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**EDITORIAL COMMITTEE**

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James Whitaker
Sally Woodlock

**CONTACT ROMAN ROADS RESEARCH ASSOCIATION**

If you’re interested in Roman roads or would like to know more contact us via our web site [http://romanroads.org/](http://romanroads.org/) or by mail to one of the below;

**Mike Haken** (Chairman)  
mike@romanroads.org

**Dave Armstrong** (Membership Sec. & Newsletter Editor)  
dave.armstrong@romanroads.org

**Rob Entwistle** (Itinera Editor)  
itinera@romanroads.org

**Rebecca L. Ellis** (Finds Officer & Social Media)  
reb.ellis@romanroads.org
ABOUT THE ASSOCIATION

What did the Romans do for us? One thing they certainly did was to lay the foundations for our modern road network, with millions of us driving every day along roads first laid out by Roman surveyors two millennia ago (such as Oxford Street in London, and large parts of the A1, A5 and many others). Unfortunately though, much of the Roman road network is not represented by modern roads, and despite a common assumption that Ivan Margary’s comprehensive gazetteer, Roman Roads in Britain (1973) made our understanding of the Roman road network reasonably complete, less than 40% of the network is actually known with any certainty. That false assumption has also frequently led to a lack of attention from the professional archaeological community (with the notable exception of roads in Wales), and for most of the past hundred years the serious study of Roman roads was left to a handful of disparate individuals and small amateur groups, with little or no co-ordination or cooperation between them.

The RRRA was formed in 2015 as a registered charity to bring those disparate individuals together, and to coordinate a nationwide programme of consistent and high quality research, promoting the study of Roman roads and Roman heritage throughout the former Roman province of Britannia. Over the last couple of decades, it has often been a race against time to discover and record what we can of the 60% of the Roman road network about which we are still uncertain, since modern agricultural methods and urban development have been steadily removing surviving features from the landscape. Fortunately, new technologies such as LiDAR and geophysical survey have helped enormously and enabled researchers to identify the remains of hundreds of miles of previously unknown Roman roads, along with associated Roman sites, and we continue to work to fill the many gaps. Research is only half the story though, we also have to ensure that the results of our work are readily available. We aim to:

1. bring together all known information on Roman roads in Britain, summarised in a freely accessible online interactive gazetteer, expected to be complete by 2026.

2. identify key sites where important questions remain, and organise fieldwork necessary to answer those questions. 100 Ha of geophysical survey have been completed, with a further 500 Ha already planned, and several future excavations are currently at the planning stage.

3. encourage the involvement of as many people as possible in our activities. We care passionately about community archaeology, and will always encourage local people to get involved in our work, without any charge (unlike some organisations, we will never do this!).

4. organise events to keep people up to date with research including online talks & seminars.

5. ensure that all our published work is Open Access, including our quarterly newsletter and Itinera (following a very short initial members only embargo).

Membership is open to everyone, and our three hundred or so members come from a wide variety of backgrounds ranging from those with just a general interest in our Roman heritage to professional archaeologists from both the public and commercial sectors, alongside seasoned Roman roads researchers. Joining the RRRA gives you the knowledge that your modest subscription (just £14 a year for a single adult) is helping to support our important work. You might even get a warm and fuzzy glow.
FROM THE CHAIRMAN

MIKE HAKEN

Whilst it may no longer be fashionable for academic journals to carry a Chairman’s message or annual review, we felt that for our first ever volume a brief outline of our activities in 2020 was more than justified, especially in the current circumstances of the Covid-19 pandemic.

The Roman Roads Research Association is a young organisation and was less than five years old at the beginning of 2020. Of course, at that time we had no idea of the challenges that the Covid-19 pandemic would present. For ourselves, the impacts were felt mainly in our fieldwork and public engagement. Our plans to revisit the site of our hugely successful community excavation on Dere Street (RR8a) and a nearby Romano-British settlement in 2019 had to be shelved, and we currently cannot say with certainty if we will revisit the site this year. The pandemic also prevented us moving forward with our Devil’s Causeway project in Northumberland, examining possible Roman military sites along the route of the Roman road, and it seems unlikely that much fieldwork will take place there until 2022. Similarly, plans to launch a major community based geophysical survey also had to be postponed, as did a planned community project near Doncaster which was to process the finds from a fieldwalking survey conducted just before the first lockdown on a newly identified Roman roadside settlement.

However, the year’s events were far from being entirely negative. Despite the difficulties, or even perhaps because of them, 2020 did bring positive changes as well. It was right at the start of the first lockdown that we took the decision to launch *Itinera*, and just over a year later you are now reading our first ever volume. Our increased social media presence resulted in a doubling of our membership in the year, a trend that has continued since, with membership now standing at 311 at the time of writing (early March 2021). Whilst most of our community projects were postponed, our small but highly dedicated team conducting geophysical survey on parts of the road corridor between Doncaster and Aldborough did achieve some excellent results (when the regulations permitted). Turning out in all weathers, even in a blizzard, they surveyed the fort at Roecliffe, confirmed the route of RR720b as it approaches *Isurium Brigantium* (Aldborough, N. Yorkshire), and discovered an entirely unexpected ‘new’ road near Tadcaster. These are just a few examples of their many achievements, and the reports for all these surveys will be published on our website later this year.

2020 also saw the launch, quietly, of a pilot project in the East Riding. *Living Beyond the Town – Petuaria* is our contribution to the *Petuaria ReVisited* project (shortlisted for the 2020 Marsh Award for Community Archaeology) and will conduct a magnetometer survey of the Roman road corridor out of Brough (Roman *Petuaria*) heading towards York, as far as South Cave. The project aims to give us a clearer idea of how the Roman period landscape developed.
along this road corridor. The survey is being carried out by a group of fourteen local volunteers, who have all received training and support in using our equipment, and it will cover about 300 Ha. It is one of the largest community geophysics projects ever conducted in this country, and if successful it will be replicated elsewhere in Britain.

Without question, the most significant event for us in 2021 is the launch of this first volume of *Itinera*. From the beginning, the Editorial Committee was very conscious of the increasing problems faced by researchers when attempting to access academic papers, even by those with access to university libraries, since so many academic journals these days are held securely behind a publisher’s pay wall. We wanted to ensure that no researcher would ever struggle to obtain a paper published in *Itinera*, and so we took the decision to produce the journal entirely ourselves and without the aid of a publisher. This was far from being a straightforward process, but we have now proved that with a dedicated group of volunteers, inexpensive publishing software and the advice of people with experience in publishing, typesetting and illustration, it can be done. We can only hope that others follow our lead. Crucially, by going down this route we can not only keep the price of the printed version low but are able to make the entire journal open access online, after an initial members-only embargo of one year.

We continue to promote a strong community-based approach, and 2021 will see the launch of two further community geophysics projects examining sites along the course of Roman roads, one in Nottinghamshire and the other in North Yorkshire. Another potential project is being discussed in Cambridgeshire. We are very well aware of an apparent bias towards projects in Yorkshire; this is an unintentional but inevitable consequence of the Association being founded in Yorkshire. However, we are extremely keen to undertake fieldwork elsewhere in Britain, especially geophysical survey, and welcome any suggestions for areas of future research. In time, we hope that we can meet many more of our members face to face, whether that be by our planned zoom series of chats and lectures, or back out in the field when circumstances allow.

Despite the uncertainties of the coming months, thanks to the enthusiasm and participation of our membership, the long-term outlook for the RRRA is extremely bright. In the meantime, we hope all our readers remain safe and well in these challenging times.

Mike Haken  
Chairman  
mike@romanroads.org
The first Editorial of a new annual journal is a significant moment. Launching *Itinera* marks a step forward for the RRRA, focusing light on an aspect of Roman archaeology that has not previously enjoyed its own published academic outlet. That such a development is possible, demonstrates the current health and breadth of an area of Roman studies that will always be associated with the expert labour of Ivan Margary in the middle years of the twentieth century.

*Itinera* is, from conception, a journal intended to bridge the gap between academic researchers and that large band of enthusiasts – the backbone of so many local societies and our own RRRA membership – who wish both to stay informed about, and contribute to, developments in the field. Thus *Itinera*’s content will include quality work by capable independent researchers alongside significant papers from established academics. To ensure maintenance of standards, all papers are peer assessed.

*Itinera* has been established to offer a point of reference for all those doing work which can develop and broaden understanding of Roman roads and land communications. It is an aspect often touched upon in wider archaeological investigations (see for example Janet Phillips and Pete Wilson’s paper in the current volume) but in the past such isolated findings have not always been treated with due emphasis and made readily available for a better understanding of the road network as a whole. *Itinera* will allow Roman road studies to make their proper contribution to understanding Roman society, technological practice, communications, and military and economic development. The journal will inform academics about the current state of knowledge while also making it available to local individuals and societies, allowing future work to be targeted for maximum efficacy. Thus this journal is published both in digital form for maximum reach (free to RRRA members), and in paper form for permanent academic reference and record.

Our content, as may be judged from this first volume, is wide-ranging. The first paper, from David Ratledge, shows how an experienced and skilled practitioner is able to exploit modern technology (in this case LiDAR) to expose and clarify routes that were previously imprecisely defined. Other papers demonstrate the findings of specific excavations, examine the artefactual and archaeological evidence for Roman transport, explore issues of planning and surveying, and speculate about the extent of local road networks. A major contribution from Bill Trow represents the culmination of many years work in testing some of Selkirk’s conclusions regarding the existence of a ‘Proto Dere Street’. A roundup of the year (interpreted broadly for this first volume) keeps track of investigative work relating to Roman roads around the country.
The starting point of Roman road studies has long been Ivan Margary’s classic study, ‘Roman Roads in Britain’. A major challenge for the present day is how to build constructively upon this work in the 21st century, allowing recent findings, seldom pulled together, to be readily referenced by the archaeological community. Two important papers in this volume, from Mike Haken and Dave Armstrong, examine ways in which the RRRA supports identification, classification and nomenclature of new discoveries, building upon Margary’s work and ensuring that it remains fit for purpose in the twenty-first century.

