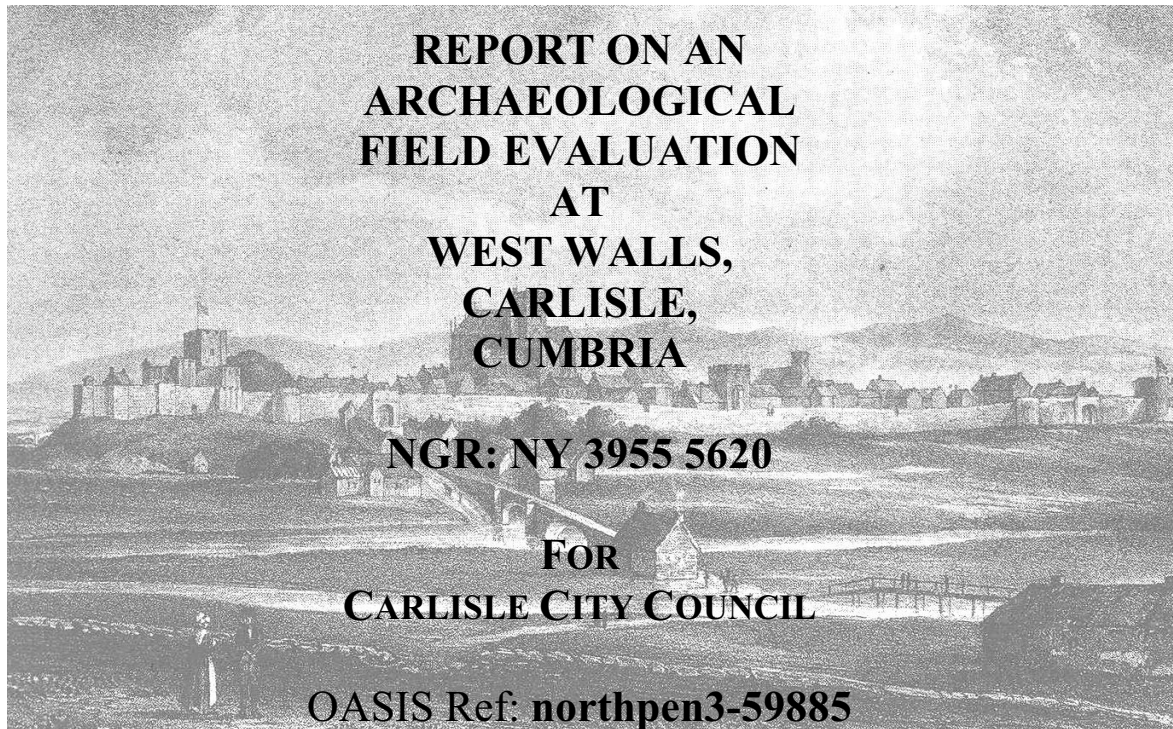


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# **NORTH PENNINES ARCHAEOLOGY LTD**

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**Client Reports No. CP/925/09**



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## EXECUTIVE SUMMARY

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In May 2009, North Pennines Archaeology Ltd were invited by Carlisle City Council to undertake an archaeological evaluation at West Walls, Carlisle, Cumbria (NGR NY 3955 5620). The aim of the evaluation was to determine the depth and condition of the foundations of the wall with the purpose of providing information to assist in a programme of consolidation and repair work. The walls are a Scheduled Ancient Monument (Cumbria 337), marking the western limit of the medieval city of Carlisle. Although the evaluation was conducted outside the designated listing area, a programme of archaeological investigation was deemed appropriate as the site is considered to have high archaeological potential associated with Roman, medieval and post-medieval settlement and land use.

The archaeological evaluation comprised the excavation of three trial trenches, located at strategic points along the base of a c.70m section of the wall's western elevation, as agreed with Chris Reid of Carlisle City Council. All three trenches were excavated to the level of the natural substrate, exposing the lowest courses of West Walls. Sections of a Victorian retaining garden wall had to be removed prior to excavation in order to facilitate full investigation and recording.

