A1 Dishforth to Barton Motorway Upgrade

THE ARCHAEOLOGY OF ROMAN DERE STREET
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Introduction

Dishforth to Leeming is the latest stretch of the A1 in Yorkshire to be improved in a programme of upgrades which started in the mid-1990s. As was the case with earlier schemes, the protection of cultural heritage and the environment have played an important part in the planning of the road. Historic buildings and structures have for the most part been avoided, while care has been taken to undertake archaeological surveys and to plan the route with the least impact on archaeological sites.

In addition to review of documentary, air photographic and map evidence, archaeology along the route is thoroughly researched in advance of construction through fieldwalking, trial excavation and geophysical survey. Where impacts have been unavoidable historic structures have been recorded and archaeological sites excavated. Measures have also been taken to minimise impacts upon the natural environment.

This booklet presents a summary of the results of the investigations which have been undertaken. These show that the main archaeological interest along this section of the A1 lies in the Roman period, especially around the Roman fort and settlement at Healam. The A1 corridor may have been used as a route from prehistoric times but Roman Dere Street was the beginning of the long history of an engineered road which was important throughout the
Roman period and was once again to become famous in the coaching days of the 18th century. When the railways arrived in the mid-19th century the stagecoaches went out of business but the road regained its importance with the rise of motor traffic in the 20th century. The present upgrade is the latest in a series of improvements designed to make the road safer and more efficient.

Above: Geophysical survey plot, the dark lines in Area 38 are the ditches of ploughed out field boundaries.

Right: Carrying out preliminary gradiometer survey in 2006 in advance of construction contract.

Opposite: Test pits excavated in 2006 to establish the extent of a prehistoric flint scatter in advance of construction contract.
Prehistoric features

Roman Dere Street may well follow the general alignment of a route used by people from the later Neolithic period (c. 3000 – 2500 BC) onwards as they travelled from one ritual or ceremonial site to another – within the region there are complexes of Neolithic earthwork monuments, henges, burial mounds and other sites, in the valley of the River Ure in the Aldbrough area and on the River Swale around Catterick.
Away from the monument complexes however, there is little evidence for their travels apart from occasional pits of the kind found in greater numbers nearer Boroughbridge. Pit digging seems to have been a ritual activity which involved the deposition of sherds of pottery as well as plant remains.

From around 2500 BC these semi-nomadic peoples appear to have been settling more permanently, although the population in this part of the Vale of York seems to have been very sparse and evidence remains scarce. No settlements are known and even finds of flint are

Above: A ring ditch at Sinderby, perhaps evidence for a ploughed out Bronze Age round barrow or burial mound.

Right: Bronze spearhead, c. 1200 BC.

Opposite: A Neolithic pit at Dishforth, these often contain pieces of pottery and are thought to have had a ritual function.
rare. At Sinderby a circular plan ring-ditch may be evidence for a former Early Bronze Age burial mound of the kind which can occasionally be found along the low ridge which the A1 traverses – one was excavated at Ainderby Quernhow when the A1 was widened in 1951.

A single bronze spear head of Late Bronze Age type (c. 1200 BC) was found near Rainton. It is probably a casual loss, but is the only evidence for activity at this time along the route.

Iron Age settlement (600 BC – 70 AD) is increasingly well-known from the lowland areas of North Yorkshire, with many enclosed farmsteads now identified. However, settlement of this kind seems not to have existed along the actual route of the A1. This suggests that the general communications route (rather than any engineered road) had continued in use, with the result that settlement was located slightly away from the route, in less-obvious and presumably safer locations. From later in the Iron Age (200 BC) field systems were increasingly established and a few field boundary ditches found along the A1 route may belong to this period.

Field boundaries of probable Iron Age date bordering the A1, here on the line of Roman Dere Street. These are on a different alignment from the Roman road and are probably Iron Age in date.
Romans and countrymen

From around 70AD the Romans extended their military grip on northern England. The area was by then prosperous farming country and tax in the form of agricultural produce was important in maintaining the Roman army.

A fort was established at Healam, more-or-less midway between forts at Aldbrough and Catterick, which were about a day’s march away. The fort soon became the focus of more extensive settlement which remained in use for the best part of three hundred years.

Above: Reconstruction of how the mill site at Healam might have looked and (left) millstone from a water-powered Roman mill.