A new journal is not launched without the labour of a dedicated band. Our editorial committee has met regularly on-line throughout this year of pandemic to resolve the many issues that have arisen. It has established ground rules; invited, gathered, reviewed, and selected material; communicated with authors; edited text and images; created and used templates; entered materials into publishing software; stitched together the journal itself; and finally sent the completed journal for printing and circulation.

Mike Haken, the RRRA Chairman, has been unsparing of his time and expertise, actively involved at every stage. Dave Armstrong, indefatigable as the man at the centre, has pulled together the materials into the form of a journal, always positive and perceptive, no labour too challenging. Mike Bishop has given generously of his archaeological knowledge and crucial publishing experience; Chester Forster has brought his experience from other archaeological journals both to head up our band of local correspondents and to manage the indexing of this volume; and John Poulter has been a valued consultant. Paul Bidwell and Pete Wilson, among several others, have acted as readers and referees, their immense knowledge and expertise allowing us to maintain a solid academic basis to this venture.

Nevertheless, it is the authors to whom a journal is ultimately indebted for its success: we thank all our contributors for making Itinera’s first volume possible. We trust that others will be inspired to maintain and develop this journal, taking note of our mid-November deadline for 2022 copy. Similarly we welcome offers of help for our next volume in terms of reading, reviewing, managing images or digital typesetting.

We look forward to receiving ideas for relevant and authoritative papers, whether from inside or outside the UK.

Robert Entwistle
Hon Editor, Itinera
itinera@romanroads.org
ABSTRACT

This paper takes a brief look of the history of recording Roman roads on maps in Britain, and then moves on to examine why so many different mappings of Roman roads in Britain exist, using Eastern Yorkshire as an example. An examination of previous attempts to classify Roman roads according to the strength of evidence follows, discussing the various merits and issues.

The various factors that must be taken into account are then identified and discussed, before finally proposing a rating method which comes in the form of a Key, that should remove any subjectivity from the assessment. This is presented as solution that is a potential solution, rather than a definitive one, that if nothing else should demonstrate to all archaeologists the dangers inherent in an overly simplistic approach to the assessment of Roman road features.

INTRODUCTION

The inspiration for this paper arose out of the frustration, and mild amusement, experienced by the author when attending a conference on Roman Yorkshire some years ago, where each speaker presented a map of Yorkshire’s Roman roads which differed in some way (often wildly) from everyone else’s. In the years since, the author has read many research papers which claim to have discovered ‘new’ Roman roads, by lone researchers and seasoned academics alike, and found the variations in the voracity and security of the evidence presented quite startling. Clearly, there was not only a myriad of ways archaeologists and researchers chose to represent Roman roads on their mapping, but an equally diverse range of evidential requirements. There was a clear need for some standardisation, but just how could this be achieved?

The obvious answer would be the creation of a freely available and up to date digital mapping of Britain’s Roman road network, something that the RRRA first investigated in
2016, but didn’t fully develop. Fundamental to such a project was the formulation of a standardised system for recording road features. Such a system of recording would need to be able to assess the likelihood of identified features actually being part of a Roman road, or on a former road alignment, and then grade the features accordingly in a simple and easily understood way. Crucially, it would have to do so in a way that removed any subjectivity from recording, and would be applied by all researchers in the same way. Unfortunately, the system adopted at that time proved not to be sufficiently objective, and the project was put on hold.

This paper seeks to address that issue. It looks first at the various ways Roman roads have been presented on maps from the 18th century up to the present day and then examines previous attempts to classify Roman roads, highlighting several key issues. It then proposes a rating system, developed from one already in use in Wales, with a simple to use key that in theory anyone should be able to use. This is not presented as a fait accompli, rather it is a proposal that is open to discussion. After all, it cannot fulfil its purpose unless it is widely accepted amongst not only Roman roads researchers, but the archaeological community as a whole.

**HISTORICAL BACKGROUND**

During the late 17th and early 18th centuries, antiquarians became increasingly interested in discovering and recording Roman roads and it wasn’t long before they started to appear on general purpose maps. Antiquarians soon realised that the evidence for many roads was to say the least varied, in some places very clear and obvious, in others more vague, and sometimes absent altogether. Yet, whilst many antiquarians and cartographers recognised that the survival of Roman roads was often fragmentary, not all of them illustrated the difference between a visible Roman road and one that was inferred or projected and the ways roads were represented on maps varied enormously. As an example, Figs. 1.1 and 1.2 show how differently John Warburton and Andrew Armstrong portrayed Roman roads on their maps in the 18th century.

The wide diversity of representation continued into the 20th century, as evidenced by Codrington and Margary (figs. 1.3 & 1.4), and has continued unabated. Indeed, from the point of view of easily understandable and accurate conveyance of information, the situation is arguably now worse than ever, with modern archaeological publications containing a wide and diverse range of representations of the Roman road network.

**UNDERSTANDING THE DISPARITIES IN MODERN MAPPING**

Using Eastern Yorkshire as an example (although the picture is similar across the country), figure 2 shows the Roman roads marked on maps in three recently published archaeological works relating to the Roman period in Yorkshire (figs. 2.1 – 2.3). One might wonder how it could be possible that such widely differing presentations could all be created within seven years of each other.
Classifying with Confidence

Figure 1. Some examples of how Roman roads have been marked on maps over the last three centuries.

1.1 Warburton’s depictions (1720) of a visible Roman road (RR720a, left), and one not visible (RR712, top right). Key, bottom right. From the Biblioteca Virtual del Patrimonio Bibliográfico © Ministerio de Cultura y Deporte, Gobierno de Espana.

1.2 Part of Armstrong’s Map of Northumberland (1769) showing the Military Way, with a snippet of his key. ©McMaster University, under CC-BY NY licence.

1.3 Part of Codrington’s map and key (1903), showing all four of his defined classes.

1.4 Part of Margary’s map and key (1973), showing both certain and inferred roads.
Figure 2. A comparison of various maps of Roman roads in eastern Yorkshire, all of which have been published within the last 65 years.
The most obvious immediate difference in style between the three maps figures 2.1 – 2.3, and the three source maps to their right, is that the first three all mark roads as a single solid line. Since their intent is to demonstrate the courses of the roads, rather than an assessment of the weight of archaeological evidence, this is understandable. An unfortunate consequence, however, is that it creates the misleading impression that these roads are known with certainty, when most are not. Figure 3 shows the roads marked on the Ordnance Survey's most recent edition (2016) alongside a representation of the Roman roads rated according to the system later proposed in this paper. Unlike the maps in figures 2.1 – 2.3, both maps attempt to assess the likely veracity of archaeological data for each stretch of road, resulting in only a small proportion of road being regarded as definite, although the assessment method of each is clearly very different.

Figure 3. A comparison of the most recent edition of the Ordnance Survey’s Map of Roman Britain and a map prepared by the author using up to date data drawn from four Historic Environment Records.

A quick glance at figures 2.1 and 2.4 shows that apart from the omission of the Staxton to Scarborough road in fig. 2.1, the two maps are almost identical, Margary’s (2.4) being slightly more schematic. Fig. 2.1 draws its data from the Digital Atlas of the Roman Empire (DARE) (Ahlfeldt 2021), a project hosted by the University of Copenhagen. Whilst DARE derives most of its road mapping from the Barrington Atlas of the Greek and Roman World (Talbert & Bagnall 2000), for roads in Britain its source is actually M.C.Bishop’s freely available Google Earth kmz file of British Roman roads (Bishop 2016), which is in turn an interpretation of Ivan Margary’s Roads of Roman Britain (1967), itself unchanged from Margary’s original 1957 edition. So, almost certainly without realising it, figure 2.1 was created using mapping that is 64 years out of date. The only difference between figures 2.1 and 2.4 is that for some reason the Staxton to Scarborough road (RR817) has been omitted, possibly because Margary’s route is incorrect and it is now known to be substantially further east than he recorded.

Figure 2.2, Patrick Ottaway’s schematic representation of the road network (Ottaway 2013 fig. 6.1) is based on a map he developed some considerable time previously (Patrick Ottaway
2021, email 18 February), itself originally based upon the Ordnance Survey's map of Roman Britain (probably the 3rd edition, 1956, fig. 2.5). His intent was to show connections, rather than accurate routes, and he made four amendments using his up to date knowledge of Roman archaeology in Yorkshire; extending RR800 all the way to Malton, which is its probable destination, extending RR815 to meet RR80a (also quite probable), adjusting the course of RR817 to start at Staxton, and omitting 812. Haslegrove's map (figure, 2.3) similarly shows marked similarities to the OS Map of Roman Britain, in this case the 5th edition (2001), although several roads have been omitted. Whilst the map attempts to show the road network as it would have been in the early 2nd century AD, there appears to be little evidential basis for the decision to omit most of the roads emanating from Malton, particularly a road between York and Malton, the two major military sites in the region both of early establishment.

