

WATER STREET, CARLISLE, CUMBRIA



ARCHAEOLOGICAL DESK-BASED ASSESSMENT CP10109 21/12/2011



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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 NP Archaeology Ltd on the preparation of reports.

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CONTENTS

SUMMARY.....	6
ACKNOWLEDGEMENTS.....	9
1 INTRODUCTION	10
2 METHODOLOGY	11
2.1 Project Design	11
2.2 Desk-Based Assessment	11
2.3 Site Visit.....	12
2.4 Reporting.....	12
3 SITE LOCATION AND GEOLOGY.....	13
4 DESK-BASED ASSESSMENT	14
4.1 Introduction	14
4.2 Historic Environment Record (HER).....	14
4.3 Cartographic Sources.....	18
4.4 Historical Context	22
5 SITE VISIT	40
5.1 Introduction	40
5.2 Site Visit.....	40
6 CONCLUSION.....	44
7 BIBLIOGRAPHY	47
APPENDIX 1: HER SITES AND LISTED BUILDINGS.....	50
APPENDIX 2: FIGURES	60

ILLUSTRATIONS

FIGURES (APPENDIX 2)

(FRONTISPICE: 1965 PHOTOGRAPH OF HOUSING ON WATER STREET)

FIGURE 1: SITE LOCATION

FIGURE 2: DETAILED SITE LOCATION

FIGURE 3: PLAN OF THE CITY OF CARLISLE AND PLACES ADJACENT, INCLUDED IN HUTCHINSON'S HISTORY OF THE COUNTY OF CUMBERLAND 1794-1797

FIGURE 4: ROPER'S PLAN OF CARLISLE 1805

FIGURE 5: JOHN WOOD'S PLAN OF THE CITY OF CARLISLE FROM ACTUAL SURVEY 1821

FIGURE 6: 'MAP OF BOTCHARDGATE TOWNSHIP IN THE PARISH OF ST CUTHBERT'S', CARLISLE 1848

FIGURE 7: BOARD OF HEALTH MAP, SURVEYED BY RICHARD ASQUITH, 1853

FIGURE 8: FIRST EDITION ORDNANCE SURVEY MAP 1865, 25" TO 1 MILE SCALE

FIGURE 9: FIRST EDITION ORDNANCE SURVEY MAP 1865, 10FT TO 1 MILE SCALE

FIGURE 10: PLAN OF CARLISLE CITADEL STATION DATED 1876

FIGURE 11: SECOND EDITION ORDNANCE SURVEY MAP 1899, 10FT TO 1 MILE SCALE

FIGURE 12: SECOND EDITION ORDNANCE SURVEY MAP 1901, 25" TO 1 MILE SCALE

FIGURE 13: THIRD EDITION ORDNANCE SURVEY MAP 1925, 25" TO 1 MILE SCALE

FIGURE 14: ORDNANCE SURVEY MAP REVISION OF 1938, 25" TO 1 MILE SCALE

FIGURE 15: ORDNANCE SURVEY MAP 1965, 1:1250 SCALE

FIGURE 16: ORDNANCE SURVEY MAP 1977, 1:1250 SCALE

PLATES

PLATE 1: 16TH CENTURY MAP OF THE CITY OF CARLISLE34

PLATE 2: SKETCH SHOWING THE POSITIONS OF 'WORKS' ERECTED DURING THE SIEGE OF CARLISLE 1644-65. THE RED CIRCLE SHOWING THE WORKS LOCATED IN THE AREA AROUND MODERN WATER STREET 35

PLATE 3: PART OF G SMITH'S PLAN OF CARLISLE SHOWING THE BATTERIES AND GARRISON POSITIONS DURING THE JACOBITE REBELLION IN 1745.....35

PLATE 4: GROUND PLAN OF HOUSES ON SOUTH GEORGE STREET36

PLATE 5: UNDATED VIEW (POSSIBLY 1930s) LOOKING EAST SHOWING THE LARGE COVERED ROOF OF THE RAILWAY STATION, WITH THE PROPERTIES ON WATER STREET TO THE RIGHT OF PHOTOGRAPH (ARROWED).....36

PLATE 6: UNDATED VIEW (POSSIBLY 1930s) LOOKING WEST SHOWING THE PROPERTIES OF THE PROPOSED DEVELOPMENT AREA TO LEFT OF PHOTOGRAPH (SHOWN BY RED ARROW) 37

PLATE 7: HOUSES AT SOUTH END OF WATER STREET KNOWN AS 'LOUGH DERG' AND 'VALE OF AVOGA' 37	
PLATE 8: PHOTOGRAPH TAKEN 1965 OF THE SOUTH END OF WATER STREET, POSSIBLY PRIOR TO DEMOLITION	38
PLATE 9: PROPERTIES ON WATER STREET AS SEEN IN 1974.....	38
PLATE 10: NO. 25 WATER STREET AS SEEN IN 1974	39
PLATE 11: TWO HOUSES AT SOUTH END OF WATER STREET DURING DEMOLITION IN 1978.....	39
PLATE 11: VIEW LOOKING NORTH-EAST FROM THE JUNCTION OF WATER STREET AND JAMES STREET	41
PLATE 12: VIEW LOOKING SOUTH SHOWING THE PROPOSED DEVELOPMENT AREA FROM THE JUNCTION OF WATER STREET WITH ROBERT STREET	41
PLATE 13: VIEW LOOKING SOUTH DOWN SOUTH JOHN STREET SHOWING THE NORTH END OF THE PROPOSED DEVELOPMENT AREA TO RIGHT OF PHOTOGRAPH AND SURVIVING PROPERTIES ON SOUTH JOHN STREET TO THE LEFT	42
PLATE 14: PROPERTIES ON SOUTH JOHN STREET STILL EXTANT	42
PLATE 15: ONE OF THE SURVIVING PROPERTIES ON SOUTH JOHN STREET WITH A SIGN FOR 'HARDYS COURT' OVER ONE OF THE DOORWAYS	43
PLATE 16: VIEW LOOKING NORTH SHOWING THE PROPERTIES ON SOUTH JOHN STREET, THE MASONRY BUILDING MAY HAVE BEEN THE MISSION HALL	43

SUMMARY

NP Archaeology Ltd were commissioned by Day Cummins Ltd, on behalf of Carlisle City Council, to undertake an archaeological desk-based assessment of an area of land on the south side of Water Street, Carlisle, Cumbria (NGR NY 4024 5529), in response to a planning application for the construction of a proposed female and family accommodation centre (Planning Application No. 1/11/0922).

Historic maps show that Water Street has been in existence since at least the 18th century and numerous industries were established in this area of Carlisle during the 19th century. As a result of this historic background, Cumbria County Council Historic Environment Service had requested that a desk-based assessment was to be undertaken of the site and immediate surroundings in order to provide further information on the archaeology of the site and to determine, as fully as possible from the available evidence, the nature, survival, extent, quality and importance of any archaeological remains within the proposed development area.

The desk-based assessment involved the consultation of the Cumbria Historic Environment Record (HER), a database of known sites of historical or archaeological interest, within a 250m radius of the proposed development area on Water Street. The HER also includes information on Listed Buildings, Conservation Areas, Scheduled Ancient Monuments, as well as non-designated sites, and details of previous schemes of archaeological work which may have taken place within the area. The local studies section of Carlisle Library, and Carlisle Archives Centre, were also consulted primarily for information from historical mapping which show the development of the site during the 19th and 20th centuries. Unpublished and published material was also assessed for any information on the buildings which are known to have occupied the site, as well as for a broader history of this area of Carlisle.

The desk-based assessment has revealed that whilst there is some evidence for prehistoric, Roman and early medieval activity in the city of Carlisle, excavations immediately to the north on the site of the former Metal Box Factory did not reveal any archaeological features earlier than the medieval period, and there are no recorded HER sites or any documentary evidence which suggests activity in the area from these periods. It is possible that the area to the west of modern Botchergate may have been flood plain, although the exact character and course of the River Caldew during these periods is unknown.

It has been suggested that the Corporation Dam or mill race may have originated in the medieval period, used to provide water to power the 'City Mills'. Recent archaeological work has revealed some evidence that this may have been the case, although what was revealed was essentially an 18th century water channel. There is certainly archaeological evidence for medieval activity at the north end of Botchergate,

although as with the Roman period, it is not known if this activity spread any further westwards beyond the plots which fronted onto that major thoroughfare.

Although not substantial, there is some evidence that two 'works' associated with the siege of Carlisle during the Civil War in 1644-45 were erected in close proximity to the site of modern Water Street, although the exact locations is unknown, and the form that these works took is also unclear.

By the second half of the 18th century industrial concerns began to operate to the west of the city walls, utilising the water of the River Caldew for textile manufacture. The proposed development area is shown as open fields in 1821, however by 1848 it appears to have been utilised for the construction of housing which continued to occupy the site until the 1970s. To the rear of the houses which fronted onto Water Street, as well as those on the adjacent South John Street, there were rear courts or yard which contained further housing, suggesting a densely populated industrial suburb.

It is clear from historical mapping and photographs that archaeological remains will survive below ground within the proposed development area in the form of foundations and services for the housing which occupied the site up until the 1970s. There has been no evidence revealed during the course of the desk-based assessment that any of the houses on the site were cellared, which would have had a detrimental effect on any earlier archaeological remains. It was noted during the evaluation on the former Metal Box site to the north that the water table was high, which may indicate that the provision of cellars would not have been practical. It is known that following the demolition of the housing within the proposed development area, the site was utilised as car parking and it is believed that there has been no further intrusive development on the site.

As far as the significance of the site is concerned, it has been noted that this area of Carlisle may not have been exploited to any great degree up until the 18th century due to its potential to have been part of the flood plain of the River Caldew. The city has, however, been the subject of several periods of attack during Border warfare, and the subject of sieges in particular that which lasted for nine months during the Civil War 1644-45, and in 1745. Carlisle was one of the most besieged towns during the Civil War, and the fact that the area on which Water Street is located was situated outside the city walls, may indicate that there may be evidence for 'works' or features relating to these important events in Carlisle's history.

The housing which occupied the proposed development area is likely to have been built for the labouring classes, common to most industrial towns; these included back-to-back and courtyard development. It has been noted in the North West Regional Framework that very little of this type of housing now survives, as from the end of the 19th century and through to the 1960s, the majority was swept away in so-called slum clearances. To challenge historical concepts of slums in the North West, it has been

noted that not only is the topographical analysis of the surviving fragments of pre-1840 working class urban development required, but also the excavation for former areas of slum clearances. The proposed development area contained workers housing which would fit into this area of required research, and further archaeological work would benefit from the fact that, unlike so many other areas of slum clearance, the site has not been redeveloped.

It is recommended that an archaeological evaluation be undertaken on the site of the proposed development in order to provide further information on the form and material culture of the occupants of the early 19th century housing, and to assess the evidence for any earlier archaeological remains on the site.

ACKNOWLEDGEMENTS

NP Archaeology Ltd would like to thank Philip Brooks of Day Cummins Ltd for commissioning the project, on behalf of their clients, Carlisle City Council. NP Archaeology Ltd would also like to thank Jeremy Parsons and Jo Mackintosh, Cumbria County Council Historic Environment Service; Stephen White, Carlisle Library, Denis Perriam, and staff at Carlisle Archives Service, for all their assistance.

The archaeological desk-based assessment was undertaken by Fiona Wooller, who also wrote the report. The project was managed by Matt Town, Project Manager for NP Archaeology Ltd, who also edited the report.

1 INTRODUCTION

- 1.1 NP Archaeology Ltd were commissioned by Day Cummins Ltd, on behalf of their clients, Carlisle City Council, to undertake an archaeological desk-based assessment of an area of land to the south side of Water Street, Carlisle, Cumbria (NY4024 5529), prior to the proposed construction of a female and family accommodation building on the site, which is presently used as a car sales yard (Planning Application No. 1/11/0922).
- 1.2 Historic maps show that Water Street has been in existence since at least the 18th century, and that numerous industries were established in this area during the 19th century. As a consequence of the historical nature of the area, Jeremy Parsons, Cumbria County Council Historic Environment Officer, has requested that a desk-based assessment be undertaken in order to provide further information on the location, extent, potential survival and significance of known archaeological remains on the site¹.
- 1.3 The desk-based assessment involved the collation of information derived from several sources as outlined below, in order to assess the potential for archaeological remains to survive on the site, and the significance of any such remains which may be affected by the proposed development.