The evaluation revealed that the foundations of the section of West Walls under investigation were insubstantial, making this section at least, largely ineffectual as a defensive structure, and possibly as a retaining structure. The results of the evaluation suggest that this section of West Walls was constructed further west than the original medieval defences at a much later date. Although it is not known exactly when this realignment may have taken place, both contemporary maps and artefactual evidence suggests that it was some time after the mid-eighteenth century. If so, then sections of the original curtain wall may still survive to some extent, hidden by later rebuilding works. Unfortunately, West Walls is not exclusively homogenous and has been repaired, refaced and rebuilt on numerous occasions over its 900 year history, making the dating and interpretation of the entire section of West Walls largely impractical.

The archaeological evaluation also revealed that the foundations of the wall have been subject to excessive disturbance, both by human and root activity. The extent of the damage and the full detrimental impact this disturbance has had to the Walls is not known. However, the structural stability of West Walls falls outside the remit of this archaeological investigation, although it may be suggested that a full investigation into the structural integrity of the structure be carried out in the future.

The purpose of this archaeological evaluation was to establish the depth and condition of the foundations of West Walls within a specifically targeted area. However, given the homogenous nature of the structure, it would be unwise to assume that the findings of this investigation are representative of the entirety of the Walls. Therefore, further investigations are likely to be needed to better inform the repair of the wall. Due to the significant historical context of West Walls, and the potential to further understand certain aspects of this important structure, it is strongly recommended that any future invasive work within the vicinity of West Walls be subject to a programme of archaeological investigation.

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## ACKNOWLEDGEMENTS

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North Pennines Archaeology Ltd. would like to thank Chris Reid, building surveyor for Carlisle City Council for commissioning the project. NPA Ltd would also like to thank the staff of Carlisle City Council for their assistance during the work. Thanks are also due to Dennis Perriam for his input during the project.

David Jackson conducted the evaluation, assisted by Rachel Horn. Alan James kindly provided the metal detecting survey. David Jackson prepared the report and the figures were produced by Rachel Horn. The report was edited by Matthew Town, Project Manager for NPA Ltd, who also managed the project.

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## 1 INTRODUCTION

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### 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In May 2009, North Pennines Archaeology Limited were commissioned by Carlisle City Council to undertake a programme of archaeological work at West Walls, Carlisle, Cumbria (centred on NY 3955 5620) (Figure 1). This scheme of archaeological works was undertaken to establish the depth and condition of the wall foundations in order to inform the repair of the wall, and to provide a predictive model of surviving archaeological remains detailing zones of relevant importance against mitigation proposals. The wall is a Scheduled Ancient Monument (Cumbria 337), (SMR 5058) marking the western limit of the medieval city of Carlisle. The area to the east of the wall has been extensively landscaped and is in use as a municipal car park (Figure 2). The current evaluation lies outside the listed area.
- 1.1.2 The field evaluation consisted of three trial trenches located at strategic points along the base of a *c.*70m section of the wall as agreed with Chris Reid of Carlisle City Council. All three trial trenches were excavated by hand and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2008).
- 1.1.3 This report comprises the results of the archaeological evaluation and post-fieldwork analysis following the work at West Walls, including a statement of further archaeological potential and recommendations for future work within the area.

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## 2 METHODOLOGY

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### 2.1 PROJECT DESIGN

2.1.1 A project design was submitted to Carlisle City Council by North Pennines Archaeology Ltd at the request of Chris Reid, building surveyor for CCC, for an archaeological evaluation of the study area. The project design outlined a scheme of 'best practice' for the works, for all relevant authorities. Following acceptance of the project design, 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 ARCHAEOLOGICAL EVALUATION

2.2.1 The evaluation consisted of a formal programme of archaeological investigation associated with a scheme of improvement works proposed by Carlisle City Council for West Walls. The work included the systematic examination and accurate recording of all archaeological features, horizons and artefacts identified. All work was conducted according to the recommendations of the Institute for Archaeologists (2008).

2.2.2 In summary, the main objectives of the field evaluation were:

- to uncover the base of the west city wall (or a sufficient section for the purpose);
- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
- 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.
- to assess the likely scope and duration of any further evaluation that may be necessary to mitigate the effects of the proposed repair or development scheme;
- to provide a mitigation strategy for the proposed repair or development.

2.2.3 The trial trenches were excavated by hand and all features were investigated and recorded according to the North Pennines Archaeology Ltd standard procedure as set out in the Excavation Manual (Giecco 2003).

2.2.4 All finds encountered were retained, and were cleaned and packaged according to standard guidelines, and recorded under the supervision of F. Giecco (NPA Ltd Technical Director).

