

**CASTLE STREET,
CARLISLE,
CUMBRIA**



WATCHING BRIEF REPORT

CP. No: 1387/11

13/05/2011

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Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by North Pennines Archaeology Ltd on the preparation of reports.

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SUMMARY

North Pennines Archaeology Ltd was commissioned by Carlisle City Council, to undertake an archaeological watching brief at the north-western end of Castle Street, Carlisle, Cumbria (centred on Ordnance Survey grid reference NY 39819 56064), as part of the forthcoming Carlisle Roman Gateway Project. The on-site works comprised the resurfacing of pavements, the creation of high quality entrance spaces to Tullie House, along with new street furniture, signage in the form of orientation beacons, bespoke seating, tree planting and surfacing interpreting the line of Hadrian's Wall and its forts. The proposed scheme of works lie within the Scheduled Monument of the Roman and Medieval towns of Carlisle (SM No. 547). This is an area of extremely high archaeological sensitivity, positioned within the Roman fort of Carlisle and within the heart of the early medieval town. It lies approximately 0.3km south of Hadrian's Wall, a Scheduled Monument and World Heritage Site. As a result, Andrew Davison Inspector of Ancient Monuments Team Leader (North), English Heritage requested that an Archaeological Watching Brief be undertaken during, groundworks associated with the scheme that were likely to impact on any archaeological deposits.

The Archaeological Watching Brief was undertaken over three non-consecutive days between the 24th February and 30th March 2011. The watching brief monitored the excavation of three pits for orientation beacons, a pit for a tree planting and the excavation of a trench for telecommunication services. The ground was very disturbed by late 19th and 20th century service runs. No archaeological remains were encountered in the beacon and tree pits, however medieval pottery sherds and iron slag was recovered from deposits in the telecommunications trench along with a single sherd of Roman pottery. The finds are evidence of occupation of the area in the Roman period along with habitation and possible ironworking in the late 12th to 14th centuries.

As this archaeological watching brief was conducted as part of a recommendation to observe groundworks on Castle Street in association with the Carlisle Roman Gateway Public Realm Scheme, no further work is deemed necessary. However, given the high archaeological potential and scheduling of the area, any future work would have to be subject to a programme of archaeological investigation.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Andrew Sproat, Development Manager, Carlisle City Council, for commissioning the project, and for all assistance throughout the work. North Pennines Archaeology Ltd would also like to extend their thanks to Derek Hobday, English Landscapes and all staff at the Castle Street site, for their help during this project.

The archaeological watching brief was undertaken by Kevin Mounsey and Joanne Beaty. The report was written by Kevin Mounsey and the drawings were produced by David Jackson. The project was managed and the report edited by Matt Town, Project Manager for NPA Ltd.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In December 2010, North Pennines Archaeology were invited by Carlisle City Council to maintain an archaeological watching brief at the north-western end of Castle Street, Carlisle, Cumbria (NGR NY 39819 56064; Figure 1), during groundworks associated with the Carlisle Roman Gateway Public Realm Scheme. The city of Carlisle has a rich and varied historic heritage. Hadrian's Wall, a designated World Heritage Site and Scheduled Monument, is situated to the north of the city (approximately 0.3km north of Castle Street). The city centre is also home to Carlisle Castle, known to be approximately 900 years old, and Carlisle Cathedral and Precinct, which dates back to 1122. Castle Street lies within a Scheduled Ancient Monument (CU 547), situated to the east of the River Caldew and south of Carlisle Castle within the heart of the historic centre of Carlisle. The SAM comprises an area of the Roman and Medieval town of Carlisle, bounded by Annetwell Street, Abbey Street, Castle Street and Paternoster Row. As a result, Andrew Davison, Inspector of Ancient Monuments Team Leader (North), English Heritage requested that all intrusive groundworks be subject to a programme of archaeological observation and investigation. This is in line with government advice as set out in Planning Policy Statement 5 (Planning for the Historic Environment) 2010.
- 1.1.2 All groundworks associated with the development of the Carlisle Roman Gateway Public Realm Scheme had to be excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2008), and were consistent with the specification provided by NPA Ltd (2011) and generally accepted best practice.
- 1.1.3 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by North Pennines Archaeology Ltd in response to a request by Carlisle City Council for an archaeological watching brief of the study area. Following acceptance of the project design by Andrew Davison, Inspector of Ancient Monuments Team Leader (North), English Heritage, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 THE WATCHING BRIEF

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2008).

