



ARCHAEOLOGICAL  
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WYAS

**Colton Lane Junction  
Bilbrough Top  
North Yorkshire**

*Archaeological Investigations*

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# Colton Lane Junction (A64)

**Bilbrough Top**

**North Yorkshire**

## ***Archaeological Investigations***

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### ***Summary***

*An archaeological watching brief was carried out at Colton Lane Junction, to the south of the A64, during the construction of a new road and bridge complex. New access roads crossed the projected route of the Roman road between York and Tadcaster at two locations. The road was located and recorded in section and plan revealing a cobbled surface over a sand and gravel agger with a southern roadside ditch. The watching brief covering the rest of the road corridor proved negative.*

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## 1. **Introduction and Archaeological Background**

- 1 1 Archaeological Services WYAS was commissioned by Mr Gareth Talbot of Atkins Heritage to undertake an intensive archaeological watching brief during topsoil stripping in advance of the construction of a new bridge and junction complex between Tadcaster and York on the A64. The site is centred at SE 537 458 between the villages of Colton and Bilbrough (see Fig 1). The area to be monitored covered all the land-take within the proposed new road and junction complex to the south of the A64 particularly where the new road crosses the projected line of a Roman road (see Fig 2).
- 1 2 The solid geology of the site comprises Permian and Triassic sandstones overlain by soils classified in the Dunkswick soil association. These soils are described as being slowly permeable, seasonally water logged, fine loamy and fine loamy over clayey.
- 1 3 A desk-top assessment undertaken by Atkins Heritage concluded that the only known archaeological site of significance within the area that would be affected by the development was the former Roman road (Margary 28c) that linked Tadcaster (*Calcaria*) and York (*Eboracum*). The line of this road is clearly marked on the first edition Ordnance Survey (hereafter OS) map of 1849. Its projected line crosses through the current site being marked by the field boundary that forms the southern boundary of a commercial complex and a bridle path (see Fig 2). The nearest excavated section through this road was recorded at Street Houses, approximately 1km west of the current road scheme. Here the road was approximately 7m wide with a slight camber and a well-preserved surface made of gravel with a few cobbles and a robbed out kerb.
- 1 4 The main component of a Roman road is the *agger*, an embankment, typically raised about 0.75m above the surrounding land and varying in width between 8m and 13m. This raised element would typically be topped with material such as rammed gravel or cobbles to form a hardwearing surface. The end result was a durable, well-drained road with a heavy camber. Kerbstones were often employed and roadside drainage ditches were also common. These ditches ran parallel to the road edge and were commonly about 0.5m deep and 2m wide. Local materials were usually used for construction, often being quarried very close to the road.
- 1 5 The greatest potential for other unknown archaeological sites within the development area lies in the possibility of Roman roadside settlements. Evidence of Roman settlement has been located at Bilbrough Hall, to the north of the present site, and the Governor of York is thought to have maintained an outpost at Bilbrough.
- 1 6 Earlier prehistoric sites might also be present in the vicinity as indicated by the field-names Barrow Fields and Hill Field to the north-east of Bilbrough. These names (noted on the first edition OS mapping) suggest prehistoric burial mounds nearby. Indeed the same map records a tumulus just south of Bilbrough within 0.5km of the proposed junction improvement works.
- 1 7 The area to be affected by the proposed road improvements was evaluated by Archaeological Services WYAS prior to the current phase of archaeological

investigation in November 2002 (Gidman 2003). Six trial trenches were excavated and a watching brief maintained during the excavation of eleven engineering test pits. No archaeological features or deposits were identified during this investigation. However, no excavations were undertaken across or adjacent to the projected course of the Roman road because of the health and safety implications involved in working close to a high-pressure gas main the route of which also runs parallel with the projected line of the Roman road.