- 2.2.5 All deposits encountered were deemed unsuitable for environmental sampling, and therefore no samples were retained.
- 2.2.6 All three trenches were left open following excavation and recording at the request of the client.
- 2.2.7 The fieldwork programme was followed by an assessment of the data as set out in the *Management of Archaeological Projects* (2<sup>nd</sup> Edition, 1991).

### **2.3 ARCHIVE**

- 2.3.1 A full professional archive has been compiled in accordance with the project design, and in accordance with current UKIC (1990) and English Heritage guidelines (1991), and according to the recommendations in *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Brown 2007). The paper and digital archive will be deposited with the Tullie House Museum, Carlisle under the unique project identifier: **NPA 09 WWC-A**.
- 2.3.2 North Pennines Archaeology 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. Details of the results of this project will be made available by North Pennines Archaeology as a part of this national project under the unique project identifier: **northpen3-59885**.



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## 3 BACKGROUND

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### 3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 West Walls is situated on the western fringe of Carlisle city centre, marking the western boundary of the medieval city. The site lies within an urban context and is bound by both residential and ecclesiastical buildings to the east at a height of *c.*23m OD. The site is bound to the west by a landscaped municipal car park, which was once the Town Dyke Orchard, and by the Caledonian Railway further west (Figure 1).
- 3.1.2 The evaluation area is situated on a prominent bank at the base of the western elevation of West Walls, some *c.*5m below the ground level east of the wall. The immediate area is largely comprised of a modern tarmac path and adjacent Victorian retaining garden wall with extensive tree cover.
- 3.1.3 The underlying geology of the study 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 BACKGROUND

- 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 2<sup>nd</sup> 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 5<sup>th</sup> century, Carlisle probably continued to be occupied and it housed an important monastic community from the 7<sup>th</sup> century, although one Anglo-Saxon Chronicle suggests that Carlisle remained deserted for 200 years after being attacked by the 'Pagan Danes' (Garmonsway 1986).
- 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), ordered the erection of a stone castle and city walls (McCarthy 1990). Scottish kings continued to lay claim to many parts of Northern England throughout the 12<sup>th</sup> century and it was during this time that the walls were heightened by King David I of Scotland (Towill 1991).
- 3.2.8 During the 13<sup>th</sup> 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 15<sup>th</sup> 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).
- 3.2.10 **Post-Medieval – Modern:** by the mid-16<sup>th</sup> century, the condition of the city walls was such that the decision was taken 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 *et al* 1990: 171).

- 3.2.11 Contemporary reports of Carlisle's defences fair little better throughout the 18<sup>th</sup> century. In 1740 a section of West Walls opposite St. Cuthbert's was on the point of collapse (McCarthy *et al* 1990: 212), and in attempting to retake Carlisle from Bonnie Prince Charlie's men in 1745, many of the Duke of Cumberland's stray rounds from cannon fire hit the western city wall (Perriam 2008). A map of the same period produced by the Board of Ordnance to show defects in the walls, had a bulge between the Irish Gate and the Abbey, against which was written *'In the wall will speedy be a breach and must be taken down'* (*ibid*). Another account, from a letter sent by a certain Matilda Gilpin to her husband in 1746 during necessary repairs to West Walls, recalls that she had a much better view from her closet window in the deanery because *'the town wall is almost level with the ground'* (*ibid*).
- 3.2.12 By the end of the 18<sup>th</sup> century the medieval city walls of Carlisle were in disrepair (Perriam 1976: 184), and in 1803 it is reported that they were becoming a hindrance to the expanding city (Towill 1991: 104). In 1811 the Irish Gate and the English Gate were taken down to accommodate the increased traffic into the city and by 1815, the North and East Walls had been completely removed (Perriam 1976: 192). One of the reasons why West Walls largely survived this obliteration was pointed out by Robert Carlyle when he stated that they were saved because *'the River Caldew runs parallel to the western line of the wall and the rampart forms a natural termination, as there is a considerable descent from the inside of the wall to the verge of the river. Thus circumscribed both by the river and the inequality of the ground, it would be impossible to try to extend the City in this quarter'* (*ibid*: 194). However, sections of West Walls did still succumb to development. Part of the wall near the former Irish Gate was demolished in 1823 to make way for a *'neat little house'*, a considerable length of the wall was removed when work began on the new County Gaol in 1824, and a further section of the wall was taken down in 1876 with the construction of Victoria Viaduct (*ibid*: 194). However, the threat to West Walls did not only come from demolition, but also from buildings being constructed against it, effectively hiding it from view.
- 3.2.13 The Central School was the first building to be constructed on the site of West Walls in 1813, and then the Police Station in 1840. It is possible that the Sallyport steps and Town Dyke Orchard are of the same date. This was followed shortly afterwards by the construction of the Fawcett Schools next the Police Station in 1850-1851, after which a string of warehouses were built covering the entire southern stretch of the wall between the Sallyport steps and the County Gaol (*op cit*: 195-196).
- 3.2.14 During the 1970's however, the construction of new roads and the demolition of buildings provided the opportunity to observe not only newly exposed sections of West Walls, but also the remains of the North Walls. It was at this time that the Sallyport Gate was revealed when the area was landscaped after West Walls car park was opened in 1973 (*op cit*: 196-198).
- 3.2.15 Within the last three decades, more of the impinging buildings have been demolished at West Walls, including the Fawcett School, and several essential programmes of rebuilding and repair work have also been undertaken. However, the interpretation and dating of Carlisle's defensive walls continues to be problematic. This problem is summarised in Bulmer's Directory of 1901 which states that *'so patched is the west curtain wall of Carlisle, by repeated repairs of every date, that no sound conclusion can be come to'* (Perriam 2008).

