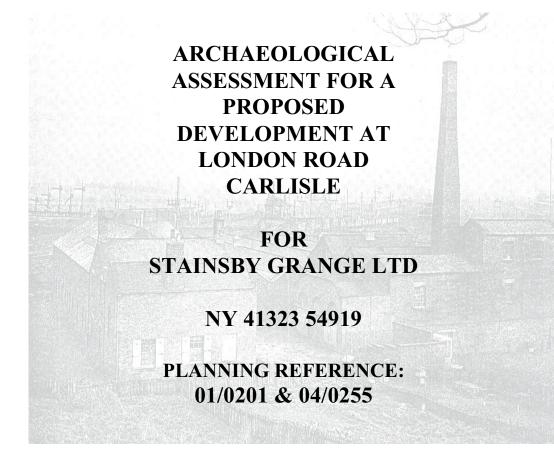
NORTH PENNINES ARCHAEOLOGY LTD

Project Designs and Client Reports No. CP/109/04



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EXECUTIVE SUMMARY

In March 2004 North Pennines Archaeology Ltd was commissioned by Stainsby Grange Ltd to undertake an archaeological desk study in advance of a non-food DIY retail store, car parking and access and a Fast Food Restaurant with Related Car Parking and Servicing (Planning Application Reference 01/0201 and 04/0255).

The study involved the collection of all readily available information regarding the archaeological landscape of the study area, including the locations and settings of Scheduled Ancient Monuments, Listed Buildings, Parks and Gardens and other, non-designated archaeological remains. The report also sets out priorities for further investigation in accordance with the guidance set out in the Cumbria and Lake District Joint Structure Plan and the Carlisle District Local Plan.

The development area falls within the Carlisle Archaeological Hazard Area, an area of high archaeological potential recorded on the County SMR. It is close to a Roman road and a number of significant archaeological remains have been found within this area. It is also part of the Medieval Socage lands of Carlisle, as it falls northwest of the River Petteril. Part of the late 18th century Mains Cotton Mill are also situated on the site, locally important within the context of Carlisle's cotton industry and the development of the town throughout the 19th century.

Owing to the high potential for surviving archaeological remains it is anticipated a programme of archaeological evaluation and building recording will be required prior to the commencement of construction on site.

The results described below are appropriate to the scheme as existing on 25th June 2004. Any changes to the scheme options will require revision of the results described in this report.

ACKNOWLEDGEMENTS

Thanks are due to the following people and institutions who gave help and assistance during the compilation of this report: Jo Mackintosh of Cumbria County Council Historic Environment Record, David Williams of Stainsby Grange, Denis Perriam, Alan James and all the staff at the County Record Office, Carlisle.

The report was written by Chris Jones, BA, MA, NPA Archaeologist and edited by Juliet Reeves, BA. Overall responsibility for the project rested with Frank Giecco, BA, Dip Arch, NPA Principal Archaeologist.

1 Introduction

- 1.1 The Cultural Heritage can broadly be defined as the man made elements within a landscape, which make and contribute to an area's historic character. It is regarded as being an important national resource of value to future generations, but one that is subject to evolution and change. Within an urban environment, the landscape has been subject to a succession of changes over time. It is important that the knowledge of past land use informs future development in order to maintain the historic character of the area. Impacts upon the historic environment can affect its historic character as an entity in its own right and from the perspective of the local community, the latter being known as visual impact.
- 1.2 This section describes those cultural heritage elements on land adjacent to London Road, Carlisle. This is limited in scope to a map of all designated sites and areas of potentially important archaeological remains within the proposed development area. In addition to a written description of the archaeological constraints of the proposals, the requirement for further work and the extent and scope of such work and any time constraints on the development will also be included. The importance of the cultural heritage of the Historic City of Carlisle is emphasised in Cumbria and Lake District Joint Structure Plan, Policy ST4, where development will enhance the functional role between the city and Scotland and the North East of England whilst not adversely affecting the area cultural heritage and environmental quality (CCC 2003, 10).
- 1.3 The scheme is located on the site of Bendall's Engineering, London Road, Carlisle (NY 41323 54919) and lies within Harraby Ward in Carlisle Parish. The study area comprises an area of land approximately 4ha (40000m²) in extent. Additional impacts, such as visual impact upon the settings of nearby Scheduled Monuments, Listed Buildings and non-designated archaeological sites, will include all areas from which the site is visible and forms a significant visual element in local views. The site also lies within the Carlisle Archaeological Hazard Area, an area of high archaeological potential recorded on the County Sites and Monuments Record (SMR). The area is shown in figure 1.
- 1.4 The principal objective of this assessment is to undertake sufficient work in order to identify and characterise the archaeological constraints associated with the development area, in order to assess the archaeological and historical potential of the development site.

2 Assessment Techniques and Methodology

2.1 Guidelines

2.1.1 The methodology used for this assessment is based on guidance set out in the Cumbria and Lake District Joint Structure Plan (Cumbria County Council 2003) and the Carlisle District Local Plan (Carlisle City Council 1997).

2.2 References

2.2.1 The Joint Structure and District Plans provide detailed guidance on the type of archaeological constraints to development appropriate to the Carlisle Region. Other guidance includes Planning Policy Guidance Note 15, *Planning and the Historic Environment* (DoE 1990) and Planning Policy Guidance Note 16, *Archaeology and Planning* (DoE 1990).

2.3 Methodology

2.3.1 Baseline Survey

- 2.3.1.1 The Assessment involved the consultation of the Cumbria County Council Historic Environment Record. This was in order to obtain information on the location of all designated sites and areas of historic interest and any other, non-designated sites within the study area, which included monuments, findspots, Listed Buildings And Conservation Areas.
- 2.3.1.2 An electronic enquiry was also made of English Heritage's National Monuments Record and the website of the Archaeology Data Service. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.
- 2.3.1.3 Further documentary study was undertaken at the County Record Office, Carlisle, which involved the collection of all relevant historical maps and documents including surveys, Tithe and Enclosure Maps, Acts of Parliament and early Ordnance Survey maps.
- 2.3.1.4 The desk study was undertaken in accordance with the Institute of Field Archaeologists *Standards and Guidance for Archaeological Desk-Based Assessments* (IFA 1994).

