



SURVEY AND EXCAVATION
FINAL REPORT

HANSON CEMENT QUARRY
ROMAN ROAD, CLITHEROE,
LANCASHIRE

prepared for
Pendle Hill Landscape
Partnership

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Summary

At the invitation of the Pendle Hill Landscape Partnership an archaeological investigation was carried out by Northern Archaeological Associates and local community volunteers into a section of the Roman road from Ribchester to Ilkley where it passes through the present Hanson Aggregates quarry north-west of Clitheroe during September and October 2021.

The investigation consisted of a topographic survey of the modern ground and buried road surfaces, and of excavation of part of the road itself. This confirmed the presence and course of the road and provided evidence for the nature of its construction while allowing members of the local community to learn basic surveying, excavation and recording techniques.

1.0 INTRODUCTION

- 1.1 This report presents the results of an archaeological survey and excavation of a section of the Roman road from Ribchester to Ilkley (Margary 72a) within the grounds of the Hanson Aggregates quarry, Bradford Road, north-east of Clitheroe, Lancashire (Fig. 1), where cartographic, topographic, LiDAR, documentary and ground-truthed evidence indicate the course of the road running from south-west to north-east (Fig. 2).
- 1.2 Northern Archaeological Associates (NAA) were invited to conduct the investigation by the Pendle Hill Landscape Partnership (PHLP) with the co-operation of the site owners, Hanson Aggregates.
- 1.3 Work took place over three weeks during September and October 2021, involving archaeologists from NAA and local volunteers from PHLP.
- 1.4 The work consisted of an initial topographical and auger survey followed by an archaeological excavation of a section of the road.

2.0 LOCATION, TOPOGRAPHY AND GEOLOGY

Location

- 2.1 The site is located to the west of the A59, 2.5km north-west of the centre of Clitheroe, between Pendle Hill to the south-east and the River Ribble to the north-west, National Grid Reference SD 76442 42803 (Fig. 1).

Geology and soils

- 2.2 The geology of the area consists of diamicton Devensian till (boulder clay) overlying Clitheroe limestone and Hodder mudstone formation bedrock (BGS 2021a).
- 2.3 Soil in the area is clayey and loamy, seasonably wet, slowly permeable and acidic. It is shallow on higher ground becoming deeper downhill (BGS 2021b).

Topography and land-use

- 2.4 The site is located on the eastern side of a small hill, with ground sloping down to the south-east towards Warston Brook, at a height of c.110m above Ordnance Datum.

- 2.5 The site is bounded by pasture to the north, west and east, with a large spoil heap of quarry material to the south. A modern track on made ground, associated with the quarry, runs along the north-western edge of the site.

3.0 SUMMARY ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1 A study of the Historical Environment Record was made by PHLP volunteers, which has been extensively utilised in this report.

Prehistoric

- 3.2 A single barbed and tanged arrowhead was found in 1961, approximately 200m uphill (north-west) from the excavation site in an area since quarried away. No other finds of prehistoric date have been recorded nearby.

Roman period

- 3.3 The Roman road from Ribchester to Ilkley is assigned the Margary number 72a (Margary 1973). It is recorded on the 1898 Ordnance Survey map crossing the River Ribble east of Ribchester, south-west of the excavation site, and heading east, before turning to the north-east at the crossing of the River Calder and continuing to the modern Whalley Road. It does not reappear on the 1898 map until it turns eastwards again between the villages of Chatburn and Downham to the north-west of the excavation, but it is seen preserved as a parish boundary running through the site. Satellite imagery shows much of the line of the road from the Calder to the quarry represented by remaining hedgerows, including immediately adjacent to the excavation site. This route takes the road around the north of Pendle Hill while staying above the flood plain of the Ribble.
- 3.4 The discovery in 1778 of a hoard of approximately 1000 Roman silver denarii dating from 32BC to AD145 by workmen on the Chatburn to Worston road, c.500m north-west of the excavation site, is recorded by W.T. Watkin in "Roman Lancashire" (1883).

Medieval

- 3.5 Clitheroe Castle, a Scheduled Ancient Monument lies within the town, 2.5 km south-east of the excavation site. Original construction took place in the late 11th and early 12th century (<https://historicengland.org.uk/listing/the-list/list-entry/1016196>).
- 3.6 Medieval strip fields delineated by hedgerows run 260m south-east from the excavation site to the edge of the village of Worston, though these are now truncated by the A59.