¹ Parsons, J, 2011

2 METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 NP Archaeology Ltd produced a Project Design in advance of the commencement of the desk-based assessment setting out aims and methodology of the work², as required by the Brief issued by Cumbria County Council Historic Environment Service.³

2.2 DESK-BASED ASSESSMENT

- 2.2.1 The desk-based assessment involved two main phases, an assessment of historical documentation and sources which provide information on the history of the area of this part of Carlisle and the proposed development site on Water Street itself, and a site visit in order to identify any potential archaeological remains, and to assess the current ground conditions. The assessment of historical documentation involved the consultation of the following archives:

- *Cumbria Historic Environment Record*: the Historic Environment Record (HER) for Cumbria was consulted for information on sites of archaeological and/or historical interest within a 250m radius of the proposed development area. The HER contains information on Scheduled Ancient Monuments, Listed Buildings, Conservation Areas, and non-designated sites, as well as details of previous archaeological work within the locality. Information derived from the HER has been combined with historical documentation in order to provide a narrative of the main developments in the history of Carlisle, and on the proposed development site at Water Street itself.
- *Carlisle Library (local studies)*: the local studies section of Carlisle Library was consulted primarily to obtain information from historical mapping for the development of the site through the 19th and 20th centuries. Published and unpublished material was also consulted relevant to the Water Street area of Carlisle and its immediate environs. A search was also made of any historical photographs or engravings which may have shown the character of any of the buildings which formerly stood in or around the site.
- *Carlisle Archives Centre*: Carlisle Archives Centre was also consulted for any historical mapping which could not be obtained at Carlisle Library, and for any information on relevant historical building

² Town, M, 2011

³ Parsons, J, 2011

control plans, trade directories and sales particulars which may exist within their collections.

- *On-Line Sources:* on-line sources such as the National Monuments Record were also consulted in order to enhance the material derived from the HER, Carlisle Library and Carlisle Archives Service.

2.2.2 The desk-based assessment was undertaken in accordance with the Institute for Archaeologists *Standard and Guidance for Archaeological Desk-Based Assessment*⁴.

2.3 SITE VISIT

2.3.1 The site visit was undertaken in order to assess if it was possible to note any standing remains or archaeological features within the proposed development area, and to inform any future archaeological work of restrictions such as Tree Preservation Orders, Public Footpaths, and the locations of services where noted.

2.4 REPORTING

2.4.1 A copy of the report will be deposited with Cumbria County Council Historic Environment Service, where viewing will be made available upon request.

2.4.2 NP Archaeology Ltd and Cumbria County Council Historic Environment Service 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 NP Archaeology Ltd, as a part of this national project.

⁴ IfA 2008

3 SITE LOCATION AND GEOLOGY

- 3.1 The proposed development area on Water Street is located to the south side of the city centre, immediately to the south of the Citadel Railway Station (Figure 1). Water Street is situated at the south end of James Street, and can also be accessed from Crown Street to the east. Immediately to the north of the proposed development area is a modern retail park, to the north-east are small scale modern commercial premises, and to the east are the remains of housing on South John Street (Figure 2). The proposed development area is presently in use for car sales.
- 3.2 The city of Carlisle is situated in an area characterised by the Countryside Commission as the 'Solway Basin', which is a broad, lowland plain landscape fringed by the low, rugged, relatively remote coastline of the Solway Firth and the Irish Sea. The Solway Basin is underlain mainly by mudstones and sandstones of Permo-Triassic age ('New Red Sandstone'). The most important sandstone formation, the St Bees Sandstone, has been much quarried for use as building stone, especially south of Carlisle. Erosion of the comparatively weak Permo-Triassic and Jurassic rocks reduced much of the Solway Basin to an area of low relief prior to the onset of the last glaciations. During this period thick ice-sheets crossed the area from Scotland and the Lake District. These carried with them vast quantities of rock debris which was deposited as boulder clay (till).⁵

⁵ Countryside Commission 1998, Pages 19 and 20

4 DESK-BASED ASSESSMENT

4.1 INTRODUCTION

- 4.1.1 The desk-based assessment involved the consultation of the Cumbria Historic Environment Record (HER), a database of known sites of historical or archaeological interest which is maintained by Cumbria County Council Historic Environment Service. As well as containing information on known archaeological sites in Cumbria (excluding the Lake District National Park), the HER also contains details of any Listed Buildings, Conservation Areas, Scheduled Ancient Monuments, and other designated sites, as well as information on previous schemes of archaeological work.
- 4.1.2 Carlisle Archives Centre and the local studies section of Carlisle Library were also visited in order to obtain historical mapping which show the development of the site on Water Street and the surrounding area. Some on-line sources were also utilised, although these were only consulted in addition to the two main sources, and not instead of.
- 4.1.3 The results of the desk-based assessment are presented below as a summary of the historical development of the city of Carlisle, and on the site of the proposed works at Water Street, based on historical and archaeological information derived from these sources.

4.2 HISTORIC ENVIRONMENT RECORD (HER)

- 4.2.1 *HER Sites:* there are a total of 35 sites which are recorded in the County Historic Environment Record database, within a 250m radius of the proposed development area. A full list of these entries is provided in Appendix 1. What is clear from these entries is that the character of the area in and around Water Street, in the late 18th and throughout the 19th and early 20th centuries, was largely industrial, with many of the sites relating to textile manufacture, breweries, a ropery, iron foundry, saw mill, and features associated with the railway network in the city. Of particular interest is the identification of three sites located within a 250m radius of Water Street which relate to the medieval period; Corporation Mill (HER 41032) which is believed to have been in existence in the 15th century, but the site was obliterated by the extension of the Citadel Station; Ireby's Mill, where the first mill on the site was believed to have been constructed in 1347 (HER 41061), and the Corporation Dam, a mill leat which supplied the towns corn mills with water from the River Caldew. A section of this mill leat was excavated as part of an archaeological evaluation on the Carnaud Metal Box site in 1997, and it was suggested that the leat had medieval origins as 12th and 13th century pottery was recovered from the site (HER 41072).

- 4.2.2 The presence of these sites relating to the medieval period indicates that the south-western side of the city, outside the city walls, may have been used for industrial purposes, similar to what was happening in Caldewgate during this period, where evidence for metal working dating from the early 14th century to the 15th century has recently been revealed through archaeological work⁶.
- 4.2.3 At present there are no HER sites recorded within the proposed development area itself, however immediately to the south-east, on the end of South John Street, was the site of Hamilton's Clay Tobacco Pipe Manufactory, recorded on historical mapping in 1865 (HER 41098). It will be noted below that many of the streets in the area were residential in character throughout the 19th and into the 20th century, however the presence of this manufactory to the rear of residential properties indicates that small-scale industrial activity was occurring amongst the housing historically.
- 4.2.4 *Scheduled Ancient Monuments*: there are no Scheduled Ancient Monuments within a 250m radius of the proposed development area on Water Street.
- 4.2.5 *Listed Buildings*: there are a total of five Listed Buildings located within a 250m radius of the proposed development area. Full details of these are provided in Appendix 1.
- 4.2.6 *Conservation Areas*: the proposed development area is not located within a Conservation Area.
- 4.2.5 *Previous Archaeological Work*: a 250m radius search was also conducted of the HER for information on previous archaeological work which has been carried out within the area around Water Street. This information is useful in identifying the nature and survival of archaeological remains, and to what periods in history they relate:
- *Carnaud Metal Box Site, James Street, Carlisle* [the evaluation is presently not recorded in the HER, although the building survey is]: following a proposal to redevelop the Carnaud Metal Box site on James Street [the site of the present Matalan/Staples retail units and associated car parking], an archaeological desk-based assessment and evaluation was undertaken by Lancaster University Archaeological Unit (LUAU) in 1997/98. The evaluation was undertaken within the curtilage of the existing buildings, with the trenches being located to test at least a 3% sample of the area of interest, and particularly the predicted line of the Corporation Dam. Six trenches were excavated measuring 2m and 3m in width and between 11m and 23m in length, to a depth of c.1.20m with sondages dug by hand or machine to test

⁶ Giecco, F, 2011, Page 134

the deposits further. It was noted that additional excavation was constrained by safe working limits and the high level of the water table. In general all the trenches were characterised by alluvial deposits (silts and clays up to c.1m in depth) overlying gravels, typical of a river flood plain. The waterlogged conditions on site had preserved the wooden structural elements and organic deposits, together with good survival of paleoenvironmental remains. The trenching successfully located the former mill leat known as 'Corporation Dam' to the west side of the site (to the east of James Street). It was clear that more than one phase of managed water channel had existed on this alignment. One edge of the earlier channel comprised a double row of wooden stakes (associated with wattling and brushwood), forming a revetment. In conclusion, it was noted that the earlier water channel may have originated in the medieval period, although it was unclear whether this water course was completely artificial or an enhanced natural feature. The channel was certainly established by the 18th century, and documentary references to the lack of maintenance of a stream supplying power to a mill outside the city walls in the 14th and 15th centuries may add weight to the early use of this same channel⁷.

- *Carnaud Metal Box Site, James Street, Carlisle*: LUAU also undertook a building survey of the five principal elements of the Metal Box development site in 1998. The survey revealed that apart from the lower section of the original east wall and the square-sectioned chimney, very little survived of the early 19th century mill which occupied the site, and is shown on historical mapping in 1811. The original power source for the mill was not established, although it was noted to have likely to have been a steam-powered system from the outset. During the first half of the 19th century the power system was modified, and a two-phase engine house was added on the east side of the mill. During the same period, a biscuit mill was constructed on the site. In 1871 a substantial change took place with the construction of a new, enlarged mill replaced the early 19th century structure. Following the sale of the site to Hudson Scott and Sons Limited in 1897, expansion and diversification occurred reflected in the subsequent construction of a large single-storey factory⁸.
- *40-78 Botchergate, Carlisle*: in 2000 Carlisle Archaeology Limited undertook an excavation to the rear of 40-78 Botchergate, between

⁷ Drury, D, 1998

⁸ Burke, T and Cotton, J, 2001

Botchergate and Collier Lane, prior to redevelopment of the site. With the exception of a small posthole sealed beneath a buried turf line, no direct evidence for pre-Roman occupation was found on the site. The presence, however, of a stone blade and a few flint flakes as residual material in Roman contexts may have hinted at the possibility of Neolithic/Bronze Age activity in the vicinity. The most remarkable result of the excavation was the discovery of a Roman earthwork, a linear bank constructed of clay and redeposited sub-soil aligned NW-SE, roughly parallel to Collier Lane. It was suggested that this earthwork may have supported some form of timber feature or superstructure, the evidence for which survived as two parallel rows of large post holes either side. The original function of this earthwork is unclear: possible interpretations have included part of the defences of a previously unknown military site; the remains of a large civic building; a flood defence, or even the support for a timber aqueduct. Finds associated with this feature were scarce, although several sherds of Black Burnished Ware Type 1 (BB1) pottery may have indicated a construction date within the Hadrianic period (c.AD125+). Following its construction the area was seemingly used as a rubbish tip over the 2nd, 3rd and 4th centuries AD. Two burials were also revealed towards the east side of the site closer to Botchergate, dating to the Roman period⁹.

- *84-88 Botchergate, Carlisle*: an archaeological desk-based assessment undertaken by Carlisle Archaeology Limited in 2001, in advance of a proposed redevelopment, concluded that there was a very strong possibility that archaeological remains of Roman date would be present on the site, and that features associated with the medieval period would also be anticipated.
- *Desk-Based Assessment on land bounded by Former Railway Line at Bousteads Grassing, Rome Street, Carlisle*: an archaeological desk-based assessment was undertaken by Archaeological and Educational Services in 2008 prior in advance of a proposed residential development located to the south side of Currock Street, and to the east of Rome Street. The assessment revealed that the site had been occupied by a ropery and timber yard in the late 19th century, and that the site was bounded by various railway lines, the construction of which was noted to have had a significant impact on any potential archaeological remains. Information derived from the drilling of boreholes on the site, bearing in mind that the site was utilised heavily by the railways, noted the following sequence of ground:

⁹ HER Report Ref: 1/CAL/00/BOT

topsoil = c.0.10m to c.0.55m below ground level; made ground = up to 0.70m to 2.20m below ground level; relic topsoil = from c.0.70m to 1.30m below ground level; and drift geology (alluvial sand, gravel and clay) = from c.0.80m to c.2.20m up to c.1.90m to c.5.00m¹⁰.

