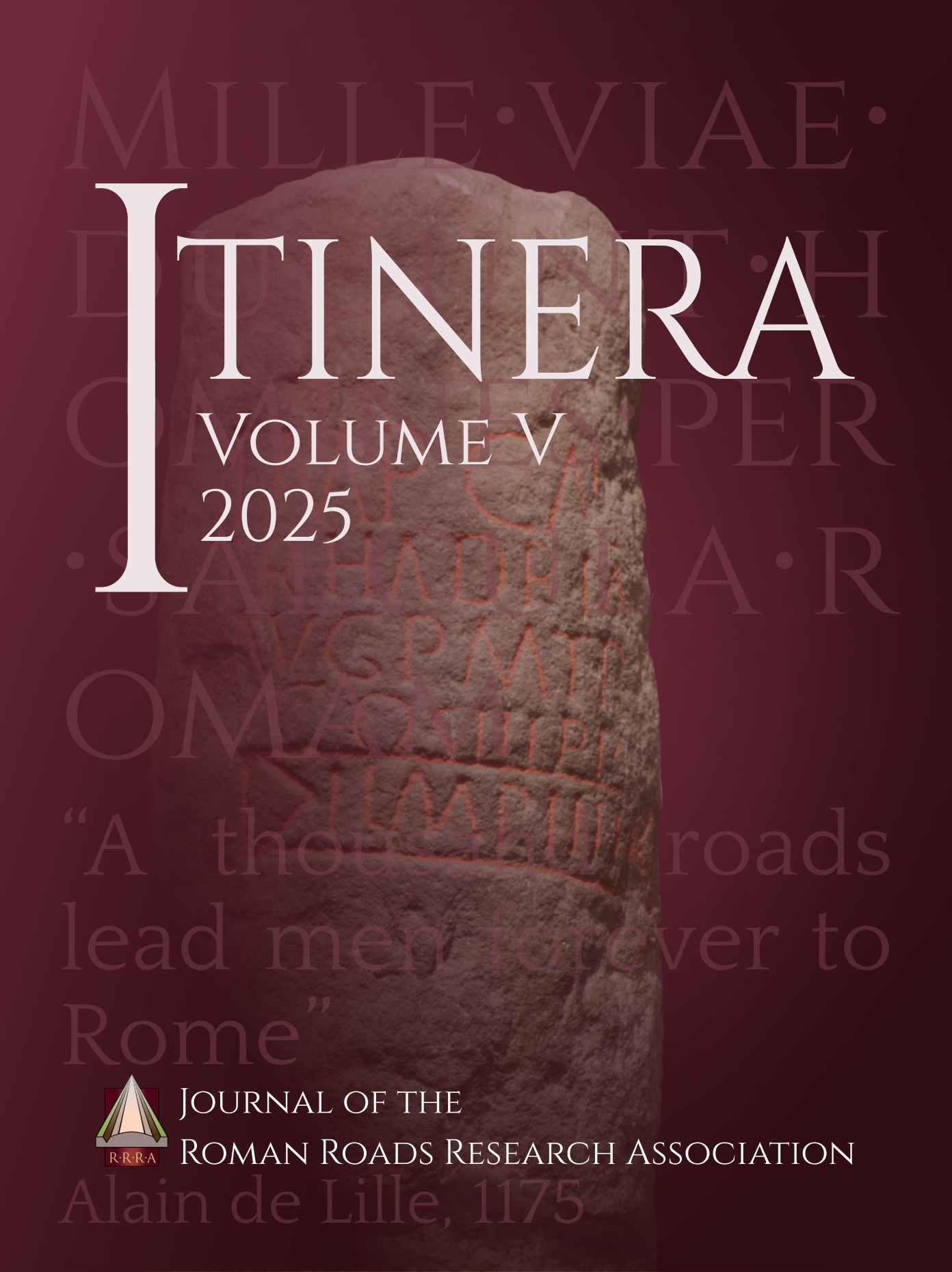


ITINERA

Volume V

2025

"A thousand roads lead men forever to Rome"

Alain de Lille, 1175

Journal of the
Roman Roads Research Association

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Editorial

Robert Entwistle



Welcome to the 2025 edition of *Itinera*, Volume V. *Itinera* continues to hold a unique position among academic journals of Roman studies, with roots in both the academic and grassroots communities. We focus upon the study of Roman roads, transport technology and systems of surveying. We welcome reports and contributions from all researchers able to extend knowledge in these areas to professionals and the public alike, through the format of a formal academic paper.

Volume V, if slenderer than the bumper 2024 edition, is typical in its range of papers. Thus, Wayne Kirk extends our knowledge of Roman Northamptonshire in the light of modern findings, through a wide-reaching paper appraising its road network. Mike Luke, well respected for his excavations and publications on Roman Bedfordshire, shows how a developed understanding of the 'small town' of Sandy leads to an improved appreciation of the local roads. The same theme of road networks is explored in a different way by Keith Abbott, who argues that minor roads and trackways are seriously under-represented in our present appreciation of Roman roads.

Neil Godfrey, by contrast, addresses a wholly different issue: the relationship between roads and Romano-Celtic temples, with roads providing not only transport and passing clients, but also planned landscapes within which temples stood. My own paper is different again, examining ancient surveying methods through the features of extant surveyed works, classical literary sources, and modern surveying techniques. This methodological paper ends my series of papers on Long-distance Alignments. We are also pleased to have a paper from an independent researcher, Paul Smith – one of our own members – presenting his thesis of a road formed over time, from the Iron-Age into the Roman period and beyond.

In this volume we further welcome two authoritative papers from leading academics in Romania, demonstrating the growing understanding of Roman roads in a part of the empire that has received limited attention in the UK. In understanding the growth of road networks in a territory newly brought within the empire we see the link between conquest and road construction, and reflect on the impact of recent political change upon research.

As always, I warmly celebrate the work of our academic advisors and our willing team of volunteers who carry out many critical functions: proofreading, creating the Index, reporting updates from across the country, and managing distribution of printed copy. *Itinera* would not be possible without the willing labours of these individuals, and above all without the editorial team who manage the life of our journal across the year. The process moves from gathering papers and archaeological updates, through review, selection, editing and typesetting, through to final publication. Dr Mike Bishop – writer, publisher and archaeologist – was a founder member of our editorial team, guiding us through the formative first four years of our existence. His expert advice on publishing and all matters Roman helped steer us through a period when everything was new. His international contacts extended knowledge of our journal to contributors as far away as Spain (and most recently) Romania. *Itinera* owes him a great debt as he moves on to other things this year.

With Mike leaving, we are delighted to have welcomed to our team Professor James Gerrard of the University of Newcastle. James Gerrard brings great academic distinction, strengthening us with his experience and calm judgements. Already he has inspired the initiative of an annual Prize for the best Dissertation reflecting Roman Transport studies. Details of the prize (readily available on request)

have been distributed through SALON and the RRRA Newsletter and will shortly be available on the RRRA website. We hope to see this prize awarded for the first time in 2025.

I take this opportunity of warmly welcoming submissions, projected or actual, for Volume VI of Itinera, from all corners of Britannia and the wider empire. You will find '*Notes for Contributors*' on the RRRA website.

In the meantime, I invite you to enjoy everything within Volume V.

Robert Entwistle

(Hon Editor, *Itinera)*

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A Lidar Based Appraisal of the Roman Roads in Northamptonshire

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Abstract

This paper appraises the routes and likelihoods of Roman roads in Northamptonshire based primarily on their appearance on lidar data, but also referring to evidence from excavation, county HER records, aerial photography and crop marks. The paper builds on the work already undertaken by the author in the Kettering area (Kirk 2024) which has demonstrated this approach is viable for detecting unknown Roman roads in the Northamptonshire countryside. The work identifies several new Roman roads and alternate routes for existing roads and questions the existence of some routes in the south of the county, as previously identified by the Viatores (1964).

Introduction

The use of lidar data to determine the routes of Roman roads is now well accepted and works especially well in highland regions where arable agriculture is not so prevalent. It should be recognised however, that for the lidar data to detect a Roman road, it needs to have been built with an *agger* and that *agger* must have survived over 1500 years of agriculture, weathering, flooding, robbing and quarrying.

Northamptonshire is a relatively lowland area with elevations ranging from 0 to around 220m and sits on Jurassic age bedrocks. Although the area has generally been extensively farmed, there are several regions of ancient forest land, e.g. Rockingham, Salcey, Whittlewood, which have delayed the onset of intensive agricultural activity and improved the chances that a lidar detectable *agger* has been preserved.

Using techniques such as lidar hill-shading and Local Relief Models (LRMs), features with as little as 10-20cm elevation change can be detected. This, combined with the fact that Roman roads tend to have straight alignment segments and run between known sites of Roman settlement, is the key to identifying possible Roman roads and distinguishing them from other raised linear features seen such as medieval field headlands, pipelines, disused post-medieval roads etc.

Another key tool available is the Historic England National Mapping Programme of archaeological features which is available through the Aerial Archaeology Mapping Explorer. Aerial photographs and the historic imagery on Google Earth, allows crop marks from the ditches either side of the *agger*

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and parchmarks caused by the remains of the *agger* to be identified, and is especially useful where the *agger* has been damaged or destroyed and cannot be seen on lidar imagery.

Other data sources include the county Historic Environment Records (HERs), historic maps, the Historic England aerial photo explorer and previous research papers, primarily available through the ADS.

It is worth noting that several of the roads studied in this paper run along river valleys, which poses particular problems for the lidar techniques. Firstly, the roads often roughly follow the course of the meandering river, meaning straight sections are shorter and sometimes not even straight. Secondly, the roads are likely to have been inundated by flooding numerous times in the last 1500 years, masking any lidar response. These lowland areas have also been farmed and quarried for hundreds of years and unless the road has been proven by excavation, identification and verification of such routes is difficult.

The Starting Point(s)

Fig. 1 shows the Roman roads and main settlements in Northamptonshire and the surrounding counties as identified on the OS 2016 map of Roman Britain. Only 6 proven roads are identified in Northamptonshire; Watling Street (RR1); *Bannaventa* to Duston (RR17); *Lactodurum* (Towcester) to

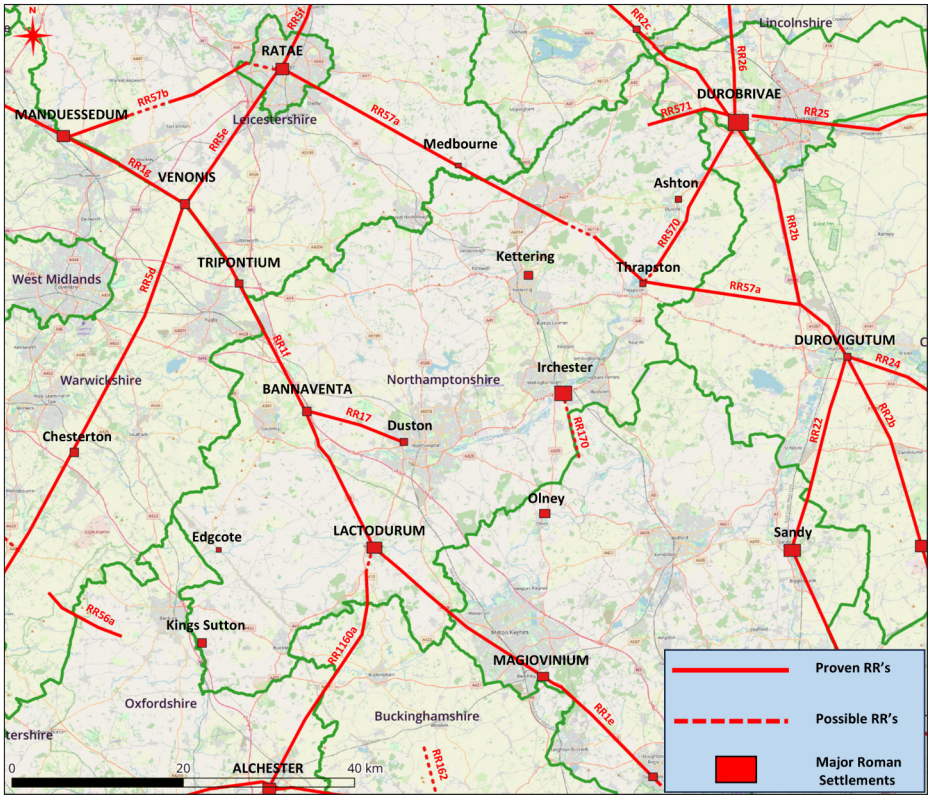


Fig. 1. Roman roads from Ordnance Survey 2016 Map of Roman Britain

Alchester (RR160a); Thrapston to *Durobrivae* (RR 570); the so called Via Devana (RR57a); Ermine Street to King's Cliffe (RR571) and the possible route from Irchester to the south (RR170). The total distance of Roman roads (definite) in the county is approximately 104 km with an additional c. 15km of Roman roads (possible).

As well as the roads listed above, the Roman road system in Northamptonshire is also significantly influenced by Ermine Street (RR2) which lies to the east of the county and is one of the major Roman communications routes in Roman Britain.

Some settlements are apparently not served by roads e.g. Kettering, Kings Sutton & Olney but this is now being infilled. Kirk (2024, 339-355) has looked at the Roman roads surrounding Kettering and work by many other authors has suggested that a more extensive network exists (e.g. Margary 1973 & Viatores 1964).

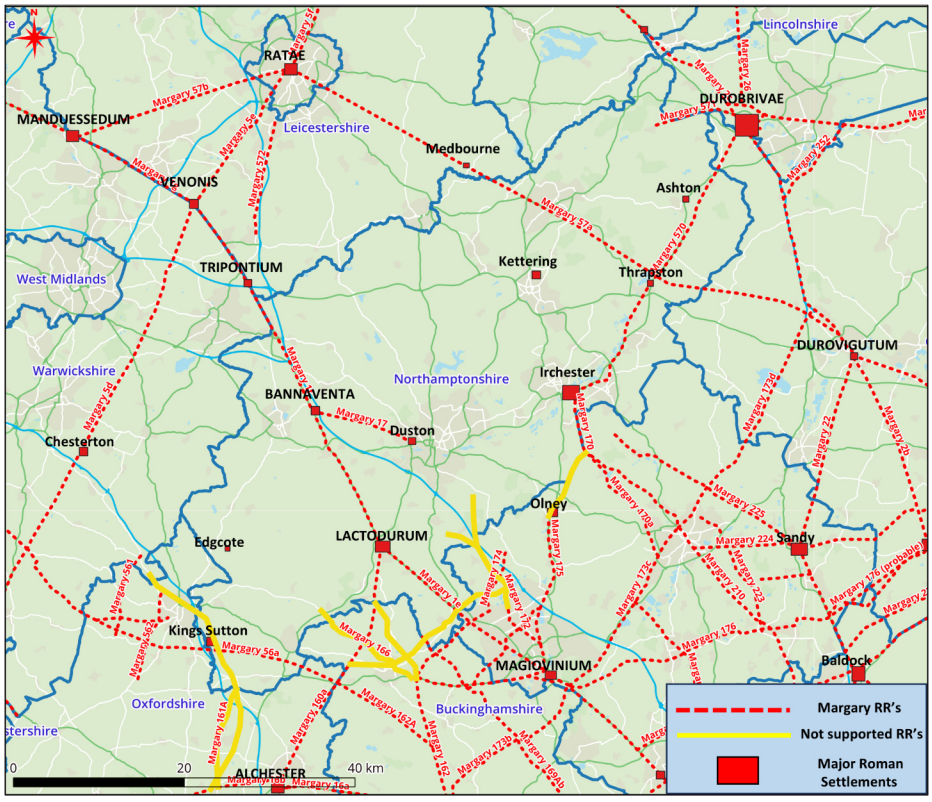


Fig. 2. Roman roads from Mike Bishop's website 'The Secret History of the Roads of Roman Britain' based on Margary 1973. The roads in and entering Northamptonshire were studied. Those not supported in the study are shown in yellow. Those outside the county were not examined.

Fig. 2 shows the Margary road network taken from Bishop's website; The Secret History of the Roads of Roman Britain who quotes '*This is Margary's network from his final 1973 edition of Roman Roads in Britain and incorporates his three different categories of road plus the Viatores' roads (many of which have been called into question, but that is beyond the scope of this humble website).*'

Apart from the extension of RR570 from Thrapston to Irchester and RR175 from Olney to Dungee Corner, the Margary and OS 2016 road networks are very similar in northeast Northamptonshire. The network in the southwest of the county is quite different, with a series of roads entering the county from Buckinghamshire and Oxfordshire, primarily defined by the Viatores (Viatores 1964). The Viatores did not look in detail at these proposed roads far into Northamptonshire or their ultimate destinations, as it was outside of the remit of their study. As will be seen, some of these roads have lidar support but the majority do not and are questioned or discounted by the local HERs and other authorities. Those roads examined but not supported are shown in yellow in Fig. 2 and will be covered later in the text.

The Roman Roads Supported by this Study

Fig. 3 presents an updated picture of the network in and around Northamptonshire, based on this and previous work by the author (Kirk 2024), the OS 2016 Map and a couple of roads in the area reviewed by David Ratledge (2024). Also shown on the image are the locations of proven and possible villas, identified by searching through the county HER records. As was shown in the work by Kirk (2024), these were often important in the routing of the road network as well as the major Roman settlements.

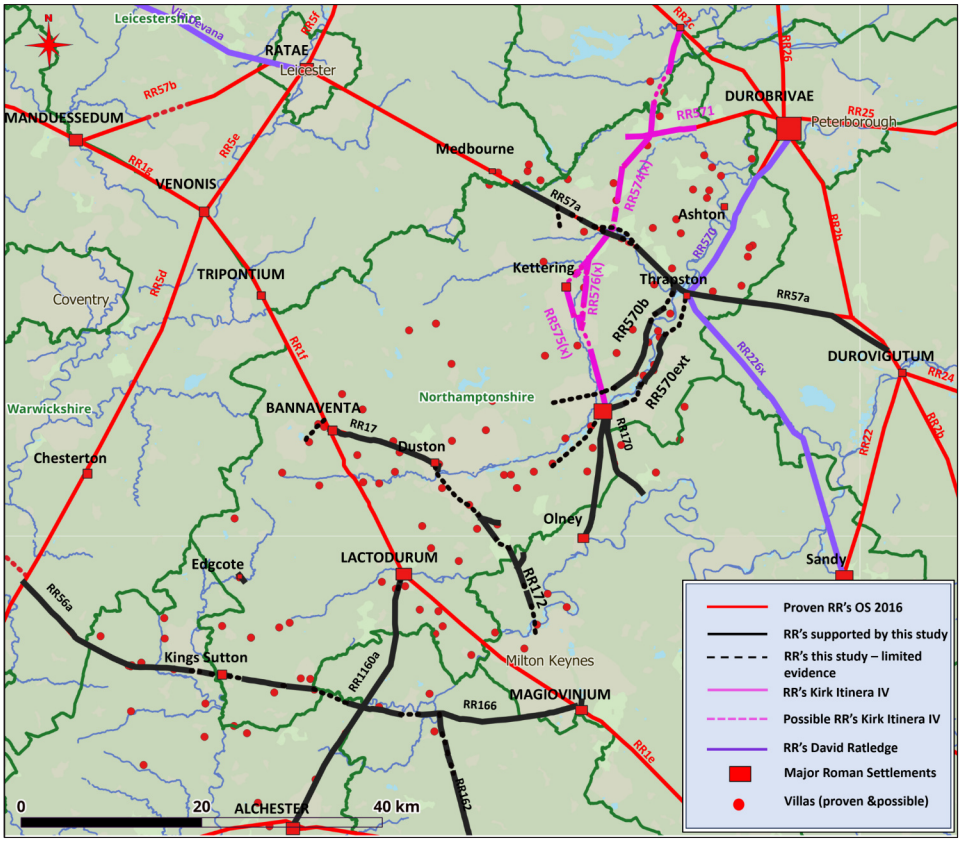
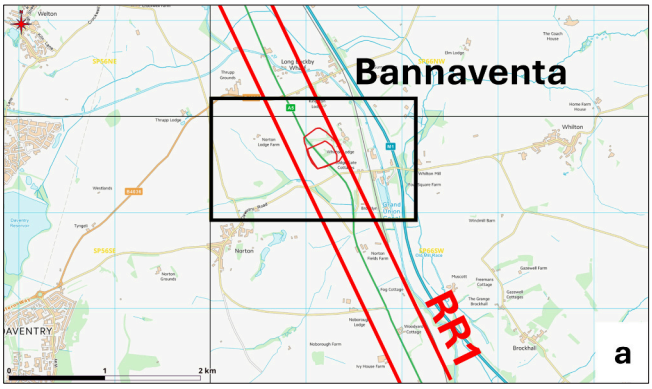


Fig. 3. Roman Roads supported by this study.