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
- to produce a photographic record of all contexts using colour digital and 35mm monochrome formats as applicable, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful of dating purposes;

- to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).

2.2.3 The refurbishment scheme took place at the north-western end of Castle Street, Carlisle. The majority of the work consisted of renewing and extending the pavement areas with natural red sandstone with granite detailing. This work was considered unlikely to impinge on any archaeological deposits and so was not included in the archaeological remit. However other works associated with this scheme, comprising a tree pit, three pits for orientation beacons and a service trench for telecommunications were all excavated to depths likely to intrude on any surviving archaeological remains. These were all subject to archaeological monitoring. Monitoring work was carried out over three non-consecutive days between 24th February and 30th March 2011. A summary of the findings of the watching brief is included within this report.

2.3 THE ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2007). The archive will be deposited within Tullie House Museum, with copies of the report sent to the County Historic Environment Record at Carlisle Cumbria, available upon request. The archive can be accessed under the unique project identifier NPA10, CRP-A, CP 1387/10.

2.3.2 North Pennines Archaeology, and Carlisle City Council Council, support the **Online Access to the Index of Archaeological Investigations (OASIS)** project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Castle Street lies within the city centre of Carlisle, its northern part opposite Carlisle Castle. The city of Carlisle was developed on raised land between the Rivers Caldew, Eden and Petteril. At its north-west end Castle Street joins Finkle Street running north-east and Annetwell Street running south-west (Figure 2). On the corner of Castle Street and Annetwell Street is the main entrance to Tullie House Museum, developed in the early 1990s. Adjacent to this is the main underpass entrance leading under Castle Way to the Castle Green. This was the site of the Carlisle Millennium Project excavations. Between 1998 and 2001 significant archaeological remains of Carlisle's first Roman fort were uncovered in this area.
- 3.1.2 The underlying geology of the area is Red Sandstone, overlain by glacial deposits of boulder clay (British Geological Survey 2001). The boulder clay has been deposited by ice and is derived from bedrock traversed by glacial movement and is heterogeneous (SSEW 1984). Two rivers run close to the study area, the River Eden and the River Caldew. The Eden is the principal river which passes through the modern city towards the Solway Firth and was an important watercourse throughout the historical development of Carlisle.

3.2 HISTORICAL CONTEXT

- 3.2.1 **Prehistoric:** there is extensive evidence for prehistoric activity within and around Carlisle, including the remains of prehistoric ploughing at Blackfriars Street and Lowther Street. Neolithic and Bronze Age pottery was found at Scotby Road, including Grooved Ware and Beaker pottery, and a collared urn and burnt mound were excavated at Garlands Hospital (Perriam 1992: 3). Two Bronze Age cemeteries and two Bronze Age cist burials were also discovered in the area (Gosling 1976: 171).
- 3.2.2 **Romano-British:** Roman occupation of Carlisle is first indicated by the presence of a turf and timber fort. This fort, dating to the early seventies AD, was possibly centred on the present Castle Green north of the evaluation area. This fort predates the later much richer Roman town of *Luguvalium*, and was post-dated by another fort across the Eden in the Stanwix area. At that time the Romans established a fort at the northern end of the present city centre, and this quickly expanded to become a substantial civilian settlement over 40 acres in area. The withdrawal by the Romans from

