57392) lies just south of Hadrian's Wall in an area approximately 200m east of the Roman cavalry fort of *Ala Petriana*.

#### The Roman fort of Ala Petriana

Excavations by Simpson and Hogg in 1932-34 and by Simpson and Richmond 1939-40 established the positions of the south gate of the Hadrian's Wall fort and the defences of the north-eastern, south-eastern and south-western sides as well as the line of the Vallum. Internal buildings, including a granary were also located within Stanwix School.

In the spring of 1984, excavations within the car park at the Cumbria Park Hotel, Carlisle uncovered the previously unsuspected north curtain wall, rampart and interval tower of the Roman fort at Stanwix (Dacre 1985, 55).

The excavation did not identify any old ground surface and the unweathered appearance of the natural sub-soil suggested that the area had been terraced during the past suggesting either no surviving or no pre-military activity.

The 1984 excavation revealed a 24m length of northeast-southwest aligned robbed curtain wall overlying a clay and cobble foundation. The wall comprised of a chamfered stone course overlying a course of yellow sandstone flags.

The southerly footings of the curtain wall were overlain by an earth bank, at least 3.5m in width that was contemporary with the curtain wall. This rampart respected a stone Interval Tower.

The square plan Interval Tower comprised of dressed stone blocks, preserved to at least three courses and resting above footings slightly askew from the towers ground plan. The tower possessed a probable doorway with a respecting path.

Occupation deposits within the Interval Tower suggested worn and coarse trampled floors with an area of paving in the angle between walls that may have provided a rigid surface for a ladder or stairway leading to upper stories or the walls summit.

Robbing of the wall and tower could not be isolated to any temporal phase whilst sealing soils and tertiary ditch fills provided no conclusive dating material.

Roman finds were mainly utilitarian items such as nails, hobnails, lead pot-mends, glass sherds and slag fragments. A tile stamp of the Ninth Legion, four fragments of pottery bearing graffiti, a lead plumb-bob and a copper alloy ring were all recovered.

Pottery was largely recovered from unsecure and unstratified contexts and the small reliable assemblage could not provide a conclusive dating range. Samian and mortarium provide a probable date of between *circa* A.D. 150-180.

This work demonstrated that the fort had been enlarged during the Antonine period so that it projected north of Hadrian's Wall. The other critical discovery was that a ditch lay beneath the interval tower. This ditch antedated the enlargement of the fort and is presumed to be associated with Hadrian's Wall discovered by Simpson and Hogg between 1932 and 1934 and confirmed by watching brief during 2008 (Martin 2008).

Between 1997 and 1999, further excavations at Stanwix School identified a turf wall rampart, the earliest structural feature just south of the line of Hadrian's Wall. Cobbled surfaces and demolition deposits were located internally before timber buildings were established in the fourth Century.

A watching brief at 18-22 Scotland Road, Stanwix, conducted between June and December 2000, confirmed further stretches of the northern curtain wall, a possible heavily denuded rampart and an inter-vallum road inside the wall along with further remains of inner and outer defensive ditches and a cobbled surface on the berm between the inner ditch and the fort wall (Martin 2009, 6-7).

#### Extra-mural settlement near the fort

Excavation during 2009 approximately 150 metres north of the Wall revealed a cobbled spread bearing eight Roman coins varying in date between circa 117 and 337 AD. Although interpretation remains provisional, there appears to be a strong case for a market or a centre for exchange involving client people north of the Wall throughout the Roman period (Martin 2010).

The presence of a linear ditch, well and a possible timber sill foundation suggested formal settlement that may have equated to a *vicus*, a parallel with the results of a geophysical survey at Birdoswald (Wilmott pers comm).



## Archaeological Watching brief at 13 Beech Grove, Carlisle

An evaluation in 1993 (HER no. 40442) approximately 500 metres northeast of the study area found evidence for a cobbled surface, foundation trenches and post-holes for putative timber buildings. A V-shaped ditch was also discovered at least 25 metres in length overlain by a series of cobbled surfaces. This multi-phased activity was originally interpreted as a Late Iron Age or early Romano-British farmstead.

Roman pottery (HER no. 40425) was also found 400 metres northeast of the study area at Knowefield, whilst a Roman coin (HER no. 18937) was found at Beech Grove.

Approximately 1.5km northwards, Windsor Way, Carlisle (unpublished) produced in 1999 occasional undated ditches and *ard* marks but no trace of substantive occupation despite a study area of several hectares (Reeve *pers comm*).

Approximately 100m to the south of the study area, a ditch dating from the Post Medieval period (HER no. 40817) has been found. Plough marks (HER no. 41194) and a boundary ditch (HER no. 41195) both of which date to the prehistoric period. Plough marks (HER no. 41194) and a boundary ditch (HER no. 41195) dating from the Roman period have also been found.