- *Caldew and Carlisle City Flood Alleviation Scheme*: a desk-based assessment undertaken by The Archaeological Practice in 2005/2006 found that potentially significant archaeological remains may survive at various locations along the length of the River Caldew and in areas proposed for groundworks associated with the flood defences. In the area to the east of the River Caldew, it was noted within this assessment that the Corporation Mill Race was believed to have been medieval in origin, and that it was drained and filled in in the 1860s to allow the railway to use the land¹¹.

4.3 CARTOGRAPHIC SOURCES

4.3.1 A selection of cartographic (map) sources were consulted at Carlisle Archives Centre and the local studies section of Carlisle Library, ranging from the 17th century up until the second half of the 20th century. Although some of the earliest maps that were consulted did show some development beyond the city walls in the 17th and 18th centuries, only those from the late 18th century onwards are referred to in this report as they provide some information on buildings and features in and around the proposed development area at Water Street. It must be noted that each map reproduced within this report only represents a 'snap shot' of a particular year, and there are some large gaps between the publication of the maps in which features or industries may have come and gone without being recorded on cartographic sources. The figures referred to below are reproduced in Appendix 2 of this report.

4.3.2 *Plan of the City of Carlisle and Places Adjacent*, included in *Hutchinson's History of the County of Cumberland 1794-1797* (Figure 3): this map, which was included in Hutchinson's History of the County of Cumberland, essentially shows the city of Carlisle as largely defined by its former walls, with the Castle at the extreme north and the English Gate forming the southern end. Development outside the city walls, however, is clearly shown on this map, especially at the main entrance into the city from the west, on the road lining the road into Irish Gate (now Caldewgate); the main road in from the north, at Rickergate; and the main road in from the south, Botchergate. Two further areas of development are shown on this map, one to the north of the city, to

¹⁰ HER Report Ref: 1/08/1861

¹¹ HER Report Ref: 1/06/1627

the west of the Castle along the 'Corporation Dam' [now the site of Devonshire Walk car park] and a further area to the south-west of the city, to west of the English Gate, where an extensive range of buildings is shown between the city walls and the Corporation Dam (Figure 3). At least one mill is labelled in this area, although it is likely that other buildings utilising water power also existed in this area at this date. Although this map does not extend as far as the location of the present Water Street, it does annotate a section of road as 'Water Gate Lane'.

- 4.3.3 *Roper's Plan of Carlisle 1805 (Figure 4)*: Roper's plan is similar to that of Hutchinson's, although in this case the whole of the city is shown to indicate the level of development outside the city gates to the west at Caldewgate; to the north at Rickergate; and to the south at Botchergate. As noted above there is an area of activity between the Castle walls and Caldewgate, where two mills, a workhouse and the Old and New Breweries were situated. To the west of the city walls, along the line of the 'Corporation Dam', several further mills are annotated, two of which are described as 'cotton twist mills'. Water Gate Lane and St Nicholas Lane [presumably the modern Collier Lane] are labelled, although the location of modern Water Street is not visible on this map, which may suggest that industrial activity did not extend that far down from the city at this date.
- 4.3.4 *John Wood's Plan of the City of Carlisle from Actual Survey 1821 (Figure 5)*: this map clearly annotates a 'Water Street' and 'Water Gate Lane' heading off in a southerly direction from 'Court Square'. This map appears to indicate that the line of Water Street/Water Gate Lane (now part of modern Water Street) was a principal route into and away from the south end of the city, and was lined with properties several of which are labelled such as 'Corporation Mill', 'New Mill', a 'Hattery' and 'Mr Gale's Manufactory'. Other properties are shown lining 'Brown's Row' which leads off Water Street to the east, and 'Springfield', which appears to be the west end of modern Crown Street. Two further industrial sites are shown to the extreme south end of this map, 'Long Island Cotton Mill' and 'Cotton Works, Cowan, Heysham & Co.'. The land on which the proposed development area is located is shown as fields at this date, annotated 'Mr Brown's property'.
- 4.3.5 *'Map of Botchardgate Township in the Parish of St Cuthbert's', Carlisle 1848 [Botchergate Tithe Map and Award] (Figure 6)*: this map shows that by this date a significant event has taken place for the city of Carlisle, the construction of the first phase of the Citadel Railway Station and associated railway lines immediately to the north and north-east of the proposed development area on Water Street. This has had a dramatic effect on the earlier alignment of Water Street, with the section which linked Court Square to Water Gate Lane being obliterated along with Caldew Brow and

associated properties. New roads are shown to have been laid out to the west, which would later become Mill Street and James Street. The mill race is clearly visible to the west and north-west of the proposed development area, although it is not shown passing through it. The proposed development area itself is shown by this date to be seemingly covered in buildings, although no detail is given as to the form of these structures, but it is presumed to be housing. The following plot numbers surrounding the proposed development area have the following information contained in the accompanying Award: Plot 12, landowner listed as John Slater, occupier as himself, and is described as 'garden and fish pond'. Plot 13, landowner listed as the Lancaster and Carlisle Railway, occupier as themselves, and described as 'parts of general station and railway'. Plot 11 was owned by the Corporation of Carlisle at this date, occupied by John Watters, and described as 'pasture', indicating there was still an agricultural economy in close proximity to the city at this date. Plot No. 14 was listed as being owned by James Heysham, occupied by William Randleson, and described as meadow, 'field behind factory'.

- 4.3.6 *Board of Health Maps, Surveyed by Richard Asquith, 1853 (Figure 7)*: this large scale map provides clear information on the divisions between the buildings located within the proposed development area in the middle of the 19th century. Although not labelled as such, it is presumed from the character of the structures, that they are residential, with passageways represented by an elongated 'X' between to provide access to rear yards [the numbers do not relate to house numbers but presumably to a schedule which no longer accompanies the map]. Several 'courts' or yards are shown to the rear of the properties on Water Street and on South John Street to the east, two of which are labelled 'Hetherington's Court' and 'Harrington's Court', either named after owners or occupiers of the properties (in later editions some of the court names change, possibly indicating change in ownership or occupancy). Small buildings in these rear yards or courts may represent earth closets, although some are labelled 'D B', the meaning of which is unclear, but may represent 'dust bin'. No apparent industrial features appear to have existed in the proposed development area; however small-scale industry and dwellings are known to have co-existed on South John Street, where a circular feature is shown possibly representing a clay tobacco pipe kiln.
- 4.3.7 *First Edition Ordnance Survey Mapping 1865, 25" and 10ft to 1 mile scales (Figures 8 and 9)*: Figure 8 shows the area around Water Street as it appeared in 1865, with several 'works' located in close proximity. Water Street itself is shown to extend from the south side of Citadel Station in the north, where it adjoins Mill Street, and curves in a southerly direction to meet James Street and Currock Street. The east side of Water Street is residential in character,

although as already noted some small-scale industry may have co-existed within the courts to the rear. To the west of Water Street, the land is generally industrial in character. By this date St Stephen's Church has been erected on the west side of James Street, possibly to serve the new community that was growing in this area of Carlisle. The proposed development area continued to be shown as occupied by housing, although on this map and the larger scale version (Figure 9) these properties appear to be subdivided, suggesting that they were 'back to backs', and therefore potentially of lower status. The larger-scale version of the First Edition mapping also clearly names more of the rear courts, within which the letters 'W T' refer to water taps (Figure 9).

- 4.3.8 *Plan of Carlisle Citadel Station dated 1876 (Figure 10)*: this plan has been included within this report as it shows the extensions which had been made to the Citadel Railway Station and associated railway lines by this date, with the erection of the large sandstone wall which now shields the station from the south, and when built obliterated parts of the north end of Water Street (Brown's Row and Forster Street are no longer shown) and the removal of most of Mill Street, to be replaced by Victoria Viaduct. These extensive changes to the railway did not, however, physically impact on the proposed development area on Water Street.
- 4.3.9 *Second Edition Ordnance Survey Mapping 1899 and 1901, 25 inch and 10ft to 1 mile scale (Figures 11 and 12)*: by the end of the 19th and into the 20th century, the proposed development area was still covered in housing, although many of the court names had changed by this date. A Mission Hall is labelled on the west side of South John Street, seemingly converted from at least two dwellings (this building is not presently recorded in the county HER).
- 4.3.10 *Third Edition Ordnance Survey Map 1925, 25" to 1 mile scale (Figure 13)*: this map shows very little change within the proposed development area apart from the construction of several small buildings, possibly privies or coal houses, in some of the rear yard or courts.
- 4.3.11 *Ordnance Survey Map Revision of 1938, 25" to 1 mile scale (Figure 14)*: very little has changed within the proposed development area by this date. It is noticeable that the Tin Box Manufactory labelled on the 1925 map has seemingly expanded on the west side of Water Street, and is annotated as 'Metal Box Manufactory' by 1938.
- 4.3.12 *Ordnance Survey Map 1965, 1:1250 scale (Figure 15)*: by 1965 changes have started to occur to the buildings which occupied the proposed development area and the surrounding streets. Clearly some of the houses on the east side of Water Street have been demolished, leaving a gap between No's 43 and 59. Housing on South John Street has also been removed and replaced by a

Coal Depot, as has that on South George Street, and on the north side of Margaret Street on the west side of James Street. A significant loss by this date is that of St Stephen's Church, also formerly on the west side of James Street. This map also clearly shows the expansion of the 'Metal Box Factory' on both sides of James Street.

- 4.3.13 *Ordnance Survey Map 1977, 1:1250 scale (Figure 16)*: within 12 years, all of the housing within the proposed development area has been demolished, leaving only No's 73 and 75 (which were set back from the Water Street frontage) standing to the south. Further housing has also been lost on South John Street and fronting onto Currock Street.

4.4 HISTORICAL CONTEXT

- 4.4.1 The following historical context draws on information derived from the HER, cartographic sources, and previous archaeological work and is augmented by further information derived from published and unpublished sources that provide documentary evidence for activity in and around the Water Street area of Carlisle. The following is a brief narrative and serves only to provide an understanding of what form any archaeological remains may take within the proposed development area. The broader history of the city of Carlisle has been well documented elsewhere¹²; however relevant information from these sources will be referred to below.

- 4.4.2 *Place Name Evidence*: it is unclear where the name Water Street came from, although it is likely to have had relatively simple origins, and may simply have been so called due to its proximity to the Corporation Mill Race. It is clear from historical mapping that the north end of the route originally ran from Court Square to 'Water Gate Lane', which then seemingly continued to head towards Blackwell. Over time, Water Gate Lane was lost as a street name, to be replaced by Water Street. It is interesting to note that other 18th century suburbs beyond the city walls, such as Caldewgate, Rickergate and Botchergate, retained their names to the present day, however 'Water Gate' has been lost. This area of Carlisle is often referred to locally as 'Wapping'; the origins of this place name are also unclear. 'Wapping' does not appear on any historical mapping, or in documentary sources, and the only time local historian Denis Perriam has seen it written down was on a sign at Carlisle Railway Station referring to electric trains. It has been suggested that it was a reference to the 'beatling' or 'wapping' of cloth and

¹² For example refer to Creighton 1889; Blake and Blake 1959; Towill 1991; Perriam 1992; McCarthy 1993 and Brennand and Stringer 2011

consequently to the textile industry which grew up in this locality¹³, although this has not been substantiated.

