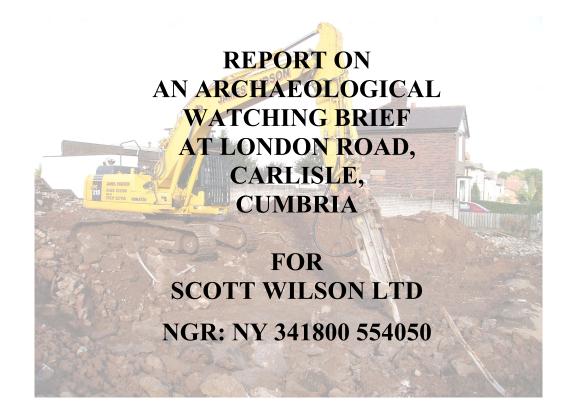
NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. 370/06



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NON-TECHNICAL SUMMARY

During August 2006, North Pennines Archaeology Ltd carried out an archaeological watching brief on London Road, Carlisle, Cumbria, on behalf of Scott Wilson Ltd (NGR NY 341800 554050). The monitoring was requested as the on site demolition contractor was required to extricate sub-surface, fuel storage tanks. The tanks were located on the site of the old Cavaghan and Gray factory adjacent to London Road. Due to the potential archaeological sensitivity of the area, Cumbria County Council Historic Environment Services (CCCHES) requested a programme of archaeological work in the form of a watching brief on the works. The removal of the tanks was therefore monitored and the results of the monitoring process showed no features or layers of archaeological potential.

ACKNOWLEDGEMENTS

Kevin Mounsey carried out the fieldwork. The report was prepared by Kevin Mounsey and edited by Matthew Town, Senior Project Officer, who also managed the project. Thanks are due to Laura Broughton of Scott Wilson Ltd for her assistance and guidance in this project, and to Jeremy Parsons, Assistant Archaeologist for Cumbria County Council Historic Environment Services.

1 INTRODUCTION

1.1 Site Background

- 1.1.1 In August 2006, North Pennines Archaeology Ltd undertook an archaeological watching brief on London Road, Carlisle (NGR: NY 341800 554050; Fig 1), following a request by Scott Wilson for archaeological monitoring during the removal of several sub-surface, fuel storage tanks. This was undertaken as part of the planning condition for the remediation works on the site (planning ref: ARH/DC/06/0638).
- 1.1.2 The storage tanks were located on the site of the Cavaghan and Gray factory adjacent to London Road. London Road lies on the Roman road into Carlisle. The known Roman cemetery at Gallows Hill lies to the north of the site, but the exact extent of its parameters are unknown. Due to the potential for archaeological remains to occur within the area, Cumbria County Council Historic Environment Service (CCCHES) requested that an archaeological watching brief be undertaken during the removal of the storage tanks. The watching brief was carried out on August 21st and 22nd 2006.
- 1.1.3 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.
- 1.1.4 The principal rivers closest to the study area are the Rivers Eden and Petteril, which flow to the south and west of the study area respectively. The River Petteril also forms the parliamentary and municipal boundary and marks the medieval Socage Manor of Carlisle.

1.2 Archaeological and Historical Background

- 1.2.1 The study area lies adjacent to London Road, the main Roman and Medieval road leading south from the city.
- 1.2.2 There is extensive potential 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 collared urn and burnt mound were excavated at Garlands Hospital (Perriam 1992, 3). Flints of Neolithic and Bronze Age date have 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*.
- 1.2.3 By 73AD a Roman fort had been established 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 80's and 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 in 400 AD.

- 1.2.4 The corridor either side of London Road and Botchergate has long been known to contain Roman remains, with some 40 burials recovered in the 19th century, and other remains recovered during systematic archaeological excavation during the 1990's (Carlisle Archaeology Ltd, Lancaster University Archaeological Unit/Oxford Archaeology North), and more recently, by North Pennines Archaeology Ltd (Giecco *forthcoming*). Little is known, however, regarding the extent of the Roman cemetery (and settlement) or the nature and extent of medieval settlement.
- 1.2.5 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.
- 1.2.6 From the middle ages until the late 18th century, Carlisle was more or less confined to 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 extension 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.
- 1.2.7 The development site lay outside the principal area of settlement during the medieval period, a territory that, being outside the city walls, was subject to ravaging and 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.
- 1.2.8 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 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, Thomas Johnson in 1608 and Aaron Rathbone in 1611 (*Ibid*, 67).
- 1.2.9 During the later 18th and 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.
- 1.2.10 During the 20th century the need and growth of residential housing estates continued in various directions around Carlisle. It is on one of these estates, Harraby, which encompasses London Road, that the old Cavaghan and Gray site is situated.