2.3.2 Definition of Scales of Impact

- 2.3.2.1 The impact upon the cultural heritage is defined by the presence or probable survival of archaeological remains both within the development area and its immediate environs. These remains constitute all designated and non-designated sites including: World Heritage Sites, Scheduled Ancient Monuments, Areas of Archaeological Importance, Listed Buildings, Registered Parks and Gardens and Battlefield sites and non-designated sites and includes above ground remains and buried archaeological remains. The scales of impact vary according to the importance of the site according to its designation, and its area in relation to the proposed scheme.
- 2.3.2.2 Potential impacts upon above ground archaeological remains, i.e. those clearly visible to the human eye, such as buildings, burial mounds and earthworks, may also include visual impacts upon their landscape setting. Noise may also be a factor where the remains are open to public access. Buried remains are vulnerable to groundworks, including ploughing and construction works, which could directly destroy the archaeological remains.
- 2.3.2.3 Impacts upon the buried archaeology can include direct physical damage, changes in the water table due to cuttings or drainage measures, or by disturbance, which reduces the value of a site as a historical record, such as severance of a site from its landscape setting and linked features.
- 2.3.2.4 Archaeological remains can be damaged by mitigation planting, care therefore needs to be taken when deciding where to plant in respect of buried archaeology.

2.3.3 Development of Mitigation Measures

- 2.3.3.1 According to Planning Policy Guidance Note 16 (PPG16, DoE 1990), Para A:8, "where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development, there should be a presumption in favour of their physical preservation" (DoE 1990).
- 2.3.3.2 Mitigation measures where there is a clear danger to the survival of archaeological remains could include:
 - the siting of foundations and service trenches away from archaeological remains and their setting,
 - the design of the scheme's vertical alignment and associated earthworks so that archaeological remains are not disturbed,
 - to provide for an excavation and recording of the remains prior to the start of earth-moving,
 - to provide for an archaeologist to be 'on call' so that any finds during construction can be recorded.

2.3.3.3 Reducing the impact of a development on archaeological remains is one of the factors to be considered when choosing foundation design and servicing options, conflicts can occur, for example raising vertical alignments may have a detrimental visual impact and increase noise for local people.

2.3.4 Assessment of Impacts

2.3.4.1 The assessment of impacts upon the archaeological remains is based upon the importance of the site which is itself based upon the criteria set out in the Ancient Monuments and Archaeological Areas Act 1979 (HMSO 1979). It is likely that further survey will be required before the full impact of the scheme can be understood.

2.3.5 Limitations to Surveys or Assessments

2.3.5.1 The aim of this assessment is to provide a map of the study area showing the archaeological constraints within the site of proposed development, and to provide a statement describing those constraints, detailing which areas may require additional surveys.

3 The Base Line Conditions

3.1 Existing Baseline

3.1.1 Topography, Geology and Hydrology of the Study Area

- 3.1.1.1 The study area is situated on low-lying ground, which forms part of the Carlisle Plain approximately 30m AOD. It is located approximately 0.5km south of the Historic Centre of Carlisle within an area of mixed industrial and residential use, in the Harraby District.
- 3.1.1.2 The geology of the area consists of boulder clay interleaved with alluvial sand and gravels, which occurs along the rivers and merges into marine alluvium near the upper limits of tidal waters. The boulder clay has been deposited by ice and is derived from bedrock traversed by glacial movement and is heterogeneous (SSEW 1984).
- 3.1.1.3 The principal river within the study area is the River Petteril, a tributary of the Eden, which borders the site to the south and east. The site is also crossed by a millrace, which has been diverted from the Petteril at Harraby Green, crosses the site and continues its course northwards beyond the study area. The River Petteril also forms the Parliamentary and Municipal Boundary and marked the extent of the medieval Socage Manor of Carlisle.

3.2 The Archaeological Landscape

- 3.2.1 The scheme exists in an industrial urban landscape within the modern City of Carlisle. The development area is situated partly on the northeast slope of Gallows Hill, which is 43m AOD at its highest point, falling to a height of 23m AOD on the site of Bendall's Engineering Works.
- 3.2.2 Approximately 0.5km north of the study area lies the Historic City of Carlisle. The earliest documented settlement was the Roman town of *Luguvalium*, which extended from the site of the medieval castle, along West Walls and present day Lowther Street to the Victorian Citadel. Present day London Road (the A6) has been the principal road to London since Roman times, and it is along this road that the Roman cemetery extended. The precise extent of the Roman cemetery is not known, but Roman period burials have been found as far as Gallows Hill, on the opposite side of London Road from the development site. There is a strong probability that Roman remains will be present within the study area, particularly along the area adjacent to London Road, which would be severely impacted upon by the construction of a proposed Fast Food outlet.
- 3.2.3 Within the development site lay the late 18th century Mains Cotton Mill. This mill was one of the earliest factories in the region, with some of the buildings surviving as part of Bendall's Engineering. The development proposals would mean the demolition of the works including any surviving elements from the original factory.

3.3 Legislative Framework

3.3.1 National Policy Context

3.3.1.1 Department of Environment's (DoE) Planning Policy Guidance Notes 15 'Planning and the Historic Environment' and 16, 'Archaeology and Planning' (PPG 15, 16; DoE 1990) underlines the national importance of many archaeological sites and the need for their preservation. PPG16 advises that archaeological remains should be seen as a finite and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. It states that care must be taken to ensure that archaeological remains are not needlessly destroyed. They contain irreplaceable information about our past and the potential for an increase in future knowledge. The policy guidance notes makes it clear that where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development, there should be a presumption in favour of their physical preservation (DoE 1990).