They are bounded to their north-west by the Roman road, suggesting that the road was still a significant part of the landscape when they were laid out. An exact date cannot be assigned to the fields, though the settlement of Worston can be traced as a place name as far back as at least AD1246 (Iles 1992).

Post-medieval and modern

- 3.7 Bellmanpark Limeworks opened c.1869 and various associated structures dating to the late 19th and early 20th are recorded within a kilometre to the north and west of the excavation site. These include the Bellmanpark lime kilns and tramway, which form a scheduled monument (<https://historicengland.org.uk/listing/the-list/list-entry/1021105>).

4.0 AIMS AND OBJECTIVES

- 4.1 The investigation was conducted to confirm the character and course of the Roman road and to identify roadside ditches if present, while involving and engaging the local community who would learn basic archaeological survey, excavation and recording skills.

5.0 METHODOLOGY

- 5.1 An initial survey was conducted with local volunteers on a section of the agger 100m north-east of the excavation site (Plate 1). This consisted of an examination of the overlying topography of the road by optical instrument (dumpy level), taking readings of relative height of the modern ground surface (Plate 2). A hand auger survey was then conducted at the same points as the topographic survey to create a profile of the buried surface of the Roman road by drilling through the post-Roman overburden soils until the stone surface of the road was encountered (Plate 3). This process was repeated on a second day to allow more volunteers to participate.
- 5.2 The area of excavation, within which the road survived as an upstanding earthwork (Plate 4), was to be stripped of overlying modern soils by mechanical excavator to expose the surface of the road. However, the unexpected nature of the later sand and clay surface overlying the stone road meant that the road was not properly identified at this stage and the methodology was adapted considering this. After identification of the road a slot was dug at the south-west end of the machined area to show the available transverse section (Fig. 3), and topsoil was stripped by hand to the south-west of the machined area to reveal the road surface.

- 5.3 Following excavation, the section through the road was drawn and photographed, and the exposed surface was also drawn in plan and photographed.
- 5.4 Written descriptions of archaeological features/deposits were recorded on NAA pro forma context sheets, which employ standard archaeological recording conventions.
- 5.5 Finds were appropriately packaged and stored on site in accordance with published guidelines (English Heritage 1995; Watkinson and Neal 2001).

6.0 RESULTS

Survey

- 6.1 The results of the topographical survey, using a dumpy level and an auger were processed to create a contour plot of the upper turfed surface of the earthwork and the surface of the underlying road (Fig. 3). The contour plot revealed that the underlying road surface was relatively flat and the agger was seen sloping down to the north-west. Only part of the road was surveyed due to the location of a modern fence, so the south-eastern edge of the road was not visible on the contour plot. The topographic and auger survey confirmed that the road continued along the course suggested by the Lidar results (Fig. 2).

Excavation

- 6.2 The earliest archaeological deposit identified was the foundation layer of the Roman road (12), which measured at least 0.5m in depth at the centre of the road. The foundation was seen to a width of 4m in section and continued under the unexcavated made ground to the north-west. A total width of over 6m could be estimated, assuming that the highest point of the road represented its centre (Plate 5). A surface layer of smaller stones (11), up to 8cm thick, overlay the foundation, although there was little to differentiate it from the underlying deposit other than size of stone used in construction, and it was not positively identified beyond pit 13 where it was not exposed in plan (Plate 6).
- 6.3 The edge of a possible roadside ditch (16) filled with gravel (15) eroded from the road surface was identified at the south-east side of the road (Plate 7). However, the extent of this material to the south-east could not be established within the limit of excavation and it may have been a spread of material overlying a steeper area of the natural slope of the hillside.

- 6.4 The road surface and foundation were cut by a feature (13). This was not exposed fully in plan but perhaps represented a robbing pit for building materials. It was well repaired by infilling with stone and clay (14), which was similar to the material used in the initial construction of the road.
- 6.5 The road and possible ditch were overlain by a mixture of sand and clay (10) with few inclusions. The surface of this deposit continued the camber of road surface 11 for approximately 2m on its north-west side before sloping down towards the south-east, and had a maximum depth of 0.55m. Where it was exposed in plan, an interface layer with subsoil (17) and topsoil (1) came down onto a highly compacted surface. The line of this surface could not be confidently identified in section, so 10 to the south-east may include eroded material from the deposit overlying the surviving compacted material. This deposit continues to the south-east beyond the limit of excavation.
- 6.6 The sandy clay road surface (10) was overlain by 0.2m of topsoil and turf (1) forming a visible ridge along the length of the excavation site.