It can be seen that all three maps in figures 2.1, 2.2 & 2.3 have been derived from perfectly acceptable sources, except that those sources represent the state of archaeological understanding of the Roman road network at different points over a 45 year period, rather than any of them being current. All three have additions and/or omissions based upon the particular author's own criteria; the degree to which such amendments have been entirely subjective is unclear. It is also possible that the disparate mapping may, ironically, reveal a belief amongst some archaeologists that the Roman road network is well known and established, making the use of Margary or older editions of the OS mapping seem acceptable. As a comparison of figures 2 and 3 clearly illustrates, increasingly objective assessment of evidence over the past half century has resulted in far less certainty being attached to the Roman road network in eastern Yorkshire. Whilst the pattern is similar elsewhere in Britain, in some areas the reverse is actually true, for example in Cumbria where the number of known roads has greatly increased in the last decade, largely thanks to work by David Ratledge using LiDAR data (Ratledge 2017).

This is not to say, however, that current maps are necessarily up to date. With the technological advances in recent decades, particularly with the widespread use of Geographic Information Systems (GIS) in archaeology, it might be expected that newly discovered roads would be introduced to OS and other mapping systems fairly quickly following publication, but that is often far from being the case. For example, RR802(x), a road which appears to run from York passing Strensall heading north, was originally discovered during an RCHME funded project in 1992 (Swan, et al., 1993) and consequently does not appear on any Margary derived mapping. Unfortunately, it did not appear on the OS map of Roman Britain map for another 19 years (Ordnance Survey 2001 & 2011, see figs 2.6 and 3.1). An even more extreme example, not in Eastern Yorkshire as illustrated here but in West Yorkshire, is part of the road from Manchester to York (RR712) between Castleshaw and Slack. Work by the Huddersfield & District Archaeological Society over more than four decades has demonstrated beyond doubt that the true course of the road is not beneath the modern A640 (Rochdale Road) as was assumed up to forty years ago, but over two miles away to the southeast in the Colne Valley. Their work won a Mick Aston Presentation Award in 2004 and was published as a book soon after (Lunn et al. 2008). Yet, the most recent OS Map of Roman Britain (6th edition, 2016 revision), drawing its data from Historic England, resolutely marks the previously assumed and totally incorrect line, for over seven miles.
Figure 2 (specifically 2.4 – 2.6) also illustrates how over the last half century, approaches to the voracity of evidence have changed, with far less certainty being attached to the lines of many roads now than used to be the case, along with the realisation that many previously recorded Roman roads are not Roman roads at all. Recent mapping highlights this point even more clearly (figure 3). For example, Margary frequently based his criterion ‘course certain’ on what was accepted as correct at the time by local experts, without digging down into the evidence, and he is far from being alone in making this mistake. Some roads have been accepted for so long, that their existence is all too often accepted as established fact, irrespective of whether or not there is actually any evidence for them. Once firmly established in public perception, they become extremely difficult to challenge. Two examples of this phenomenon are part of RR2e and RR81b. RR2e has traditionally been thought to underlie the modern A1079 between Barmby Moor and Grimston Bar, and was marked as Roman by John Warburton three centuries ago (Warburton 1720). Despite Maule Cole pointing out as far back as 1891 that there is actually no evidence for this supposed stretch of road (Maule Cole 1891, p. 208), belief in its existence has been extremely hard to shake, as evidenced by its inclusion in every image in Figure 2. The Ordnance Survey finally removed it from their mapping 120 years after Maule Cole highlighted the error (Ordnance Survey 2011, see fig. 3). A similar example is the famous Wade’s Causeway, RR81b, a linear feature identified for three centuries as a Roman road which supposedly branches from RR814 at Amotherley and runs through the Roman complex at Cawthorn at least as far as the fort at Lease Rigg. It was all marked as certain by Margary, despite Francis Drake (Drake, 1736, p. 36) having written that ‘From the camp (Cawthorn) the road disappears towards York’, and there being no known evidence for it on that stretch. The OS marked the road as possible between Amotherley and Cawthorn on the 3rd edition Map of Roman Britain (1956 see fig. 2.5) but this stretch disappeared from the 5th edition (2001, see fig. 2.6), whilst from Cawthorn northwards to Lease Rigg it remaining marked as definite and was only reduced to ‘possible’ in the 6th edition (Ordnance Survey, 2011 see fig. 3.1). Serious doubts as to whether or not the feature was a road at all were cast by Blaise Vyner well over a decade ago (Frere & Fitts 2009, p. 277), and Vyner now presents clear evidence that the feature dates from the Bronze Age (Vyner 2019), yet English Heritage, who maintain a mile long length of the feature, still remain steadfast in labelling a stretch of it as ‘Wheeldale Roman road’ (English Heritage 2021, p. 238).

It is worth considering that whilst the Ordnance Survey’s Map of Roman Britain is clearly a well utilised resource, the OS draw their data from the three national bodies, ie the Royal Commissions on Historic and Ancient Monuments for both Wales and Scotland (now Historic Environment Scotland) and Historic England. Unfortunately, for the individual researcher, using the data held by these three bodies is less than straightforward, and access to the digital mapping of Roman roads by any of the three bodies is currently not readily available. The historic environment records of both Wales and Scotland are publicly available online via Archwilio and Canmore respectively, although since the individual records for individual roads are not grouped, and the online mapping only presents them as points rather than lines, compiling a map from their data is a time consuming exercise. For England, the position is much worse, since Historic England no longer maintain the National Monuments Record (NMR), or its online equivalent Pastscape, with responsibility now passed to local Historic Environment Records (HERs). Whilst most of the site records held by
local HERs are now available online through Heritage Gateway, the depth of data presented through Heritage Gateway varies massively, (often just a record of an entry) and some HERs still have no online presence. Even worse for a researcher, there is currently no means of presenting Heritage Gateway data on a map. It remains to be seen what impact the decentralisation strategy of Historic England will have on future editions of the OS Map of Roman Britain, but it hardly seems likely that the speed and accuracy of updating will improve, almost certainly the opposite.

Several major issues have been highlighted by the maps and examples above, and are itemised below.

1 There is no consistency in the representation on maps of the weight of evidential base for any given Roman road.

2 Archaeologists are frequently interested in illustrating connections and routes, and consequently present presumed lines of Roman roads on maps as solid lines, implying a degree of certainty often not supported by the evidence.

3 In using the Roman road network to illustrate their work, archaeologists make decisions to include or exclude claimed roads which are to a greater or lesser degree subjective.

4 Two sources of trusted and readily available base mapping, ie DARE (ie Margary’s Roman Roads in Britain) and the Ordnance Survey’s various editions of the Map of Roman Britain) are in general use, although both are often assumed to be correct and up to date, when they generally aren’t. The data on which the OS map is based is theoretically available to researchers and archaeologists, but not in an easily accessible or particularly useful format.

5 New evidence can sometimes demonstrate that road lines previously mapped as definite are incorrect, or not even roads at all. However, persistent belief in some perceived road lines can be difficult to dislodge, even amongst the archaeological community, sometimes taking decades.

6 There are long time lags between the discovery of new archaeological evidence and eventual representation of it on readily available trusted base mapping.

In summary, it is clear that the current mapping on accessible digital resources such as DARE tends to create a false impression that the courses of all roads are well known and supported by the evidence, which is often far from being the case. Similarly, paper based mapping from the Ordnance Survey, whilst much more objective, is still frequently a decade or more out of date, and is far from practical to use, particularly when having to attempt obtain an expensive licence for each reproduction (Ordnance Survey did not grant a licence for the reproduction of extracts of their maps in this paper). It is also clear that the current disparity in mapping of Roman roads in Britain by the archaeological community can only be remedied by ensuring that there is a trusted, accurate, up to date and open access map of Roman roads in Britain that becomes the standard port of call for providing Roman road mapping in Britain. In theory, such mapping would address the five issues listed above. Whether or not it is possible that DARE could fulfil this role is not yet clear, however
whether an existing system such as DARE is used, or a new one created, it is crucial that data is kept up to date and accurate and is presented in such a way that the weight of evidence is clear and obvious. It is therefore essential that any new or revised mapping would utilise a simple and easily understood graphical representation of the certainty of each Roman road, in effect a system of classification. The question then arises, how best do we do that?

PREVIOUS ATTEMPTS AT CLASSIFICATION

The confidence with which a road or a series of linear features can be identified as a Roman road has been an issue for those mapping Roman roads in Britain since the first antiquarian maps appeared in the early 18th century. As a result, methods of depiction have varied widely, although two level depiction has been common, using words such as known, certain or definite, as opposed to uncertain, inferred or supposed. The Ordnance Survey were no different, marking roads on their 19th century mapping as either Roman road, or Roman road (supposed), later adding Roman road (course of) where it is thought the road is now destroyed. The distinction therefore was perceived in simple terms, either it is a Roman road, or it isn’t, with no shades of grey. Neither was there any defined rationale to determine what was or what was not a Roman road, something which resulted both in frequent mis-identification and in the expression of unjustified confidence, the consequences of which we are still dealing with today.

The first person, at least at a national level, to advise a more cautious evidence based approach was Thomas Codrington over a century ago. In his Roman Roads in Britain as he stated in his preface “The network of roads might easily be made more complete, as a glance at the map will show; but it seems best to refrain from conjecture as much as possible, and to follow the roads only so far as there is evidence available for tracing them.” (Codrington 1903, iv). Indeed, Codrington’s map shows that he was well aware of some of the difficulties in assessing whether a feature was in fact a Roman road, since he realised that it was essential to assess both the likelihood of a road being Roman and whether or not it was a road at all (see fig. 1.3). Somewhat ironically, Codrington actually based much of his mapping on the work of previous researchers, without any major assessment of the voracity of their evidence.

There have only really been two serious attempts to introduce any regulated objectivity into the assessment of whether or not a feature may or may not be a Roman road, and both are relatively recent.