3.3.2 Statutory Designations

- 3.3.2.1 Under the Ancient Monuments and Archaeological Areas Act 1979, the Secretary of State for Culture, Media and Sport and the Executive Offices in Wales and Scotland can designate any building, structure or other work above or below ground which appears to be of national importance because of its historical, architectural, traditional, artistic or archaeological importance. This designation does not affect the ownership of the monument, but is binding to successive owners. No work can take place on a scheduled site without application for Scheduled Monument Consent to English Heritage, the statutory body for Historic Buildings and Monuments, in accordance with the Ancient Monuments (Application for Scheduled Monument Consent) Regulations 1981 and the Ancient Monuments (Class Consent) Order 1994.
- 3.3.2.2 The list of Scheduled Ancient Monuments is a selective example of the nation's Cultural Heritage and as such differs from a more comprehensive list of buildings of special architectural or historic interest compiled under Section 1 of the Planning (Listed Buildings and Conservation Areas) Act 1990. Listed Buildings are classified according to grades (Grade I being the most important and reserved for buildings of exceptional interest, through Grades II* and II to Grade III which is a non-statutory grade employed by some local planning authorities to indicate local significance). The most common form of listing is Grade II. In addition to the listing of buildings of historic interest, in cases of non-listed buildings of particular architectural or historic interest in danger of demolition or alteration, the local planning authority may serve a Building Preservation Notice. Such notices are effective for 6 months during which time the building may be listed or a decision taken not to do so.

- 3.3.2.3 In addition to the designation of Scheduled Ancient Monuments, as part of the Ancient Monuments and Archaeological Areas Act 1979, Part II, the historic town centres of Canterbury, Chester, Exeter, Hereford and York were designated as Areas of Archaeological Importance (AAI's).
- 3.3.2.4 Further to the statutory designations, the National Trust's land is inalienable by Act of Parliament, and cannot be removed from the ownership of the Trust without consent. The Trust was established "to promote the permanent preservation, for the benefit of the nation, of lands and buildings or historic national interest or natural beauty."

3.3.3 Non-Statutory Designations

- 3.3.3.1 English Heritage maintains a non-statutory Register of Parks and Gardens of Special Historic Interest. The main purpose of this register is to ensure that 'highway and planning authorities, and developers, know that they should try to safeguard them when planning new road schemes and new developments generally' (DoE Circular 8/87). Inclusion on the register does not involve new restrictions on development, nor does it affect the statutory listing or planning controls on any listed building within a registered park or garden but is a material consideration for planning purposes.
- 3.3.3.2 English Heritage also maintains a non-statutory Register of Historic Battlefields, which includes 43 of the country's most significant landscapes where armed conflict took place. The register is a planning tool, designed to highlight the importance of those places that wish to protect from inappropriate development (EH 2003). There is also a Buildings at Risk Register, published annually, which brings together information on all Grade I and II* listed buildings, and scheduled ancient monuments (structures rather than earthworks), known to English Heritage to be 'at risk' through neglect and decay, or vulnerable to becoming so. In addition, the Grade II listed buildings in London, which are considered at risk, are included (English Heritage 2003).
- 3.3.3.3 Local authorities may designate a section of land or buildings as Conservation Areas. This is a local, non-statutory designation where the area is of special architectural or historic interest, 'the character or appearance of which it is desirable to preserve or enhance'. Section 72 (1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires authorities to have regard for the fact that there is a conservation area when exercising any of their functions under the Planning Acts and to pay special attention to the desirability of preserving or enhancing the character and appearance of conservation areas.

3.3.4 Local Policy Framework

- 3.3.4.1 The study area falls within the jurisdiction of Carlisle City Council, the Local Planning Authority for the City of Carlisle, and is subject to the policies listed in the Cumbria and the Lake District Joint Structure Plan and Carlisle District Local Plan. The policies for the Historic Environment have the principal objectives:
 - Policy E31 Development and other land use changes in areas or features of national or international conservation importance, or within their settings, which are detrimental to their characteristics will not be permitted. Exceptions will only be made where: there is an over-riding need for development required to meet local infrastructure needs which cannot be located elsewhere and which is sited to minimise environmental impacts and meets high standards of design. These areas are defined as: World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty (AONB), Special Protection Areas, Ramsar Sites, Special Areas of Conservation, Limestone Pavements protected by Order, National Nature Reserves, Sites of Special Scientific Interest (SSSI), Grade I or Grade II* Listed Buildings, Grade I or Grade II* Registered Parks and Gardens, Scheduled Ancient Monuments and Battlefields.
 - Policy E34 Measures will be taken to identify, record, protect, conserve or enhance areas, sites, buildings and settings of archaeological, historic and architectural importance, Proposals which fail to preserve or enhance the character or appearance of Conservation Areas or which damage, obscure, or remove important archaeological sites or other historic features or are detrimental to the character or setting of a listed building will not be permitted unless the harm caused to their importance and intrinsic interest is clearing outweighed by the needs of development.

Cumbria and the Lake District Joint Structure Plan (2003)

- Policy E28 Development will not be permitted where there is an unacceptable adverse effect on scheduled and other nationally important ancient monuments and their settings.
- Policy E29 On other known sites and monuments of archaeological significance, permission for development will only be granted provided the applicant can demonstrate that the site will be either satisfactorily preserved or appropriate arrangements for excavation and recording have been made. These cases will be judged against: the importance of the archaeological features; the effects of the proposal on archaeological features which have a particular archaeological and/or landscape significance; the applicants arrangements for in situ preservation of the features.