## **2. Objectives and Methodology**

- 2.1 The broad aim of the archaeological works was to establish the full range, extent and spatial organisation of any archaeological remains within the road corridor, and to determine the chronological phasing of the archaeology. A more specific aim was to determine the exact position and alignment, and the extent of survival of, the Roman road and any associated features, particularly to establish the location of the gas main and accurately record its relationship in respect to any surviving vestiges of the Roman road.
- 2.2 In order to achieve these aims the Principal Archaeologist at the North Yorkshire Heritage Unit advised that a watching brief should be maintained during topsoil stripping and all intrusive groundworks along the length of the road corridor to the south of the A64 (see Fig 2). Of particular significance were the two locations (Fig 2 – Areas A and B) where the new access roads cross the projected line of the Roman road. The methodology for this work was formalised in a Method Statement (see Appendix V) produced by Archaeological Services on behalf of Atkins Heritage prior to the commencement of the groundworks. This methodology was later revised to reflect the more detailed work required to record the Roman road (see below and Appendix VI).
- 2.3 The topsoil strip of the road corridor was carried out using a 20 tonne 360° mechanical excavator, equipped with a toothless ditching bucket, and a 20 tonne dump truck. The topsoil strip proceeded through Fields 1 to 4 (see Fig 2) with an archaeologist and a banksman present at all times. The topsoil strip was done in two phases. Firstly the main road corridor was stripped facilitating access and then a secondary strip alongside the first was done in areas impacted upon by the batter (banking), stripped so that the banking had a stable base. Mottoring was also undertaken during the creation of new field accesses and during the excavations for drainage including the digging of a pond created to accommodate rainwater runoff from the new road surfaces. Area A (see Figs 2, 3 and 4).
- 2.4 Due to the presence of overhead power lines along the boundary between Fields 3 and 4 and the need to keep the bridle path open at all times, the more detailed investigation in Area A began with a partial topsoil strip south of the bridle path to expose the line of the gas pipe and identify possible Roman road deposits in plan. When no such deposits were identified an exploratory trench was hand excavated in a further attempt to locate the Roman road. At this point the clients halted the excavations until a smaller machine was available that could work safely under the power lines and the whole area be stripped and evaluated at the same time. However, before this could be effected a trench opened for gas main protection work (monitored but not controlled by

archaeologists) was observed to cut through suspected Roman Road deposits pre-empting any archaeological investigation. However, the resultant sections were cleaned and recorded as appropriate using ASWYAS standard method and the area tied-in using a total station theodolite. It was at this point that it became clear that working under 'normal' watching brief conditions would have meant incomplete or compromised recording and so a new Method Statement was produced specifically to allow for the full and detailed recording of the Roman road and after a lengthy pause topsoil stripping re-commenced using a JCB under direct archaeological supervision. The resultant surface was cleaned and exploratory trenches were excavated by hand to locate the limits and width of the road. These efforts were unsuccessful and therefore two machine cut trenches were opened across the projected line of the Roman road. The topsoil stripping in Area A commenced on January 23<sup>rd</sup> 2004 and the archaeological recording was completed on March 4<sup>th</sup> 2004.

Area B (see Figs 2, 3 and 5)

- 2.5 The investigation of the second area began on September 21<sup>st</sup> 2004 with topsoil stripping across the bridle path. This revealed no archaeological remains, however further investigation was required across the field boundary and to the north. This took the form of two machine cut trenches (Trench 3 and Trench 4). The trenches were aligned from north to south measuring 1.5m in width. The trenches revealed surviving Roman road deposits that were cleaned by hand and recorded in plan. The deposits were then cut through by machine to reveal a buried soil. This too was excavated down to natural deposits.

### **3 Results**

- 3.1 No archaeological features other than the earthworks caused by ridge and furrow ploughing in Field 4 were identified during the watching brief maintained during the topsoil strip. Metal detector finds and other finds recovered from the topsoil are catalogued in Appendix III. However, in the areas of more detailed archaeological investigation evidence for the continuation of the Roman road has been identified. The results of these excavations are described below.

- 3.2 Area A Trench 1 (see Figs 6 and 7)

#### **Summary**

This trench measured 1.39m in width by 22.60m in length and revealed several sand and gravel tips that are probably the remains of material used to create the agger to the Roman road. A ditch to the south of the road contained fills probably derived from the agger and a 2<sup>nd</sup> or 3<sup>rd</sup> AD century silver ring was retrieved from the tertiary fill. Unfortunately the cut for the gas pipe removed any evidence for the relationship between the road and the ditch.