NEHHAS Field Archaeology Branch

Richard Whaley’s offshoot from the North East Hampshire Historical and Archaeological Society has been investigating Roman roads in southern England for several years, and has developed its own star rating system (Whaley, 2019), detailed below. The system attempts to assess the degree to which investigation has taken place, rather than the actual weight of evidence.
5* Major Roman Road where the course on the ground is exactly known for most of its route. Applies to routes like the Devil's Highway or Foss Way, and not many more are likely to be found.

4* Margary's criteria for establishing a Roman Road: cumulative evidence upon an alignment, with excavation in at least one place on most alignments. While the line across country is established, it does not mean that each piece of evidence must be shown to come from Roman origins, nor that the Road's exact position is known on the ground except at excavation sites or possibly at terrace sites.

3* Accumulative evidence upon the alignments, but without the excavation evidence. Quite a lot of the Margary entries are of this class. Individual pieces of evidence may be coincidence, but the whole gains credibility the more alignment evidence is gathered, until it becomes quite probable that the alignments are Roman.

2* Projects based on sound documentary theory, but without the full standard of accumulated field evidence upon alignments. May be becoming probable. Some Margary entries of this class.

1* Sound documentary theory of long lines of parish, field & property boundaries, paths, place names, Saxon Charter and other historical documents, air photos, but without significant field evidence. A few Margary entries of this class.

0* Some documentary or field evidence, but not enough to assign any probability. May be worth expanding research from evidence available. Margary entries in this class exist.

The system establishes six classes requiring an increasing weight of evidence. At first glance the system appears quite attractive, but on close examination it has some major issues. Its first and greatest flaw is that the system attempts to rate each road as a whole. Given that the archaeological evidence for most Roman roads tends to be limited to short sections with long gaps in between, the system effectively creates an average rating across a road, masking the possibility that some sections might be known with certainty, and others may be no more than a wild guess. Secondly, it’s method of accumulating evidence along alignments is poorly defined, and is almost entirely subjective in assessing what constitutes a “full standard of accumulated field evidence”. It is also unclear how much weight should be given to LiDAR evidence, the main tool used in modern Roman roads research, or for that matter geophysical survey, and only regards aerial photo evidence as contributing to a one star rating, which seems extremely low. Thirdly, the top five star class only includes ‘major roads’ without defining what that actually means, and in any case surely the importance of a road is not relevant for a rating system which determines the likelihood of a road being Roman. Furthermore, by requiring a route to be ‘known’, it assumes that established cultural and archaeological tradition is always correct, which as has already demonstrated, it certainly isn’t. Finally, the descriptions are misleading, since it is states that Margary’s criteria for establishing a Roman road gives a four star rating without pointing out that this was Margary’s criteria for his own research. Most of Margary’s entries however, were drawn entirely from other researchers without applying his own criteria, hence the inclusion in his book of roads that are rated by NEHHAS from five stars to none.
Welsh Archaeological Trusts

In the early 2000s, CADW funded all the Welsh archaeological trusts to conduct an assessment of the Roman road network in Wales. The main methodology was developed by Bob Sylvester and Wendy Owens of the Clwyd and Powys Archaeological Trust (CPAT), and included a detailed regime of recording, which used 21 different fields to record comprehensive data about each length of road, not including a further seven ‘administrative details’ (Sylvester & Owens 2003, Appendix 2). Just two criteria were used for mapping. The first, ‘Survival’, is fairly self-explanatory and has five options; Earthwork, Fossilised, Cropmark, Buried & Unknown. The second, ‘Status’, is the most useful mapping criterion and the one that concerns us here, and has a four level rating system. The definitions were free to be ‘tweaked’ by individual trusts, and the Glamorgan and Gwent Archaeological Trust (GGAT) did make small changes to ‘Status’ levels iii & iv (Sherman & Evans 2004, 7-8). Gwynedd Archaeological Trust maintained the original definitions, although with different wording (Hopewell 2013, 20). Unlike the NEHHAS system, the Welsh model involved breaking each road down into a series of segments, a segment being defined quite loosely in terms of consistent form and survival – a new segment begins when the characteristics of the road changes substantially. Each segment was then recorded separately. It is beyond the scope of this paper to discuss every field that the project created in its Roman roads table for recording, suffice it to say that it was reasonably comprehensive, although omitted some important details, such as measurement of separation between road ditches or recording the presence of side lanes or shoulders

The possible entries in the ‘Status’ field are as follows

i) **Known.** Extant earthwork or well-recorded buried feature. Shown as solid lines on OS strip maps.

ii) **Proposed.** Conjectural sections either linking known segments or as hypothetical road alignments for which there is some physical evidence. Shown as dashed lines on OS strip maps, and where evidence is reasonably convincing.

iii) **Predicted.** Virtually no substantive evidence for a road other than someone’s belief and/or conjectural road alignment with no known traces. Where the authenticity of a road is in significant doubt, this is the highest level of status that can be achieved. (GGAT also added - Also used in cases where undated road metalling of Roman type, bearing no relation to the post-medieval road network has been found during excavation or noted in watching brief, but there is no further information concerning line or potential destination.)

iv) **Discounted.** Where a road has subsequently been disproved by a reliable authority or where an alternative line has now been accepted. (changed by GGAT to - Rejected. Used for sites described as Roman roads in the Sites and Monuments Record, but for which there is no reliable evidence).

This system is simple, and gives much more clarity than anything before it, or since. That said, it was intended for use by professional archaeologists working closely together, and may not be quite as suitable for lone independent researchers, not used to applying
archaeological standards of evidence to their work. For example, how certain can a researcher be that an extant linear earthwork, especially a feature identified on lidar, is actually a Roman road rather than a pipeline, or that anomalies on a geophysical survey qualify as a well-recorded feature?

Furthermore, there are a couple of issues with the definitions of the ratings. First, the highest rating, ‘known’ only applies to extant or well-recorded features, conjectured road lines linking two known segments being always regarded as ‘proposed’. To an experienced researcher, this approach might appear a little strange, since in a lowland area where there is no intervening watercourse, steep slope or obstruction, the course of a Roman road between two known segments close together and both on precisely the same alignment is almost certainly going to be along the same alignment, at least to within a few metres. On the other hand, a conjectured line between two segments on slightly different alignments, or which are a considerable distance apart, is unlikely to be accurate at all, yet in the Welsh model, both are presented the same way. The definition of ‘proposed’ also includes all hypothetical lines with ‘some physical evidence’, although what evidence is required is not defined. Secondly, there is some conflict between Predicted and Rejected (ie Discounted) in the GGAT version of the system, since all roads without reliable evidence were regarded as Rejected and yet roads based entirely on a single person’s belief or conjectured with no known physical traces were recorded by other trusts as Predicted. Furthermore, and perhaps fundamentally, there was only a very basic attempt to clearly define what combinations of elements or characteristics would be regarded as diagnostically Roman, or potentially Roman. This inevitably leaves a degree of subjectivity in the system.

THE PROPOSED RRRA CLASSIFICATION METHOD

The primary concern of this paper is to propose a consistent method by which stretches of Roman road (or supposed Roman road) can be assessed as to their veracity so that they can be accurately presented on maps. Whilst it is perfectly feasible to use such a method solely to prepare a map (with no other purpose), it is must always be remembered that in order to make a rating possible, a large amount of evidential data must be first examined. Ultimately, it has always been the RRRA’s intention to record this data for every Roman road in Britain in a GIS database, the ‘Status’ rating being just a single field. A full discussion of data collection and recording is not required here, however it is worth reiterating that the Welsh system involved the use of 28 fields in a database – that is 28 separate pieces of information to be recorded for each segment of road. In the author’s opinion, that system did not go anywhere near far enough, since it did not require the recording of the presence of specific road features such as the agger, ditches, quarry pits or kerbs, nor did it attempt to record the materials used in construction or the way in which they road was constructed. This is only mentioned in order to emphasise to the reader the depth of research that is needed before embarking on any objective attempt to assess the weight of evidence for a Roman road.

The need for a simple, comprehensive, and objective rating system to remove as much subjectivity as possible in the recording and mapped presentation of Roman roads has been clearly established. It is also clear that of the two attempts to tackle this issue, the Welsh
model of rating ‘Status’ comes close to satisfying these requirements. With some modifications, our proposed rating system is based closely upon the Welsh model, whilst addressing the issues outlined above. Ratings need to be more strictly defined, and applied using a method that ensures consistency, whether the assessment is being conducted by an experience professional archaeologist, or a relatively inexperienced independent researcher or volunteer. The method must also ensure investigational rigour, ensuring that the local HER has been checked, map regression taken place, and the possibility of commonplace misleading features such as pipelines has been ruled out. The simplest solution to this is the use of well-structured key, designed to take account of all the types of evidence any researcher or archaeologist is likely to encounter.

The proposed RRRA ‘Status’ ratings

Whilst similar to the Welsh system, our proposal contains slight modifications. First, the naming of the ratings could be seen as slightly confusing, with little obvious clarity as to what is meant be ‘proposed’ and ‘predicted’. For example, one might assume that a line projected between two known lengths of road on the same alignment would be ‘predicted’, but actually in the Welsh system it is ‘proposed’. For ease of understanding, is proposed to regard the ratings as being indicative of the probability of a segment being the line of a Roman road. Also, in the Welsh system, the top level ‘known’ was given the numerical value ‘1’, and the lowest level ‘discounted’ the value ‘4’. In our modified method, we have reversed this so that the highest level (in our opinion more logically), has the numerical value of ‘3’, with the lowest level (unrated/unratable) the value ‘0’. The definitions of the levels have also been firmed up and expanded. Crucially, it is now possible in specific circumstances for a segment without physical evidence to be awarded the highest rating, impossible under the original method:

3. Known. Well recorded earthwork or buried feature, extant at the time of recording (which may have been some time ago), that based on current understanding is almost certainly a Roman road. In specific and limited circumstances, a segment with little or no physical evidence can be rated ‘known’ because of its relationship with adjacent segments rated ‘known’. The probability of the feature being a Roman road or on the line of a former Roman road is 95% or more.