Watling Street - RR1f and area around *Bannaventa*



The course of Watling Street is well defined so will not be examined here, other than the section around *Bannaventa* where it is joined by RR17 and several other possible "*side roads*" (Young 2021, 73-106). Fig. 4 shows the layout of the *Bannaventa* as described by Young compared with a lidar LRM image covering the town and its surroundings. The yellow box indicates the area covered by Young's image.

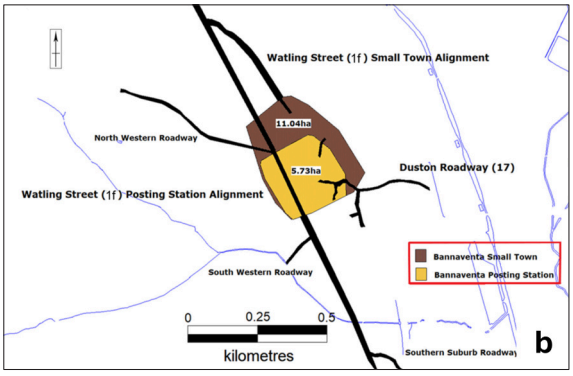
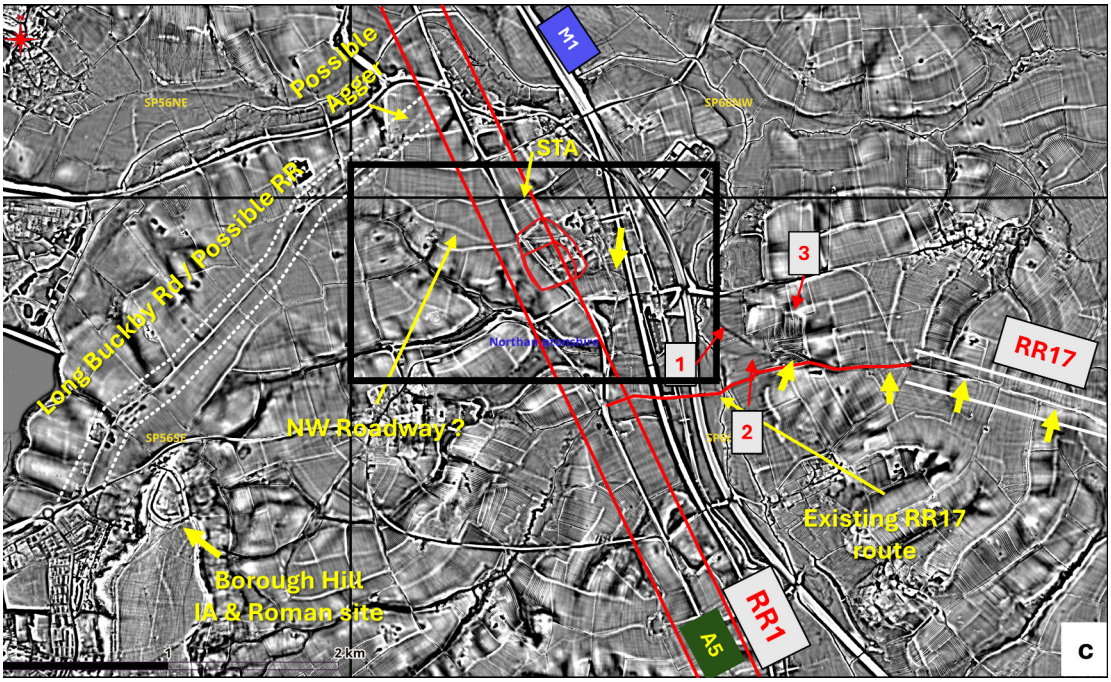


Fig. 4. (a), above, OS location map (b), left, Bannaventa summary map from Young 2021 and (c), below, lidar LRM image from surrounding area. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.



Much of RR1 (Red parallel lines on Fig. 4) is concealed under the A5 modern road but through the south of the town it is in open fields. The Roman road through the settlement is not well imaged on the lidar data, suggesting it may have been subsequently destroyed.

The route labelled by Young as '*Watling Street Small Town Alignment*' (STA), is visible on the lidar LRM just north of the settlement. Also visible is a linear feature in the region of the 'North Western Roadway' but this is slightly to the south of the roadway. This may mean that the feature is unrelated i.e. a medieval headland or that there is a slight error in georeferencing. The lidar feature continues northwest towards Long Buckby Road but cannot be traced beyond. The nearby deserted medieval village of Thrupp (RCHME 1981, 153-4) was geophysically surveyed between 2014 and 2017 by the CLASP group (Young *et al.* 2019). No sign of a Roman road coming from the southeast was identified in the survey, but it may have been destroyed by later activity. It is reported that there are Iron Age and Roman landscape features underlying the medieval remains which would support the possibility the lidar feature is Roman.

A Roman origin for Thrupp may also be supported by a straight linear feature seen on lidar imagery from SP 6032 6538 to SP 6052 6559 that continues northeast where Long Buckby Road turns more east-west to a junction with Watling Street. This short section has the lidar characteristics of an *agger* (a raised and straight linear feature seen on the imagery) and may be a Roman road from Watling Street that connects to Thrupp and possibly onto the Roman sites at Borough Hill and beyond.

The South Western Roadway is not seen on the lidar, nor is the Southern Suburb Roadway, so these are probably not significant long distance routes.

Bannaventa-Duston RR17

RR17 can be seen approaching *Bannaventa* from the southeast along the ridge from Duston. The road then descends into the stream valley near Whilton Locks. The route identified by Margary (1973) (thin red line on Fig. 4) has the road turning almost east-west at around SP 6260 6400 and heading to a junction with RR1 at SP 6148 6374, following the parish boundary. This is not well supported by the lidar or *Bannaventa* investigation. On the lidar image, a curving cutting/holloway can be seen (1) coming from the base of the ridge and heading northwest towards the sinuous road identified as RR17 during the *Bannaventa* investigations (Young 2021, 73-106). The preferred route for RR17 as it approaches the town is highlighted by the yellow arrows, but definition of the route is impacted by the railway, M1 motorway and the canal

There is another, fainter low feature (2) heading more east-west emanating from the same point at the base of the ridge, which may be another road spur.

A third possible route is supported by a linear feature (3) on the edge of the ridge. This is slightly misaligned with RR17 and there is no obvious connection back to the more accepted section under the modern road seen on the lidar LRM imagery, but this remains another option.

Once RR17 has climbed onto the ridge it continues in an almost straight line heading for the Roman settlement at Duston, which is a distance of c.12.1 km. The Roman road underlies the modern surface of the aptly named *''Roman Road*'' for most of the route but near Little Brington and Nobottle Woods there are a couple of places where the two may diverge. The first location (1) on Fig. 5 is just south of Little Brington near St. John's Church Tower SP 6634 6338 where a lidar linear extends to around SP 6660 6330. This may be a headland, as the field clearly contains ridge and furrow but following it would straighten a slight kink in the modern road course.

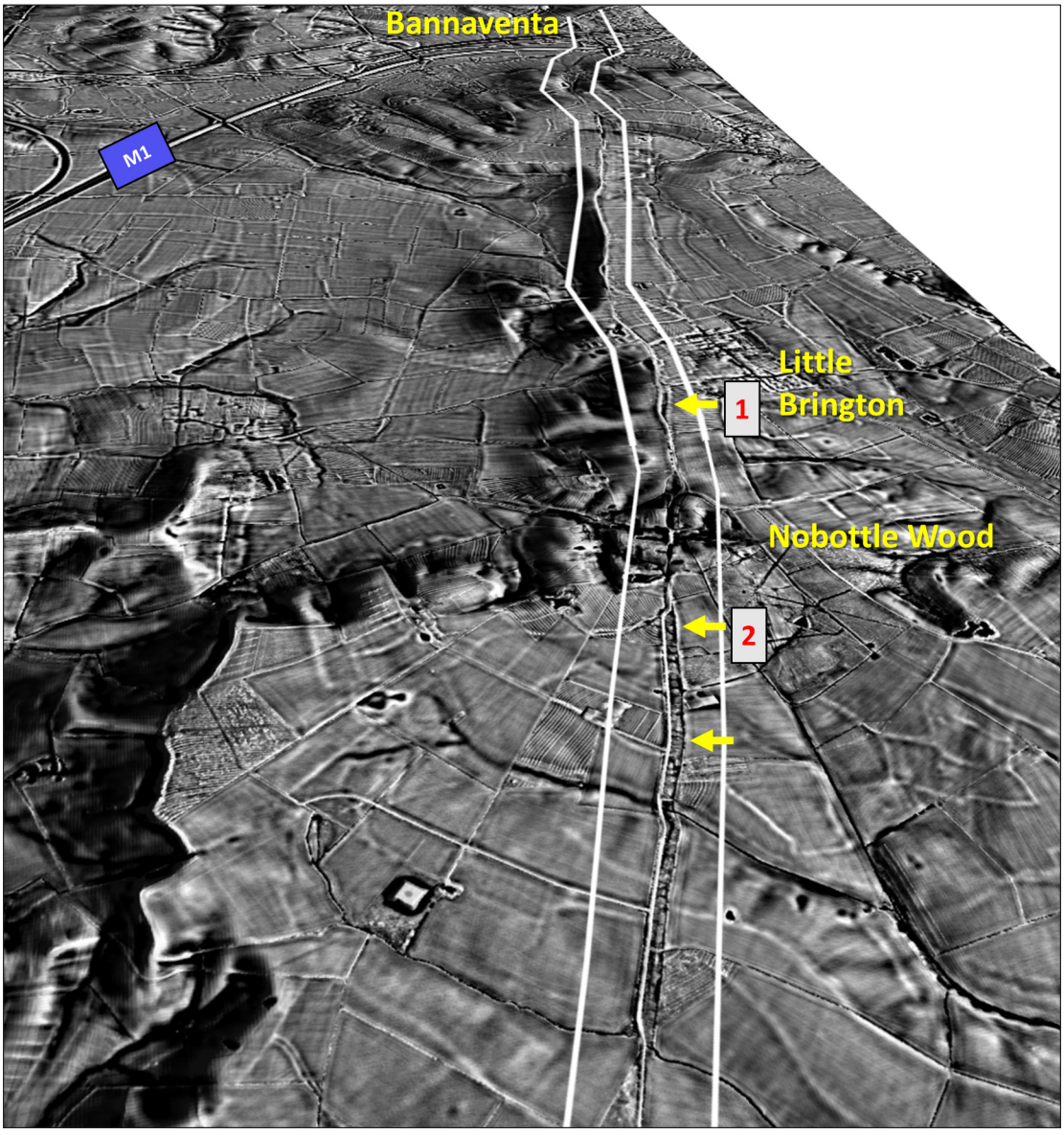


Fig. 5. RR17 lidar Shaded LRM looking NW towards Bannaventa. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

The second location (2) on Fig. 5 lies in Nobottle Belt. A clear lidar linear feature parallels the course of the modern road between SP 6750 6290 and SP 6890 6240 for c. 1500m and coincides with the parish boundary between Brington and Harlestone. This may be part of a parish boundary bank but again choosing this course would slightly straighten the Roman road.

As the Roman road approaches Duston, it follows Berrywood Road until that curves to the south. Beyond here, the course is lost on the lidar data but continues straight and has been found in several

places by excavation. For example (Burnham *et al.* 1997, 427) describe the Roman road being exposed at SP 718 613 and SP 724 611 where a layer of stone 20ft wide was observed.

The Duston Roman settlement is described in the Northamptonshire Extensive Urban Survey (Taylor *et al.* 2002, 7) which states that occupation started in the mid-late first century AD and expanded in the early second century. The town layout is little known due to ironstone quarrying, but fragmentary evidence suggests it lay along two roads, RR17 and a road pointing in the direction Towcester to the southwest (Northants HER 2395/1/1).

RCHME Northants Vol.5 (1985, 249-266) reports a road running southwest-northeast across the site which had side ditches flanking it around SP 7315 6035. Despite much searching the wider area on the lidar data, a road running from Duston to Towcester has not yet been identified, so is not included in this study.

A possible northwestern extension of the Roman road passing through Salcey Forest and heading towards Duston from the southeast is covered later in the text.

Lactodurum (Towcester) to Alchester - RR160a

Area around the Town

RR160a from *Lactodurum* (Towcester) to Alchester is already well defined and accepted over most of its course, although a couple of sections are more difficult to discern within Northamptonshire.

Excavations in Towcester have revealed that the Roman town growth was focussed around Watling Street and the Alchester Road, which was constructed in the AD70s and was flanked by settlement along its frontages A 620m stretch of the RR160a in southwest of Towcester was excavated and is shown in Fig. 6a as the yellow line. Here, the road measured 10m wide and is constructed with pebble and limestone metalling of a depth of 12-15cm, with a sand foundation.

Lactodurum; other Roman Roads

The excavation of the 670m road section also revealed a branch road to the southeast, running in the general direction of Fleet Marston that appears to be a late addition to the town's road network constructed in the late third century AD (Taylor *et al.* 2002, 11-21). No evidence of the side road can be found to the south of Towcester on the lidar data and it may be simply a link to the Wood Burcote villa and settlement just to the south.

Taylor *et al.* also stated that there may be a Roman road that heads in the direction of Kings Sutton, which is thought to follow the line of the modern Brackley Road west from the town. An investigation to the rear of Sponne School (yellow circle Fig. 6a), suggests that it was already in use by the late 1st century AD (Northants HER 726/3). The initial line of Brackley Road out of Towcester is indeed straight and heads for the Roman villa site at Mileoak (Northants HER MNN11525), so may well have Roman origins but despite extensive searching on the lidar data, a convincing route further towards Kings Sutton or Edgcote is yet to be identified.

A Roman road from Towcester heading north towards Duston has long been suspected (Taylor *et al.* 2002, 11-21) but nothing convincing has so far been identified. There have been several recent archaeological investigations to the north-west of Towcester, none of which have identified a Roman road. The only evidence of support is from the 1880s, when Dryden noted an extensive spread of material running north-east from the Railway Station (north of the present town) towards Gayton in the direction of Duston (Taylor *et al.* 2002, 14).

Other possible eastward routes from Towcester towards the Roman settlements at Irchester and Olney have also been investigated on the lidar data, but again nothing convincing has yet been identified.

RR160a Beyond *Lactodurum*

The route of the RR160a immediately southwest of Towcester is identified as "*Possible*" on the 2016 OS Roman Map but the lidar data confirms the route. The lidar LRM image in Fig. 6a shows a series of linear features heading from the urban area towards Swinneyford Farm Roman Villa (Northants HER MNN8512) with a clear section between SP 6866 4675 and SP 6844 4614. The Roman road then turns due south around SP 6839 4566 and heads for the border with Buckinghamshire. The road route here

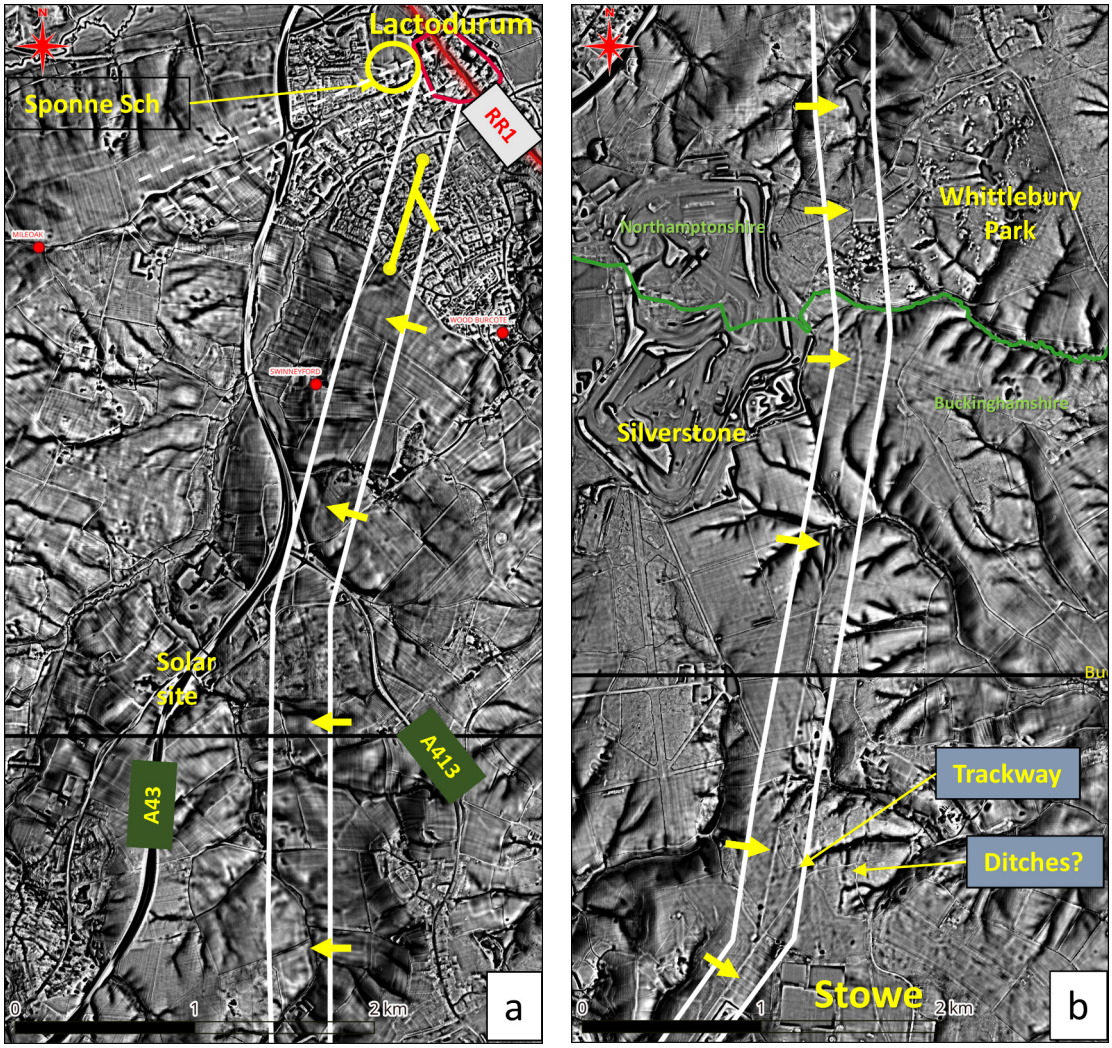


Fig. 6. RR160a lidar Shaded LRM. (a) section from Lactodurum (Towcester) to Whittlebury. (b) section from Whittlebury to Stowe. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

is not well shown by the lidar but the parish boundary between Silverstone and Whittlebury and some field boundaries appear to overlie the course through Shacks Barn Solar site.