- Policy E30 On all scheduled and other nationally importance monuments, sites of archaeological significance and other sites of high archaeological potential the City Council will ensure that the archaeological aspects of development proposals are examined and evaluated before planning applications are determined. Planning permission will not be granted without adequate assessment of the archaeological implications.
- Policy E31 On land for which there is no archaeological information, but where there are reasonable grounds for believing remains to be present, the City Council will ensure that the archaeological aspects of development proposals are examined and evaluated before planning applications are determined. Planning permission will not be granted without adequate assessment of the archaeological implications.
- Policy E32 The City Council will encourage proposals, which enhance major archaeological sites.
- Policy E35 Proposals for new development which adversely affect a listed building or its setting will not be permitted. The City Council will seek to encourage any new development to be sympathetic in scale, character and materials.

Carlisle District Local Plan (1997), Chapter 2: Archaeology.

3.4 Previous Work

3.4.1 There has been no previous archaeological assessment undertaken within the study area. However, there have been a number of assessments and interventions undertaken within the environs of the site.

3.4.1 19th-century Observations

- 3.4.1.1 In the later 19th century, a number of Roman burials were discovered on both sides of Botchergate, extending from Court Square to London Road and Gallows Hill. Over 40 burials were found at different times, including cremations and inhumations, together with miscellaneous discoveries of Roman pottery.
- 3.4.1.2 In 1895 an urn full of bones was found in Tait Street, and another is recorded opposite Tait Street (Charlesworth 1978, 125). At the Crown Inn, at the northern corner of Crown Street and Botchergate, Haverfield recorded the discovery of two small vessels, one containing a pipeclay figurine of Venus and burnt bone (*Ibid*, 126). As burials in Roman times were usually located outside the occupied areas, there is a clear case for regarding Botchergate as lying outside the core settlement of Carlisle.

3.4.4 Other Investigations

- 3.4.4.1 In 1985, a number of gas-pipe trenches below the western pavement of Botchergate were watched to determine whether archaeological remains could be identified. They revealed road metalling, thought at the time to belong to the Roman and medieval road, the projected line of which lies below Blackfriars Street and extends towards the Roman fort at Tullie House (CAU 1985).
- 3.4.4.2 In 1994 Carlisle Archaeological Unit undertook an evaluation in the Cecil Street car park, south of Tait Street, where remains of cremation burials were located, together with field boundaries defining fields that are probably Roman in date. Here the depth of archaeological deposits varied between approximately 0.6m and 1.45m below the modem ground surface (McCarthy and Flynn 1994).
- 3.4.4.3 During July and August 1997, Carlisle Archaeological Unit undertook a rescue excavation prior to the redevelopment of the former Co-Op building at 40-78 Botchergate, Carlisle. As most of the frontage buildings were to be retained, the investigation focused on the area to the rear, adjacent to Collier Lane, which was to be cleared and built over. A complex sequence of Roman activity was revealed, including part of a substantial earthwork (Zant 1999; Zant and Giecco 1999)
- 3.4.4.4 In 1997 Lancaster University Archaeological Unit found traces of a small Roman settlement of uncertain function at St Nicholas Yard during an excavation. The work revealed two broad, shallow ditches, which appeared to be separated by a metalled surface. Traces of possible burials and other features were also located. The excavations also revealed putative medieval features including an oven and the remains of walls, possibly associated with the former 12th century leper hospital (Howard-Davis and Leah 1999).

- 3.4.4.5 A series of evaluations followed by large-scale excavations were carried out by Carlisle Archaeology during 1998 and 1999 between Tait Street and Mary Street on the eastern side of Botchergate, revealing complex, deeply stratified Roman deposits including a sequence of buildings fronting Botchergate and a number of cremation burials (Zant and Giecco 1999; Giecco 2001).
- 3.4.4.6 An evaluation was carried out in July 2000 by Carlisle Archaeology at King Street, revealing extensive archaeological deposits throughout the site, the vast majority of Roman date (Reeves 2000).
- 3.4.4.7 An excavation was undertaken on the north-eastern side of Botchergate by Lancaster University Archaeological Unit (LUAU, now Oxford Archaeology North). The work revealed extensive Roman and Medieval archaeological deposits which provided a complete stratigraphic sequence for the Roman and post-Roman periods. The features included two Roman cremations from the late 1st century AD, a series of hearths from the early 2nd century AD, including a probable lead smelting furnace, which were overlain by later medieval deposits including evidence for structures adjacent to the street frontage (LUAU 2001)
- 3.4.4.8 In January-February 2003, North Pennines Heritage Trust undertook a field evaluation on the site of the corn mill, Harraby Green, Carlisle, which revealed the substantial below ground remains of the latest phase of the mill and also probable remains of medieval settlement, consisting of a clay and cobble foundation and a number of medieval pottery fragments in an area north of the post medieval and modern mill (Jones 2003).
- 3.4.4.9 In February 2004, North Pennines Archaeology Ltd undertook a field evaluation on land adjacent to St Nicholas Bridge, across the line of the Canal Branch of the London, Midland and Scottish Railway from London Road. The results of the evaluation included a series of stakeholes which were observed cut into the natural subsoil within trenches 1 and 2, one of which contained medieval pottery. A number of fragments of redeposited Roman and medieval pottery were found within a layer of buried ploughsoil. Deposits associated with the London and North Western Railway, which included a Wagon Repair and a Creosoting Shed, both of which survive on site, significantly truncated pre-1900 deposits.

4 Historical Background

4.1 Place Name Evidence

4.1.1 The area was known as The Maines or Mains, which derives from the Medieval lordship or demesne lands (pronounced *domain*; Denis Perriam, per's comm.).