7.0 THE FINDS

Pottery (Charlotte Britton)

- 7.1 A single rim fragment of local Roman period greyware pottery was found in the topsoil (1).

8.0 DISCUSSION

- 8.1 Nothing earlier than the metalled road was identified during the excavation, as the foundation of road was too substantial to remove entirely.
- 8.2 There is clear evidence for the presence of a metalled road which has been resurfaced with sandy clay, following the route of the presumed course of the Roman road. The paucity of finds recovered from the current excavation are, however, insufficient to prove the date of either phase of the road as Roman. The deep deposit of stone forming the base of the road may have been necessary to provide a solid foundation in the natural boulder clay on sloping ground. The road was surfaced with a layer of smaller, rammed stone, some of which were dislodged either during use or by later weathering and spread to the side of the road. The material used in the road's construction probably derives from the local boulder clay, though there is no immediate evidence for an extraction site.

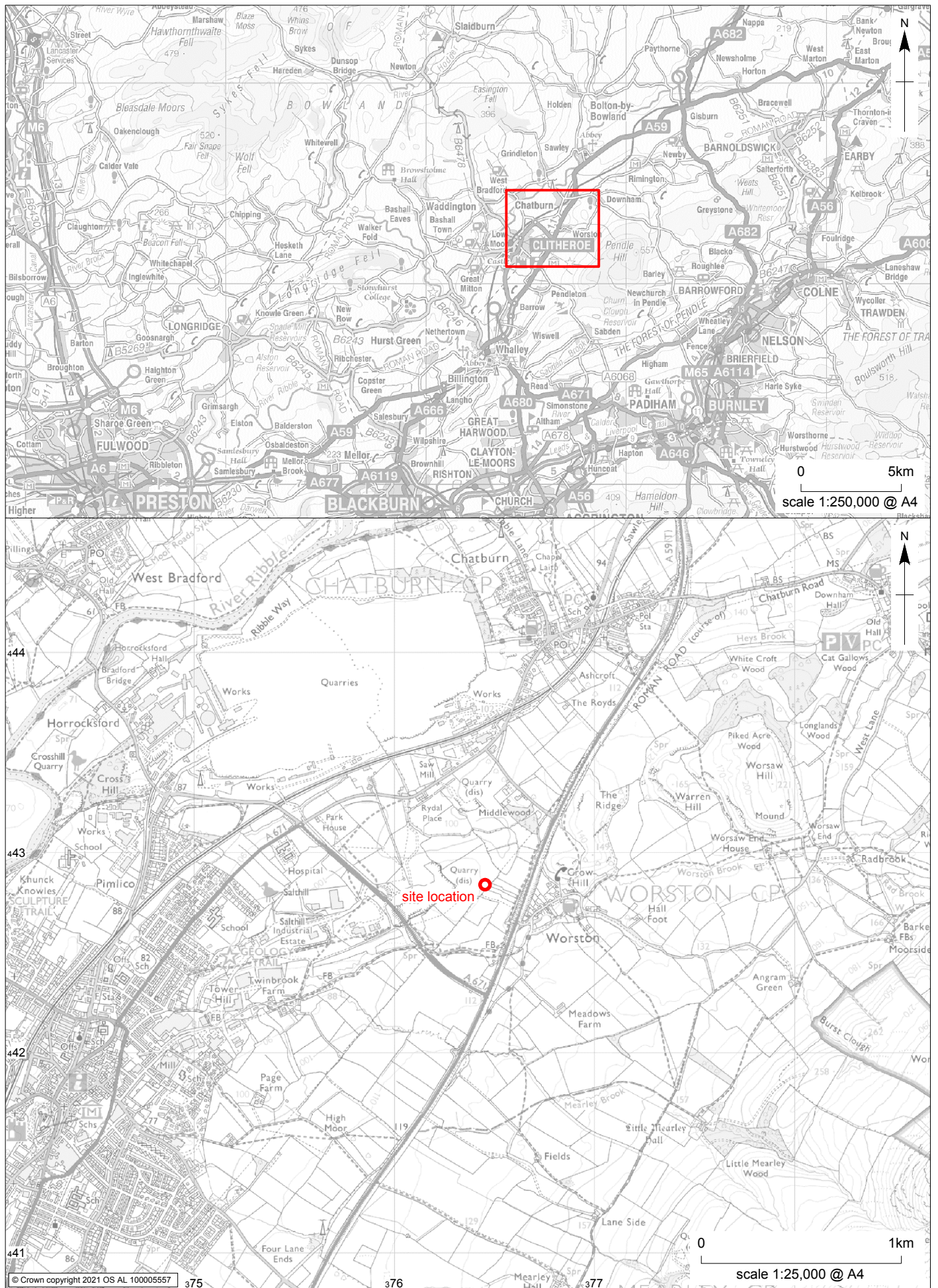
- 8.3 There is evidence for a roadside ditch along the south-eastern edge of the road but any evidence for a counterpart on the north-western side was beyond the limit of excavation and may now lie under the modern haul road.
- 8.4 The pit cut through the surface of the road may show robbing for construction material, though no evidence has been seen of its reuse. The repair of the pit using a similar technique to the original construction indicates maintenance of the road during the Roman period.
- 8.5 The undated later surface, along with the evidence of the medieval strip fields to the south-east imply use and maintenance of the road beyond the Roman period. The Ribble and Aire valleys form an important trans-Pennine route for travel and trade, and it is likely that an established route would see continuous use.
- 8.6 After the road went out of use a layer of topsoil formed above it, though the camber and course of the road can still be seen in parts of the modern ground surface.
- 8.7 The contour plot resulting from the topographic and auger survey revealed that the road was present in this location and followed the course suggested by the results of the Lidar survey.
- 8.8 There is the potential to expose more of the road surface to the south-west of the current slot to investigate the general construction of the road and to ascertain whether the identified pit is an isolated occurrence or part of wider robbing out of construction material.
- 9.0 ARCHIVE DEPOSITION**
- 9.1 The physical archive resulting from the archaeological investigations, including paperwork, drawings, and the finds assemblage, is to be deposited with the Pendle Hill Landscape Partnership (PHLP) so that it may make use of the data for educational, promotional and publication purposes. It is recommended that PHLP submits the project archive to the appropriate recipient museum or collecting authority within Lancashire County Council and the digital archive with the Archaeological Data Service (ADS).