2. Probable. Sufficient physical evidence, either extant or well recorded, to determine that the segment is probably the course of a road, and more likely than not to be Roman, but with insufficient evidence to entirely rule out an 18th or 19th century road or some other feature. In specific and limited circumstances, a segment with little or no physical evidence can also be rated ‘probable’ because of its relationship with adjacent segments rated ‘known’. The probability of this being a Roman road or on the line of a former Roman road is between 51% and 94%.

1. Possible. A possible Roman road/ Roman road line. May not have sufficient evidence to establish that it is indeed a road at all. This is the highest rating achievable by a supposed fossilised road, i.e. line of parish boundaries, rights of way, etc. without other evidence.
The probability of this being a Roman road or on the line of a former Roman road is between 6% and 50%.

0. Unrated/unratable. Where a road has been subsequently disproved by a reliable authority, or where an alternative line is now accepted. May also be where there is no evidence for a road, other than a claim or belief. The probability of this being a Roman road or on the line of a former Roman road is between 0 and 5%.

Defining a road ‘segment’

Before any thought can be given to assessing a Status rating, it must first be made clear exactly what it is that is being rated. Like the Welsh model, the proposed system breaks a road down into a series of segments with a rating being applied to each segment, rather than attempting to rate the potential road as a whole as in the NEHHAS system. Based upon the definition developed by Ann Owen and Bob Sylvester for the Clwyd and Powys Archaeological Trust’s Roman Roads Project, a segment is now defined as

A continuous feature or line of features between two points which presents in a consistent or homogeneous manner over generally similar terrain, with no gap greater than 200m.

The definition of exactly what is meant by “continuous” was slightly problematic, since too tight a definition would lead to a very large number of individual records. In practice,

Figure 4. LiDAR image showing a string of four cuttings and a short length of agger representing the remains of the recently identified road RR282(x) heading north towards Bilthorpe in Nottinghamshire, ultimately to Rossington in South Yorkshire
particularly when working with lidar, there are frequent occasions when a string of features can be seen, all on the same alignment, but have significant gaps between them. For example, lidar (Fig. 4) reveals a string of cuttings (labelled A – D) and agger (E) along a recently identified part of RR282(x), near Bilston, Nottinghamshire. The features are all individually distinct with gaps between, as great as 110m between cuttings B & C, yet all five features align and can clearly be regarded as a whole, ie a single segment. Similarly, where a feature has been cut by another feature such as road, but where we can be confident beyond reasonable doubt that prior to the modern road it was a continuous feature, it therefore can still be regarded as a single segment. Where a break in a feature cannot be explained by being cut by another feature, and is more than 200m, then a separate segment should be defined. The 200m might appear somewhat arbitrary, but a cut-off has to be made somewhere. A minor change of alignment (less than 5 degrees) should not be treated as a break in continuity, unless there is good reason to suspect a road junction.

“Homogeneous” in the strict sense of the CPAT definition meant that a length of agger had to be treated as a different feature to a cutting. To avoid excessive numbers of records, we have relaxed this slightly. Long strings of lengths of agger, with cuttings and terraceways in places and very short breaks due to agricultural activity, can be regarded as a single segment provided they have a generally consistent character, as in figure 4. However, where the character changes, even if clearly still part of the road, a new segment should be defined. This may be where:

• the height of an agger suddenly changes (more than can be explained by agricultural destruction or erosion)
• a road feature becomes much wider, narrower or multiple carriageways appear
• the road crosses a watercourse where there will have been a bridge (the bridge is regarded as a segment)
• Road layout no longer follows standard straight line practice, specifically the use of a zigzag to ascend a steep gradient and where a road follows a smooth curve, rather than a series of short straight lengths - zigzags and curves are treated as segments in their own right.
• the number or form of the ditches changes
• The method of construction is known to change substantially

Of course, whilst the definitions above relate to the physical evidence, the gaps between two stretches of physical evidence (more than 200m apart) must be considered segments in their own right. The way that Roman roads were nearly always laid out in straight sections means that if two distant segments of road are on the same alignment, the road between them will have been laid out along the same line, unless there was a good reason not to do so such as difficult terrain, a river crossing, or the need to divert to a fort or settlement. This means that in certain circumstances, a segment with no known physical evidence surviving, can still be rated 3. *Known*, unlike the Welsh system where the highest such a segment could be rated was 2. *Proposed*. 

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The Method

The first stage in the rating process is to ensure that each segment complies with the definition specified above. However, in order for that to be done, and for the evidence for a segment to be accurately rated, it is essential that all available evidence is being considered and that sufficient research and investigation has been carried out. Over the last century or so, Roman roads research has on occasions suffered greatly from a lack of investigational rigour, all too often resulting in the field being regarded with disdain by many archaeologists. All too often have researchers predicted that a particular road ought to be in a particular place, and then focussed on any scrap of evidence that might support the theory, rather than making a thorough examination of all the evidence and following the path to which the evidence leads. Also, there has been far too much importance placed on the use of supposed ‘fossilised’ Roman roads. It is certainly true that because Roman roads were prominent features in the landscape, they were frequently used in the medieval period to demark boundaries of parishes and land holdings and sometimes their lines only survive as footpaths or buried beneath modern roads. This does not mean, however, that whenever a straightish line of such features occurs, or an apparent line of suggestive ‘street’ place-names, it must mark the line of a former Roman road, indeed Roman roads only account for a small percentage of such occurrences. Repeated and well known examples of both these failings are clearly apparent in the work of the Viatores, a group of researchers in the south-east Midlands working in the mid 20th century (Viatores 1964), but there are many others.

The assessment of evidence for most road segments takes place in a series of stages. First, the physical evidence for a given segment is considered, resulting in the rating of a segment entirely on its own merit without reference to any other part of the road or the surrounding landscape. This will sometimes result in the segment’s status being determined as 3. Known, 0. Unrated/Unratable, otherwise it will be regarded as being at one of three levels of probability of being a Roman road. This approach continues as each stage of the key as the user is taken through the examination of relationships between the segment and other Roman roads and sites, other nearby road segments, and with post-Roman agricultural features. For this reason, in sections 3 to 6 the user is directed to one of three subsections A to C, dependent on the level of probability attained in the previous section (A being lowest, C highest). Due to their exceptional nature, fossilised evidence, zigzags, curves, bridges, segments which are hypothetical or projected between other segments, are all dealt with in their own specific section, to which the user is directed from Section 2.

Section 1. Is your road segment rateable?

The first section of the Key, therefore, is designed to ensure that thorough research has been carried out, as a bare minimum the consultation of relevant Historic Environment Records (HERs), along with map regression (at least as far back as the oldest available edition of the 6 inch to the mile Ordnance Survey maps, available on the National Library of Scotland’s website), checks of available LiDAR data, and checks of the Ordnance Survey’s Roman road files (obtainable for England through RRRA). Once these checks are complete, the user is directed to Section 2 of the Key.
Section 2. Physical Evidence

After directing users rating hypothetical or fossilised segments to section 7C, Section 2 then briefly deals with excavation. It was considered that attempting to revisit excavation conclusions by analysing all the features recorded would be too complex and largely unnecessary, and that it is sufficient for these purposes to accept the findings of an excavator, unless those findings have been challenged by a reliable authority. If the excavation proved the presence of a Roman road, then the segment status is ‘3. Known’ is recorded, otherwise the section moves on to isolate river crossings and zigzags/curves where the user is directed to section 7A & B respectively. The rest of the section is designed to assess evidence from modern techniques, frequently from LiDAR, aerial photography, or geophysical survey.

The section then examines potential evidence for the presence of a road and assesses the probability of it being Roman, before directing the user to the relevant parts of Section 3, each part dealing with different weights of evidence. The first evidence considered is for remains of possible road structure, either a raised straight linear feature, parchmark, geophysical anomaly, or stone scatter across a field. No definite Roman road has been identified in Britain less than 3m wide, hardly a surprise since in Roman law the effective width of a via had to be a minimum 8 pedes in width (2.4m) (Laurence 1999, p. 58). However, there is at least one narrower road in the Pennines which has a running width of about 2.5m (RR730) and has been considered by many researchers, including Margary, to exhibit characteristics of Roman planning. Consequently, any potential road feature with a probable running surface less than 2.5m wide is immediately regarded as unrated.

Without excavation, none of the above features individually can be determined to be a road and could just as easily be something like a ploughed out boundary bank, however the additional presence of a row or rows of roadside quarry pits or the presence of probable cuttings makes the former existence of a road almost certain, just not necessarily a Roman one. Whilst not always present, rows of quarry pits running just outside the road ditches are generally regarded as a diagnostic feature of Roman roads (Hopewell, 2013, p. 10), although caution is required since roadside quarrying certainly took place alongside 18th & 19th century roads, many of which are also straight. Certainly, quarry pits were frequently utilised during Roman road construction for supply of road building materials, but they are far from being ubiquitous and have not been properly studied, indeed a recent archaeological research framework concerning historic quarrying in England does not contain a single mention of them (Newman, et al., 2016). In general, whereas 18th and 19th century roadside quarries and quarry pits tend to be quite large and isolated, Roman quarry pits were small frequent and in rows, often less than 5m across and rarely extending more than 10m perpendicular to the road.