4.2 Prehistoric

4.2.1 There is extensive evidence for prehistoric activity within and around Carlisle, including the remains of ard marks from prehistoric ploughing at Blackfriars Street and Lowther Street. Neolithic and Bronze Age pottery was found at Scotby Road, including Grooved Ware and Beaker pottery, and a collared urn and burnt mound were excavated at Garlands Hospital (Perriam 1992, 3). Flints of Neolithic and Bronze Age date have also been found, and two socketed Late Bronze Age axes were found at Kings Meadow, Stanwix (SMR No. 525). It has been suggested that the promontory on which Carlisle Castle now stands has been a defended site since at least the Iron Age and possibly a pre-Roman *dun*.

4.3 Roman

- 4.3.1 By 73 AD the Romans had established a fort at the northern end of the present city centre, and this quickly expanded to become a substantial civilian settlement measuring over 40 acres in area. The withdrawal by the Romans from Scotland in the 80s, and later the building of Hadrian's Wall from AD 122, probably had a substantial impact on the settlement. By about AD 200 Carlisle, known as *Luguvalium*, seems to have been granted special status, and it continued to flourish, with a large number of houses, shops, administrative and other public buildings, until the end of the Roman occupation around AD 400.
- 4.3.2 Outside the core part of the Roman town of Carlisle, in the period between the Flavian period and the mid 2nd century, many forts were built, some of which were temporary camps, and others were more substantial. Some doubtless housed troops on active campaigns, whilst others probably provided accommodation for soldiers redeployed during the withdrawal from Scotland and in the context of an evolving frontier policy. In addition, there are many small farmsteads, whose economy would have been linked in some way to that of Carlisle and the needs of the military.
- 4.3.3 The corridor either side of London Road and Botchergate has long been known to contain Roman remains, with some 39 burials recovered during building works in the 19th century, and other remains recovered during systematic archaeological excavation during the 1990s (Carlisle Archaeology, Lancaster University Archaeological Unit). Little is known, however, regarding the extent of the Roman cemetery (and settlement) or the nature and extent of medieval settlement.

4.4 Medieval

- 4.4.1 Following the withdrawal of the Legions in the early part of the 5th century, Carlisle probably continued to be occupied, and it housed an important monastic community from the 7th century. The arrival of the Normans in 1092 heralded a period of major change, during which the city was enclosed by walls. Throughout the Middle Ages and up to the Jacobite rebellion in 1745, Carlisle was a major frontier city on the borders of England and Scotland.
- 4.4.2 From the Middle Ages until the late 18th century, Carlisle was more or less confined to the land within the city walls, apart from three ribbon-like suburbs outside the three city gates. From the end of the 18th century, with the rapid expansion of the town during the Industrial Revolution, the three suburbs grew very rapidly in size, with new housing, factories, roads, and industrial and commercial premises. These developments, together with the advent of the railways, expanded over what had previously been open countryside.
- 4.4.3 The development site lay outside the principal area of settlement during the medieval period, a territory that, outside the protection of the city walls, was subject to ravaging by frequent raids and invading retinues. It is likely the site consisted of agricultural land during the medieval period, and formed part of the medieval lordship or demesne of Carlisle.

4.5 Post Medieval

- 4.5.1 Following the union of the English and Scottish Crowns with the accession of James I to the English throne in 1603, a programme of pacification of the borderlands began. This saw a modernisation of tenureships of great benefit to northern landowners and a breakdown of the traditional forms of Border service (Spence 1984; 64). This process of modernisation led to the undertaking of two detailed surveys of the Socage or manorial lands of Carlisle, by Thomas Johnson in 1608 and Aaron Rathbone in 1611 (Ibid, 67). Figure 3 shows the site within an area of open land, known in 1611 as The Mains.
- 4.5.2 During the later 18th and the 19th centuries, the introduction of the factory system and increasingly complex technologies gave rise to a substantial population increase in urban areas throughout Britain. In Carlisle, the construction of factories and their attraction to migrant workers from the adjacent countryside saw a concomitant rise in the urban population and a need for new residential housing outside the traditional city centre. A prime area, immediately outside the historic core, was the area north and east of Botchergate. Rydal Street, or Union Street as it was called in 1824, lay close to the Union Workhouse, which constituted one of the poorest areas of the expanding city. The area was characterised by narrow streets and cramped, back-to-back terraced housing.
- 4.5.3 The original Mains Cotton Mill dates back to the late 18th century along the a mill race along the River Petteril. Further to the south the Corn Mill at Harraby Green also used a mill race along the same river. There were also a number of mills, which used the mill race along the River Caldew, to the south and west of the city.

5 Assessment Results

5.1 International Designations

5.1.1 World Heritage Sites

5.1.1.1 There are no World Heritage Sites (UNESCO 1972) within any of the areas under consideration.

5.2 National Designations

5.2.1 Scheduled Ancient Monuments

5.2.1.1 There are no Scheduled Ancient Monuments within the study area.

5.2.2 Areas of Archaeological Importance

5.2.2.1 There are no Areas of Archaeological Importance within or adjacent to the study area.

5.2.3 Listed Buildings

5.2.3.1 There are no Listed Buildings within the study area.

5.2.4 Building Preservation Notices

5.2.4.1 There are no known Building Preservation Notices within any of the areas under consideration.

5.2.5 Battlefield Sites

5.2.5.1 There are no registered battlefield sites within the study area under consideration.

5.3 Local Designations

5.3.1 Conservation Areas

5.3.1.1 The study area does not fall within a designated Conservation Area. There are designated Conservation Areas a short distance from the site within the urban area, including Botchergate, Portland Square and Chatsworth Square.

5.4 Designated Buildings and Sites

5.4.1 There have been a number of archaeological sites within the vicinity of the study area. These include a number of Roman burials discovered on both sides of Botchergate, extending from Court Square to London Road and Gallows Hill (Giecco 2001). This area represents a significant focus of archaeological activity and falls within the Carlisle Archaeological Hazard Area (CCCAS).