- 4.4.3 *Prehistoric Period (up to 43AD)*: recent archaeological work has revealed evidence for human activity in the area around Carlisle dating to the Mesolithic period (c.8000-c.4000BC), when most of Cumbria is likely to have been covered with broadleaved woodland inhabited by a wide range of mammals, birds and insects. This excavation at Stainton, to the north-west of the city, revealed thousands of tiny flint tools known as microliths on a terrace adjacent to a former channel of the river Eden [indicating the importance of water courses]. Although there were only slight traces of structures and hearths at this site, the flints are noted to have probably represented many visits and camps by hunting and gathering groups¹⁴.
- 4.4.4 There is at present very little environmental evidence for human activity in Cumbria during the Neolithic, Bronze Age and early Iron Age. There is, however, evidence from the Neolithic period in the form of stone axe-heads and wooden artefacts that were preserved in waterlogged conditions at the edge of the former river at the Stainton site¹⁵. Similar stone tools have also been found as isolated finds closer to the city centre, at Harraby and Botcherby¹⁶, although as yet no evidence for settlement from this period has been revealed.
- 4.4.5 Evidence for Bronze Age sites has been found at Crosby on Eden, to the east of Carlisle, and at a site near the former Garlands Hospital, also to the east of the city¹⁷. Evidence for prehistoric agriculture has been found on several sites within the city centre, most notably at Blackfriars Street where plough or ard marks were revealed beneath the earliest Roman occupation layers¹⁸, beneath the parade ground of Stanwix Roman fort to the north of the city, and recently below the earliest levels of the Roman fort on the site of Castle Green¹⁹.
- 4.4.6 Closer to the site of the proposed development area, the excavations which took place to the rear of 40-78 Botchergate, to the north of Water Street, revealed several small flint flakes and a stone blade, which may hint at the possibility of Neolithic/Bronze age activity in the area. It was noted within this archaeological report that the River Caldew may have, in the early post-glacial period, been situated much further east, and may even have flowed

¹³ Davidson, S, 2004, Page 52

¹⁴ Stallibrass, S and Huntley, J, 2011, Page 21

¹⁵ *ibid*, Page 25

¹⁶ Perriam, D.R, 1992, Page 3

¹⁷ Stallibrass, S and Huntley, J, 2011, Page 26 and Perriam, D.R, 1992, Page 3

¹⁸ McCarthy, M, 1990, Page 14

¹⁹ Zant, J, 2009, Page 43

in a series of braided channels over a wide flood plain. Although it is not possible to accurately assess the historic location of the River Caldew, it is conceivable that in the late prehistoric or early historic periods, the area immediately west of Collier Lane, i.e. that land that includes Water Street, may have been marshy and/or susceptible to seasonal flooding, possibly crossed by one or more active channels, even if the main course lay further to the west²⁰. The excavations which were undertaken on the Metal Box site immediately to the north of Water Street did not reveal any evidence for prehistoric activity. Here, the natural river gravels were overlain by grey water-deposited clay silts, incorporating distinct lenses of silt and fine and, and organic rich wet or waterlogged deposits including roots, branches and twigs. Palaeoenvironmental samples taken from water channels revealed during this archaeological work produced pollen which indicated a landscape predominantly cleared of trees. Herbaceous pollen suggested wet meadows and arable land, with a higher percentage of heather pollen and fern spores in the earlier water channel sample, suggesting a heath community²¹. This information potentially indicates that the area of land to the west of the present railway station and the north end of Botchergate may have, up until the post-medieval period, been marshy and prone to flooding, which may suggest that the area was not utilised to any great degree for building on, apart from mills along the mill race.

- 4.4.7 *Roman (AD c.43-c.410)*: the history and archaeology of Roman Carlisle has been well documented and need not be repeated here. It must be noted, however, that Carlisle was clearly of strategic importance for the Roman army, with one fort occupying the prominent bluff on which the Castle now stands, and another fort at Stanwix on the north bank of the River Eden, situated on Hadrian's Wall, both seemingly operating at the same time, but possibly serving different functions. The earliest Roman fort stood on the site of the Castle, and was erected in timber in the autumn or winter of AD72-3, as indicated by tree ring dating. The fort at Stanwix was possibly established during the AD 120s as part of the Hadrian's Wall frontier²².
- 4.4.8 Outside almost every Roman fort in north-west England, a small urban development of civilians was established, usually known as a *vicus*. These settlements would have provided a range of goods and services for the soldiers of the adjacent forts, as well as acting as market places for the wider hinterland. At Carlisle, the *vicus* extended south of the fort which was located on the site of the present Castle, and evidence for buildings and activity has been found on Blackfriars Street, the earliest phase being in the

²⁰ HER Report Ref: 1/CAL/00/BOT

²¹ Drury, D, 1998, Pages 237 and 239

²² Zant, J, 2011, Pages 35 and 43

form of timber strip houses constructed in the late 70s AD; and on the site of the present Lanes Shopping Centre. The development of Botchergate, which like its modern successor (the A6) probably represented the main road into Carlisle from the south, was noted by David Shotter to have been different in character and chronology to the area to the north during the Roman period. The earliest use of Botchergate was as a cemetery area, which in the 2nd century was replaced by 'strip houses' aligned at 90 degrees to the road, some of which had evidence for industrial use. During the first half of the 3rd century, however, Botchergate appears to have returned to use as a cemetery area once again²³.

4.4.9 On the west side of Botchergate, excavations undertaken to the rear of No's 40-78 in 2000 by Carlisle Archaeology Limited revealed the linear Roman earthwork, aligned roughly parallel with the line of the modern Collier Lane, which has already been referred to above (see 4.2.5 above); this may have supported a timber feature, possibly an aqueduct, or may even have acted as a flood defence. Although the lack of finds hindered the dating of this feature, a few of the other features to the east of the site contained Black Burnished Ware Type 1 (BB1) possibly indicating a Hadrianic or later date (c.AD125+). The excavation also revealed evidence that the site was used as a rubbish tip over the 2nd, 3rd and 4th centuries AD, however one possible inhumation burial and a cremation to the eastern side of the site, appear to be contemporary with the deposition of this rubbish against the earlier linear bank close to the line of Collier Lane, indicating that the site was in use for two different functions during these periods²⁴. It is interesting to consider whether this section of linear clay bank demarcated the western edge of the settlement along Botchergate during the Roman period, in which case the land to the west, between the line of modern Collier Lane and the River Caldew, may still not have been greatly utilised for buildings or activity due to marshy conditions.

4.4.10 The excavations on the site of the Metal Box factory immediately to the north of Water Street did not seemingly reveal any evidence for activity in the area dating to the Roman period. There is presently no evidence to suggest that the Corporation Dam or mill race, which is believed to have been in existence in the medieval period, had earlier origins.

4.4.11 *Early Medieval (c.410-1066AD)*: there is evidence for activity during the early medieval period within what is now the city centre, for example on Blackfriars Street²⁵. At the site of the present Lanes Shopping Centre, a

²³ Shotter, D, 2011

²⁴ HER Report Ref: 1/CAL/00/BOT

²⁵ McCarthy, M, 1990, Pages 70-73

timber-lined pit produced a dendrochronological date of 771-716AD, as well as a Trewiddle-style strap end of the 9th century. A timber-lined well on Castle Street produced another dendrochronological date of 770-803AD²⁶. Excavations to the west of the Cathedral revealed part of a cemetery dating to the 10th century, possibly associated with an important church which may have been located beneath the cloister or Fraternity²⁷.

4.4.12 Closer to the site at Water Street, there is presently little evidence for continued activity along Botchergate, although this does not mean that the area was not inhabited or utilised, simply that archaeological evidence has yet to come to light. No evidence for early medieval activity was seemingly revealed during the excavations on the Metal Box site immediately to the north of Water Street.

4.4.13 *Medieval (c.1066-1540AD)*: as with the Roman period, the development of the city of Carlisle through the medieval period has been well documented elsewhere²⁸, and consideration will be given here only to the immediate vicinity of the proposed development area on Water Street. On the earliest known map of Carlisle dating to the 16th century, the city is shown as all being located within its walls, with the Castle clearly defining the north and of the town, and the Citadel to the south, with the Irish Gate to the west and the Scotch Gate to the east (Plate1). Beyond the walls, no features are seemingly shown, although this does not mean that 'suburbs' were not in existence outside the safety of the city walls during the medieval period.

4.4.14 In Caldewgate, white metal working is known to have taken place in the 14th and 15th centuries, and recent excavations on the site of the Malster's Arms by North Pennines Archaeology Ltd revealed evidence for bronze-working in this area, possibly hinting at a medieval industrial 'quarter', although industries such as tanning (in the Lanes), a particularly smelly process, and pottery making (Scotch Street) are known to have taken place within the city walls. In contrast to the archaeology of the city centre, the medieval remains of the suburbs are often located just below the modern ground surface, for example recent excavations on Botchergate and Caldewgate revealed medieval deposits at less than 0.20m below the modern overburden²⁹.

4.4.15 It has already been noted that the Corporation Dam or mill race which carried water from the River Caldew to the south-west of the city, to power the water mills, is believed to be at least medieval in origin, possibly originated from streams that flowed from Blackwell through a man-made

²⁶ Newman, R, 2011a, Page 77

²⁷ McCarthy, M, 1993, Page 40

²⁸ For example, See Summerson, 1993 Volumes I and II

²⁹ Giocco, F, 2011, Pages 124 and 133

channel towards the city, which provided water from the defensive ditches around the city walls. Denis Perriam notes that three water-corn mills were built on the millrace in the medieval period, the Borough Mill, Abbey Mill (later the Fulling Mill) and Castle Mill, all known collectively as the City Mills. There are documentary references to the mills, particularly when some form of disturbance in the supply of water has occurred, for example an inquisition in 1427 reported: '*...a certain water course..runs through Blakhall to the mill called le Castelmylne..certain malefactors have cut and broken the banks..so that the ditches are dry and the mill cannot grind..*'³⁰.

4.4.16 Being located outside the relative safety of the city walls, the water mills along the mill race to the west of Carlisle, were vulnerable to attack during periods of border warfare and siege. Summerson notes that during the siege of Carlisle in 1315, for example, the city's mills and fisheries were burnt by the Scottish army. Of relevance with this particular siege, as is also noted in later periods, the proposed development area on Water Street was situated outside the city walls, and as a consequence it is possible the land was used by besieging armies. It is known that Robert the Bruce took up camp at Caldewgate, where a siege engine was set up next to a church known as Holy Trinity (now gone). Summerson includes a diagram showing the locations from which the city was attacked on various days in that year, including positions along the west side of the city walls, although it is unclear if the area around Water Street was utilised. What is clear, was this particular siege was unsuccessful, noted to have partly been due to the torrential rain through those months. It was documented that the besiegers prepared '*a certain great berefrai like a kind of tower*' which they had intended to push against the walls, but it had sunk into the '*quagmired ground*'³¹, possibly indicating that the land around the city walls was marshy.

4.4.17 The excavations undertaken on the site of the former Metal Box factory, immediately to the north of Water Street, revealed some evidence for medieval activity in the form of local pottery sherds dating to the mid-12th to 13th century, and a sherd from a possible 14th – 16th century jug, recovered from silts (although these could have been redeposited from elsewhere), and a few sherds of medieval or early post-medieval pottery were recovered from the eastern bank of a water course. The water course deposits yielded a sherd of late medieval pottery. Although this work concluded that the water course revealed during the course of the excavation related to the

³⁰ Perriam, D.R, 1992, Page 34

³¹ Summerson, H, 1993, Pages 216-218

Corporation Dam, formed prior to the 18th century, the earlier channel noted may have originated in the medieval period³².

- 4.4.18 The archaeological work conducted to the rear of 40-78 Botchergate in 2000 revealed some evidence of medieval activity in the form of pottery sherds, although the assemblage was much smaller than the Roman. Nevertheless, the assemblage was regarded as a useful addition to the very limited archaeological evidence there presently is for the medieval suburbs³³.
- 4.4.19 *Post-Medieval (c.1540-1900AD)*: it has already been noted that the city of Carlisle has been subject to sieges and phases of attack throughout its history. During the English Civil War in the middle of the 17th century, the city was seemingly well prepared to withstand attack from the Parliamentarians, who finally dug in around the city in 1644. Of particular relevance to the proposed development area on Water Street, is that several earthworks were constructed around the city during the nine month siege, two of which are shown in a diagram to have seemingly existed to the south-west corner of the walled city, the 'English Gate' and the 'Kings Work' (Plate 2) (the exact locations of these are difficult to pinpoint). In his article 'The Siege of Carlisle 1644-5, Chancellor Ferguson also refers to a 'works' seemingly in the area close to the site of the modern railway station, annotated as having been erected by 'Glenham'³⁴. The form of these siegeworks was quite distinctive, as can be seen on Plate 2, although as yet none of the works around Carlisle have been revealed through excavation. The works at St Nicholas was the only earthwork to survive the Civil War in Carlisle, but it was unfortunately destroyed when St Stephen's Vicarage was constructed in 1865³⁵. What is interesting about the modern sketch reproduced as Plate 2 is a track shown to leave the south gate of the walled city, and head in a southerly direction towards Blackwell or 'Blackwall'. This may represent Water Street as it appears on the earliest reliable mapping, prior to its truncation by the construction of the Citadel Station and railway lines (see Figure 5 for example).
- 4.4.20 Writing in his diary during the siege of Carlisle 1644-65, Isaac Tullie makes reference to the burning and pulling down of the suburbs: '*which begun with the houses and barns near Newtowne and Caldewbridge, which was done without any opposition from the Scots, through the houses were not farr from their works*'³⁶. It is possible that mills along the mill race, and any standing buildings in the area around Water Street, may have suffered a similar fate during this

³² Drury, D, 1998, Page 247

³³ HER Report Ref: 1/CAL/00/BOT

³⁴ Ferguson, Chancellor, 1890-91

³⁵ Perriam, D.R, 1992, Page 30

³⁶ Jefferson, S, 1840, Page 12

period, although archaeological evidence is yet to be found for any such instances around the city walls.