- Scotland in the AD 80's, and the building of Hadrian's Wall from AD 122, probably had a substantial impact on the settlement.
- 3.2.3 By c.AD 200 Carlisle, known as Luguvalium, seems to have been granted special status, and it continued to flourish, with a large number of houses, shops, administrative and other public buildings, until the end of the Roman occupation around AD 400.
- 3.2.4 The Roman roads which have been located through archaeological investigation may not form the total extent of the traffic system, as seen by the discovery of the street found at Tullie House which failed to fit into any grid system yet devised. This suggests the Roman civil town had a different alignment to the earlier fort. Evidence for the existence of a post 2nd century ditch may relate to urban defences of the Roman civil town. The uncovering of the Roman cemeteries outside the civil town boundaries indicates that Roman Carlisle was similar in size to its medieval counterpart (Ferguson, 1890: 101), and there has been some debate over the years as to whether the boundaries of the Roman city actually formed a precursor for medieval Carlisle.
- 3.2.5 Several discoveries of Roman date have been found close to the evaluation area. These include portions of sepulchral monuments and a large urn full of ashes (Ferguson 1893: 365-374), and a number of Roman coins have been discovered in the immediate vicinity (Caruana *et al* 1994). Other finds include mortaria fragments and wasters of late second century design.
- 3.2.6 **Medieval Period:** following the withdrawal of the Legions in the early part of the 5th century, Carlisle probably continued to be occupied and it housed an important monastic community from the 7th century, although one Anglo-Saxon Chronicle suggests that Carlisle remained deserted for 200 years after being attacked by the 'Pagan Danes' (Garmonsway 1986). Hutchinson (1797) says that "*several persons speaking of St. Cuthberts life, tell us he founded, A.D 686, a convent of monks, a school and an abbey of nuns, but from Bede's Life of that faint chap, it appears the nunnery here, to which Queen Emenburga retired, was existing before St. Cuthbert's visiting the Castle*".
- 3.2.7 The arrival of the Normans in 1092 heralded a period of major change within the Carlisle area. Cumbria was added as a province to the English Kingdom by William II, the second son of William the Conqueror, after forcing King Malcolm III of Scotland to pay homage to him in 1091. In 1093 William began construction of Carlisle Castle in timber and this stood until 1122 when Henry I (William's younger brother), promoted a major period of rebuilding and the foundation of an Augustinian priory in 1133 (McCarthy 1990). The thirteenth century saw the foundation of two monastic establishments by the Dominicans (Black Friars) and Franciscans. The

Blackfriars monastery was located within the city walls in the west of the city (Summerson, 1993, 103).

- 3.2.8 During the 13th century Carlisle saw an extended period of peace after the Scottish siege of 1216, as the city benefited from increased trade with Scotland (McCarthy 1990). The ever-present threat of war however, also had a negative effect on the city. Developing suburbs beyond the city walls were abandoned during times of war, due to defence strategies or destruction by the raiding Scots. The city of the period suffered from a series of damaging fires and outbreaks of plague, and there are reports of the city walls being in need of constant repair, often being subsidised by the citizens themselves (Summerson 1993).
- 3.2.9 Towards the end of the 15th century the population of Carlisle was growing and the defences were repaired and strengthened. The bishopric and associated clergy and friars also aided the economic strength of the city at this time (McCord & Thompson 1998). Accounts of St Cuthbert's church, in the city, begun in 1603, summarise the condition of the city at that time. They state *'Carlisle then fell, from being one of the most important garrison towns in the kingdom, to a mere country town without commerce or manufacturers'* (Ferguson 1883). During the Civil War Carlisle was held by the Royalists before being recaptured by Parliamentary forces in 1645 (McCarthy *et al*, 1990).
- 3.2.10 **Post-Medieval – Modern:** by the mid-16th century, the condition of the city walls was such that the decision was taken by Henry VIII to extensively remodel Carlisle castle at the northern end of the city, and to build a new fortress, the citadel, at the southern end. This new double fortress design was intended to make it untenable for any enemy able to breach the crumbling city walls (McCarthy 1980: 171). In November 1745 the city surrendered to the Jacobite Prince Charles, however the city was retaken by the Duke of Cumberland in December 1745. This was the last act of violence in the city's history (Hutchinson 1797). The Church of St Cuthberts had become so ruinous by the 1700's that it was pulled down and rebuilt in 1778 (Hutchinson, 1797).
- 3.2.11 At the start of the 18th century Hutchinson (1797) says *"Carlisle, at the beginning of the present century, exhibited no marks of modern convenience and elegance. The buildings, mostly of wood, clay and laths, bespoke the poverty and bad taste of the inhabitants"* and that the city was small and not very populated. This changed after the 1745 rebellion when a company of Hamburg merchants decided Carlisle was an ideal location for Cotton mills. The milling industry brought change to the city, bringing people from all over the country to work. Textiles and biscuits led to the development of industrial areas such as English Damside and Caldewgate (Whellan, 1860).

3.2.12 The north side of Annetwell Street was demolished in the 1970's to allow for the construction of Castle Way. The south side of Annetwell Street has been largely redeveloped in recent years, including the construction of the BBC Radio Cumbria building immediately south-east of the watching brief area. A vast amount of evidence was uncovered for the Roman fort during the redevelopment of the south side of Annetwell Street, including the south gateway and several phases of rebuilding (see Paragraph 3.3.2 below).