6 Map Regression

6.1 The Socage Lands of Carlisle, 1610

- 6.1.1 This map, drawn by Aaron Rathbone 1610/11 is one of the earliest to show in any detail the demesne or Castle lands surrounding the city. The map is one of two detailed Exchequer surveys produced following the Union of English and Scottish Crowns in 1603, and lists who occupied the Socage lands, their holdings and claims to ownership. Half the manor, some 667 acres, was claimed as freehold, the Dean and Chapter of Carlisle was the largest of the 104 freeholders with 159 acres and "amongst the freeholders and 148 tenants were the traders, craftsmen and husbandmen of Carlisle and of Rickergate and Botchergate outside the walls." (Spence 1994, 67).
- 6.1.2 Many of the place names of modern Carlisle are described on this map, including Gallows Hill and The Mains, within which the study area falls. London Road is clearly marked, as a smallholding on the west side of Gallows Hill.

6.2 Hodskinson and Donald's Map 1774

6.2.1 This map predates the construction of the Mains Spinning Mill. The River Petteril is clearly marked on this map, as is a smallholding on the east side of London Road. No other detail can be viewed from this map.

6.3 Botchergate Tithe Map, 1848

6.3.1 The Tithe Maps are a series of maps broadly dating to the mid 19th century to show land ownership, tenure, and acreage and land value. The 1848 map of Botchergate Ward, within which the study area falls, shows the Mains Mill as a long, rectangular building and three smaller, square or sub-rectangular buildings around a small enclosure, with large parts of the site as yet undeveloped. To the south and east, within the present development site, a large field, in the ownership of Admiral Taylor and occupied by James Robinson, was used as pasture. Two smaller fields between the mill and London Road (Gallows Hill Fields) were occupied by Rothwell & Co of The Mains, and used for arable.

6.4 Ordnance Survey 1st Edition, 1865

6.4.1 This map, the first detailed survey to include all the elements of the city of Carlisle on one map, clearly shows the Mains Cotton Factory and the house and gardens of Mains House. The factory is bordered to the north by the mid 19th century railway, which crosses the Petteril and appears to cut the mill race which extends through the factory site from Harraby and re-emerges north of the railway. An embankment is shown on the east side of London Road, forming an 'L' shape, suggesting a cutting or natural hollow at this point. There is no evidence of activity either along London Road or in the area between the factory and the River Petteril.

6.5 Ordnance Survey 2nd Edition 1912

6.5.1 By 1901 the Mains factory has become a Hosiery Works and the area south-east of the factory is occupied by Petteril Bridge Goods Station, a large rectangular building reached by an extension to the railway across a bridge over the river, and also a series of cattle pens. This area appears to be on a terrace or raised area above the river. There is also a series of small rectangular buildings and one large rectangular building on the northeast side of London Road. Mains House and garden is also visible on this map, marked as 'The Mains'.

6.6 Ordnance Survey 3rd Edition 1925

6.6.1 By 1925 little has changed which is visible on the 1901 2nd Edition map. The Hosiery Works by this date had become Albion Woollen Mills and the extent of the mill complex is as it was in 1901. The area southeast of the mill continues to be occupied by the Goods Station and yard.

6.7 Ordnance Survey 4th Edition c. 1950

6.7.1 By the 1950s the track no longer extends into the site, and the Good Station is marked 'Depot'. The mill is as it was prior to the Second World War, with the exception of a cluster of small, rectangular buildings to its south and west. Mains House is still clearly visible as is a long, rectangular building on the northeast side of London Road. Large areas of the site are still unoccupied at this time.

6.8 Present Day

- 6.8.1 The site at present is occupied by two large industrial units, one of which consists of part of the Mains mill, and the other is situated on the site of the Goods Station. A disused petrol station can be seen adjacent to London Road, as can a long rectangular building, occupied by Armstrong Building Supplies. It is possible that, away from the positions of fuel tanks, part of the petrol station forecourt may overlie previously undisturbed ground.
- 6.8.2 A borehole survey across the site has identified a sequence of 'made ground' deposits ranging from 1.30m to 2.0m in thickness overlying clay and gravels. The made ground consisted of sand, brick and ash and extended across the rear of the site, where the retail units are proposed.

7 Impacts Of The Proposed Development

- 7.1 The scheme proposes to demolish existing industrial units and erect two large retail units and a Drive Thru' restaurant on the site. The development would include service areas for each of the retail units and car parking. The development site can be divided into three construction areas (see Figure 2): The area to the west of the site will be raised by 1-2m; the east of the site will be excavated 0.50m below the present ground surface and a strip adjacent to London Road which will be excavated to a depth greater than 0.50m. A fourth area (circled in blue on Figure 2), which includes a building presently occupied by Armstrong Building Supplies, will remain as is.
- 7.2 The scheme proposals for a Drive Thru' Restaurant and car parking adjacent to London Road, involving the excavation of foundations and service trenches, that will have a potentially high negative impact upon any buried archaeological remains. This is an area of high archaeological potential, adjacent to the line of a Roman Road in the vicinity of a high occurrence of significant archaeological remains. Factors to consider include the type and design of foundations to be used: i.e. the use of relatively shallow 'raft' type foundations may have a limited impact upon buried archaeological remains and also the number and locations of service trenches requires consideration.
- 7.3 Any minor groundworks required in the construction of car parking facilities may have a negative impact on any buried archaeological features.
- 7.4 It is anticipated there will be no visual impacts upon the settings of Scheduled Ancient Monuments, Listed Buildings or Conservation Areas as a result of the proposed development.