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APPENDIX A
CONTEXT AND FINDS CATALOGUE

Context	Interpretative description	Relationships	Notes
1	Topsoil	-	-
2	Backfill of modern pipe trench	Fill of 3	No evidence for pipe trench cutting archaeology
3	Cut of modern pipe trench	Filled by 2	-
4	Sandy clay road	-	Same as 10
5	Stone road surface	-	Same as 11
6	Road foundation	-	Same as 7 and 12
7	Road foundation	-	Same as 6 and 12
8	Void	-	-
9	Natural	-	-
10	Sandy clay road	-	Same as 4
11	Stone road surface	-	Same as 5
12	Road foundation	-	Same as 6 and 7
13	Cut of robbing pit	Filled by 14	-
14	Fill of robbing pit	Fill of 13	-
15	Gravel fill of roadside ditch	Fill of 16	-
16	Cut of roadside ditch	Filled by 15	-
17	Subsoil	-	-

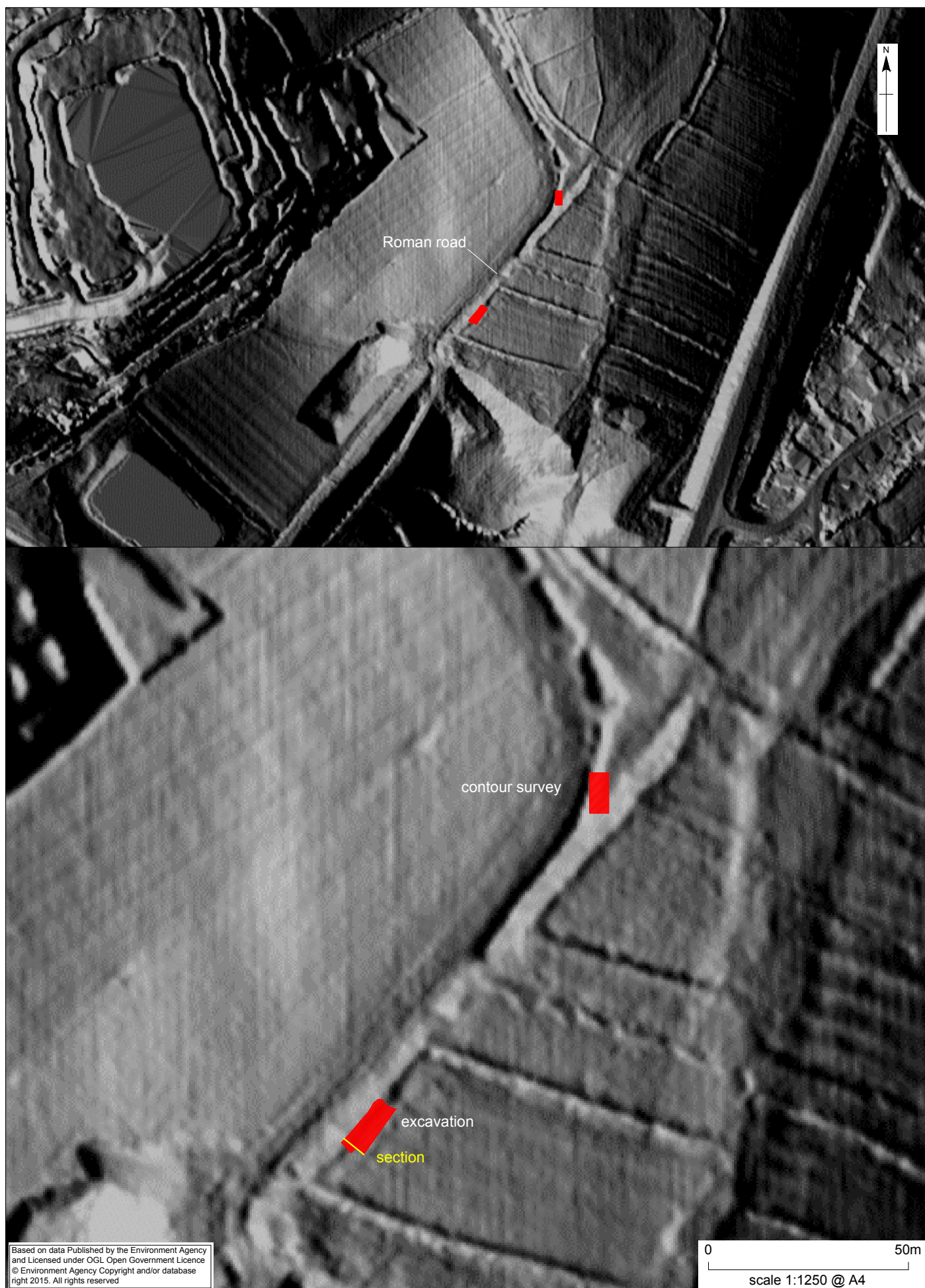


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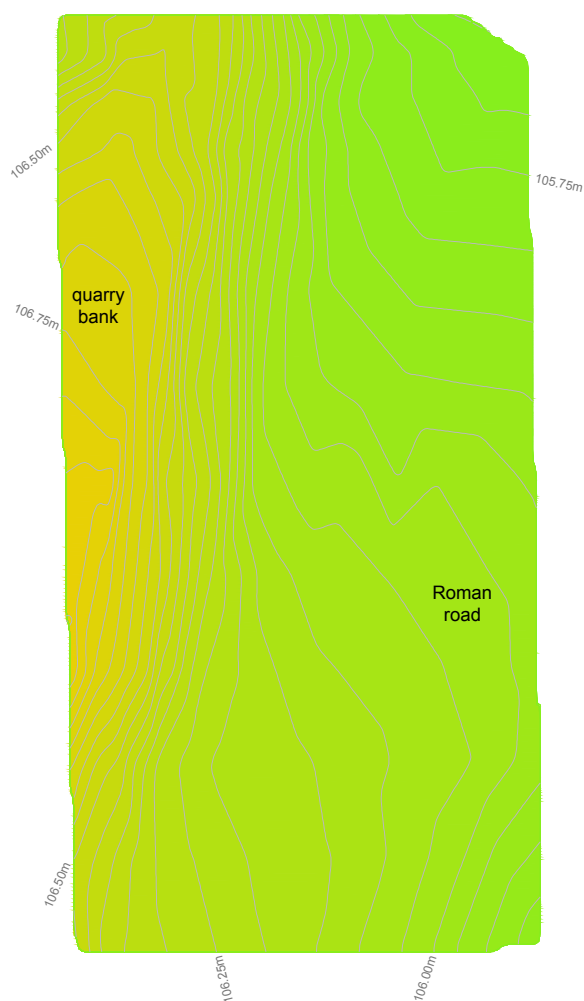
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Hanson Cement Quarry: site location