3.3 PREVIOUS WORK

3.3.1 There have been a number of archaeological investigations within the area defined as the City of Carlisle Hazard Area (SMR No. 3560). These include major excavations at The Lanes (McCarthy, 2000, McCarthy, Padley and Henig, 1982) and Botchergate (Zant, 1997, Giecco, 2001, Lancaster University Archaeology Unit, 2000).

3.3.2 Several archaeological investigations have also been conducted within the vicinity of the watching brief area in recent years. These excavations have amassed a detailed understanding of the sequence of Roman forts, which covered an area now occupied by the medieval castle, Castle Way and Annetwell Street. These excavations have revealed two phases of the Flavian fort, a second timber fort and two separate stone forts, as well as an associated gateway and roads. Further discoveries during these archaeological investigations included early medieval remains. Some of the more prolific excavations are listed below.

- Excavations carried out in the 1970's by Dorothy Charlesworth on Annetwell Street (Charlesworth 1978, 1980).
- Excavations undertaken by Carlisle Archaeology Unit near the Annetwell Street frontage between 1980 and 1984 (Caruana 1986).
- Excavations undertaken by Carlisle Archaeology Unit during the Tullie House extension in 1989 (Caruana 1989).
- Excavations carried out by Carlisle Archaeology Unit during the construction of the BBC Radio Cumbria building on Annetwell Street in 1990 (Caruana 1991).
- The millennium excavations on Castle Green, immediately north of the study area, conducted during 1998-2001 (Zant, 2004).

3.3.3 During June 2010, North Pennines Archaeology Ltd carried out an archaeological rapid desk based assessment, trial trench evaluation and watching brief along the south side of Annetwell Street and across the north-

west end of Castle Street (Westgarth and Jackson 2010). A medieval cobbled surface sealed by an organic deposit containing animal bone, leather and sherds of pottery dating from the late 13th century to early 14th century was recorded in Annetwell Street. Across the north-western end of Castle Street a trench for electric cables revealed a deposit containing brick fragments and residual Roman Pottery.

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief monitoring was undertaken over three non-consecutive days between 24th February and 30 March 2011. The monitoring work took place in the north-western area of Castle Street, Carlisle. Only those groundworks thought likely to disturb archaeological deposits were monitored. These included the excavation of a pit for tree planting, the excavation of three pits to locate 3.0m high orientation beacons and the excavation of a service trench for telecommunication cables (Figure 2). All excavation was carried out by a mechanical excavator.

4.2 THE TREE PIT

4.2.1 The pit for a tree was excavated immediately north-east of the subway steps (Figure 2). Measuring 3.40m in length and 3.00m in width it had a maximum depth of 1.00m. All deposits encountered were modern and probably associated with landscaping around the subway entrance and the Tullie House Rotunda building. Electric cable ducting was evident on the western side of the pit at the base. A brown/grey, modern, very mixed backfill including steel reinforcing rods (**110**) measuring 0.70m in depth was sealed by 0.20m of grey sub-base (**102**). This was covered by 0.05m of orange bedding mortar (**101**) which in turn had concrete slabs (**100**) laid on top of it. No significant archaeological deposits were encountered in this pit.



Plate 1: Tree Planting Pit (facing south-west)

4.3 TELECOMMUNICATIONS TRENCH

- 4.3.1 A curving trench was excavated for telecommunication conduits on the northern side of the tree pit, in the southern pavement of Castle Street (Figure 2). The trench measured c.15.60m in length, had a maximum depth of 0.70m and an average width of 0.45m. It ran from a new BT box located on the western end of the buildings on the south side of Castle Street, in a curving arc, into the road surface of Annetwell Street where a new junction box was to be set in the ground.
- 4.3.2 At the eastern end of the trench, adjacent the new BT box, 0.50m of brown, gravelly/sand backfill (103) was excavated into. This was sealed by 0.10m of grey sub-base (102) which in turn was covered by 0.05m of orange bedding mortar (101) on which was laid concrete paving slabs measuring 0.05m thick (100). This deposit ran for a distance of 1.50m until a red brick and mortar foundation wall [117], (104), measuring 0.40m thick was encountered (Plate 2).



Plate 2: Redbrick and Mortar Wall [117], (104) (facing west)

It was excavated out to a depth of 0.40m and was sealed by the grey sub-base (102). The wall (104) was the front of a building, probably 19th century, that once continued westward on the south side of Castle Street.