### **3.3 PREVIOUS ARCHAEOLOGICAL 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); Botchergate (Zant, 1997, Giocco, 2001, Lancaster University Archaeology Unit, 2000); and the millennium excavations on Castle Green conducted during 1998-2001 (Zant, 2004).
- 3.3.2 Several archaeological investigations have also been conducted within the vicinity of the study area in recent years. These include;
- an archaeological excavation conducted by Carlisle Archaeological Unit in 1979 on the site of the former County Gaol. The investigation revealed the remains of the city defences, including parts of the West Wall. The results of the excavation suggest that the remains of the wall may have dated to the 16<sup>th</sup> century (McCarthy 1980);
  - an archaeological watching brief conducted by North Pennines Archaeology Ltd in 2003 during excavations within the basement of Club XS, immediately south of the present evaluation. No evidence of West Walls was observed during the investigation, although a shallow Roman ditch was noted (Crompton & Giocco 2004);
  - an archaeological assessment and evaluation carried out by Durham University Archaeology Unit in 2003 at the Town Dyke Orchard, immediately north of the study area. The excavation discovered the remnants of the Corporation Dam along with the edge of a large engine shed associated with the Caledonian Railway (Platel 2003).

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## 4 EVALUATION RESULTS

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### 4.1 INTRODUCTION

- 4.1.1 The archaeological evaluation took place between the 5<sup>th</sup> May 2009 and the 8<sup>th</sup> May 2009, and comprised the excavation of three trial trenches in order to determine the depth and condition of West Walls. The trenches were located at strategic points along the base of a c.70m section of the walls western elevation and were excavated to the level of the natural substrate, exposing the lowest courses of West Walls.
- 4.1.2 All three trenches were located within a Victorian walled garden. Sections of the retaining garden wall had to be removed prior to excavation in order to facilitate full investigation and recording.
- 4.1.3 The results of the evaluation are summarised below.