The route is lost for a couple of hundred metres before reappearing clearly on the west side of the lake in the West Park Farm campsite. It is not clear through the Whittlebury Hall golf course but reappears just across the Buckinghamshire border combined with a slight change in direction to the south-southwest at SP 6849 4180 (Fig. 6b).

The road then heads to Stowe before a further direction change to the southwest at around SP 6786 3835, just to the south of the modern road. The area around this turning point has several other features identified on the lidar with the area often having a "*mottled*" appearance, as if it has been affected by minor quarrying or similar.

Approximately 160m east of RR160a and parallel to it, is a series of subtle raised trackways extending from around SP 6805 3860 to SP 6814 3922 for around 650m. This might be a feature related to the Stowe Gardens landscaping or could possibly be an alternative older routing for the road.

The section between the Northamptonshire border and Stowe has an excellent lidar response with an *agger* height of up to 30cm preserved. The excellent preservation is probably due to the fact that the area was once part of Whittlewood Forest and the area has not been subsequently heavily impacted by agriculture.

The continuation of the road southwest beyond Stowe is outside the remit of this study but its course to Water Stratford and then onwards to Alchester is easy to discern.

RR56a and Roman Roads in Southwest Northamptonshire

Fig. 7 shows the updated map of the Roman roads in the southwest of the county from this study. The major proposed change is a re-routing of RR56a, which is interpreted to run from a junction with the Fosse way, through the Swalcliffe Lea Roman site, then through Kings Sutton Roman Town. Beyond Kings Sutton Roman Town the route is different and more northerly to that previously accepted, passing through Evenley Hall and skirting to the south of Buckingham by following the Great Ouse River and onto a junction with RR166 near the Roman crossing identified at Thornborough. Several of the Viatores routes have been studied (yellow roads) but are not supported by the lidar. Also, the

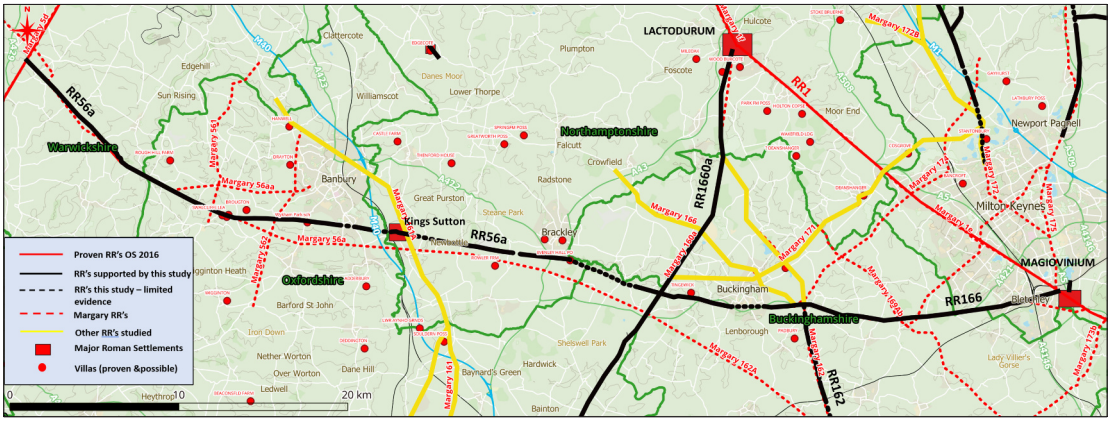


Fig. 7. Updated map of Roman roads in SW Northamptonshire

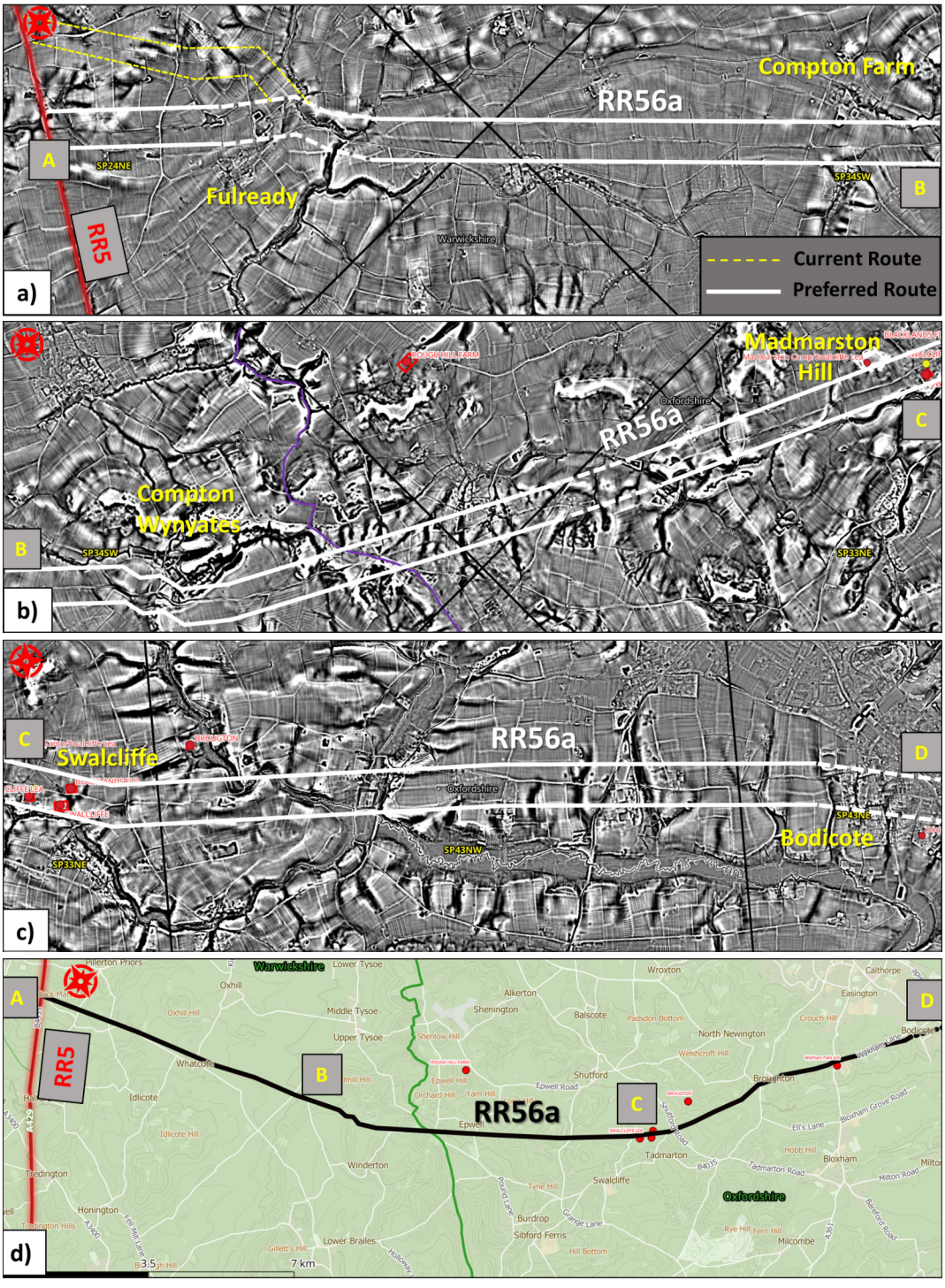


Fig. 8a-d. RR56a lidar LRM panels and route overview from Fosse Way to Bodicote. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

area around Edgcote has been examined to find a long-distance route from the known road at the site (HER 1443/1/1) but this has so far proved elusive.

RR56a - Fosse Way to Bodicote section

Lidar LRM panels and the route overview for RR56a from the Fosse Way to Bodicote just south of Banbury are shown in Fig. 8a-d.

The lidar data suggest a possible different interpretation to Margary (1973, 153) for the intersection with the Fosse Way. There is a clear lidar linear coming from the southeast running to the northeast of Whatcote. This then meets a stream valley and does a slight dog-leg. The current interpretation has the road turning almost due north-south and heading towards Pillerton Priors before turning northwest again and joining the Fosse Way where Banbury Road (A422) makes an intersection.

An alternative interpretation would be for the road to continue its northwest alignment and follow a lidar linear to meet the Fosse way near SP 2730 2763 labelled point A in Fig. 8a. Note the OS 2016 Roman map marks route of RR56b through Ettington to Fosse way as possible, so the intersection location is not clear coming from the west.

Around and beyond Whatcote, the Roman road follows a consistent linear lidar signal across fields from SP 2918 4568 to SP 3263 4211 where it climbs the hill at Compton Wynyates (Fig. 8b). There is a possible section of preserved *agger* from SP 3447 4067 to SP 3483 4047 in open fields west of Epwell. It runs mostly along field boundaries and then to the south of Madmarston Hill and the Roman settlement at Swalcliffe Lea (Oxfordshire HER 2444). The road has been excavated here and is reported to be 25ft wide with a surface of tightly laid cobblestones.

The section from Swalcliffe Lea to Bodicote (C-D) is shown in Fig. 8c. The road follows field boundaries from SP 3973 3833 to SP 4040 3828 where it reaches a small area of quarrying. The route then possibly turns north to cross a stream at Fulling Mill and then into Broughton Castle grounds. An alternative crossing is around SP 410 383 to align with straight section of agger (beneath ridge and furrow) visible on lidar imagery coming from the east of Broughton. This alignment would have it heading for a Roman site identified on the Oxfordshire HER (24185). Continuing almost east-west there is a possible section of *agger* from SP 4210 3825 to SP 4302 3823 where it then joins Wykham Lane.

The Roman road then underlies Wykham Lane, past the possible villa at Wykham Park School, until it diverges to a more southerly route with a possible *agger* from SP 4523 3794 to SP 4564 3788. There are hints of *agger* under modern housing to Weeping Cross road which then continues to a junction with Oxford Road.

RR56a - Around Kings Sutton Roman Settlement

From Oxford Road, the Roman road is interpreted to follow a series of field boundaries towards a crossing point of the river Cherwell near the site of Twyford Mill and then onto the Roman settlement north of Kings Sutton (Fig. 9).

Kings Sutton Roman settlement has had little excavation (Taylor 2002, 6). It is interpreted to have been extensively occupied by the 2nd century AD with settlement focussed around the road network. Figure 9 shows an overlay of the town outline and roads on the lidar data. Evidence for the road network comes from aerial photographs, with an attempt to excavate the road at SP 4982 3734 not able to identify it, probably due to quarrying (Taylor 2002, 8). The lidar data also does not identify any

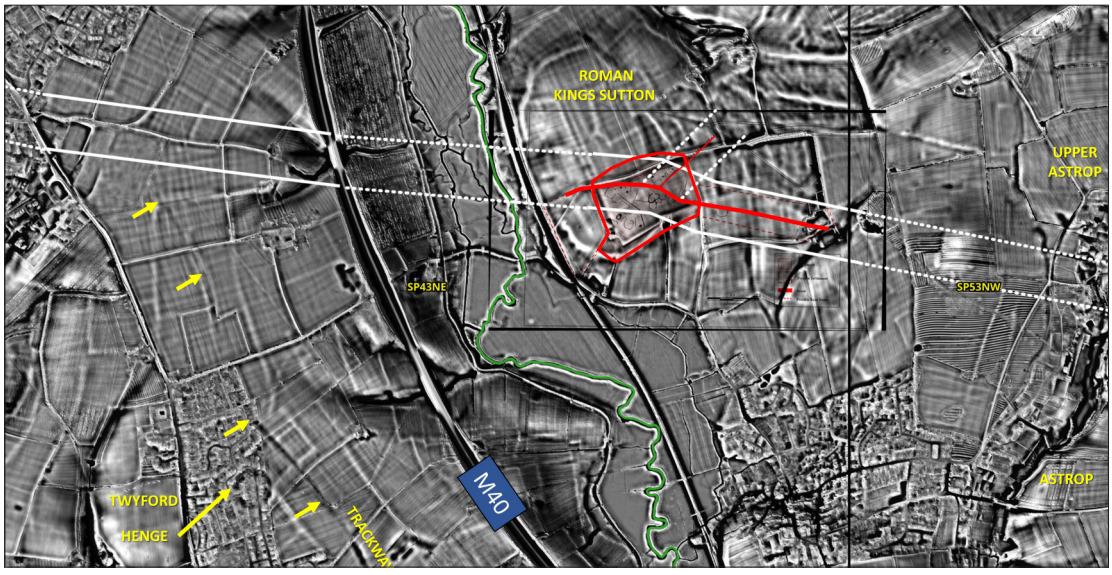


Fig. 9. Lidar LRM image around Kings Sutton Roman settlement with overlay from Taylor 2002. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

agger associated with the road. A second road leaving the settlement to the northeast has also been identified (Taylor 2002, 7) but again this is not seen on the lidar and any continuation has been destroyed by quarrying.

The projected course of the major road heads east-southeast for Upper Astrop and Newbottle but there are no clear lidar linear features. The current interpretation (Margary 1973, 154) has the road turning south-southeast for Astrop and Newbottle Spinney, where it joins Green Lane to Charlton, but no Roman road remains have been identified in this area. RCHME Northants Vol.4 (1982, 177-183) states that '*much of the alleged route follows enclosure tracks which show no sign of antiquity*'.

Two other features to notice in Fig. 9, are the circular feature/possible henge identified under a housing estate in Twyford (Oxfordshire HER 28508) and a possible pre-historic trackway running Northwest-southeast. The identification of the henge feature illustrates the power of lidar being able to "*see*" older features through the modern "*noise*" of built-up areas.

RR161 and 161a – Not supported Roman Roads near Kings Sutton

Margary RR161 and RR161a are both postulated to leave Akeman Street (RR16b) just north of Kirtlington taking slightly different routes to rejoin just north of Souldern. Routes heading for RR16 and the Tackley crossing are possible, but it would be more likely for any road to connect Kings Sutton directly to Alchester, unless they were servicing settlements along the course of the River Cherwell which are not observed.

RR161a reportedly leaves Akeman Street (RR16) on the "*The Portway*" north of Kirtlington (Fig. 10a) which has straight sections and runs due north for around 4km to near where the road meets the B4030. Here the Portway bends and veers around the western edge of Heyford Airfield (Fig. 10 b) and then along field boundaries past the possible Roman villa at Souldern. The road is then supposed to

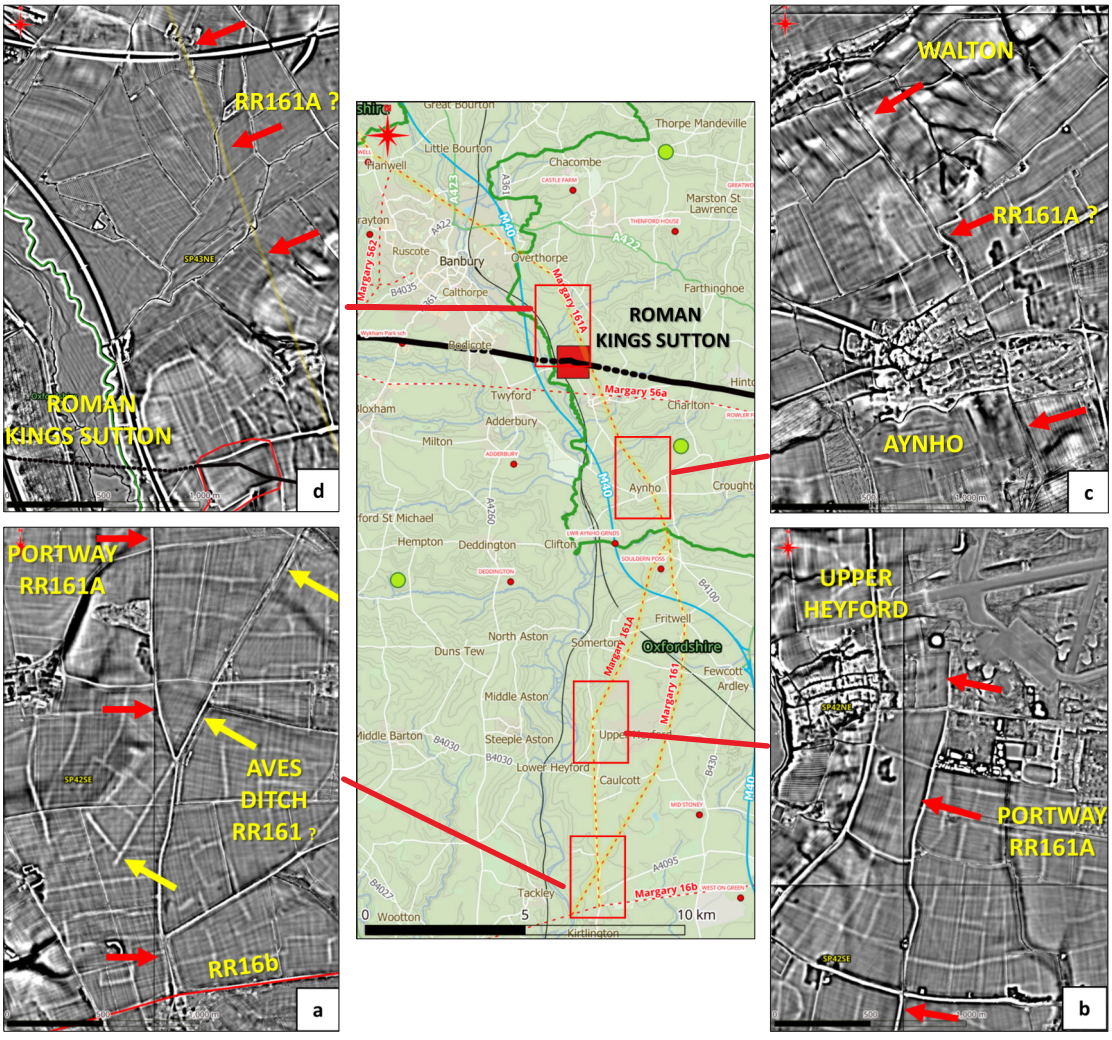


Fig. 10. Map and lidar examples for Margary Roman roads RR161 and RR161a. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

turn west of north following field boundaries to Aynho (Fig. 10c) and then bend further to the west through the deserted medieval village at Walton, before heading to Kings Sutton Roman settlement, where it is not observed by current archaeological investigations (Fig. 10d).