4.3.3 North of the redbrick wall (104) for a distance of 2.40m a surviving medieval deposit was encountered (Plate 3). Comprising of a black clay/silt (105) it measured 0.40m in depth and contained fragments of medieval pottery, iron slag and animal bone. The top of this deposit was only 0.15m below the current ground surface being sealed by 0.05m of grey sub-base (102), overlain by 0.05m of orange bedding mortar (101) on which were laid concrete paving slabs (100) 0.05m thick. Two electric ducts crossed the trench in this sector.



Plate 3: Dark Medieval Deposit (105) (right foreground) (facing west)

4.3.4 West of the medieval deposit (105) was an area of pink sub-base backfill (107). This measured 0.80m in length and was excavated to a depth of 0.30m. Light grey sub-base (106) measuring 0.10m in depth sealed this. Above this was 0.05m of orange bedding mortar (101) and 0.05m of concrete paving slabs (100). Immediately west of context (107) two more electric cable ducts crossed the trench.

4.3.5 West of the second set of cable ducts crossing the trench the dark medieval clay/silt (105) was again encountered for a distance of 1.20m followed by another area of pink sub-base backfill (107) measuring 1.10m in length. It is probable that the pink sub-base (107) represents the backfill of service runs cutting through the medieval deposit (105) but the trench was not excavated deep enough (0.55m depth) to clarify this.

4.3.6 At a distance of c.8.10m west of the new BT cabinet the trench cut through a very mixed deposit of brown silty gravel (108) (Plate 4). It measured 0.80m in length and was excavated to a depth of 0.15m. From it were retrieved several pieces of iron slag and one small piece of Roman pottery. Due to the

very disturbed nature of this deposit a secure date for it could not be given. The silty gravel (108) was sealed by 0.20m of grey sub-base (102), over which lay 0.05m of orange bedding mortar (101) on which the concrete paving slabs (100) had been laid. To the west of this was a deposit of reinforced concrete (109) measuring c.0.40m in length and 0.32m in depth (Plate 4).



Plate 4: Brown Silty Gravel (108) east of Concrete (109) (facing south-west)

- 4.3.7 West of the reinforced concrete (109) was a deposit of modern grey, coarse gravel backfill measuring 1.00m in length and 0.40m in depth. This was sealed by 0.10m of grey sub-base (102) on which the paving slabs (100) were laid.
- 4.3.8 Just north of the old BT cabinet the trench was excavated through a deposit of modern foam concrete (113) measuring 2.30m in length and excavated to depth of 0.35m. This was sealed by 0.05m of grey sub-base (102) on which was laid the concrete paving slabs (100) measuring 0.05m in depth.
- 4.3.9 At a distance of 0.95m west of the old BT cabinet the trench entered the road surface of Annetwell Street where a pit measuring 2.10m in length and 1.40m in width was excavated to a depth of 0.50m. This was to be the site of a new connection box. On the western edge of this pit a large cast iron service pipe was uncovered along with existing telecommunication ducts running east west. The stratigraphy of the pit consisted of foam concrete (113), excavated to a depth of 0.40m and sealed by 0.10m of black asphalt road surface (112).



Plate 5: Connection Pit at the Western End of the Excavated Trench (facing south)

4.4 ORIENTATION BEACON PITS

- 4.4.1 A total of three pits were excavated for the insertion of 3.00m tall orientation beacons. These were all excavated on the south side of Castle Street on the pavement. For the purpose of this report the pits have been numbered 1 to 3 starting at the north-west end of Castle Street moving south-east to the Tullie House entrance (Figure 2). No significant archaeological features were observed in any of the pits.



Plate 6: Orientation Beacon Pit #1 (facing south-east)