### 4.2 RESULTS

- 4.2.1 **Trench 1:** Trench 1 was located c.9m southeast of the north-western access steps, in order to investigate an area of deviation in both the direction and appearance of the wall (Plate 4, Figure 2). The trench was aligned northwest to southeast and measured c.1.62m in length and c.0.72m in width (Figure 8). Trench 1 was excavated to a depth of c.1.6m exposing c.0.2m of natural mid-brown/orange clay (**101**) directly below the lower foundation courses of West Walls (**106**) at a height of c.1.8m OD. The trench revealed six additional courses of the wall which measured c.1.6m in depth. The foundations (**106**) were comprised of roughly rectangular sandstone blocks of red St. Bees type, and were offset from the main elevation of the wall (Plates 2 & 3). The wall foundations (**106**) had been covered by a c.0.57m deposit of rubble backfill (**102**) and c.0.2m of dark brown silty clay garden soil (**100**). The rubble (**102**) and garden soil (**100**) were retained by, and probably contemporary with, a c.0.72m high Victorian garden wall (**105**) which was comprised of sandstone, whinstone and granite (Plate 1, Figure 8). The Victorian wall (**105**) ran parallel with a c.70m section of West Walls.
- 4.2.2 Trench 1 also revealed the presence of excessive tree root disturbance. This disturbance was especially prevalent within the wall foundations (**106**), much of which had been dislodged or damaged. Most of the lime mortar had also been replaced by garden soil (Plate 3). The western face of the lower two courses of the foundations (**106**) had also been disturbed by an early 20<sup>th</sup> century service pipe. The service pipe had been laid on a c.0.2m firm clay bed (**107**), and was directly below a c.0.17m deposit of modern hardcore (**104**) and c.0.07m of tarmac surface (**103**).
- 4.2.3 **Trench 2:** Trench 2 was located c.49m southeast of Trench 1, in order to investigate the foundations below a clean break in the western elevation of the wall (Plate 5, Figure 2). The trench was aligned northwest to southeast and measured c.1.8m in length and c.1.2m in width. Trench 2 was excavated to a depth of c.1.23m exposing the natural mid-brown/orange clay (**101**) below the wall foundations (**106**). Interestingly the natural ground (**101**) had been cut into at this point to a depth of c.0.5m, reducing the wall foundations from four courses to just two courses to the southeast of the cut [**112**] (Plate 7, Figure 9). Furthermore, this reduction in the level of the natural ground appeared to correspond with the break in the western elevation of West Walls.





Plate 1: *View northwest of Trench 1 location (pre-ex) and Victorian retaining wall (105)*



Plate 2: *View northeast of Trench 1 showing wall foundations (106)*



Plate 3: *Southwest facing elevation of wall foundations (106) Trench 1*





Plate 4: *Plan view of Trench 1 (note the varied wall structure in foreground)*

- 4.2.4 The foundation stones (**106**) within Trench 2 were comprised of roughly rectangular sandstone blocks of red St. Bees type, bonded with lime mortar and offset from the main elevation of the wall (Plates 6 & 7, Figure 9). The foundation stones (**106**) were below a *c.*0.3m deposit of rubble backfill (**102**) and *c.*0.25m of dark brown silty clay garden soil (**100**), which were retained by the Victorian garden wall (**105**). Trench 2 revealed minimal root disturbance.
- 4.2.5 **Trench 3:** due to the results of Trench 2, the decision was taken to excavate a third trench in order to further investigate the shallow depth of the wall foundations. Trench 3 was located *c.*8m southeast of Trench 2 and measured *c.*1.7m in length and *c.*1.2m in width (Figures 2 and 10). The trench was excavated to a depth of *c.*0.9m, exposing *c.*0.1m of the natural clay (**101**) at a height of *c.*18.5m OD. However, unlike Trench 1 and 2, Trench 3 had been excessively disturbed. The natural ground (**101**) was directly below a *c.*0.34m disturbance layer, which was comprised of garden soil intermixed with natural clay (**111**). Within the southeast half of the trench, the disturbance layer (**111**) was directly below a modern ceramic service pipe. The service pipe (**109**) was aligned northeast to southwest, and was sealed by a *c.*0.3m thick deposit of rubble and mortar (**108**). Within the northwest half of Trench 3, the disturbance layer (**111**) was sealed below two courses of wall foundations (Plate 8, Figure 10). The wall foundations (**110**) were the same as the foundations (**106**) observed in Trench 1 and 2. However, the foundations (**110**) in Trench 3 had probably been disturbed and re-laid when the service pipe (**109**) was installed. The deposits within Trench 3 were sealed by *c.*0.4m of garden soil (**100**).





Plate 5: *West elevation of West Walls showing break above Trench 2*



Plate 6: *View southeast of Trench 2*



Plate 7: *Southwest-facing section of Trench 2 showing foundations (106) cut into the natural ground (101)*