8 Archaeological Mitigation

- 8.1 It is anticipated that, owing to the high archaeological potential within the area adjacent to London Road (the areas circled in pink on Figure 2), further archaeological investigation prior to the commencement of the construction programme will be required. This could take the form of a field evaluation, in line with Policy E31 of the Carlisle District Local Plan and Policy E34 of the County Structure Plan.
- 8.2 The area to the west of the site (circled in yellow on Figure 2) will have an impact on any surviving buildings associated with the Mains Cotton Mill. The mill is an important part of the industrial development of Carlisle throughout the late 18th, 19th and 20th centuries and is of high local significance. Prior to the demolition of the exiting buildings, it is anticipated that a programme of archaeological recording will be required at the former Mains Cotton Mill, to ensure its preservation by record, which could take the form of a detailed photographic study.
- 8.3 The central and eastern part of the development site (circled in green on Figure 2), lies within an area of raised ground prior to the construction of the Goods Depot for the London and North East Railway in the late 19th century. Borehole survey has indicated this area as consisting of 'made ground' to a depth of 1.30m to 2m, through which the proposed development will impact upon the upper 0.50m. It is likely that the scheme will have a limited impact within this area, which has limited archaeological potential. The use of pile-driven foundations over a small area reduces the potential impact upon archaeological remains, which would be an effective mitigation strategy. Detailed foundation design plans should be made available to the archaeological monitoring body when considering an appropriate mitigation strategy.

9 Summary

9.1 Overview

- 9.1.1 The development area falls within the City of Carlisle Archaeological Hazard Area (CCCAS), an area although outside the Historic core of Carlisle, nevertheless falls within the area of the Medieval demesne lands. The site also lies within an area of known Roman archaeology, including a major road and a number of burials adjacent to this road. There have been finds of Roman date across the road from the development site, within the Gallows Hill area. Part of the site adjacent to this road also falls within the Gallows Hill area and as such is an area of high archaeological potential.
- 9.1.2 According to the available evidence the development site falls within an area of high archaeological potential and there is a very strong probability that remains of Roman date will be present. The site includes 2 areas of high archaeological potential:
 - *the area adjacent to London Road* (circled pink on Figure 2) the area of the highest archaeological potential, comprising a total area of 0.8ha. It is likely that buried archaeological remains of Roman date exist here. Areas subject to groundworks, such as foundation and service trenches and any minor works for car parking, etc will have a negative impact on the archaeology. Further work is anticipated here in line with Policy E31 of the Carlisle District Local Plan to determine the presence/absence, nature, extent and state of preservation of archaeological remains;
 - *the Mains Mill site* (circled yellow on Figure 2) it is probable that remains of late 18th century date survive as part of the present building. This is a highly significant historic building within the context of the industrial development of Carlisle. A programme of archaeological recording is anticipated here, to ensure that the historic parts of the building be recorded prior to demolition.

10 Bibliography

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APPENDIX 1 List of Statutory and other Consultees

Statutory Consultees

Dr Richard Newman County Archaeologist Cumbria County Council County Offices Kendal Cumbria LA9 4RQ

Carlisle City Council Planning Department Civic Centre Rickergate Carlisle CA3 8QG

APPENDIX 2 List of Archaeological Sites, Monuments and Listed Buildings

	SITE NAME	LOCATION	PERIOD	SMR NO.	DESIGNATION	NOTES
1	Harraby	NY3413 5546	Roman	3811		Milestone
2	Harraby Hill	NY3411 5548	Unknown	4537		Site of gibbet
3	Gallows Hill	NY3412 5548	Roman	5076		Coin Hoard
4	Harraby Hill	NY3410 5547	Unknown	10138		Site of Reservoir
5	Harraby Hill	NY3411 5547	Unknown	10139		Site of Workhouse

TABLE 1: BENDALL'S ENGINEERING, LONDON ROAD, CARLISLE

APPENDIX 3 – Suggested Project Design

PROJECT DESIGN FOR AN ARCHAEOLOGICAL FIELD EVALUATION ON LAND ADJACENT TO LONDON ROAD CARLISLE CUMBRIA

1 INTRODUCTION AND LOCATION

- 1.1 North Pennines Archaeology Ltd has been invited by Stainsby Grange Ltd, to undertake an archaeological field evaluation on land adjacent to London Road, Carlisle, Cumbria.
- 1.2 The work follows a proposal for the demolition of existing buildings and construction of a non-food DIY retail store, car parking and access and a Fast Food Restaurant with Related Car Parking and Service Area (Planning Application No 01/0201 and 04/0255). The scheme affects an area of high archaeological potential, close to the Roman cemetery along London Road and within the Carlisle Archaeological Hazard Area (SMR 3560). In line with Policy E30 of the Carlisle District Local Plan, a programme of archaeological field evaluation is required in order to examine the impact of the proposals prior to the determination of the planning application. The work set out in this project design will be subject to the approval of Cumbria County Council Archaeology Service prior to work commencing on site.
- 1.3 A desk-based assessment has been undertaken which involved the collection of all readily available data from the County Sites and Monuments Record, Carlisle Record Office and the archive of North Pennines Archaeology Ltd. This revealed a high archaeological potential on the site, which is situated, adjacent to the line of the Roman road (modern London Road), along which a number of Roman inhumations and cremations have been found during ground investigations since the 19th century. The site also lies within the area of the medieval Socage lands of Carlisle (Jones, C.J. (2004) An Archaeological Desk-Based Assessment of land adjacent to London Road, Carlisle, North Pennines Archaeology, Unpublished Report).
- 1.4 The field evaluation will consist of the excavation of a series of linear trial trenches and/or test pits to adequately sample 5% of the threatened available area and the investigation and recording of deposits and features of archaeological interest identified within those trenches. All features will be investigated and recorded unless otherwise agreed by the County Archaeology Service.

2 AIMS AND METHODOLOGY

2.1 Visual Site Inspection

2.1.1 A visual site inspection will be undertaken in order to note any surface features of potential archaeological interest and to identify any potential hazards to health and safety, such as the presence of live services or constraints to undertaking archaeological fieldwork, such as Tree Preservation orders and public footpaths. Particular regard will be given to the impact of basement construction within the former cinema on the survival of archaeological deposits.