2 AIMS AND OBJECTIVES

2.1 General Objectives

- 2.1.1 The watching brief comprised monitoring the removal of sub-surface storage tanks.
- 2.1.2 The general objectives of the watching brief were:
 - to observe and record archaeological remains should they occur within the defined watching brief area;
 - to establish the presence/absence, nature, extent and state of preservation of archaeological remains as far as possible within the remit of the archaeological watching brief condition;
 - to recover artefactual material, especially where useful for dating purposes;
 - to recover palaeoenvironmental material where it survives.

2.2 Site Specific Aims

- 2.2.1 Site-specific requirements were defined as follows:
 - to monitor the area during the removal of sub-surface storage tanks and any contaminated soils surrounding them;
 - to investigate and record any archaeological remains encountered, and to protect them from damage where appropriate;
 - to define the location, character, extent and state of preservation of any features associated with the site of the Roman Road and cemetery should this be encountered in the development area, and protect them from impact by the development works.

3 Methodology

3.1 Fieldwork

- 3.1.1 The watching brief comprised of two days of observation in one distinct area adjacent to London Road, Carlisle. The machine-excavated trench measured 1.4m deep, 9.6m wide and reached a length of 14.6m.
- 3.1.2 NPA standard pro-forma watching brief sheets were completed during the observations and any archaeological features were investigated and recorded, in accordance with the NPA standard procedure as set out in the company Manual (Giecco, 2001) and the Institute of Field Archaeologists *Standards and Guidance for Archaeological Watching Briefs* (IFA 1994).
- 3.1.3 Photography was undertaken using a Praktica G3.2 Digital Camera. Pentax K1000 and Pentax P30 Single Lens Reflex (SLR) manual cameras with 200 ISO colour slide film and 400 ISO black and white print film respectively, were also retained.

3.1.4 All references to cardinal directions refer to site grid north.

3.2 **Project Archive**

3.2.1 The full archive has been produced to a professional standard in accordance with the current English Heritage guidelines set out in the *Management of Archaeological Projects* (English Heritage, 2nd Ed. 1991). The archive will be deposited within an appropriate repository and a copy of the report given to the County Historic Environment Record, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA 06, LRC-A.

4. **RESULTS**

4.1 Introduction

4.1.1 No archaeological features were exposed during the excavations and no finds were recovered during the excavations.

4.2 Trench Excavation

- 4.2.1 The trench was located on the north-east side of the site, adjacent to and fronting onto London Road. It measured 14.6m in length and 9.6m in width. Excavation took place to a maximum depth of 1.4m. The site of the trench encompassed an area that at one time was a fuel filling station. It is believed to have ceased operating and closed down in the 1980s.
- 4.2.2 The trench contained a total of eight underground fuel storage tanks. Over these was a layer of concrete approximately 0.35m thick. Protruding through the concrete were circular access hatches to the tanks. Each one of these had a round plate bolted to it. A pecker attached to a 360 degree tracked excavator, was used to remove the plates. It appeared that each tank had been filled with a sand and cement mix.
- 4.2.3 Two of the fuel tanks were removed from the ground using a bucket attached to the excavator. Some spillage of liquid occurred and a strong odour of fuel became evident. It appeared that some space within the tanks still contained fluids. A decision was made to pump out any remaining fluids within the tanks.
- 4.2.4 Removal of three of the fuel tanks left depressions in the ground 1.4m deep. Some of these contained fuel liquids. Observation of the ground stratigraphy showed there to be some building debris overlying the natural orange clay encircling the fuel tanks.
- 4.2.5 Due to the intrusive nature of the fuel tanks and the fact that the site had obviously been heavily disturbed, it was deemed no longer viable, at this stage, to carry on the archaeological watching brief
- 4.2.6 No features or material of archaeological significance were recorded.

4.3 Interpretative Discussion

4.3.1 The close proximity of the excavation to the Roman Road and cemetery justified the need for the watching brief to ensure no features or finds of archaeological

significance were impacted upon by the removal of the material during excavation. In the event, no features of archaeological interest were noted. Following consultation with Jeremy Parsons (Assistant Archaeologist, CCCHES), it was agreed that no further work was required.

5 CONCLUSIONS

5.1 Summary of Results

5.1.1 The archaeological watching brief carried out on London Road, Carlisle, Cumbria, failed to detect any archaeological features during the removal of the sub-surface storage tanks. It must be concluded that no archaeological features have ever been present at this depth, or if they have, that they have since been truncated by later developments.

5.2 Recommendations

5.2.1 The work detailed here constitutes the final report on the full programme of archaeological watching brief undertaken at the site. It is therefore recommended that no further archaeological work would be required.