The RCHME do not take a supportive view of this road (RCHME Northants Vol.4 1982, 177-183) and no supportive evidence is seen in the Northants HER record (HER 55/1). The lidar picture is mixed, but there is nothing definitive to identify it as a Roman road. Where the Portway road curves near the intersection with Aves Ditch there is no evidence for an *agger* continuing straight across the fields (Fig. 10a). Similarly, the Portway south of Heyford Airfield (Fig. 10b) does not have the character of a Roman road, with no remnant *agger* sections observed between the 'unnecessary' bends. The section between Aynho and the deserted medieval village at Walton Grounds is reasonably straight and has some raised sections, hollow-ways and cuttings (Fig. 10c), but proving this is Roman in origin is difficult, as it is known to be the medieval road between the two villages (RCHME Northants Vol.4

1982, 177-183). The road is not recorded in the archaeological evaluation of Kings Sutton (Taylor 2002) and there is no evidence of a Roman road continuing north towards Warkworth (Fig. 10d).

In summary, until a section of this road is archaeologically investigated, it is difficult to accurately define its age. As stated above, one might expect a road to run between Kings Sutton Roman Town and Alchester and parts of this route may be represented above.

RR161 is shown in Fig. 10 leaving Akeman Street just to the east of the Tackley crossing and following Aves Ditch (Oxfordshire HER 8925) to the northwest. Recent work has concluded that the Ditch is in fact an Iron Age boundary e.g. (Hart *et al.* 2010, 133-164) and does not have a Roman origin, despite its straight alignment. The lidar data (Fig. 10a) clearly show that Aves Ditch/RR161 does not reach Akeman Street but abruptly terminates around SP 4980 2112. Excavations in the area support this conclusion (Slater 1937, 202), leading some to suggest it is an unfinished Roman road. This is not supported by the archaeological evidence, so it is discounted as being a Roman. It should be noted that the lidar reveals several interesting linear features which have similar responses and may have a similar origin around both ends of Aves Ditch, indicating the structure may be more extensive but this is not covered any further here.

RR56a Kings Sutton to Evenley – an alternative route

As discussed above, the accepted route of RR56a beyond Kings Sutton Roman settlement is not supported by archaeological analysis (e.g. RCHME Vol.4 1982 & Northants HER 6915/1). Analysis of the lidar data suggests a possible alternative route continuing in a straight alignment from the

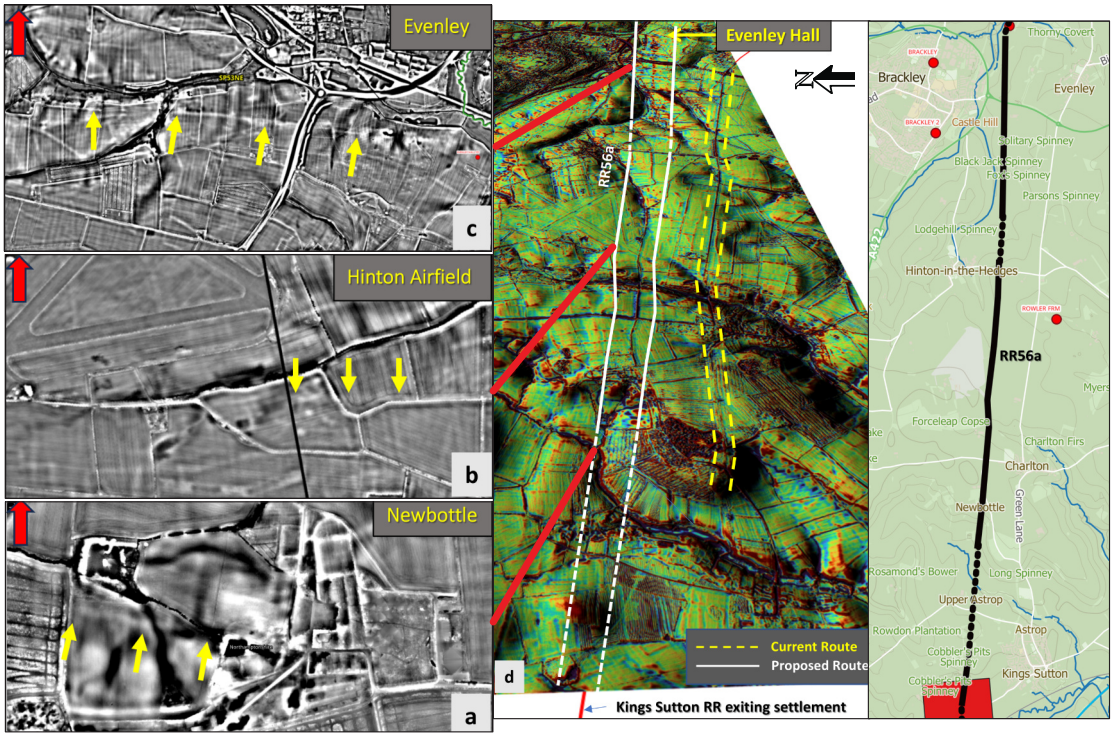


Fig. 11. (a)-(c): lidar LRM examples, OS overview map and (d) 3D lidar perspective for RR56a between Kings Sutton Roman settlement and Evenley Hall. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

settlement road to the Roman site at Evenley Hall. Fig. 11d looks from west to east and highlights the key lidar features of the proposed route.

There is no lidar response from Kings Sutton Roman road immediately to the east of the settlement but projecting the cropmarks leads to the village of Newbottle. Here a faint linear lidar response on the correct alignment can be seen (*Fig.11a*) from SP 5183 3696 to SP 5254 3682 which coincides with a crop mark on historic Google Earth Imagery (5/24/2009). This feature maybe related to the earthworks associated with Newbottle deserted medieval village but other evidence on the same alignment suggests it may have earlier origins.

Beyond Newbottle, the Roman road underlies the road running to Forceleap Farm and then follows the southern boundary of Hinton Airfield. A section of preserved *agger* in open fields may be present between SP 5474 3645 to SP 5534 3636 and is shown in Fig. 11b. A linear feature visible on lidar imagery is then seen running for over 2.8km from SP 5652 3618 to SP 5937 3588 and the Roman site at Evenley Hall grounds (Fig. 11c). It should be noted that the British Geological Survey identify a series of east-west trending faults in this area, but they do not consistently align with the lidar feature.

The Roman site at Evenley has only had minor excavation but has been extensively metal detected and field walked (Northants HER 141 & 141/0/1). Substantial amounts of Roman material dating from 1st to 4th century AD have been found over a wide area, with possibly a temple or villa on the site (RCHME Northants, Vol.4 1982, 49-53). Two large hoards were also discovered in 1826 and 1854 and boundaries, ditches and enclosures have been discovered by the NMP (HER 141/0/3). This may be a more substantial Roman site than is currently recognised.

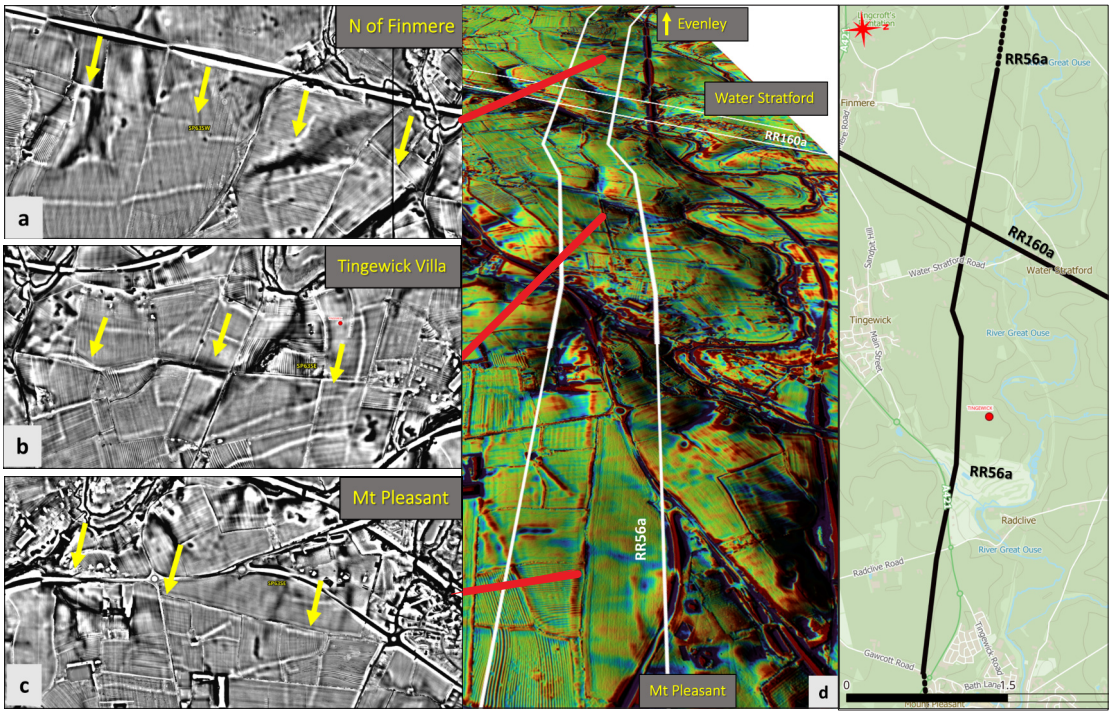


Fig. 12. (a-c) lidar LRM examples, OS overview map and (d) 3D lidar perspective for RR56a between Evenley Hall and Mount Pleasant, Buckingham. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

The route immediately beyond Evenley Hall is not obvious and there is the possibility that the Roman road crosses the River Great Ouse nearby and heads to a junction with RR160a north of Water Stratford. However, the lidar suggests that the road may stay south of the river and follow its course to the south of Buckingham (Fig. 12a-d). The first potential feature is around SP 6054 3528 where a 60m embankment crosses a small dry stream valley.

This is part of a linear feature visible on lidar running for c. 1.5km, which appears to be a series of pits and short positive features north of Finmere (Fig.12a), running roughly parallel to the former railway line to a junction with RR160a at around SP 6490 3380. Beyond the junction, there is a slight dog leg before continuing to the south of Tingewick Villa (Bucks HER 0008700000) and on through Buckingham Golf Course (Fig. 12b). From here, the route picks up a series of field boundaries, which are recorded as a municipal boundary on the OS Six Inch 1830s-80s maps but is shown as a road on Jefferys' 1770 map of Buckinghamshire (Fig. 12c). The route is lost through the Mount Pleasant area of Buckingham, but it probably makes for a junction with RR166 (which comes from Fenny Stratford) around the Roman crossing of Padbury Brook at Thornborough (Fig. 13).

RR166 *Magiovinium* (Fenny Stratford) to Thornborough

Based on the work above, this may either be considered an extension of RR56a or a Roman road in its own right. Much of it underlies modern roads, so lidar cannot inform us a great deal about its likelihood or route. However, there are couple of places where the modern A421 road curves or bends and features can be seen following a straighter course (Fig. 13*)* and Roman roads have been excavated at Bourton Grounds around Thornborough Bridge (Bucks HER 0017700000) & (Johnson 1975, 3-56).

The Bourton grounds site records significant Roman activity, with two barrows dated to the late 2nd century AD, a Romano-British temple, cemetery and series of roads and trackways. The map inset in Fig. 13 is an enhanced version of Fig. 12 from Johnson's paper showing that two east-west roads were found on both sides of the River Twin (or Padbury Brook) and a third road was found on the east side of the river heading southeast-northwest and may be associated with RR162. The larger northern road is interpreted to have been established by the time of the Roman conquest evidenced by the presence of *''native vessels"* dating to the first half of the 1st century AD. The southern of the roads consists of small limestone blocks laid upon a clay *agger* which is 3.5m in width and has been dated to late 1st century AD. Despite some uncertainty in dating, it is clear that an east west Roman road crossed Padbury Brook. Nothing can be seen on lidar at the excavation site due to the modern A421 but extrapolating the orientation of the excavated roads leads to some patchy linear lidar features in Bourton grounds (Fig. 13.1) which may be the remnants of the Roman road heading for a junction/ continuation with RR56a near Mount Pleasant, Buckingham. This is supported by an area of Roman finds in these fields and especially Bucks HER 0671700000 where a possible Roman road is mentioned.

A section of possible preserved *agger* is shown in the area of Linford Stables (Fig. 13.2*),* running from SP 7616 3251 to SP 7804 3221. A road is shown on Jefferys' 1770 map of Buckinghamshire in the same location, indicating that it probably predates enclosure.

The Roman road is interpreted to run under the A421 until a final section of linear lidar response lying south of the A421 running from SP 8000 3244 to SP 8037 3247 (Fig. 13.3). Field walking in this area has discovered some Roman pottery (Bucks HER 0008000000) but no road has yet been identified. The Roman road is then conjectured to follow the course of Buckingham Road through Bletchley and onto Fenny Stratford and a junction with Watling Street, just north of *Magiovinium*.

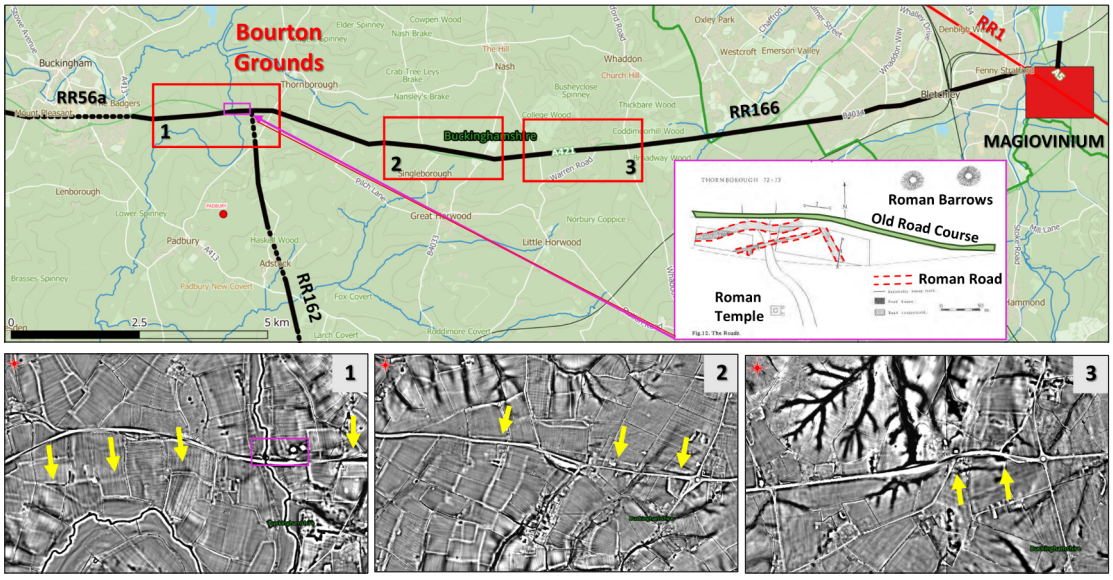


Fig. 13. Lidar LRM examples, overview map and Bourton excavation summary Roman road map (modified from Johnson 1975) for RR166/RR56a between Buckingham and Magiovinium. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

RR162 Fleet Marston to Bourton Grounds

The third road identified at the Bourton Grounds site (Fig. 13) heading to the southeast was traced for 45m by probe surveying and resistivity survey along with a trial excavation (Johnson 1975, 3-56). It has metalling 8-10m wide and is interpreted to be late 1st century AD. The road is not seen on lidar, possibly due to remnant ridge and furrow masking it. The direction indicates this is probably RR162 (or a spur off it) which heads south to Fleet Marston. Although only categorised as possible on the 2016 OS Roman Map, the lidar offers strong support for this road over most of its length. The same cannot be said for the section of RR162 thought by the Viatores to run north from Boughton Grounds. This is not well supported by the lidar imagery and will be discussed in the next section.

Initially, the route is hidden by ridge and furrow and quarrying at Coombs Quarry but appears to be represented by a footpath. From Coombs Quarry, the road then probably underlies Adstock Road before heading across the fields to the north of Pear Tree Farm (Fig.14). A faint linear lidar feature can be seen from where Adstock road curves to the east to around SP 7360 3098.

The course through Adstock is not clear but the lidar response returns just to the south of the village around SP 7398 2982 to SP 7415 2914 and heading towards Addington. Here, the road passes through Street Mary's church and continues south of the village along a hollow-way to cross Claydon Brook near South Lake and a disused railway line.

The Roman road then runs to the west of Claydon Brook towards Claydon sub-station but the lidar response is not clear until SP 7489 2648 to SP 7500 2614 where a possible section of preserved *agger* is observed. A disused railway then complicates the picture but the raised linear feature reappears

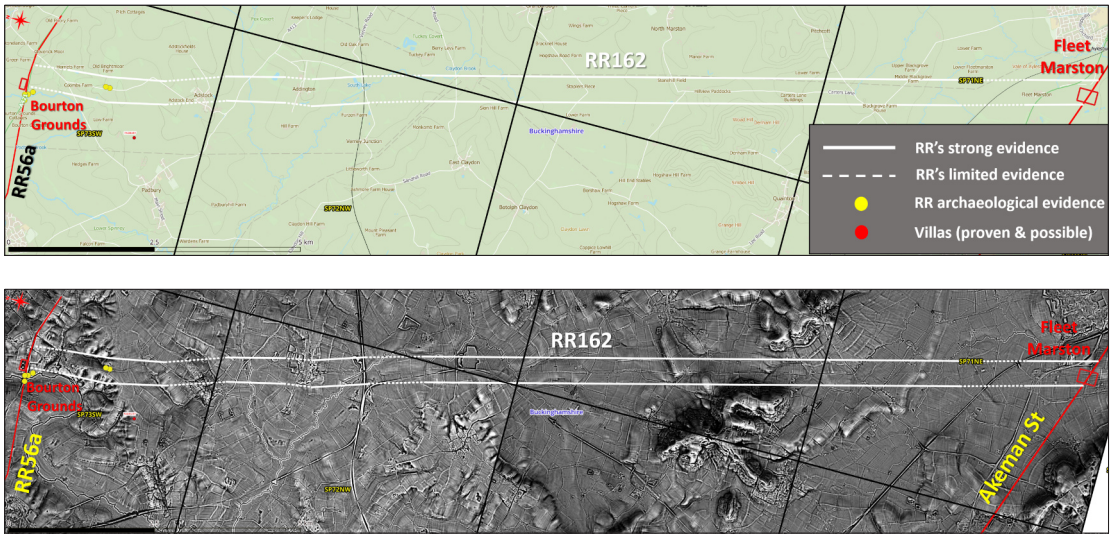


Fig. 14. Lidar shaded LRM and OS overview map for RR162 between Fleet Marston and Bourton Grounds. Lidar data ©Environment Agency copyright and/or database right 2024. All rights reserved.

around SP 7514 2545. After crossing a small stream, a cutting is observed at around SP 7524 2503 before the road course is shown by field and parish boundaries for c. 2.6km to Stonehill Farm.