- 4.4.2 Orientation beacon pit 1 was located at the north-west end of Castle Street (Figure 2). The pit measured 1.30m in length and 0.80m in width and was excavated to a depth of 1.00m (Plate 6). A heavily corroded cast iron pipe ran north-west to south-east along the southern edge of the pit. A mixed, dirty, sandy backfill (116) was excavated to a depth of 0.45m. This was sealed by 0.25m of reinforced concrete (115) over which lay an earlier Castle Street, black asphalt, road surface (114) measuring 0.08m in depth. Above this was 0.12m of grey sub-base (102) sealed by 0.05m of orange bedding mortar (101) on which was laid 0.05m of paving slabs (100).
- 4.4.3 Orientation beacon pit 2 was located on the north-west side of the Tullie House Museum entrance on Castle Street (Figure 2). The pit measured 2.30m long, 1.40m wide and was excavated to a depth of c.1.0m. A gas service pipe ran along the north-eastern edge of the pit. At the base of the pit was a dark brown/black deposit (118), possibly dating from the 19th century, which had been excavated to a depth of 0.46m. Sealing this deposit at the north-west end of the pit and protecting a modern blue alkathene water pipe was a deposit of orangey brown foam concrete (119) containing steel reinforcing rods. The majority of the dark deposit (118) was sealed with a layer of orange sub-base (122) measuring 0.30m in depth. This in turn was covered by a layer of grey concrete measuring (121) 0.24m in depth



Plate 7: Orientation Beacon Pit #2 (facing south-east)

- 4.4.4 Orientation beacon pit 3 was located on the south-east side of the Tullie House Museum entrance on Castle Street (Figure 2). The pit measured 1.80m in length, 1.50m in width and was excavated to a depth of 1.00m. At the base of the pit was a dark brown/black deposit (118) which was excavated to a

depth of 0.40m. Telecommunication, gas and water services were also observed at the base. The dark deposit (118) was sealed by a 0.30m deep layer of orange sub-base (122) which in turn was covered by 0.30m of orangey brown concrete (120) on the south-west side and 0.30m of grey concrete (121) on the north east side.



Plate 8: Orientation Beacon Pit #3 (facing north-west)

5 FINDS

5.1 FINDS ASSESSMENT

5.1.1 A total of 13 finds from 3 different contexts were recovered during the watching brief (see Table 1 below). The finds were cleaned and packaged according to standard guidelines, and recorded under the supervision of F. Giecco (NPA Ltd Technical Director).

5.2 ROMAN POTTERY

5.1.2 The Roman pottery retrieved consisted of 1 sherd of light orange Mancetter, Hartshill mortarium measuring 30mm in length and 25mm in width. This was recovered from the silty gravel deposit (108).

5.1.3 Mortaria were a type of kitchen bowl with heavy flanges, coarse sand or grit embedded in the internal surface and usually a pouring spout. Hemispherical or conical in shape they were used for mixing and pounding foods. Mancetter Hartshill mortaria were manufactured in Warwickshire from the 2nd to 4th centuries A.D. Extensive distribution of these occurred in the midlands and northern England.

5.3 MEDIEVAL POTTERY

5.3.1 A total of 6 sherds of medieval pottery were recovered during the watching brief. All 6 sherds were recovered from the dark clay/silt deposit (105).

5.3.2 A single sherd of Red Gritty ware measuring 77mm in length, 55mm in width and 7mm in thickness was recovered. Three parallel grooves ran around the external circumference of the sherd. Consisting of a coarse, hard red fabric, probably locally made, it is typical of Carlisle deposits dating from the late 12th to early 13th centuries and forming part of the widespread 'Northern Gritty Ware' tradition. The cooking pot or jar was the most common form in this ware, but flared-neck jugs, bowls, pitchers and other forms were also known (Giecco 2006, 45; McCarthy 2000, 139). The internal surface of the sherd recovered was partially covered with a yellow/green lead glaze. This suggests that it came from a cooking pot, the glaze applied internally to prevent liquids seeping out (Laing 2003, 88)

5.3.3 The watching brief produced 5 sherds of Grey ware with an external green glaze. These were ascribed a late 13th to 14th century date range. The sherds ranged in size from 42mm to 57mm and were all 5mm to 7mm in thickness. 2 of the sherds displayed full reduction characteristics, 2 were partially

reduced and 1 sherd showed no sign of any reduction at all. 2 pieces displayed external raised bands running around the circumference and 1 piece showed partial rim survival.

- 5.3.4 Reduction refers to the lack of oxygen during the pottery firing process resulting in dark brown, grey or black pots (*ibid.* 128). Partial reduction occurs when the central cortex of the pot displays a dark colour but the internal side is fully oxidized to a cream, buff or reddish-brown (McCarthy 2000, 140). Thus a sandwich effect is created with the external green glaze and internal, light coloured, fully oxidized surface on either side of the dark reduced fabric.
- 5.3.5 Reduced and partially reduced Grey ware was perhaps the most characteristic fabric in northern England during the medieval period. Consisting of a gritty fabric, often fairly hard, it had a dull olive glaze on the exterior. This was achieved by using a yellow lead glaze, which when fired turned green. The fabric was mainly used for storage jars and cisterns with bungholes and multiple handles (Laing 2003, 88).
- 5.3.6 During the late 13th to early 14th century Partially Reduced Grey ware was slowly succeeded by Late Medieval Reduced Grey ware. By the 15th century it was the dominant type. It forms part of a widespread northern 'Reduced Greenware' tradition which had a *floruit* in the 15th and 16th centuries (McCarthy 2000, 140).