If the segment is definitely a road, then the distance between a pair of ditches is being increasingly seen as diagnostic. In lowland areas at least, there appears to have been standardised spacing of road ditches, which Margary recognised as two classes, 62ft and 84 ft (Margary 1973, p. 22), roughly 18.5m and 25m, although these seem to be quite approximate measurements. Indeed, given the Roman army’s frequent use of the actus, i.e. 120 pedes (Roman feet), it seems likely that the lower of the two, when allowing for
truncation by modern ploughing, represents an original ditch separation of a half *actus*, 60 *pedes*. Since the occurrence of single pairs of parallel ditches (or other similar features revealed on aerial photography or geophysics such as pairs of modern drains) at these spacings is very rare, their presence next to a road is treated as diagnostic. There is some evidence that there may have been a further smaller class of about 40 *pedes* (approx. 12.5m), but more research is needed.

**Section 3. Relationship with another Roman road**

If the segment branches directly from another Roman road, then it is likely that the new segment is Roman, even more likely if there is no evidence that the other Roman road continued in use into the medieval period. There is no certainty, however; the possibility that the segment being rated is relatively recent will always remain, hence the results of this section all direct the user to section 4.

**Section 4. Relationship with nearby Roman sites**

Whilst similar to section 3, the relationship of a road segment with a Roman site has to be treated slightly differently. As with a road, it is possible that the site remained in use well after the Roman period; just think how many of our towns and cities have Roman origins. Unlike an adjacent road however, features relating to a Roman site may well respect or butt up to the road segment, as would be the case with the vicus outside a fort. In such a case, the segment must therefore have been in use during the Roman period. The opposite can also be true, in that a Roman period settlement can cut across the supposed line of a road. Such a case has recently been identified in eastern Yorkshire, where a gradiometer survey by

Figure 5. Recent gradiometer survey of a Romano-British ladder settlement near Fridaythorpe, East Riding of Yorkshire, cutting across RR810 and disproving its assumed course along a former post-medieval trackway.
FFWAP (winners of the 2020 Marsh Award for Community Archaeology) has established that a Romano-British ladder settlement, known from surface finds to have been occupied throughout the Roman period, cuts across the supposed course of RR810 near Fridaythorpe (Alison Spencer 2020, pers. comm) and appearing to disprove that road segment.

**Section 5. Relationship with medieval and post medieval agricultural features**

Section 5. looks at whether medieval or modern agricultural features coincide with or cut across the segment. First, the Key examines whether a field boundary, or former field boundary shown on old maps, coincides with the segment. If it does, unless the segment extends beyond it the probability of the segment being a Roman road is unchanged, and the user is directed on to section 6. If it doesn’t, or if the segment extends beyond the end of the boundary, we then look at whether the segment cuts across 18th/19th century enclosures. Again, provided the segment isn’t a pipeline, the probability of the segment being a Roman road is unchanged (in reality it increases slightly, but insufficient to merit a level change). Finally, the Key examines whether the segment appears to be beneath broad rig & furrow or pre-enclosures field systems, which would suggest the feature is likely to be earlier than the 18th century. This raises the segment by one level before Section 6, or in the case of a segment in Section 5C, gives a status of 3. Known. The importance of map regression is shown on fig. 6, where two parallel ditches some 14m apart revealed gradiometry were originally thought by the author to be the remains of RR2e just north of Brough in the East Riding.

![Figure 6. Gradiometer survey of a Romano-British settlement near Brantingham, East Riding of Yorkshire, with a pair of ditches cutting across it, thought to be RR2e. Later map regression showed them to be an old field boundary, later surveys confirming the line of RR2e further west, with ditches approx 18m apart.](image)
Unfortunately, map regression carried out later revealed a 19th century field boundary along the same line. Later survey in nearby fields has proven the alignment of RR2e to be close to the modern road at this point, with a ditch separation of just over 60 pedes.

Section 6. Relationship with nearby segments

This is possibly the most controversial section, since it attempts to quantify the likelihood of the segment being Roman based on whether or not it lies on the same alignment as other adjacent, or nearby segments. Potential changes in status level are dependent on whether the segment lies on the same alignment as one of its neighbouring segments with physical evidence, or both, and on the distances that separate them. Clearly, the smaller the size of any gap, the less likely the segment is to be on the same alignment by chance, making its probability of Roman origin higher. The distances that have been set may seem arbitrary to some, however they have been set based on the experience of experienced researchers.

Section 7. Watercourse crossings, zigzags, curves, hypothetical & fossilised road lines

As referred to earlier, the crossings of watercourses, zigzags and curves, are dealt with separately in this section, as are fossilised and projected road lines. Remains of bridges are rare, and usually only found by excavation, but if there are any remains it is often possible to determine the correct line of the crossing. The crossing can be rated by reference to the road segments either side. Proven Roman fords are almost unknown in Britain, the only probable one being at Benenden in Kent, and ferries by their very nature leave little trace, being tracable only from the termini of the road either side.

Roman zigzags are often masked by later zigzags or braiding, where the Roman line has worn out and traffic has over centuries worn various alternative tracks. The rating is therefore likely to be determined by the rating of the adjacent segments.

As already discussed, straight alignments of parish boundaries, field boundaries, rights of way, and modern roads and tracks, have often been taken as firm evidence for the former presence of a Roman road, however it is now recognised that such lines of features can arise for many reasons, not just because they follow a Roman road. The recently confirmed road already referred to in Nottinghamshire, RR282(x) had been suspected for nearly a century, with long lines of Parish boundaries following the course of parts of the A614 north of Ollerton, then along the A1 from Clumber Park northwards almost as far as Blyth. We now know that some of the A614 is indeed on the line of a Roman road, unfortunately the A1 is not, not even close. For this reason, the approach taken here is a very cautious one, which might not be easily accepted by some. Such segments are to be regarded in the same way as modern roads thought to overlie a Roman line without any known evidence.

Under the original Welsh system, projected road segments with no physical evidence were always given the status of 2 Projected, although this took no account of any nearby influencing factors. In this system, we are proposing that account should be taken of known adjacent segments and Roman sites, in a similar fashion to segments dealt with in Section 6.
### The Key

**START HERE - IS YOUR ROAD SEGMENT STATUS RATEABLE?**

This first page is a series of checks to ensure that your segment fits this definition, and that you have conducted the required basic checks of readily available data. GO TO... boxes are all hyperlinked

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
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<tbody>
<tr>
<td>Is part of the segment ‘fossilised’ evidence, such as field boundaries,</td>
<td>Please divide your segment</td>
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<tr>
<td>rights of way, modern road/track &amp; parish boundaries?</td>
<td>so that the fossilised</td>
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<td>evidence becomes a segment</td>
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<td>in its own right</td>
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<td>RETURN TO START</td>
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<tr>
<td>Does your segment contain physical evidence with gaps between evidence</td>
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<td>of more than 200m?</td>
<td>so that large gaps become a</td>
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<td>segment in its own right</td>
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<td>RETURN TO START</td>
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<tr>
<td>Is part of your segment a zigzag, or a truly curved section</td>
<td>Please divide your segment</td>
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<tr>
<td>of road (not a series of short straight sections)?</td>
<td>so that zigzags and curves</td>
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<td>become segments in their own</td>
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<td>right RETURN TO START</td>
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<tr>
<td>Does your segment run along two or more straight primary alignments</td>
<td>Major alignment changes can</td>
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<td>(not just minor local adjustments)?</td>
<td>occasionally be indicators</td>
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<td>of road junctions. Divide</td>
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<td>your segment at the</td>
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<td>alignment change(s) and</td>
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<td>RETURN TO START</td>
</tr>
<tr>
<td>Is your segment crossed by a watercourse?</td>
<td>The intervening changed</td>
</tr>
<tr>
<td></td>
<td>terrain should be treated</td>
</tr>
<tr>
<td></td>
<td>as a segment in its own right</td>
</tr>
<tr>
<td></td>
<td>Please redefine your segments</td>
</tr>
<tr>
<td></td>
<td>and RETURN TO START</td>
</tr>
<tr>
<td>Do any gaps in physical evidence within your segment exhibit any</td>
<td>STOP You cannot continue</td>
</tr>
<tr>
<td>changes in terrain, ie valleys, hillocks, mounds or barrows, area of</td>
<td>until the HER has been</td>
</tr>
<tr>
<td>marshland?</td>
<td>searched, since it may</td>
</tr>
<tr>
<td></td>
<td>contain further information</td>
</tr>
<tr>
<td></td>
<td>such as excavation reports</td>
</tr>
<tr>
<td></td>
<td>which bear on the rating. Go</td>
</tr>
<tr>
<td></td>
<td>to Heritage Gateway, and use</td>
</tr>
<tr>
<td></td>
<td>the map to search around your</td>
</tr>
<tr>
<td></td>
<td>feature. Only set the ‘Where’</td>
</tr>
<tr>
<td></td>
<td>parameter, since your feature</td>
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<tr>
<td></td>
<td>may have been identified as</td>
</tr>
<tr>
<td></td>
<td>something other than a Roman</td>
</tr>
<tr>
<td></td>
<td>road. If the HER has no online</td>
</tr>
<tr>
<td></td>
<td>version, please contact them</td>
</tr>
<tr>
<td></td>
<td>to obtain the relevant</td>
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<tr>
<td></td>
<td>information RETURN TO START</td>
</tr>
<tr>
<td>Have you searched the local Historic Environment Record for records</td>
<td>STOP Map regression should be</td>
</tr>
<tr>
<td>relating to the segment you are seeking to rate and the length of</td>
<td>carried out using all</td>
</tr>
<tr>
<td>possible road?</td>
<td>available historic mapping.</td>
</tr>
<tr>
<td></td>
<td>As a minimum, examine 6 inch</td>
</tr>
<tr>
<td></td>
<td>to the mile OS maps back to</td>
</tr>
<tr>
<td></td>
<td>1st edition using the NLS</td>
</tr>
<tr>
<td></td>
<td>website RETURN TO START</td>
</tr>
<tr>
<td>Has map regression been carried out for this segment, as a bare</td>
<td>STOP Aerial photos and lidar</td>
</tr>
<tr>
<td>minimum using the Ordnance Survey maps available on the NLS website</td>
<td>can often provide additional</td>
</tr>
<tr>
<td></td>
<td>information supporting a Roman</td>
</tr>
<tr>
<td></td>
<td>origin, and sometimes show</td>
</tr>
<tr>
<td></td>
<td>that the feature is in fact</td>
</tr>
<tr>
<td></td>
<td>something else, like a</td>
</tr>
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<td></td>
<td>pipeline. Check Google Earth</td>
</tr>
<tr>
<td></td>
<td>Pro, Bing, Zoom Earth, lidar</td>
</tr>
<tr>
<td></td>
<td>imagery before proceeding</td>
</tr>
<tr>
<td></td>
<td>After checking aerial photos</td>
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<td></td>
<td>and maps, does your suspected</td>
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<td></td>
<td>road line change alignment</td>
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<td>at any point on a modern</td>
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<td></td>
<td>field boundary, building,</td>
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<td></td>
<td>road or track?</td>
</tr>
<tr>
<td></td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>STOP</td>
</tr>
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<td></td>
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<tr>
<td></td>
<td>NO</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