- 4.4.21 One hundred years on from the Civil War, and Carlisle was once again the subject of attack, this time by the Jacobite Rebels. A contemporary drawing of the city and surrounding features provides clear information on the form that the city took in the middle of the 18th century, largely still within its protective walls, and of the suburbs. This plan is entitled '*A Plan of the City of Carlisle with the position of the Batteries erected by the Duke of Cumberland as also those of the Garrison, from the first appearance of the Rebels till the Surrender of that city to his Royal Highness to whom it is most humbly dedicated by G Smith*', and although as its title suggests, it was most concerned with the locations of the various batteries³⁷ around the city, it does provide useful information on some of the suburbs (Plate 3). Although no doubt containing a degree of artistic licence, it is interesting to note the cluster of buildings including a 'Wheat Mill' on the east side of the mill race, annotated on this plan as '*Aqueduct for the City Mills*'. It is difficult to assess from this source if any of the buildings represented by the small vignettes were located in the area around present day Water Street, but it does appear to show, north of 'The Mayors House' that some of the land between the city walls and the mill race has seemingly been turned into gardens, although the land between the mill race and the River Caldew (Cauda River) is annotated as '*Low Meadow by Cauda*'.
- 4.4.22 Although some buildings appear to be shown in the general area around what is now the Citadel Railway Station on Smith's plan of 1745, it is possible that these structures may have been constructed of clay, rather than of brick or stone. When Celia Fiennes visited the city in 1698, she observed: '*no house of brick or stone*' apart from the Mayor's House, which (at least by 1745) lay outside the city walls in English Damside, as shown on Plate 3. It has been suggested that properties along Botchergate in the 16th and 17th centuries, and possibly even later, were clay-built and of single storey³⁸, potentially leaving little in the archaeological record.
- 4.4.23 Carlisle's industrial rise began in the later 18th century and was based on water-power supplied by the medieval millraces³⁹. The first textile factory had opened in Carlisle in 1724, but restrictive laws favoured wool and the fact that cotton cloth had to contain a percentage of wool limited what could be made from it. In 1774 the laws were relaxed and for the first time pure cotton fabrics could be produced. The bleaching qualities of the hard water

³⁷ The use of cannon by this date allowed for the batteries to be situated some distance away from the city walls

³⁸ Newman, R, 2011b, Page 147

³⁹ Newman, C, 2011, Page 153

of the River Caldew were an important factor in the growth of the cotton industry in the city, before chemical bleaches were developed in the 19th century. The earlier factories were at first concerned with the spinning and finishing of cloth, as all weaving was undertaken by handloom weavers who worked at home, receiving thread from the factories and sending back the woven cloth⁴⁰. The process of bleaching the cloth was lengthy, often taking between six to eight months. The cloth was exposed to the sun and rain and steeped in alkaline solutions. There were large areas of land around the city that was used as printfields, for the cloth to be laid out, as shown on a map of the city of 1794, where a Printfield is labelled to the west of the city walls (Figure 3). The development of bleaching powder c.1800 made printfields obsolete, and it is worth noting that on a map accompanying Jollie's Cumberland Guide and Directory 1811, no printfields are shown at all⁴¹. Following the demise of the printfields it is possible land was opened up for further development.

- 4.4.24 Information from a 250m radius search centred on the proposed development area of the county HER, indicates that the area was becoming industrialised in the early years of the 19th century. For example, the earliest phase of Slater's Cotton Mill was erected as a six storey building in 1802, and was known as New Mill (HER 19811); Currock Works was in existence in 1805 as a cotton twist mill belonging to Cowan Heysham and Co in 1811 and 1821, and was located immediately south of Water Street (HER 41022); Carrick's Hattery was located at the north end of Water Street (under the present Citadel Station), and was certainly in existence in 1811 and 1821 (HER 41030); High Brewery, which may have been established around 1794 (HER 41031) and Long Island Works on Lamplugh Street which became a cotton mill in the later 18th century, after serving as a Stampery for printing cloth (HER 41061).
- 4.4.25 Jollie's Cumberland Guide and Directory of 1811 provides some information on the types of trades which were being undertaken on Water Street, or as it was known then, Water Lane and Water Street, although these entries appear to refer to the north end of the road, rather than the site of the proposed development. The following are listed as being 'persons in business' on or around Water Lane: Joseph Blaylock, muslin and gingham manufacturer, Water Lane; Carlisle Cotton Twist Company, Water Lane, Botchergate; Cowen Heysham & Co., cotton twist mill, Currock; George Haugh, brewer, Water Lane; William Hobson, teacher, Water Street; William Holme and Co, muslin manufacturer, Long Island; Mason and Rennison, pipe makers, Brown's Row, Water Street; Robert Park, nail maker, Water

⁴⁰ Perriam, D.R, 1992, Page 36

⁴¹ Towill, S, 1991, Page 77

Street, Botchergate; Jasper Richardson, Water Lane, book keeper to The Carlisle Twist Company's Cotton Mill; Walter Scott, teacher, Water Lane, Botchergate; Thomas Stubbs, muslin and gingham manufacturer, Water Street.

- 4.4.26 It can be noted from cartographic sources that the housing on the site of the proposed development area was erected at some point between 1821 (Figure 5) and 1848 (Figure 6). It has not been established when or by whom the housing on Water Street, and the adjacent areas such as South John Street and Robert Street, was erected, but it is possible they were constructed to house workers in the cotton industry. Writing with regard to the burgeoning industrial growth in Carlisle in the early years of the 19th century, Towill noted that the greatest growth was in the new industrial areas on the low lying land along the River Caldew and Corporation Dam, *'where the cotton industry took root and immigrants from Ireland and Scotland chiefly settled'*⁴².
- 4.4.27 In 1829 there were 11 cotton mills in Carlisle and the neighbourhood; ten large gingham and check manufacturers; two bleacheries; two calico print works; five dye houses; three linen and one woollen manufactory; and eight hat manufactories, as well as six corn mills. The cotton trade was regarded in this period as the most important for the city, giving employment to many Irish and Scotch weavers. A trade directory of this year provides a clue as to the mixture of trades and professions that were operating out of 'Watergate' and 'Water Lane' at this date, although these entries may refer to the north end of the road, prior to the housing on the proposed development area being constructed. An example of the trades on Watergate in 1829: Wm Gregson, academy; Timothy Powell, Lancastrian Academy; Hugh Dixon, baker; John Wood, blacksmith; Joseph Naylor, corn miller; Wm Kidd, leather cutter; Samuel Foden, shopkeeper; Robert Gale, Scotch umbrella gingham manufacturer; and James Lennon, millwright and machine maker⁴³.
- 4.4.28 The 1841 Census returns for Water Street were consulted in an attempt to note if the housing on the proposed development area had been erected by this date and to provide information on who was residing in the properties in that year. The early Census Returns are very hard to decipher to the untrained eye, but from what could be gained it would appear many of the inhabitants of the street at that date were indeed weavers, suggesting that the houses may have been constructed by this date.
- 4.4.29 By 1847, there does not appear to be as many trades listed on Water Street or 'Water Lane', and Watergate is not referred to at all as a street name. The

⁴² Towill, S, 1996, Pages 50-51

⁴³ Parson, W and White, 1829

decrease in trades may have been a result of the construction of the first phase of the Citadel Railway Station which obliterated the north end of Water Street in its construction, possibly hinting that the north end of the street was more commercial than the south. Trades listed on Water Street in this year included a beerhouse, shopkeepers, grocer, John Slater, cotton spinner, a timber merchant and Joseph Iredale, brewer and soda water manufacturer⁴⁴.

- 4.4.30 The historical maps consulted, and reproduced as figures in Appendix 2, clearly show that the proposed development area on Water Street was occupied by dense housing with courts or yards to the rear (Figure 7 onwards). Maps from the 1860s appear to suggest that the houses were back to back, although this could not be confirmed by any documentary sources. It is interesting to note that some of the courts shown on Figure 9 may have been named after individuals or families who were trading in the area around Water Street, for example Foden's Court may have been named after Samuel Foden who was a shopkeeper on Watergate in 1829 (see 4.4.27 above), and Randleson's Court may have been named after William Randleson (or his family) who was listed as a grocer on Water Street in 1847.
- 4.4.31 There were no documents housed at Carlisle Archive Centre which may have provided any indication of the layout of the houses within the proposed development area, such as building control plans. There are plans relating to South George Street, formerly located to the north of the proposed development area, dating to the late 19th century which may provide a clue as to the ground plan of the houses formerly located within the proposed development area (Plate 4).
- 4.4.32 Aerial photographs housed in a collection at Carlisle Archive Centre, and photographs within the local studies section and within the personal collection of Denis Perriam provide information on the form the houses on Water Street prior to their demolition in the 1960s. Plate 5 shows the 'Wapping' area of Carlisle in around the 1930s, with St Stephen's Church visible central to the photograph, the dominating wall of the railway station to the background and the housing which formerly stood on the proposed development area to right of photograph. Plate 6 shows the same area looking west, with Water Street to left of photograph, and the extensive buildings of the Metal Box Manufactory in the foreground.
- 4.4.33 Plate 7 is an undated photograph of the two houses at the south end of Water Street (just outside the proposed development area) which were set back from the frontage with front gardens. These were known locally as 'Lough Derg' and 'Vale of Avoga', suggesting an Irish influence. It is

⁴⁴ Mannix and Whellan 1847

possible these were higher status houses compared to the rest of this row on the south side of Water Street. Plate 8 is a photograph taken in 1965, possibly just before demolition, of the south end of the proposed development area, showing the housing that occupied the site. From this photograph it is possible to note that the housing was two storeys in height, seemingly double pile in plan (two rooms deep) and that some of the houses had dormer windows in the roof slopes indicating that the roof spaces were utilised. The houses appear to have been constructed of brick laid in Flemish Bond, i.e. alternate headers (short end of brick) and stretchers (long edge) in each course. The window sills and door surrounds are of masonry, although the window heads are of brick, and the passageway entrances between the two doorways had decorative detailing by including a keystone (Plates 8 to 11).

- 4.4.34 A consultation of the 1901 Census Returns for Water Street clearly shows that the area was densely populated during this period. The entries are too long to reproduce here, however the entries relating to No's 37 to 75, which are the numbers shown on 20th century mapping to have existed in the proposed development area, indicate that the houses were occupied by between one and seven people. There were five separate properties within Foden's Court; five separate dwellings in Mullin's Court, and four dwellings in Peile's Court, indicating the denseness of the population in this area at the turn of the century. Occupations listed included cotton winders, iron moulders, and biscuit packers, possibly all employed in the industries in the locality. Individual trades such as tailor, fish merchant, pawnbroker and clogger are also represented at this time.
- 4.4.35 Cartographic sources show that the proposed development area remained covered in housing and associated yards until the 1960s, when the wholesale demolishing of properties in the area commenced. St Stephen's Church, which stood between Hewson Street and St Stephen's Street, on the west side of James Street, was consecrated in 1865 and served the area known as Wapping; it was demolished in 1964⁴⁵. The demolition of the old Metal Box factory located immediately north of the proposed development area began in 1997 as part of a redevelopment plan for the site to retail units⁴⁶.