Plate 8: *Southwest-facing section of Trench 3 showing heavy disturbance*

### 4.3 DISCUSSION

- 4.3.1 Although all three trenches succeeded in locating the lowest courses of a section of West Walls, these foundations were very insubstantial, especially for such an important defensive structure. Of the three excavated trenches, Trench 1 revealed the most substantial foundations, although these only reached a depth of *c.*0.3m below the tarmac surface. It is probable that Trench 1 was excavated at the base of an older section of the wall, the west elevation at this point being largely comprised of excessively worn irregular stones, some possibly of re-used Roman type. The change in both the direction and composition of the wall south of this point probably signifies a much later phase of rebuilding or re-facing works. Furthermore, the exposed foundations are likely to be associated with the later phase of building works, due to their distance and alignment in relation to the earlier section of the wall.
- 4.3.2 It is probable that the exposed section of the wall within Trench 2 also relates to two separate phases of construction. The west face at this point has a clear construction break, and the exposed foundations appeared to reflect this, effectively reducing the foundations from four courses north of the break to just two courses to the south. It is unclear as to which is the predating section of the wall, although the fact that the foundations north of the construction break have been cut into the natural ground, which forms a base for the foundations to the south, suggests that it is the latter.

- 4.3.3 Very little information of any archaeological significance was gained from the results of Trench 3, the area having been heavily disturbed in recent years. Although two foundation courses were present, it is likely that these were secondary deposits, probably having been removed during the installation of a service pipe, before being re-laid in their original location.
- 4.3.4 All three trenches also revealed that the foundations of the wall have been excessively damaged through root activity, many of the stones being damaged or dislodged.
- 4.3.5 Based upon the results of the evaluation, it is highly unlikely that the foundations of the original medieval city walls were exposed, as any defensive wall built upon such insubstantial foundations would soon crumble under the barrage of enemy attack. It is far more probable that the section of the wall under investigation relates to a much later phase of rebuilding work, sometime after the final siege of Carlisle in 1745. Contemporary accounts of the time certainly suggest that a significant section of the wall within the evaluation area was almost level with the ground. It is possible that this entire section of the wall south of Trench 1 was built on a different alignment, effectively adding a second wall adjacent to the earlier medieval structure. This would correspond with several pre-19<sup>th</sup> century maps of Carlisle (Figures 3, 4 and 5) and a 1755 engraving of the wall adjacent to the deanery (Plate 9), which all show West Walls with a substantial crescent situated further east at this point. Although it is not known exactly when this later section of the wall may have been constructed, both documentary evidence and artefactual evidence (see Section 5 below) suggest that it was sometime after the mid-18<sup>th</sup> century. Unfortunately, it is not known with any certainty whether the original medieval wall within the evaluation area was situated further east, and if so, to what extent it may still survive. However, the insubstantial foundations of the section of West Walls under investigation suggests that it is not solely acting as a retaining wall for the higher ground to the east.



Plate 9: Engraving of 1755 of West Walls and Prior's Tower

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## 5 FINDS ASSESSMENT

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### 5.1 INTRODUCTION

- 5.1.1 A total of 81 finds from 4 different contexts were retrieved during the archaeological evaluation. All finds were cleaned and packaged according to standard guidelines, and recorded under the supervision of F. Giocco (NPA Ltd Technical Director).

### 5.2 ASSESSMENT

- 5.2.1 **Pottery:** a total of 29 sherds of pottery were recovered during the archaeological evaluation, including 8 sherds from context (100) in Trench 1, one sherd from context (102) in Trench 1, and 20 sherds from context (100) in Trench 2. The pottery assemblage included sherds of porcelain, lead glazed red earthenware and cream stoneware. All of the pottery sherds date from the 19<sup>th</sup> century or later.
- 5.2.2 **Glass:** a total of 22 glass fragments were recovered during the evaluation, including four shards from context (100), four shards from context (102) three shards from context (104), and four shards from context (107), all from Trench 1. All of the fragments from Trench 1 are of bottle glass dating between the 19<sup>th</sup> century and modern period. Trench 2 produced a single shard of post-medieval window glass from context (100) and six shards of 19<sup>th</sup>/20<sup>th</sup> century bottle glass from context (102).
- 5.2.3 **Metal:** a total of 14 metal objects were recovered during the evaluation (not including small finds, see 5.3 below), including two Cu alloy objects from context (100) in Trench 1, 8 Fe objects and two Cu alloy objects from context (100) in Trench 2, and two Pb objects from context (100) in Trench 3. The metal finds are largely undiagnostic, although given their context, it would not be unreasonable to allocate them a 19<sup>th</sup> century-modern date.
- 5.2.4 **Clay Pipe:** a total of three clay pipe fragments were recovered during the evaluation, which included stem fragments from context (100) in Trench 1 and 2, and a clay pipe bowl from context (107) in Trench 1. Clay pipes are notoriously difficult to date without any distinguishing features. However, given the context that the finds were recovered from, it would not be unreasonable to also assign them a 19<sup>th</sup> century provenance.
- 5.2.5 **Bone:** a total of 8 fragments of bone were recovered during the evaluation, including three fragments of bovid from context (100) in Trench 1 and five fragments from sheep (*Ovis aries*) or goat (*Capra aegagrus hircus*) from context (107) in Trench 1 and context (100) in Trench 3. A single oyster shell was also recovered from context (107) in Trench 1.