A Post-Medieval ditch aligned broadly north-south was encountered at 3 Beech Grove (Martin 2010, 9) approximately 40m southwards.

Approximately 250m west of the study area at Old Croft Cross, Stanwix, Carlisle a cross (HER no. 521) dating to the Early Medieval period was found. Approximately 300m west of the study area at North View, Stanwix, Carlisle (HER no. 499) a Roman weapon was found.



Figure 3. First edition Ordnance Survey map of 1866 showing location of 3 Beech Grove

Approximately 100m west of the fort at St George's Crescent, foundations for a large building were encountered that respected land divisions dating to the late 1<sup>st</sup> or early 2<sup>nd</sup> century AD. A rich pottery assemblage was recovered suggesting intensive settlement up to circa 150 AD but little cultural activity thereafter (Martin 2012).

The 1866 First Edition Ordnance Survey map (figure 3) shows the study area as being an open field (49) bounded to the north by Knowefield Nurseries and the Cumberland Reformatory to the south, currently the Cumbria College of Art.

The area was developed for residential housing during the 1930s.

## 5. RESULTS

### 5.1 Development proposals

The development involves the construction of a two storey extension to 3 Beech Grove (figure 4) which required the excavation of a foundation footprint.

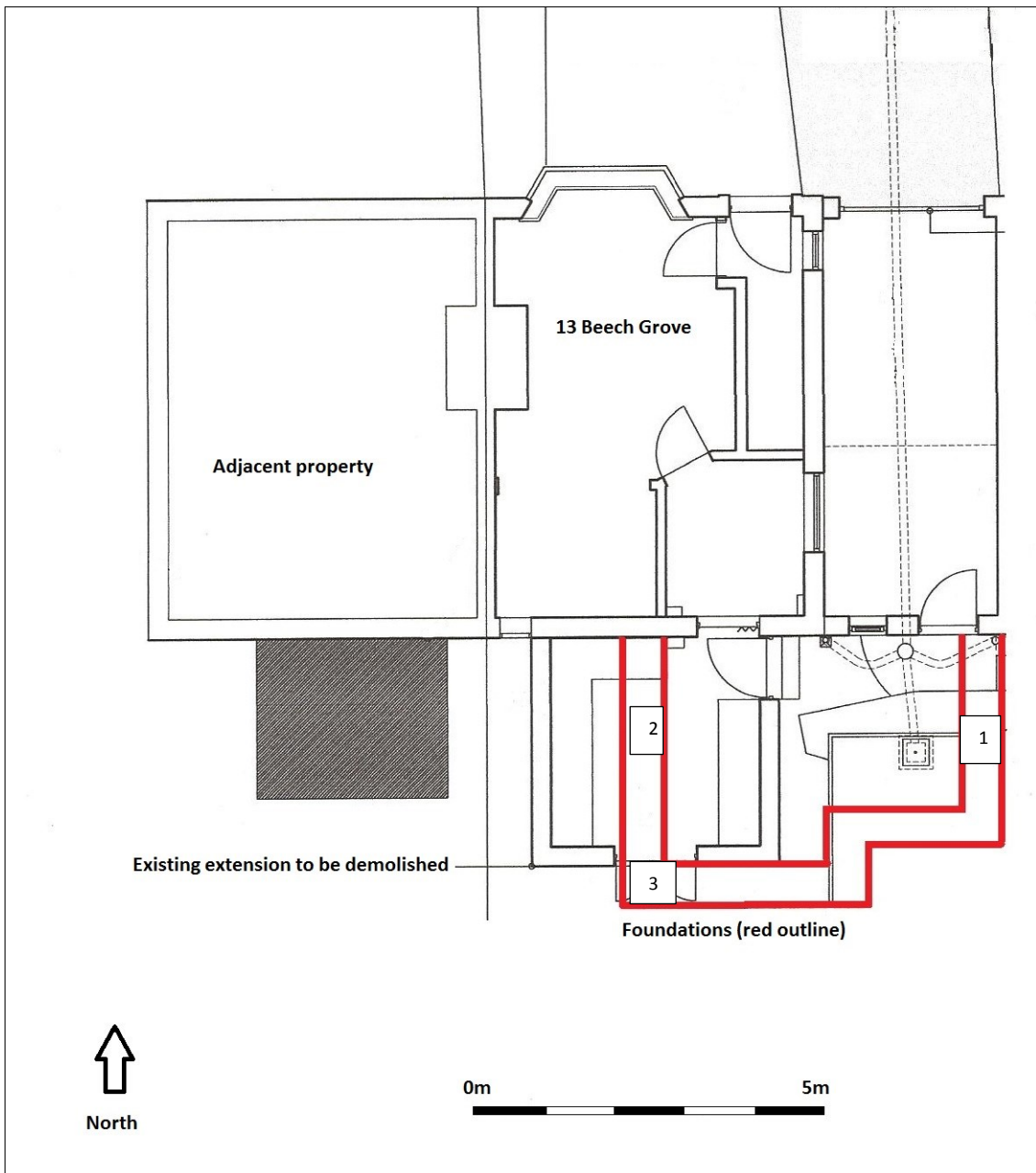


Figure 4. Ground plan regarding the proposed development (study area outlined in red).



## **5.2 Methodology**

The objective of the watching brief investigation is 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 are to:

- Provide a record of those works associated with the removal of the overburden
- 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 proforma sheets and field drawings, according to the protocols set out in the GMA manual.

The ground-works were undertaken by 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.

The work was undertaken on 13<sup>th</sup> and 28<sup>th</sup> August 2012.

## **5.3 Results**

The first archaeological operation undertaken was the removal of the super-structure that represented the former extension to 13 Beech Grove. No foundations for this structure were revealed.

A further 0.20m-0.35m of overburden comprising brick rubble and dark brown silty clay forming garden soil was removed from the development footprint.

The southern and eastern footings (1) were reduced to a depth of 0.75m below ground surface. This trench revealed orange brown clayey sand drift geology (figure 5) overlain by 0.50m of mixed grey-brown silty clay representing backfill to services and remnant garden soil.

The western footing (2) was within the fill of a north-south aligned ditch (figure 6).



Figure 5. Eastern footing (1).



Figure 6. Ditch fill in western footing (2).

In order to provide a solid foundation, fill consisting of homogenous grey silt bearing very occasional stone and charcoal fleck (figure 9) capped by orange-brown silty clay was reduced to a depth of 1.80m that appeared to indicate the base of a putative ditch. The ditch was at least 1.00m in width, the northern limit not being visible.