⁴⁵ Perriam, D, 1995, Page 127

⁴⁶ Cumberland News, 13th June 1997

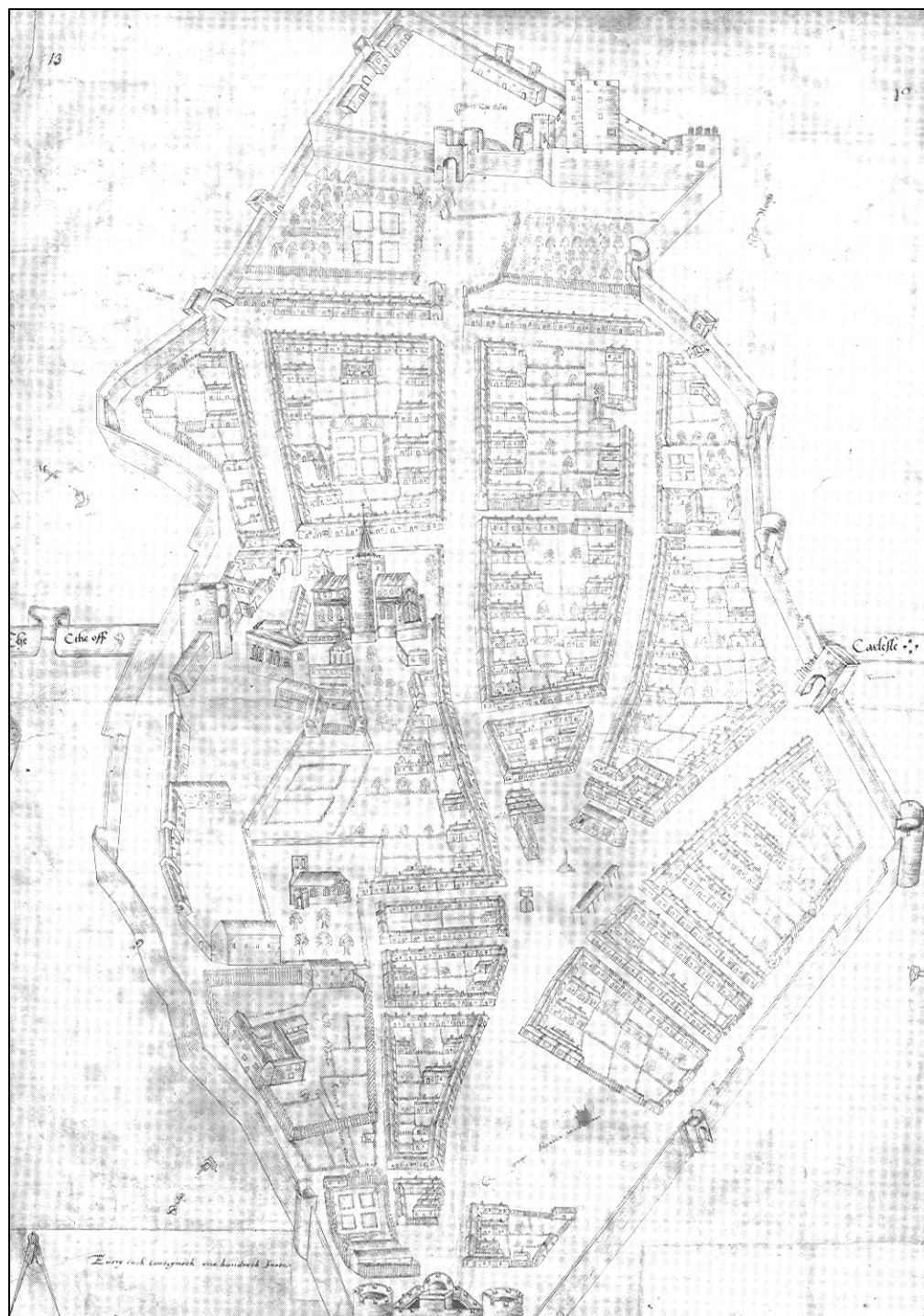


Plate 1: 16th century map of the City of Carlisle

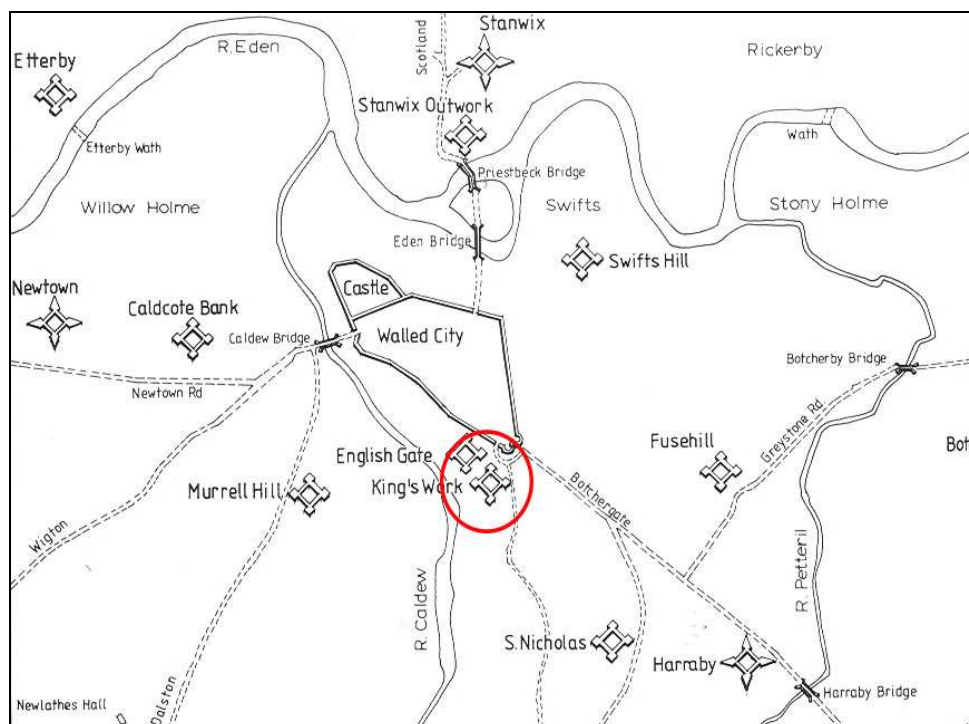


Plate 2: Sketch showing the positions of 'Works' erected during the siege of Carlisle 1644-65. The red circle showing the works located in the area around modern Water Street (Source: Perriam 1992)

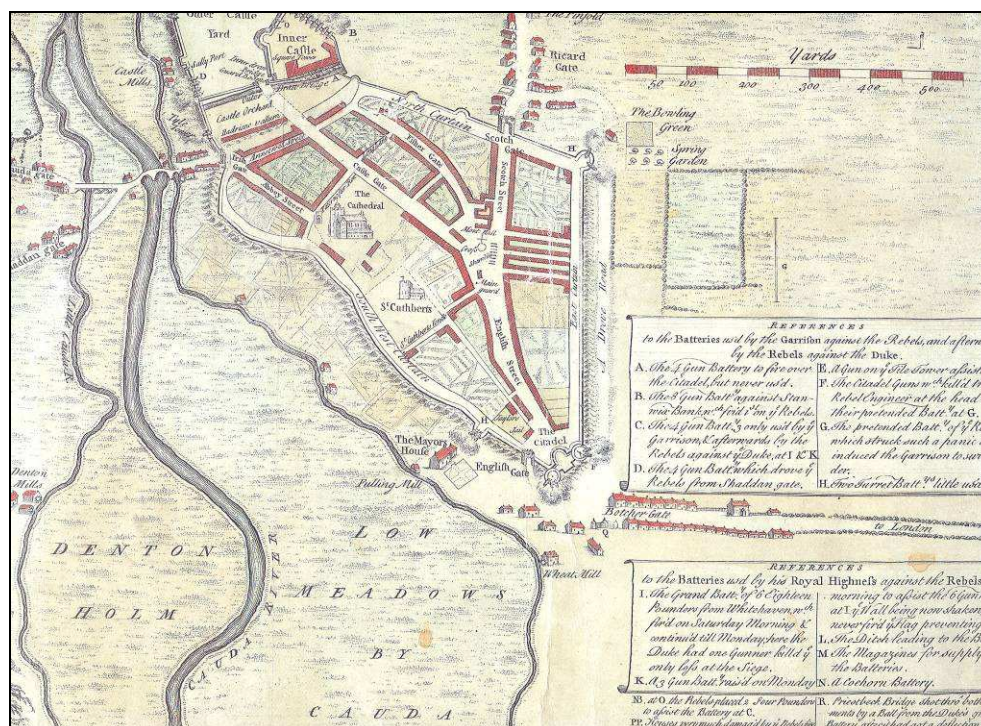


Plate 3: Part of G Smith's Plan of Carlisle showing the batteries and garrison positions during the Jacobite Rebellion in 1745

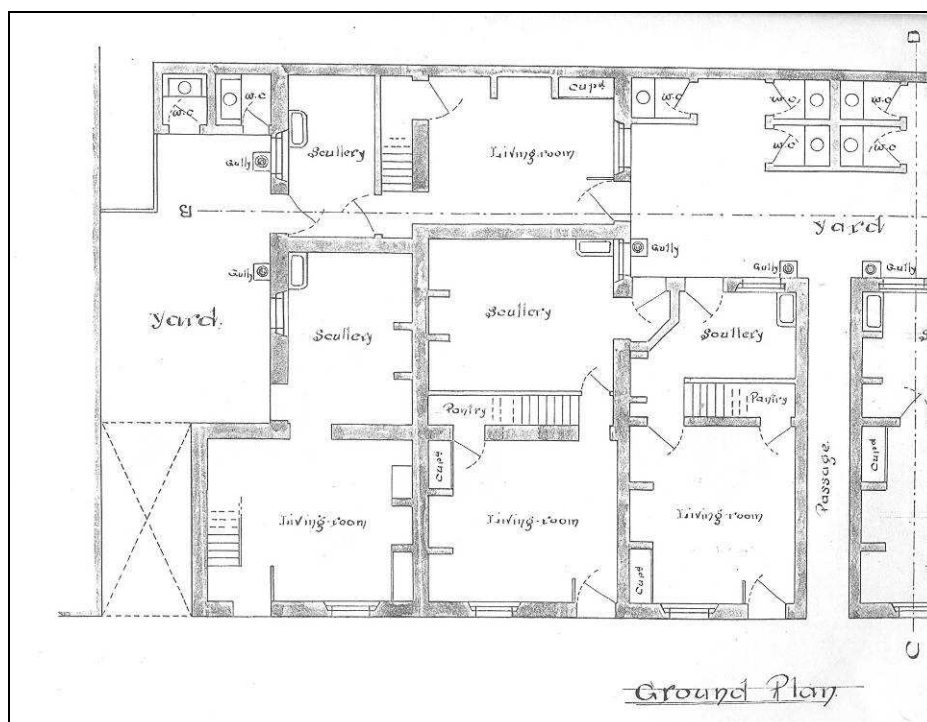
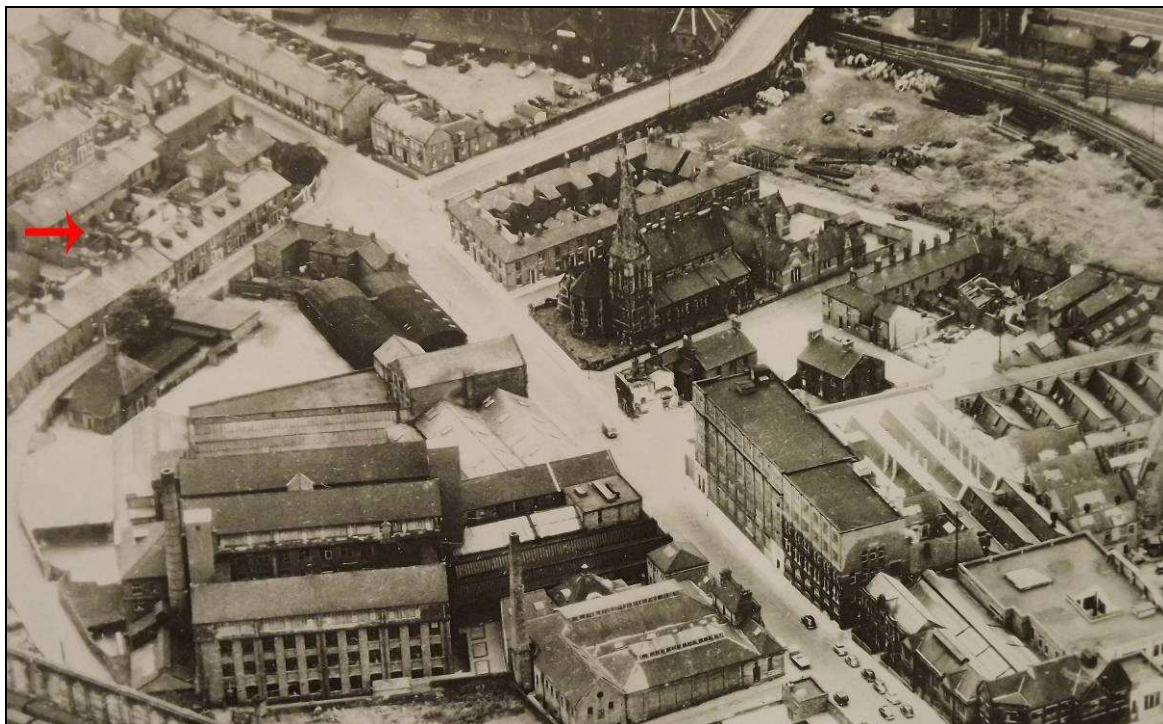


Plate 4: Ground plan of houses on South George Street (CAC Ref: Ca/E4/2162)



Plate 5: Undated view (possibly 1930s) looking east showing the large covered roof of the railway station, with the properties on Water Street to the right of photograph (arrowed) (CAC Ref: DX2029)



***Plate 6:** Undated view (possibly 1930s) looking west showing the properties of the proposed development area to left of photograph (shown by red arrow) (CAC Ref: DX2029)*



***Plate 7:** Houses at south end of Water Street known as 'Lough Derg' and 'Vale of Avoga' (CAC Ref: DX2029)*



Plate 8: Photograph taken 1965 of the south end of Water Street, possibly prior to demolition (Courtesy of Denis Perriam)



Plate 9: Properties on Water Street as seen in 1974 (Courtesy of Carlisle Library)



Plate 10: No. 25 Water Street as seen in 1974 (Courtesy of Carlisle Library)



Plate 11: Two houses at south end of Water Street during demolition in 1978 (Courtesy of Carlisle Library)

5 SITE VISIT

5.1 INTRODUCTION

- 5.1.1 The site of the proposed development area was visited in order to assess if there were any apparent remains of archaeological interest within the site boundary, and to assess any restrictions to potential future archaeological work.