- 3.2.1 The two drawn sections, either side of the gas pipe, represent one cut across the Roman road, the excavations were undertaken at different times and at staggered locations, resulting in sections that do not knit cleanly into a single drawing.
- 3.2.2 The cut for the gas pipe divides the trench into two sections. To the south of the pipe (see Fig. 6) the dark brown natural clay was present beneath the sandy

clay former subsoil 122 Cutting both the deposit and the natural is a ditch [119] approximately 2m wide and 0.75m in depth filled with several gravelly fills (115, 116, 117 and 118). These deposits are probably derived from the materials used to build up the agger. This ditch has been truncated to the north by the cut for the gas pipe. Ploughing appears also to have dragged a line of stones from the road surface, to the south, forming layer 113.

3.2.3 To the north of the gas main (see Fig. 7) several sand and gravel tips are visible (106, 107, 109, 110, 132). These appear to be random in deposition probably resulting from bucket loads or shovel loads of material used to create the agger. The southern roadside ditch [119] is heavily truncated by the cutting of the gas pipe trench and the relationship to the agger has been lost.

3.2.4 The section to the north of the gas pipe revealed the road ending abruptly prior to the impending hedgerow, with no evidence of the road surviving in the field to the north (Field 3).

3.3 Area A Trench 2 (see Fig. 8)

#### Summary

The second trench, measuring 1.58m wide by 24.26m in length, was opened in a more controlled manner resulting in a single long section across the projected line of the road. The deposits did not mirror those encountered in Trench 1 and no evidence of a surface or notable agger was recorded.

3.3.1 The natural geology consisted of pebbles and cobbles (128/141) in this area. South of the hedge a dark band of clayey silt (129) appears to line a shallow depression in the natural geology and overlying this is a deposit of reddish brown sandy silt (131), firm in compaction and with small pebbles, gravel and stone inclusions. It was not clear whether this shallow depression was in fact the plough-damaged remnants of the roadside ditch [119] identified in Trench 1 or indeed whether deposit 131 was formed from disturbed road deposits. Overlying 131 was a similar deposit, 126, comprising light orangey brown sandy silt with frequent pebbles and cobbles but with less stone in its matrix than deposit 131.

3.3.2 The disturbance caused by the hedge boundary is a consistent feature in Area A. To the north of the hedge boundary two deposits (123 and 124) are cut by the hedge boundary. Deposit 123 comprises a greyish orangey brown sandy silt with frequent small stone fragments 0.5m in depth whilst 124 was an orangey brown sandy silt with occasional small pebbles and larger cobbles 0.35m in depth. Both these deposits were sterile and may represent banding in the natural geology.

3.3.3 Above these deposits and cut by the hedge is deposit 127, a reddish brown sandy silt that includes frequent small pebbles and stone fragments, interpreted as a possible road make-up deposit.

### 3 4 Area B Trench 3 (see Fig 9)

#### Summary

Trench 3 was 1.5m in width and 8m in length being terminated at the northern end when increasing modern intrusive activity precluded further investigation. However, well preserved Roman road deposits including the agger with a cobbled surface, kerbing and a possible roadside ditch to the south were recorded.

- 3 4 1 Sealing a buried soil horizon (155) are deposits 163 and 164 that comprise the agger. Uneven bands of dark red brown sandy clay with gravel and pebbles appear to represent shovel tips of material used to build up the road. A collection of river cobbles, 152, above the buried soil may form a marker bank. Overlying 163 is the metalled surface of the road, 153, defined on the southern edge by the marker bank that may have a second function here as a kerb. To the south of the kerb deposit 151 is less compact than 153 and may represent a continuation of the road surface but may also represent regular plough damage causing a spread of material.
- 3 4 2 A sterile layer of dark yellow brown sandy clay (150), 0.26m in depth seals the Roman road deposits. Above this is a patchy but distinct layer of pebbles (149) that might be another road surface.
- 3 4 3 Cutting through the pebble layer 149 to its southern edge is a ditch [165] filled by light grey brown silty clay (166). This feature may have been a roadside ditch draining the possible later road surface (149) or be a reworking of the field boundary.

### 3 5 Area B Trench 4 (see Fig 10)

#### Summary

The modern intrusive activity encountered in Trench 3 was again present in this trench but at this location it was possible to work around the services and concrete foundations to reveal the road further to the north. The cobbled surface, recorded in plan, the agger and a southern roadside ditch were again recorded.