### 5.3 SMALL FINDS

- 5.3.1 **Small Find No.1:** SF#1 is a Cu alloy tobacco pipe tamper, recovered from context (100) in Trench 2. The tamper is elaborately decorated and is mounted by an ornate figurine. The figure appears to be a male archer in Tudor style costume. The figure's

extended right arm is holding a bow. The base of the tamper displays a cross-hatch groove. Pipe tampers were commonly used throughout the 17<sup>th</sup> – 20<sup>th</sup> centuries, and were produced from a large range of materials in many different forms. It is difficult to provide an accurate date for SF#1 without specialist advice as figurine pipe tampers appear to be popular from the 17<sup>th</sup> century onwards. However, the base of the tamper measures *c.*13mm in diameter, suggesting that the piece was produced sometime after the 17<sup>th</sup> century when clay pipe bowls tend to be larger. Given the context SF#1 was recovered from, and the associated artefacts, it is likely to have been deposited in the 19<sup>th</sup>/early 20<sup>th</sup> century. SF#1 measures *c.*68.66mm in height and 0.039kg in weight, and is in a good condition (Plate 10).

- 5.3.2 **Small Find No.2:** SF#2 is a Cu alloy Edward VII penny *circa.* 1907, recovered from context (100) in Trench 2. The coin measures *c.*31mm and 0.009kg in weight. The coin is in a reasonable condition.
- 5.3.3 **Small Find No.3:** SF#3 is a fragment of a Cu alloy decorative fleur-de-lis. The object was recovered from context (100) in Trench 2, and measures *c.*31.3mm in height and 0.008kg in weight. It is probable that SF#3 originally formed part of the decoration on the *in-situ* Victorian benches, as these also retain fragments of similar fleur-de-lis decoration.
- 5.3.4 **Small Find No.4:** SF#4 is a Cu alloy decorated button recovered from context (100) in Trench 3. The button is decorated with a coat of arms and the names 'SMITH & WRIGHT' can be seen on the back. This is the stamp of Smith & Wright Ltd of Birmingham who manufactured military and other buttons throughout the late 19<sup>th</sup>/20<sup>th</sup> centuries. SF#4 is probably a general service button which was in commission between 1902-1952. SF#4 measures *c.*17.3mm in diameter and 0.002kg in weight, and is in a reasonable condition (Plate 11).



Plate 10: SF#1 – Cu pipe tamper

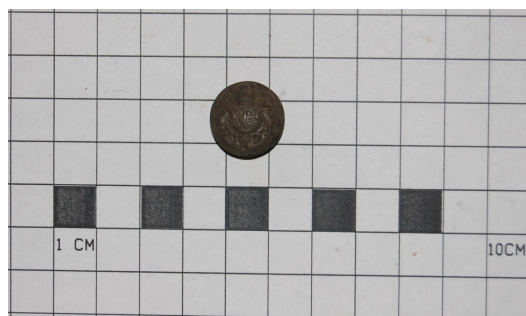


Plate 11: SF#4 – Cu decorated button

## 5.4 DISCUSSION

- 5.4.1 Most of the artefacts recovered from West Walls can confidently be given a 19<sup>th</sup>/20<sup>th</sup> century date. However, it is important to note that the deposits from which the finds were recovered had been extensively disturbed by both human and root activity, and many of the earlier 19<sup>th</sup> century finds were associated with modern rubbish. Therefore, the artefact assemblage is largely ineffectual for dating any specific archaeological deposit. However, the large number of 19<sup>th</sup> century finds within the assemblage is consistent with the construction of the Victorian retaining garden wall.
- 5.4.2 The absence of any artefacts pre-dating the 19<sup>th</sup> century suggests that any evidence of earlier activity may have been destroyed by later building work. This lack of earlier artefactual evidence provides strong support to the possibility that the evaluated section of West Walls is a relatively late addition to the structure.