Beyond Stonehill Farm, the road underlies Carters Lane for c. 3km until it meets Blackgrove Road. It then crosses fields with a good lidar response from SP 7688 1873 to SP 7715 1772. The approach to Fleet Marston Roman site and Akeman Street is not clear on lidar but the road course is marked by cropmarks and has been found by excavation, where it is reported to be made of flint gravel in silty matrix which is 6.62m wide and 0.17m thick (Lythe 2009).

Bourton Grounds area - other possible Roman Roads RR162, RR166 & RR171

Fig.15 shows the Roman roads around Bourton Grounds taken from taken from Margary 1973. The roads highlighted in yellow are those examined during this study as they impact on Northamptonshire.

RR162 heading north from Bourton Grounds is not well supported by lidar or searches of the HER Records. The lidar LRM does not have any convincing evidence of the road heading north to cross the Great Ouse. There is a small section of possible raised linear feature l from near Foxcott Wood Farm, but it is not clearly connected to anything beyond. A possible Roman road with braided sections of is reported in Foxcote Wood in the HER records (Bucks HER 0203400000) but nothing convincing is seen on the lidar data. An alternative northern extension for RR162 would be to follow the northeast trending hollow-way of the deserted part of Thornborough village (Bucks HER 0054500000) and then link to RR174 which may in future be identified as Roman in origin.

RR166 is shown on Margary's map to come from the east and then to turn northwest at Bourton Grounds and head towards Page Hill, Buckingham. Again, nothing is seen on the lidar data which

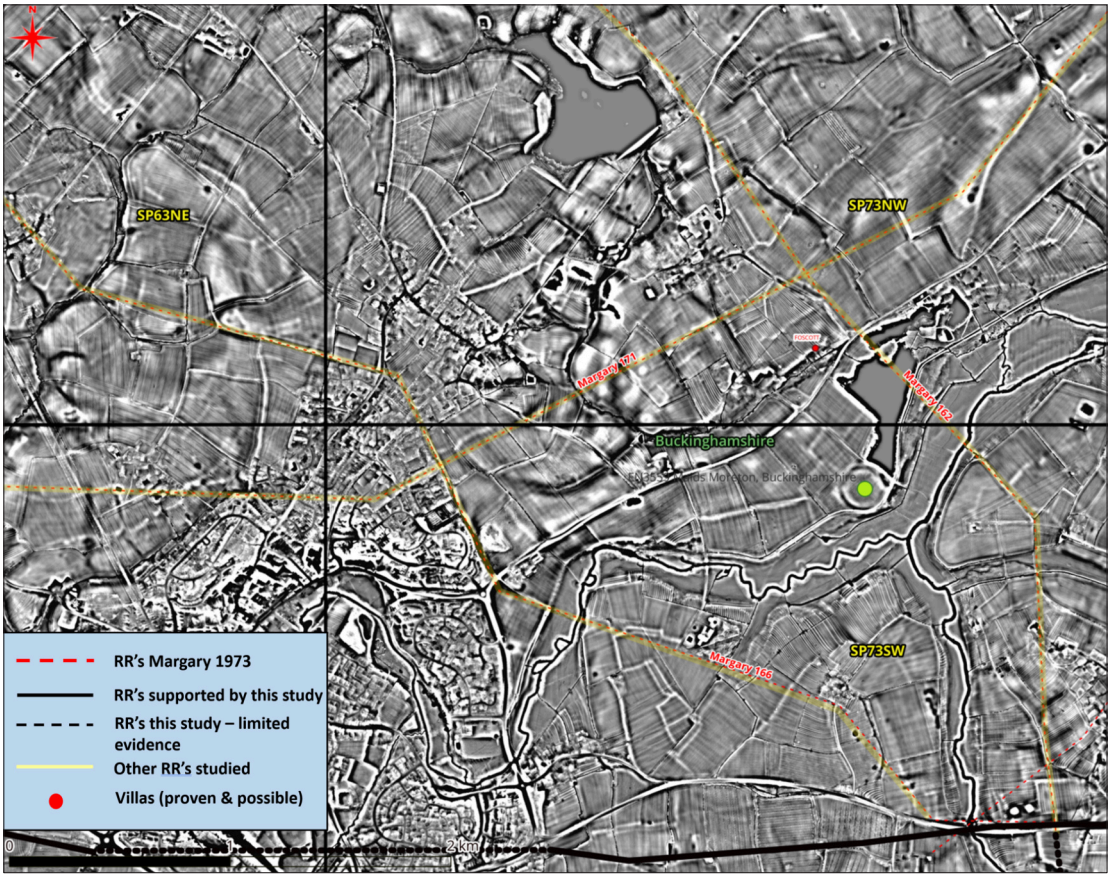


Fig. 15. Lidar LRM with Margary 1973 Roman roads around Bourton Grounds. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

supports this route or is seen in the HER records. The preferred interpretation is that the road continues straight across Padbury Brook to meet with RR56a as discussed above.

RR171 reportedly comes from a junction with RR1 at Old Stratford, Deanshanger, through the north of Buckingham to a junction with RR160a near Water Stratford (Viatores 1964, 316-322). The area along the proposed route SW of Deanshanger Roman Villa has been relatively recently archaeologically evaluated e.g. (Wolf and Whelan 2022, Brown 2022, Cotswold Archaeology 2015) and no substantive evidence of a Roman road identified. As observed elsewhere in this study, a Roman road running alongside a major river is very feasible, but until it is found by excavation it is difficult to positively identify.

RR172 *Magiovinium* to Duston – an alternative route

RR172 is reported as coming from *Magiovinium*, through what is now Milton Keynes and, across the Great Ouse at Haversham, through Hanslope Park and onto Spinney Lodge Farm in Hanslope (Viatores 1964, 324-7). Here the road is shown to divide into RR172a, which goes through Salcey Forest

and terminates at Piddington Roman Villa and RR172b which heads NW towards Hartwell and Ashton. Neither of these roads is well supported by lidar, so must be questioned, but a clear lidar linear feature is observed nearby which shows the true route of the road. This RR172 alternate route heads from Haversham towards Roman sites at Wootton and presumably the Duston settlement.

The route through Milton Keynes is obscured by the town's developments and not confirmed by modern data, but it appears traceable on the lidar heading north from Stantonbury (Fig. 16). The road

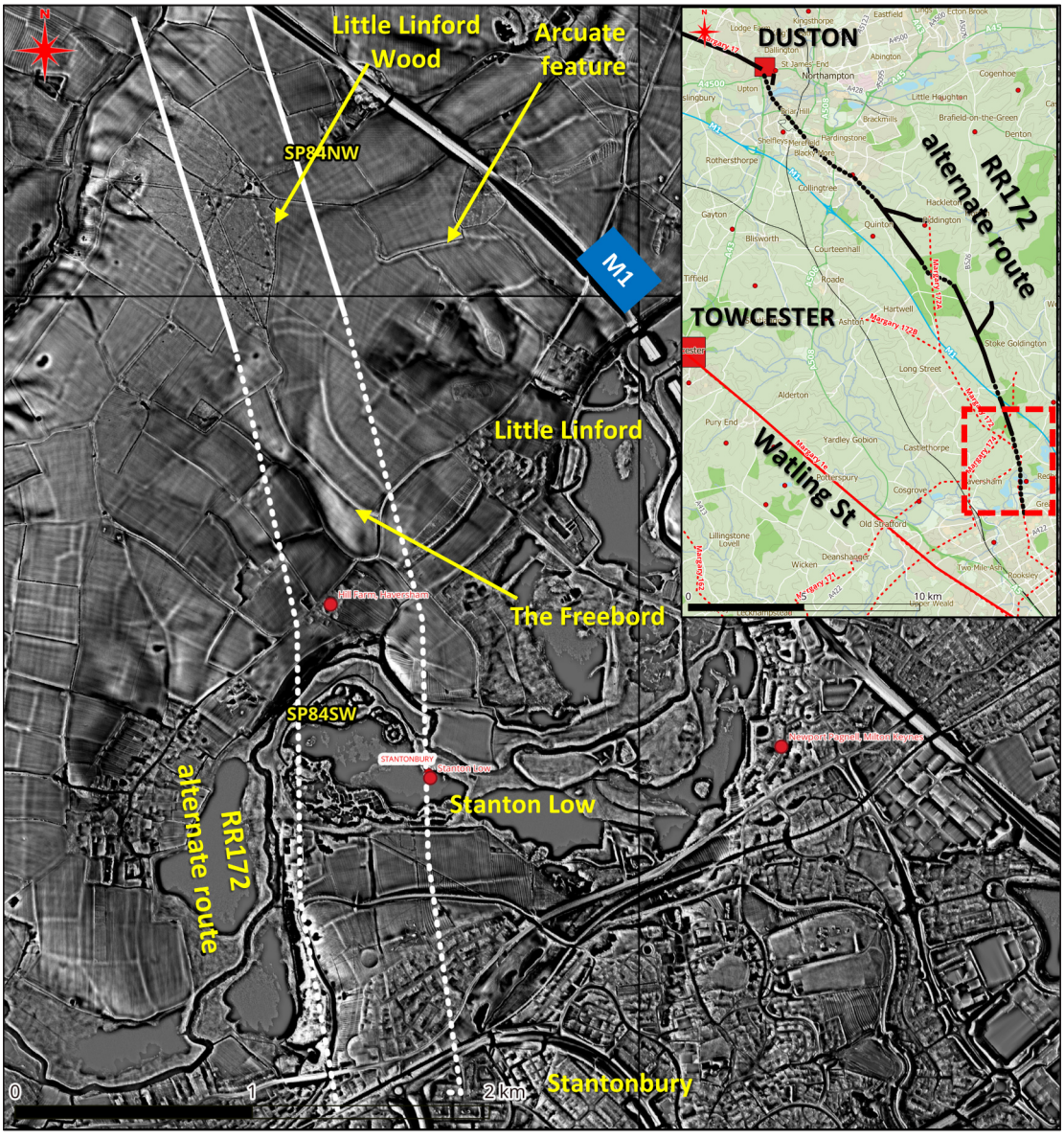
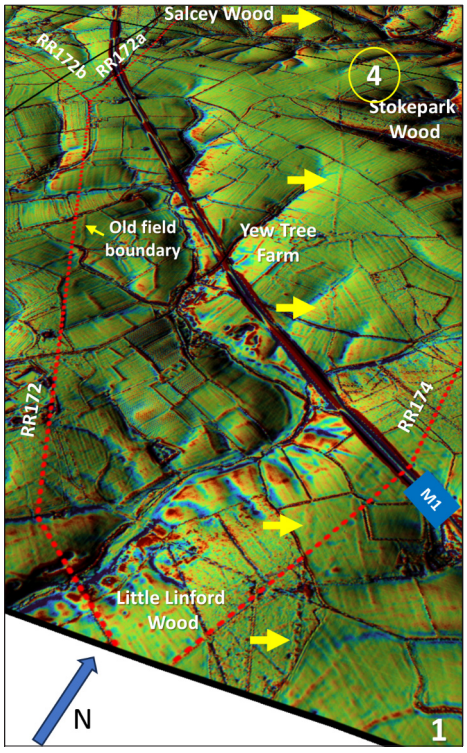
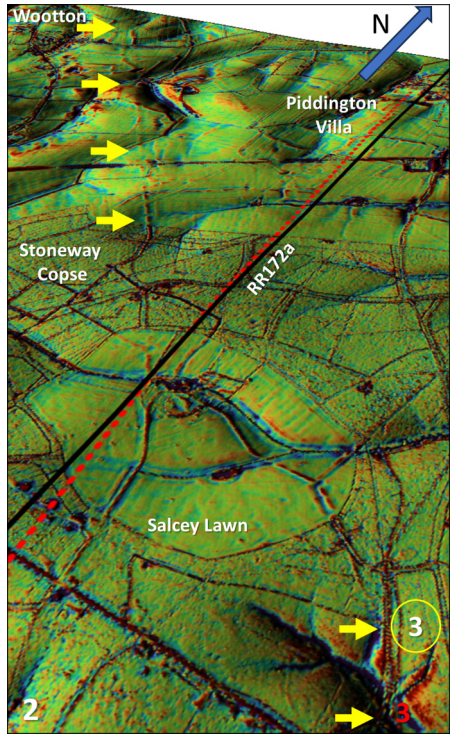


Fig. 16. Shaded lidar LRM showing new route for RR172 leaving Milton Keynes. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.





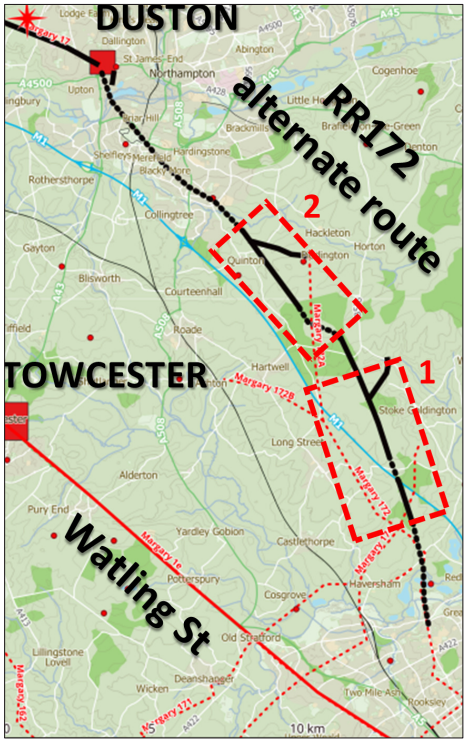
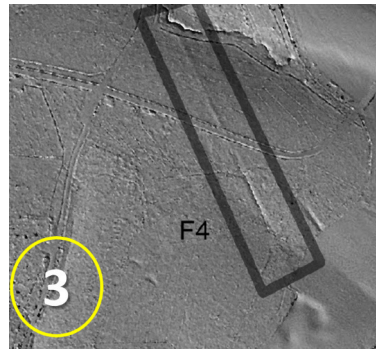


Fig. 17. 3D perspective views of RR172 and Salcey Forest lidar insert 1. Little Linford Wood to Salcey Forest. 2. Salcey Forest to Wootton. 3. Extract from Salcey Forest lidar survey (Simmonds 2011, Fig. 16). photo of agger in Stokepark Wood. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.





runs north along Saxon Street before crossing Marlborough Street and a dis-used railway. Here it enters Stanton Low Park and appears as a hollow-way heading towards the Stanton Low Roman site and the River Great Ouse. The river crossing is presumed near Haversham Mill where the Viatores indicate there was a ford. The road is then reported to run along a feature called '*the Freebord*' (Viatores 1964, 324-7) which does appear raised, but it is slightly curved and out of alignment with the course of the Roman road further north in Little Linford Wood.

The area around Little Linford has an interesting lidar feature, with an arcuate boundary of c. 1100m diameter located at the head of a dry valley system to the north of the village. This may be just a series of medieval headlands or possibly something of more significance. A lidar linear feature is also seen heading northwest-southeast past Little Linford, which may be part of the Roman road system.

The Viatores route for RR172 takes it towards Hanslope Park but the lidar data show that a more north-north-west course through Little Linford Wood is more correct. A raised linear lidar feature running for c. 750m from SP 8347 4513 to SP 8322 4587 is observed before transforming into a hollow-way as it passes through dry stream valleys close to the M1.

Fig. 17.1 shows 3D perspective views of the lidar LRM from Little Linford Wood to Salcey Forest and Salcey Forest to Wootton Fig. 17.2. The new route for RR172 is highlighted by the yellow arrows with the Viatores routes for RR172(a, b) and RR174 also shown in red.

The Roman road can be seen heading northwest from the M1 to Yew Tree Farm where the clarity of the lidar response to the *agger* improves around SP 8261 4754 and a cropmark is also noted on the Northants NMP. The road then continues straight on the lidar and is supported by cropmarks on Google Earth 2017 imagery as it approaches Stokepark Wood after a minor change of direction. Here, there are cuttings as streams are approached and a section of well-preserved *agger* in the woods (Fig. 17.4*)*. The lidar and cropmarks can be confidently traced past Stokelodge Farm and into Salcey Forest for a short section.

The Viatores RR174 is not visible on lidar and no archaeological evidence has been identified, so is not currently supported (Fig. 17.1). Viatores RR172 is shown taking a more westerly route north towards Salcey Forest. Their proposed route lacks lidar support until a section to the west of Woad Farm which is formed by a kink in Newport Way and then an old field boundary. A linear feature is also seen on lidar imagery near Spinney Lodge, but this section is more curvilinear than straight, so may not be a Roman road. Jefferys' Northamptonshire 1779 map shows the curvilinear section of RR172 is a trackway heading into Salcey Forest. Beyond this area, there is no lidar, crop mark or modern archaeological evidence to support the routes of either RR172a or RR172b. As indicated elsewhere in this volume, the label RR172(x) has been reserved for this route following the protocol laid out in Armstrong (2021, 282). In addition, and the previous allocation of RR172 to the Margary/Viatores route along with RR172a and RR172b are withdrawn being considered as currently disregarded until further evidence is presented.

Fig. 17.2 shows the proposed alternative route of RR172 entering Salcey Forest from the south-east, to the east of Salcey Lawn. The Roman road is then seen exiting the forest towards the northwest, through Stoneway Copse on a slightly different alignment. Fig. 17.3 is taken from a lidar survey completed over Salcey Forest (Simmonds 2011, 14). The survey revealed pre-medieval features including rectangular enclosures (some of which may be Roman) and importantly a c.400m long southeast-northwest oriented linear feature which crosses Forest Road. To the south of Forest Road,

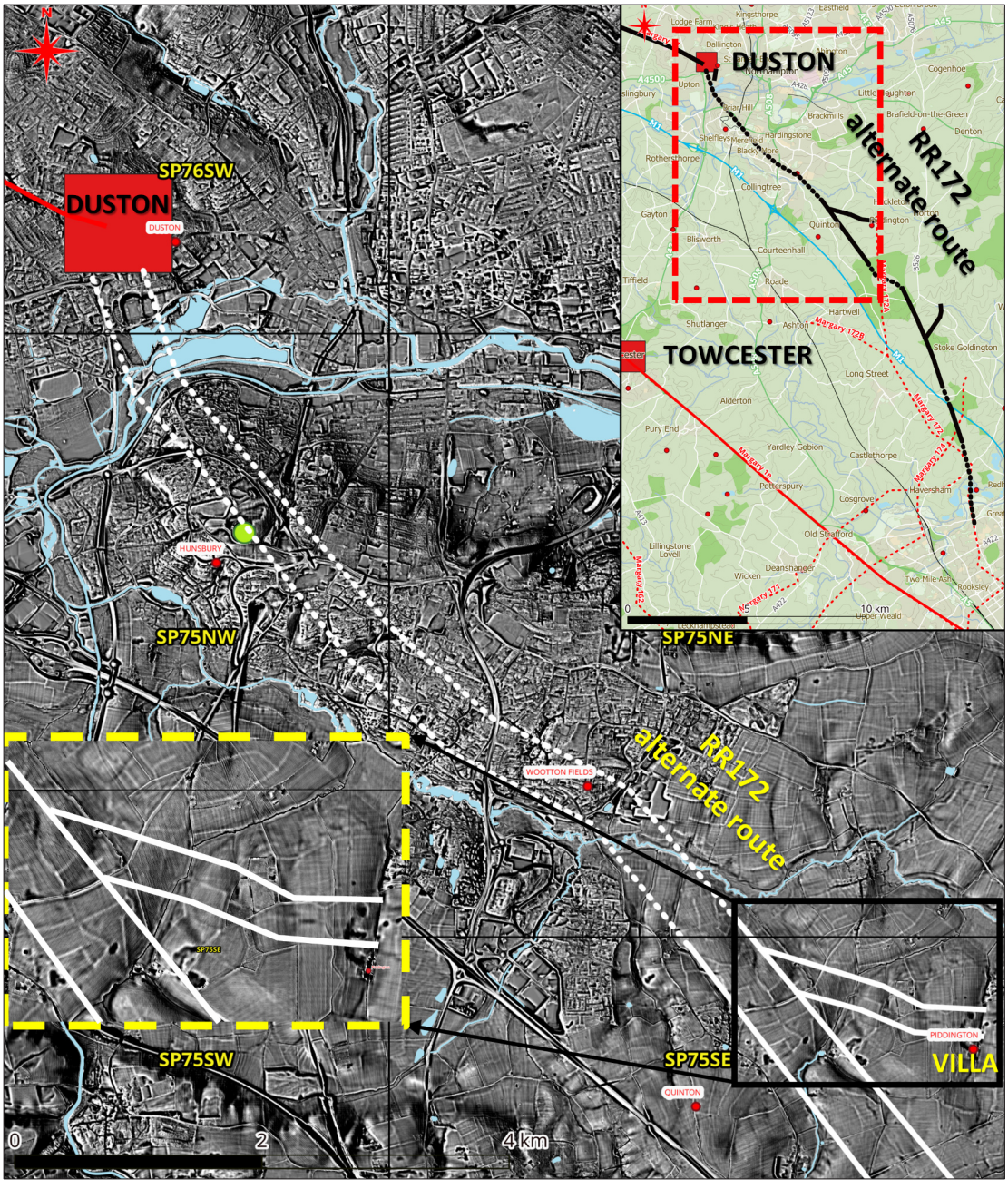


Fig. 18. Shaded lidar LRM of RR172 from Salcey Forest to Duston with Piddington Villa road inset. Lidar data @ Environment Agency copyright and/or database right 2024. All rights reserved.

it is observed as an earthwork bank flanked by a ditch c. 3.5m wide with the bank up to 0.15m high and the ditch measuring 0.3m deep. To the north, it is a low wide bank measuring up to 7m wide and

0.15m high. This feature is in direct alignment and continuation with the lidar linear coming from Stokepark Wood.