- 3 5 1 Sterile yellow boulder clay (158) along the length of the trench base identified natural. A buried soil (159=191=184) overlying the natural, was in turn sealed by the first deposits of road agger (160=174=185). The agger was represented by dark red brown sandy clay with regular lenses of sand and gravel. Above this foundation was a surface (156=196=157) comprised of rounded cobbles compacted to form a metalled surface as seen in Trench 3 (153). Though difficult to identify in section this surface was recorded in plan above the agger at three locations (see Fig 10).
- 3 5 2 To the south, as in Trench 3, the road surface was cut by a ditch [168] that also cuts through the road agger and the buried soil layer. No ditch was present on the northern side of the road.
- 3 5 3 Sealing all the Roman layers was a deep deposit of buried soil (161=175=186), at least 0.5m in depth, comprising yellowish brown sandy clay. The layer was firmly compacted with few inclusions and probably



represents a soil formed after the road fell out of use that has degraded in to subsoil with no surviving organic material

#### **4 Artefact Record**

- 4 1 A silver ring was recovered from the tertiary fill (115) of the southern roadside ditch of Trench 1. The constriction between the bezel and the shoulders on this ring suggests that it was made during the 2<sup>nd</sup> or 3<sup>rd</sup> centuries (Cool 1983, Group XIII). This feature is also seen on some of the simpler elbowed rings of the 3<sup>rd</sup> century that have plain block bezels as here (*ibid* Group XIV, 1070 nos 12-19). Unfortunately the crushed and broken condition of the ring means that it is not possible to determine whether the ring had the typical elbowed profile of these rings, with a sharp change of angle at the base of the shoulders, that would confirm a 3<sup>rd</sup> century date, although this seems most likely. The powdery copper alloy corrosion products that are visible on many parts of the surface of the ring suggest that the silver has been alloyed with quite a high level of copper. The corrosion products are not obviously visible in the broken sections strongly suggesting that this piece is made from a base silver alloy and is not a copper alloy with white metal plating.

##### **Catalogue**

*Finger ring Silver with powdery copper alloy corrosion products. Rounded rectangular bezel with constriction on either side, shallow D-sectioned shoulders tapering to narrow hoop at back. Broken into three fragments and crushed out of shape. Bezel section 5.5 x 2.5mm, hoop section 2 x 1.5. 115 sfl.*

#### **5. Environmental Record**

- 5 1 Bulk environmental samples, varying in volume between 0.3 and 15 litres, were processed by Archaeological Services WYAS using an Ankara style water flotation system (French 1971). The resultant flots from nine samples were submitted for detailed analysis.
- 5 2 The flots produced between <5ml to 25ml of modern root material, very small coal fragments and occasional small carbonised fragments. These were sorted with the aid of a low powered binocular microscope at magnifications of x 4-45. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants.
- 5 3 As the majority of samples produced little or no carbonised remains they have not been tabulated. Samples 1 (111), 3 (109), 7 (167), 9 (160) and 10 (159) produced no remains and will not be considered further. The remaining samples are discussed below.
- 5 4 Very few carbonised remains were recovered from the Roman road samples. The only sample containing carbonised weeds came from context 161 (Sample 8), a layer that probably post-dates the road. Only two weed species were present and as both were poorly preserved they may not be contemporary with the layer. Sample 11 (169) contained a few very small fragments of charcoal, with one of these identifiable as *Quercus* (oak). This sample together with

Sample 12 (187) produced a number of non-carbomised modern looking seeds, mostly *Ranunculus* (buttercups) and *Rubus* (brambles) types, and *Chenopodium album* (fat hen), indicating either closeness to the subsoil or bioturbation/contamination with surface deposits. Therefore, the oak identified may not be particularly ancient.

5.5 Also probably worth a mention are the occasional finds of very small fragments (<5mm) of coal in Samples 12 (187) and 13 (185). This probably represents naturally occurring material in the local geology.

5.6 The samples from Colton Lane Junction produced very little indication of agricultural activity or use of the local environment. As a busy Roman thoroughfare, this area has not accumulated any waste material from farming such as cereal grains, or provided evidence for industrial activity that may have been indicated by the presence of charcoal. Recovery of modern plant material suggested some degree of mixing/bioturbation with surface deposits.