Context No	Trench/Area No	SF No.	Material	Quantity	Weight (kg)	Period
100	1		Animal Bone	3	0.86	Post-Med
100	1		Glass	4	0.032	Post-Med
100	1		Clay Pipe	1	0.001	Post-Med
100	1		Pottery	8	0.034	Post-Med
102	1		Glass	4	0.035	Post-Med
102	1		Pottery	1	0.01	Post-Med
104	1		Glass	3	0.029	Post-Med
107	1		Animal Bone	3	0.048	Post-Med
107	1		Glass	4	0.114	Post-Med
107	1		Clay Pipe Bowl	1	0.007	Post-Med
107	1		Oyster Shell	1	0.034	Post-Med
100	2	1	Cu Alloy Tamper	1	0.039	Post-Med
100	2	2	1907 Penny	1	0.009	Post-Med
100	2	3	Fleur-de-lis	1	0.008	Post-Med
100	2		Cu Alloy Objects	2	0.002	Post-Med
100	2		Fe Objects	8	0.107	Post-Med
100	2		Cu Alloy Objects	2	0.007	Post-Med
100	2		Clay Pipe	1	0.002	Post-Med
100	2		Window Glass	1	0.001	Post-Med
100	2		Pottery	20	0.151	Post-Med
102	2		Glass	6	0.058	Post-Med
100	3	4	Decorated Button	1	0.002	Post-Med
100	3		Pb Objects	2	0.051	Post-Med
100	3		Animal Bone	2	0.006	Post-Med

Table 1: *Finds Index*

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## 6 CONCLUSIONS AND RECOMMENDATIONS

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### 6.1 CONCLUSIONS

- 6.1.1 The archaeological evaluation comprised the excavation of three trial trenches located at strategic points along the base of a c.70m section of West Walls in order to determine the depth and condition of the foundations of the wall with the purpose of providing information to assist in a programme of consolidation and repair work.
- 6.1.2 Although all three trenches succeeded in locating the lowest foundations of the wall, the findings suggest that these are too shallow to be associated with the original medieval city wall, and are more likely to relate to a much later phase of rebuilding work. Furthermore, both documentary evidence and artefactual evidence suggest that this section of the wall was constructed sometime after the mid-18<sup>th</sup> century. Unfortunately, it is not known with any certainty whether the original medieval wall within the evaluation area was situated further east, and if so, to what extent it may still survive.
- 6.1.3 The archaeological evaluation also revealed that the foundations of the wall have been subject to excessive disturbance, both by human and root activity. However, the extent of the damage and the full detrimental impact this disturbance has had to the Walls is not known at this time, but further investigations into the structural stability of West Walls may be needed in the future.

### 6.2 RECOMMENDATIONS

- 6.2.1 The purpose of this archaeological evaluation was to establish the depth and condition of the foundations of West Walls within a specifically targeted area. However, given the homogenous nature of the structure, it would be unwise to assume that the findings of this investigation are representative of the entirety of the Walls. Therefore, further investigations are likely to be needed to better inform the repair of the wall.
- 6.2.2 Due to the significant historical context of West Walls, and the potential to further understand certain aspects of this important structure, it is strongly recommended that any future invasive work within the vicinity of West Walls be subject to a programme of archaeological investigation.



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## APPENDIX I: CONTEXT INDEX

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Context Number	Category	Trench	Above	Below	Interpretation
100	Deposit	All	102/105/ 106/108/110	/	Garden Soil
101	Geological	All	/	106/107/112	Natural Substrate
102	Deposit	All	106	100	Rubble Backfill
103	Deposit	All	104	/	Tarmac Surface
104	Deposit	All	101/107	103	Hardcore Packing
105	Structure	All	106	100	Retaining Garden Wall
106	Structure	All	101/112	100/102/ 105/107	West Walls
107	Deposit	1	101	104	Clay Bed for Ceramic Pipe
108	Deposit	3	109	100	Rubble Packing Deposit
109	Structure	3	111	108	Ceramic Service Pipe
110	Structure	3	111	100	Disturbed Lower Courses of West Walls
111	Deposit	3	101	109/110	Disturbance Layer
112	Cut	2	101	106	Foundation Cut

Table 2: *Context Index*

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## **APPENDIX II: FIGURES**

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