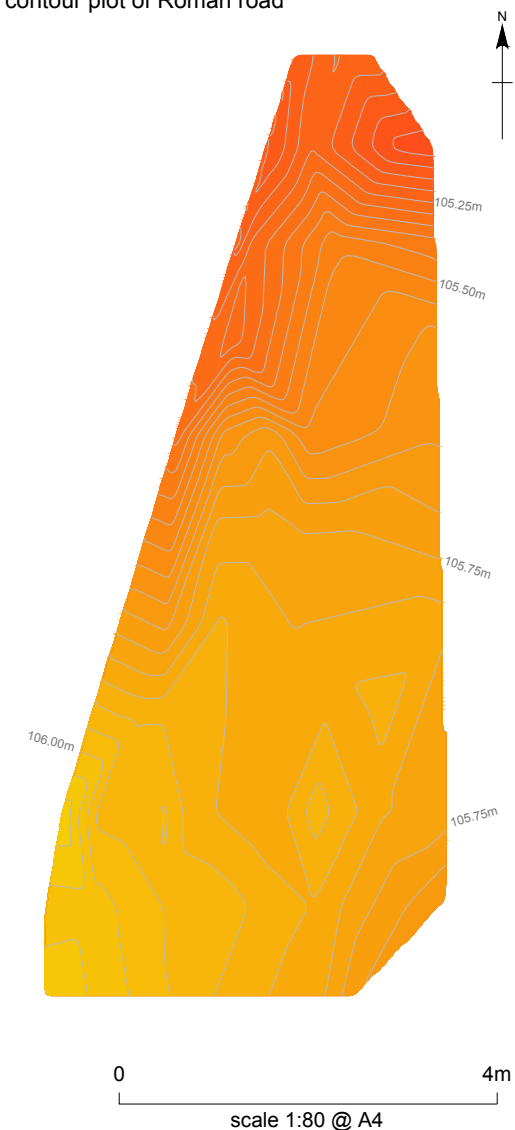
Figure 1



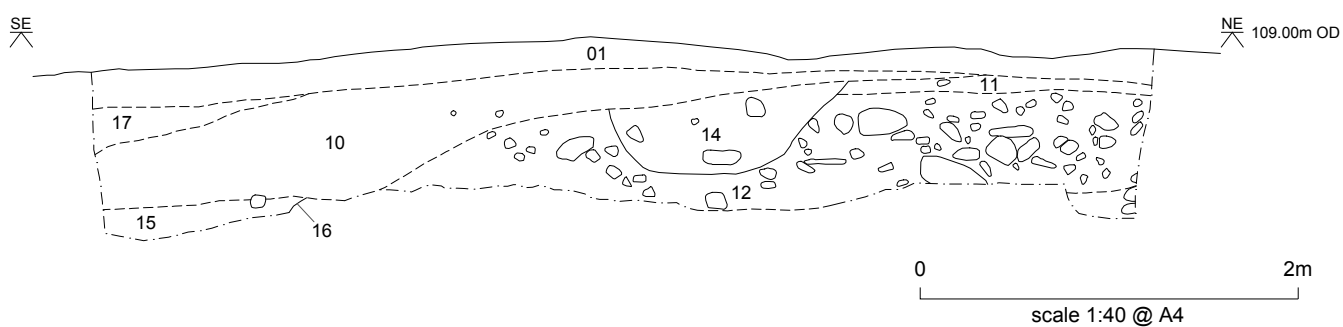
Surface contour plot of Roman road and quarry bank



Sub-surface contour plot of Roman road



Section





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Hanson Cement Quarry: site of initial topographic and augur survey, with surviving agger continuing under fence and into trees

Plate 1



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Hanson Cement Quarry: volunteers engaged in topographic survey

Plate 2



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Hanson Cement Quarry: volunteers participating in auger survey Plate 3



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Hanson Cement Quarry: the upstanding earthwork prior to excavation

Plate 4



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Hanson Cement Quarry: section of upper surface showing agger, clay and stone surfaces, facing south-west

Plate 5



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Hanson Cement Quarry: oblique view of section with exposed road surface, facing south

Plate 6



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Hanson Cement Quarry: south-east end of section showing possible roadside ditch, facing south-west

Plate 7