2.2 Field Evaluation

- 2.2.1 The field evaluation will consist of the excavation of a series of linear trial trenches in order to provide a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. The location of the trial trenches will have to respect the numerous services, which cross the site. Prior to the commencement of the work a visual site inspection will be undertaken in order to establish any constraints to the work, including the positions of live services, public rights of way or tree preservation orders.
- 2.2.2 In summary, the main objectives of the evaluation will be:
 - to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed.
 - to establish the character of those features in terms of cuts, soil matrices and interfaces.
 - to recover artefactual material, especially that useful for dating purposes;
 - to recover paleoenvironmental material where it survives in order to understand site and landscape formation processes;
- 2.2.3 Thirteen 20m x 1.6m linear trial trenches will be excavated, comprising a minimum 5% sample of the undeveloped area. Trenches shall be excavated by a JCB 3CX mechanical excavator to either the top of archaeological deposits, or the natural substrate, whichever is observed first.
- 2.2.4 Trenches will be subsequently cleaned by hand and all features will be investigated and recorded according to the North Pennines Archaeology Ltd standard procedure as set out in the Excavation manual (Giecco 2001). If in situ burials are encountered during evaluation it is proposed that they will be left in situ, until further mitigation.
- 2.2.5 Finds will be managed by Frank Giecco. North Pennines Archaeology Ltd will undertake first aid conservation, but if further conservation is required there will be extensive consultation with appropriate specialists (see 5.2)
- 2.2.6 Any environmental evidence found during the work will be sampled in agreement with Cumbria County Council Archaeology Service under the guidance of appropriate specialists, and undertaken according to the North Pennines Archaeology Ltd standard environmental sampling procedure. Environmental samples will be processed under the direction of **Patricia Crompton, BSc Hons**, NPAL Environmental Supervisor who will also assess any human remains recovered during the evaluation.

- 2.2.7 Any human remains will be left in situ, covered and protected when discovered. No further investigation will be undertaken beyond that necessary to establish the date and character of the burial, and the County Archaeology Service and local Coroner will be informed immediately upon the discovery of the remains. The removal of any human remains will be done under strict Home Office licence and environmental health regulations.
- 2.2.8 The fieldwork programme will be followed by an assessment of the data, which will be followed by the production of a client report, following the guidance set out in the *Management of Archaeological Projects* (2nd Edition, 1991), including:
 - A site location plan, related to the national grid.
 - The dates on which the project was undertaken.
 - A concise, non-technical summary of the results
 - A description of the methodology employed, work undertaken and results obtained.
 - Plans and sections at an appropriate scale showing the position of deposits.
 - A list of, and spot dates for, any finds recovered and a description and interpretation of the deposits identified.
 - A description of any environmental or any other specialist work undertaken and the results obtained.
 - Recommendations for further analysis if applicable.

2.3 Photographic Survey

2.3.1 A photographic assessment will be undertaken of the area formerly occupied by the Mains Cotton Mill. The aim of the survey will be to identify and record all significant historical features in order to ensure their preservation by record. The survey will involve the production of a photographic archive comprising Colour Print, Colour Slide and Monochrome film and will be undertaken using a combination of 35mm and Medium formats.

3 HEALTH AND SAFETY

- 3.1 Full consideration will be given to health and safety issues during all fieldwork. North Pennines Archaeology Ltd Health and Safety Statement conform to the provisions of the Standing Conference of Archaeological Unit Managers (SCAUM) Health and Safety Manual.
- 3.2 A full risk assessment will be undertaken to assess all real and potential hazards prior to the commencement of fieldwork.

4 STAFFING

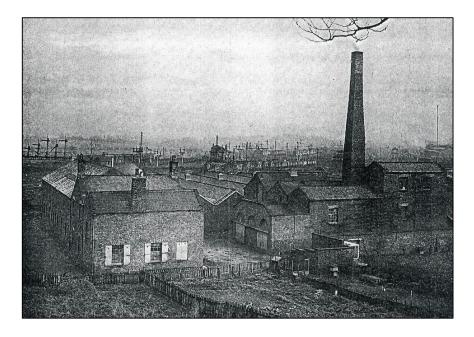
- 4.1 The work will be undertaken under the overall direction of Frank Giecco, BA, Dip Arch. AIFA, NPA Principal Archaeologist. Day-to-day work will be directed by Chris Jones, BA, MA AIFA, NPA Archaeologist who will be assisted by 3 archaeological workers. All staff are highly experienced archaeologists with significant experience of both urban and rural sites throughout Cumbria.
- 4.2 Specialist Services which may be utilised:

Illustration	Juliet Reeves, Archaeological Consultant
Lithics	Ken Denham, Archaeological Consultant
Roman Pottery	Louise Hird, Archaeological Consultant.
Medieval Pottery	Cathy Brooks, Archaeological Consultant.
Post Medieval Pottery	Anne Jenner, Tyne and Wear Museums
Environmental analysis	Patricia Crompton. NPA Environmental Coordinator
Conservation	Archaeological Services, University of Durham
Post Medieval Glass	Dr Hugh Wilmott, University of Sheffield
Wood	Ian Tyers, University of Sheffield

6 WORK TIMETABLE AND COSTS

- 6.1 The project can be implemented 1 week after the acceptance of this project design by Cumbria County Council Archaeology Service.
- 6.2 The field evaluation will require 10 working days to complete.
- 6.3 Copies of this report will be deposited within Cumbria County Council SMR and the NPA archive no later than two months following the completion of all fieldwork.
- 6.4 The field evaluation can be undertaken for the fixed and firm price of £5,550, exclusive of VAT. This includes the production of a Client report illustrating the results of the field evaluation.

APPENDIX 4 Illustrations



The Mains Cotton Mill in 1907. The London & North East Railway can be seen in the background. (from Perriam, D. 1992).