## 6 Discussion

6.1 The Roman road identified here is part of a 9½ mile section from Tadcaster to York, formerly the Roman towns *Calcaria* and *Eboracum*. From Tadcaster 'The present road (A64) represents it (the line of the Roman road) from beyond the River Wharfe as far as Islington, 1 mile, after which the course is derelict to Street Houses and again for a mile beyond, the present road swinging away to the south, and then to the north, of the line and only rejoining it finally after Copmanthorpe. The alignment is, however, very well marked by traces of the road, either as lanes or hedgerows with considerable remains of the agger, which at its best is 30 feet wide and 2 feet high, and much stone and pebbles are visible at some points. It is accompanied by parish boundaries almost throughout' (Margary 1973).

6.2 Sections of the road much closer to Colton Lane were exposed at Street Houses during excavations in 1928 and 1929 and also during building work in 1955, the latter discovery being recorded and featuring in the *Yorkshire Archaeology Journal* (Wenham 1957). These excavations are the nearest examination of the Roman road to the present site giving an opportunity to compare consistency of building techniques along a relatively short stretch of road. The excavations in the 1920s examined the road at two locations (unfortunately not accurately recorded) finding a width of 25 feet including a kerb on either side of 14 inches. No traces of ditches were found. The road agger was made up of cobbles, fragments of limestone and a large proportion of finely broken brick and tile to a thickness of 7 inches. Overlying this was a layer of regularly sized cobbles between 2½ and 4 inches in depth, the road surface being 'surprisingly well preserved'. Evidence of cambering was also noted.

6.3 The 1955 excavations revealed a section of road measuring 21 feet 8 inches in width and with the addition of kerbstones that were found out of situ, the road would have measured 24 feet in width. No section was cut through the road so a depth cannot be established for the agger. The surface was noted as well preserved and fairly uniform with a slight camber.

- 6 4 More recent archaeological work during the construction of the industrial unit occupied by the Land Rover Dealership east of the present site (north of the Roman road) did not identify any archaeological features or deposits and the extensive trial trenching carried out by ASWYAS prior to the junction development (Gidman 2003) similarly failed to find any archaeological activity. Therefore the fact that no archaeological features were identified during the watching brief maintained during the topsoil stripping in the areas away from the line of the Roman road is not without precedent. The archaeological evidence from the most recent phase of work is discussed below.
- 6 5 Trench 1 reveals no evidence of the road surviving to the north of the hedgerow. This absence of remains is probably a result of a combination of plough damage in Field 3 and disturbance caused by the hedgerow. The hedge may well have taken root in the softer less compact soil filling a northern roadside ditch, with subsequent root damage destroying any evidence of the ditch. Survival of the hedge has been aided by the continued use of the Roman road as a right of way and therefore a physical boundary.
- 6 6 Unfortunately the relationship between the road and ditch in Trench 1 has been lost due to the modern cut for the gas pipe. However, the hypothesis that the ditch has been dug later than the initial road construction gains weight when the height from which the southern edge of the ditch is cut is noted, along with the comparisons to the southern roadside ditch in Trenches 3 and 4 that clearly cuts the agger, assuming that the ditch in all the trenches is contemporary and continuous.
- 6 7 The gravel tips noted in Trench 1 appear to be fairly random in deposition resulting from bucket loads or shovel loads of material dumped to create the agger. This technique differs from the text-book construction where the agger is built up with a clear layering of different materials.
- 6 8 The deposits encountered in Trench 2 were significantly different than those seen in Trench 1 and though not characteristically those of a Roman road the presence of a possible southern roadside ditch shows some structural continuity. In this trench the road is in a very poor state of survival with little identifiable evidence remaining. Indeed the interpretation of road deposits is largely inferred from the section in Trench 1. The possibility remains that as the geology is of firm stone (river cobbles) then the need to adapt and build a significant road with agger was not always necessary.
- 6 9 The possibility that the hedge took root in an unidentified northern roadside ditch of Area 1 is speculation based on an assumed symmetry and examples from elsewhere. It should therefore be considered as a plausible hypothesis but without any physical evidence. As the boundary moves between Areas 1 and 2 the hedge moves from the north of the Roman road to the centre of it at the north-south fence line to the south of the Roman road by Area 2. Consequently the above hypothesis does not hold true along the whole of this section of the road.
- 6 10 Trench 3 and 4 presented new evidence on the construction of the road with significant areas of metalled surface and a possible kerb being identified. Kerbs recorded elsewhere locally are formed by large worked stones placed end to

end (Wenham), rather than by a group of large cobbles as seen in Trench 3 but the possibility remains that the larger stones seen in section through the agger were part of a marker bank