The insertion of this footing accompanied by incoming water (figure 8) made the ground inherently unstable with the possibility that the integrity of the existing building being compromised. Work was abandoned until an engineering solution was provided on August 28<sup>th</sup> 2012 when the work was once more monitored.



Figure 7. Southern footing (3).



Figure 8. Flooded trenches



Figure 9. Homogenous ditch fill

At the south-western corner of the footprint (3), an extant land drain entered the footing that soon flooded the 0.90m deep trench (figure 7). Overburden comprised garden soil to a depth of 0.70m with probable orange-brown silty clay natural drift geology visible to a height of 0.20m.

#### **5.4 Discussion**

The watching brief did not reveal the course of Hadrian's Wall as suggested on the Ordnance Survey (figure 2).

There exists a realistic possibility that this undated landscape feature observed may represent an east-west aligned forward ditch in front of the Wall, because the deep ditch revealed in the western footing did not correspond to any historic land boundary (figure 3).

Typically, the forward ditch was V-shaped in profile with a narrow, flat base; the characteristic standard ankle-breaker common to Roman military ditches. The closest parallel was observed at Cumbria Park Hotel in 1984 approximately 400m westwards, where three ditches were inserted north of the Wall (Dacre 1985, 55-61).

The earliest forward ditch (134) respected the slighted Hadrian's Wall but became redundant when the fort was enlarged circa 150 AD. Ditch (134) was either replaced by a narrow ditch (40) or a wide ditch (8). The ditch at Beech Grove was deeper than the depth of ditch 40 (1.05m) at Cumbria Park Hotel.

Whether it bore any similar characteristics to ditch (8) (9.00m wide x 3.00m in depth) or ditch 134, the limited observation could not verify, although the close proximity of the ditch to the proposed course of the Wall suggests that the closest parallel would be ditch 134 and therefore belonging to the early 2<sup>nd</sup> century rather than a mid-second century date proposed for the other two ditches.

Although a heavily compromised observation, the presence of a forward ditch in close proximity to the presumed course of the Wall remains an important topographic discovery.

#### **6. 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, 2001 and 2007).

The archive will be deposited with Tullie House Museum, Carlisle and two copies of the report donated to the County Sites and Monuments Record, as requested by the curatorial authority.

#### **7. ACKNOWLEDGMENTS**

I am grateful to Mr Stephen Crichton, for commissioning this project and Carl Savage for expediting the watching brief on behalf of GMA Ltd on August 28<sup>th</sup> 2012.

I would also like to thank Jeremy Parsons (CCCHES) for his guidance with the archaeological brief, 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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