The route across Salcey Lawn is not confirmed, due to the presence of many tracks, ditches and banks of different ages which are observed. There are also pipelines servicing a reservoir and medieval park boundaries which complicate the route definition. A possible small section of road has been identified in a valley around SP 8119 5195 which appears to be where it turns northwest towards the Garden cottage (M. Haken pers. com.). It is clear though that a Roman road leaves the forest to the northwest, through Stoneway Copse and heads for the Roman sites at Wootton. The Roman road is mentioned in Morton's Natural History of Northamptonshire 1712, who observed a straight road, paved with pebbles, heading SE-NW, which "*discontinued*" near the Great Lodge (in the centre of Salcey Lawn) but reappeared beyond the Lodge to the northwest but was narrower than to southeast. He surmised it was heading from Newport Pagnel to Northampton, which is generally supported by this study.

The Roman road towards Wootton is seen both on the lidar data and as cropmarks (Northants HER MNN125444). It is less distinct than to the southeast of the forest, which may be due to it being narrower than the southern section, as suggested by Morton. Fig. 18 shows the route heading towards Wootton and then the presumed route to Duston. The lidar response of the road disappears just to the south of Wootton Brook but it is presumed the road then passes near to the Wootton Fields Roman site, past Hunsbury Roman Villa to cross the Nene near to Duston Mill. A crossing here looks reasonable, as there are spurs of high ground descending into the river valley from both sides, which minimises the amount of flood prone marshy ground to cross.

Also shown in Fig. 18 is a zoomed inset around Piddington Villa. The quarrying and excavation around the villa site can be seen along with a possible link road which joins the villa to the main route of RR172. A series of linear hollows and banks probably represent the course of a service road.

Roads around Irchester and Thrapston

This section deals with Roman roads which are focused on the Roman settlements of Thrapston and Irchester and which are highlighted in Fig. 19.

RR570ext Irchester to Thrapston

Margary 1973 indicated that the continuation of RR570 from Thrapston to Irchester was probable but that further assessment was needed. Since that time, significant excavation of the Roman sites beside the Nene and near the modern A45 have now defined the road location in specific locations and combined with the lidar data, the route can be more confidently identified.

Fig. 20 shows the route of RR570ext and key supporting excavations. Also highlighted (as yellow dots) are locations of Roman roads have been identified by excavation or geophysics from the investigations in the area.

Occupation of Irchester Roman Town began in the 1st century AD, initially as an unenclosed settlement which was subsequently enclosed (late 2nd century AD) by an earthen rampart, a stone wall and defensive ditches (Morris & Meadows 2012, 2). This enclosure was important for the surrounding road network, as it was cut off from the internal network (Butler *et al.* 2010, 3) and was

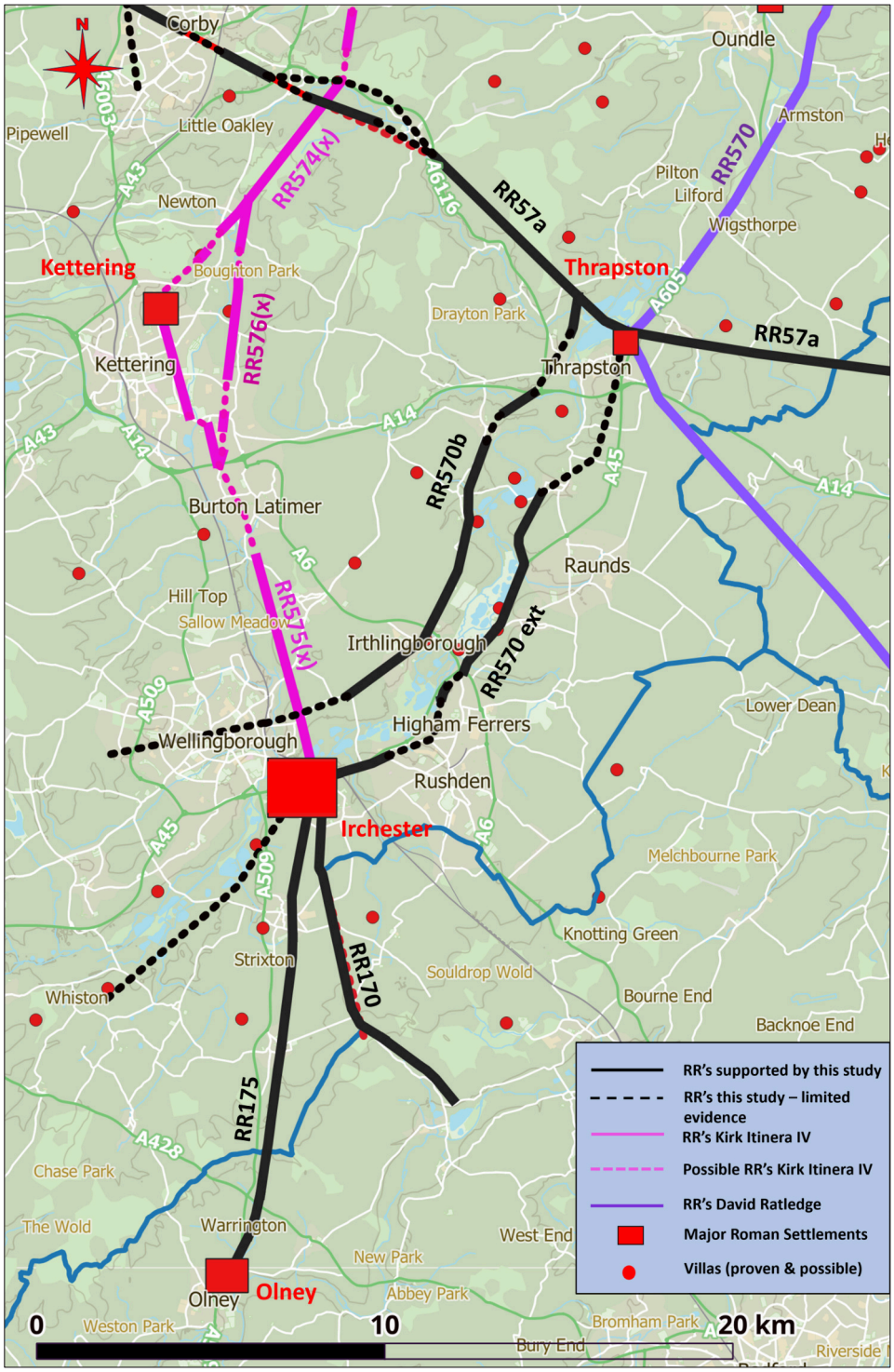


Figure 19. Roman roads around Irchester and Thrapston

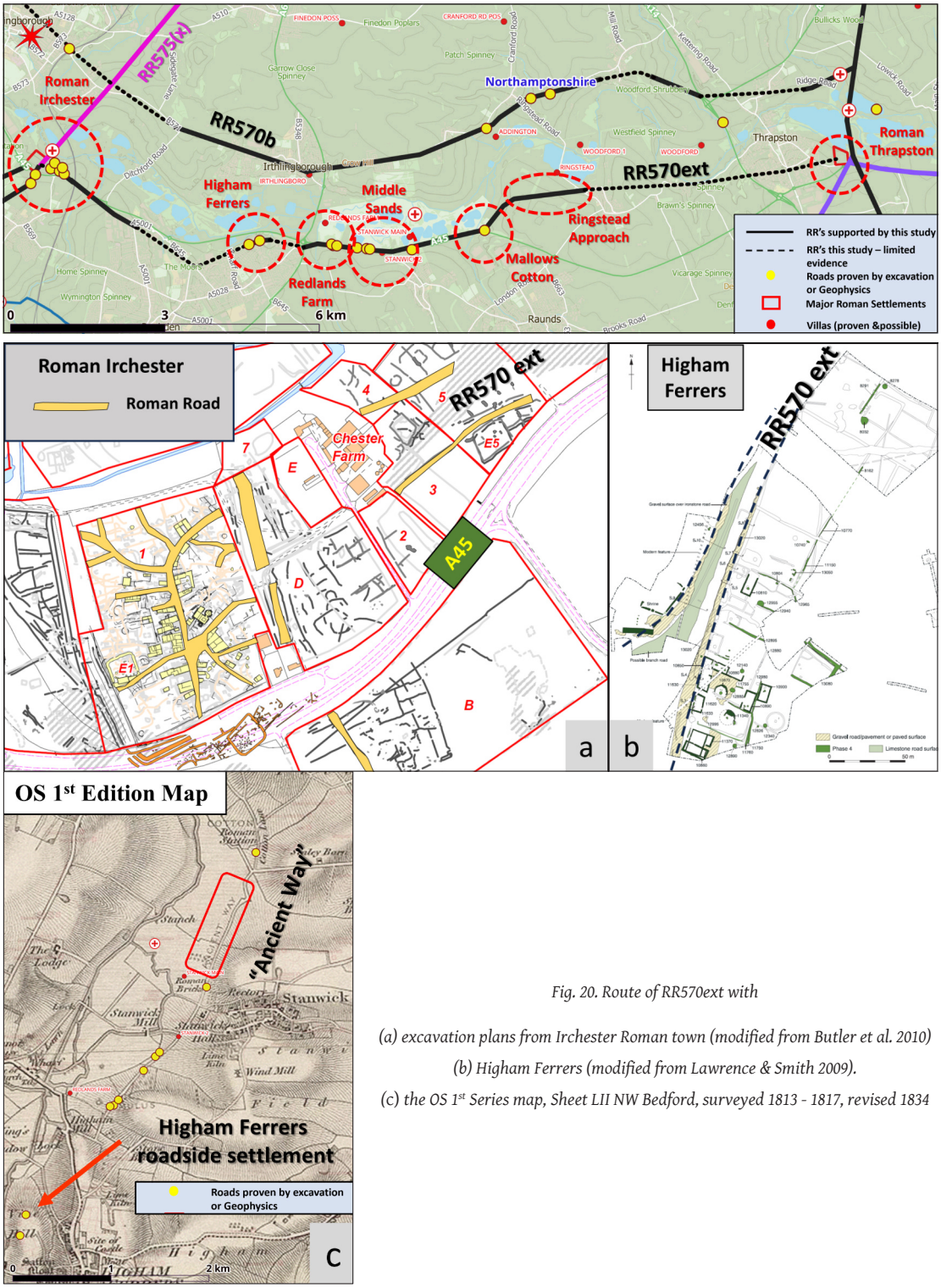


Fig. 20. Route of RR570ext with

(a) excavation plans from Irchester Roman town (modified from Butler et al. 2010)

(b) Higham Ferrers (modified from Lawrence & Smith 2009).

(c) the OS 1st Series map, Sheet LII NW Bedford, surveyed 1813 - 1817, revised 1834

likely re-arranged at the same time. This means there is probably more than one phase of roads in the immediate vicinity of the town which then connect to long distance routes.

Two roads have been identified by geophysical survey heading east-northeast away from the town (Butler *et al.* 2010, 7-8) and are interpreted to be part of RR570ext. Unfortunately, the roads cannot be traced beyond the survey area, as they are destroyed by iron workings or go under the modern A45.

It is likely that it underlies Northampton Road (Allen 2017, 3) which runs towards Higham Ferrers and is seen on the 1st Series OS map. Substantial sections of the Northampton Road also appear on Jefferys' 1779 map of Northamptonshire, showing it has some antiquity.

RR570ext must branch off Northampton Road and turn to the north before reaching Higham Ferrers as it is revealed by excavations at Higham Ferrers roadside settlement (Lawrence & Smith 2009). Here, the road has several surfaces, the earliest being ironstone paving 0.2m deep and composed of pieces up to 0.2m across and has been traced for c.150m, whilst the associated roadside ditches have been traced for over 200m, with a width of around 20-25m (Fig.20).

Beyond Higham Ferrers the route is lost again until it is revealed by a series of investigations in the Nene valley at Redlands Farm, Middle Sands and Stanwick (Crosby & Muldowney 2011; Parry 1995). Fig. 20c shows the locations where the road has been identified in a series of roadside settlements, overlain on the OS 1st Series map. The map also shows that Roman features had been identified in the area already, with *''Roman bricks*'' seen to the west of Stanwick and a 'Roman Station' at Mallows Cotton. The identified Roman road locations lie adjacent to and underneath an 'Ancient Way' shown on the OS 1st Series map, which is now covered by the A45.

The excavations near Redlands Farm and northeast to the Middle Sands Roman site (Parry 1995) in advance of the widening of the A45 have identified a series of sections of metalling and ditches located between SP 9361 7041 and SP 9682 7096. Dating is provided by sherds of pottery from 1st to early 2nd century AD on the metalling surface, whilst pottery from a ditch was dated between 1st to early 4th century AD. The excavations also identified the remains of a series of buildings whose common alignment suggests the presence of a contemporary road (e.g. Northants HER 1346). Slightly further northeast, investigation at the Stanwick Villa site also identified the road where a section was exposed during trenching around SP 9730 7162 (Crosby & Muldowney 2011, 70) although much of it is interpreted to underlie Cotton Lane (the Ancient Way on the OS 1st Series map).

Beyond Stanwick, the Ancient Way and RR570ext continue north to the deserted medieval villages of Marsh Cotton and then the neighbouring Mallows Cotton labelled ''*Roman Station*" on the OS 1st Series map. Substantial Roman features are recorded here underlying and surrounding the deserted medieval village including settlements (HER MNN4048), enclosures and trackways (MNN160392), field systems (MNN788) and even a possible villa (MNN20889). A large hollow-way (Cotton Lane) runs through the earthworks of the village. In places this is unmetalled, but a section excavated close to the A45 as part of the Raunds area project (Parry 2006) identified a 10m wide limestone surface that was subsequently replaced by a mixture of pebbles, limestone and ironstone. This has probably undergone much modification during the medieval period but could have Roman origins.

On the OS 1st Series Map (Fig. 20c) there are two roads that may be routes for the continuation of RR570ext from Mallows Cotton. One continues straight and the other turns towards the NE, parallel to the A45. Looking at the earlier Jefferys' map (Fig. 21a inset), only the route that is straight exists,

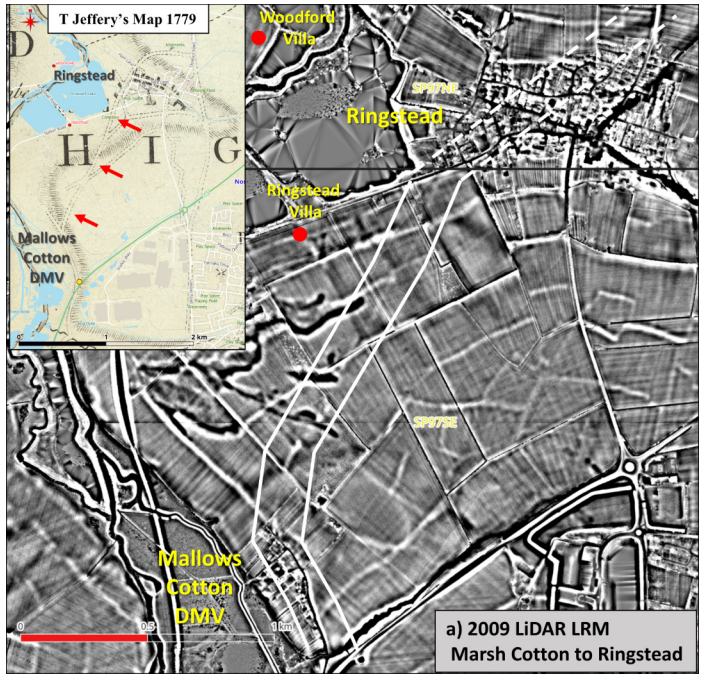
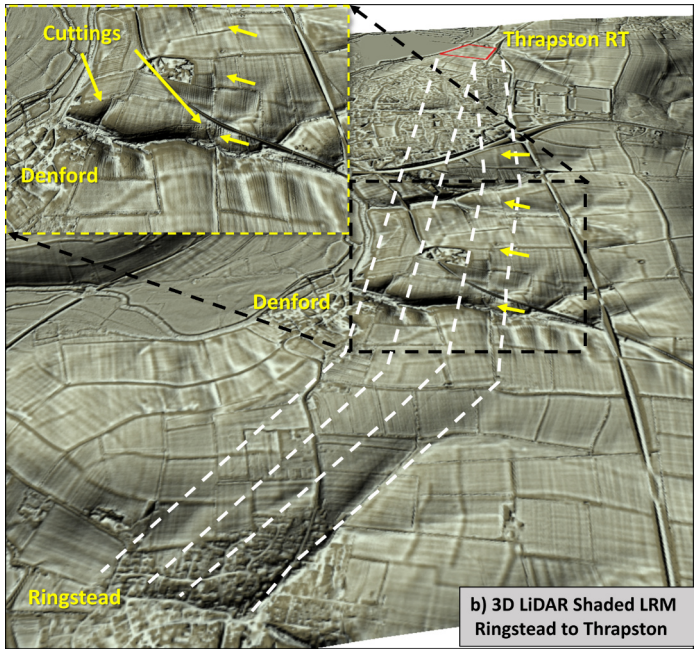


Fig. 21. RR570ext (a.) 2009 lidar LRM between Mallows Cotton and Ringstead with Jefferys' 1779 map inset and (b.) shaded lidar LRM between Ringstead and Thrapston with possible routes. Lidar data @ Environment Agency copyright and/or database right 2024. All rights reserved.



suggesting it is the more likely option. On the lidar LRM (Fig. 21a), the road can be seen turning in straight sections from Mallows Cotton and heading NE towards Ringstead Villa and Ringstead village.