5.4 POST-MEDIEVAL POTTERY

- 5.4.1 Only 1 piece of post-medieval pottery was retrieved during the watching brief. This was recovered from a mixed sandy backfill deposit (116). The sherd was lead glazed red earthenware with an internal yellow slip and measured 67mm in length and 38mm in width.

5.5 GLASS

- 5.5.1 A total of 1 sherd of sheet glass was recovered from within context (105). The fragment measured 21mm in length and 20mm in width and was ascribed a post-medieval date.

5.6 IRON SLAG

- 5.6.1 During the watching brief 4 pieces of iron slag were recovered. Orange/brown in colour the pieces ranged from 116mm to 40mm in size. Of the 4 pieces 1 came from the dark clay/silt deposit (105) and 3 from the silty gravel deposit (108). Strongly associated with the medieval pottery

recovered in context (105) the slag was ascribed a medieval date and is probably the result of medieval iron working processes.

Context	Material	Quantity	Weight (kg)	Period
105	Pottery	6	0.135	Medieval
105	Slag	1	0.909	Medieval
105	Window Glass	1	0.001	Post-Medieval
108	Pottery	1	0.006	Roman
108	Slag	3	0.260	Medieval
116	Pottery	1	0.025	Post-Medieval

Table 1: Finds Table of Artefacts Recovered from the Watching Brief.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring of groundworks at the north-west end of Castle Street established that much of the refurbishment area had been heavily disturbed by late 19th century and 20th century service runs and modern developmental deposits. No significant archaeological structures were noted. However in small pockets where no modern disturbance had taken place medieval deposits survived in places at a depth of less than 0.30m below the current ground level.

6.2 RECOMMENDATIONS

6.2.1 As this watching brief was conducted as a condition of groundworks associated with the Carlisle Roman Gateway Public Realm Scheme at the north-west end of Castle Street, no further archaeological work is deemed necessary. However, given the site's location in Roman and Medieval Carlisle, a Scheduled Ancient Monument (CU547) and the close proximity of Hadrian's Wall, a Scheduled Monument and World Heritage Site, it is recommended that any work conducted in the future be subject to a similar programme of archaeological investigation.

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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Concrete Paving Slabs
101	Deposit	Orange Mortar Bedding for Concrete Slabs
102	Deposit	Grey Sub-Base
103	Deposit	Brown Gravelly Sand Backfill
104	Structure	Redbrick Wall
105	Deposit	Dark Brown Medieval Clay/Silt Deposit
106	Deposit	Modern Light Grey Sub-Base Backfill
107	Deposit	Modern Pink Sub-Base Backfill
108	Deposit	Brown Silty Gravel Deposit
109	Structure	Modern Reinforced Concrete
110	Deposit	Modern Brown/Grey Mixed Backfill
111	Deposit	Modern Grey Course Gravel Backfill
112	Deposit	Black Asphalt Road Surface (Annetwell Street)
113	Deposit	Pink/Yellow Foam Concrete
114	Deposit	Original Black Asphalt Road Surface (Castle Street)
115	Deposit	Reinforced Concrete
116	Deposit	Orangey/Brown Mixed Dirty Backfill
117	Cut	For Redbrick Wall (104)
118	Deposit	Brown/Black 19 th Century Soil
119	Deposit	Foam Concrete
120	Deposit	Orange/brown Concrete
121	Deposit	Grey Concrete
122	Deposit	Orange Sub-Base

Table 2: List of Contexts issued during Watching Brief

APPENDIX 2: FIGURES



North Pennines Archaeology Ltd
2011

PROJECT: Castle Street, Carlisle, Cumbria
 SCALE: 1:25,000 at A4
 REPORT No: CP1387
 CLIENT: Carlisle City Council
 DRAWN BY: DJ
 DATE: April 2011
 FIGURE: 1

KEY:

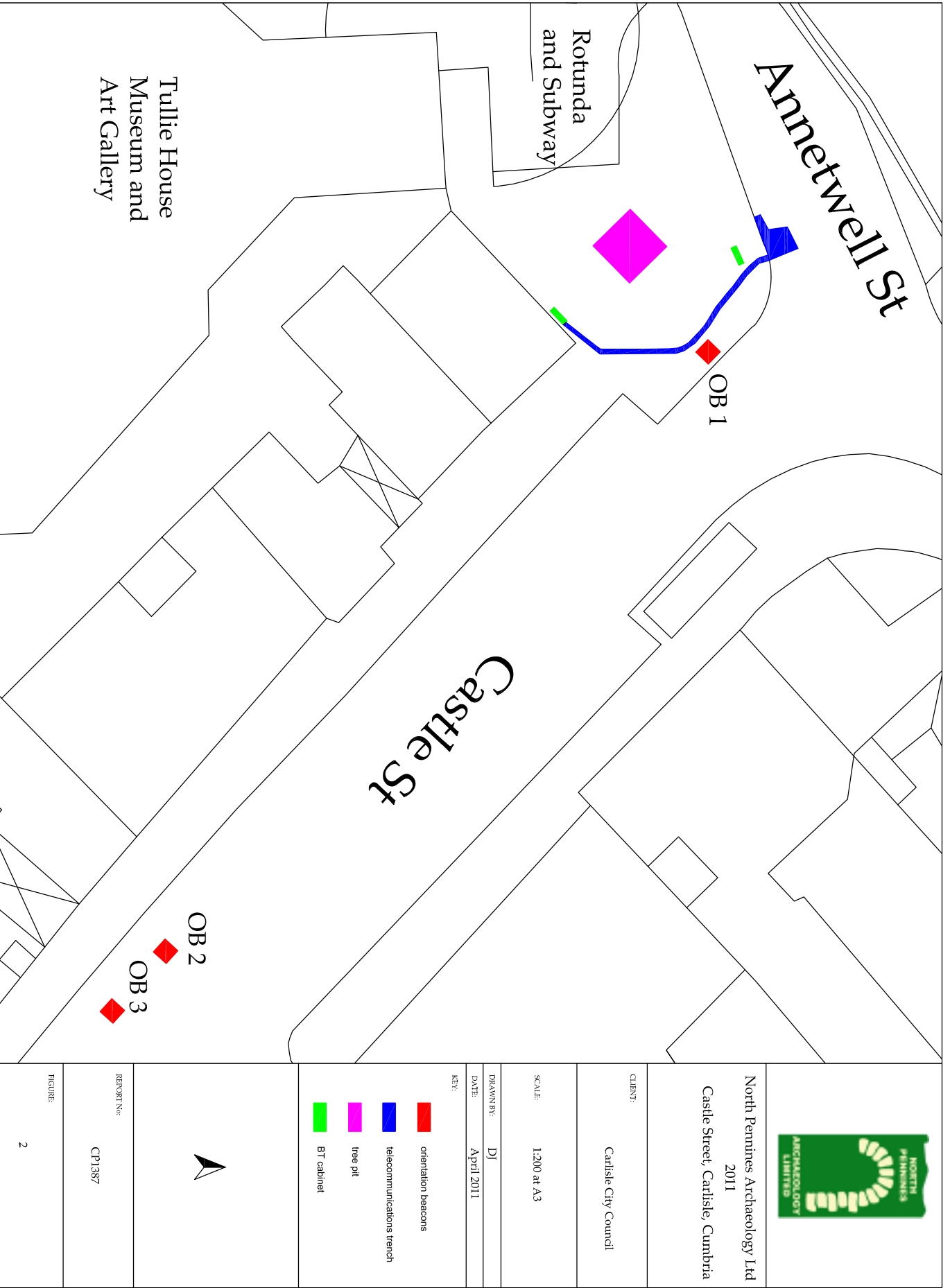


site location



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Figure 1: Site location



North Pennines Archaeology Ltd
2011
Castle Street, Carlisle, Cumbria

CLIENT:
Carlisle City Council

SCALE: 1:200 at A3

DRAWN BY: DJ
DATE: April 2011

- KEY:
- orientation beacons
 - telecommunications trench
 - ◆ tree pit
 - BT cabinet



REPORT No:
CP1387

FIGURE
2

Figure 2: Location of watching brief