5.2 SITE VISIT

- 5.2.1 The proposed development area on Water Street was noted at the time of the site visit to be a flat area of land which is presently in use for a car sales outlet (Plates 12 and 13). No buildings or features were noted to still be extant within the proposed development area.
- 5.2.2 The north end of the proposed development area would originally have occupied by housing on South John Street; some of these properties still survive, although they are not located within the proposed development site. The properties that are still extant are two stories in height, and were noted to be constructed of either brick, laid in English Garden Wall Bond, or masonry as noted in the southernmost property, possibly the former Mission Hall labelled on Figure 11 (Plates 13-16). It was noticeable that the surviving properties on South John Street appear to have been constructed at different phases, whilst those within the proposed development area on Water Street, appear to have been constructed in one phase, although photographs of all these houses were not available to confirm this.
- 5.2.3 There were no obvious restrictions to any potential archaeological work noted within the proposed development area as the site have been levelled and utilised for car parking for several decades.



Plate 11: View looking north-east from the junction of Water Street and James Street



Plate 12: View looking south showing the proposed development area from the junction of Water Street with Robert Street



***Plate 13:** View looking south down South John Street showing the north end of the proposed development area to right of photograph and surviving properties on South John Street to the left*



***Plate 14:** Properties on South John Street still extant*



Plate 15: One of the surviving properties on South John Street with a sign for 'Hardys Court' over one of the doorways



Plate 16: View looking north showing the properties on South John Street, the masonry building may have been the Mission Hall

6 CONCLUSION

- 6.1 The desk-based assessment has revealed that whilst there is some evidence for prehistoric activity in the area around the modern Water Street, in particular in the city centre, excavations immediately to the north on the site of the former Metal Box Factory did not reveal any archaeological features earlier than the medieval period. It is possible that the area to the west of modern Botchergate may have been flood plain, although the exact character and course of the River Caldew during this period is unknown.
- 6.2 Archaeological work to the rear of No's 40-78 Botchergate, to the east side of Collier Lane revealed a substantial Roman earthwork which was interpreted as possibly having been utilised as a support for a timber aqueduct, or may have formed some form of flood defence. This earthwork, possibly erected in the early 2nd century, was then utilised as a boundary for the deposition of rubbish throughout the Roman period, possibly suggesting it demarcated a rear boundary to plots fronting Botchergate. No evidence for Roman activity has as yet been revealed further west of Collier Lane and it is considered that the land may have been marshy or formed part of the River Caldew flood plain.
- 6.3 There is not, as yet, any archaeological or historical evidence for early medieval activity within close proximity to the proposed development area on Water Street, despite archaeological work revealing finds dating to this period within the modern city centre.
- 6.4 It has been suggested that the Corporation Dam or mill race may have originated in the medieval period, used to provide water to power the 'City Mills'. Recent archaeological work has revealed some evidence that this may have been the case, although what was revealed was essentially an 18th century water channel. There is certainly archaeological evidence for medieval activity at the north end of Botchergate, although as with the Roman period, it is not known if this activity spread any further westwards beyond the plots which fronted onto that major thoroughfare.
- 6.5 Although not substantial, there is some evidence that two 'works' associated with the siege of Carlisle during the Civil War in 1644-45 were erected in close proximity to the site of modern Water Street, although the exact locations is unknown, and the form that these works took is also unclear. It has been noted that only one of these siege works survived into the 19th century, but this was obliterated in 1865 when St Stephen's Vicarage at Currock was constructed.

- 6.6 By the second half of the 18th century industrial concerns began to operate to the west of the city walls, utilising the water of the River Caldew for textile manufacture. By 1794-97, a track or road known as 'Water Gate Lane' was in existence, possibly representing the north end of what is now Water Street. The proposed development area is shown as open fields in 1821, however by 1848 it appears to have been utilised for the construction of housing, possibly for local textile workers, which continued to occupy the site until the 1970s. To the rear of the houses which fronted onto Water Street, as well as those on the adjacent South John Street, there were rear courts or yard which contained further housing, suggesting a densely populated industrial suburb.
- 6.7 It is clear from historical mapping and photographs that archaeological remains will survive below ground within the proposed development area in the form of foundations and services for the housing which occupied the site up until the 1970s. There has been no evidence revealed during the course of the desk-based assessment that any of the houses on the site were cellared, which would have had a detrimental effect on any earlier archaeological remains. It was noted during the evaluation on the former Metal Box site to the north that the water table was high, which may indicate that the provision of cellars would not have been practical. If the properties did not have cellars, then it is possible that the houses may have relatively shallow foundations which may not have impacted greatly on any earlier archaeological remains. It is known that following the demolition of the housing within the proposed development area, the site was utilised as car parking and it is believed that there has been no further intrusive development on the site.
- 6.8 As far as the significance of the site is concerned, it has been noted that this area of Carlisle may not have been exploited to any great degree up until the 18th century due to its potential to have been part of the flood plain of the River Caldew. The city has, however, been the subject of several periods of attack during Border warfare, and the subject of sieges in particular that which lasted for nine months during the Civil War 1644-45, and in 1745. Carlisle was one of the most besieged towns during the Civil War, and the fact that the area on which Water Street is located was situated outside the city walls, may indicate that there may be evidence for 'works' or features relating to these important events in Carlisle's history. It has been noted that a systematic review of towns which endured sieges during the Civil War is long overdue⁴⁷.

⁴⁷ Brennand, M (Editor) 2007, Page 131

- 6.9 The housing which occupied the proposed development area is likely to have been built for the labouring classes, common to most industrial towns; these included back-to-back and courtyard development. It has been noted in the North West Regional Framework that very little of this type of housing now survives, as from the end of the 19th century and through to the 1960s, the majority was swept away in so-called slum clearances. The Agenda notes: *'The concept of the slum was for long accepted as a reality in the historical record, as the documents produced by civil authorities, and the records of photographers and artists, were used to form the concept'*. To challenge historical concepts of slums in the North West, it has been noted that not only is the topographical analysis of the surviving fragments of pre-1840 working class urban development required, but also the excavation for former areas of slum clearances⁴⁸. The proposed development area contained workers housing which would fit into this area of required research, and further archaeological work would benefit from the fact that, unlike so many other areas of slum clearance, the site has not been redeveloped.
- 6.10 It is recommended that an archaeological evaluation be undertaken on the site of the proposed development in order to provide further information on the form and material culture of the occupants of the early 19th century housing, and to assess the evidence for any earlier archaeological remains on the site.

⁴⁸ Brennand, M (Editor), 2007, Page 145

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Second Edition Ordnance Survey Map 1901, 25" to 1 mile scale, Cumberland Sheet XXIII.7 (CAC)

Third Edition Ordnance Survey Map 1925, 25" to 1 mile scale, Cumberland Sheet XXIII.7 (CAC)

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Ordnance Survey Map 1965, 1:1250 scale, Plan NY4055SW (CL)

Ordnance Survey Map 1977, 1:1250 scale, Plan NY4055SW (CL)

APPENDIX 1: HER SITES AND LISTED BUILDINGS

The following table lists all the HER sites identified within a 250m radius of the proposed development area at Water Street:

HER No.	Site Name	Brief Description	NGR	General Period
19811	Slater's Cotton Mill, James Street	In 1802 the Carlisle Cotton Twist Company built a six-storey cotton twist mill on the city's Middle Meadows, known as New Mill. It was steam powered with a Bolton and Watt engine	E: 340190 N:555400	Post Medieval (Georgian)
40965	Lamplugh Works, Rome Street	Weaving mill, extant in 1865, when it made cotton and woollen cloth. Run by the Mains Manufacturing Co by 1884 when it was described as 'power-loom weavers'. In 1925 it still produced both woollen and cotton cloth	E:340043 N:555142	Post Medieval (Victorian)
40966	Hudson Scott Printing Works, James Street	Printworks of Hudson Scott & Sons Ltd began in English Street in 1799 and developed into a printing and box making concern. The business was transferred to a new factory in James Street in 1869, and became one of the major industries in Carlisle. By 1882 it employed 200. In the early 20 th century it merged with the Metal Box Company and expanded into the adjacent Slater's Mill (HER 19811)	E:340086 N:555364	Post Medieval (Victorian)
40968	Carlisle Tram System	Tram system and London Road depot built in 1900, following the withdrawal of a horse-drawn service, and closed in 1931	E:341025 N:555025	Modern (early 20 th century)
40972	Carlisle Electricity Works, James Street	Electric cables had been laid underground in 1896 in preparation for street lighting. The Electricity Lighting Station was built on James Street in 1899 to provide power for street lighting and the tram system. Built on the	E:340080 N:555423	Post Medieval (Victorian)

HER No.	Site Name	Brief Description	NGR	General Period
		site of the Borough Saw Mills (HER 41097)		
40974	Public Baths, James Street	Built by the Corporation in 1883-4. A Turkish Baths was added in 1910, this part is now Grade II listed	E:340133 N:555423	Post Medieval (Victorian) Modern (early 20 th century)
40998	St Stephen's Church, James Street	Built by 1901 as the church to a new parish	E:340140 N:555285	Post Medieval (Victorian)
41003	Newcastle and Carlisle Railway, Canal branch	A goods branch of the Newcastle and Carlisle Railway was built from the London Road Station to the canal basin. Realigned in 1873 to allow it to pass under other railways	E:340250 N:555126	Post Medieval (Victorian)
41005	Lancaster and Carlisle Railway/London and North Western Railway	The Lancaster and Carlisle Railway was opened north from Oxenholme in 1846, and the whole line was taken over by the London and North Western Railway in that year, although this arrangement did not become permanent until 1859. The line was rebuilt following the Carlisle Citadel Station Act in 1873, with the St Nicholas crossing eliminated and replaced by a bridge crossing over the lowered Canal Branch of the North Eastern Railway (formerly Newcastle and Carlisle Railway)	E:340437 N:555263	Post Medieval (Victorian)
41022	Currock Works, Currock Street	Cotton Twist Mill in existence by 1805, belonging to Cowan Heysham and Co in 1811 and 1821. In 1853 it was Lowther and Parker's cotton mill. It became the Currock Works, making cotton and woollen goods by 1865 with three reservoirs to its east side. It was bought by Joseph Iredale and demolished in 1875 to be replaced by the High Brewery	E:340194 N:555200	Post Medieval (Georgian and Victorian)
41030	Carrick's Hattery, Water Gate Lane	Although some sources say that William Carrick's hat manufactory began in 1790	E:340152 N:555477	Post Medieval (Georgian)