The route between Ringstead and Denford is not clear with no evidence seen on the lidar or found in the HER records. The road between the villages on Jefferys' map is the same as the course of the modern Denford Road ,which may be a possibility, but it is a less efficient route as it climbs and descends a hill for no reason. A pair of possible routes to Thrapston are shown in Fig. 21b, which align with cuttings seen in a valley to the east of Denford. Beyond Denford, the route could underlie Denford Road and Midland Road, staying close to the River Nene and onto the Roman town. Roman activity has been recorded near Thrapston castle (HER MNN162501) but no road identified. If the cuttings seen in Fig. 21b are significant, then the Roman road would take a more easterly route. The most easterly course looks more promising, as beyond the cutting there is a linear feature seen on the lidar leading towards the Romano-British settlement identified on the SE side of Thrapston (HER MNN4371). It should be noted that the area between Denford and Thrapston has been subject to quarrying, minor railways etc. so the lidar response needs to be treated with caution.

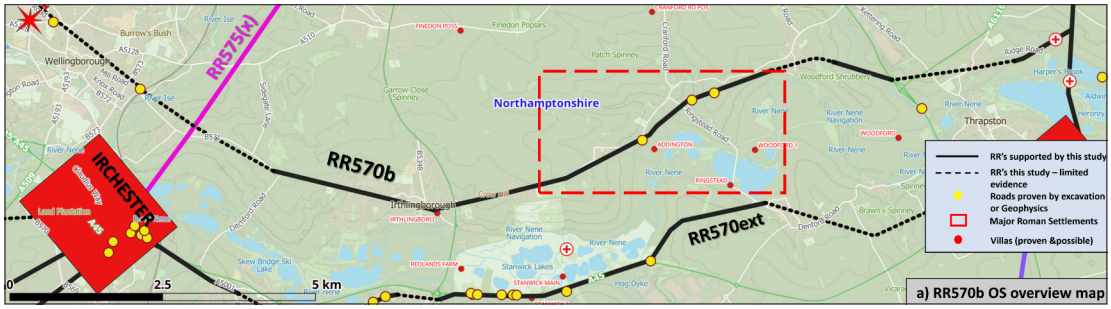
A further extension of RR570 to the southwest of Irchester, along the south side of the Nene valley has been identified by excavation and crop marks (Meadows 2009, 92). Fig. 19 shows the approximate course running from Irchester through the Wollaston and Grendon Roman sites. The lidar data does not identify the road between the sites of excavation, despite it being archaeologically identified for over 3km, probably due to quarrying, inundation and agricultural disturbance. Furthermore, Meadows suggests that the route had its origin in the early Iron Age as a pit alignment and the route is not straight, making it more difficult to determine. The only areas of metalling comprised thin gravel spreads which only occurred in the immediate vicinity of the associated farmsteads, seldom extending more than 100m from the sites. Beyond these areas, the road is only defined by roadside ditches (Meadows 2009, 92). This lack of metalling and *agger* means that road has proved very difficult to identify using lidar.

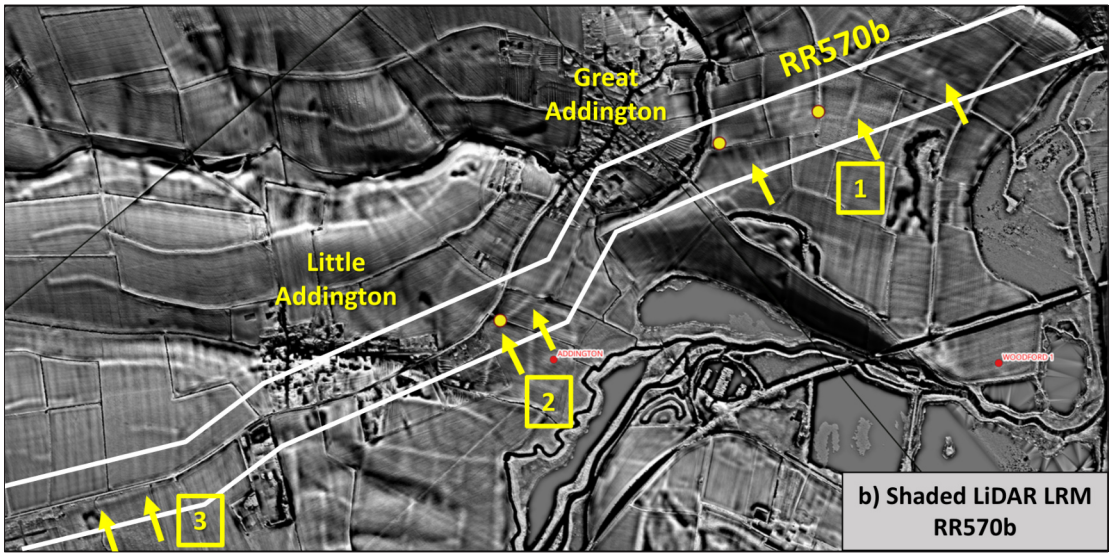
Meadows suggests the route may have been directed towards Towcester, but the curving nature and construction may mean it is more likely that it was used to service the villas and farmsteads along the south side of the Nene Valley rather than a long-distance route. Also, no evidence of the road is seen on the lidar between Grendon and Towcester.

RR570b: RR57a to Wellingborough, northwest of the Nene

A Roman road parallel to the Nene but on the north side has been postulated for some time e.g. (RCHME Northants Vol.1 1975, 116-123) where it is suggested that a road originated from RR57a near Lowick, passed through Lowick and Drayton Park, before changing course through Woodford, the Addingtons and then onto the current road to Irthlingborough. In RCHME Northants Vol.2 1979, 186-191, it is suggested the road then passes through Irthlingborough and crosses the Nene somewhere to the east of Ditchford Bridge before heading for Irchester. At the time, the road from Thrapston to Irchester to the south of the Nene was not supported (RCHME Northants Vol.1 1975, 116-7), so this was presented as the Thrapston to Irchester route.

The evidence now suggests a road north of the Nene existed together with one to the south, although in a different location to that proposed by the RCHME and is shown in Fig. 22. The key evidence comes from the central section of the road around 'the Addingtons' villages. A 1.4km long linear feature seen on lidar suggests a diffuse *agger* in the fields between Great Addington and Woodford. This partly





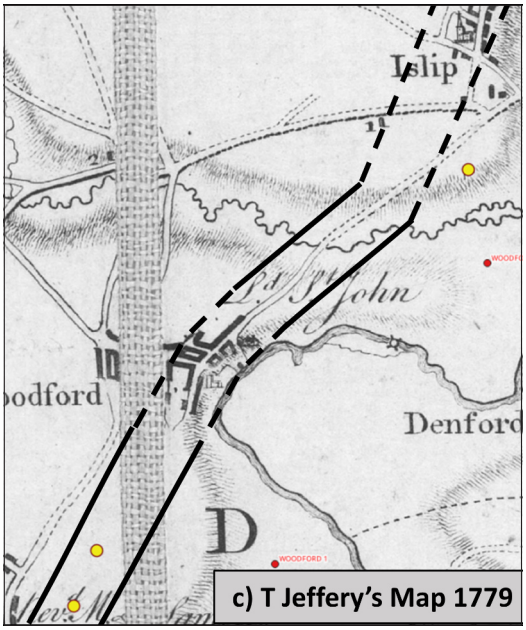


Fig. 22:

(a) RR570b route on OS map.

(b) Shaded lidar LRM around the Addingtons.

(c) Thomas Jefferys' Map of Northamptonshire 1779 around Woodford.

(d) Cropmarks north of Islip taken from RCHME Northants Vol.1, Figure 70. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.



coincides with a cropmark described as a 12m wide ridge which is 200m long, with side ditches from SP 9637 7556 to SP 9622 7520 (HER 1760/1/5) just outside Great Addington (Fig. 23b - area 1).

Further to the south, in the vicinity of Addington Roman Villa, a further section of *agger* has probably been identified by excavation (HER 1760/1/1 and RCHME 1975, 116-123) (*Fig. 22b* – area 2). This was first identified in 1964/5 as a low bank with a clear belt of limestone scatter and was excavated in 1967. The cambered structure of a road was found composed of tightly packed limestone cobbles with clay and some gravel resting on natural clay. The road was reported to be 25ft wide with the metalling up to 2.5ft thick but the age was not confirmed as Roman, as the oldest dateable pottery was medieval. The feature is visible on Google imagery as a linear spread of stone and is supported by the lidar data.

The identification as a Roman road was later brought into question, with suggestions it was a medieval headland and a series of trenches in an excavation 165m to the south (Souterrain 2020) did not identify the road. The interpretation that it is a headland is not supported by the study of Partida (2014), whose mapping did not identify one in the proposed location. Also, the trenches in the Souterrain excavation may have missed the road course, as they are not at the western most edge of the site where it appears that the Roman road turns slightly west and underneath the modern road.

Past Little Addington, the road is interpreted to underlie Irthlingborough Road all the way to Irthlingborough, which has a series of very straight alignments. There may be a small section where the Roman road is alongside the modern road just north of Crow Hill Recreation Ground. Here, a 300m linear feature, visible on lidar imagery is observed between SP 9585 7278 and SP 9573 7253 (Fig. 22b – area 3). The road then passes the Crow Hill Iron Age hillfort, which had continued occupation into the Roman period, and then into Irthlingborough where a possible villa has been identified near All Saints Church.

The Roman road then follows the straight course of Wellingborough Road to Stone Cross Farm, near the Ditchford road junction. The modern road then makes an angled turn to the west-northwest. If the assumed course is projected from Wellingborough Road before the turn at the Ditchford road junction, then there would be an intersection with RR575(x) (Kirk 2024, 339-324) around Irthlingborough Grange. There is a linear feature seen on the lidar from SP 9283 6922 to SP 9270 6908, but HER 3121/1/1 identifies this as a relatively modern trackway which is seen on the OS 1st Series map. Also, there is no clear evidence to support this route from the geophysical surveying associated with the Stanton Cross development (Arkley & Walford 2018). However, it may be possible that the surveying was unable to identify it, as the land to the east of Irthlingborough Grange is covered in green waste.

An alternative would be to follow the modern road where it makes the west-southwest turn, along Mill Rd/Wellingborough Road. Where Wellingborough Road makes a turn to the southwest, a field boundary and footpath continue straight past South Hill Farm. This would then be the location of the junction with RR575(x).

The Northants HER identifies a possible Roman road in this area (HER 7618/1) and suggest it may continue further to the west through Wellingborough, because of two possible sections of Roman road identified by excavation in the town. The first is north of Mill Road at SP 902 684, but this is said to be badly plough damaged and the second at Freeman's Endowed School SP 885 680 where an *agger* with side ditch full of gravel was found below made-up ground.

This possible alignment is supported when looking at the OS 1st series drawing for the area (OSD 252) which shows a trackway extending east from Wellingborough, along the line of Brickhill Road and

heading towards Mears Ashby. The alignment stops around SP 859 675 and no further continuation is seen in field boundaries or the lidar data. This maybe the route of the mooted Duston to Irchester Roman road but until further evidence is obtained it cannot be confirmed.

Heading back to the area from Woodford to RR57a, the route of RR570b to the north is not well defined. The RCHME interpret the road going towards Drayton Park and then onto a junction with Via Devana (RR57a) near Lowick. The number of changes of direction for no apparent reason and lack of lidar support bring this interpretation into question.

The preferred interpretation is that the road continues to loosely parallel the River Nene to an intersection with RR57a near the Roman Nene bridge crossing at Aldwincle (HER 1896/1/7). The road probably leaves Woodford using a road identified on Jefferys' map, but no longer in use, heading towards Islip (Fig. 22c). A faint lidar linear feature is observed following the road course from SP 976 776 to SP 980 778 near Alledge Brook, but its age is uncertain. The Roman road then likely turns more to the north and past Islip, as the road on Jefferys' map is heading for a Nene river crossing that probably wasn't present in Roman times.

To the north-northeast of Islip, a set of parallel cropmarks running 10-16m apart mark the location of road/trackway side ditches running NNE-SSEW for c. 380m. *Fig. 23d* which is taken from Fig. 70 of RCHME Northants Vol.4 1975 shows these pointing directly at a suspected Roman crossing of Harper's Brook at SP 9930 8040, which is evidenced by heavy limestone slabs (HER2302/0/1). Following this route would result in an intersection with RR57a around SP 9930 8060.

RR57a: Stanion to the River Nene section

The route of RR57a (often termed as *Via Devana*) in Northamptonshire is already well defined, apart from the area around Stanion and Brigstock (see Fig. 1) which will be discussed here.

The Roman road is seen approaching Stanion with an excellently preserved section in Hazel Wood, Corby and a further section in Oakley Purlieus Woods (Fig. 23a). The route is not clear on the lidar for the section from the A43 to Stanion Lodge, after which there is a faint linear feature on lidar heading towards Brigstock (Fig. 23a). This linear feature is supported by aerial photography (NMP photo SP9385_020) which shows a cropmark tracking across the fields following a ridge towards Brigstock. Fig. 23c shows the Roman road cropmark and dark patches associated with charcoal burning.

The route through Brigstock is not clear on the lidar, but there must be a change of direction somewhere in the village, as a linear feature on the lidar imagery is seen to the east of the A6116 at around SP 9521 8468 on a slightly different orientation, tracking southeast through Cat's Head Wood.

The Northants HER (HER 1896/1/21) reveals that the Roman road course may not only continue straight from Oakley Purlieus. A soilmark which is interpreted to be a Roman road running from SP 9048 8703 to SP 9065 8702 is observed. Also, as reported in HER1896/1/39 where the road metalling and ditches have been exposed, the road tracks slightly to the NE of the expected straight course. The cropmark location is shown between the two yellow dots in Fig. 23b. The orientation of these cropmarks is more east-west than the expected route and raises the possibility that there was an additional route to the Stanion Villa running to the north of Harper's Brook. The cropmark lies on the same orientation as a linear lidar feature running through Stanion village which turns into Brigstock Road as it approaches the villa, which may offer support.

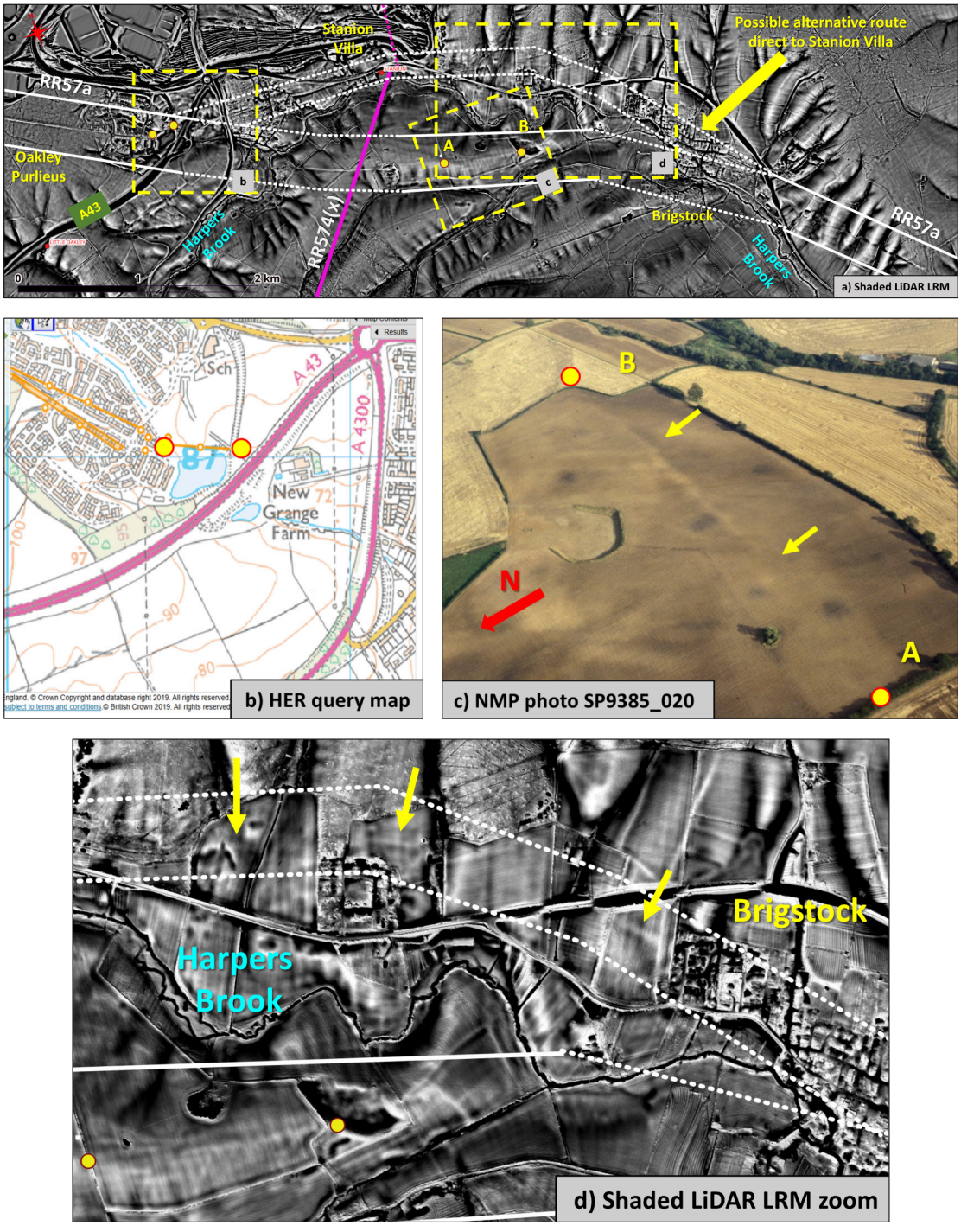


Fig. 23 (a) RR57a Shaded lidar LRM Little Stanion to Brigstock. (b) HER query with alternative route. (c) NMP photo SP9385_020. (d) Shaded lidar LRM highlighting possible alternative route. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