- 6 11 Later use of the route of the road appears to be evidenced by the pebble surface seen in section (Trench 3 – 149). If this is the case then the clay base looks to be a later reuse of the road/ridge with extra deposits placed down to raise it above encroaching water levels as drainage patterns changed. Certainly this hypothesis would explain the presence of a ditch [165] at its southern most limit. The ditch is cut from significantly higher than the Roman road surface 153 and is therefore much later. To the north of the road, no ditch was detected, any ditch could easily have been obscured/obliterated/truncated by the large modern concrete foundations sunk through the archaeology at regular intervals along the section into the natural.
- 6 12 The environmental and artefactual remains do not add much to the overall interpretation of the archaeology. The environmental evidence suggested some degree of mixing/bioturbation with surface deposits and as such has little to add to the discussion. The significance of the silver ring dating to the 2<sup>nd</sup> or 3<sup>rd</sup> century should not be overplayed. As it was recovered from the upper fill of the later roadside ditch in Trench 1 it does not allow an accurate date for the road to be given and only allows confirmation of a date no earlier than the 2<sup>nd</sup> century for the filling of the ditch and as seen in Trench 3 the ditch is much later than the original construction of the road. However the fact remains that this is one of very few dateable finds from the excavations.
- 6 13 The Roman occupation at Tadcaster is dated to the late 1<sup>st</sup> century AD (Roberts 1996) and it is documented that the Ninth Legion arrived in York in AD71 (Ottaway 1993). Without any archaeological evidence from this fieldwork the date of the road construction is likely to be in the 1<sup>st</sup> century AD.

## **7 Conclusions**

- 7 1 The excavations at Colton Lane Junction have located and identified the Tadcaster to York Roman road close to and orientated along its projected line. Trenches 3 and 4 located the road north of the present field boundary that denoted the projected line. Further east, Trenches 1 and 2, found it to be south of the field boundary, along the present bridle path, where anticipated. This slight deviation between predicted and actual location highlights the movements of field boundaries away from the straight lines of the Roman roads to a slowly evolving countryside of irregular field boundaries.

## ***Bibliography***

- Atkins Heritage, 2003 A64 Colton Lane Junction Improvements, North Yorkshire Archaeological Assessment
- ASWYAS, 2002, 'West Yorkshire Archaeology Service site recording manual', West Yorkshire Archaeology Service, unpubl
- British Geological Survey, 1979, Geological Map of the United Kingdom, 3<sup>rd</sup> Edition Solid, Scale 1:625 000, Institute of Geological Sciences
- Cool, H E M, 1983 *A study of the Roman personal ornaments made of metal, excluding brooches, from southern Britain*, unpubl PhD Thesis, University of Wales
- English Heritage, 1989, Monuments Protection Programme Single Monument Class Description Roman Road (Romano-British)
- French, D H 1971 An Experiment in Water Sieving *Anatolian Studies* 21 59-64
- Gidman, J, 2003, 'Colton Lane Junction, Bilbrough Top, North Yorkshire, Archaeological Evaluation', West Yorkshire Archaeological Services, (Rep 1079) unpubl
- Margary, I D, 1973, Roman Roads in Britain Notes
- Martin, L, 2003, 'Colton Lane Junction, Bilbrough Top, North Yorkshire, Method Statement for Archaeological Watching Brief', West Yorkshire Archaeological Services, unpubl
- Ordnance Survey, 1849, 1<sup>st</sup> Edition Sheet 190, Scale 6 inches to 1 mile
- Ottaway, P, 1993, Roman York
- Roberts, I, 1996, 'Tadcaster Swimming Pool Interim Report & Finds Assessment', WYAS Rep 304 West Yorkshire SMR
- Soil Survey of England and Wales, 1983, Soil Map of England and Wales, Soils of Midland and Western England, Sheet 3, 1:250 000
- Stace, C 1997 *New Flora of the British Isles* 2<sup>nd</sup> Edition Cambridge University Press
- Sutton, R, 2002, 'A64 Colton Lane Junction Improvements, North Yorkshire Tender Information and Brief for Archaeological Evaluation' Atkins Heritage, unpubl
- Wenham, P, 1957, Two Discoveries of the Roman Road Between York and Tadcaster, 39(2), pt 154, pp 276-282

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