Overleaf: Reconstruction of how the fort and settlement might have looked in the second century AD.
The alignment of the new A1 was planned to avoid the Roman fort and settlement, but it traversed an area outside the fort to the north-east. Here the complex remains of a Roman ‘industrial estate’ were found on the north bank of Healam Beck. The area appears to have been mainly used for food processing and storage. Here a range of large buildings, each within its own enclosure, faced onto Dere Street. The buildings were probably used for storage – perhaps for keeping supplies of grain and other foods secure before processing and distribution. Nearby kilns may have been used for baking or brewing.

A number of the buildings had been rebuilt several times over the three centuries that the fort and settlement remained in use. The excavated area produced a large quantity of finds which are being researched. One of the buildings had been constructed over the burial of a horse, thought to have been placed as a sacrifice or ritual offering.

Opposite: Healam Roman fort and settlement, showing (right) the detail of the excavated ‘industrial estate’ north of the beck.

Below: Excavating a Roman kiln at Healam.
Pieces of tile, slag and animal bone were found, as well as pottery and a wide range of metal objects. The lowermost levels, which had remained waterlogged since Roman times, contained preserved wooden posts and occasional wooden artefacts which are only rarely found, including a dowel or pin and the lid of a storage jar.

Fragment of a decorated samian dish with maker’s stamp, 2nd century AD, made in southern France.

A bronze brooch, used as a cloak fastener.

Black-burnished Ware jar, 3rd century AD, probably made in Yorkshire.

Belt fitting made of bronze with blue and cream enamel inlay decoration.

Sestertius of Trajan, AD 98-105.
The construction of a new gas pipeline on the banks of the beck to the west of the fort at Healam showed that Roman activity had extended into this area, where traces of buildings were found. The area had also been used as a burial ground, and a number of child burials were present. The area excavated at Healam produced a total of 28 inhumation and 9 cremation burials.

Above: Fragment of a soldier’s bronze diploma, awarded on discharge from the army, photo by J Jones, Durham University.

Right: Wooden lid from a storage jar, preserved in waterlogged levels.

Below: Skeleton of a horse, missing a front leg, found beneath a Roman building at Healam.
Healam lies on Dere Street between Roman forts at Boroughbridge to the south and Catterick to the north, where settlements also developed.

Outside these points, though, settlement was limited and it seems that, then as now, the road attracted service centres, with settlement staying at some distance from the road.

Left: Beside the beck at Healam a child’s footprints had been preserved in the lowermost silts.

Below: Excavating the skeleton of a child, west side of the Roman road at Healam.

Below left: The skeleton of a woman buried with a bronze bracelet. Below right: An archaeologist cleaning the surface of the metalled floor of a Roman building at Healam.
Above: The Roman road lay beneath the old A1 at Healam. Above right: The Roman road surface had been damaged by wheel ruts.

Right: At Baldersby a small assemblage of Roman pottery was found in a pit, together with a finger ring made from Whitby jet.

Far right: The Romans had workshops at York where beads and other ornaments were made out of Whitby jet. This 4 cm tall decorative piece was found during fieldwalking at Healam.
After the Romans

Although people continued to live and farm in the area after the Roman period no evidence was found along the A1 upgrade stretch and it seems likely that people continued to avoid the road, which by then was less well used.

It is likely that the villages of Kirklington, Carthorpe, Burneston and Exelby, all lying to the west of the road, were first settled at this time. Leeming is unusual in being set on the line of the road: it may have been a service centre with inns and other businesses to support travellers,
though these would have been few in number, especially in winter when travel was difficult. In medieval times Low Lane provided an alternative route to the Roman road, although it is possible that there was a medieval bridge on the old line of Dere Street at Healam Beck.

**From turnpike to dual carriageway**
Lack of funding for road maintenance combined with demand for improved transport led to the establishment of the turnpike trusts, which were able to charge travellers and so raise funds for road improvements. This stretch of the Great North Road was the subject of an initial turnpike act in 1743 and was to become famous: ‘the 13 mile stretch from ... beyond Kirkby Hill to Leeming is as straight as the proverbial arrow...well known to every horse-loving Yorkshireman as Leeming Lane’ (Tom Bradley, *The Old Coaching Days in Yorkshire*).