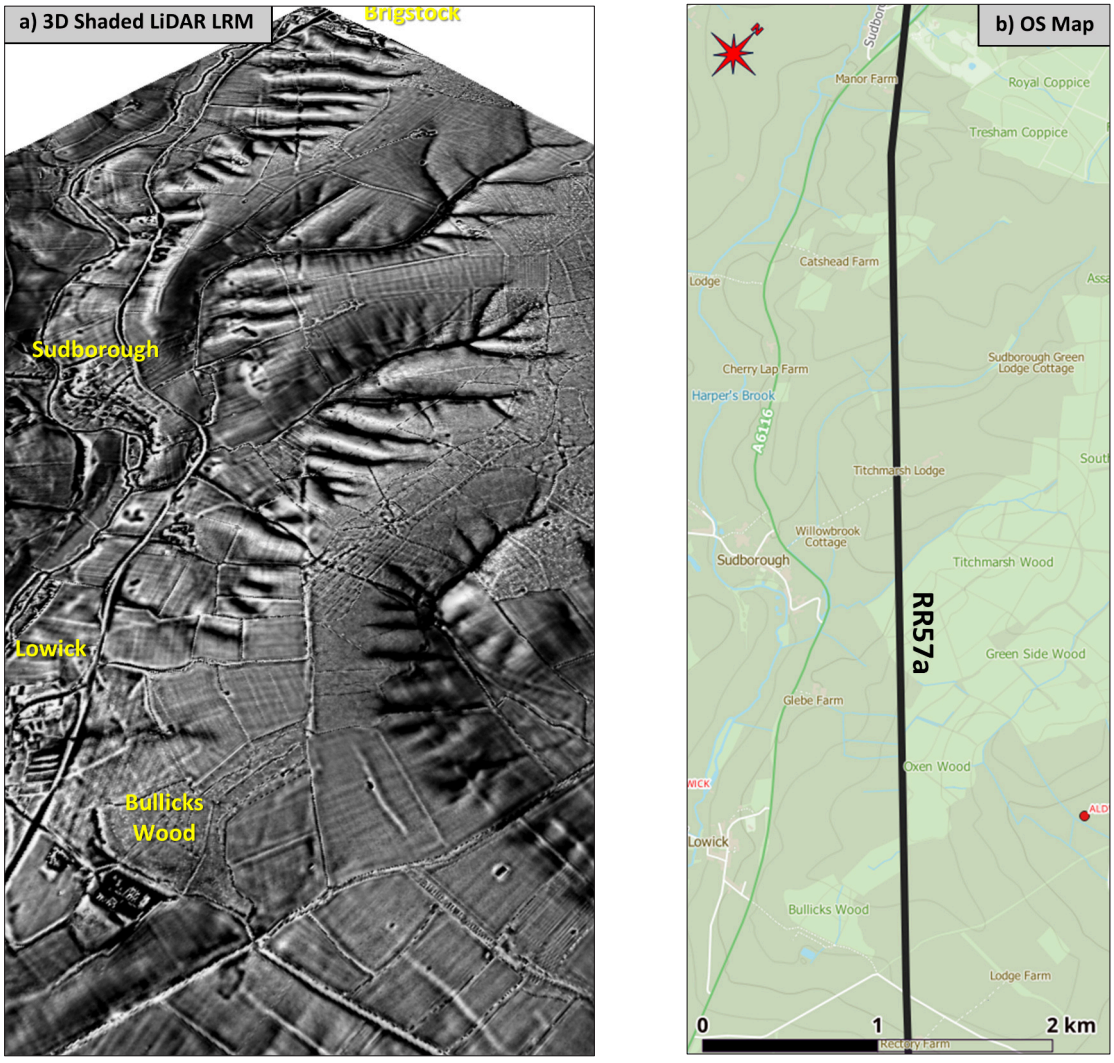


Fig. 24 (a) 3D shaded lidar LRM of RR57a between Bullicks Wood and Brigstock. (b) OS route overview Map. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

To the west of the villa, the course of the additional route maybe indicated by three linear sections seen on the lidar linear to the north of Harpers Brook, as indicated in Fig. 23d. These may be just headlands, but it would be useful to revisit the interpretation of the excavation of Stanion villa to determine if an east-west Roman road can be seen or inferred.

RR57a from the River Nene to Corby was considered uncertain by Margary (Margary 1973, 214) but the lidar data show one of the clearest sections of Roman road in Northamptonshire (Fig. 24a). The road can be seen as a line of *aggers* and cuttings over a distance of c. 5.5km, with a minor change of direction near Cat's Head Wood. The approach to the river Nene crossing is not well imaged by the lidar but the route is well defined by substantial archaeological investigations in the area, which had not been undertaken at the time Margary published.

Finally on RR57a, it should be noted that a possible Roman road heading southwards through Corby towards RR575(x) in Kettering could be interpreted from HER records but is not visible on lidar (Fig. 19). Two raised features at SP 8703 8639 and at SP 8690 8685 have been identified (M. Haken pers. com.) and may represent the route but these do not align well with archaeological evidence reported in the Northants HER and listed below. HER 3141/1/10 identifies an apparent *agger* near Oakley at SP

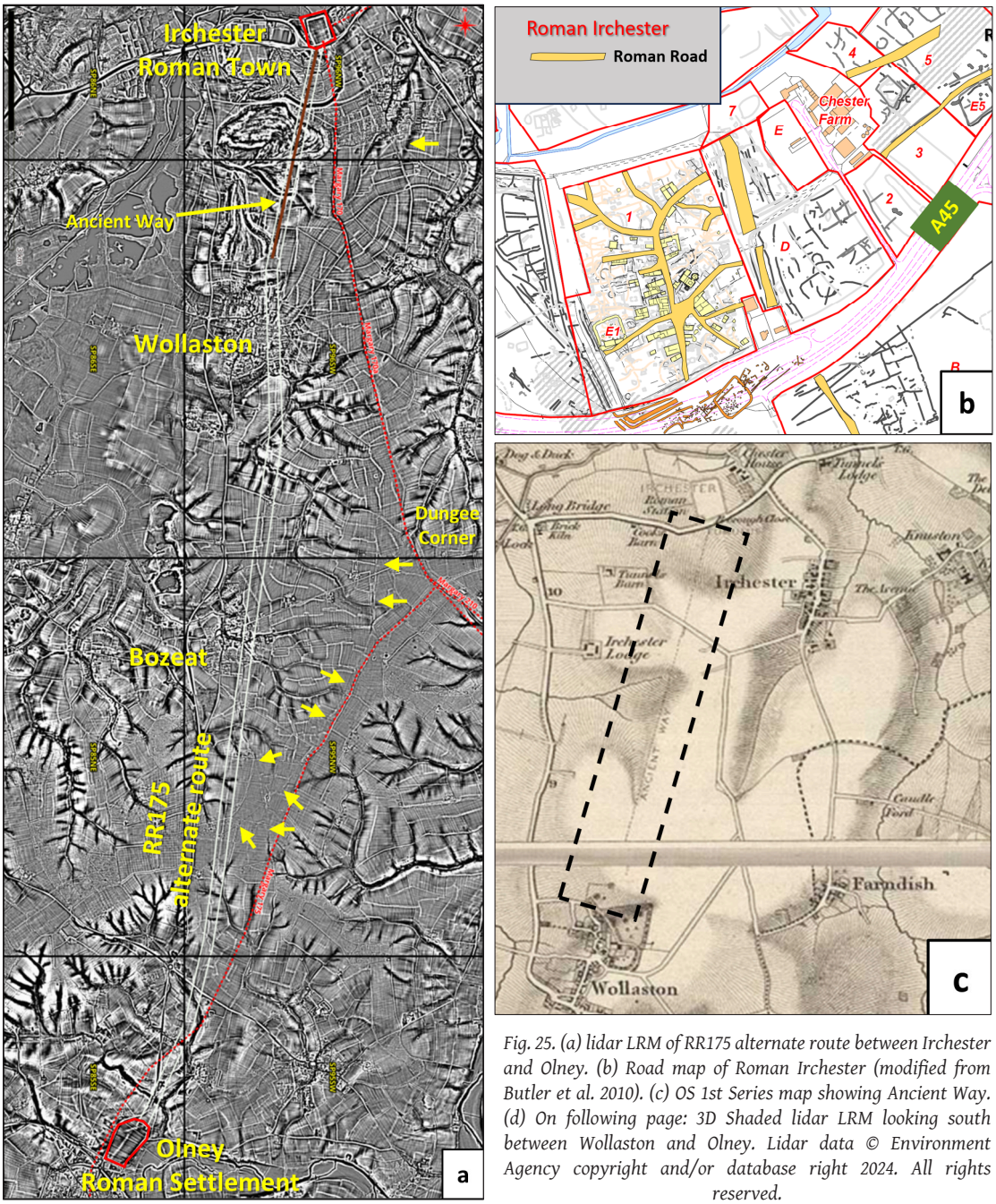


Fig. 25. (a) lidar LRM of RR175 alternate route between Irchester and Olney. (b) Road map of Roman Irchester (modified from Butler et al. 2010). (c) OS 1st Series map showing Ancient Way. (d) On following page: 3D Shaded lidar LRM looking south between Wollaston and Olney. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

8670 8660 but the age is not defined. Further north, HER 3141/1/11 notes a length of limestone slabs 4m wide and 150m long at SP 8640 8810 with much Roman pottery in the area. Unfortunately, the road cannot be identified in the fields between Corby and Kettering.

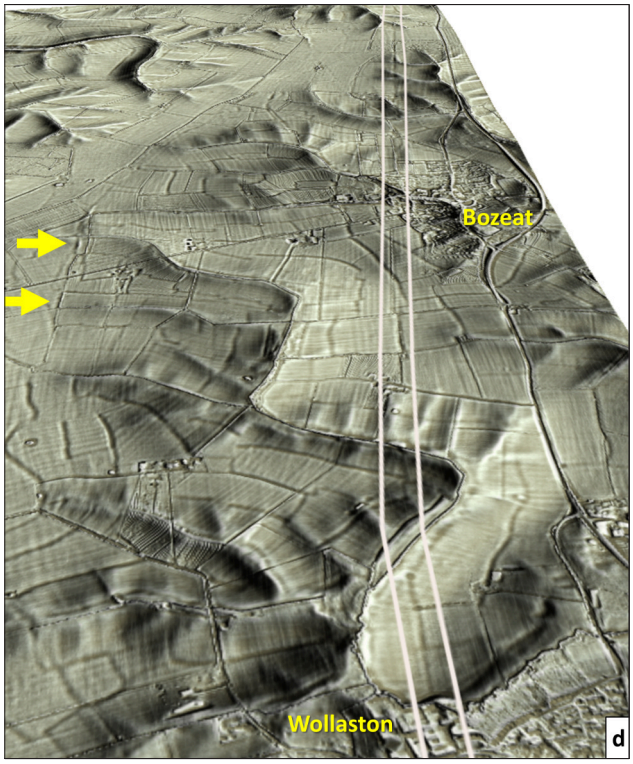
RR175 Irchester to Olney – an alternative route

The current interpretation for RR175 in Northamptonshire (Fig. 2) is for it to leave the Roman settlement at Olney and head northeast past Warrington and to then run along the Northants / Beds border to a junction with RR170 at Dungee Corner. This seems rather an indirect route between the two settlements and the route has not been proven by archaeological investigation. It is possible that this was a Roman road, as parts of it are straight and there is a raised bank, primarily on the Bedfordshire side of the border, but the recent discovery of a linear lidar feature suggesting a direct route between Olney and Irchester brings this into question.

The alternate route overview for RR175 is shown in Fig. 19 and the detailed analysis in Fig. 25.

As discussed earlier, the Roman road layout in the immediate surroundings of Irchester is likely to have changed when the town was enclosed in the late 2nd century AD. Fig. 25b shows the roads as identified in and around the town (Butler *et al.* 2010). The road identified to the east of the town appears to be the '*bypass*' road which joins up with RR170 and heads towards Dungee Corner.

Within the town, a road is seen approaching the south wall which is not seen on the outside. As this area has been heavily disturbed by modern road building and iron quarrying further to the south, this is not surprising. What is surprising is another 'Ancient Way' found on the 1st Series OS map, heading from the location of the intra-mural road towards Wollaston (Fig. 25c). This observation combined with a strong lidar linear south of Bozeat (Fig. 25d) suggests that there was a direct Roman road between Irchester and Olney. As indicated elsewhere in this volume, the label RR175aa(x) has been reserved for this route following the protocol laid out in Armstrong (2021, 282). In addition, the previous allocation of RR170 to the Margary/Viatores route along with RR170a, RR175 and RR210 are withdrawn being considered as currently disregarded until further evidence is presented.



The area immediately south of the Roman town has been quarried, so the lidar is inapplicable here. A short section of open fields before the village of Wollaston have an indistinct lidar response, however, south of Wollaston, the lidar response is much improved. A raised linear feature

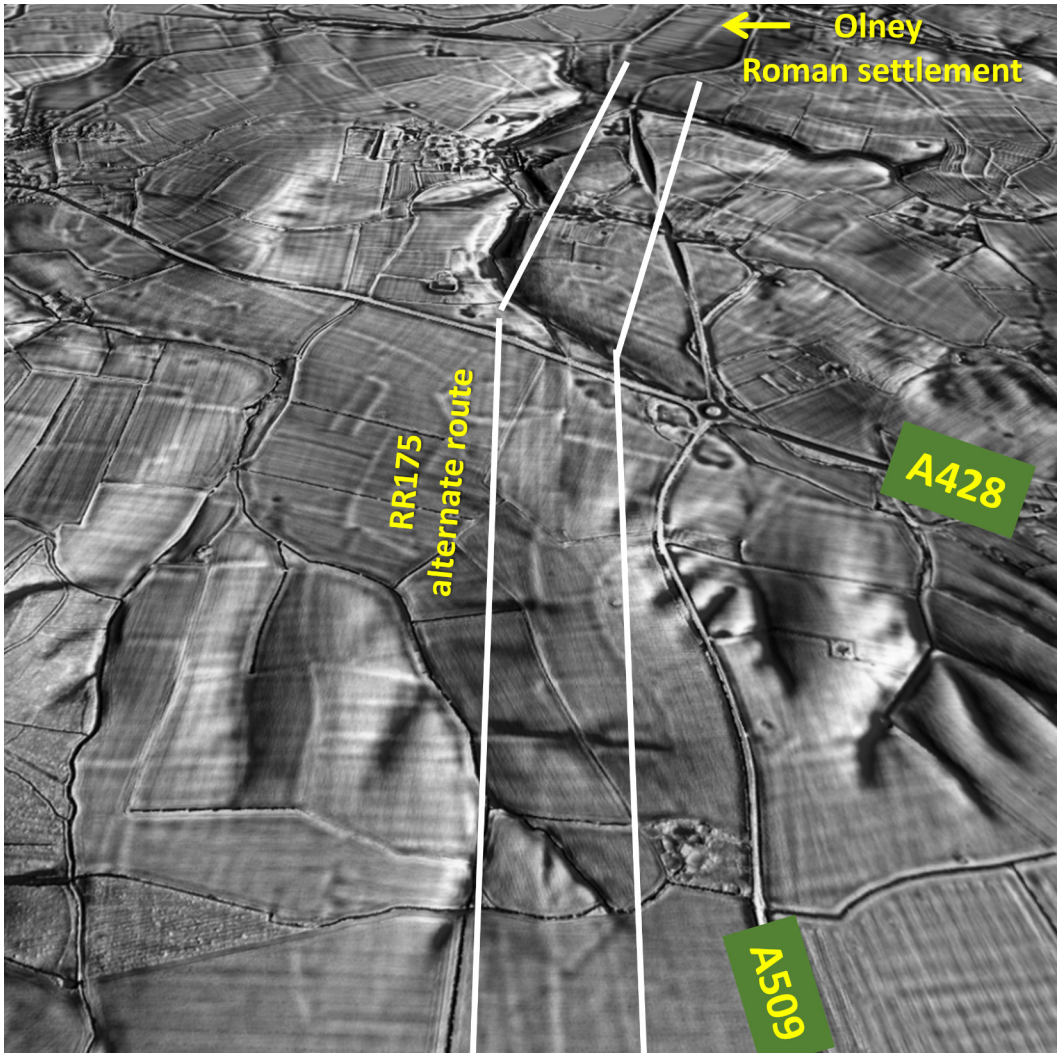


Fig. 26. 3D Shaded lidar LRM for RR175 approaching Olney Roman settlement. Lidar data © Environment Agency copyright and/or database right 2024. All rights reserved.

can be seen both north and south of Bozeat, which is especially strong in the area of Bozeat Grange. The Northants HER have recognised features in the same location and ascribed them to medieval or post medieval field boundaries (HER 1335/0/1) but their appearance and the fact there are cuttings as well as raised sections, gives more support to the conclusion it is a Roman road. Also, the best preserved *agger* is in an area of ancient woodland (Partida 2014), as might be expected if it were protected from agriculture.

The Roman road can be seen sub-parallel to the A509 approaching the Olney Roman settlement until it meets the A428 (Fig. 26). Here a slight change in direction is required to avoid a series of small

valleys and head straight for the Roman settlement. RR175 beyond Olney will not be discussed here but there is evidence it continues south towards *Magiovinium*.

Also, highlighted on Fig. 25a (yellow arrows) are a host of lineaments in this upland area between the valleys of the Nene and the Great Ouse. The age of these is uncertain and requires further investigation, but similar features nearby have been identified as Iron Age trackways. This raises the possibility that the Northants / Beds border feature may pre-date Roman times.

RR170 – Irchester to Dungee Corner & Kempston?

RR170 is interpreted to run from Irchester to Kempston, via Dungee Corner. The overall route is shown in Fig. 19 and 25a. The link between the Irchester 'bypass' (Fig. 25b) and the long-distance route is not obvious. For example, Margary 1973 has the route going along Wollaston Road from modern day Irchester to the south, but the northern part of this road isn't shown on Jefferys' 1779 map, indicating it is post-enclosure. However, there are no strong alternative candidates on the lidar data, so this is assumed to be the course for now.

Beyond SP 918 646, Jefferys' map shows a road coincident with the Roman road route all the way to Dungee Corner, indicating this is probably the correct course. A Roman interpretation might be supported by the fact that it is raised above the background landscape, even where it is now a green lane past Hinwick Road. The curve in the road on the approach to Dungee corner appears to be to avoid a stream valley and there is no lidar evidence that there are remnant *aggers* between the curves, meaning the Roman road must follow the modern roads precisely.

A section of possible *agger* from SP 9380 5936 to SP 9502 5841 is seen just over the Bedfordshire border beyond Dungee Woods where the modern road enters a stream valley and the road presumably continues through Harrold and onto Kempston as RR170a (Viatores 1964, 290).

Summary

As a result of this study, combined with previous work of Kirk (2024) and Ratledge (2024), the Roman road map of Northamptonshire has been updated to positively identify a total of c. 209 km of Roman roads with a further c. 64 km identified as possible.

In the south of the county, an alternative route for RR56a has been proposed and several of the Viatores routes questioned. Also, the route for RR162 from Bourton Grounds to Fleet Marston has been confirmed. A new route for RR172 has been identified from Haversham to Wootton and probably Duston, along with confirmation of the extension of RR570 from Thrapston to Irchester on the south side of the Nene. It appears that there is also a Roman road on the north side of the Nene which parallels this route. A more direct route for RR175 from Olney to Irchester has been identified, whilst a further extension of RR570 is reported on the south of the Nene between Irchester and Grendon but cannot be seen in lidar.

Several additional possible routes remain elusive, such as the suspected road from Duston to Towcester and that from Duston to Irchester, so the map will likely be updated in the future.

Abbreviations used in the text.

ADS: Archaeology Data Service

HER : Historic Environment Record

LRM : Local Relief Model

NMP: National Mapping Program

OS: Ordnance Survey

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