**CLASSIFYING WITH CONFIDENCE**

1. **START HERE**
2. **IS YOUR ROAD SEGMENT STATUS RATEABLE?**
3. Follow the decision tree to determine the status of your road segment.
4. **RETURN TO START** if necessary.
5. **GO TO SECTION 2** after completing all checks.
SECTION 2 - PHYSICAL EVIDENCE

Physical evidence includes evidence from a variety of sources, including lidar, aerial photography, geophysical survey, visible extant earthworks, and evidence from excavations. The evidence may not be current, and the feature could now be destroyed or no longer visible.

Does the segment comprise a ‘fossilised’ road line of field boundaries, rights of way, modern road/track & parish boundaries?

YES

GO TO SECTION 7C

NO

NO

Has your segment been excavated, or investigated by means of test pit or similar?

YES

Did excavation claim to confirm the existence of a Roman road?

YES

GO TO SECTION 7B

NO

NO

Did excavation prove the existence of a road of undetermined period?

YES

GO TO SECTION 7A

NO

NO

Is your segment perfectly straight, or comprises a series of adjacent straight lengths?

YES

GO TO SECTION 2A

NO

NO

Does the segment have at least one of the following:
1. A raised straight linear feature
2. A linear parchmark or geophysical anomaly indicative of road make up
3. A clearly defined linear spread of stones observed along the line of the segment

YES

NO

Is there a row(s) of quarry pits parallel to the linear feature?

YES

Status - 3. KNOWN

NO

YES

Is there evidence of ditches parallel to the feature and quarry pits?

YES

GO TO SECTION 3C

NO

NO

Are the ditches approximately 18m or 25m apart?

YES

NO

YES

GO TO SECTION 3A

NO

NO
This sub-section covers segments without direct evidence of road structure, but which do have potential associative evidence in the form of quarry pits, parallel ditches, cuttings.

**SECTION 2A - PHYSICAL EVIDENCE; SEGMENTS WITHOUT EVIDENCE OF ROAD MATERIAL**

Does the segment include a straight row(s) of quarry pits parallel to, or flanking the linear feature? (Not an isolated single quarry)

- **NO**
- **YES**

Does the segment include evidence suggesting a pair of straight parallel ditches

- **NO**
- **YES**

Does the segment include clear evidence of a cutting or cuttings perfectly aligned with the rest of the segment?

- **NO**
- **YES**

Are the ditches approximately 18m or 25m apart?

- **NO**
- **YES**

Does the segment include clear evidence of a cutting or cuttings perfectly aligned with the rest of the segment?

- **NO**
- **YES**

Does the segment include clear evidence of a cutting or cuttings perfectly aligned with the rest of the segment?

- **NO**
- **YES**

Does the segment contain more than one cutting on the same alignment?

- **YES**
- **NO**

**Status - 0. UNRATED**

**Status - 3. KNOWN**

**GO TO SECTION 3A**

**GO TO SECTION 3B**

**GO TO SECTION 3C**
SECTION 3A - RELATIONSHIP WITH ANOTHER ROMAN ROAD

Does the segment definitely branch from another road segment rated '3 KNOWN'

YES → Is there evidence that the other road remained in use beyond the Roman period?

YES → GO TO SECTION 4B

NO → GO TO SECTION 4A

NO → GO TO SECTION 4C

SECTION 3A - RELATIONSHIP WITH ANOTHER ROMAN ROAD

Does the segment definitely branch from another road segment rated '2 PROBABLE'

YES → GO TO SECTION 4A

NO → GO TO SECTION 4C

SECTION 3B - RELATIONSHIP WITH ANOTHER ROMAN ROAD

Does the segment definitely branch from another road segment rated '3 KNOWN'

YES → Is there evidence that the other road remained in use beyond the Roman period?

YES → GO TO SECTION 4B

NO → GO TO SECTION 4C

NO → GO TO SECTION 4B

SECTION 3B - RELATIONSHIP WITH ANOTHER ROMAN ROAD

Does the segment definitely branch from another road segment rated '3 KNOWN'

YES → GO TO SECTION 4C

NO → GOTOSECTION4B

NO → GOTOSECTION4C

Status - 3. KNOWN

SECTION 3C - RELATIONSHIP WITH ANOTHER ROMAN ROAD

Does the segment definitely branch from another road segment rated '3 KNOWN'

YES → Is there evidence that the other road remained in use beyond the Roman period?

YES → GO TO SECTION 4C

NO → GOTOSECTION4B

NO → GOTOSECTION4C

NO → GOTOSECTION4C

YES → GOTOSECTION4C

Status - 3. KNOWN

SECTION 4A - RELATIONSHIP WITH NEARBY ROMAN SITES

Is the segment aligned directly towards a known Roman fort or settlement?

NO → Does any proven adjacent Roman period archaeological features appear to respect the segment and appear contemporaneous?

YES → GO TO SECTION 5B

NO → GO TO SECTION 5B

NO → GO TO SECTION 5A

NO → GO TO SECTION 5C

SECTION 4A - RELATIONSHIP WITH NEARBY ROMAN SITES

Do any proven adjacent Roman period archaeological features appear to respect the segment and appear contemporaneous?

YES → Status - 3. KNOWN

NO → GO TO SECTION 5B

NO → GOTOSECTION5C

YES → Is there evidence that the fort/settlement remained in use in the medieval period?

YES → Temporary Status - 1. POSSIBLE

NO → GO TO SECTION 5A

Further investigation is essential since this could disprove the road. Award a temporary status of 1. POSSIBLE
SECTION 4B - RELATIONSHIP WITH NEARBY ROMAN SITES

Is the segment aligned directly towards a known Roman fort or settlement?  
YES  
NO

Does the segment run to or through the gate of a known Roman fort or settlement?  
YES  
NO

Do any proven adjacent Roman period archaeological features appear to respect the segment and appear contemporaneous?  
YES  
NO

Does any proven adjacent Roman period settlement or site or feature cut across the segment?  
YES  
NO

Further investigation is essential since this could disprove the road. Award a temporary status of 1. POSSIBLE

Status - 3. KNOWN

SECTION 4C - RELATIONSHIP WITH NEARBY ROMAN SITES

Is the segment aligned directly towards a known Roman fort or settlement?  
YES  
NO

Does the segment run to or through the gate of a known Roman fort or settlement?  
YES  
NO

Do any proven adjacent Roman period archaeological features appear to respect the segment and appear contemporaneous?  
YES  
NO

Does any proven adjacent Roman period settlement or site or feature cut across the segment?  
YES  
NO

Further investigation is essential since this could disprove the road. Award a temporary status of 1. POSSIBLE

Status - 3. KNOWN

Temporary Status - 1. POSSIBLE
Is the segment apparently overlain by pre-Enclosures Award field boundaries, or agricultural features such as broad rig and furrow with the classic reverse ‘S’ pattern or cord rig?

This is one of the main areas where mis-identification occurs, and further investigation must take place - segment cannot be rated until a pipeline or similar has been ruled out.

Does the segment cut across Enclosures period (ie 18th/19th C) field boundaries/trackways?

Does map regression show a current or former field boundary along the line of the segment?

Does your segment extend beyond the end of the old boundary, or exhibit physical evidence of being other than a boundary bank?

Has thorough investigation been made to ensure that the segment is not a modern feature such as a pipeline?

Status - 0. UNRATED
SECTION 6A - RELATIONSHIP WITH NEARBY SEGMENTS

Does the segment run along or close to an alignment projected from a single segment some distance away, with no physical evidence in between?

- **YES**
  - Is the nearby segment rated **3. KNOWN**?
    - **YES**
      - Status - **2. PROBABLE**
    - **NO**
      - Is the gap less than 1000m?
        - **YES**
          - Status - **1. POSSIBLE**
        - **NO**
          - Status - **3. KNOWN**

- **NO**
  - Does the segment run along or close to a projected alignment between two segments some distance away, both of which are either on the same alignment, or the alignment of one coincides with the end of the other, and with no physical evidence in between?
    - **YES**
      - Is the lowest rated of the two nearby segments rated **1. POSSIBLE**?
        - **YES**
          - Status - **1. POSSIBLE**
        - **NO**
          - Are the gaps less than 1500m in total?
            - **YES**
              - Are both nearby segments rated **3. KNOWN**?
                - **YES**
                  - Status - **2. PROBABLE**
                - **NO**
                  - Status - **1. POSSIBLE**
            - **NO**
              - Are both nearby segments rated **2. PROBABLE**
                - **YES**
                  - Are the gaps less than 4500m in total?
                    - **YES**
                      - Status - **2. PROBABLE**
                    - **NO**
                      - Status - **1. POSSIBLE**
              - **NO**
                - Are both nearby segments rated **3. KNOWN**
                  - **YES**
                    - Status - **2. PROBABLE**
                  - **NO**
                    - Status - **1. POSSIBLE**

Does the segment run between two other adjacent segments both rated on the basis of physical evidence in Section 2?