In the heyday of coaching, until around 1840 when the new railways took away trade almost overnight, the New Inn was the ‘principal’ house at Healam, with stabling for about twenty horses. The turnpike road followed the line of the Roman road, but was separated from it by a thick layer of clean sand, while a new bridge was constructed over Healam Beck.
The railways took most of the traffic off the turnpike roads and it was not until the growth of motor traffic in the earlier 20th century that the old roads were once again improved. In this area the A1 was crossed by a section of the Leeds Northern Railway extending from Northallerton to Ripon and Harrogate. The station at Sinderby was closed in 1962, having been used only for freight for a number of years.

Below: All Change! The derelict station at Sinderby was recorded before being demolished.
Above: The turnpike road at Healam overlain by a ‘new’ tarmac road constructed in the late 1920s or early 1930s, the new road was set between concrete kerbs and had a near-level surface, the edges of the old cambered turnpike infilled with rubble and a thick layer of tarmacadam.

Below: The old bridge at Healam was widened to accommodate the increasingly busy A1, but it still retained its 18th century appearance.
Healam was chosen as the location for one of the clocks set up beside major roads by the Leyland lorry company in the early 1930s.

Set on a steel lattice framework, the clocks bore the inscription ‘Leyland Motors for all Time’ – at Healam that may have meant until around 1955. In 1959-1960 the old A1 over Healam bridge was replaced by a dual carriageway running to its west, the short length of Roman road and later turnpike was now bypassed.
Below left: Reconstruction showing successive phases of the A1/Great North Road/Dere Street at Healam Beck. In the centre the islanded portion of the original line of Dere Street and the 18th century turnpike road, as it was in the 1930s, with the telephone wires which followed the course of the A1 and the Healam clock. On the left is the 1959-1969 dual carriageway, the A1 until 2011, while on the right the new A1 upgrade rejoins the original alignment having avoided passing through the Roman fort.

Below right: Archaeologists walk along the stretch of A1/turnpike/Roman road crossing Healam Beck: the 1959-60 A1 passes to their left, while the upgraded A1 is being constructed to their right.
Environmental archaeology considers the evidence for past environments (palaeoenvironments). Analysis is made of a variety of ecological remains to determine what the environment was like when a site was in use. The evidence includes pollen grains, snail shells, animal bones and plant macrofossils – microscopically identifiable fragments of plants.

Hand auger cores were taken at locations along the route where there was potential for waterlogged palaeoenvironmental evidence to survive. The cores collected as part of this were analysed for preserved pollen, insects and molluscs. Suitable samples were also sent for radiocarbon dating.

At Healam Beck, the evidence suggests that the area was woodland until around the time of the Romans, when the area was probably cleared to allow for settlement to be established at the river crossing. The presence of people here is further indicated by an increase in charcoal together with fragments of Samian pottery (South Gaulish Roman pottery) in the samples. During the main archaeological excavations additional palaeoenvironmental information was collected from the Healam area and other sites. This will tell us about agriculture and crop processing methods, the diet of the people who lived there and provide further information about the way the environment was changed.

It was not just past environments that were of interest. The construction of the new road affected a number of animal species. To ensure their continued protection, new habitats were created to protect them, including artificial badger setts, otter holts, ponds and hibernacula for newts, while bat boxes were also installed.
Otters are present in rivers and becks along the A1 route.

Relocation, relocation, relocation! – boxes were installed and suitable wetland habitats created to ensure that pipistrelle bats and great crested newts were moved from the path of the roadworks.
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Further information

The finds from the excavations are currently being studied by specialists and their reports will be included in the detailed account and discussion of the archaeology of the Dishforth to Leeming Project. Reporting inevitably takes time and the complete report on the A1d2b Dishforth to Leeming Project is scheduled for completion in November 2012, after which it will be published. Following publication of the report the finds and records from the excavations will be deposited in the Yorkshire Museum, York. Information will also be obtainable from the North Yorkshire County Council Historic Environment Record.

Front cover: Archaeologists reveal the surface of Roman Dere Street.
Rear cover: Excavations in progress at Healam while bridge construction continues in the background.
The construction of the A1d2b (Dishforth to Leeming) provided an important opportunity to investigate the archaeology of this little-known area of the Vale of Mowbray. The results of the work greatly enhance understanding, in particular, of the native Romano-British settlement and Roman military activity in the northern part of the Vale of York. The work was funded by the Highways Agency as part of its commitment to the historic environment and dissemination of work undertaken on its behalf.