HER No.	Site Name	Brief Description	NGR	General Period
		(Towill), an advert in the Carlisle Journal in 1803 states that it was a 'short establishment' and a new manufactory had recently been built. It was sited on the millrace, which supplied water to the business, and is marked on maps of 1811 and 1821. The business grew, becoming William Carrick and Sons in 1834, and a new engine and boiler house were added in mid-century. It was demolished following the expansion of Citadel Station in 1876, when Water Street was also realigned, and the firm moved to new premises which became the South Vale Hat Works (HER 40951)		
41031	High Brewery, Water Street	The site of the original High Brewery. Its origins are unknown, but in 1794 it was said that a brewery had just been erected by Mr Haugh. A brewery was run by George Haugh on Water Street in 1811, and by Thomas Halton in 1829. On Wood's map of 1821, it is marked as Mr Gale's Manufactory, and a circular building on its southern edge may have been a gasometer. In 1840 it was bought by Joseph Iredale and in 1862 it was described as 'one of the most complete breweries in the north of England'. The brewhouse was five storeys high. The need to extend the Citadel Railway Station to the south west in 1871 led Iredale to move the brewery to a new site on Currock Street in 1875 (HER 41065)	E:340220 N:555460	Post Medieval (Georgian)
41032	Corporation Mill	Marked as Corporation Mill on a map of 1821, and as a mil in 1805. The site of the medieval	E:340168 N:555492	Medieval (Plantagenet)

HER No.	Site Name	Brief Description	NGR	General Period
		borough corn mill, it is probably the mill marked as 'wheat mill' in 1746. It would have been demolished to make way for extension to Citadel Station in the 1870s. This mill was in existence in 1474, when it was leased with the other mills under the control of the Corporation		
41033	Gasworks, Brown's Row	An Act for Lighting the City of Carlisle and the suburbs was passed in 1819, and the Carlisle Gas, Light and Coke Company was formed. The gasworks were established on the corner of Brown's Row with Collier Lane, although on Wood's map of 1821 it is marked as 'Glasswork'. By 1829 the gas works had 17 retorts and one gasometer, and it supplied most of the shops and manufactories and some private houses. It was replaced by the gas works next to Nelson Bridge in 1847 (HER 40973)	E:340358 N:555452	Post Medieval (Georgian)
41034	House of Recovery, Collier Lane	A House of Recovery opened in 1820 and shown on a map of 1821	E:340403 N:555400	Post Medieval (Georgian)
41061	Ireby's Mill/Long Island Works, Lamplugh Street	The first mill on or close to this site was built in 1347 by Robert de Tebay as a private corn mill. The land was later owned by the Lamplugh family. Long Island Close was let to Bernard Barton as a Printfield in 1762, and he appears to have taken over the mill, then known as Ireby's Mill, probably for finishing linen cloth in 1763. In 1764 Bartn and Wood were given permission to set up a water wheel for washing and scouring linen yarn or cloth on the mill race in Lamplugh Close. This became Brumwell, Barton & Co. By 1780, it was	E:340085 N:555225	Medieval (Plantagenet)

HER No.	Site Name	Brief Description	NGR	General Period
		known as Brumwell's Stampery, indicating that printing cloth was its main purpose. It was renamed Long Island Works when it was taken as a cotton mill by Mitchell Ellwood & Co, which went bankrupt in 1811, with power loom weaving introduced in 1810. It changed hands several times in the 1820s; a gingham and check manufacturer owned by Roper, Tweddle and Co, power loom weavers in 1829. Between 1837 and 1846 it again became a flax mill, but was converted to a foundry in 1848, making ticket-dating presses and clocks. The foundry closed in 1863, following lease expiry, the business moved to the Denton Works. Long Island as used as warehouses into the 20 th century, and has now been redeveloped as an industrial park		
41065	High Brewery, Currock Street	Following the extension of the Citadel Railway Station, Joseph Ireland moved his High Brewery from its original site on Water Street (HER 41031) to the site of the Currock Works. He originally intended to convert Currock Mill, but eventually decided to demolish and construct a new brewery in 1875. It was sold to Mr Wadley in 1879. Following its take over by the State Brewery it was closed in 1916, but was retained as stores. With the demise of state management in 1917 there was no further use for its. It was demolished in 1975	E:340174 N:555162	Post Medieval (Victorian)
41072	Corporation Dam	The mill leat supplying the town corn mills with water from the River Caldew. An	E:339750 N:556545	Medieval (Plantagenet) Post Medieval

HER No.	Site Name	Brief Description	NGR	General Period
		evaluation of the Carnaud Metal Box site in 1997 suggests that the leat had medieval origins, and 12 th -13 th century pottery was recovered from the site, but dating evidence for the leat itself demonstrated that it was established by the 18 th century. The earlier phases of the leat had been revetted by wooden stakes and brushwood, in order to prevent erosion		(Georgian)
41073	Slater's Biscuit Mill, James Street	Slater's Biscuit Mill is shown on a map of 1853 built into the western bank of Corporation Dam. By the end of the 19 th century it was replaced by a large shed extension to Slater's Mill (HER 19811). This was presumably Eagle Mill, which was taken over by Hudson Scott as storage space for their tin box manufactory	E:340169 N:555346	Post Medieval (Victorian)
41074	Waterloo Foundry, James Street	The smithy was established by Hayton and Burgess who had begun in the Old Cockpit smithy by 1829. The Waterloo Foundry on the corner of Wood Street with James Street was in existence by 1853. In 1861 William Horsley, weaving utensil and power-loom manufacturer, is listed in James Street. The foundry was later moved to St Nicholas Street, presumably following the expansion of Citadel Station in the 1870s	E:340194 N:555465	Post Medieval (Victorian)
41097	Borough Saw Mill	The saw mill was on James Street in 1853. In 1899 the electricity station was built on the site (HER 40972)	E:340060 N:555433	Post Medieval (Victorian)
41098	Hamilton Pipe Works, South John Street	Samuel Hamilton is listed as a clay tobacco pipe maker on Botchergate in 1847, and in 1858 at John Street, Botchergate. A clay tobacco pipe manufactory is marked	E:340254 N:555203	Post Medieval (Victorian)

HER No.	Site Name	Brief Description	NGR	General Period
		on South John Street on the OS map of 1865. It is marked as Samuel Hamilton's works in a sales notice in the Carlisle Journal in 1885, when it was described as 'a large tobacco pipe manufactory, moulding and trimming shops, commodious warehouse, 65ft chimney, storehouse for clay and a large yard'		
41099	Ropery, L & NER Canal Branch Railway	Ropery marked on OS map of 1865	E:340253 N:555064	Post Medieval (Victorian)
42005	Maryport and Carlisle Goods and Coal Depot	The Maryport and Carlisle Railway opened an extension of their line to Crown Street in 1844 and acquired 3 acres of land next to Crown Street in 1853. Here it built goods depot with sandstone sheds, along with cells for coal and lime. The goods shed still stands, now converted to commercial premises, and to the rear some railway sleepers still survive [in 2004-2005]	E:340370 N:555269	Post Medieval (Victorian)
42014	Unitarian Chapel, Victoria Viaduct	The Unitarians first came to Carlisle in 1872, initially meeting in the Temperance Hall in Caldewgate. In 1889, work began on a chapel at the junction of James Street with Victoria Viaduct, in the yard of the Borough Saw Mill. The building was on two levels, with the entrance to the chapel from the viaduct, with a large room beneath used as a school and for public meetings. The chapel did not flourish and following the construction of the electricity station on the site of the saw mill, the school room was sold to the Corporation and converted for the use of the station	E:340066 N:555458	Post Medieval (Victorian)

HER No.	Site Name	Brief Description	NGR	General Period
42019	Caledonian Railway	The Caledonian Railway Act was passed in 1845. The line was 122 miles long and was the largest construction project of its type up to that time. The first section from Carlisle to Beattock was opened in 1847, with the full opening in 1848	E:339485 N:556265	Post Medieval (Victorian)
42024	Citadel Station	Carlisle's principal station, planned from 1845 and built in 1847. It was built by the Lancaster and Carlisle Railway, where it was to meet the Caledonian line. There were various extensions in the 1850s including carriage sheds built on the east side in 1854, and extension to the station offices in 1855. The Carlisle Citadel Station Act 1861 granted powers to carry out extensive alterations, including to the platforms, additional goods lines to the south and new sheds built opposite the station in 1863-4, with further reconstruction through the 1870s. The reconstructed station was opened in 1881. The extensions marked the agreement of the different lines to use the station (M&CR from 1851, N&CR in 1862, NBR in 1864)	E:340254 N:555504	Post Medieval (Victorian)
42025	Goods Traffic Committee Railway	Goods line built by the Goods Traffic Committee of the various railway companies, from Willowholme junction to Bog junction, to allow goods trains to avoid Citadel Station	E:339857 N:555620	Post Medieval (Victorian)
42027	North Eastern Railway	Realignment of the Canal branch railway (HER 41003) to allow it to pass under other railways	E:340481 N:555013	Post Medieval (Victorian)
42029	London and North Western Railway Goods Station, Crown Street	Goods station for the London and North Western Railway in Crown Street built in 1867, replacing St Nicholas goods depot. A new line was built to	E:340445 N:555286	Post Medieval (Victorian)

HER No.	Site Name	Brief Description	NGR	General Period
		it in 1873		
42030	London and North Western Railway Goods Line	Goods line built in 1873 servicing the London and North Western Railway goods station on Crown Street	E:340500 N:555178	Post Medieval (Victorian)
42031	North Eastern Railway Line	Realignment of the North Eastern Railway line in 1873 from London Road Junction to Citadel Station, lowering it beneath other lines	E:340617 N:554995	Post Medieval (Victorian)
42032	Maryport and Carlisle Railway Line	Realignment of the Maryport and Carlisle Railway line in 1873 from Currock Junction to Citadel Station over other lines to remove dangerous level crossings	E:340514 N:554788	Post Medieval (Victorian)
42036	Maryport and Carlisle Railway Line	Branch off the realignment of the Maryport and Carlisle Railway line from Currock Junction to Citadel Station, providing access to the Maryport and Carlisle Railway Goods Station	E:340430 N:555147	Post Medieval (Victorian)
42040	Rome Street Gas Works	Built 1878-79 by J Hepworth, engineer. Cast and wrought iron and concrete. Gasholder No. 4 is grade II listed.	E:340134 N:555103	Post Medieval (Victorian)

The following table lists all the Listed Buildings identified within a 250m radius of the proposed development area at Water Street:

LB No.	Site Name	Brief Description	NGR	Grade
25533	Citadel Station	Railway station built 1847-48 for a Joint Station Committee by Sir William Tite, extended 1879-80. Calciferous sandstone ashlar on chamfered plinth with stepped buttresses. The building by Tite is noted to be amongst the most important early major railway stations in Britain. The detached wall (to the south-west) for the demolished roof is listed separately	E:340239 N:555536	II*
25534	Detached West Wall of Citadel	Detached wall for Citadel Station extension, formerly	E:340219 N:555437	II

LB No.	Site Name	Brief Description	NGR	Grade
	Station	joined to the main buildings by an overall roof, 1879-80. Calciferous sandstone ashlar on red sandstone base. Broad pilasters have between each of them three recessed panels with pointed heads. Liked to main buildings by a series of arched tunnels which are partly visible on the west side. Some of the arches have been let as industrial units. Overall roof was removed 1957-58		
25536	The Cumbrian Hotel [now The Hallmark Hotel]	Hotel built as The County and Station Hotel latterly The County Hotel. Dated and inscribed on pediments G.H.H (George Head Head, a Carlisle banker) 1852, by Anthony Salvin; 1866-8 by Cory and Ferguson of Carlisle. Partly rusticated stucco on chamfered plinth with rusticated pilaster quoins, string course, sill band and cornice	E:340276 N:555539	II
25678	No. 4 Gasholder, Carlisle Gas Works	Gasholder. 1878-79 by J Hepworth, engineer. Cast and wrought iron and concrete. Cylindrical rising vertical tank set in concrete pit, has had its iron plate cladding removed leaving exposed iron ribs (done before listing). Guilding frame is of 3 tiers of 12 plain round cast-iron columns with ball and spear finials, held together by lattice girders and bracing. Previous listing regarded this as first use of concrete in north of England	E:340129 N:555098	II
27849	Turkish Suite, The Pools	Turkish Baths 1909 by the County Surveyor W C Marks, built by William Johnstone of Carlisle with an interior tiled decorative scheme by Minton and Hollins of Stoke	E:340130 N:555420	II

APPENDIX 2: FIGURES