- **YES**
  - Is the segment on precisely the same alignment as the two segments?
    - **YES**
      - Are both adjacent segments rated **1. POSSIBLE**
        - **YES**
          - Status - **1. POSSIBLE**
        - **NO**
          - Status - **2. PROBABLE**
    - **NO**
      - Status - **3. KNOWN**

- **NO**
  - Does the segment continue the projected alignment of a single adjacent segment rated on the basis of physical evidence?
    - **YES**
      - Are both adjacent segments rated **3. KNOWN**?
        - **YES**
          - Status - **3. KNOWN**
        - **NO**
          - Status - **1. POSSIBLE**
    - **NO**
      - Status - **1. POSSIBLE**
Does the segment run along or close to an alignment projected from a single segment some distance away, with no physical evidence in between? 

**YES**  
Is the gap less than 3000m?  
**NO**  
Status - 2. PROBABLE  
**YES**  
Is the nearby segment rated 3. KNOWN?  
**YES**  
Status - 3. KNOWN  
**NO**  
**NO**  
**NO**  
**NO**  
Status - 2. PROBABLE

Does the segment run along or close to a projected alignment between two segments some distance away, both of which are either on the same alignment, or the alignment of one coincides with the end of the other, and with no physical evidence in between? 

**YES**  
Is the highest rated nearby segment rated 2. PROBABLY?  
**YES**  
Status - 2. PROBABLE  
**NO**  
Is the highest rated nearby segment rated 3. KNOWN?  
**YES**  
Status - 3. KNOWN  
**NO**  
Status - 2. PROBABLE

Does the segment run between two other adjacent segments both rated on the basis of physical evidence in Section 2? 

**YES**  
Is the segment on precisely the same alignment as the two segments?  
**NO**  
Status - 2. PROBABLE  
**YES**  
**NO**  
**NO**  
Status - 2. PROBABLE

Does the segment continue the projected alignment of a single adjacent segment rated on the basis of physical evidence? 

**YES**  
Is the adjacent segment rated 3. KNOWN?  
**YES**  
Status - 3. KNOWN  
**NO**  
**NO**  
Status - 2. PROBABLE

**NO**  
Is the highest rated adjacent segment rated 3. KNOWN?  
**YES**  
Status - 3. KNOWN  
**NO**  
**NO**  
Status - 2. PROBABLE
**SECTION 7A - BRIDGES, FORDS & FERRIES**

Crossings of watercourses by whatever method are treated as individual segments of road. Whilst hundreds of Roman fords have been claimed in Britain, none have actually been proven as Roman. Since it is almost impossible to determine a ford as being Roman, the rating of crossings claimed to be Roman fords are determined by ratings of the segments either side. In reality, it is probable that most watercourses were crossed by bridges. Very wide rivers may have required ferries, the course of which can only be determined by the segments on either side. The segments either side of the crossing MUST be rated first.

- **Are there surviving remains of one bridge abutment, OR remains of bridge structure such as piers or bridge platform?**
  - **Yes**
    - **Status - 3.KNOWN**
  - **No**
    - **Are the lowest rated of the adjacent segments rated 2. Probable?**
      - **Yes**
        - **Status - 2. PROBABLE**
      - **No**
        - **Status - 0 UNRATED**
    - **Is the segment opposite the abutment rated 3. Known?**
      - **Yes**
        - **Status - 3.KNOWN**
      - **No**
        - **Is the segment opposite the abutment rated 2. Probable?**
          - **Yes**
            - **Status - 2. PROBABLE**
          - **No**
            - **Status - 0 UNRATED**
  - **Are both adjacent segments rated 0. Unrated?**

**SECTION 7B - ZIGZAGS & CURVES**

Zigzags and true curves, ie not a curve comprising a series of short straight sections, are unusual and often extremely difficult to confirm as Roman. Zigzags in particular tend to suffer more erosion and wear, and are often masked by multiple later deviations from the original line, making confirmation of Roman engineering very difficult. Consequently, they are treated in a different way and with greater caution than other road segments. Adjacent segments MUST be rated first.

- **Is the zigzag or curve clearly defined and easy to identify?**
  - **Yes**
    - **Status - 3.KNOWN**
  - **No**
    - **Is the highest rated adjacent segment rated 3. Known?**
      - **Yes**
        - **Status - 3.KNOWN**
      - **No**
        - **Is the highest rated adjacent segment rated 2. Probable?**
          - **Yes**
            - **Status - 2. PROBABLE**
          - **No**
            - **Is the highest rated adjacent segment rated 1. Possible?**
              - **Yes**
                - **Status - 1. POSSIBLE**
              - **No**
                - **Status - 0 UNRATED**
    - **Is the lowest rated adjacent segment rated 2. Probable or 3. Known?**
      - **Yes**
        - **Status - 2. PROBABLE**
      - **No**
        - **Are both adjacent segments rated 0. Unrated?**

- **Status - 0 UNRATED**
SECTION 7C - FOSSILISED ROAD LINES & PROJECTED HYPOTHETICAL ROAD LINES

Is your segment a projected hypothetical road line with no physical evidence known (i.e., NOT a modern road or a line of parish boundaries, rights of way, etc.)?**

**YES**

- **Status - 1. POSSIBLE**
  - Is the lowest rated of the adjacent segments rated 1. **Possible**?
    - NO
      - Status - 1. POSSIBLE
    - YES
      - Status - 2. PROBABLE

**NO**

- Does the segment lie between two other adjacent segments rated on the basis of physical evidence in SECTIONS 2, 7A & 7B?
  - **NO**
    - Status - 3.KNOWN
  - **YES**
    - Is the segment on precisely the same alignment as at least one of the adjacent two segments?
      - **NO**
        - Status - 1. POSSIBLE
      - **YES**
        - Is the segment less than 1000m long, across easy even ground?
          - **NO**
            - Is the lowest rated of the adjacent segments rated 1. **Possible**?
              - NO
                - Status - 1. POSSIBLE
              - YES
                - Status - 2. PROBABLE
          - **YES**
            - Is the lowest rated of the adjacent segments rated 2. **Probable**?
              - NO
                - Status - 2. PROBABLE
              - YES
                - Status - 3.KNOWN

- **YES**
  - Is the modern road precisely on the alignment projected from the single adjacent segment?
    - **NO**
      - Status - 3.KNOWN
    - **YES**
      - Is the adjacent segment rated 3. **Known**?
        - NO
          - Status - 3.KNOWN
        - YES
          - Is the lowest rated of the adjacent segments rated 3. **Known**?
            - NO
              - Status - 3.KNOWN
            - YES
              - Is the modern road precisely on the alignment projected from the single adjacent segment?
CONCLUSION

As has been demonstrated in the example of eastern Yorkshire, the lack of a single reliable and current source for the mapping of Roman roads in Britain has resulted in considerable confusion as to what Roman roads actually existed and more pertinently where they actually were. This in turn has led to a virtual free for all in the representation of Roman roads on archaeological maps, which manifests itself in two ways. Firstly, the huge variations in the actual roads or supposed roads included or excluded, with decisions of selection appearing extremely subjective. Secondly, in the many different ways of representing the certainty of any given road, with a clear preference in academic work on the Roman period for simply showing everything as certain. It could probably even be argued that the situation is worse now than at any point in the last 300 years, certainly at any time since Thomas Codrington over a century ago. That is quite an indictment.

However, it must be stressed that the purpose of this paper was certainly not to point fingers, and the examples used are a few selected from very very many. Just about any part of Britannia could have provided similar examples, indeed, the only reason that eastern Yorkshire was used at all is that it is an area that the author is familiar with.

As was made clear in the introduction, the preceding Key and the method and reasoning that supports it have not been presented as perfect solutions to one of the perceived problems. Some people may well perceive the Key as too difficult or time consuming, and initially it may seem so, and yet with repeated use it should become almost second nature, to a point where it’s becomes eventually unnecessary. Indeed, experienced researchers may be doing the process intuitively already. The Key may or may not be a solution, but in presenting it as a suggestion it is hoped that some of the complex problems involved in the identification and confirmation of Roman roads have been demonstrated. Confirming a Roman road is not simply the straightforward identification of an agger and side ditches as is all too often assumed.

That may all seem extremely negative, however the primary objective of the paper is actually the reverse. It is hoped that by highlighting the issues, and potentially stimulating discussion and debate about both the issues and the potential solutions, some consensus may be formed about how best to proceed in future. Of course, the determination of the status rating is only one piece of information that needs to be recorded about any given road segment; in the Welsh model there were 27 others and in the original RRRA prototype it was planned to have as many as 34 fields. It is planned to restart the RRRA’s mapping project in 2022, the aim remaining to create an easily accessible and comprehensive database of Roman road data with an online interface, using technology suitable for the next decade. In the meantime, if the Key is even just moderately well received, and the problems it seeks to tackle even just partly acknowledged by the archaeological profession and its institutions, then this paper will have succeeded in satisfying its purpose, at least in part.

If in the process a potential solution to part of the problem has emerged, then that is a bonus.
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