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Plate 1: Underground Fuel Tanks



Plate 2: Removal of a Fuel Tank by Mechanical Excavator



Plate 3: Spilled Fluid in Fuel Tank Pit

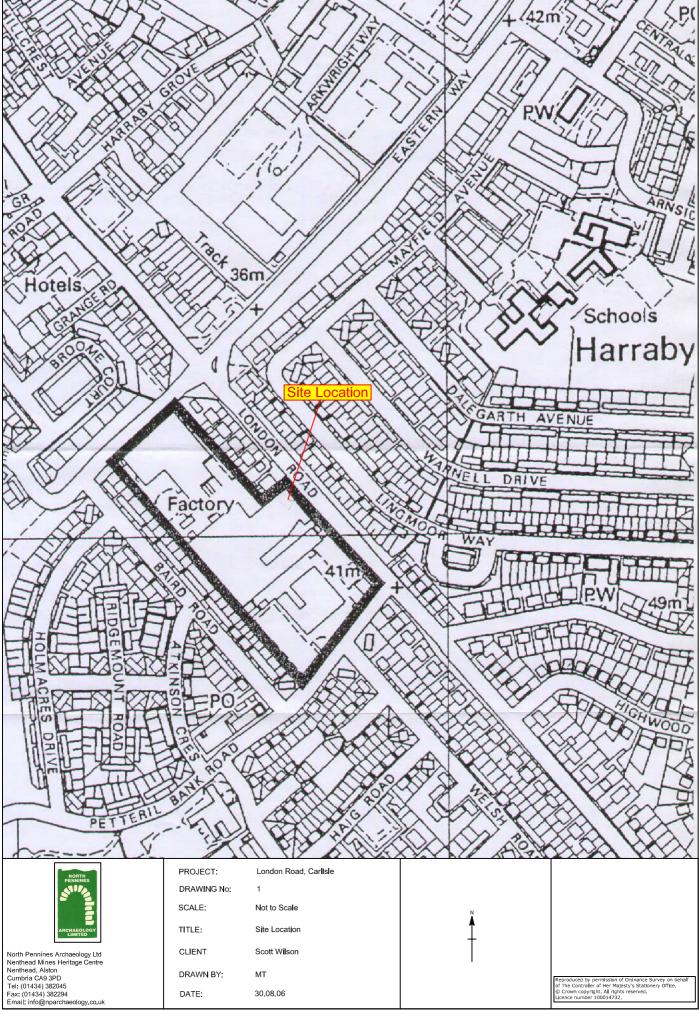


Figure 1 : Site Location

French



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London Road, Carlisle
2
1:500 approx
Watching Brief Trench
Scott Wllson
MT
30.08.06

PROJECT: DRAWING No: SCALE: TITLE:

CLIENT DRAWN BY:

DATE:





Figure 2 : Watching Brief Trench Location

INTERIM STATEMENT

In total 1 trench measuring 14.6 metres long and 9.6 metres wide was partially excavated, mechanically, by a 360 degree tracked excavator. The trench was located on the north-east side of the site, adjacent to housing and fronting onto London Road.



Plate1. Underground Fuel Tanks

Until recently the site had contained the factory buildings occupied by Cavaghan and Gray. On commencement of the watching brief all existing buildings had been demolished with materials recycled where possible. The site of the trench encompassed an area that at one time was a fuel filling station. It is believed to have ceased operating and closed down in the 1980s.

21 August 2006

The trench contained a total of 8 underground fuel storage tanks still extant. Over these was a layer of concrete approximately 0.35 metres thick. Protruding through the concrete were circular access hatches to the tanks. Each one of these had a round plate bolted to it. A pecker, attached to a 360 degree tracked excavator, was used to remove the plates. It appeared that each tank had had a sand and cement mix poured into it in the past.

2 of the fuel tanks were lifted from the ground using a bucket attached to the excavator. Some spillage of liquid occurred and a strong smell of fuels became evident. It appeared that some space within the tanks still contained fluids. A decision

was made to halt any further excavation for the day in order to pump out any remaining fluids within the tanks.



Plate 2. Removal of a Fuel Tank by Mechanical Excavator

Removal of 2 of the fuel tanks left depressions in the ground 1.40metres deep. Observation of the ground stratigraphy showed there to be some building debris overlying orange clay encircling the fuel tanks. This however was disturbed ground, having previously been excavated in order to install the tanks.

No features or material of archaeological significance were observed during removal of the fuel tanks. Digital photographs were taken of the work in progress.

22 August 2006

Removed fuel tanks had been split opened in order to extricate the sand and cement mix. There was a strong smell of fuels in the excavation area. 1 more fuel tank had been removed leaving 5 remaining. Liquids were evident at the base of some of the depressions within the excavation area. It was decided at a site meeting that no further excavation could take place until further pumping of fluids from the remaining tanks had taken place.



Plate 3. Spilled Fluid in Fuel Tank Pit

The watching brief at this stage had taken place on ground that had already been disturbed and was made up of natural orange clay surrounding intrusive building features. No features or material of archaeological significance were recorded.